

Chemical Analysis Report

SE-DIST-2020-10-07-01

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

Event Description: **SMP- 3147 North Canal FINAL**

Request ID: **RQ-2020-10-05-58**

Customer: **SE-DIST**

Project ID: **SMP**

Send Reports to:

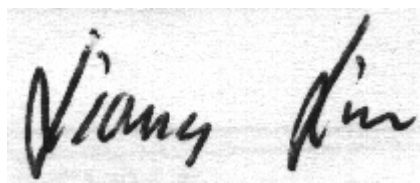
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Drew Liddick

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: Liang Lin, Environmental Administrator

Date Certified: 22-OCT-2020 13:02

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

Case Narrative

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

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

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

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

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited 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: North Canal @ US1

Collection Date/Time: 10/06/2020 11:30

Field ID: G5SE0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2200113	EPA 180.1 Rev. 2.0	Turbidity	11	A	NTU	P388349	
	EPA 300.0 Rev. 2.1	Chloride	130		mg Cl/L	P388631	
		Sulfate	45		mg SO4/L	P388634	
	SM 2120 B-2011	Color (true)	160	A	PCU	P388353	
	SM 2320 B-2011	Total Alkalinity	135		mg CaCO3/L	P388573	
	SM 2540 C-2011	TDS	433		mg/L	P388804	
	SM 2540 D-2011	TSS	17		mg/L	P388778	
	SM 4500 F-C-2011	Fluoride	0.25		mg F/L	P388576	MS
2200114	EPA 350.1 Rev. 2.0	Ammonia-N	0.18		mg N/L	P388494	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P388457	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.39		mg N/L	P388449	
	EPA 365.1 Rev. 2.0	Total-P	0.32		mg P/L	P388379	
	SM 5310 B-2011	Organic Carbon	19		mg C/L	P388444	
2200115	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.17		mg P/L	P388367	
2200121	EPA 8321B	Aldicarb	0.020	U	ug/L	P388526	
		Aldicarb Sulfone	0.0020	U	ug/L	P388526	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P388526	
		Carbaryl	0.0020	UJ	ug/L	P388526	MS
		Carbofuran	0.0020	UJ	ug/L	P388526	MS
		3-Hydroxycarbofuran	0.0020	U	ug/L	P388526	
		Methiocarb	0.0020	U	ug/L	P388526	
		Methomyl	0.0020	U	ug/L	P388526	
		Oxamyl	0.0020	U	ug/L	P388526	
		Propoxur	0.0020	UJ	ug/L	P388526	MS
2200122		2,4-D	0.015		ug/L	P388291	
		Acesulfame K**	0.10	U	ug/L	P388355	
		AMPA**	1.1		ug/L	P388355	
		Sucralose**	1.1		ug/L	P388355	
		Acetaminophen**	0.0080	U	ug/L	P388291	
		Acetamiprid**	0.0020	U	ug/L	P388291	
		Endothall**	0.25	U	ug/L	P388355	
		Glufosinate**	0.10	U	ug/L	P388355	
		Glyphosate**	1.6		ug/L	P388355	
		Afidopyropen**	0.0020	U	ug/L	P388291	MS
		Bentazon	0.10		ug/L	P388291	
		Benzovindiflupyr**	0.0020	U	ug/L	P388291	
		Carbamazepine**	0.0018	I	ug/L	P388291	
		Clothianidin**	0.0089		ug/L	P388291	
		Dinotefuran**	0.0028	I	ug/L	P388291	
		Diuron	0.0020	U	ug/L	P388291	
		Fenuron	0.072		ug/L	P388291	
		Fluridone**	0.0085		ug/L	P388291	
		Imazapyr**	0.044		ug/L	P388291	

Field ID: G5SE0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2200122	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P388291	
		Ibuprofen**	0.020	U	ug/L	P388291	
		Imidacloprid	1.2		ug/L	P388291	
		Linuron	0.0040	U	ug/L	P388291	
		Mandestrobin**	0.0020	U	ug/L	P388291	
		MCP	0.0020	U	ug/L	P388291	
		Naproxen**	0.0080	U	ug/L	P388291	
		Primidone**	0.0074	I	ug/L	P388291	
		Pyraclostrobin**	0.0020	U	ug/L	P388291	
		Thiamethoxam**	0.012		ug/L	P388291	
		Tolfenpyrad**	0.0020	U	ug/L	P388291	
		Triclopyr**	0.0040	U	ug/L	P388291	
2200125	EPA 8270E	Aldrin	4.3	U	ng/L	P388387	
		Alpha-BHC	2.2	U	ng/L	P388387	
		Alpha-Chlordane	1.1	U	ng/L	P388387	
		Beta-BHC	8.7	U	ng/L	P388387	
		Beta-Cyfluthrin**	16	U	ng/L	P388387	
		Bifenthrin**	4.3	U	ng/L	P388387	
		Delta-BHC	8.7	U	ng/L	P388387	
		Gamma-BHC	8.7	U	ng/L	P388387	
		Chlorothalonil	2.2	U	ng/L	P388387	
		Cis-Nonachlor**	1.1	U	ng/L	P388387	
		Cypermethrin	22	U	ng/L	P388387	
		Dacthal**	1.1	U	ng/L	P388387	
		DDD-p,p'	5.4	U	ng/L	P388387	
		DDE-p,p'	5.4	U	ng/L	P388387	
		DDT-p,p'	6.5	U	ng/L	P388387	
		Deltamethrin**	22	U	ng/L	P388387	
		Dicofol	33	U	ng/L	P388387	
		Dieldrin	4.3	U	ng/L	P388387	
		Endosulfan I	4.3	U	ng/L	P388387	
		Endosulfan II	4.3	U	ng/L	P388387	
		Endosulfan Sulfate	2.2	U	ng/L	P388387	
		Endrin	2.2	U	ng/L	P388387	
		Endrin Aldehyde	2.2	U	ng/L	P388387	
		Endrin Ketone	2.2	U	ng/L	P388387	
		Ethalfuralin**	3.3	U	ng/L	P388387	
		Gamma-Chlordane	1.1	U	ng/L	P388387	
		Dichlobenil**	2.2	U	ng/L	P388387	
		Esfenvalerate**	22	U	ng/L	P388387	
		Fenprothrin**	11	U	ng/L	P388387	
		Heptachlor	1.6	U	ng/L	P388387	
		Heptachlor Epoxide	2.2	U	ng/L	P388387	
		Hexachlorobenzene	2.2	U	ng/L	P388387	
		Lambda-Cyhalothrin**	16	U	ng/L	P388387	

MS

Field ID: G5SE0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2200125	EPA 8270E	Methoxychlor	4.3	U	ng/L	P388387	LCS
		Mirex	2.2	U	ng/L	P388387	
		MGK-264**	3.3	UJ	ng/L	P388387	
		Permethrin	11	U	ng/L	P388387	
		Phenothrin**	33	U	ng/L	P388387	
		Piperonyl Butoxide**	1.6	U	ng/L	P388387	
		Prallethrin**	27	U	ng/L	P388387	
		Tau-Fluvalinate**	3.8	U	ng/L	P388387	
		Tetramethrin**	8.7	U	ng/L	P388387	
		Trans-Nonachlor**	1.1	U	ng/L	P388387	
		Triclosan Methyl**	1.1	U	ng/L	P388387	
		Trifluralin	2.7	U	ng/L	P388387	
		Chlordane	5.4	U	ng/L	P388387	
		Toxaphene	33	U	ng/L	P388387	
2200126	EPA 8270E	Acetochlor	0.26	U	ng/L	P388358	LCS
		Alachlor	0.26	U	ng/L	P388358	
		Ametryn	0.62	UJ	ng/L	P388358	
		Atrazine	42		ng/L	P388358	
		Atrazine Desethyl	9.6		ng/L	P388358	
		Azinphos Methyl	2.1	U	ng/L	P388358	
		Bromacil	30		ng/L	P388358	
		Butylate	0.41	U	ng/L	P388358	
		Carbophenothion	0.51	U	ng/L	P388358	
		Chlorpyrifos Ethyl	0.26	UJ	ng/L	P388358	
		Chlorpyrifos Methyl	0.051	U	ng/L	P388358	
		Cyanazine	3.3	U	ng/L	P388358	
		Demeton	1.5	U	ng/L	P388358	
		Diazinon	0.13	U	ng/L	P388358	
		Dimethenamid**	0.10	U	ng/L	P388358	
		Disulfoton	0.51	U	ng/L	P388358	
		Dithiopyr**	0.29	I	ng/L	P388358	
		EPTC	1.3	U	ng/L	P388358	
		Ethion	0.15	U	ng/L	P388358	
		Ethoprop	0.10	U	ng/L	P388358	
		Fenamiphos	0.51	U	ng/L	P388358	
		Fipronil	0.74	I	ng/L	P388358	
		Fipronil Desulfinyl**	0.61		ng/L	P388358	
		Fipronil Sulfide	0.38	I	ng/L	P388358	
		Fipronil Sulfone	1.1		ng/L	P388358	
		Flumioxazin**	1.8	U	ng/L	P388358	
		Fonofos	0.21	U	ng/L	P388358	
		Hexazinone	1.0	I	ng/L	P388358	
		Imazalil**	0.77	U	ng/L	P388358	
		Malathion	0.36	U	ng/L	P388358	
		Metalaxyl	4.7		ng/L	P388358	

Field ID: G5SE0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2200126	EPA 8270E	Metolachlor	20		ng/L	P388358	
		Metribuzin	3.3	U	ng/L	P388358	
		Mevinphos	0.51	U	ng/L	P388358	
		Molinate	0.31	U	ng/L	P388358	
		Naled**	1.5	U	ng/L	P388358	
		Norflurazon	25		ng/L	P388358	
		Oxadiazon	25		ng/L	P388358	
		Parathion Ethyl	0.26	U	ng/L	P388358	
		Parathion Methyl	0.56	U	ng/L	P388358	
		Pendimethalin	1.0	U	ng/L	P388358	
		Phorate	0.26	U	ng/L	P388358	
		Prodiamine**	0.18	U	ng/L	P388358	
		Prometon	0.92	U	ng/L	P388358	
		Prometryn	0.21	U	ng/L	P388358	
		Pronamide**	0.15	U	ng/L	P388358	
		Propiconazole**	0.51	U	ng/L	P388358	
		Simazine	0.51	U	ng/L	P388358	
		Sulfentrazone**	38		ng/L	P388358	
		Tebuconazole**	0.51	U	ng/L	P388358	
		Terbufos	0.10	U	ng/L	P388358	
2200129	EPA 200.7 Rev. 4.4	Terbutylazine	0.44	U	ng/L	P388358	
		Barium	30.8		ug/L	P388399	
		Calcium	64.6		mg/L	P388399	
		Iron	1.58E+03		ug/L	P388399	
		Magnesium	14.9		mg/L	P388399	
		Potassium	5.9		mg/L	P388399	
		Sodium	67.1		mg/L	P388399	
		Zinc	11	I	ug/L	P388399	
	EPA 200.8 Rev. 5.4	Aluminum	336		ug/L	P388399	
		Antimony	0.13	I	ug/L	P388399	
		Arsenic	2.10		ug/L	P388399	
		Beryllium	0.040	I	ug/L	P388399	
		Boron**	72.0		ug/L	P388399	
		Cadmium	0.032	I	ug/L	P388399	
		Chromium	1.2	I	ug/L	P388399	
		Copper	10.6		ug/L	P388399	
		Lead	0.71		ug/L	P388399	
		Nickel	0.79	I	ug/L	P388399	
	SM 2340B	Selenium	0.35	I	ug/L	P388399	
		Silver	0.010	I	ug/L	P388399	
		Thallium	0.10	U	ug/L	P388399	
		Hardness	223		mg/L	P388399	

Field ID: G5SE0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
-----------	-------------	-----------	--------	------	-------	----------	----------

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Chloride: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: North Canal @ US1

Collection Date/Time: 10/06/2020 11:40

Field ID: FB_10062020

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2200116	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P388349	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P388631	
		Sulfate	0.20	U	mg SO4/L	P388634	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P388353	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P388573	
	SM 2540 C-2011	TDS	15	U	mg/L	P388803	
	SM 2540 D-2011	TSS	2	U	mg/L	P388777	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P388576	MS
2200117	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P388494	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P388457	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P388449	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P388379	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P388444	
2200118	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P388367	
2200123	EPA 8321B	Aldicarb	0.020	U	ug/L	P388526	
		Aldicarb Sulfone	0.0020	U	ug/L	P388526	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P388526	
		Carbaryl	0.0020	U	ug/L	P388526	MS
		Carbofuran	0.0020	U	ug/L	P388526	MS
		3-Hydroxycarbofuran	0.0020	U	ug/L	P388526	
		Methiocarb	0.0020	U	ug/L	P388526	
		Methomyl	0.0020	U	ug/L	P388526	
		Oxamyl	0.0020	U	ug/L	P388526	
		Propoxur	0.0020	U	ug/L	P388526	MS
2200124		2,4-D	0.0020	U	ug/L	P388291	
		Acesulfame K**	0.10	U	ug/L	P388355	
		AMPA**	0.10	U	ug/L	P388355	
		Sucralose**	0.010	U	ug/L	P388355	
		Acetaminophen**	0.0080	U	ug/L	P388291	
		Acetamiprid**	0.0020	U	ug/L	P388291	
		Endothall**	0.25	U	ug/L	P388355	
		Glufosinate**	0.10	U	ug/L	P388355	
		Glyphosate**	0.10	U	ug/L	P388355	
		Afidopyropen**	0.0020	U	ug/L	P388291	MS
		Bentazon	8.0E-04	U	ug/L	P388291	
		Benzovindiflupyr**	0.0020	U	ug/L	P388291	
		Carbamazepine**	8.0E-04	U	ug/L	P388291	
		Clothianidin**	0.0020	U	ug/L	P388291	
		Dinotefuran**	0.0020	U	ug/L	P388291	
		Diuron	0.0020	U	ug/L	P388291	
		Fenuron	0.016	U	ug/L	P388291	
		Fluridone**	8.0E-04	U	ug/L	P388291	
		Imazapyr**	0.0040	U	ug/L	P388291	

Field ID: FB_10062020

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2200124	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P388291	
		Ibuprofen**	0.020	U	ug/L	P388291	
		Imidacloprid	0.0020	U	ug/L	P388291	
		Linuron	0.0040	U	ug/L	P388291	
		Mandestrobin**	0.0020	U	ug/L	P388291	
		MCP	0.0020	U	ug/L	P388291	
		Naproxen**	0.0080	U	ug/L	P388291	
		Primidone**	0.0040	U	ug/L	P388291	
		Pyraclostrobin**	0.0020	U	ug/L	P388291	
		Thiamethoxam**	0.0020	U	ug/L	P388291	
		Tolfenpyrad**	0.0020	U	ug/L	P388291	
		Triclopyr**	0.0040	U	ug/L	P388291	
2200127	EPA 8270E	Aldrin	4.5	U	ng/L	P388387	
		Alpha-BHC	2.2	U	ng/L	P388387	
		Alpha-Chlordane	1.1	U	ng/L	P388387	
		Beta-BHC	8.9	U	ng/L	P388387	
		Beta-Cyfluthrin**	17	U	ng/L	P388387	
		Bifenthrin**	4.5	U	ng/L	P388387	
		Delta-BHC	8.9	U	ng/L	P388387	MS
		Gamma-BHC	8.9	U	ng/L	P388387	
		Chlorothalonil	2.2	U	ng/L	P388387	
		Cis-Nonachlor**	1.1	U	ng/L	P388387	
		Cypermethrin	22	U	ng/L	P388387	
		Dacthal**	1.1	U	ng/L	P388387	
		DDD-p,p'	5.6	U	ng/L	P388387	
		DDE-p,p'	5.6	U	ng/L	P388387	
		DDT-p,p'	6.7	U	ng/L	P388387	
		Deltamethrin**	22	U	ng/L	P388387	
		Dicofol	33	U	ng/L	P388387	
		Dieldrin	4.5	U	ng/L	P388387	
		Endosulfan I	4.5	U	ng/L	P388387	
		Endosulfan II	4.5	U	ng/L	P388387	
		Endosulfan Sulfate	2.2	U	ng/L	P388387	
		Endrin	2.2	U	ng/L	P388387	
		Endrin Aldehyde	2.2	U	ng/L	P388387	
		Endrin Ketone	2.2	U	ng/L	P388387	
		Ethalfuralin**	3.3	U	ng/L	P388387	
		Gamma-Chlordane	1.1	U	ng/L	P388387	
		Dichlobenil**	2.2	U	ng/L	P388387	
		Esfenvalerate**	22	U	ng/L	P388387	
		Fenpropathrin**	11	U	ng/L	P388387	
		Heptachlor	1.7	U	ng/L	P388387	
		Heptachlor Epoxide	2.2	U	ng/L	P388387	
		Hexachlorobenzene	2.2	U	ng/L	P388387	
		Lambda-Cyhalothrin**	17	U	ng/L	P388387	

Field ID: FB_10062020

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2200127	EPA 8270E	Methoxychlor	4.5	U	ng/L	P388387	LCS
		Mirex	2.2	U	ng/L	P388387	
		MGK-264**	3.3	UJ	ng/L	P388387	
		Permethrin	11	U	ng/L	P388387	
		Phenothrin**	33	U	ng/L	P388387	
		Piperonyl Butoxide**	1.7	U	ng/L	P388387	
		Prallethrin**	28	U	ng/L	P388387	
		Tau-Fluvalinate**	3.9	U	ng/L	P388387	
		Tetramethrin**	8.9	U	ng/L	P388387	
		Trans-Nonachlor**	1.1	U	ng/L	P388387	
		Triclosan Methyl**	1.1	U	ng/L	P388387	
		Trifluralin	2.8	U	ng/L	P388387	
		Chlordane	5.6	U	ng/L	P388387	
2200128	EPA 8270E	Toxaphene	33	U	ng/L	P388387	LCS
		Acetochlor	0.24	U	ng/L	P388358	
		Alachlor	0.24	U	ng/L	P388358	
		Ametryn	0.58	U	ng/L	P388358	
		Atrazine	0.24	U	ng/L	P388358	
		Atrazine Desethyl	1.5	U	ng/L	P388358	
		Azinphos Methyl	1.9	U	ng/L	P388358	
		Bromacil	0.49	U	ng/L	P388358	
		Butylate	0.39	U	ng/L	P388358	
		Carbophenothion	0.49	U	ng/L	P388358	
		Chlorpyrifos Ethyl	0.24	UJ	ng/L	P388358	
		Chlorpyrifos Methyl	0.049	U	ng/L	P388358	
		Cyanazine	3.2	U	ng/L	P388358	
		Demeton	1.5	U	ng/L	P388358	
		Diazinon	0.12	U	ng/L	P388358	
		Dimethenamid**	0.097	U	ng/L	P388358	
		Disulfoton	0.49	U	ng/L	P388358	
		Dithiopyr**	0.097	U	ng/L	P388358	
		EPTC	1.2	U	ng/L	P388358	
		Ethion	0.15	U	ng/L	P388358	
		Ethoprop	0.097	U	ng/L	P388358	
		Fenamiphos	0.49	U	ng/L	P388358	
		Fipronil	0.24	U	ng/L	P388358	
		Fipronil Desulfinyl**	0.12	U	ng/L	P388358	
		Fipronil Sulfide	0.15	U	ng/L	P388358	
		Fipronil Sulfone	0.15	U	ng/L	P388358	
		Flumioxazin**	1.7	U	ng/L	P388358	
		Fonofos	0.19	U	ng/L	P388358	
		Hexazinone	0.49	U	ng/L	P388358	
		Imazalil**	0.73	U	ng/L	P388358	
		Malathion	0.34	U	ng/L	P388358	
		Metalaxyl	0.73	U	ng/L	P388358	

Field ID: FB_10062020

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2200128	EPA 8270E	Metolachlor	0.49	U	ng/L	P388358	
		Metribuzin	3.2	U	ng/L	P388358	
		Mevinphos	0.49	U	ng/L	P388358	
		Molinate	0.29	U	ng/L	P388358	
		Naled**	1.5	U	ng/L	P388358	
		Norflurazon	0.49	U	ng/L	P388358	
		Oxadiazon	0.097	U	ng/L	P388358	
		Parathion Ethyl	0.24	U	ng/L	P388358	
		Parathion Methyl	0.54	U	ng/L	P388358	
		Pendimethalin	0.97	U	ng/L	P388358	
		Phorate	0.24	U	ng/L	P388358	
		Prodiamine**	0.17	U	ng/L	P388358	
		Prometon	0.88	U	ng/L	P388358	
		Prometryn	0.19	U	ng/L	P388358	
		Pronamide**	0.15	U	ng/L	P388358	
		Propiconazole**	0.49	U	ng/L	P388358	
		Simazine	0.49	U	ng/L	P388358	
		Sulfentrazone**	0.49	U	ng/L	P388358	
		Tebuconazole**	0.49	U	ng/L	P388358	
		Terbufos	0.097	U	ng/L	P388358	
		Terbutylazine	0.41	U	ng/L	P388358	
2200130	EPA 200.7 Rev. 4.4	Barium	1.0	U	ug/L	P388399	
		Calcium	0.075	U	mg/L	P388399	
		Iron	30	U	ug/L	P388399	
		Magnesium	0.040	U	mg/L	P388399	
		Potassium	0.30	U	mg/L	P388399	
		Sodium	0.50	U	mg/L	P388399	
		Zinc	5.0	U	ug/L	P388399	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P388399	
		Antimony	0.050	U	ug/L	P388399	
		Arsenic	0.050	U	ug/L	P388399	
		Beryllium	0.010	U	ug/L	P388399	
		Boron**	246		ug/L	P388399	
		Cadmium	0.020	U	ug/L	P388399	
		Chromium	0.40	U	ug/L	P388399	
		Copper	0.40	U	ug/L	P388399	
		Lead	0.20	U	ug/L	P388399	
		Nickel	0.50	U	ug/L	P388399	
	SM 2340B	Selenium	0.20	U	ug/L	P388399	
		Silver	0.010	U	ug/L	P388399	
		Thallium	0.10	U	ug/L	P388399	
		Hardness	0.35	U	mg/L	P388399	

Field ID: FB_10062020

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
-----------	-------------	-----------	--------	------	-------	----------	----------

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Chloride: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 200.8 Rev. 5.4: The boron result was confirmed in the undigested sample on 10/12/2020.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P388349

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P388399

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P388399

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388631

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388634

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P388494

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388457

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P388449

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P388379

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388367

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

Reference Method: EPA 8270E
Batch ID: P388358

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P388358

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	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P388387

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	U	ng/L
Dichlobenil	2.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P388387

Component	Result	Code	Units
Endrin Ketone	2.0	U	ng/L
Esfenvalerate	20	U	ng/L
Ethalfuralin	3.0	U	ng/L
Fenpropathrin	10	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L
Methoxychlor	4.0	U	ng/L
MGK-264	3.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Piperonyl Butoxide	1.5	U	ng/L
Prallethrin	25	U	ng/L
Tau-Fluvalinate	3.5	U	ng/L
Tetramethrin	8.0	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Triclosan Methyl	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P388387

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

Reference Method: EPA 8321B
Batch ID: P388291

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P388291

Component	Result	Code	Units
MCP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P388355

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: P388526

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

Reference Method: SM 2120 B-2011
Batch ID: P388353

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P388573

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

Reference Method: SM 2540 C-2011
Batch ID: P388803

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-2011
Batch ID: P388804

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P388777

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P388778

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P388576

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P388444

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: P388399

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	106		P	85 - 115
Calcium	102		P	85 - 115
Iron	109		P	85 - 115
Magnesium	107		P	85 - 115
Potassium	103		P	85 - 115
Sodium	108		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P388399

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	104		P	85 - 115
Beryllium	96.5		P	85 - 115
Boron	98.0		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	103		P	85 - 115
Copper	104		P	85 - 115
Lead	99.7		P	85 - 115
Nickel	104		P	85 - 115
Selenium	103		P	85 - 115
Silver	97.9		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388631

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388634

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P388494

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388457

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P388449

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P388379

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388367

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

Reference Method: EPA 8270E
Batch ID: P388358

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	91.3	85.5	P/P	71 - 122
Alachlor	87.7	85.2	P/P	70 - 121
Ametryn	100	98.7	P/P	49 - 137
Atrazine	85.4	84.8	P/P	76 - 125
Atrazine Desethyl	91.8	91.2	P/P	31 - 144
Azinphos Methyl	117	123	P/P	67 - 150
Bromacil	83.6	82.6	P/P	36 - 121
Butylate	57.8	64.8	P/P	33 - 88.0
Carbophenothion	79.4	72.0	P/P	66 - 116
Chlorpyrifos Ethyl	81.0	70.0	P/F	73 - 117
Chlorpyrifos Methyl	89.7	78.5	P/P	68 - 121
Cyanazine	124	116	P/P	20 - 250
Demeton	80.5	77.7	P/P	30 - 123
Diazinon	92.9	91.2	P/P	70 - 128
Dimethenamid	92.1	87.7	P/P	66 - 122
Disulfoton	80.7	79.3	P/P	46 - 124
Dithiopyr	84.0	83.8	P/P	69 - 122
EPTC	58.1	58.2	P/P	31 - 90.0
Ethion	74.6	71.5	P/P	45 - 135
Ethoprop	83.5	75.9	P/P	59 - 118
Fenamiphos	97.9	87.9	P/P	30 - 136
Fipronil	102	97.9	P/P	57 - 127
Fipronil Desulfinyl	85.1	84.6	P/P	51 - 122
Fipronil Sulfide	92.3	80.6	P/P	57 - 119
Fipronil Sulfone	74.1	74.9	P/P	51 - 119
Flumioxazin	139	140	P/P	20 - 250
Fonofos	88.1	78.4	P/P	60 - 120
Hexazinone	86.4	79.7	P/P	57 - 142
Imazalil	86.5	86.1	P/P	30 - 139
Malathion	87.6	81.8	P/P	67 - 128
Metalaxyl	89.5	84.7	P/P	21 - 148
Metolachlor	83.5	81.7	P/P	70 - 120
Metribuzin	100	94.4	P/P	20 - 250
Mevinphos	85.1	81.5	P/P	47 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P388358

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	67.5	67.1	P/P	41 - 99.0
Naled	52.5	50.6	P/P	38 - 97.0
Norflurazon	91.5	91.9	P/P	54 - 127
Oxadiazon	78.2	75.5	P/P	65 - 122
Parathion Ethyl	88.2	80.0	P/P	71 - 113
Parathion Methyl	103	104	P/P	73 - 129
Pendimethalin	75.1	72.3	P/P	63 - 130
Phorate	83.6	70.1	P/P	48 - 118
Prodiamine	56.3	57.7	P/P	20 - 144
Prometon	83.8	89.8	P/P	53 - 120
Prometryn	98.9	98.2	P/P	63 - 119
Pronamide	88.1	93.6	P/P	81 - 122
Propiconazole	94.0	92.0	P/P	62 - 124
Simazine	99.1	86.2	P/P	77 - 129
Sulfentrazone	84.7	84.9	P/P	20 - 137
Tebuconazole	60.5	67.6	P/P	20 - 118
Terbufos	84.6	72.1	P/P	61 - 119
Terbutylazine	85.5	80.5	P/P	75 - 119

Reference Method: EPA 8270E
Batch ID: P388387

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	50.4	51.3	P/P	20 - 87.0
Alpha-BHC	88.8	90.1	P/P	65 - 142
Alpha-Chlordane	85.4	88.0	P/P	58 - 106
Beta-BHC	90.8	92.9	P/P	65 - 179
Beta-Cyfluthrin	77.9	78.8	P/P	39 - 153
Bifenthrin	84.2	83.6	P/P	38 - 128
Chlorothalonil	56.0	53.4	P/P	20 - 214
Cis-Nonachlor	86.0	88.2	P/P	56 - 113
Cypermethrin	74.4	76.4	P/P	37 - 130
Dacthal	88.2	90.5	P/P	75 - 109
DDD-p,p'	87.9	89.7	P/P	66 - 119
DDE-p,p'	85.6	86.9	P/P	53 - 108
DDT-p,p'	92.2	92.7	P/P	57 - 133
Delta-BHC	98.5	98.7	P/P	68 - 187
Deltamethrin	81.3	85.5	P/P	50 - 200
Dichlobenil	62.2	62.1	P/P	25 - 140
Dicofol	98.6	104	P/P	66 - 123
Dieldrin	91.6	90.6	P/P	65 - 111
Endosulfan I	89.5	92.3	P/P	65 - 115
Endosulfan II	101	95.9	P/P	68 - 133
Endosulfan Sulfate	83.3	81.8	P/P	62 - 127
Endrin	98.3	97.0	P/P	64 - 122
Endrin Aldehyde	83.1	88.8	P/P	61 - 132
Endrin Ketone	89.6	88.8	P/P	66 - 120
Esfenvalerate	76.2	78.1	P/P	50 - 150
Ethalfuralin	86.5	84.7	P/P	57 - 127
Fenpropathrin	88.1	86.8	P/P	60 - 160
Gamma-BHC	93.5	94.3	P/P	71 - 158
Gamma-Chlordane	82.7	86.0	P/P	53 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P388387

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Heptachlor	80.4	77.3	P/P	45 - 96.0
Heptachlor Epoxide	86.2	87.8	P/P	64 - 109
Hexachlorobenzene	82.9	82.5	P/P	46 - 103
Lambda-Cyhalothrin	76.3	77.7	P/P	38 - 145
Methoxychlor	88.8	89.4	P/P	69 - 149
MGK-264	49.7	50.5	F/P	50 - 150
Mirex	77.8	77.7	P/P	31 - 90.0
Permethrin	81.1	80.5	P/P	41 - 108
Phenothrin	52.3	52.3	P/P	22 - 91.0
Piperonyl Butoxide	95.7	97.4	P/P	50 - 150
Prallethrin	46.3	48.3	P/P	32 - 92.0
Tau-Fluvalinate	82.6	84.8	P/P	50 - 150
Tetramethrin	94.6	96.7	P/P	60 - 160
Trans-Nonachlor	84.7	86.8	P/P	50 - 107
Triclosan Methyl	95.2	98.6	P/P	50 - 150
Trifluralin	84.4	84.3	P/P	58 - 119

Reference Method: EPA 8276
Batch ID: P388387

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	91.8	91.8	P/P	47 - 119
Toxaphene	89.4	89.1	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P388291

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	47.3		P	30 - 160
Acetaminophen	74.2		P	30 - 160
Acetamiprid	68.9		P	30 - 160
Afidopyropen	57.7		P	30 - 160
Bentazon	91.4		P	30 - 160
Benzovindiflupyr	74.9		P	30 - 160
Carbamazepine	52.3		P	30 - 160
Clothianidin	51.9		P	30 - 160
Dinotefuran	72.6		P	30 - 160
Diuron	30.6		P	30 - 160
Fenuron	90.5		P	30 - 160
Fluridone	89.7		P	30 - 160
Hydrocodone	75.7		P	30 - 160
Ibuprofen	124		P	30 - 160
Imazapyr	120		P	30 - 160
Imidacloprid	82.1		P	30 - 160
Linuron	73.1		P	30 - 160
Mandestrobin	93.6		P	30 - 160
MCPP	157		P	30 - 160
Naproxen	63.5		P	30 - 160
Primidone	71.8		P	30 - 160
Pyraclostrobin	90.0		P	30 - 160
Thiamethoxam	63.8		P	30 - 160
Tolfenpyrad	48.7		P	30 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P388291

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Triclopyr	134		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P388355

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	125		P	40 - 150
AMPA	78.8		P	40 - 150
Endothall	92.8		P	40 - 150
Glufosinate	85.4		P	40 - 150
Glyphosate	93.1		P	40 - 140
Sucralose	105		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P388526

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	66.7		P	30 - 160
Aldicarb	62.6		P	30 - 160
Aldicarb Sulfone	84.9		P	30 - 160
Aldicarb Sulfoxide	115		P	30 - 160
Carbaryl	30.2		P	30 - 160
Carbofuran	37.3		P	30 - 160
Methiocarb	38.6		P	30 - 160
Methomyl	79.9		P	30 - 160
Oxamyl	91.5		P	30 - 160
Propoxur	38.4		P	30 - 160

Reference Method: SM 2120 B-2011
Batch ID: P388353

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.2		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P388573

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

Reference Method: SM 4500 F-C-2011
Batch ID: P388576

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.9		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P388444

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P388399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200325	Barium	104	107	P/P	80 - 120
2200325	Calcium	103		P	80 - 120
2200325	Iron	114	107	P/P	80 - 120
2200325	Magnesium	113	105	P/P	80 - 120
2200325	Potassium	105	101	P/P	80 - 120
2200325	Sodium	110	105	P/P	80 - 120
2200325	Zinc	99.7	102	P/P	80 - 120
2200340	Barium	105		P	80 - 120
2200340	Calcium	99.2		P	80 - 120
2200340	Iron	108		P	80 - 120
2200340	Magnesium	103		P	80 - 120
2200340	Potassium	99.0		P	80 - 120
2200340	Sodium	103		P	80 - 120
2200340	Zinc	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P388399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200325	Aluminum	100	102	P/P	80 - 120
2200325	Antimony	104	105	P/P	80 - 120
2200325	Arsenic	103	104	P/P	80 - 120
2200325	Beryllium	95.9	98.7	P/P	80 - 120
2200325	Boron	102	105	P/P	80 - 120
2200325	Cadmium	101	103	P/P	80 - 120
2200325	Chromium	101	100	P/P	80 - 120
2200325	Copper	103	103	P/P	80 - 120
2200325	Lead	98.4	99.5	P/P	80 - 120
2200325	Nickel	101	102	P/P	80 - 120
2200325	Selenium	96.2	99.9	P/P	80 - 120
2200325	Silver	97.6	95.7	P/P	80 - 120
2200325	Thallium	101	103	P/P	80 - 120
2200340	Aluminum	103		P	80 - 120
2200340	Antimony	107		P	80 - 120
2200340	Arsenic	105		P	80 - 120
2200340	Beryllium	96.8		P	80 - 120
2200340	Boron	103		P	80 - 120
2200340	Cadmium	103		P	80 - 120
2200340	Chromium	105		P	80 - 120
2200340	Copper	104		P	80 - 120
2200340	Lead	101		P	80 - 120
2200340	Nickel	103		P	80 - 120
2200340	Selenium	99.1		P	80 - 120
2200340	Silver	98.6		P	80 - 120
2200340	Thallium	106		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388631

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2199815	Chloride	103		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388634

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2199815	Sulfate	98.9		P	90 - 110
2200113	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P388494

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200051	Ammonia-N	100	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388457

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200137	Kjeldahl Nitrogen	110	102	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P388449

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200093	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P388379

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200093	Total-P	107	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388367

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200139	O-Phosphate-P	95.8	98.8	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P388358

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200126	Acetochlor	85.6	87.3	P/P	68 - 126
2200126	Alachlor	80.7	78.8	P/P	66 - 125
2200126	Ametryn	106	115	P/P	31 - 182
2200126	Atrazine Desethyl	83.6	79.0	P/P	13 - 161
2200126	Azinphos Methyl	112	115	P/P	54 - 162
2200126	Butylate	40.7	49.2	P/P	16 - 92.0
2200126	Carbophenothion	73.5	74.9	P/P	30 - 131
2200126	Chlorpyrifos Ethyl	78.0	78.1	P/P	63 - 124
2200126	Chlorpyrifos Methyl	80.6	81.4	P/P	64 - 125
2200126	Cyanazine	109	108	P/P	13 - 245
2200126	Demeton	82.1	81.7	P/P	20 - 154
2200126	Diazinon	94.6	98.7	P/P	66 - 141
2200126	Dimethenamid	83.9	88.8	P/P	50 - 130
2200126	Disulfoton	82.6	91.5	P/P	55 - 130
2200126	Dithiopyr	78.5	84.2	P/P	66 - 122

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P388358

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200126	EPTC	49.9	58.0	P/P	15 - 93.0
2200126	Ethion	77.7	77.8	P/P	15 - 148
2200126	Ethoprop	82.8	89.0	P/P	59 - 126
2200126	Fenamiphos	87.1	80.6	P/P	39 - 137
2200126	Fipronil	99.1	100	P/P	47 - 131
2200126	Fipronil Desulfinyl	83.1	85.9	P/P	43 - 121
2200126	Fipronil Sulfide	77.0	76.9	P/P	29 - 134
2200126	Fipronil Sulfone	70.9	65.5	P/P	19 - 131
2200126	Flumioxazin	153	157	P/P	10 - 300
2200126	Fonofos	85.2	90.5	P/P	62 - 128
2200126	Hexazinone	84.5	85.4	P/P	58 - 154
2200126	Imazalil	73.3	61.9	P/P	10 - 215
2200126	Malathion	76.9	77.4	P/P	54 - 135
2200126	Metalaxyl	81.8	86.9	P/P	46 - 136
2200126	Metribuzin	99.3	102	P/P	44 - 277
2200126	Mevinphos	95.4	87.3	P/P	44 - 135
2200126	Molinate	66.7	69.5	P/P	31 - 104
2200126	Naled	49.6	49.4	P/P	33 - 113
2200126	Parathion Ethyl	87.7	87.0	P/P	67 - 120
2200126	Parathion Methyl	113	108	P/P	70 - 140
2200126	Pendimethalin	90.2	91.1	P/P	59 - 145
2200126	Phorate	72.7	75.3	P/P	52 - 127
2200126	Prodiamine	83.9	83.8	P/P	11 - 157
2200126	Prometon	89.1	91.0	P/P	55 - 130
2200126	Prometryn	95.3	101	P/P	55 - 127
2200126	Pronamide	89.7	85.2	P/P	66 - 150
2200126	Propiconazole	111	116	P/P	14 - 178
2200126	Simazine	112	98.1	P/P	58 - 159
2200126	Tebuconazole	59.5	60.3	P/P	10 - 122
2200126	Terbufos	84.6	84.9	P/P	65 - 131
2200126	Terbuthylazine	85.4	88.3	P/P	63 - 131

Reference Method: EPA 8270E
Batch ID: P388387

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2201111	Aldrin	63.0	62.1	P/P	32 - 82.0
2201111	Alpha-BHC	99.4	96.5	P/P	68 - 157
2201111	Alpha-Chlordane	80.7	81.6	P/P	54 - 108
2201111	Beta-BHC	103	102	P/P	54 - 200
2201111	Beta-Cyfluthrin	79.9	78.0	P/P	50 - 154
2201111	Bifenthrin	80.3	81.4	P/P	49 - 124
2201111	Chlorothalonil	124	120	P/P	10 - 289
2201111	Cis-Nonachlor	81.6	82.1	P/P	53 - 112
2201111	Cypermethrin	76.7	78.4	P/P	43 - 141
2201111	Dacthal	87.9	89.1	P/P	75 - 112
2201111	DDD-p,p'	79.8	80.7	P/P	58 - 125
2201111	DDE-p,p'	74.0	76.0	P/P	50 - 108
2201111	DDT-p,p'	85.2	87.2	P/P	52 - 140
2201111	Delta-BHC	270	269	F/F	61 - 228
2201111	Deltamethrin	77.4	77.5	P/P	50 - 200
2201111	Dichlobenil	45.1	46.1	P/P	25 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P388387

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2201111	Dicofol	87.1	86.9	P/P	59 - 130
2201111	Dieldrin	86.4	85.6	P/P	57 - 121
2201111	Endosulfan I	98.0	101	P/P	62 - 123
2201111	Endosulfan II	162	146	P/P	48 - 163
2201111	Endosulfan Sulfate	87.1	91.5	P/P	63 - 132
2201111	Endrin	100	100	P/P	58 - 128
2201111	Endrin Aldehyde	76.8	74.6	P/P	44 - 126
2201111	Endrin Ketone	87.5	89.6	P/P	68 - 127
2201111	Esfenvalerate	71.4	71.7	P/P	50 - 150
2201111	Ethalfuralin	79.3	79.5	P/P	55 - 131
2201111	Fenpropathrin	82.9	85.0	P/P	60 - 160
2201111	Gamma-BHC	139	123	P/P	54 - 206
2201111	Gamma-Chlordane	78.8	77.9	P/P	52 - 105
2201111	Heptachlor	74.0	67.6	P/P	47 - 94.0
2201111	Heptachlor Epoxide	83.1	84.0	P/P	61 - 113
2201111	Hexachlorobenzene	69.3	71.7	P/P	45 - 100
2201111	Lambda-Cyhalothrin	82.6	80.6	P/P	37 - 165
2201111	Methoxychlor	83.6	83.7	P/P	63 - 153
2201111	MGK-264	77.9	81.4	P/P	50 - 150
2201111	Mirex	74.1	74.9	P/P	38 - 90.0
2201111	Permethrin	77.1	77.2	P/P	45 - 112
2201111	Phenothrin	66.3	67.0	P/P	22 - 118
2201111	Piperonyl Butoxide	100	101	P/P	50 - 150
2201111	Prallethrin	61.2	61.4	P/P	21 - 114
2201111	Tau-Fluvalinate	81.6	81.8	P/P	50 - 150
2201111	Tetramethrin	125	126	P/P	60 - 160
2201111	Trans-Nonachlor	78.7	80.0	P/P	50 - 103
2201111	Triclosan Methyl	87.1	90.0	P/P	50 - 150
2201111	Trifluralin	78.2	78.7	P/P	57 - 122

Reference Method: EPA 8276
Batch ID: P388387

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2201091	Chlordane	100	102	P/P	34 - 129
2201091	Toxaphene	122	127	P/P	16 - 148

Reference Method: EPA 8321B
Batch ID: P388291

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2199564	2,4-D	49.5	50.0	P/P	30 - 160
2199564	Acetaminophen	80.5	83.7	P/P	30 - 160
2199564	Acetamiprid	66.2	59.1	P/P	30 - 160
2199564	Afidopyropen	32.5	28.4	P/F	30 - 160
2199564	Bentazon	34.8	36.3	P/P	30 - 160
2199564	Benzovindiflupyr	56.7	63.0	P/P	30 - 160
2199564	Carbamazepine	44.5	46.2	P/P	30 - 160
2199564	Clothianidin	63.8	59.5	P/P	30 - 160
2199564	Dinotefuran	78.5	80.9	P/P	30 - 160
2199564	Diuron	37.7	37.0	P/P	30 - 160
2199564	Fenuron	57.5	59.0	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P388291

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2199564	Fluridone	66.2	63.7	P/P	30 - 160
2199564	Hydrocodone	56.1	60.7	P/P	30 - 160
2199564	Ibuprofen	57.7	51.2	P/P	30 - 160
2199564	Imazapyr	49.9	55.0	P/P	30 - 160
2199564	Imidacloprid	112	112	P/P	30 - 160
2199564	Linuron	76.7	81.3	P/P	30 - 160
2199564	Mandestrobin	60.6	67.1	P/P	30 - 160
2199564	MCPP	55.0	57.5	P/P	30 - 160
2199564	Naproxen	40.5	46.4	P/P	30 - 160
2199564	Primidone	75.6	73.4	P/P	30 - 160
2199564	Pyraclostrobin	69.1	70.8	P/P	30 - 160
2199564	Thiamethoxam	68.6	68.8	P/P	30 - 160
2199564	Tolfenpyrad	41.8	40.5	P/P	30 - 160
2199564	Triclopyr	49.8	58.5	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P388355

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2199834	Acesulfame K	77.6	73.6	P/P	40 - 150
2199834	AMPA	121	120	P/P	40 - 150
2199834	Endothall	89.0	92.2	P/P	40 - 150
2199834	Glufosinate	80.7	87.4	P/P	40 - 150
2199834	Glyphosate	83.1	82.8	P/P	40 - 140
2199834	Sucralose	90.2	87.2	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P388526

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200121	3-Hydroxycarbofuran	48.3	47.2	P/P	30 - 160
2200121	Aldicarb	43.4	45.7	P/P	30 - 160
2200121	Aldicarb Sulfone	63.9	69.7	P/P	30 - 160
2200121	Aldicarb Sulfoxide	35.5	40.7	P/P	30 - 160
2200121	Carbaryl	18.2	23.3	F/F	30 - 160
2200121	Carbofuran	27.2	30.5	F/P	30 - 160
2200121	Methiocarb	31.3	35.7	P/P	30 - 160
2200121	Methomyl	55.1	64.1	P/P	30 - 160
2200121	Oxamyl	66.7	69.4	P/P	30 - 160
2200121	Propoxur	25.9	30.3	F/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P388576

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200682	Fluoride	108	108	F/F	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P388444

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200192	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P388349

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200113	Turbidity	3.74	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P388399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200325	Barium	2.35	Spike	P	0 - 20
2200325	Calcium	3.37	Spike	P	0 - 20
2200325	Iron	5.15	Spike	P	0 - 20
2200325	Magnesium	4.62	Spike	P	0 - 20
2200325	Potassium	3.99	Spike	P	0 - 20
2200325	Sodium	2.52	Spike	P	0 - 20
2200325	Zinc	2.39	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P388399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200325	Aluminum	2.14	Spike	P	0 - 20
2200325	Antimony	0.621	Spike	P	0 - 20
2200325	Arsenic	0.989	Spike	P	0 - 20
2200325	Beryllium	2.93	Spike	P	0 - 20
2200325	Boron	2.18	Spike	P	0 - 20
2200325	Cadmium	1.37	Spike	P	0 - 20
2200325	Chromium	0.409	Spike	P	0 - 20
2200325	Copper	0.182	Spike	P	0 - 20
2200325	Lead	1.12	Spike	P	0 - 20
2200325	Nickel	0.217	Spike	P	0 - 20
2200325	Selenium	3.75	Spike	P	0 - 20
2200325	Silver	1.93	Spike	P	0 - 20
2200325	Thallium	1.89	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388631

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2199815	Chloride	0.158	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388634

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2199815	Sulfate	0.610	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P388494

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200051	Ammonia-N	0.892	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P388457

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200137	Kjeldahl Nitrogen	4.47	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P388449

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200093	NO2NO3-N	0.482	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P388379

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200093	Total-P	0.0233	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P388367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200139	O-Phosphate-P	2.91	Spike	P	0 - 20

Reference Method: EPA 8270E
 Batch ID: P388358

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200126	Acetochlor	1.99	Spike	P	0 - 30
2200126	Alachlor	2.36	Spike	P	0 - 30
2200126	Ametryn	8.18	Spike	P	0 - 30
2200126	Atrazine	2.66	Spike	P	0 - 30
2200126	Atrazine Desethyl	3.33	Spike	P	0 - 30
2200126	Azinphos Methyl	2.96	Spike	P	0 - 30
2200126	Bromacil	1.57	Spike	P	0 - 30
2200126	Butylate	18.8	Spike	P	0 - 30
2200126	Carbophenothion	1.88	Spike	P	0 - 30
2200126	Chlorpyrifos Ethyl	0.0889	Spike	P	0 - 30
2200126	Chlorpyrifos Methyl	1.05	Spike	P	0 - 30
2200126	Cyanazine	0.878	Spike	P	0 - 30
2200126	Demeton	0.477	Spike	P	0 - 30
2200126	Diazinon	4.21	Spike	P	0 - 30
2200126	Dimethenamid	5.68	Spike	P	0 - 30
2200126	Disulfoton	10.3	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P388358

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200126	Dithiopyr	6.50	Spike	P	0 - 30
2200126	EPTC	15.0	Spike	P	0 - 30
2200126	Ethion	0.117	Spike	P	0 - 30
2200126	Ethoprop	7.25	Spike	P	0 - 30
2200126	Fenamiphos	7.69	Spike	P	0 - 30
2200126	Fipronil	0.947	Spike	P	0 - 30
2200126	Fipronil Desulfinyl	2.89	Spike	P	0 - 30
2200126	Fipronil Sulfide	0.195	Spike	P	0 - 30
2200126	Fipronil Sulfone	4.42	Spike	P	0 - 30
2200126	Flumioxazin	2.76	Spike	P	0 - 30
2200126	Fonofos	6.10	Spike	P	0 - 30
2200126	Hexazinone	0.932	Spike	P	0 - 30
2200126	Imazalil	16.8	Spike	P	0 - 30
2200126	Malathion	0.612	Spike	P	0 - 30
2200126	Metalaxyl	4.47	Spike	P	0 - 30
2200126	Metolachlor	3.52	Spike	P	0 - 30
2200126	Metribuzin	2.73	Spike	P	0 - 30
2200126	Mevinphos	8.84	Spike	P	0 - 30
2200126	Molinate	4.11	Spike	P	0 - 30
2200126	Naled	0.501	Spike	P	0 - 30
2200126	Norflurazon	5.22	Spike	P	0 - 30
2200126	Oxadiazon	7.21	Spike	P	0 - 30
2200126	Parathion Ethyl	0.775	Spike	P	0 - 30
2200126	Parathion Methyl	4.62	Spike	P	0 - 30
2200126	Pendimethalin	1.05	Spike	P	0 - 30
2200126	Phorate	3.43	Spike	P	0 - 30
2200126	Prodiamine	0.116	Spike	P	0 - 30
2200126	Prometon	2.15	Spike	P	0 - 30
2200126	Prometryn	6.08	Spike	P	0 - 30
2200126	Pronamide	5.15	Spike	P	0 - 30
2200126	Propiconazole	4.04	Spike	P	0 - 30
2200126	Simazine	12.9	Spike	P	0 - 30
2200126	Sulfentrazone	3.21	Spike	P	0 - 30
2200126	Tebuconazole	1.36	Spike	P	0 - 30
2200126	Terbufos	0.260	Spike	P	0 - 30
2200126	Terbuthylazine	3.42	Spike	P	0 - 30
LFB	Acetochlor	6.57	LCS	P	0 - 30
LFB	Alachlor	2.90	LCS	P	0 - 30
LFB	Ametryn	1.63	LCS	P	0 - 30
LFB	Atrazine	0.707	LCS	P	0 - 30
LFB	Atrazine Desethyl	0.714	LCS	P	0 - 30
LFB	Azinphos Methyl	4.96	LCS	P	0 - 30
LFB	Bromacil	1.31	LCS	P	0 - 30
LFB	Butylate	11.4	LCS	P	0 - 30
LFB	Carbophenothion	9.74	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	14.5	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	13.2	LCS	P	0 - 30
LFB	Cyanazine	6.61	LCS	P	0 - 30
LFB	Demeton	3.53	LCS	P	0 - 30
LFB	Diazinon	1.86	LCS	P	0 - 30
LFB	Dimethenamid	4.90	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P388358

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Disulfoton	1.72	LCS	P	0 - 30
LFB	Dithiopyr	0.206	LCS	P	0 - 30
LFB	EPTC	0.144	LCS	P	0 - 30
LFB	Ethion	4.22	LCS	P	0 - 30
LFB	Ethoprop	9.47	LCS	P	0 - 30
LFB	Fenamiphos	10.8	LCS	P	0 - 30
LFB	Fipronil	3.68	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	0.574	LCS	P	0 - 30
LFB	Fipronil Sulfide	13.5	LCS	P	0 - 30
LFB	Fipronil Sulfone	1.10	LCS	P	0 - 30
LFB	Flumioxazin	0.389	LCS	P	0 - 30
LFB	Fonofos	11.7	LCS	P	0 - 30
LFB	Hexazinone	7.97	LCS	P	0 - 30
LFB	Imazalil	0.560	LCS	P	0 - 30
LFB	Malathion	6.92	LCS	P	0 - 30
LFB	Metalaxyl	5.52	LCS	P	0 - 30
LFB	Metolachlor	2.11	LCS	P	0 - 30
LFB	Metribuzin	5.87	LCS	P	0 - 30
LFB	Mevinphos	4.38	LCS	P	0 - 30
LFB	Molinate	0.586	LCS	P	0 - 30
LFB	Naled	3.70	LCS	P	0 - 30
LFB	Norflurazon	0.370	LCS	P	0 - 30
LFB	Oxadiazon	3.46	LCS	P	0 - 30
LFB	Parathion Ethyl	9.72	LCS	P	0 - 30
LFB	Parathion Methyl	0.791	LCS	P	0 - 30
LFB	Pendimethalin	3.88	LCS	P	0 - 30
LFB	Phorate	17.5	LCS	P	0 - 30
LFB	Prodiamine	2.54	LCS	P	0 - 30
LFB	Prometon	6.91	LCS	P	0 - 30
LFB	Prometryn	0.666	LCS	P	0 - 30
LFB	Pronamide	6.08	LCS	P	0 - 30
LFB	Propiconazole	2.11	LCS	P	0 - 30
LFB	Simazine	14.0	LCS	P	0 - 30
LFB	Sulfentrazone	0.212	LCS	P	0 - 30
LFB	Tebuconazole	11.2	LCS	P	0 - 30
LFB	Terbufos	16.0	LCS	P	0 - 30
LFB	Terbutylazine	6.00	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P388387

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201111	Aldrin	1.55	Spike	P	0 - 30
2201111	Alpha-BHC	3.02	Spike	P	0 - 30
2201111	Alpha-Chlordane	1.10	Spike	P	0 - 30
2201111	Beta-BHC	1.05	Spike	P	0 - 30
2201111	Beta-Cyfluthrin	2.44	Spike	P	0 - 30
2201111	Bifenthrin	1.37	Spike	P	0 - 30
2201111	Chlorothalonil	3.58	Spike	P	0 - 30
2201111	Cis-Nonachlor	0.595	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P388387

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201111	Cypermethrin	2.20	Spike	P	0 - 30
2201111	Dacthal	1.39	Spike	P	0 - 30
2201111	DDD-p,p'	1.16	Spike	P	0 - 30
2201111	DDE-p,p'	2.67	Spike	P	0 - 30
2201111	DDT-p,p'	2.25	Spike	P	0 - 30
2201111	Delta-BHC	0.461	Spike	P	0 - 30
2201111	Deltamethrin	0.124	Spike	P	0 - 30
2201111	Dichlobenil	2.35	Spike	P	0 - 30
2201111	Dicofol	0.237	Spike	P	0 - 30
2201111	Dieldrin	0.879	Spike	P	0 - 30
2201111	Endosulfan I	3.40	Spike	P	0 - 30
2201111	Endosulfan II	10.4	Spike	P	0 - 30
2201111	Endosulfan Sulfate	4.87	Spike	P	0 - 30
2201111	Endrin	0.273	Spike	P	0 - 30
2201111	Endrin Aldehyde	2.94	Spike	P	0 - 30
2201111	Endrin Ketone	2.36	Spike	P	0 - 30
2201111	Esfenvalerate	0.495	Spike	P	0 - 30
2201111	Ethalfuralin	0.257	Spike	P	0 - 30
2201111	Fenpropathrin	2.40	Spike	P	0 - 30
2201111	Gamma-BHC	11.9	Spike	P	0 - 30
2201111	Gamma-Chlordane	1.08	Spike	P	0 - 30
2201111	Heptachlor	8.98	Spike	P	0 - 30
2201111	Heptachlor Epoxide	1.03	Spike	P	0 - 30
2201111	Hexachlorobenzene	3.34	Spike	P	0 - 30
2201111	Lambda-Cyhalothrin	2.45	Spike	P	0 - 30
2201111	Methoxychlor	0.0875	Spike	P	0 - 30
2201111	MGK-264	4.32	Spike	P	0 - 30
2201111	Mirex	1.17	Spike	P	0 - 30
2201111	Permethrin	0.111	Spike	P	0 - 30
2201111	Phenothrin	1.10	Spike	P	0 - 30
2201111	Piperonyl Butoxide	0.260	Spike	P	0 - 30
2201111	Prallethrin	0.321	Spike	P	0 - 30
2201111	Tau-Fluvalinate	0.324	Spike	P	0 - 30
2201111	Tetramethrin	0.311	Spike	P	0 - 30
2201111	Trans-Nonachlor	1.67	Spike	P	0 - 30
2201111	Triclosan Methyl	3.30	Spike	P	0 - 30
2201111	Trifluralin	0.720	Spike	P	0 - 30
LFB	Aldrin	1.75	LCS	P	0 - 30
LFB	Alpha-BHC	1.47	LCS	P	0 - 30
LFB	Alpha-Chlordane	2.94	LCS	P	0 - 30
LFB	Beta-BHC	2.36	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	1.19	LCS	P	0 - 30
LFB	Bifenthrin	0.693	LCS	P	0 - 30
LFB	Chlorothalonil	4.77	LCS	P	0 - 30
LFB	Cis-Nonachlor	2.61	LCS	P	0 - 30
LFB	Cypermethrin	2.59	LCS	P	0 - 30
LFB	Dacthal	2.50	LCS	P	0 - 30
LFB	DDD-p,p'	2.04	LCS	P	0 - 30
LFB	DDE-p,p'	1.56	LCS	P	0 - 30
LFB	DDT-p,p'	0.567	LCS	P	0 - 30
LFB	Delta-BHC	0.193	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P388387

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Deltamethrin	4.99	LCS	P	0 - 30
LFB	Dichlobenil	0.171	LCS	P	0 - 30
LFB	Dicofol	5.62	LCS	P	0 - 30
LFB	Dieldrin	1.08	LCS	P	0 - 30
LFB	Endosulfan I	3.07	LCS	P	0 - 30
LFB	Endosulfan II	5.52	LCS	P	0 - 30
LFB	Endosulfan Sulfate	1.80	LCS	P	0 - 30
LFB	Endrin	1.36	LCS	P	0 - 30
LFB	Endrin Aldehyde	6.71	LCS	P	0 - 30
LFB	Endrin Ketone	0.923	LCS	P	0 - 30
LFB	Esfenvalerate	2.43	LCS	P	0 - 30
LFB	Ethalfuralin	2.11	LCS	P	0 - 30
LFB	Fenpropathrin	1.53	LCS	P	0 - 30
LFB	Gamma-BHC	0.929	LCS	P	0 - 30
LFB	Gamma-Chlordane	3.89	LCS	P	0 - 30
LFB	Heptachlor	4.02	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.78	LCS	P	0 - 30
LFB	Hexachlorobenzene	0.585	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	1.74	LCS	P	0 - 30
LFB	Methoxychlor	0.734	LCS	P	0 - 30
LFB	MGK-264	1.54	LCS	P	0 - 30
LFB	Mirex	0.0673	LCS	P	0 - 30
LFB	Permethrin	0.676	LCS	P	0 - 30
LFB	Phenothrin	0.127	LCS	P	0 - 30
LFB	Piperonyl Butoxide	1.84	LCS	P	0 - 30
LFB	Prallethrin	4.29	LCS	P	0 - 30
LFB	Tau-Fluvalinate	2.72	LCS	P	0 - 30
LFB	Tetramethrin	2.20	LCS	P	0 - 30
LFB	Trans-Nonachlor	2.50	LCS	P	0 - 30
LFB	Triclosan Methyl	3.51	LCS	P	0 - 30
LFB	Trifluralin	0.0990	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P388387

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201091	Chlordane	1.70	Spike	P	0 - 30
2201091	Toxaphene	4.06	Spike	P	0 - 30
LFB	Chlordane	0.0631	LCS	P	0 - 30
LFB	Toxaphene	0.296	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P388291

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2199564	2,4-D	1.00	Spike	P	0 - 30
2199564	Acetaminophen	3.87	Spike	P	0 - 30
2199564	Acetamiprid	11.4	Spike	P	0 - 30
2199564	Afidopyropen	13.2	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P388291

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2199564	Bentazon	4.28	Spike	P	0 - 30
2199564	Benzovindiflupyr	10.5	Spike	P	0 - 30
2199564	Carbamazepine	3.82	Spike	P	0 - 30
2199564	Clothianidin	7.01	Spike	P	0 - 30
2199564	Dinotefuran	3.07	Spike	P	0 - 30
2199564	Diuron	2.06	Spike	P	0 - 30
2199564	Fenuron	2.56	Spike	P	0 - 30
2199564	Fluridone	3.77	Spike	P	0 - 30
2199564	Hydrocodone	7.94	Spike	P	0 - 30
2199564	Ibuprofen	11.9	Spike	P	0 - 30
2199564	Imazapyr	4.09	Spike	P	0 - 30
2199564	Imidacloprid	0.0777	Spike	P	0 - 30
2199564	Linuron	5.86	Spike	P	0 - 30
2199564	Mandestrobin	10.3	Spike	P	0 - 30
2199564	MCPP	4.33	Spike	P	0 - 30
2199564	Naproxen	13.5	Spike	P	0 - 30
2199564	Primidone	2.98	Spike	P	0 - 30
2199564	Pyraclostrobin	2.47	Spike	P	0 - 30
2199564	Thiamethoxam	0.231	Spike	P	0 - 30
2199564	Tolfenpyrad	3.27	Spike	P	0 - 30
2199564	Triclopyr	16.1	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P388355

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2199834	Acesulfame K	5.35	Spike	P	0 - 30
2199834	AMPA	1.24	Spike	P	0 - 30
2199834	Endothall	3.49	Spike	P	0 - 30
2199834	Glufosinate	7.97	Spike	P	0 - 30
2199834	Glyphosate	0.362	Spike	P	0 - 30
2199834	Sucralose	3.06	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P388526

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200121	3-Hydroxycarbofuran	2.45	Spike	P	0 - 30
2200121	Aldicarb	5.21	Spike	P	0 - 30
2200121	Aldicarb Sulfone	8.73	Spike	P	0 - 30
2200121	Aldicarb Sulfoxide	13.5	Spike	P	0 - 30
2200121	Carbaryl	24.5	Spike	P	0 - 30
2200121	Carbofuran	11.6	Spike	P	0 - 30
2200121	Methiocarb	13.2	Spike	P	0 - 30
2200121	Methomyl	15.0	Spike	P	0 - 30
2200121	Oxamyl	3.93	Spike	P	0 - 30
2200121	Propoxur	15.8	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
 Batch ID: P388353

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200113	Color (true)	3.24	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P388573

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200682	Total Alkalinity	0.679	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
 Batch ID: P388803

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2199816	TDS	6.11	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
 Batch ID: P388804

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200049	TDS	2.34	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
 Batch ID: P388576

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200682	Fluoride	0.498	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
 Batch ID: P388444

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200192	Organic Carbon	0.220	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2200122
Field Sample ID: G5SE0043

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	59.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	71.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	47.8	P	30 - 160
EPA 8321B	Diuron-d6	47.4	P	30 - 160
EPA 8321B	Endothall-d6	112	P	30 - 160
EPA 8321B	Endothall-d6	112	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	78.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	78.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	67.5	P	30 - 160
EPA 8321B	Primidone-d5	67.0	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	30 - 160

Lab Sample ID: 2200123
Field Sample ID: FB_10062020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	64.9	P	30 - 160

Lab Sample ID: 2200124
Field Sample ID: FB_10062020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	60.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	70.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	59.9	P	30 - 160
EPA 8321B	Diuron-d6	47.1	P	30 - 160
EPA 8321B	Endothall-d6	107	P	30 - 160
EPA 8321B	Endothall-d6	107	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	100	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	100	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.2	P	30 - 160
EPA 8321B	Primidone-d5	76.3	P	30 - 160
EPA 8321B	Sucralose-d6	107	P	30 - 160
EPA 8321B	Sucralose-d6	107	P	30 - 160

Lab Sample ID: 2200125
Field Sample ID: G5SE0043

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	73.1	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	62.6	P	34 - 106
EPA 8276	Decachlorobiphenyl	49.8	P	26 - 97.0
EPA 8276	PCNB	89.8	P	38 - 141

Lab Sample ID: 2200126
Field Sample ID: G5SE0043

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	97.0	P	72 - 135
EPA 8270E	Terbufos-d10	78.2	P	57 - 134

Quality Assurance Report Surrogates

Lab Sample ID: 2200127

Field Sample ID: FB_10062020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	82.7	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	77.1	P	34 - 106
EPA 8276	Decachlorobiphenyl	60.6	P	26 - 97.0
EPA 8276	PCNB	105	P	38 - 141

Lab Sample ID: 2200128

Field Sample ID: FB_10062020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	92.2	P	72 - 135
EPA 8270E	Terbufos-d10	84.5	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A101415

Included Lab Sample IDs: 2200113, 2200116

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A101417

Included Lab Sample IDs: 2200113, 2200116

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	90 - 115
Color (true)	98.2	99.0	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A101426

Included Lab Sample IDs: 2200115, 2200118

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.0	98.2	P/P	90 - 110
O-Phosphate-P	99.7	98.0	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A101446

Included Lab Sample IDs: 2200114, 2200117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.0	98.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A101447

Included Lab Sample IDs: 2200114, 2200117

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

Reference Method: EPA 8321B

Run ID: A101451

Included Lab Sample IDs: 2200122, 2200124

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	125	61.4	P/P	60 - 160
Endothall	108	113	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A101460

Included Lab Sample IDs: 2200114, 2200117

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A101474

Included Lab Sample IDs: 2200114, 2200117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.2	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A101475

Included Lab Sample IDs: 2200122, 2200124

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	92.3	69.4	P/P	60 - 160
Glufosinate	89.0	76.8	P/P	60 - 160
Glyphosate	99.7	99.4	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A101476

Included Lab Sample IDs: 2200129, 2200130

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	101	99.4	P/P	90 - 110
Antimony	101	101	P/P	90 - 110
Arsenic	101	99.7	P/P	90 - 110
Arsenic	102	101	P/P	90 - 110
Beryllium	97.6	98.2	P/P	90 - 110
Beryllium	99.0	97.6	P/P	90 - 110
Boron	96.9	100	P/P	90 - 110
Boron	98.5	96.9	P/P	90 - 110
Cadmium	98.2	97.1	P/P	90 - 110
Cadmium	98.5	98.2	P/P	90 - 110
Chromium	97.1	98.2	P/P	90 - 110
Chromium	98.2	97.4	P/P	90 - 110
Copper	101	98.2	P/P	90 - 110
Copper	101	101	P/P	90 - 110
Lead	98.8	97.2	P/P	90 - 110
Lead	99.2	98.8	P/P	90 - 110
Nickel	100	100	P/P	90 - 110
Nickel	100	98.2	P/P	90 - 110
Selenium	97.8	95.3	P/P	90 - 110
Selenium	99.5	97.8	P/P	90 - 110
Silver	102	99.9	P/P	90 - 110
Silver	102	102	P/P	90 - 110
Thallium	95.8	94.8	P/P	90 - 110
Thallium	96.5	95.8	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A101477

Included Lab Sample IDs: 2200129, 2200130

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	100	P/P	90 - 110
Barium	102	101	P/P	95 - 105
Calcium	101	99.6	P/P	95 - 105
Calcium	99.6	101	P/P	90 - 110
Iron	101	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A101477

Included Lab Sample IDs: 2200129, 2200130

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	102	101	P/P	95 - 105
Magnesium	100	98.8	P/P	95 - 105
Magnesium	98.8	99.4	P/P	90 - 110
Potassium	98.9	99.6	P/P	90 - 110
Potassium	99.0	98.9	P/P	95 - 105
Sodium	101	102	P/P	95 - 105
Sodium	102	103	P/P	90 - 110
Zinc	98.2	97.0	P/P	90 - 110
Zinc	100	98.2	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A101478

Included Lab Sample IDs: 2200114

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

Reference Method: EPA 8321B

Run ID: A101479

Included Lab Sample IDs: 2200122, 2200124

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	106	109	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A101486

Included Lab Sample IDs: 2200113, 2200116

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.6	105	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A101486

Included Lab Sample IDs: 2200113, 2200116

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A101493

Included Lab Sample IDs: 2200113, 2200116

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A101496

Included Lab Sample IDs: 2200129, 2200130

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A101496

Included Lab Sample IDs: 2200129, 2200130

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.2	97.8	P/P	90 - 110
Aluminum	99.0	98.2	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A101503

Included Lab Sample IDs: 2200125, 2200127

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	99.2		P	80 - 120
Alpha-BHC	104		P	80 - 120
Alpha-Chlordane	97.1		P	80 - 120
Beta-BHC	99.2		P	80 - 120
Beta-Cyfluthrin	85.3		P	80 - 120
Bifenthrin	100		P	80 - 120
Chlorothalonil	88.4		P	80 - 120
Cis-Nonachlor	98.9		P	80 - 120
Cypermethrin	86.2		P	80 - 120
Dacthal	98.0		P	80 - 120
DDD-p,p'	103		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	111		P	80 - 120
Delta-BHC	97.7		P	80 - 120
Deltamethrin	92.9		P	80 - 120
Dichlobenil	106		P	80 - 120
Dicofol	93.8		P	80 - 120
Dieldrin	97.7		P	80 - 120
Endosulfan I	99.1		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	96.4		P	80 - 120
Endrin	96.0		P	80 - 120
Endrin Aldehyde	88.0		P	80 - 120
Endrin Ketone	93.3		P	80 - 120
Esfenvalerate	88.1		P	80 - 120
Ethalfuralin	99.4		P	80 - 120
Fenpropathrin	101		P	80 - 120
Gamma-BHC	105		P	80 - 120
Gamma-Chlordane	93.5		P	80 - 120
Heptachlor	95.7		P	80 - 120
Heptachlor Epoxide	96.5		P	80 - 120
Hexachlorobenzene	105		P	80 - 120
Lambda-Cyhalothrin	91.0		P	80 - 120
Methoxychlor	105		P	80 - 120
MGK-264	95.1		P	80 - 120
Mirex	97.5		P	80 - 120
Permethrin	90.9		P	80 - 120
Phenothrin	93.1		P	80 - 120
Piperonyl Butoxide	92.3		P	80 - 120
Prallethrin	90.0		P	80 - 120
Tau-Fluvalinate	91.9		P	80 - 120
Tetramethrin	91.6		P	80 - 120
Trans-Nonachlor	97.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A101503

Included Lab Sample IDs: 2200125, 2200127

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclosan Methyl	100		P	80 - 120
Trifluralin	99.7		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A101532

Included Lab Sample IDs: 2200117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.0	98.2	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A101551

Included Lab Sample IDs: 2200125, 2200127

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.9		P	80 - 120
Toxaphene	105		P	80 - 120

Reference Method: EPA 8270E

Run ID: A101555

Included Lab Sample IDs: 2200126, 2200128

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.7		P	80 - 120
Alachlor	99.3		P	80 - 120
Ametryn	96.7		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	101		P	80 - 120
Azinphos Methyl	102		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	98.6		P	80 - 120
Carbophenothion	99.6		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Cyanazine	94.0		P	80 - 120
Demeton	105		P	80 - 120
Diazinon	99.4		P	80 - 120
Dimethenamid	102		P	80 - 120
Disulfoton	95.7		P	80 - 120
Dithiopyr	97.7		P	80 - 120
EPTC	102		P	80 - 120
Ethion	97.7		P	80 - 120
Ethoprop	99.5		P	80 - 120
Fenamiphos	96.0		P	80 - 120
Fipronil	100		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	103		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Flumioxazin	87.8		P	80 - 120
Fonofos	107		P	80 - 120
Hexazinone	99.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A101555

Included Lab Sample IDs: 2200126, 2200128

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazalil	91.1		P	80 - 120
Malathion	98.7		P	80 - 120
Metalaxyl	99.6		P	80 - 120
Metolachlor	97.2		P	80 - 120
Metribuzin	102		P	80 - 120
Mevinphos	107		P	80 - 120
Molinate	101		P	80 - 120
Naled	102		P	80 - 120
Norflurazon	99.5		P	80 - 120
Oxadiazon	100		P	80 - 120
Parathion Ethyl	95.8		P	80 - 120
Parathion Methyl	104		P	80 - 120
Pendimethalin	104		P	80 - 120
Phorate	100		P	80 - 120
Prodiamine	86.0		P	80 - 120
Prometon	97.8		P	80 - 120
Prometryn	101		P	80 - 120
Pronamide	100		P	80 - 120
Propiconazole	95.0		P	80 - 120
Simazine	99.0		P	80 - 120
Sulfentrazone	105		P	80 - 120
Tebuconazole	102		P	80 - 120
Terbufos	97.6		P	80 - 120
Terbutylazine	98.9		P	80 - 120

Reference Method: EPA 8321B

Run ID: A101563

Included Lab Sample IDs: 2200122, 2200124

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	79.7	89.6	P/P	50 - 150
Acetaminophen	103	104	P/P	60 - 160
Acetamiprid	102	105	P/P	50 - 150
Afidopyropen	77.4	86.7	P/P	50 - 150
Bentazon	112	136	P/P	50 - 160
Bentazon	142	136	P/P	50 - 160
Benzovindiflupyr	95.4	98.0	P/P	50 - 150
Carbamazepine	103	110	P/P	60 - 150
Clothianidin	93.9	94.2	P/P	60 - 150
Dinotefuran	92.9	96.3	P/P	50 - 150
Diuron	99.0	107	P/P	60 - 160
Fenuron	96.8	93.1	P/P	60 - 150
Fluridone	103	100	P/P	60 - 160
Hydrocodone	101	97.5	P/P	60 - 150
Ibuprofen	65.7	85.1	P/P	50 - 160
Imazapyr	89.1	84.1	P/P	50 - 160
Imidacloprid	110	112	P/P	60 - 150
Imidacloprid	92.7	89.2	P/P	60 - 150
Linuron	139	116	P/P	60 - 150
Mandestrobin	99.4	102	P/P	50 - 150
MCPP	102	103	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A101563

Included Lab Sample IDs: 2200122, 2200124

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Naproxen	67.0	87.4	P/P	50 - 160
Primidone	97.5	96.6	P/P	60 - 150
Pyraclostrobin	95.0	101	P/P	60 - 150
Thiamethoxam	102	99.8	P/P	50 - 150
Tolfenpyrad	88.9	84.9	P/P	60 - 150
Triclopyr	101	103	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A101598

Included Lab Sample IDs: 2200121, 2200123

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	88.9	84.1	P/P	60 - 150
Aldicarb	97.2	94.2	P/P	60 - 150
Aldicarb Sulfone	92.8	94.9	P/P	50 - 150
Aldicarb Sulfoxide	124	129	P/P	50 - 150
Carbaryl	66.3	79.4	P/P	60 - 150
Carbofuran	88.4	92.8	P/P	50 - 150
Methiocarb	68.9	72.5	P/P	50 - 150
Methomyl	99.4	109	P/P	50 - 150
Oxamyl	97.3	104	P/P	50 - 150
Propoxur	87.1	89.8	P/P	50 - 150

* 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						3.74	
EPA 200.7 Rev. 4.4	Barium	106		104	107	105		2.35
	Calcium	102		103	99.2			3.37
	Iron	109		114	107	108		5.15
	Magnesium	107		113	105	103		4.62
	Potassium	103		105	101	99.0		3.99
	Sodium	108		110	105	103		2.52
	Zinc	100		99.7	102	101		2.39
EPA 200.8 Rev. 5.4	Aluminum	102		100	102	103		2.14
	Antimony	104		104	105	107		0.621
	Arsenic	104		103	104	105		0.989
	Beryllium	96.5		95.9	98.7	96.8		2.93
	Boron	98.0		102	105	103		2.18
	Cadmium	101		101	103	103		1.37
	Chromium	103		101	100	105		0.409
	Copper	104		103	103	104		0.182
	Lead	99.7		98.4	99.5	101		1.12
	Nickel	104		101	102	103		0.217
	Selenium	103		96.2	99.9	99.1		3.75
	Silver	97.9		97.6	95.7	98.6		1.93
	Thallium	102		103	106	101		1.89
EPA 300.0 Rev. 2.1	Chloride	103		103			0.158	
	Sulfate	101		98.9	103		0.610	
EPA 350.1 Rev. 2.0	Ammonia-N	101		100	102			0.892
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101		110	102			4.47
EPA 353.2 Rev. 2.0	NO2NO3-N	102		104	104			0.482
EPA 365.1 Rev. 2.0	Total-P	104		107	107			0.0233
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.0		95.8	98.8			2.91
EPA 8270E	Acetochlor	91.3	85.5	85.6	87.3	6.57		1.99
	Alachlor	87.7	85.2	80.7	78.8	2.90		2.36
	Aldrin	50.4	51.3	62.1	63.0	1.75		1.55
	Alpha-BHC	88.8	90.1	96.5	99.4	1.47		3.02
	Alpha-Chlordane	85.4	88.0	81.6	80.7	2.94		1.10
	Ametryn	100	98.7	106	115	1.63		8.18
	Atrazine	85.4	84.8			0.707		2.66
	Atrazine Desethyl	91.8	91.2	83.6	79.0	0.714		3.33
	Azinphos Methyl	123	117	112	115	4.96		2.96
	Beta-BHC	90.8	92.9	103	102	2.36		1.05
	Beta-Cyfluthrin	77.9	78.8	79.9	78.0	1.19		2.44
	Bifenthrin	84.2	83.6	80.3	81.4	0.693		1.37
	Bromacil	82.6	83.6			1.31		1.57
	Butylate	64.8	57.8	40.7	49.2	11.4		18.8
	Carbophenothion	79.4	72.0	73.5	74.9	9.74		1.88
	Chlorothalonil	56.0	53.4	120	124	4.77		3.58
	Chlorpyrifos Ethyl	81.0	70.0	78.0	78.1	14.5		0.0889
	Chlorpyrifos Methyl	89.7	78.5	80.6	81.4	13.2		1.05
	Cis-Nonachlor	86.0	88.2	82.1	81.6	2.61		0.595
	Cyanazine	124	116	109	108	6.61		0.878
	Cypermethrin	74.4	76.4	78.4	76.7	2.59		2.20
	Dacthal	88.2	90.5	89.1	87.9	2.50		1.39
	DDD-p,p'	87.9	89.7	80.7	79.8	2.04		1.16
	DDE-p,p'	85.6	86.9	76.0	74.0	1.56		2.67
	DDT-p,p'	92.2	92.7	87.2	85.2	0.567		2.25
	Delta-BHC	98.5	98.7	270	269	0.193		0.461

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Deltamethrin	81.3	85.5	77.5	77.4	4.99	0.124
	Demeton	80.5	77.7	82.1	81.7	3.53	0.477
	Diazinon	92.9	91.2	94.6	98.7	1.86	4.21
	Dichlobenil	62.2	62.1	46.1	45.1	0.171	2.35
	Dicofol	98.6	104	86.9	87.1	5.62	0.237
	Dieldrin	91.6	90.6	85.6	86.4	1.08	0.879
	Dimethenamid	92.1	87.7	83.9	88.8	4.90	5.68
	Disulfoton	80.7	79.3	82.6	91.5	1.72	10.3
	Dithiopyr	84.0	83.8	78.5	84.2	0.206	6.50
	Endosulfan I	89.5	92.3	101	98.0	3.07	3.40
	Endosulfan II	101	95.9	162	146	5.52	10.4
	Endosulfan Sulfate	83.3	81.8	91.5	87.1	1.80	4.87
	Endrin	98.3	97.0	100	100	1.36	0.273
	Endrin Aldehyde	83.1	88.8	74.6	76.8	6.71	2.94
	Endrin Ketone	89.6	88.8	89.6	87.5	0.923	2.36
	EPTC	58.1	58.2	49.9	58.0	0.144	15.0
	Esfenvalerate	76.2	78.1	71.7	71.4	2.43	0.495
	Ethalfuralin	86.5	84.7	79.5	79.3	2.11	0.257
	Ethion	74.6	71.5	77.7	77.8	4.22	0.117
	Ethoprop	83.5	75.9	82.8	89.0	9.47	7.25
	Fenamiphos	97.9	87.9	87.1	80.6	10.8	7.69
	Fenpropathrin	88.1	86.8	85.0	82.9	1.53	2.40
	Fipronil	102	97.9	99.1	100	3.68	0.947
	Fipronil Desulfinyl	85.1	84.6	83.1	85.9	0.574	2.89
	Fipronil Sulfide	92.3	80.6	77.0	76.9	13.5	0.195
	Fipronil Sulfone	74.1	74.9	70.9	65.5	1.10	4.42
	Flumioxazin	139	140	153	157	0.389	2.76
	Fonofos	88.1	78.4	85.2	90.5	11.7	6.10
	Gamma-BHC	93.5	94.3	139	123	0.929	11.9
	Gamma-Chlordane	82.7	86.0	77.9	78.8	3.89	1.08
	Heptachlor	80.4	77.3	67.6	74.0	4.02	8.98
	Heptachlor Epoxide	86.2	87.8	84.0	83.1	1.78	1.03
	Hexachlorobenzene	82.9	82.5	71.7	69.3	0.585	3.34
	Hexazinone	86.4	79.7	84.5	85.4	7.97	0.932
	Imazalil	86.5	86.1	73.3	61.9	0.560	16.8
	Lambda-Cyhalothrin	76.3	77.7	82.6	80.6	1.74	2.45
	Malathion	87.6	81.8	76.9	77.4	6.92	0.612
	Metalaxyl	84.7	89.5	81.8	86.9	5.52	4.47
	Methoxychlor	88.8	89.4	83.6	83.7	0.734	0.0875
	Metolachlor	81.7	83.5			2.11	3.52
	Metribuzin	94.4	100	99.3	102	5.87	2.73
	Mevinphos	81.5	85.1	95.4	87.3	4.38	8.84
	MGK-264	49.7	50.5	77.9	81.4	1.54	4.32
	Mirex	77.8	77.7	74.1	74.9	0.0673	1.17
	Molinate	67.1	67.5	66.7	69.5	0.586	4.11
	Naled	50.6	52.5	49.6	49.4	3.70	0.501
	Norflurazon	91.5	91.9			0.370	5.22
	Oxadiazon	78.2	75.5			3.46	7.21
	Parathion Ethyl	88.2	80.0	87.7	87.0	9.72	0.775
	Parathion Methyl	103	104	113	108	0.791	4.62
	Pendimethalin	75.1	72.3	90.2	91.1	3.88	1.05
	Permethrin	81.1	80.5	77.1	77.2	0.676	0.111
	Phenothrin	52.3	52.3	66.3	67.0	0.127	1.10
	Phorate	70.1	83.6	72.7	75.3	17.5	3.43

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Piperonyl Butoxide	95.7	97.4	100	101	1.84		0.260
	Prallethrin	46.3	48.3	61.2	61.4	4.29		0.321
	Prodimamine	57.7	56.3	83.9	83.8	2.54		0.116
	Prometon	89.8	83.8	89.1	91.0	6.91		2.15
	Prometryn	98.2	98.9	95.3	101	0.666		6.08
	Pronamide	93.6	88.1	89.7	85.2	6.08		5.15
	Propiconazole	92.0	94.0	111	116	2.11		4.04
	Simazine	86.2	99.1	112	98.1	14.0		12.9
	Sulfentrazone	84.9	84.7			0.212		3.21
	Tau-Fluvalinate	82.6	84.8	81.6	81.8	2.72		0.324
	Tebuconazole	67.6	60.5	59.5	60.3	11.2		1.36
	Terbufos	72.1	84.6	84.6	84.9	16.0		0.260
	Terbuthylazine	80.5	85.5	85.4	88.3	6.00		3.42
	Tetramethrin	94.6	96.7	125	126	2.20		0.311
	Trans-Nonachlor	84.7	86.8	78.7	80.0	2.50		1.67
	Triclosan Methyl	95.2	98.6	87.1	90.0	3.51		3.30
	Trifluralin	84.4	84.3	78.2	78.7	0.0990		0.720
EPA 8276	Chlordane	91.8	91.8	100	102	0.0631		1.70
	Toxaphene	89.4	89.1	122	127	0.296		4.06
EPA 8321B	2,4-D	47.3		49.5	50.0			1.00
	3-Hydroxycarbofuran	66.7		47.2	48.3			2.45
	Acesulfame K	125		77.6	73.6			5.35
	Acetaminophen	74.2		80.5	83.7			3.87
	Acetamiprid	68.9		66.2	59.1			11.4
	Afidopyropen	57.7		32.5	28.4			13.2
	Aldicarb	62.6		45.7	43.4			5.21
	Aldicarb Sulfone	84.9		69.7	63.9			8.73
	Aldicarb Sulfoxide	115		40.7	35.5			13.5
	AMPA	78.8		121	120			1.24
	Bentazon	91.4		34.8	36.3			4.28
	Benzovindiflupyr	74.9		56.7	63.0			10.5
	Carbamazepine	52.3		44.5	46.2			3.82
	Carbaryl	30.2		23.3	18.2			24.5
	Carbofuran	37.3		30.5	27.2			11.6
	Clothianidin	51.9		63.8	59.5			7.01
	Dinotefuran	72.6		78.5	80.9			3.07
	Diuron	30.6		37.7	37.0			2.06
	Endothall	92.8		89.0	92.2			3.49
	Fenuron	90.5		57.5	59.0			2.56
	Fluridone	89.7		66.2	63.7			3.77
	Glufosinate	85.4		80.7	87.4			7.97
	Glyphosate	93.1		83.1	82.8			0.362
	Hydrocodone	75.7		56.1	60.7			7.94
	Ibuprofen	124		57.7	51.2			11.9
	Imazapyr	120		49.9	55.0			4.09
	Imidacloprid	82.1		112	112			0.0777
	Linuron	73.1		76.7	81.3			5.86
	Mandestrobin	93.6		60.6	67.1			10.3
	MCPP	157		55.0	57.5			4.33
	Methiocarb	38.6		35.7	31.3			13.2
	Methomyl	79.9		64.1	55.1			15.0
	Naproxen	63.5		40.5	46.4			13.5
	Oxamyl	91.5		69.4	66.7			3.93
	Primidone	71.8		75.6	73.4			2.98

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	Propoxur	38.4	30.3	25.9			15.8
	Pyraclostrobin	90.0	69.1	70.8			2.47
	Sucralose	105	90.2	87.2			3.06
	Thiamethoxam	63.8	68.6	68.8			0.231
	Tolfenpyrad	48.7	41.8	40.5			3.27
	Triclopyr	134	49.8	58.5			16.1
SM 2120 B-2011	Color (true)	97.2				3.24	
SM 2320 B-2011	Total Alkalinity	102				0.679	
SM 2540 C-2011	TDS					6.11	
	TDS					2.34	
SM 4500 F-C-2011	Fluoride	99.9	108	108			0.498
SM 5310 B-2011	Organic Carbon	97.4	101	101			0.220

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2200113, 2200116
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2200129, 2200130
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2200129, 2200130
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2200113, 2200116
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2200113, 2200116
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2200114, 2200117
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2200114, 2200117
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2200114, 2200117
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2200114, 2200117
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2200115, 2200118
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2200125, 2200127
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2200126, 2200128
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2200125, 2200127
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2200121, 2200123
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2200122, 2200124
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2200122, 2200124
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2200113, 2200116
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2200113, 2200116
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2200129, 2200130
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2200113, 2200116
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2200113, 2200116
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2200113, 2200116
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2200114, 2200117

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	10/07/2020			10/07/2020 15:48	Yen Ta	2200113, 2200116
EPA 200.7 Rev. 4.4	10/07/2020	10/08/2020 15:20	Elliott D. Healy	10/12/2020 11:38	Betina Topolski	2200130
	10/07/2020	10/08/2020 15:20	Elliott D. Healy	10/12/2020 13:08	Betina Topolski	2200129
EPA 200.8 Rev. 5.4	10/07/2020	10/08/2020 15:20	Elliott D. Healy	10/12/2020 13:40	Alexander Thompson	2200130
	10/07/2020	10/08/2020 15:20	Elliott D. Healy	10/12/2020 15:19	Alexander Thompson	2200129
	10/07/2020	10/08/2020 15:20	Elliott D. Healy	10/13/2020 14:50	Alexander Thompson	2200130
	10/07/2020	10/08/2020 15:20	Elliott D. Healy	10/13/2020 15:41	Alexander Thompson	2200129
EPA 300.0 Rev. 2.1	10/07/2020			10/14/2020 02:49	Elliott Rodriguez	2200113
	10/07/2020			10/14/2020 03:02	Elliott Rodriguez	2200116
EPA 350.1 Rev. 2.0	10/07/2020			10/10/2020 11:04	Ping Hua	2200114
	10/07/2020			10/10/2020 11:06	Ping Hua	2200117
EPA 351.2 Rev. 2.0	10/07/2020	10/09/2020 12:48	David Boose	10/12/2020 11:38	Virginia P. Brown	2200114
	10/07/2020	10/09/2020 12:48	David Boose	10/12/2020 11:39	Virginia P. Brown	2200117
EPA 353.2 Rev. 2.0	10/07/2020			10/09/2020 10:16	Beverly Y. Sanders	2200114
	10/07/2020			10/09/2020 10:17	Beverly Y. Sanders	2200117
EPA 365.1 Rev. 2.0	10/07/2020	10/08/2020 13:02	Yen Ta	10/12/2020 14:42	Lipi Saha	2200114
	10/07/2020	10/08/2020 13:02	Yen Ta	10/13/2020 16:03	Shengyu Wang	2200117
EPA 365.1 Rev. 2.0 dissolved	10/07/2020			10/07/2020 15:44	Blanca Fach	2200118
	10/07/2020			10/07/2020 16:28	Blanca Fach	2200115
EPA 8270E	10/07/2020	10/09/2020 07:30	Fe-Val Siddell	10/12/2020 16:19	Vandana T. Nagar	2200126
	10/07/2020	10/09/2020 07:30	Fe-Val Siddell	10/12/2020 16:45	Vandana T. Nagar	2200128
	10/07/2020	10/12/2020 11:42	Rasheda Ghaffari	10/14/2020 00:40	Arthur Maknenko	2200125
	10/07/2020	10/12/2020 11:42	Rasheda Ghaffari	10/14/2020 01:11	Arthur Maknenko	2200127
EPA 8276	10/07/2020	10/12/2020 11:42	Rasheda Ghaffari	10/16/2020 00:40	Michael Poppell	2200125
	10/07/2020	10/12/2020 11:42	Rasheda Ghaffari	10/16/2020 01:35	Michael Poppell	2200127
EPA 8321B	10/07/2020	10/07/2020 13:00	Hoor Shaik	10/10/2020 11:37	Juyoung Kim	2200122
	10/07/2020	10/07/2020 13:00	Hoor Shaik	10/10/2020 12:12	Juyoung Kim	2200124
	10/07/2020	10/07/2020 13:00	Hoor Shaik	10/16/2020 00:40	Juyoung Kim	2200122
	10/07/2020	10/08/2020 10:00	Rebecca Ware	10/08/2020 18:22	Rebecca Ware	2200122
	10/07/2020	10/08/2020 10:00	Rebecca Ware	10/08/2020 18:36	Rebecca Ware	2200124
	10/07/2020	10/08/2020 10:00	Rebecca Ware	10/09/2020 15:02	Rebecca Ware	2200122
	10/07/2020	10/08/2020 10:00	Rebecca Ware	10/09/2020 15:13	Rebecca Ware	2200124
	10/07/2020	10/08/2020 10:00	Rebecca Ware	10/12/2020 14:40	Rebecca Ware	2200122
	10/07/2020	10/08/2020 10:00	Rebecca Ware	10/12/2020 14:51	Rebecca Ware	2200124
	10/07/2020	10/13/2020 09:00	Hoor Shaik	10/16/2020 06:26	Juyoung Kim	2200121
	10/07/2020	10/13/2020 09:00	Hoor Shaik	10/16/2020 07:36	Juyoung Kim	2200123
SM 2120 B-2011	10/07/2020			10/07/2020 16:48	Benjamin T. Nordmann	2200116
	10/07/2020			10/07/2020 17:18	Benjamin T. Nordmann	2200113
SM 2320 B-2011	10/07/2020			10/13/2020 04:26	Lauren Lees	2200113
	10/07/2020			10/13/2020 04:35	Lauren Lees	2200116

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2340B	10/07/2020			10/12/2020 11:38	Betina Topolski	2200130
	10/07/2020			10/12/2020 13:08	Betina Topolski	2200129
SM 2540 C-2011	10/07/2020			10/08/2020 15:02	Yijie Li	2200113, 2200116
SM 2540 D-2011	10/07/2020			10/08/2020 15:02	Yijie Li	2200113, 2200116
SM 4500 F-C-2011	10/07/2020			10/13/2020 04:26	Lauren Lees	2200113
	10/07/2020			10/13/2020 04:35	Lauren Lees	2200116
SM 5310 B-2011	10/07/2020			10/08/2020 23:44	Madeline Gruver	2200114
	10/07/2020			10/08/2020 23:57	Madeline Gruver	2200117