

Chemical Analysis Report

NW-DIST-2021-04-15-01

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

Event Description: **Pensacola Run**
Request ID: **RQ-2021-04-12-38**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 07-MAY-2021 10:46



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: Rest Area Run below Beaver Pond Creek

Collection Date/Time: 04/14/2021 10:00

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2240167	EPA 180.1 Rev. 2.0	Turbidity	8.7		NTU	P396645	
	EPA 300.0 Rev. 2.1	Chloride	6.2		mg Cl/L	P397039	
		Sulfate	1.9		mg SO4/L	P397041	
	SM 2120 B-2011	Color (true)	83	A	PCU	P396635	
	SM 2320 B-2011	Total Alkalinity	7.6		mg CaCO3/L	P396887	
	SM 2540 C-2011	TDS	39		mg/L	P397227	
	SM 2540 D-2011	TSS	2	I	mg/L	P397224	
2240168	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P397116	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P397362	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.42		mg N/L	P397068	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P396899	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P396856	
2240169	SM 5310 B-2011	Organic Carbon	5.9		mg C/L	P396955	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P396625	
2240189	EPA 8321B	Aldicarb	0.020	U	ug/L	P396769	
		Aldicarb Sulfone	0.0020	U	ug/L	P396769	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P396769	MS
		Carbaryl	0.0020	U	ug/L	P396769	
		Carbofuran	0.0020	U	ug/L	P396769	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P396769	
		Methiocarb	0.0020	U	ug/L	P396769	
		Methomyl	0.0020	U	ug/L	P396769	
		Oxamyl	0.0020	U	ug/L	P396769	
		Propoxur	0.0020	U	ug/L	P396769	
		2,4-D	0.0020	U	ug/L	P396769	
		Acesulfame K	0.10	U	ug/L	P396835	MS
		2,4,5-T	0.0040	U	ug/L	P396769	
2240190		AMPA	0.10	U	ug/L	P396835	
		Sucralose	0.79		ug/L	P396835	
		Acetaminophen	0.0080	UJ	ug/L	P396769	MS, RPD
		Acetamiprid	0.0020	U	ug/L	P396769	
		Endothall	0.25	U	ug/L	P396835	
		Glufosinate	0.10	U	ug/L	P396835	
		Glyphosate	0.10	U	ug/L	P396835	
		Afidopyropen	0.0020	U	ug/L	P396769	
		Bentazon	0.0028	I	ug/L	P396769	
		Benzovindiflupyr	0.0020	U	ug/L	P396769	
		Carbamazepine	0.0015	I	ug/L	P396769	
		Clothianidin	0.0020	U	ug/L	P396769	
		Dinotefuran	0.0020	U	ug/L	P396769	
		Diuron	0.0020	U	ug/L	P396769	
		Fenuron	0.016	U	ug/L	P396769	
		Fluridone	8.0E-04	U	ug/L	P396769	

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2240190	EPA 8321B	Imazapyr	0.0040	U	ug/L	P396769	
		Hydrocodone	0.0020	U	ug/L	P396769	
		Ibuprofen	0.020	U	ug/L	P396769	
		Imidacloprid	0.020	J	ug/L	P396769	MS
		Linuron	0.0040	U	ug/L	P396769	
		Mandestrobin	0.0020	U	ug/L	P396769	
		MCP	0.0020	UJ	ug/L	P396769	MS
		Naproxen	0.0080	U	ug/L	P396769	
		Primidone	0.0040	U	ug/L	P396769	
		Pyraclostrobin	0.0020	U	ug/L	P396769	
		Thiamethoxam	0.0020	UJ	ug/L	P396769	MS
		Tolfenpyrad	0.0020	U	ug/L	P396769	
		Triclopyr	0.0040	UJ	ug/L	P396769	RPD
2240191	EPA 8270E	Aldrin	4.5	U	ng/L	P396789	
		Alpha-BHC	2.2	U	ng/L	P396789	
		Alpha-Chlordane	1.1	U	ng/L	P396789	
		Beta-BHC	9.0	U	ng/L	P396789	
		Beta-Cyfluthrin**	17	U	ng/L	P396789	
		Bifenthrin**	4.5	U	ng/L	P396789	
		Delta-BHC	9.0	U	ng/L	P396789	
		Gamma-BHC	9.0	U	ng/L	P396789	
		Chlorothalonil	2.2	U	ng/L	P396789	
		Cis-Nonachlor**	1.1	U	ng/L	P396789	
		Cypermethrin	22	U	ng/L	P396789	
		Dacthal**	1.1	U	ng/L	P396789	
		DDD-p,p'	5.6	U	ng/L	P396789	
		DDE-p,p'	5.6	U	ng/L	P396789	
		DDT-p,p'	6.7	U	ng/L	P396789	
		Deltamethrin**	22	U	ng/L	P396789	RPD
		Dicofol	34	U	ng/L	P396789	
		Dieldrin	4.5	U	ng/L	P396789	
		Endosulfan I	4.5	U	ng/L	P396789	
		Endosulfan II	4.5	U	ng/L	P396789	
		Endosulfan Sulfate	2.2	U	ng/L	P396789	
		Endrin	2.2	U	ng/L	P396789	
		Endrin Aldehyde	2.2	U	ng/L	P396789	
		Endrin Ketone	2.2	U	ng/L	P396789	
		Ethalfuralin**	3.4	U	ng/L	P396789	
		Gamma-Chlordane	1.1	U	ng/L	P396789	
		Dichlobenil**	2.2	U	ng/L	P396789	
		Esfenvalerate**	22	U	ng/L	P396789	
		Fenprothrin**	11	U	ng/L	P396789	
		Heptachlor	1.7	U	ng/L	P396789	
		Heptachlor Epoxide	2.2	U	ng/L	P396789	
		Hexachlorobenzene	2.2	U	ng/L	P396789	

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2240191	EPA 8270E	Lambda-Cyhalothrin**	17	U	ng/L	P396789	
		Methoxychlor	4.5	U	ng/L	P396789	
		Mirex	2.2	U	ng/L	P396789	
		MGK-264**	3.4	U	ng/L	P396789	
		Permethrin	11	U	ng/L	P396789	
		Phenothrin**	34	U	ng/L	P396789	
		Piperonyl Butoxide**	1.7	U	ng/L	P396789	MS
		Prallethrin**	28	UJ	ng/L	P396789	RPD
		Tau-Fluvalinate**	3.9	U	ng/L	P396789	
		Tetramethrin**	9.0	U	ng/L	P396789	
		Trans-Nonachlor**	1.1	U	ng/L	P396789	
		Triclosan Methyl**	1.1	U	ng/L	P396789	
		Trifluralin	2.8	U	ng/L	P396789	
		Chlordane	5.6	U	ng/L	P396789	
		Toxaphene	34	U	ng/L	P396789	
		Chlordane	5.6	U	ng/L	P396789	
2240192	EPA 8270E	Acetochlor	0.26	U	ng/L	P396895	
		Alachlor	0.26	U	ng/L	P396895	
		Ametryn	0.62	U	ng/L	P396895	
		Atrazine	35		ng/L	P396895	
		Atrazine Desethyl	7.6		ng/L	P396895	
		Azinphos Methyl	2.1	U	ng/L	P396895	
		Azoxystrobin**	0.51	U	ng/L	P396895	
		Bromacil	0.96	I	ng/L	P396895	
		Butylate	0.41	U	ng/L	P396895	
		Caffeine**	18	I	ng/L	P396895	
		Carbophenothion	0.51	U	ng/L	P396895	
		Carfentrazone Ethyl**	0.10	U	ng/L	P396895	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P396895	
		Chlorpyrifos Methyl	0.051	U	ng/L	P396895	
		Cyanazine	3.3	U	ng/L	P396895	
		Demeton	1.5	U	ng/L	P396895	
		Diazinon	0.13	U	ng/L	P396895	
		Difenoconazole**	0.62	U	ng/L	P396895	
		Dimethenamid**	0.10	U	ng/L	P396895	
		Disulfoton	0.51	U	ng/L	P396895	
		Dithiopyr**	0.18	U	ng/L	P396895	
		EPTC	1.3	U	ng/L	P396895	
		Ethion	0.15	U	ng/L	P396895	
		Ethoprop	0.10	U	ng/L	P396895	
		Fenamiphos	0.51	U	ng/L	P396895	
		Fenbuconazole**	0.13	U	ng/L	P396895	
		Fipronil	0.26	U	ng/L	P396895	
		Fipronil Desulfinyl**	0.13	U	ng/L	P396895	
		Fipronil Sulfide	0.15	U	ng/L	P396895	
		Fipronil Sulfone	0.45	I	ng/L	P396895	

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2240192	EPA 8270E	Fluazifop-P-butyl**	0.10	U	ng/L	P396895	
		Fludioxonil**	0.13	U	ng/L	P396895	
		Flumioxazin**	1.8	U	ng/L	P396895	
		Flutolanil**	0.10	U	ng/L	P396895	
		Fluxapyroxad**	0.10	U	ng/L	P396895	
		Fonofos	0.21	U	ng/L	P396895	
		Hexazinone	0.51	U	ng/L	P396895	
		Imazalil**	0.77	U	ng/L	P396895	MS
		Iprodione**	0.62	U	ng/L	P396895	
		Malathion	0.36	U	ng/L	P396895	
		Metalaxyl	0.77	U	ng/L	P396895	
		Metolachlor	0.36	U	ng/L	P396895	
		Metribuzin	3.3	U	ng/L	P396895	
		Mevinphos	1.1	U	ng/L	P396895	
		Molinate	0.31	U	ng/L	P396895	
		Myclobutanil**	0.26	U	ng/L	P396895	
		Naled**	1.5	U	ng/L	P396895	
		Norflurazon	0.51	U	ng/L	P396895	
		Oxadiazon	0.31	U	ng/L	P396895	
		Oxyfluorfen**	0.15	U	ng/L	P396895	
		Parathion Ethyl	0.26	U	ng/L	P396895	
		Parathion Methyl	0.56	U	ng/L	P396895	
		Pendimethalin	1.0	U	ng/L	P396895	
		Phorate	0.54	U	ng/L	P396895	
		Prodiamine**	0.18	UJ	ng/L	P396895	RPD
		Prometon	0.92	U	ng/L	P396895	
		Prometryn	0.21	U	ng/L	P396895	
		Pronamide**	0.15	U	ng/L	P396895	
		Propiconazole**	0.51	U	ng/L	P396895	
		Pyriproxyfen**	0.13	U	ng/L	P396895	
		Simazine	1.9	I	ng/L	P396895	
		Sulfentrazone**	1.6	I	ng/L	P396895	
		Tebuconazole**	0.51	U	ng/L	P396895	
		Terbufos	0.10	U	ng/L	P396895	
		Terbuthylazine	0.44	U	ng/L	P396895	
2240193	EPA 200.7 Rev. 4.4	Barium	18.6		ug/L	P397169	
		Calcium	3.06		mg/L	P397169	
		Iron	730		ug/L	P397169	
		Magnesium	1.10		mg/L	P397169	
		Manganese	8.6		ug/L	P397169	
		Potassium	1.3		mg/L	P397169	
		Sodium	7.1		mg/L	P397169	
		Zinc	5.0	U	ug/L	P397169	
		Aluminum	388		ug/L	P397169	
		Antimony	0.050	I	ug/L	P397169	
	EPA 200.8 Rev. 5.4						

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2240193	EPA 200.8 Rev. 5.4	Arsenic	0.33		ug/L	P397169	
		Beryllium	0.021	I	ug/L	P397169	
		Boron**	19.3		ug/L	P397169	
		Cadmium	0.020	U	ug/L	P397169	
		Chromium	0.50	I	ug/L	P397169	
		Copper	0.40	U	ug/L	P397169	
		Lead	0.27	I	ug/L	P397169	
		Nickel	0.50	U	ug/L	P397169	
		Selenium	0.20	U	ug/L	P397169	
		Silver	0.010	U	ug/L	P397169	
		Thallium	0.10	U	ug/L	P397169	
	SM 2340B	Hardness	12.2		mg/L	P397169	

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: 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: Pace Mill Creek upstream of Hwy 90

Collection Date/Time: 04/14/2021 12:00

Field ID: G4NW0481

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2240170	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P396645	
	EPA 300.0 Rev. 2.1	Chloride	6.1		mg Cl/L	P397039	
		Sulfate	1.3		mg SO4/L	P397041	
	SM 2120 B-2011	Color (true)	40		PCU	P396635	
	SM 2320 B-2011	Total Alkalinity	9.0		mg CaCO3/L	P396887	
	SM 2540 C-2011	TDS	33		mg/L	P397227	
	SM 2540 D-2011	TSS	2	U	mg/L	P397224	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P397116	
2240171	EPA 350.1 Rev. 2.0	Ammonia-N	0.071		mg N/L	P397362	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.29		mg N/L	P397068	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.40		mg N/L	P396900	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P396856	
	SM 5310 B-2011	Organic Carbon	3.4		mg C/L	P396955	
2240172	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P396625	
2240194	EPA 200.7 Rev. 4.4	Barium	25.4		ug/L	P397169	
		Calcium	3.25		mg/L	P397169	
		Iron	1.08E+03		ug/L	P397169	
		Magnesium	1.30		mg/L	P397169	
		Manganese	42.5		ug/L	P397169	
		Potassium	0.78	I	mg/L	P397169	
		Sodium	4.8		mg/L	P397169	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P397169	
		Aluminum	98		ug/L	P397169	
		Antimony	0.055	I	ug/L	P397169	
		Arsenic	0.41		ug/L	P397169	
		Beryllium	0.013	I	ug/L	P397169	
		Boron**	18.0		ug/L	P397169	
		Cadmium	0.020	U	ug/L	P397169	
		Chromium	0.40	U	ug/L	P397169	
		Copper	0.40	U	ug/L	P397169	
		Lead	0.21	I	ug/L	P397169	
		Nickel	0.50	U	ug/L	P397169	
		Selenium	0.20	U	ug/L	P397169	
		Silver	0.010	U	ug/L	P397169	
		Thallium	0.10	U	ug/L	P397169	
		Hardness	13.5		mg/L	P397169	

Ref. Method and Comment:

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

Sample Location: Dridglers Creek above Parkview Street

Collection Date/Time: 04/14/2021 12:31

Field ID: G4NW0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2240195	EPA 200.7 Rev. 4.4	Barium	15.9		ug/L	P397169	
		Calcium	3.41		mg/L	P397169	
		Iron	610		ug/L	P397169	
		Magnesium	1.21		mg/L	P397169	
		Manganese	23.4		ug/L	P397169	
		Potassium	0.88	I	mg/L	P397169	
		Sodium	5.9		mg/L	P397169	
	EPA 200.8 Rev. 5.4	Zinc	6.8	I	ug/L	P397169	
		Aluminum	182		ug/L	P397169	
		Antimony	0.050	U	ug/L	P397169	
		Arsenic	0.48		ug/L	P397169	
		Beryllium	0.010	U	ug/L	P397169	
		Boron**	22.2		ug/L	P397169	
		Cadmium	0.020	U	ug/L	P397169	
		Chromium	0.51	I	ug/L	P397169	
		Copper	0.68	I	ug/L	P397169	
		Lead	0.21	I	ug/L	P397169	
		Nickel	0.50	U	ug/L	P397169	
		Selenium	0.20	U	ug/L	P397169	
		Silver	0.010	U	ug/L	P397169	
		Thallium	0.10	U	ug/L	P397169	
	SM 2340B	Hardness	13.5		mg/L	P397169	

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P396645

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P397169

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
Manganese	1.0	U	ug/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: P397169

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: P397039

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P397041

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397362

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: P397068

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P396899

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P396900

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P396856

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P396625

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

Reference Method: EPA 8270E
 Batch ID: P396789

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P396789

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

Reference Method: EPA 8270E

Batch ID: P396895

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
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	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
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P396895

Component	Result	Code	Units
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	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
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.52	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
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8276

Batch ID: P396789

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P396769

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	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: EPA 8321B

Batch ID: P396835

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

Reference Method: SM 2120 B-2011

Batch ID: P396635

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B-2011
Batch ID: P396635

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P396887

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

Reference Method: SM 2540 C-2011
Batch ID: P397227

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P397224

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P397116

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P396955

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: P397169

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	103		P	85 - 115
Calcium	99.8		P	85 - 115
Iron	106		P	85 - 115
Magnesium	103		P	85 - 115
Manganese	106		P	85 - 115
Potassium	108		P	85 - 115
Sodium	105		P	85 - 115
Zinc	108		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P397169

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	91.3		P	85 - 115
Antimony	92.4		P	85 - 115
Arsenic	97.5		P	85 - 115
Beryllium	92.3		P	85 - 115
Boron	91.2		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	92.8		P	85 - 115
Copper	94.7		P	85 - 115
Lead	98.7		P	85 - 115
Nickel	92.5		P	85 - 115
Selenium	93.5		P	85 - 115
Silver	101		P	85 - 115
Thallium	96.7		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P397039

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P397041

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P397362

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P397068

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P396899

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P396900

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P396856

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P396625

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

Reference Method: EPA 8270E
 Batch ID: P396789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	32.7	31.4	P/P	20 - 82.0
Alpha-BHC	87.2	82.3	P/P	58 - 130
Alpha-Chlordane	82.9	82.4	P/P	61 - 105
Beta-BHC	103	104	P/P	53 - 164
Beta-Cyfluthrin	109	108	P/P	40 - 140
Bifenthrin	83.3	83.5	P/P	44 - 122
Chlorothalonil	163	135	P/P	20 - 201
Cis-Nonachlor	85.8	87.0	P/P	60 - 110
Cypermethrin	101	91.2	P/P	43 - 131
Dacthal	91.4	89.9	P/P	76 - 108
DDD-p,p'	92.5	94.8	P/P	68 - 118
DDE-p,p'	76.8	79.2	P/P	56 - 107
DDT-p,p'	79.7	76.2	P/P	55 - 122
Delta-BHC	136	132	P/P	60 - 181
Deltamethrin	101	93.8	P/P	51 - 139
Dichlobenil	62.0	66.6	P/P	20 - 106
Dicofol	89.8	98.2	P/P	56 - 130
Dieldrin	87.0	86.7	P/P	67 - 111
Endosulfan I	92.8	89.3	P/P	68 - 115
Endosulfan II	114	104	P/P	69 - 133
Endosulfan Sulfate	108	101	P/P	65 - 126
Endrin	78.8	86.4	P/P	66 - 118
Endrin Aldehyde	118	117	P/P	60 - 132
Endrin Ketone	93.1	90.9	P/P	68 - 121
Esfenvalerate	89.7	80.8	P/P	42 - 116
Ethalfuralin	74.0	73.2	P/P	50 - 118
Fenpropathrin	93.7	97.6	P/P	55 - 132
Gamma-BHC	98.6	94.1	P/P	65 - 147

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P396789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Gamma-Chlordane	77.0	77.7	P/P	56 - 103
Heptachlor	67.2	65.4	P/P	47 - 95.0
Heptachlor Epoxide	85.4	83.9	P/P	67 - 107
Hexachlorobenzene	66.8	66.6	P/P	45 - 99.0
Lambda-Cyhalothrin	96.1	93.5	P/P	41 - 135
Methoxychlor	86.7	87.1	P/P	61 - 138
MGK-264	33.4	43.8	P/P	20 - 109
Mirex	60.6	63.2	P/P	36 - 92.0
Permethrin	83.6	81.5	P/P	45 - 111
Phenothrin	41.8	45.8	P/P	22 - 88.0
Piperonyl Butoxide	118	115	P/P	67 - 120
Prallethrin	39.4	55.2	P/P	28 - 92.0
Tau-Fluvalinate	108	105	P/P	38 - 145
Tetramethrin	104	91.6	P/P	29 - 150
Trans-Nonachlor	74.0	77.6	P/P	54 - 105
Triclosan Methyl	95.1	95.3	P/P	76 - 115
Trifluralin	74.7	73.3	P/P	53 - 111

Reference Method: EPA 8270E
Batch ID: P396895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	82.2	99.8	P/P	70 - 121
Alachlor	82.8	95.5	P/P	70 - 119
Ametryn	73.9	91.7	P/P	61 - 135
Atrazine	87.8	93.3	P/P	76 - 123
Atrazine Desethyl	90.2	95.3	P/P	35 - 140
Azinphos Methyl	122	140	P/P	57 - 163
Azoxystrobin	159	181	P/P	43 - 231
Bromacil	71.1	90.2	P/P	42 - 123
Butylate	43.8	54.0	P/P	34 - 92.0
Caffeine	71.5	72.8	P/P	70 - 130
Carbophenothion	86.2	102	P/P	61 - 121
Carfentrazone Ethyl	91.8	109	P/P	62 - 139
Chlorpyrifos Ethyl	81.2	94.6	P/P	67 - 121
Chlorpyrifos Methyl	86.5	98.4	P/P	67 - 120
Cyanazine	108	130	P/P	20 - 226
Demeton	76.1	87.6	P/P	35 - 125
Diazinon	86.8	105	P/P	70 - 122
Difenoconazole	128	143	P/P	56 - 186
Dimethenamid	81.8	97.1	P/P	67 - 119
Disulfoton	79.6	94.4	P/P	47 - 120
Dithiopyr	82.6	98.0	P/P	67 - 118
EPTC	40.1	51.4	P/P	33 - 90.0
Ethion	70.1	79.6	P/P	40 - 133
Ethoprop	75.3	87.8	P/P	61 - 121
Fenamiphos	81.0	95.4	P/P	31 - 139
Fenbuconazole	98.4	116	P/P	66 - 141
Fipronil	88.9	103	P/P	62 - 129
Fipronil Desulfinyl	85.8	105	P/P	59 - 126
Fipronil Sulfide	79.5	97.6	P/P	63 - 117
Fipronil Sulfone	76.2	84.8	P/P	57 - 117

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P396895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluazifop-P-butyl	83.1	105	P/P	63 - 124
Fludioxonil	101	120	P/P	63 - 123
Flumioxazin	143	153	P/P	34 - 245
Flutolanil	84.7	97.6	P/P	56 - 131
Fluxapyroxad	84.2	94.4	P/P	57 - 117
Fonofos	79.2	97.9	P/P	61 - 116
Hexazinone	89.5	99.6	P/P	55 - 138
Imazalil	80.7	102	P/P	33 - 143
Iprodione	89.0	101	P/P	59 - 118
Malathion	83.4	99.2	P/P	62 - 138
Metalaxyl	87.1	107	P/P	24 - 147
Metolachlor	73.3	84.4	P/P	68 - 118
Metribuzin	102	112	P/P	20 - 239
Mevinphos	68.8	88.4	P/P	46 - 124
Molinate	55.4	61.6	P/P	46 - 100
Myclobutanil	85.5	103	P/P	32 - 149
Naled	34.1	42.6	P/P	32 - 95.0
Norflurazon	98.6	112	P/P	57 - 127
Oxadiazon	80.6	98.2	P/P	63 - 118
Oxyfluorfen	102	118	P/P	69 - 137
Parathion Ethyl	82.0	92.6	P/P	70 - 113
Parathion Methyl	102	106	P/P	71 - 130
Pendimethalin	84.6	93.1	P/P	55 - 118
Phorate	69.6	73.8	P/P	46 - 125
Prodiamine	53.5	77.7	P/P	20 - 141
Prometon	73.1	83.1	P/P	54 - 122
Prometryn	79.3	96.9	P/P	66 - 124
Pronamide	85.0	93.7	P/P	79 - 122
Propiconazole	82.9	97.5	P/P	61 - 126
Pyriproxyfen	85.8	104	P/P	52 - 131
Simazine	91.9	104	P/P	75 - 128
Sulfentrazone	53.3	66.3	P/P	20 - 132
Tebuconazole	68.6	73.0	P/P	20 - 116
Terbufos	75.9	92.8	P/P	61 - 117
Terbuthylazine	80.6	93.4	P/P	74 - 116

Reference Method: EPA 8276
Batch ID: P396789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	96.5	100	P/P	56 - 117
Toxaphene	81.6	80.7	P/P	45 - 116

Reference Method: EPA 8321B
Batch ID: P396769

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	127		P	30 - 160
2,4,5-T	119		P	30 - 160
3-Hydroxycarbofuran	90.5		P	30 - 160
Acetaminophen	76.4		P	30 - 150
Acetamiprid	94.3		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P396769

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Afidopyropen	73.3		P	30 - 160
Aldicarb	98.8		P	30 - 150
Aldicarb Sulfone	98.6		P	30 - 160
Aldicarb Sulfoxide	69.6		P	30 - 160
Bentazon	37.3		P	30 - 150
Benzovindiflupyr	82.9		P	30 - 160
Carbamazepine	85.9		P	30 - 160
Carbaryl	72.9		P	30 - 160
Carbofuran	75.1		P	30 - 160
Clothianidin	97.4		P	30 - 160
Dinotefuran	87.2		P	30 - 160
Diuron	76.7		P	30 - 160
Fenuron	98.2		P	30 - 160
Fluridone	97.0		P	30 - 160
Hydrocodone	93.0		P	30 - 160
Ibuprofen	82.3		P	30 - 160
Imazapyr	107		P	30 - 160
Imidacloprid	107		P	30 - 160
Linuron	70.9		P	30 - 160
Mandestrobin	90.0		P	30 - 160
MCPP	140		P	30 - 160
Methiocarb	83.8		P	30 - 160
Methomyl	91.0		P	30 - 160
Naproxen	99.3		P	30 - 160
Oxamyl	90.2		P	30 - 160
Primidone	75.4		P	30 - 160
Propoxur	68.8		P	30 - 160
Pyraclostrobin	79.3		P	30 - 160
Thiamethoxam	101		P	30 - 160
Tolfenpyrad	56.7		P	30 - 160
Triclopyr	125		P	30 - 160

Reference Method: EPA 8321B

Batch ID: P396835

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	150		P	40 - 150
AMPA	84.1		P	40 - 150
Endothall	99.7		P	40 - 150
Glufosinate	82.7		P	40 - 150
Glyphosate	65.5		P	40 - 140
Sucralose	99.5		P	40 - 150

Reference Method: SM 2120 B-2011

Batch ID: P396635

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P396887

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

Reference Method: SM 4500 F-C-2011
Batch ID: P397116

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.8		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P396955

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P397169

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240194	Barium	115		P	80 - 120
2240194	Calcium	100		P	80 - 120
2240194	Iron	102		P	80 - 120
2240194	Magnesium	102		P	80 - 120
2240194	Manganese	115		P	80 - 120
2240194	Potassium	105		P	80 - 120
2240194	Sodium	107		P	80 - 120
2240194	Zinc	107		P	80 - 120
2240932	Barium	113	112	P/P	80 - 120
2240932	Calcium	106		P	80 - 120
2240932	Iron	110	106	P/P	80 - 120
2240932	Magnesium	101		P	80 - 120
2240932	Manganese	115	114	P/P	80 - 120
2240932	Potassium	108	106	P/P	80 - 120
2240932	Sodium	111		P	80 - 120
2240932	Zinc	107	105	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P397169

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240194	Aluminum	88.5		P	80 - 120
2240194	Antimony	93.9		P	80 - 120
2240194	Arsenic	90.2		P	80 - 120
2240194	Beryllium	87.9		P	80 - 120
2240194	Boron	91.8		P	80 - 120
2240194	Cadmium	97.0		P	80 - 120
2240194	Chromium	91.4		P	80 - 120
2240194	Copper	89.9		P	80 - 120
2240194	Lead	95.9		P	80 - 120
2240194	Nickel	90.4		P	80 - 120
2240194	Selenium	86.1		P	80 - 120
2240194	Silver	96.8		P	80 - 120
2240194	Thallium	96.7		P	80 - 120
2240932	Aluminum	91.9	95.6	P/P	80 - 120
2240932	Antimony	98.4	94.3	P/P	80 - 120
2240932	Arsenic	98.1	98.9	P/P	80 - 120
2240932	Beryllium	95.0	92.1	P/P	80 - 120
2240932	Boron	93.4	93.6	P/P	80 - 120
2240932	Cadmium	101	102	P/P	80 - 120
2240932	Chromium	93.6	94.0	P/P	80 - 120
2240932	Copper	90.8	92.6	P/P	80 - 120
2240932	Lead	96.3	97.3	P/P	80 - 120
2240932	Nickel	91.5	89.8	P/P	80 - 120
2240932	Selenium	94.1	93.2	P/P	80 - 120
2240932	Silver	98.5	99.2	P/P	80 - 120
2240932	Thallium	101	97.6	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P397039

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P397039

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240080	Chloride	97.3		P	90 - 110
2240210	Chloride	97.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P397041

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240080	Sulfate	93.9		P	90 - 110
2240210	Sulfate	94.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P397362

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240151	Ammonia-N	96.8	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P397068

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240168	Kjeldahl Nitrogen	98.4	98.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P396899

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240101	NO2NO3-N	95.1	94.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P396900

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240174	NO2NO3-N	98.5	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P396856

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240036	Total-P	105	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P396625

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240154	O-Phosphate-P	98.2	98.4	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P396789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240512	Aldrin	38.2	37.2	P/P	29 - 83.0
2240512	Alpha-BHC	77.5	84.9	P/P	53 - 147

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P396789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240512	Alpha-Chlordane	73.8	80.4	P/P	56 - 107
2240512	Beta-BHC	92.1	102	P/P	43 - 182
2240512	Beta-Cyfluthrin	102	114	P/P	42 - 157
2240512	Bifenthrin	82.4	82.3	P/P	52 - 124
2240512	Chlorothalonil	176	206	P/P	10 - 265
2240512	Cis-Nonachlor	76.1	84.7	P/P	55 - 112
2240512	Cypermethrin	91.8	99.0	P/P	46 - 144
2240512	Dacthal	84.7	93.0	P/P	72 - 110
2240512	DDD-p,p'	81.1	89.5	P/P	58 - 123
2240512	DDE-p,p'	70.4	73.5	P/P	52 - 106
2240512	DDT-p,p'	69.2	74.9	P/P	50 - 127
2240512	Delta-BHC	117	132	P/P	56 - 222
2240512	Deltamethrin	76.5	104	P/P	47 - 152
2240512	Dichlobenil	55.8	47.9	P/P	22 - 99.0
2240512	Dicofol	85.0	86.5	P/P	38 - 145
2240512	Dieldrin	77.3	83.9	P/P	59 - 118
2240512	Endosulfan I	88.5	96.3	P/P	64 - 124
2240512	Endosulfan II	92.1	98.4	P/P	52 - 159
2240512	Endosulfan Sulfate	99.6	120	P/P	62 - 136
2240512	Endrin	83.3	85.4	P/P	57 - 126
2240512	Endrin Aldehyde	105	119	P/P	41 - 128
2240512	Endrin Ketone	85.9	92.3	P/P	67 - 129
2240512	Esfenvalerate	72.2	94.1	P/P	50 - 120
2240512	Ethalfuralin	69.4	72.8	P/P	41 - 125
2240512	Fenpropathrin	98.9	98.9	P/P	40 - 202
2240512	Gamma-BHC	91.2	102	P/P	58 - 180
2240512	Gamma-Chlordane	70.7	76.3	P/P	54 - 103
2240512	Heptachlor	62.5	68.0	P/P	46 - 94.0
2240512	Heptachlor Epoxide	79.2	87.5	P/P	62 - 111
2240512	Hexachlorobenzene	54.9	65.0	P/P	42 - 95.0
2240512	Lambda-Cyhalothrin	88.6	104	P/P	37 - 162
2240512	Methoxychlor	81.1	85.3	P/P	52 - 143
2240512	MGK-264	52.9	47.0	P/P	37 - 102
2240512	Mirex	59.1	62.5	P/P	43 - 91.0
2240512	Permethrin	78.8	83.3	P/P	48 - 113
2240512	Phenothrin	55.4	55.0	P/P	30 - 104
2240512	Piperonyl Butoxide	110	134	P/F	67 - 127
2240512	Prallethrin	51.8	53.5	P/P	28 - 102
2240512	Tau-Fluvalinate	103	117	P/P	46 - 174
2240512	Tetramethrin	99.9	120	P/P	28 - 176
2240512	Trans-Nonachlor	64.8	72.4	P/P	51 - 103
2240512	Triclosan Methyl	84.6	93.0	P/P	67 - 116
2240512	Trifluralin	68.7	74.6	P/P	47 - 118

Reference Method: EPA 8270E
Batch ID: P396895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239453	Acetochlor	88.5	94.3	P/P	66 - 122
2239453	Alachlor	81.3	90.5	P/P	65 - 122
2239453	Ametryn	101	108	P/P	45 - 173
2239453	Atrazine Desethyl	95.3	104	P/P	25 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P396895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239453	Azinphos Methyl	132	130	P/P	44 - 174
2239453	Bromacil	91.6	91.7	P/P	31 - 145
2239453	Butylate	33.3	34.2	P/P	15 - 97.0
2239453	Caffeine	74.2	75.2	P/P	70 - 130
2239453	Carbophenothion	83.9	85.4	P/P	42 - 129
2239453	Carfentrazone Ethyl	91.7	90.5	P/P	62 - 145
2239453	Chlorpyrifos Ethyl	82.2	89.0	P/P	60 - 124
2239453	Chlorpyrifos Methyl	88.8	88.5	P/P	66 - 119
2239453	Cyanazine	119	120	P/P	17 - 225
2239453	Demeton	89.0	85.9	P/P	36 - 142
2239453	Diazinon	103	107	P/P	70 - 128
2239453	Dimethenamid	83.7	85.2	P/P	54 - 125
2239453	Disulfoton	95.7	98.4	P/P	49 - 133
2239453	Dithiopyr	85.9	90.7	P/P	55 - 123
2239453	EPTC	32.1	35.8	P/P	19 - 91.0
2239453	Ethion	70.3	73.5	P/P	13 - 143
2239453	Fenamiphos	56.8	71.8	P/P	32 - 136
2239453	Fenbuconazole	107	114	P/P	73 - 148
2239453	Fipronil Desulfinyl	95.5	95.5	P/P	49 - 127
2239453	Fluazifop-P-butyl	94.7	94.2	P/P	67 - 129
2239453	Flumioxazin	174	176	P/P	38 - 279
2239453	Flutolanil	84.6	89.3	P/P	55 - 136
2239453	Fonofos	84.1	79.6	P/P	58 - 125
2239453	Hexazinone	98.8	97.1	P/P	57 - 148
2239453	Imazalil	297	283	F/F	10 - 221
2239453	Iprodione	86.3	89.7	P/P	32 - 140
2239453	Malathion	88.4	85.7	P/P	52 - 138
2239453	Metalaxyl	90.4	91.8	P/P	46 - 134
2239453	Mevinphos	91.9	89.4	P/P	45 - 140
2239453	Molinate	53.2	58.0	P/P	41 - 103
2239453	Myclobutanil	87.9	92.1	P/P	60 - 134
2239453	Naled	33.7	34.0	P/P	20 - 113
2239453	Norflurazon	97.5	99.3	P/P	51 - 123
2239453	Oxadiazon	76.3	79.6	P/P	44 - 125
2239453	Oxyfluorfen	111	110	P/P	66 - 176
2239453	Parathion Ethyl	90.5	93.0	P/P	57 - 132
2239453	Parathion Methyl	106	106	P/P	59 - 156
2239453	Phorate	78.9	79.6	P/P	47 - 136
2239453	Prodiamine	48.7	62.5	P/P	10 - 159
2239453	Prometon	86.9	87.2	P/P	59 - 127
2239453	Prometryn	87.2	88.6	P/P	59 - 129
2239453	Pronamide	94.1	94.8	P/P	65 - 145
2239453	Propiconazole	78.3	90.4	P/P	28 - 165
2239453	Pyriproxyfen	85.5	88.2	P/P	21 - 180
2239453	Simazine	120	116	P/P	63 - 147
2239453	Sulfentrazone	84.9	83.9	P/P	32 - 136
2239453	Tebuconazole	59.5	64.4	P/P	10 - 117
2239453	Terbufos	93.4	93.2	P/P	61 - 131
2239453	Terbutylazine	90.7	94.3	P/P	62 - 126

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276

Batch ID: P396789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240233	Chlordane	114	105	P/P	47 - 128
2240233	Toxaphene	87.8	86.3	P/P	11 - 163

Reference Method: EPA 8321B

Batch ID: P396769

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2239430	3-Hydroxycarbofuran	79.0	82.5	P/P	30 - 160
2239430	Aldicarb	87.2	102	P/P	30 - 150
2239430	Aldicarb Sulfone	103	111	P/P	30 - 160
2239430	Aldicarb Sulfoxide	31.0	29.9	P/F	30 - 160
2239430	Carbaryl	54.3	64.3	P/P	30 - 160
2239430	Carbofuran	62.8	62.3	P/P	30 - 160
2239430	Methiocarb	73.1	72.2	P/P	30 - 160
2239430	Methomyl	80.4	83.5	P/P	30 - 160
2239430	Oxamyl	85.4	91.9	P/P	30 - 160
2239430	Propoxur	56.3	61.1	P/P	30 - 160
2240190	2,4-D	130	149	P/P	30 - 160
2240190	2,4,5-T	97.7	132	P/P	30 - 160
2240190	Acetaminophen	96.0	237	P/F	30 - 150
2240190	Acetamiprid	106	109	P/P	30 - 160
2240190	Afidopyrophen	80.6	79.3	P/P	30 - 160
2240190	Bentazon	33.0	41.8	P/P	30 - 150
2240190	Benzovindiflupyr	85.2	96.8	P/P	30 - 160
2240190	Carbamazepine	84.5	95.2	P/P	30 - 160
2240190	Clothianidin	120	129	P/P	30 - 160
2240190	Dinotefuran	114	118	P/P	30 - 160
2240190	Diuron	74.4	70.0	P/P	30 - 160
2240190	Fenuron	112	122	P/P	30 - 160
2240190	Fluridone	103	106	P/P	30 - 160
2240190	Hydrocodone	115	125	P/P	30 - 160
2240190	Ibuprofen	69.9	90.7	P/P	30 - 160
2240190	Imazapyr	129	149	P/P	30 - 160
2240190	Imidacloprid	149	185	P/F	30 - 160
2240190	Linuron	89.4	94.7	P/P	30 - 160
2240190	Mandestrobin	88.6	94.9	P/P	30 - 160
2240190	MCPP	152	177	P/F	30 - 160
2240190	Naproxen	90.5	99.2	P/P	30 - 160
2240190	Primidone	108	112	P/P	30 - 160
2240190	Pyraclostrobin	77.8	87.0	P/P	30 - 160
2240190	Thiamethoxam	146	170	P/F	30 - 160
2240190	Tolfenpyrad	62.1	57.3	P/P	30 - 160
2240190	Triclopyr	98.0	149	P/P	30 - 160

Reference Method: EPA 8321B

Batch ID: P396835

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240044	Acesulfame K	193	160	F/F	40 - 150
2240044	AMPA	86.9	85.6	P/P	40 - 150
2240044	Endothall	88.1	78.6	P/P	40 - 150
2240044	Glufosinate	69.5	61.0	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P396835

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240044	Glyphosate	118	138	P/P	40 - 140
2240044	Sucralose	95.1	103	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P397116

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240221	Fluoride	100	101	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P396955

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2240101	Organic Carbon	102		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P396645

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240149	Turbidity	0.435	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P397169

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240932	Barium	0.313	Spike	P	0 - 20
2240932	Calcium	0.115	Spike	P	0 - 20
2240932	Iron	4.30	Spike	P	0 - 20
2240932	Magnesium	4.09	Spike	P	0 - 20
2240932	Manganese	0.162	Spike	P	0 - 20
2240932	Potassium	1.20	Spike	P	0 - 20
2240932	Sodium	0.618	Spike	P	0 - 20
2240932	Zinc	1.22	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P397169

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240932	Aluminum	3.83	Spike	P	0 - 20
2240932	Antimony	4.26	Spike	P	0 - 20
2240932	Arsenic	0.823	Spike	P	0 - 20
2240932	Beryllium	3.09	Spike	P	0 - 20
2240932	Boron	0.187	Spike	P	0 - 20
2240932	Cadmium	1.39	Spike	P	0 - 20
2240932	Chromium	0.365	Spike	P	0 - 20
2240932	Copper	1.95	Spike	P	0 - 20
2240932	Lead	1.00	Spike	P	0 - 20
2240932	Nickel	1.82	Spike	P	0 - 20
2240932	Selenium	0.869	Spike	P	0 - 20
2240932	Silver	0.771	Spike	P	0 - 20
2240932	Thallium	3.75	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P397039

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240080	Chloride	0.0408	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P397041

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240080	Sulfate	0.310	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P397362

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240151	Ammonia-N	0.673	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P397068

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240168	Kjeldahl Nitrogen	0.00626	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P396899

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240101	NO2NO3-N	0.434	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P396900

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240174	NO2NO3-N	0.509	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P396856

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240036	Total-P	0.699	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P396625

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240154	O-Phosphate-P	0.203	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P396789

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240512	Aldrin	2.68	Spike	P	0 - 30
2240512	Alpha-BHC	9.07	Spike	P	0 - 30
2240512	Alpha-Chlordane	8.60	Spike	P	0 - 30
2240512	Beta-BHC	10.2	Spike	P	0 - 30
2240512	Beta-Cyfluthrin	11.5	Spike	P	0 - 30
2240512	Bifenthrin	0.111	Spike	P	0 - 30
2240512	Chlorothalonil	15.3	Spike	P	0 - 30
2240512	Cis-Nonachlor	10.8	Spike	P	0 - 30
2240512	Cypermethrin	7.52	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P396789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240512	Dacthal	9.27	Spike	P	0 - 30
2240512	DDD-p,p'	9.83	Spike	P	0 - 30
2240512	DDE-p,p'	4.34	Spike	P	0 - 30
2240512	DDT-p,p'	7.86	Spike	P	0 - 30
2240512	Delta-BHC	11.3	Spike	P	0 - 30
2240512	Deltamethrin	30.0	Spike	F	0 - 30
2240512	Dichlobenil	15.3	Spike	P	0 - 30
2240512	Dicofol	1.78	Spike	P	0 - 30
2240512	Dieldrin	8.27	Spike	P	0 - 30
2240512	Endosulfan I	8.38	Spike	P	0 - 30
2240512	Endosulfan II	6.59	Spike	P	0 - 30
2240512	Endosulfan Sulfate	18.6	Spike	P	0 - 30
2240512	Endrin	2.54	Spike	P	0 - 30
2240512	Endrin Aldehyde	12.9	Spike	P	0 - 30
2240512	Endrin Ketone	7.22	Spike	P	0 - 30
2240512	Esfenvalerate	26.3	Spike	P	0 - 30
2240512	Ethalfuralin	4.84	Spike	P	0 - 30
2240512	Fenpropathrin	0.0278	Spike	P	0 - 30
2240512	Gamma-BHC	10.8	Spike	P	0 - 30
2240512	Gamma-Chlordane	7.60	Spike	P	0 - 30
2240512	Heptachlor	8.45	Spike	P	0 - 30
2240512	Heptachlor Epoxide	9.97	Spike	P	0 - 30
2240512	Hexachlorobenzene	16.8	Spike	P	0 - 30
2240512	Lambda-Cyhalothrin	15.7	Spike	P	0 - 30
2240512	Methoxychlor	5.05	Spike	P	0 - 30
2240512	MGK-264	11.9	Spike	P	0 - 30
2240512	Mirex	5.55	Spike	P	0 - 30
2240512	Permethrin	5.55	Spike	P	0 - 30
2240512	Phenothrin	0.799	Spike	P	0 - 30
2240512	Piperonyl Butoxide	20.2	Spike	P	0 - 30
2240512	Prallethrin	3.22	Spike	P	0 - 30
2240512	Tau-Fluvalinate	12.0	Spike	P	0 - 30
2240512	Tetramethrin	18.5	Spike	P	0 - 30
2240512	Trans-Nonachlor	11.0	Spike	P	0 - 30
2240512	Triclosan Methyl	9.48	Spike	P	0 - 30
2240512	Trifluralin	8.17	Spike	P	0 - 30
LFB	Aldrin	4.01	LCS	P	0 - 30
LFB	Alpha-BHC	5.77	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.614	LCS	P	0 - 30
LFB	Beta-BHC	0.978	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	1.00	LCS	P	0 - 30
LFB	Bifenthrin	0.240	LCS	P	0 - 30
LFB	Chlorothalonil	18.8	LCS	P	0 - 30
LFB	Cis-Nonachlor	1.39	LCS	P	0 - 30
LFB	Cypermethrin	10.1	LCS	P	0 - 30
LFB	Dacthal	1.57	LCS	P	0 - 30
LFB	DDD-p,p'	2.41	LCS	P	0 - 30
LFB	DDE-p,p'	3.02	LCS	P	0 - 30
LFB	DDT-p,p'	4.44	LCS	P	0 - 30
LFB	Delta-BHC	2.82	LCS	P	0 - 30
LFB	Deltamethrin	6.95	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P396789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dichlobenil	7.25	LCS	P	0 - 30
LFB	Dicofol	8.94	LCS	P	0 - 30
LFB	Dieldrin	0.308	LCS	P	0 - 30
LFB	Endosulfan I	3.79	LCS	P	0 - 30
LFB	Endosulfan II	9.43	LCS	P	0 - 30
LFB	Endosulfan Sulfate	6.67	LCS	P	0 - 30
LFB	Endrin	9.24	LCS	P	0 - 30
LFB	Endrin Aldehyde	1.49	LCS	P	0 - 30
LFB	Endrin Ketone	2.39	LCS	P	0 - 30
LFB	Esfenvalerate	10.5	LCS	P	0 - 30
LFB	Ethalfuralin	1.19	LCS	P	0 - 30
LFB	Fenpropathrin	4.08	LCS	P	0 - 30
LFB	Gamma-BHC	4.69	LCS	P	0 - 30
LFB	Gamma-Chlordane	0.961	LCS	P	0 - 30
LFB	Heptachlor	2.72	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.84	LCS	P	0 - 30
LFB	Hexachlorobenzene	0.323	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	2.70	LCS	P	0 - 30
LFB	Methoxychlor	0.474	LCS	P	0 - 30
LFB	MGK-264	26.9	LCS	P	0 - 30
LFB	Mirex	4.26	LCS	P	0 - 30
LFB	Permethrin	2.55	LCS	P	0 - 30
LFB	Phenothrin	9.27	LCS	P	0 - 30
LFB	Piperonyl Butoxide	2.66	LCS	P	0 - 30
LFB	Prallethrin	33.3	LCS	F	0 - 30
LFB	Tau-Fluvalinate	2.96	LCS	P	0 - 30
LFB	Tetramethrin	12.5	LCS	P	0 - 30
LFB	Trans-Nonachlor	4.73	LCS	P	0 - 30
LFB	Triclosan Methyl	0.228	LCS	P	0 - 30
LFB	Trifluralin	1.96	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P396895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239453	Acetochlor	6.32	Spike	P	0 - 30
2239453	Alachlor	10.7	Spike	P	0 - 30
2239453	Ametryn	6.04	Spike	P	0 - 30
2239453	Atrazine	1.98	Spike	P	0 - 30
2239453	Atrazine Desethyl	6.95	Spike	P	0 - 30
2239453	Azinphos Methyl	1.63	Spike	P	0 - 30
2239453	Azoxystrobin	9.16	Spike	P	0 - 30
2239453	Bromacil	0.167	Spike	P	0 - 30
2239453	Butylate	2.76	Spike	P	0 - 30
2239453	Caffeine	1.40	Spike	P	0 - 30
2239453	Carbophenothion	1.74	Spike	P	0 - 30
2239453	Carfentrazone Ethyl	1.34	Spike	P	0 - 30
2239453	Chlorpyrifos Ethyl	7.92	Spike	P	0 - 30
2239453	Chlorpyrifos Methyl	0.350	Spike	P	0 - 30
2239453	Cyanazine	1.02	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P396895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239453	Demeton	3.52	Spike	P	0 - 30
2239453	Diazinon	3.85	Spike	P	0 - 30
2239453	Difenoconazole	17.7	Spike	P	0 - 30
2239453	Dimethenamid	1.85	Spike	P	0 - 30
2239453	Disulfoton	2.84	Spike	P	0 - 30
2239453	Dithiopyr	5.43	Spike	P	0 - 30
2239453	EPTC	11.0	Spike	P	0 - 30
2239453	Ethion	4.41	Spike	P	0 - 30
2239453	Ethoprop	0.0744	Spike	P	0 - 30
2239453	Fenamiphos	23.3	Spike	P	0 - 30
2239453	Fenbuconazole	5.69	Spike	P	0 - 30
2239453	Fipronil	1.94	Spike	P	0 - 30
2239453	Fipronil Desulfinyl	0.00251	Spike	P	0 - 30
2239453	Fipronil Sulfide	3.83	Spike	P	0 - 30
2239453	Fipronil Sulfone	1.06	Spike	P	0 - 30
2239453	Fluazifop-P-butyl	0.602	Spike	P	0 - 30
2239453	Fludioxonil	2.81	Spike	P	0 - 30
2239453	Flumioxazin	1.11	Spike	P	0 - 30
2239453	Flutolanil	5.43	Spike	P	0 - 30
2239453	Fluxapyroxad	0.374	Spike	P	0 - 30
2239453	Fonofos	5.46	Spike	P	0 - 30
2239453	Hexazinone	1.58	Spike	P	0 - 30
2239453	Imazalil	4.79	Spike	P	0 - 30
2239453	Iprodione	3.94	Spike	P	0 - 30
2239453	Malathion	3.12	Spike	P	0 - 30
2239453	Metalaxyl	1.04	Spike	P	0 - 30
2239453	Metolachlor	6.85	Spike	P	0 - 30
2239453	Metribuzin	2.19	Spike	P	0 - 30
2239453	Mevinphos	2.78	Spike	P	0 - 30
2239453	Molinate	8.66	Spike	P	0 - 30
2239453	Myclobutanil	4.76	Spike	P	0 - 30
2239453	Naled	0.804	Spike	P	0 - 30
2239453	Norflurazon	1.86	Spike	P	0 - 30
2239453	Oxadiazon	3.12	Spike	P	0 - 30
2239453	Oxyfluorfen	0.345	Spike	P	0 - 30
2239453	Parathion Ethyl	2.75	Spike	P	0 - 30
2239453	Parathion Methyl	0.219	Spike	P	0 - 30
2239453	Pendimethalin	1.37	Spike	P	0 - 30
2239453	Phorate	0.850	Spike	P	0 - 30
2239453	Prodiamine	24.9	Spike	P	0 - 30
2239453	Prometon	0.328	Spike	P	0 - 30
2239453	Prometryn	1.65	Spike	P	0 - 30
2239453	Pronamide	0.812	Spike	P	0 - 30
2239453	Propiconazole	14.4	Spike	P	0 - 30
2239453	Pyriproxyfen	3.14	Spike	P	0 - 30
2239453	Simazine	3.47	Spike	P	0 - 30
2239453	Sulfentrazone	1.13	Spike	P	0 - 30
2239453	Tebuconazole	7.91	Spike	P	0 - 30
2239453	Terbufos	0.133	Spike	P	0 - 30
2239453	Terbuthylazine	3.88	Spike	P	0 - 30
LFB	Acetochlor	19.3	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P396895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Alachlor	14.2	LCS	P	0 - 30
LFB	Ametryn	21.6	LCS	P	0 - 30
LFB	Atrazine	6.09	LCS	P	0 - 30
LFB	Atrazine Desethyl	5.45	LCS	P	0 - 30
LFB	Azinphos Methyl	14.1	LCS	P	0 - 30
LFB	Azoxystrobin	12.7	LCS	P	0 - 30
LFB	Bromacil	23.7	LCS	P	0 - 30
LFB	Butylate	21.0	LCS	P	0 - 30
LFB	Caffeine	1.79	LCS	P	0 - 30
LFB	Carbophenothion	17.0	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	17.0	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	15.3	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	13.0	LCS	P	0 - 30
LFB	Cyanazine	18.3	LCS	P	0 - 30
LFB	Demeton	14.0	LCS	P	0 - 30
LFB	Diazinon	19.0	LCS	P	0 - 30
LFB	Difenoconazole	10.9	LCS	P	0 - 30
LFB	Dimethenamid	17.0	LCS	P	0 - 30
LFB	Disulfoton	17.0	LCS	P	0 - 30
LFB	Dithiopyr	17.0	LCS	P	0 - 30
LFB	EPTC	24.6	LCS	P	0 - 30
LFB	Ethion	12.7	LCS	P	0 - 30
LFB	Ethoprop	15.3	LCS	P	0 - 30
LFB	Fenamiphos	16.4	LCS	P	0 - 30
LFB	Fenbuconazole	16.5	LCS	P	0 - 30
LFB	Fipronil	14.6	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	20.3	LCS	P	0 - 30
LFB	Fipronil Sulfide	20.4	LCS	P	0 - 30
LFB	Fipronil Sulfone	10.7	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	23.5	LCS	P	0 - 30
LFB	Fludioxonil	17.2	LCS	P	0 - 30
LFB	Flumioxazin	6.73	LCS	P	0 - 30
LFB	Flutolanil	14.1	LCS	P	0 - 30
LFB	Fluxapyroxad	11.4	LCS	P	0 - 30
LFB	Fonofos	21.2	LCS	P	0 - 30
LFB	Hexazinone	10.6	LCS	P	0 - 30
LFB	Imazalil	23.6	LCS	P	0 - 30
LFB	Iprodione	12.3	LCS	P	0 - 30
LFB	Malathion	17.2	LCS	P	0 - 30
LFB	Metalaxyl	20.2	LCS	P	0 - 30
LFB	Metolachlor	14.2	LCS	P	0 - 30
LFB	Metribuzin	9.75	LCS	P	0 - 30
LFB	Mevinphos	24.9	LCS	P	0 - 30
LFB	Molinate	10.5	LCS	P	0 - 30
LFB	Myclobutanil	18.1	LCS	P	0 - 30
LFB	Naled	22.1	LCS	P	0 - 30
LFB	Norflurazon	12.8	LCS	P	0 - 30
LFB	Oxadiazon	19.7	LCS	P	0 - 30
LFB	Oxyfluorfen	14.1	LCS	P	0 - 30
LFB	Parathion Ethyl	12.2	LCS	P	0 - 30
LFB	Parathion Methyl	4.38	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P396895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Pendimethalin	9.56	LCS	P	0 - 30
LFB	Phorate	5.87	LCS	P	0 - 30
LFB	Prodiamine	36.8	LCS	F	0 - 30
LFB	Prometon	12.8	LCS	P	0 - 30
LFB	Prometryn	20.0	LCS	P	0 - 30
LFB	Pronamide	9.72	LCS	P	0 - 30
LFB	Propiconazole	16.1	LCS	P	0 - 30
LFB	Pyriproxyfen	18.8	LCS	P	0 - 30
LFB	Simazine	12.7	LCS	P	0 - 30
LFB	Sulfentrazone	21.8	LCS	P	0 - 30
LFB	Tebuconazole	6.27	LCS	P	0 - 30
LFB	Terbufos	20.0	LCS	P	0 - 30
LFB	Terbutylazine	14.7	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P396789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240233	Chlordane	8.46	Spike	P	0 - 30
2240233	Toxaphene	1.81	Spike	P	0 - 30
LFB	Chlordane	3.79	LCS	P	0 - 30
LFB	Toxaphene	1.11	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P396769

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2239430	3-Hydroxycarbofuran	4.35	Spike	P	0 - 30
2239430	Aldicarb	15.4	Spike	P	0 - 30
2239430	Aldicarb Sulfone	7.43	Spike	P	0 - 30
2239430	Aldicarb Sulfoxide	3.48	Spike	P	0 - 30
2239430	Carbaryl	16.9	Spike	P	0 - 30
2239430	Carbofuran	0.767	Spike	P	0 - 30
2239430	Methiocarb	1.31	Spike	P	0 - 30
2239430	Methomyl	3.76	Spike	P	0 - 30
2239430	Oxamyl	5.82	Spike	P	0 - 30
2239430	Propoxur	8.16	Spike	P	0 - 30
2240190	2,4-D	13.6	Spike	P	0 - 30
2240190	2,4,5-T	29.7	Spike	P	0 - 30
2240190	Acetaminophen	84.5	Spike	F	0 - 30
2240190	Acetamiprid	2.55	Spike	P	0 - 30
2240190	Afidopyropen	1.68	Spike	P	0 - 30
2240190	Bentazon	17.0	Spike	P	0 - 30
2240190	Benzovindiflupyr	12.8	Spike	P	0 - 30
2240190	Carbamazepine	11.0	Spike	P	0 - 30
2240190	Clothianidin	7.28	Spike	P	0 - 30
2240190	Dinotefuran	3.60	Spike	P	0 - 30
2240190	Diuron	6.08	Spike	P	0 - 30
2240190	Fenuron	8.32	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P396769

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240190	Fluridone	2.87	Spike	P	0 - 30
2240190	Hydrocodone	8.23	Spike	P	0 - 30
2240190	Ibuprofen	25.9	Spike	P	0 - 30
2240190	Imazapyr	14.4	Spike	P	0 - 30
2240190	Imidacloprid	19.2	Spike	P	0 - 30
2240190	Linuron	5.80	Spike	P	0 - 30
2240190	Mandestrobin	6.94	Spike	P	0 - 30
2240190	MCCP	14.7	Spike	P	0 - 30
2240190	Naproxen	9.23	Spike	P	0 - 30
2240190	Primidone	2.91	Spike	P	0 - 30
2240190	Pyraclostrobin	11.1	Spike	P	0 - 30
2240190	Thiamethoxam	15.5	Spike	P	0 - 30
2240190	Tolfenpyrad	8.09	Spike	P	0 - 30
2240190	Triclopyr	41.0	Spike	F	0 - 30

Reference Method: EPA 8321B
 Batch ID: P396835

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240044	Acesulfame K	18.7	Spike	P	0 - 30
2240044	AMPA	1.42	Spike	P	0 - 30
2240044	Endothall	11.4	Spike	P	0 - 30
2240044	Glufosinate	13.0	Spike	P	0 - 30
2240044	Glyphosate	14.1	Spike	P	0 - 30
2240044	Sucralose	7.10	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
 Batch ID: P396635

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240167	Color (true)	2.27	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P396887

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240221	Total Alkalinity	0.309	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
 Batch ID: P397227

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240035	TDS	4.05	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-2011
Batch ID: P397116

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240221	Fluoride	0.472	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P396955

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2240101	Organic Carbon	0.0909	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2240189
Field Sample ID: G5NW0068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	78.8	P	30 - 160

Lab Sample ID: 2240190
Field Sample ID: G5NW0068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	145	P	30 - 160
EPA 8321B	Acetaminophen-d4	100	P	30 - 160
EPA 8321B	Carbamazepine-d10	98.4	P	30 - 160
EPA 8321B	Diuron-d6	71.3	P	30 - 160
EPA 8321B	Endothall-d6	104	P	40 - 160
EPA 8321B	Endothall-d6	104	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	59.1	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	59.1	P	40 - 160
EPA 8321B	Ibuprofen-d3	82.6	P	30 - 160
EPA 8321B	Primidone-d5	121	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	30 - 160

Lab Sample ID: 2240191
Field Sample ID: G5NW0068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	74.9	P	47 - 111
EPA 8270E	Tetrachloro-m-xylene	44.6	P	33 - 102
EPA 8276	Decachlorobiphenyl	64.9	P	29 - 92.0
EPA 8276	PCNB	71.8	P	43 - 134

Lab Sample ID: 2240192
Field Sample ID: G5NW0068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	92.8	P	20 - 200
EPA 8270E	Simazine-d10	132	P	73 - 135
EPA 8270E	Terbufos-d10	102	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A104762

Included Lab Sample IDs: 2240169, 2240172

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.7	99.3	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A104764

Included Lab Sample IDs: 2240167, 2240170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	102	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A104768

Included Lab Sample IDs: 2240167, 2240170

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A104851

Included Lab Sample IDs: 2240168, 2240171

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	99.0	P/P	90 - 110
NO2NO3-N	98.0	98.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A104869

Included Lab Sample IDs: 2240167, 2240170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.8	99.0	P/P	90 - 110
Sulfate	97.9	98.2	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A104870

Included Lab Sample IDs: 2240167, 2240170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A104883

Included Lab Sample IDs: 2240168, 2240171

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.2	97.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A104896

Included Lab Sample IDs: 2240190

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
 Run ID: A104896
 Included Lab Sample IDs: 2240190

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	137	113	P/P	40 - 160
AMPA	93.3	97.8	P/P	40 - 160
Endothall	79.8	81.6	P/P	40 - 160
Glufosinate	86.8	99.8	P/P	40 - 160
Glyphosate	83.8	66.0	P/P	40 - 160

Reference Method: SM 5310 B-2011
 Run ID: A104901
 Included Lab Sample IDs: 2240168, 2240171

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.6	96.6	P/P	90 - 110

Reference Method: EPA 8270E
 Run ID: A104902
 Included Lab Sample IDs: 2240191

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.9		P	80 - 120
Alpha-BHC	102		P	80 - 120
Alpha-Chlordane	98.7		P	80 - 120
Beta-BHC	92.8		P	80 - 120
Beta-Cyfluthrin	104		P	80 - 120
Bifenthrin	96.7		P	80 - 120
Chlorothalonil	114		P	80 - 120
Cis-Nonachlor	97.6		P	80 - 120
Cypermethrin	93.4		P	80 - 120
Dacthal	97.7		P	80 - 120
DDD-p,p'	100		P	80 - 120
DDE-p,p'	101		P	80 - 120
DDT-p,p'	99.1		P	80 - 120
Delta-BHC	110		P	80 - 120
Deltamethrin	88.3		P	80 - 120
Dichlobenil	93.4		P	80 - 120
Dicofol	95.8		P	80 - 120
Dieldrin	100		P	80 - 120
Endosulfan I	100		P	80 - 120
Endosulfan II	102		P	80 - 120
Endosulfan Sulfate	104		P	80 - 120
Endrin	101		P	80 - 120
Endrin Aldehyde	104		P	80 - 120
Endrin Ketone	94.9		P	80 - 120
Esfenvalerate	92.2		P	80 - 120
Ethalfuralin	98.7		P	80 - 120
Fenpropathrin	109		P	80 - 120
Gamma-BHC	101		P	80 - 120
Gamma-Chlordane	97.4		P	80 - 120
Heptachlor	96.9		P	80 - 120
Heptachlor Epoxide	98.4		P	80 - 120
Hexachlorobenzene	104		P	80 - 120
Lambda-Cyhalothrin	94.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A104902
Included Lab Sample IDs: 2240191

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Methoxychlor	99.8		P	80 - 120
MGK-264	94.9		P	80 - 120
Mirex	97.5		P	80 - 120
Permethrin	88.2		P	80 - 120
Phenothrin	88.9		P	80 - 120
Piperonyl Butoxide	97.0		P	80 - 120
Prallethrin	91.5		P	80 - 120
Tau-Fluvalinate	97.6		P	80 - 120
Tetramethrin	99.8		P	80 - 120
Trans-Nonachlor	98.3		P	80 - 120
Triclosan Methyl	99.5		P	80 - 120
Trifluralin	96.7		P	80 - 120

Reference Method: EPA 8270E
Run ID: A104909
Included Lab Sample IDs: 2240192

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.7		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	97.2		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	97.2		P	80 - 120
Azinphos Methyl	101		P	80 - 120
Azoxystrobin	112		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	97.2		P	80 - 120
Caffeine	91.4		P	80 - 120
Carbophenothion	102		P	80 - 120
Carfentrazone Ethyl	105		P	80 - 120
Chlorpyrifos Ethyl	100		P	80 - 120
Chlorpyrifos Methyl	96.3		P	80 - 120
Cyanazine	93.7		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	101		P	80 - 120
Difenoconazole	103		P	80 - 120
Dimethenamid	105		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	98.0		P	80 - 120
EPTC	99.2		P	80 - 120
Ethion	105		P	80 - 120
Ethoprop	98.5		P	80 - 120
Fenamiphos	103		P	80 - 120
Fenbuconazole	104		P	80 - 120
Fipronil	99.0		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	103		P	80 - 120
Fipronil Sulfone	106		P	80 - 120
Fluazifop-P-butyl	96.0		P	80 - 120
Fludioxonil	103		P	80 - 120
Flumioxazin	100		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A104909
Included Lab Sample IDs: 2240192

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Flutolanil	100		P	80 - 120
Fluxapyroxad	108		P	80 - 120
Fonofos	103		P	80 - 120
Hexazinone	99.3		P	80 - 120
Imazalil	98.4		P	80 - 120
Iprodione	96.9		P	80 - 120
Malathion	103		P	80 - 120
Metalaxyl	106		P	80 - 120
Metolachlor	97.6		P	80 - 120
Metribuzin	109		P	80 - 120
Mevinphos	106		P	80 - 120
Molinate	97.7		P	80 - 120
Myclobutanil	101		P	80 - 120
Naled	102		P	80 - 120
Norflurazon	104		P	80 - 120
Oxadiazon	99.3		P	80 - 120
Oxyfluorfen	99.4		P	80 - 120
Parathion Ethyl	100		P	80 - 120
Parathion Methyl	108		P	80 - 120
Pendimethalin	99.4		P	80 - 120
Phorate	97.5		P	80 - 120
Prodiamine	94.3		P	80 - 120
Prometon	96.7		P	80 - 120
Prometryn	99.7		P	80 - 120
Pronamide	103		P	80 - 120
Propiconazole	103		P	80 - 120
Pyriproxyfen	97.8		P	80 - 120
Simazine	93.0		P	80 - 120
Sulfentrazone	106		P	80 - 120
Tebuconazole	105		P	80 - 120
Terbufos	100		P	80 - 120
Terbutylazine	97.7		P	80 - 120

Reference Method: EPA 8276
Run ID: A104952
Included Lab Sample IDs: 2240191

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.2		P	80 - 120
Toxaphene	104		P	80 - 120

Reference Method: SM 4500 F-C-2011
Run ID: A104962
Included Lab Sample IDs: 2240167, 2240170

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A105021

Included Lab Sample IDs: 2240168, 2240171

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.4	102	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A105034

Included Lab Sample IDs: 2240193, 2240194, 2240195

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	105	106	P/P	90 - 110
Barium	107	105	P/P	90 - 110
Manganese	109	110	P/P	90 - 110
Manganese	110	109	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A105039

Included Lab Sample IDs: 2240193, 2240194, 2240195

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.2	98.5	P/P	90 - 110
Antimony	99.5	98.0	P/P	90 - 110
Arsenic	97.5	96.6	P/P	90 - 110
Boron	97.6	100	P/P	90 - 110
Chromium	96.4	96.3	P/P	90 - 110
Copper	93.4	92.4	P/P	90 - 110
Nickel	95.2	94.5	P/P	90 - 110
Selenium	95.2	96.8	P/P	90 - 110
Thallium	97.6	96.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A105064

Included Lab Sample IDs: 2240168, 2240171

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A105068

Included Lab Sample IDs: 2240193, 2240194, 2240195

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	93.5	94.8	P/P	90 - 110
Calcium	93.8	93.5	P/P	90 - 110
Potassium	102	102	P/P	90 - 110
Potassium	102	102	P/P	90 - 110
Sodium	97.3	98.3	P/P	90 - 110
Sodium	98.3	100	P/P	90 - 110
Zinc	106	106	P/P	90 - 110
Zinc	106	106	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A105076

Included Lab Sample IDs: 2240193, 2240194, 2240195

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	103	105	P/P	90 - 110
Iron	104	103	P/P	95 - 105
Magnesium	103	105	P/P	90 - 110
Magnesium	104	103	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A105083

Included Lab Sample IDs: 2240190

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	112	111	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A105098

Included Lab Sample IDs: 2240190

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	109	109	P/P	50 - 150
2,4,5-T	107	104	P/P	50 - 150
3-Hydroxycarbofuran	112	113	P/P	60 - 150
Acetaminophen	101	92.2	P/P	60 - 160
Acetamiprid	111	117	P/P	50 - 150
Afidopyropen	104	116	P/P	50 - 150
Aldicarb	116	121	P/P	60 - 150
Aldicarb Sulfone	113	114	P/P	50 - 150
Aldicarb Sulfoxide	106	106	P/P	50 - 150
Bentazon	114	116	P/P	50 - 160
Benzovindiflupyr	108	95.4	P/P	50 - 160
Carbamazepine	103	101	P/P	60 - 150
Carbaryl	117	129	P/P	60 - 150
Carbofuran	110	113	P/P	50 - 150
Clothianidin	114	108	P/P	60 - 150
Dinotefuran	113	110	P/P	50 - 150
Diuron	114	87.5	P/P	60 - 160
Fenuron	108	110	P/P	60 - 150
Fluridone	116	118	P/P	60 - 160
Hydrocodone	120	113	P/P	60 - 150
Ibuprofen	83.3	84.3	P/P	50 - 160
Imazapyr	118	111	P/P	50 - 150
Imidacloprid	117	99.6	P/P	60 - 150
Linuron	103	106	P/P	60 - 150
Mandestrobin	101	102	P/P	50 - 150
MCPP	113	95.0	P/P	50 - 150
Methiocarb	111	122	P/P	50 - 150
Methomyl	110	112	P/P	50 - 150
Naproxen	111	121	P/P	50 - 160
Oxamyl	109	109	P/P	50 - 150
Primidone	128	96.1	P/P	60 - 150
Propoxur	103	113	P/P	50 - 150
Pyraclostrobin	106	108	P/P	60 - 150
Thiamethoxam	121	117	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A105098

Included Lab Sample IDs: 2240190

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tolfenpyrad	104	102	P/P	60 - 150
Triclopyr	102	99.8	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A105206

Included Lab Sample IDs: 2240193, 2240194, 2240195

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.9	98.8	P/P	90 - 110
Beryllium	97.3	96.0	P/P	90 - 110
Cadmium	98.4	99.0	P/P	90 - 110
Lead	101	99.3	P/P	90 - 110
Silver	98.3	97.5	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							0.435	
EPA 200.7 Rev. 4.4	Barium	103		113	115	112			0.313
	Calcium	99.8		100	106				0.115
	Iron	106		102	110	106			4.30
	Magnesium	103		102	101				4.09
	Manganese	106		115	115	114			0.162
	Potassium	108		105	108	106			1.20
	Sodium	105		107	111				0.618
	Zinc	108		107	107	105			1.22
EPA 200.8 Rev. 5.4	Aluminum	91.3		91.9	95.6	88.5			3.83
	Antimony	92.4		98.4	94.3	93.9			4.26
	Arsenic	97.5		98.1	98.9	90.2			0.823
	Beryllium	92.3		95.0	92.1	87.9			3.09
	Boron	91.2		93.4	93.6	91.8			0.187
	Cadmium	102		101	102	97.0			1.39
	Chromium	92.8		93.6	94.0	91.4			0.365
	Copper	94.7		90.8	92.6	89.9			1.95
	Lead	98.7		96.3	97.3	95.9			1.00
	Nickel	92.5		91.5	89.8	90.4			1.82
	Selenium	93.5		94.1	93.2	86.1			0.869
	Silver	101		98.5	99.2	96.8			0.771
	Thallium	96.7		101	97.6	96.7			3.75
EPA 300.0 Rev. 2.1	Chloride	98.3		97.3	97.3			0.0408	
	Sulfate	96.3		93.9	94.4			0.310	
EPA 350.1 Rev. 2.0	Ammonia-N	97.4		96.8	97.6				0.673
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106		98.4	98.4				0.0062
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0		95.1	94.6				0.434
	NO2NO3-N	98.5		98.5	98.0				0.509
EPA 365.1 Rev. 2.0	Total-P	106		105	104				0.699
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.4		98.2	98.4				0.203
EPA 8270E	Acetochlor	82.2	99.8	88.5	94.3		19.3		6.32
	Alachlor	82.8	95.5	81.3	90.5		14.2		10.7
	Aldrin	31.4	32.7	38.2	37.2		4.01		2.68
	Alpha-BHC	82.3	87.2	77.5	84.9		5.77		9.07
	Alpha-Chlordane	82.4	82.9	73.8	80.4		0.614		8.60
	Ametryn	73.9	91.7	101	108		21.6		6.04
	Atrazine	93.3	87.8				6.09		1.98
	Atrazine Desethyl	95.3	90.2	95.3	104		5.45		6.95
	Azinphos Methyl	140	122	132	130		14.1		1.63
	Azoxystrobin	181	159				12.7		9.16
	Beta-BHC	104	103	92.1	102		0.978		10.2
	Beta-Cyfluthrin	109	108	102	114		1.00		11.5
	Bifenthrin	83.3	83.5	82.4	82.3		0.240		0.111
	Bromacil	90.2	71.1	91.6	91.7		23.7		0.167
	Butylate	54.0	43.8	33.3	34.2		21.0		2.76
	Caffeine	71.5	72.8	74.2	75.2		1.79		1.40
	Carbophenothion	86.2	102	83.9	85.4		17.0		1.74
	Carfentrazone Ethyl	91.8	109	91.7	90.5		17.0		1.34
	Chlorothalonil	135	163	176	206		18.8		15.3
	Chlorpyrifos Ethyl	81.2	94.6	82.2	89.0		15.3		7.92
	Chlorpyrifos Methyl	86.5	98.4	88.8	88.5		13.0		0.350
	Cis-Nonachlor	87.0	85.8	76.1	84.7		1.39		10.8
	Cyanazine	108	130	119	120		18.3		1.02
	Cypermethrin	91.2	101	91.8	99.0		10.1		7.52

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	SMP
EPA 8270E	Dacthal	89.9	91.4	84.7	93.0	1.57	9.27
	DDD-p,p'	94.8	92.5	81.1	89.5	2.41	9.83
	DDE-p,p'	79.2	76.8	70.4	73.5	3.02	4.34
	DDT-p,p'	76.2	79.7	69.2	74.9	4.44	7.86
	Delta-BHC	136	132	117	132	2.82	11.3
	Deltamethrin	93.8	101	76.5	104	6.95	30.0
	Demeton	76.1	87.6	89.0	85.9	14.0	3.52
	Diazinon	86.8	105	103	107	19.0	3.85
	Dichlobenil	66.6	62.0	55.8	47.9	7.25	15.3
	Dicofol	98.2	89.8	85.0	86.5	8.94	1.78
	Dieldrin	86.7	87.0	77.3	83.9	0.308	8.27
	Difenoconazole	128	143			10.9	17.7
	Dimethenamid	81.8	97.1	83.7	85.2	17.0	1.85
	Disulfoton	79.6	94.4	95.7	98.4	17.0	2.84
	Dithiopyr	82.6	98.0	85.9	90.7	17.0	5.43
	Endosulfan I	89.3	92.8	88.5	96.3	3.79	8.38
	Endosulfan II	104	114	92.1	98.4	9.43	6.59
	Endosulfan Sulfate	101	108	99.6	120	6.67	18.6
	Endrin	86.4	78.8	83.3	85.4	9.24	2.54
	Endrin Aldehyde	117	118	105	119	1.49	12.9
	Endrin Ketone	90.9	93.1	85.9	92.3	2.39	7.22
	EPTC	40.1	51.4	32.1	35.8	24.6	11.0
	Esfenvalerate	80.8	89.7	72.2	94.1	10.5	26.3
	Ethalfuralin	73.2	74.0	69.4	72.8	1.19	4.84
	Ethion	70.1	79.6	70.3	73.5	12.7	4.41
	Ethoprop	75.3	87.8			15.3	0.0744
	Fenamiphos	81.0	95.4	56.8	71.8	16.4	23.3
	Fenbuconazole	98.4	116	107	114	16.5	5.69
	Fenpropathrin	97.6	93.7	98.9	98.9	4.08	0.0278
	Fipronil	88.9	103			14.6	1.94
	Fipronil Desulfinyl	85.8	105	95.5	95.5	20.3	0.0025
	Fipronil Sulfide	79.5	97.6			20.4	3.83
	Fipronil Sulfone	76.2	84.8			10.7	1.06
	Fluazifop-P-butyl	83.1	105	94.7	94.2	23.5	0.602
	Fludioxonil	101	120			17.2	2.81
	Flumioxazin	143	153	174	176	6.73	1.11
	Flutolanil	84.7	97.6	84.6	89.3	14.1	5.43
	Fluxapyroxad	94.4	84.2			11.4	0.374
	Fonofos	97.9	79.2	84.1	79.6	21.2	5.46
	Gamma-BHC	98.6	94.1	91.2	102	4.69	10.8
	Gamma-Chlordane	77.7	77.0	70.7	76.3	0.961	7.60
	Heptachlor	65.4	67.2	62.5	68.0	2.72	8.45
	Heptachlor Epoxide	83.9	85.4	79.2	87.5	1.84	9.97
	Hexachlorobenzene	66.6	66.8	54.9	65.0	0.323	16.8
	Hexazinone	99.6	89.5	98.8	97.1	10.6	1.58
	Imazalil	102	80.7	297	283	23.6	4.79
	Iprodione	101	89.0	86.3	89.7	12.3	3.94
	Lambda-Cyhalothrin	93.5	96.1	88.6	104	2.70	15.7
	Malathion	99.2	83.4	88.4	85.7	17.2	3.12
	Metalaxyl	107	87.1	90.4	91.8	20.2	1.04
	Methoxychlor	87.1	86.7	81.1	85.3	0.474	5.05
	Metolachlor	84.4	73.3			14.2	6.85
	Metribuzin	112	102			9.75	2.19
	Mevinphos	88.4	68.8	91.9	89.4	24.9	2.78

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	MGK-264	43.8	33.4	52.9	47.0	26.9	11.9
	Mirex	63.2	60.6	59.1	62.5	4.26	5.55
	Molinate	61.6	55.4	53.2	58.0	10.5	8.66
	Myclobutanil	103	85.5	87.9	92.1	18.1	4.76
	Naled	42.6	34.1	33.7	34.0	22.1	0.804
	Norflurazon	112	98.6	97.5	99.3	12.8	1.86
	Oxadiazon	98.2	80.6	76.3	79.6	19.7	3.12
	Oxyfluorfen	118	102	111	110	14.1	0.345
	Parathion Ethyl	92.6	82.0	90.5	93.0	12.2	2.75
	Parathion Methyl	106	102	106	106	4.38	0.219
	Pendimethalin	93.1	84.6			9.56	1.37
	Permethrin	81.5	83.6	78.8	83.3	2.55	5.55
	Phenothrin	45.8	41.8	55.4	55.0	9.27	0.799
	Phorate	73.8	69.6	78.9	79.6	5.87	0.850
	Piperonyl Butoxide	115	118	110	134	2.66	20.2
	Prallethrin	55.2	39.4	51.8	53.5	33.3	3.22
	Prodiamine	77.7	53.5	48.7	62.5	36.8	24.9
	Prometon	83.1	73.1	86.9	87.2	12.8	0.328
	Prometryn	96.9	79.3	87.2	88.6	20.0	1.65
	Pronamide	93.7	85.0	94.1	94.8	9.72	0.812
	Propiconazole	97.5	82.9	78.3	90.4	16.1	14.4
	Pyriproxyfen	104	85.8	85.5	88.2	18.8	3.14
	Simazine	104	91.9	120	116	12.7	3.47
	Sulfentrazone	66.3	53.3	84.9	83.9	21.8	1.13
	Tau-Fluvalinate	105	108	103	117	2.96	12.0
	Tebuconazole	73.0	68.6	59.5	64.4	6.27	7.91
	Terbufos	92.8	75.9	93.4	93.2	20.0	0.133
	Terbuthylazine	93.4	80.6	90.7	94.3	14.7	3.88
	Tetramethrin	91.6	104	99.9	120	12.5	18.5
	Trans-Nonachlor	77.6	74.0	64.8	72.4	4.73	11.0
	Triclosan Methyl	95.3	95.1	84.6	93.0	0.228	9.48
	Trifluralin	74.7	73.3	68.7	74.6	1.96	8.17
EPA 8276	Chlordane	96.5	100	114	105	3.79	8.46
	Toxaphene	81.6	80.7	87.8	86.3	1.11	1.81
EPA 8321B	2,4-D	127		130	149		13.6
	2,4,5-T	119		97.7	132		29.7
	3-Hydroxycarbofuran	90.5		79.0	82.5		4.35
	Acesulfame K	150		193	160		18.7
	Acetaminophen	76.4		96.0	237		84.5
	Acetamiprid	94.3		106	109		2.55
	Afidopyropen	73.3		80.6	79.3		1.68
	Aldicarb	98.8		87.2	102		15.4
	Aldicarb Sulfone	98.6		103	111		7.43
	Aldicarb Sulfoxide	69.6		31.0	29.9		3.48
	AMPA	84.1		86.9	85.6		1.42
	Bentazon	37.3		33.0	41.8		17.0
	Benzovindiflupyr	82.9		85.2	96.8		12.8
	Carbamazepine	85.9		84.5	95.2		11.0
	Carbaryl	72.9		54.3	64.3		16.9
	Carbofuran	75.1		62.8	62.3		0.767
	Clothianidin	97.4		120	129		7.28
	Dinotefuran	87.2		114	118		3.60
	Diuron	76.7		74.4	70.0		6.08
	Endothall	99.7		88.1	78.6		11.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Fenuron	98.2	112	122		8.32
	Fluridone	97.0	103	106		2.87
	Glufosinate	82.7	69.5	61.0		13.0
	Glyphosate	65.5	118	138		14.1
	Hydrocodone	93.0	115	125		8.23
	Ibuprofen	82.3	69.9	90.7		25.9
	Imazapyr	107	129	149		14.4
	Imidacloprid	107	149	185		19.2
	Linuron	70.9	89.4	94.7		5.80
	Mandestrobin	90.0	88.6	94.9		6.94
	MCPPP	140	152	177		14.7
	Methiocarb	83.8	73.1	72.2		1.31
	Methomyl	91.0	80.4	83.5		3.76
	Naproxen	99.3	90.5	99.2		9.23
	Oxamyl	90.2	85.4	91.9		5.82
	Primidone	75.4	108	112		2.91
	Propoxur	68.8	56.3	61.1		8.16
	Pyraclostrobin	79.3	77.8	87.0		11.1
	Sucralose	99.5	95.1	103		7.10
	Thiamethoxam	101	146	170		15.5
	Tolfenpyrad	56.7	62.1	57.3		8.09
	Triclopyr	125	98.0	149		41.0
SM 2120 B-2011	Color (true)	102			2.27	
SM 2320 B-2011	Total Alkalinity	101			0.309	
SM 2540 C-2011	TDS				4.05	
SM 4500 F-C-2011	Fluoride	98.8	100	101		0.472
SM 5310 B-2011	Organic Carbon	97.6	102			0.0909

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2240167, 2240170
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2240193, 2240194, 2240195
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2240193, 2240194, 2240195
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2240167, 2240170
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2240167, 2240170
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2240168, 2240171
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2240168, 2240171
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2240168, 2240171
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2240168, 2240171
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2240169, 2240172
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2240191
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2240192
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2240191
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2240189
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2240190
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2240190
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2240167, 2240170
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2240167, 2240170
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2240193, 2240194, 2240195

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2240167, 2240170
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2240167, 2240170
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2240167, 2240170
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2240168, 2240171

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	04/15/2021			04/15/2021 16:12	Yen Ta	2240167, 2240170
EPA 200.7 Rev. 4.4	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/28/2021 04:49	Betina Topolski	2240193
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/28/2021 05:24	Betina Topolski	2240194
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/28/2021 05:45	Betina Topolski	2240195
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/28/2021 20:02	Betina Topolski	2240193
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/28/2021 20:35	Betina Topolski	2240194
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/28/2021 20:56	Betina Topolski	2240195
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/29/2021 11:04	Betina Topolski	2240193
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/29/2021 11:18	Betina Topolski	2240194
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/29/2021 11:32	Betina Topolski	2240195
EPA 200.8 Rev. 5.4	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/27/2021 17:33	McKinley C Carter	2240193
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/27/2021 17:40	McKinley C Carter	2240195
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	04/27/2021 18:02	McKinley C Carter	2240194
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	05/05/2021 17:04	Alexander Thompson	2240193
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	05/05/2021 17:13	Alexander Thompson	2240195
	04/15/2021	04/26/2021 17:00	Elliott D. Healy	05/05/2021 18:11	Alexander Thompson	2240194
EPA 300.0 Rev. 2.1	04/15/2021			04/22/2021 19:22	Lipi Saha	2240167
	04/15/2021			04/22/2021 19:34	Lipi Saha	2240170
EPA 350.1 Rev. 2.0	04/15/2021			04/28/2021 17:52	Ping Hua	2240168
	04/15/2021			04/28/2021 17:53	Ping Hua	2240171
EPA 351.2 Rev. 2.0	04/15/2021	04/23/2021 14:33	Benjamin T. Nordmann	04/27/2021 11:50	Virginia P. Brown	2240168
	04/15/2021	04/23/2021 14:33	Benjamin T. Nordmann	04/27/2021 11:55	Virginia P. Brown	2240171
EPA 353.2 Rev. 2.0	04/15/2021			04/20/2021 11:16	Beverly Y. Sanders	2240171
	04/15/2021			04/20/2021 12:22	Beverly Y. Sanders	2240168
EPA 365.1 Rev. 2.0	04/15/2021	04/20/2021 14:25	Yen Ta	04/21/2021 13:21	Shengyu Ding	2240168
	04/15/2021	04/20/2021 14:25	Yen Ta	04/21/2021 13:22	Shengyu Ding	2240171
EPA 365.1 Rev. 2.0 dissolved	04/15/2021			04/15/2021 14:12	Lipi Saha	2240169
	04/15/2021			04/15/2021 14:13	Lipi Saha	2240172
EPA 8270E	04/15/2021	04/19/2021 08:46	Chiran X. Ghimire	04/21/2021 18:42	Michael Poppell	2240192
	04/15/2021	04/20/2021 08:00	Fe-Val Siddell	04/21/2021 19:41	Arthur Maknenko	2240191
EPA 8276	04/15/2021	04/20/2021 08:00	Fe-Val Siddell	04/24/2021 05:07	Michael Poppell	2240191
EPA 8321B	04/15/2021	04/20/2021 09:00	Hoor Shaik	04/30/2021 01:15	Juyoung Kim	2240189
	04/15/2021	04/20/2021 09:00	Hoor Shaik	04/30/2021 05:17	Juyoung Kim	2240190
	04/15/2021	04/20/2021 10:30	Rebecca Ware	04/20/2021 14:50	Rebecca Ware	2240190
	04/15/2021	04/20/2021 10:30	Rebecca Ware	04/28/2021 18:58	Rebecca Ware	2240190
SM 2120 B-2011	04/15/2021			04/15/2021 15:39	Blanca Fach	2240167
	04/15/2021			04/15/2021 15:42	Blanca Fach	2240170
SM 2320 B-2011	04/15/2021			04/20/2021 20:46	Dale L. Simmons	2240167
	04/15/2021			04/20/2021 20:57	Dale L. Simmons	2240170
SM 2340B	04/15/2021			04/29/2021 11:04	Betina Topolski	2240193

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2340B	04/15/2021			04/29/2021 11:18	Betina Topolski	2240194
	04/15/2021			04/29/2021 11:32	Betina Topolski	2240195
SM 2540 C-2011	04/15/2021			04/20/2021 15:21	Yijie Li	2240167, 2240170
SM 2540 D-2011	04/15/2021			04/20/2021 15:21	Yijie Li	2240167, 2240170
SM 4500 F-C-2011	04/15/2021			04/23/2021 23:00	Dale L. Simmons	2240167
	04/15/2021			04/23/2021 23:05	Dale L. Simmons	2240170
SM 5310 B-2011	04/15/2021			04/22/2021 05:05	Lauren Lees	2240168
	04/15/2021			04/22/2021 05:14	Lauren Lees	2240171