

Chemical Analysis Report

TLH-ROC-2020-10-21-01

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

Event Description: **Run 3**
Request ID: **RQ-2020-10-05-65**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
Tallahassee, FL 32399
Attn: Michael Eckles

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Certified by: Colin Wright, Program Administrator

Date Certified: 13-NOV-2020 10:34

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular 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: Middle of Cherry Lake

Collection Date/Time: 10/21/2020 11:53

Field ID: G1TLHR0048

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2204041	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P389056	
	EPA 300.0 Rev. 2.1	Chloride	7.0		mg Cl/L	P389473	
		Sulfate	1.2		mg SO4/L	P389476	
	SM 2120 B-2011	Color (true)	6.9		PCU	P389053	
	SM 2320 B-2011	Total Alkalinity	9.4	A	mg CaCO3/L	P389230	
	SM 2540 C-2011	TDS	28		mg/L	P389661	
	SM 2540 D-2011	TSS	2	I	mg/L	P389609	
	SM 4500 F-C-2011	Fluoride	0.054	I	mg F/L	P389236	
2204042	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P389210	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P389284	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P389249	
	EPA 365.1 Rev. 2.0	Total-P	0.019		mg P/L	P389506	
	SM 5310 B-2011	Organic Carbon	4.5		mg C/L	P389222	
2204043	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P389048	
2204068	EPA 8321B	Aldicarb	0.020	U	ug/L	P389300	
		Aldicarb Sulfone	0.0020	U	ug/L	P389300	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P389300	
		Carbaryl	0.0020	U	ug/L	P389300	
		Carbofuran	0.0020	U	ug/L	P389300	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P389300	
		Methiocarb	0.0020	U	ug/L	P389300	
		Methomyl	0.0020	U	ug/L	P389300	
		Oxamyl	0.0020	U	ug/L	P389300	
		Propoxur	0.0020	U	ug/L	P389300	
2204069		2,4-D	0.032		ug/L	P389104	
		Acesulfame K**	0.10	U	ug/L	P389065	MS
		AMPA**	0.10	U	ug/L	P389065	
		Sucralose**	0.041		ug/L	P389065	
		Acetaminophen**	0.0080	U	ug/L	P389104	
		Acetamiprid**	0.0020	U	ug/L	P389104	
		Endothall**	0.25	U	ug/L	P389065	
		Glufosinate**	0.10	U	ug/L	P389065	
		Glyphosate**	0.10	U	ug/L	P389065	
		Afidopyropen**	0.0020	U	ug/L	P389104	
		Bentazon	8.0E-04	U	ug/L	P389104	
		Benzovindiflupyr**	0.0020	U	ug/L	P389104	
		Carbamazepine**	8.0E-04	U	ug/L	P389104	
		Clothianidin**	0.0020	U	ug/L	P389104	
		Dinotefuran**	0.0020	U	ug/L	P389104	
		Diuron	0.024		ug/L	P389104	
		Fenuron	0.016	U	ug/L	P389104	
		Fluridone**	8.0E-04	U	ug/L	P389104	
		Imazapyr**	0.0040	U	ug/L	P389104	

Field ID: G1TLHR0048

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2204069	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P389104	
		Ibuprofen**	0.020	U	ug/L	P389104	
		Imidacloprid	0.0020	U	ug/L	P389104	
		Linuron	0.0040	U	ug/L	P389104	
		Mandestrobin**	0.0020	U	ug/L	P389104	
		MCP	0.0020	U	ug/L	P389104	
		Naproxen**	0.0080	U	ug/L	P389104	
		Primidone**	0.0040	U	ug/L	P389104	
		Pyraclostrobin**	0.0020	U	ug/L	P389104	
		Thiamethoxam**	0.0020	U	ug/L	P389104	
		Tolfenpyrad**	0.0020	U	ug/L	P389104	
		Triclopyr**	0.0040	U	ug/L	P389104	
2204070	EPA 8270E	Aldrin	4.4	U	ng/L	P389028	
		Alpha-BHC	2.2	U	ng/L	P389028	
		Alpha-Chlordane	1.1	U	ng/L	P389028	
		Beta-BHC	8.8	U	ng/L	P389028	
		Beta-Cyfluthrin**	16	UJ	ng/L	P389028	CCV
		Bifenthrin**	4.4	U	ng/L	P389028	
		Delta-BHC	8.8	U	ng/L	P389028	
		Gamma-BHC	8.8	U	ng/L	P389028	
		Chlorothalonil	2.2	U	ng/L	P389028	RPD
		Cis-Nonachlor**	1.1	U	ng/L	P389028	
		Cypermethrin	22	U	ng/L	P389028	
		Dacthal**	1.1	U	ng/L	P389028	
		DDD-p,p'	5.5	U	ng/L	P389028	
		DDE-p,p'	5.5	U	ng/L	P389028	
		DDT-p,p'	6.6	U	ng/L	P389028	
		Deltamethrin**	22	U	ng/L	P389028	
		Dicofol	33	U	ng/L	P389028	
		Dieldrin	4.4	U	ng/L	P389028	
		Endosulfan I	4.4	U	ng/L	P389028	
		Endosulfan II	4.4	U	ng/L	P389028	
		Endosulfan Sulfate	2.2	U	ng/L	P389028	
		Endrin	2.2	U	ng/L	P389028	
		Endrin Aldehyde	2.2	U	ng/L	P389028	
		Endrin Ketone	2.2	U	ng/L	P389028	
		Ethalfuralin**	3.3	U	ng/L	P389028	
		Gamma-Chlordane	1.1	U	ng/L	P389028	
		Dichlobenil**	2.2	U	ng/L	P389028	
		Esfenvalerate**	22	U	ng/L	P389028	
		Fenprothrin**	11	U	ng/L	P389028	
		Heptachlor	1.6	U	ng/L	P389028	
		Heptachlor Epoxide	2.2	U	ng/L	P389028	
		Hexachlorobenzene	2.2	U	ng/L	P389028	
		Lambda-Cyhalothrin**	16	U	ng/L	P389028	

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Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2204070	EPA 8270E	Methoxychlor	4.4	U	ng/L	P389028	LCS
		Mirex	2.2	U	ng/L	P389028	
		MGK-264**	3.3	UJ	ng/L	P389028	
		Permethrin	11	U	ng/L	P389028	
		Phenothrin**	33	U	ng/L	P389028	
		Piperonyl Butoxide**	1.6	U	ng/L	P389028	
		Prallethrin**	27	U	ng/L	P389028	
		Tau-Fluvalinate**	3.8	U	ng/L	P389028	LCS
		Tetramethrin**	8.8	UJ	ng/L	P389028	
		Trans-Nonachlor**	1.1	U	ng/L	P389028	
		Triclosan Methyl**	1.1	U	ng/L	P389028	
		Trifluralin	2.7	U	ng/L	P389028	
		Chlordane	5.5	U	ng/L	P389028	
		Toxaphene	33	U	ng/L	P389028	
2204071	EPA 8270E	Acetochlor	0.24	U	ng/L	P389270	MS
		Alachlor	0.24	U	ng/L	P389270	
		Ametryn	0.58	U	ng/L	P389270	
		Atrazine	5.4		ng/L	P389270	
		Atrazine Desethyl	3.4	I	ng/L	P389270	
		Azinphos Methyl	1.9	U	ng/L	P389270	
		Azoxystrobin**	1.8	I	ng/L	P389270	
		Bromacil	0.48	U	ng/L	P389270	
		Butylate	0.39	U	ng/L	P389270	
		Carbophenothion	0.48	U	ng/L	P389270	
		Carfentrazone Ethyl**	0.097	U	ng/L	P389270	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P389270	
		Chlorpyrifos Methyl	0.048	U	ng/L	P389270	
		Cyanazine	3.1	U	ng/L	P389270	
		Demeton	1.5	U	ng/L	P389270	
		Diazinon	0.12	U	ng/L	P389270	
		Difenoconazole**	0.58	U	ng/L	P389270	
		Dimethenamid**	0.097	U	ng/L	P389270	
		Disulfoton	0.48	U	ng/L	P389270	
		Dithiopyr**	0.097	U	ng/L	P389270	
		EPTC	1.2	U	ng/L	P389270	
		Ethion	0.15	U	ng/L	P389270	
		Ethoprop	0.097	U	ng/L	P389270	
		Fenamiphos	0.48	U	ng/L	P389270	
		Fenbuconazole**	0.12	UJ	ng/L	P389270	RPD
		Fipronil	0.24	U	ng/L	P389270	
		Fipronil Desulfinyl**	0.12	U	ng/L	P389270	
		Fipronil Sulfide	0.15	U	ng/L	P389270	
		Fipronil Sulfone	0.15	U	ng/L	P389270	
		Fluazifop-P-butyl**	0.097	U	ng/L	P389270	
		Fludioxonil**	0.12	U	ng/L	P389270	

Field ID: G1TLHR0048

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2204071	EPA 8270E	Flumioxazin**	1.7	U	ng/L	P389270	
		Flutolanil**	0.63		ng/L	P389270	
		Fluxapyroxad**	0.097	U	ng/L	P389270	
		Fonofos	0.19	U	ng/L	P389270	
		Hexazinone	1.1	I	ng/L	P389270	
		Imazalil**	0.73	U	ng/L	P389270	
		Iprodione**	0.58	U	ng/L	P389270	
		Malathion	0.34	U	ng/L	P389270	
		Metalaxyl	0.73	U	ng/L	P389270	
		Metolachlor	0.83	I	ng/L	P389270	
		Metribuzin	3.1	U	ng/L	P389270	
		Mevinphos	0.48	UJ	ng/L	P389270	CCV
		Molinate	0.29	U	ng/L	P389270	
		Myclobutanil**	0.24	U	ng/L	P389270	
		Naled**	1.5	U	ng/L	P389270	
		Norflurazon	0.48	U	ng/L	P389270	
		Oxadiazon	0.097	U	ng/L	P389270	
		Parathion Ethyl	0.24	U	ng/L	P389270	
		Parathion Methyl	0.53	U	ng/L	P389270	
		Pendimethalin	0.97	U	ng/L	P389270	
		Phorate	0.24	UJ	ng/L	P389270	CCV
		Prodiamine**	0.17	U	ng/L	P389270	
		Prometon	0.87	U	ng/L	P389270	
		Prometryn	0.19	U	ng/L	P389270	
		Pronamide**	0.15	U	ng/L	P389270	
		Propiconazole**	0.48	U	ng/L	P389270	
		Pyriproxyfen**	0.12	U	ng/L	P389270	
		Simazine	0.48	U	ng/L	P389270	
		Sulfentrazone**	0.48	U	ng/L	P389270	
		Tebuconazole**	2.0		ng/L	P389270	
		Terbufos	0.097	U	ng/L	P389270	
		Terbutylazine	0.41	U	ng/L	P389270	
	EPA 8270E dissolved	Oxyfluorfen**	0.15	U	ng/L	P389270	
2204072	EPA 200.7 Rev. 4.4	Barium	6.3		ug/L	P389253	
		Calcium	2.74		mg/L	P389253	
		Iron	73	I	ug/L	P389253	
		Magnesium	1.20		mg/L	P389253	
		Potassium	0.30	U	mg/L	P389253	
		Sodium	4.5		mg/L	P389253	
		Zinc	5.0	U	ug/L	P389253	
	EPA 200.8 Rev. 5.4	Aluminum	19	I	ug/L	P389253	
		Antimony	0.059	I	ug/L	P389253	
		Arsenic	1.65		ug/L	P389253	
		Beryllium	0.010	U	ug/L	P389253	
		Boron**	26.9		ug/L	P389253	

Field ID: G1TLHR0048

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2204072	EPA 200.8 Rev. 5.4	Cadmium	0.020	U	ug/L	P389253	
		Chromium	0.40	U	ug/L	P389253	
		Copper	0.40	U	ug/L	P389253	
		Lead	0.20	U	ug/L	P389253	
		Nickel	0.50	U	ug/L	P389253	
		Selenium	0.20	U	ug/L	P389253	
		Silver	0.010	U	ug/L	P389253	
		Thallium	0.10	U	ug/L	P389253	
		Hardness	11.8		mg/L	P389253	
	SM 2340B						

Ref. Method and Comment:

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

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

EPA 8270E: MS accuracy for simazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E dissolved: MS accuracy for simazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P389056

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P389253

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: P389253

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: P389473

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389476

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389210

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: P389284

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389249

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389506

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389048

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

Reference Method: EPA 8270E
Batch ID: P389028

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	U	ng/L
Dichlobenil	2.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Esfenvalerate	20	U	ng/L
Ethalfuralin	3.0	U	ng/L
Fenpropathrin	10	U	ng/L
Gamma-BHC	8.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
 Batch ID: P389028

Component	Result	Code	Units
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: P389270

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
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	0.10	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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P389270

Component	Result	Code	Units
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
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
Myclobutanil	0.25	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
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 8270E dissolved
Batch ID: P389270

Component	Result	Code	Units
Oxyfluorfen	0.15	U	ng/L

Reference Method: EPA 8276
Batch ID: P389028

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

Reference Method: EPA 8321B
Batch ID: P389065

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P389065

Component	Result	Code	Units
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: P389104

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P389300

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B-2011
Batch ID: P389053

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P389230

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

Reference Method: SM 2540 C-2011
Batch ID: P389661

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P389609

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P389236

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P389222

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: P389253

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	101		P	85 - 115
Calcium	105		P	85 - 115
Iron	104		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	102		P	85 - 115
Sodium	99.4		P	85 - 115
Zinc	96.8		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P389253

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.5		P	85 - 115
Antimony	100		P	85 - 115
Arsenic	96.8		P	85 - 115
Beryllium	93.1		P	85 - 115
Boron	99.3		P	85 - 115
Cadmium	100		P	85 - 115
Chromium	98.4		P	85 - 115
Copper	98.8		P	85 - 115
Lead	95.6		P	85 - 115
Nickel	98.1		P	85 - 115
Selenium	93.8		P	85 - 115
Silver	102		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389473

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389476

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389210

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389284

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P389249

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P389506

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P389048

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.8		P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P389028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	30.8	30.6	P/P	20 - 87.0
Alpha-BHC	79.3	79.9	P/P	65 - 142
Alpha-Chlordane	72.4	71.7	P/P	58 - 106
Beta-BHC	105	105	P/P	65 - 179
Beta-Cyfluthrin	56.8	60.0	P/P	39 - 153
Bifenthrin	60.1	60.4	P/P	38 - 128
Chlorothalonil	26.2	26.8	P/P	20 - 214
Cis-Nonachlor	75.4	73.6	P/P	56 - 113
Cypermethrin	65.3	67.4	P/P	37 - 130
Dacthal	85.3	83.7	P/P	75 - 109
DDD-p,p'	80.9	78.5	P/P	66 - 119
DDE-p,p'	69.8	69.6	P/P	53 - 108
DDT-p,p'	71.3	72.1	P/P	57 - 133
Delta-BHC	128	123	P/P	68 - 187
Deltamethrin	77.2	77.3	P/P	50 - 200
Dichlobenil	76.4	74.2	P/P	25 - 140
Dicofol	111	103	P/P	66 - 123
Dieldrin	78.4	76.4	P/P	65 - 111
Endosulfan I	79.2	78.0	P/P	65 - 115
Endosulfan II	92.8	92.0	P/P	68 - 133
Endosulfan Sulfate	84.2	82.3	P/P	62 - 127
Endrin	81.2	79.3	P/P	64 - 122
Endrin Aldehyde	91.3	87.7	P/P	61 - 132
Endrin Ketone	85.7	85.2	P/P	66 - 120
Esfenvalerate	63.5	64.4	P/P	50 - 150
Ethalfuralin	65.2	67.8	P/P	57 - 127
Fenpropathrin	67.9	67.5	P/P	60 - 160
Gamma-BHC	101	99.7	P/P	71 - 158
Gamma-Chlordane	67.6	67.7	P/P	53 - 106
Heptachlor	60.6	61.1	P/P	45 - 96.0
Heptachlor Epoxide	78.5	77.6	P/P	64 - 109
Hexachlorobenzene	66.3	66.1	P/P	46 - 103
Lambda-Cyhalothrin	65.2	67.2	P/P	38 - 145
Methoxychlor	77.3	78.5	P/P	69 - 149

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P389028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
MGK-264	43.0	40.9	F/F	50 - 150
Mirex	55.2	55.8	P/P	31 - 90.0
Permethrin	61.1	62.3	P/P	41 - 108
Phenothrin	32.0	32.6	P/P	22 - 91.0
Piperonyl Butoxide	83.9	85.0	P/P	50 - 150
Prallethrin	43.0	43.4	P/P	32 - 92.0
Tau-Fluvalinate	75.1	75.1	P/P	50 - 150
Tetramethrin	52.4	54.0	F/F	60 - 160
Trans-Nonachlor	69.4	69.0	P/P	50 - 107
Triclosan Methyl	87.0	86.4	P/P	50 - 150
Trifluralin	66.4	66.2	P/P	58 - 119

Reference Method: EPA 8270E

Batch ID: P389270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	96.1	91.9	P/P	71 - 122
Alachlor	94.1	88.6	P/P	70 - 121
Ametryn	112	105	P/P	49 - 137
Atrazine	99.4	99.7	P/P	76 - 125
Atrazine Desethyl	83.8	87.8	P/P	31 - 144
Azinphos Methyl	137	121	P/P	67 - 150
Azoxystrobin	117	141	P/P	70 - 170
Bromacil	85.0	101	P/P	36 - 121
Butylate	74.4	75.1	P/P	33 - 88.0
Carbophenothion	91.0	88.1	P/P	66 - 116
Carfentrazone Ethyl	99.0	99.1	P/P	50 - 150
Chlorpyrifos Ethyl	88.0	86.5	P/P	73 - 117
Chlorpyrifos Methyl	94.5	91.1	P/P	68 - 121
Cyanazine	118	117	P/P	20 - 250
Demeton	87.9	86.1	P/P	30 - 123
Diazinon	94.4	94.3	P/P	70 - 128
Difenoconazole	125	149	P/P	50 - 150
Dimethenamid	96.3	94.9	P/P	66 - 122
Disulfoton	87.0	79.7	P/P	46 - 124
Dithiopyr	87.1	86.0	P/P	69 - 122
EPTC	70.6	72.0	P/P	31 - 90.0
Ethion	81.9	80.8	P/P	45 - 135
Ethoprop	101	101	P/P	59 - 118
Fenamiphos	89.1	96.7	P/P	30 - 136
Fenbuconazole	88.2	125	P/P	50 - 150
Fipronil	102	105	P/P	57 - 127
Fipronil Desulfinyl	99.8	94.5	P/P	51 - 122
Fipronil Sulfide	93.1	94.5	P/P	57 - 119
Fipronil Sulfone	83.8	86.5	P/P	51 - 119
Fluazifop-P-butyl	92.1	94.9	P/P	50 - 150
Fludioxonil	90.4	93.2	P/P	50 - 150
Flumioxazin	240	242	P/P	20 - 250
Flutolanil	99.5	98.2	P/P	50 - 150
Fluxapyroxad	83.4	88.6	P/P	50 - 150
Fonofos	86.8	86.9	P/P	60 - 120
Hexazinone	73.3	99.1	P/P	57 - 142

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P389270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imazalil	50.1	48.7	P/P	30 - 139
Iprodione	97.3	92.5	P/P	50 - 150
Malathion	111	108	P/P	67 - 128
Metalaxyl	60.6	64.2	P/P	21 - 148
Metolachlor	92.8	89.3	P/P	70 - 120
Metribuzin	96.8	96.7	P/P	20 - 250
Mevinphos	83.2	91.1	P/P	47 - 116
Molinate	80.0	82.9	P/P	41 - 99.0
Myclobutanil	78.9	104	P/P	50 - 150
Naled	61.0	63.3	P/P	38 - 97.0
Norflurazon	89.2	96.5	P/P	54 - 127
Oxadiazon	88.2	84.2	P/P	65 - 122
Parathion Ethyl	96.0	93.4	P/P	71 - 113
Parathion Methyl	106	100	P/P	73 - 129
Pendimethalin	72.2	69.0	P/P	63 - 130
Phorate	89.8	81.6	P/P	48 - 118
Prodiamine	78.4	72.7	P/P	20 - 144
Prometon	88.6	92.5	P/P	53 - 120
Prometryn	104	99.4	P/P	63 - 119
Pronamide	103	102	P/P	81 - 122
Propiconazole	87.4	93.9	P/P	62 - 124
Pyriproxyfen	107	108	P/P	50 - 150
Simazine	99.3	98.4	P/P	77 - 129
Sulfentrazone	71.5	96.5	P/P	20 - 137
Tebuconazole	40.0	47.3	P/P	20 - 118
Terbufos	85.4	82.7	P/P	61 - 119
Terbutylazine	97.0	93.2	P/P	75 - 119

Reference Method: EPA 8270E dissolved
Batch ID: P389270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxyfluorfen	97.5	92.3	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P389028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	97.1	99.4	P/P	47 - 119
Toxaphene	74.7	81.2	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P389065

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	81.7		P	40 - 150
AMPA	101		P	40 - 150
Endothall	83.7		P	40 - 150
Glufosinate	100		P	40 - 150
Glyphosate	95.2		P	40 - 140
Sucralose	116		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P389104

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	71.8		P	30 - 160
Acetaminophen	51.6		P	30 - 160
Acetamiprid	55.2		P	30 - 160
Afidopyropen	43.0		P	30 - 160
Bentazon	53.7		P	30 - 160
Benzovindiflupyr	66.9		P	30 - 160
Carbamazepine	49.2		P	30 - 160
Clothianidin	83.6		P	30 - 160
Dinotefuran	71.2		P	30 - 160
Diuron	55.1		P	30 - 160
Fenuron	102		P	30 - 160
Fluridone	73.8		P	30 - 160
Hydrocodone	99.9		P	30 - 160
Ibuprofen	86.3		P	30 - 160
Imazapyr	100		P	30 - 160
Imidacloprid	82.2		P	30 - 160
Linuron	61.8		P	30 - 160
Mandestrobin	75.2		P	30 - 160
MCPP	74.1		P	30 - 160
Naproxen	81.1		P	30 - 160
Primidone	93.1		P	30 - 160
Pyraclostrobin	55.5		P	30 - 160
Thiamethoxam	95.5		P	30 - 160
Tolfenpyrad	53.4		P	30 - 160
Triclopyr	61.0		P	30 - 160

Reference Method: EPA 8321B

Batch ID: P389300

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	78.7	85.9	P/P	30 - 160
Aldicarb	44.2	49.3	P/P	30 - 160
Aldicarb Sulfone	78.3	86.6	P/P	30 - 160
Aldicarb Sulfoxide	38.9	40.5	P/P	30 - 160
Carbaryl	72.4	71.8	P/P	30 - 160
Carbofuran	56.9	58.3	P/P	30 - 160
Methiocarb	74.0	82.7	P/P	30 - 160
Methomyl	85.9	96.2	P/P	30 - 160
Oxamyl	86.6	95.6	P/P	30 - 160
Propoxur	57.3	58.7	P/P	30 - 160

Reference Method: SM 2120 B-2011

Batch ID: P389053

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

Reference Method: SM 2320 B-2011

Batch ID: P389230

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P389236

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.6		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P389222

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P389253

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203925	Barium	100		P	80 - 120
2203925	Calcium	98.0		P	80 - 120
2203925	Iron	106		P	80 - 120
2203925	Magnesium	97.1		P	80 - 120
2203925	Potassium	94.4		P	80 - 120
2203925	Sodium	95.9		P	80 - 120
2203925	Zinc	97.8		P	80 - 120
2204072	Barium	98.7	99.3	P/P	80 - 120
2204072	Calcium	105	106	P/P	80 - 120
2204072	Iron	105	103	P/P	80 - 120
2204072	Magnesium	106	104	P/P	80 - 120
2204072	Potassium	103	103	P/P	80 - 120
2204072	Sodium	96.9		P	80 - 120
2204072	Zinc	97.9	97.2	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P389253

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203925	Aluminum	96.9		P	80 - 120
2203925	Antimony	101		P	80 - 120
2203925	Arsenic	99.5		P	80 - 120
2203925	Beryllium	100		P	80 - 120
2203925	Boron	96.6		P	80 - 120
2203925	Cadmium	99.1		P	80 - 120
2203925	Chromium	99.5		P	80 - 120
2203925	Copper	100		P	80 - 120
2203925	Lead	95.4		P	80 - 120
2203925	Nickel	99.0		P	80 - 120
2203925	Selenium	95.0		P	80 - 120
2203925	Silver	102		P	80 - 120
2203925	Thallium	104		P	80 - 120
2204072	Aluminum	93.8	96.8	P/P	80 - 120
2204072	Antimony	97.4	99.6	P/P	80 - 120
2204072	Arsenic	95.2	97.6	P/P	80 - 120
2204072	Beryllium	92.8	95.0	P/P	80 - 120
2204072	Boron	92.9	96.6	P/P	80 - 120
2204072	Cadmium	95.2	98.6	P/P	80 - 120
2204072	Chromium	97.2	98.4	P/P	80 - 120
2204072	Copper	98.4	102	P/P	80 - 120
2204072	Lead	92.5	95.5	P/P	80 - 120
2204072	Nickel	95.5	97.7	P/P	80 - 120
2204072	Selenium	94.6	96.4	P/P	80 - 120
2204072	Silver	101	102	P/P	80 - 120
2204072	Thallium	101	104	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389473

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204000	Chloride	101		P	90 - 110
2204104	Chloride	100		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389476

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204000	Sulfate	102		P	90 - 110
2204104	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389210

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203947	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389284

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203987	Kjeldahl Nitrogen	114	109	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389249

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204010	NO2NO3-N	97.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204002	Total-P	108	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389048

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203919	O-Phosphate-P	96.1	96.6	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P389028

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203484	Aldrin	58.6	56.7	P/P	32 - 82.0
2203484	Alpha-BHC	83.7	85.5	P/P	68 - 157
2203484	Alpha-Chlordane	88.5	86.6	P/P	54 - 108
2203484	Beta-BHC	114	118	P/P	54 - 200
2203484	Beta-Cyfluthrin	82.6	104	P/P	50 - 154
2203484	Bifenthrin	85.5	87.0	P/P	49 - 124
2203484	Chlorothalonil	60.1	101	P/P	10 - 289
2203484	Cis-Nonachlor	89.6	87.9	P/P	53 - 112
2203484	Cypermethrin	96.1	101	P/P	43 - 141
2203484	Dacthal	94.1	93.0	P/P	75 - 112
2203484	DDD-p,p'	95.5	93.3	P/P	58 - 125
2203484	DDE-p,p'	82.4	81.9	P/P	50 - 108
2203484	DDT-p,p'	87.6	91.4	P/P	52 - 140
2203484	Delta-BHC	141	158	P/P	61 - 228
2203484	Deltamethrin	114	121	P/P	50 - 200

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
 Batch ID: P389028

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203484	Dichlobenil	79.6	77.9	P/P	25 - 140
2203484	Dicofol	102	103	P/P	59 - 130
2203484	Dieldrin	91.7	90.7	P/P	57 - 121
2203484	Endosulfan I	93.9	98.3	P/P	62 - 123
2203484	Endosulfan II	116	114	P/P	48 - 163
2203484	Endosulfan Sulfate	97.7	103	P/P	63 - 132
2203484	Endrin	91.4	98.3	P/P	58 - 128
2203484	Endrin Aldehyde	96.9	105	P/P	44 - 126
2203484	Endrin Ketone	96.9	99.9	P/P	68 - 127
2203484	Esfenvalerate	85.9	90.2	P/P	50 - 150
2203484	Ethalfuralin	75.5	76.1	P/P	55 - 131
2203484	Fenpropathrin	96.1	106	P/P	60 - 160
2203484	Gamma-BHC	107	109	P/P	54 - 206
2203484	Gamma-Chlordane	82.4	81.2	P/P	52 - 105
2203484	Heptachlor	71.7	71.4	P/P	47 - 94.0
2203484	Heptachlor Epoxide	90.2	89.4	P/P	61 - 113
2203484	Hexachlorobenzene	73.7	73.4	P/P	45 - 100
2203484	Lambda-Cyhalothrin	98.0	103	P/P	37 - 165
2203484	Methoxychlor	87.8	87.3	P/P	63 - 153
2203484	MGK-264	73.9	79.7	P/P	50 - 150
2203484	Mirex	70.5	70.4	P/P	38 - 90.0
2203484	Permethrin	85.3	88.2	P/P	45 - 112
2203484	Phenothrin	65.0	66.1	P/P	22 - 118
2203484	Piperonyl Butoxide	101	106	P/P	50 - 150
2203484	Prallethrin	61.4	61.8	P/P	21 - 114
2203484	Tau-Fluvalinate	112	119	P/P	50 - 150
2203484	Tetramethrin	69.0	71.5	P/P	60 - 160
2203484	Trans-Nonachlor	82.0	80.0	P/P	50 - 103
2203484	Triclosan Methyl	99.1	96.6	P/P	50 - 150
2203484	Trifluralin	74.7	74.4	P/P	57 - 122

Reference Method: EPA 8270E
 Batch ID: P389270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203658	Acetochlor	99.4	81.9	P/P	68 - 126
2203658	Alachlor	95.2	80.3	P/P	66 - 125
2203658	Ametryn	118	106	P/P	31 - 182
2203658	Atrazine	129	107	P/P	68 - 137
2203658	Atrazine Desethyl	84.7	73.4	P/P	13 - 161
2203658	Azinphos Methyl	143	135	P/P	54 - 162
2203658	Azoxystrobin	87.7	88.5	P/P	70 - 170
2203658	Bromacil	94.8	80.7	P/P	34 - 144
2203658	Butylate	96.8	81.5	F/P	16 - 92.0
2203658	Carbophenothion	96.9	78.3	P/P	30 - 131
2203658	Carfentrazone Ethyl	101	78.4	P/P	50 - 150
2203658	Chlorpyrifos Ethyl	96.5	78.4	P/P	63 - 124
2203658	Chlorpyrifos Methyl	104	83.9	P/P	64 - 125
2203658	Cyanazine	120	103	P/P	13 - 245
2203658	Demeton	117	99.0	P/P	20 - 154
2203658	Diazinon	105	89.6	P/P	66 - 141
2203658	Difenoconazole	118	111	P/P	50 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P389270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203658	Dimethenamid	96.7	78.4	P/P	50 - 130
2203658	Disulfoton	99.1	80.0	P/P	55 - 130
2203658	Dithiopyr	91.7	76.5	P/P	66 - 122
2203658	EPTC	80.9	67.9	P/P	15 - 93.0
2203658	Ethion	41.3	36.9	P/P	15 - 148
2203658	Ethoprop	109	88.1	P/P	59 - 126
2203658	Fenamiphos	106	87.9	P/P	39 - 137
2203658	Fenbuconazole	118	102	P/P	50 - 150
2203658	Fipronil	109	93.3	P/P	47 - 131
2203658	Fipronil Desulfinyl	103	87.2	P/P	43 - 121
2203658	Fipronil Sulfide	105	86.7	P/P	29 - 134
2203658	Fipronil Sulfone	105	83.7	P/P	19 - 131
2203658	Fluazifop-P-butyl	97.7	81.3	P/P	50 - 150
2203658	Fludioxonil	87.3	73.9	P/P	50 - 150
2203658	Flumioxazin	150	137	P/P	10 - 300
2203658	Flutolanil	89.6	75.6	P/P	50 - 150
2203658	Fluxapyroxad	56.0	51.7	P/P	50 - 150
2203658	Fonofos	97.9	87.0	P/P	62 - 128
2203658	Hexazinone	96.1	80.4	P/P	58 - 154
2203658	Imazalil	69.8	60.2	P/P	10 - 215
2203658	Iprodione	82.5	71.5	P/P	50 - 150
2203658	Malathion	118	100	P/P	54 - 135
2203658	Metalaxyl	93.1	77.2	P/P	46 - 136
2203658	Metolachlor	91.8	76.4	P/P	62 - 126
2203658	Metribuzin	110	102	P/P	44 - 277
2203658	Mevinphos	108	90.9	P/P	44 - 135
2203658	Molinate	94.7	78.2	P/P	31 - 104
2203658	Myclobutanil	86.2	72.3	P/P	50 - 150
2203658	Naled	63.0	52.9	P/P	33 - 113
2203658	Norflurazon	87.9	74.1	P/P	32 - 134
2203658	Oxadiazon	85.6	72.4	P/P	55 - 123
2203658	Parathion Ethyl	110	89.5	P/P	67 - 120
2203658	Parathion Methyl	120	104	P/P	70 - 140
2203658	Pendimethalin	88.4	72.3	P/P	59 - 145
2203658	Phorate	120	97.1	P/P	52 - 127
2203658	Prodiamine	52.2	44.5	P/P	11 - 157
2203658	Prometon	107	85.6	P/P	55 - 130
2203658	Prometryn	112	93.4	P/P	55 - 127
2203658	Pronamide	110	98.5	P/P	66 - 150
2203658	Propiconazole	88.4	72.6	P/P	14 - 178
2203658	Pyriproxyfen	101	91.2	P/P	50 - 150
2203658	Sulfentrazone	86.6	72.4	P/P	21 - 144
2203658	Tebuconazole	17.7	16.1	P/P	10 - 122
2203658	Terbufos	101	87.5	P/P	65 - 131
2203658	Terbuthylazine	101	87.7	P/P	63 - 131

Reference Method: EPA 8270E dissolved
Batch ID: P389270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203658	Oxyfluorfen	104	88.9	P/P	50 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P389028

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203933	Chlordane	110	112	P/P	34 - 129
2203933	Toxaphene	108	115	P/P	16 - 148

Reference Method: EPA 8321B
Batch ID: P389065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203277	Acesulfame K	27.0	27.2	F/F	40 - 150
2203277	AMPA	98.9	96.6	P/P	40 - 150
2203277	Endothall	79.5	82.6	P/P	40 - 150
2203277	Glufosinate	91.9	89.7	P/P	40 - 150
2203277	Glyphosate	82.4	75.2	P/P	40 - 140
2203277	Sucralose	113	100	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P389104

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203654	2,4-D	78.3	68.1	P/P	30 - 160
2203654	Acetaminophen	64.4	64.2	P/P	30 - 160
2203654	Acetamiprid	67.5	61.5	P/P	30 - 160
2203654	Afidopyropen	49.5	42.6	P/P	30 - 160
2203654	Bentazon	50.8	45.7	P/P	30 - 160
2203654	Benzovindiflupyr	66.5	68.4	P/P	30 - 160
2203654	Carbamazepine	59.8	55.9	P/P	30 - 160
2203654	Clothianidin	92.2	83.9	P/P	30 - 160
2203654	Dinotefuran	80.8	76.1	P/P	30 - 160
2203654	Diuron	54.4	53.1	P/P	30 - 160
2203654	Fenuron	38.5	40.5	P/P	30 - 160
2203654	Fluridone	70.5	80.0	P/P	30 - 160
2203654	Hydrocodone	112	113	P/P	30 - 160
2203654	Ibuprofen	75.3	74.9	P/P	30 - 160
2203654	Imazapyr	108	101	P/P	30 - 160
2203654	Imidacloprid	99.0	103	P/P	30 - 160
2203654	Linuron	62.0	70.6	P/P	30 - 160
2203654	Mandestrobin	72.4	78.8	P/P	30 - 160
2203654	MCP	91.1	92.8	P/P	30 - 160
2203654	Naproxen	66.7	56.6	P/P	30 - 160
2203654	Primidone	86.9	87.3	P/P	30 - 160
2203654	Pyraclostrobin	59.8	63.4	P/P	30 - 160
2203654	Thiamethoxam	93.0	117	P/P	30 - 160
2203654	Tolfenpyrad	53.7	54.2	P/P	30 - 160
2203654	Triclopyr	69.6	66.8	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P389300

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203921	3-Hydroxycarbofuran	59.9	73.8	P/P	30 - 160
2203921	Aldicarb	45.2	46.3	P/P	30 - 160
2203921	Aldicarb Sulfone	73.7	82.4	P/P	30 - 160
2203921	Aldicarb Sulfoxide	53.7	55.3	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P389300

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203921	Carbaryl	55.6	53.5	P/P	30 - 160
2203921	Carbofuran	40.9	41.5	P/P	30 - 160
2203921	Methiocarb	59.2	62.5	P/P	30 - 160
2203921	Methomyl	70.4	76.9	P/P	30 - 160
2203921	Oxamyl	69.1	77.2	P/P	30 - 160
2203921	Propoxur	46.3	48.5	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P389236

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204041	Fluoride	99.7	98.0	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P389222

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203987	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P389056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204000	Turbidity	1.18	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P389253

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204072	Barium	0.618	Spike	P	0 - 20
2204072	Calcium	0.505	Spike	P	0 - 20
2204072	Iron	2.24	Spike	P	0 - 20
2204072	Magnesium	1.59	Spike	P	0 - 20
2204072	Potassium	0.500	Spike	P	0 - 20
2204072	Sodium	0.316	Spike	P	0 - 20
2204072	Zinc	0.720	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P389253

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204072	Aluminum	3.01	Spike	P	0 - 20
2204072	Antimony	2.27	Spike	P	0 - 20
2204072	Arsenic	2.39	Spike	P	0 - 20
2204072	Beryllium	2.40	Spike	P	0 - 20
2204072	Boron	3.08	Spike	P	0 - 20
2204072	Cadmium	3.54	Spike	P	0 - 20
2204072	Chromium	1.20	Spike	P	0 - 20
2204072	Copper	3.68	Spike	P	0 - 20
2204072	Lead	3.11	Spike	P	0 - 20
2204072	Nickel	2.29	Spike	P	0 - 20
2204072	Selenium	1.93	Spike	P	0 - 20
2204072	Silver	1.39	Spike	P	0 - 20
2204072	Thallium	3.31	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P389473

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204104	Chloride	0.0268	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P389476

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204104	Sulfate	0.388	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389210

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203947	Ammonia-N	0.132	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389284

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203987	Kjeldahl Nitrogen	2.96	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389249

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204010	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204002	Total-P	0.0232	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389048

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203919	O-Phosphate-P	0.519	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P389028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203484	Aldrin	3.20	Spike	P	0 - 30
2203484	Alpha-BHC	2.17	Spike	P	0 - 30
2203484	Alpha-Chlordane	2.14	Spike	P	0 - 30
2203484	Beta-BHC	3.39	Spike	P	0 - 30
2203484	Beta-Cyfluthrin	22.7	Spike	P	0 - 30
2203484	Bifenthrin	1.74	Spike	P	0 - 30
2203484	Chlorothalonil	50.5	Spike	F	0 - 30
2203484	Cis-Nonachlor	1.90	Spike	P	0 - 30
2203484	Cypermethrin	4.75	Spike	P	0 - 30
2203484	Dacthal	1.18	Spike	P	0 - 30
2203484	DDD-p,p'	2.28	Spike	P	0 - 30
2203484	DDE-p,p'	0.619	Spike	P	0 - 30
2203484	DDT-p,p'	4.27	Spike	P	0 - 30
2203484	Delta-BHC	11.1	Spike	P	0 - 30
2203484	Deltamethrin	6.19	Spike	P	0 - 30
2203484	Dichlobenil	2.14	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203484	Dicofol	0.606	Spike	P	0 - 30
2203484	Dieldrin	1.16	Spike	P	0 - 30
2203484	Endosulfan I	4.56	Spike	P	0 - 30
2203484	Endosulfan II	2.30	Spike	P	0 - 30
2203484	Endosulfan Sulfate	5.37	Spike	P	0 - 30
2203484	Endrin	7.35	Spike	P	0 - 30
2203484	Endrin Aldehyde	8.00	Spike	P	0 - 30
2203484	Endrin Ketone	3.02	Spike	P	0 - 30
2203484	Esfenvalerate	4.87	Spike	P	0 - 30
2203484	Ethalfuralin	0.797	Spike	P	0 - 30
2203484	Fenpropathrin	9.77	Spike	P	0 - 30
2203484	Gamma-BHC	1.42	Spike	P	0 - 30
2203484	Gamma-Chlordane	1.53	Spike	P	0 - 30
2203484	Heptachlor	0.496	Spike	P	0 - 30
2203484	Heptachlor Epoxide	0.891	Spike	P	0 - 30
2203484	Hexachlorobenzene	0.385	Spike	P	0 - 30
2203484	Lambda-Cyhalothrin	5.44	Spike	P	0 - 30
2203484	Methoxychlor	0.507	Spike	P	0 - 30
2203484	MGK-264	7.66	Spike	P	0 - 30
2203484	Mirex	0.0823	Spike	P	0 - 30
2203484	Permethrin	3.31	Spike	P	0 - 30
2203484	Phenothrin	1.65	Spike	P	0 - 30
2203484	Piperonyl Butoxide	4.06	Spike	P	0 - 30
2203484	Prallethrin	0.587	Spike	P	0 - 30
2203484	Tau-Fluvalinate	5.67	Spike	P	0 - 30
2203484	Tetramethrin	3.53	Spike	P	0 - 30
2203484	Trans-Nonachlor	2.49	Spike	P	0 - 30
2203484	Triclosan Methyl	2.53	Spike	P	0 - 30
2203484	Trifluralin	0.367	Spike	P	0 - 30
LFB	Aldrin	0.721	LCS	P	0 - 30
LFB	Alpha-BHC	0.653	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.883	LCS	P	0 - 30
LFB	Beta-BHC	0.292	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	5.51	LCS	P	0 - 30
LFB	Bifenthrin	0.483	LCS	P	0 - 30
LFB	Chlorothalonil	2.27	LCS	P	0 - 30
LFB	Cis-Nonachlor	2.31	LCS	P	0 - 30
LFB	Cypermethrin	3.23	LCS	P	0 - 30
LFB	Dacthal	1.81	LCS	P	0 - 30
LFB	DDD-p,p'	3.12	LCS	P	0 - 30
LFB	DDE-p,p'	0.312	LCS	P	0 - 30
LFB	DDT-p,p'	1.09	LCS	P	0 - 30
LFB	Delta-BHC	4.12	LCS	P	0 - 30
LFB	Deltamethrin	0.188	LCS	P	0 - 30
LFB	Dichlobenil	2.89	LCS	P	0 - 30
LFB	Dicofol	7.59	LCS	P	0 - 30
LFB	Dieldrin	2.60	LCS	P	0 - 30
LFB	Endosulfan I	1.53	LCS	P	0 - 30
LFB	Endosulfan II	0.859	LCS	P	0 - 30
LFB	Endosulfan Sulfate	2.31	LCS	P	0 - 30
LFB	Endrin	2.39	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P389028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endrin Aldehyde	3.99	LCS	P	0 - 30
LFB	Endrin Ketone	0.632	LCS	P	0 - 30
LFB	Esfenvalerate	1.33	LCS	P	0 - 30
LFB	Ethalfuralin	3.91	LCS	P	0 - 30
LFB	Fenpropathrin	0.494	LCS	P	0 - 30
LFB	Gamma-BHC	1.38	LCS	P	0 - 30
LFB	Gamma-Chlordane	0.201	LCS	P	0 - 30
LFB	Heptachlor	0.782	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.16	LCS	P	0 - 30
LFB	Hexachlorobenzene	0.253	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	2.95	LCS	P	0 - 30
LFB	Methoxychlor	1.56	LCS	P	0 - 30
LFB	MGK-264	5.00	LCS	P	0 - 30
LFB	Mirex	1.09	LCS	P	0 - 30
LFB	Permethrin	1.94	LCS	P	0 - 30
LFB	Phenothrin	2.05	LCS	P	0 - 30
LFB	Piperonyl Butoxide	1.31	LCS	P	0 - 30
LFB	Prallethrin	0.776	LCS	P	0 - 30
LFB	Tau-Fluvalinate	0.0386	LCS	P	0 - 30
LFB	Tetramethrin	3.11	LCS	P	0 - 30
LFB	Trans-Nonachlor	0.653	LCS	P	0 - 30
LFB	Triclosan Methyl	0.703	LCS	P	0 - 30
LFB	Trifluralin	0.409	LCS	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203658	Acetochlor	19.3	Spike	P	0 - 30
2203658	Alachlor	17.0	Spike	P	0 - 30
2203658	Ametryn	10.9	Spike	P	0 - 30
2203658	Atrazine	15.5	Spike	P	0 - 30
2203658	Atrazine Desethyl	12.4	Spike	P	0 - 30
2203658	Azinphos Methyl	6.36	Spike	P	0 - 30
2203658	Azoxystrobin	0.845	Spike	P	0 - 30
2203658	Bromacil	16.0	Spike	P	0 - 30
2203658	Butylate	17.2	Spike	P	0 - 30
2203658	Carbophenothion	21.2	Spike	P	0 - 30
2203658	Carfentrazone Ethyl	24.7	Spike	P	0 - 30
2203658	Chlorpyrifos Ethyl	20.7	Spike	P	0 - 30
2203658	Chlorpyrifos Methyl	21.2	Spike	P	0 - 30
2203658	Cyanazine	14.9	Spike	P	0 - 30
2203658	Demeton	17.0	Spike	P	0 - 30
2203658	Diazinon	16.2	Spike	P	0 - 30
2203658	Difenoconazole	5.80	Spike	P	0 - 30
2203658	Dimethenamid	20.9	Spike	P	0 - 30
2203658	Disulfoton	21.3	Spike	P	0 - 30
2203658	Dithiopyr	18.1	Spike	P	0 - 30
2203658	EPTC	17.5	Spike	P	0 - 30
2203658	Ethion	11.2	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203658	Ethoprop	21.4	Spike	P	0 - 30
2203658	Fenamiphos	18.2	Spike	P	0 - 30
2203658	Fenbuconazole	14.5	Spike	P	0 - 30
2203658	Fipronil	16.0	Spike	P	0 - 30
2203658	Fipronil Desulfinyl	17.1	Spike	P	0 - 30
2203658	Fipronil Sulfide	18.9	Spike	P	0 - 30
2203658	Fipronil Sulfone	23.0	Spike	P	0 - 30
2203658	Fluazifop-P-butyl	18.3	Spike	P	0 - 30
2203658	Fludioxonil	16.6	Spike	P	0 - 30
2203658	Flumioxazin	8.60	Spike	P	0 - 30
2203658	Flutolanil	17.0	Spike	P	0 - 30
2203658	Fluxapyroxad	7.86	Spike	P	0 - 30
2203658	Fonofos	11.8	Spike	P	0 - 30
2203658	Hexazinone	16.4	Spike	P	0 - 30
2203658	Imazalil	14.8	Spike	P	0 - 30
2203658	Iprodione	14.2	Spike	P	0 - 30
2203658	Malathion	15.9	Spike	P	0 - 30
2203658	Metalaxyl	18.8	Spike	P	0 - 30
2203658	Metolachlor	18.3	Spike	P	0 - 30
2203658	Metribuzin	7.55	Spike	P	0 - 30
2203658	Mevinphos	16.8	Spike	P	0 - 30
2203658	Molinate	19.0	Spike	P	0 - 30
2203658	Myclobutanil	17.5	Spike	P	0 - 30
2203658	Naled	17.5	Spike	P	0 - 30
2203658	Norflurazon	17.0	Spike	P	0 - 30
2203658	Oxadiazon	16.6	Spike	P	0 - 30
2203658	Parathion Ethyl	20.4	Spike	P	0 - 30
2203658	Parathion Methyl	13.8	Spike	P	0 - 30
2203658	Pendimethalin	20.0	Spike	P	0 - 30
2203658	Phorate	20.8	Spike	P	0 - 30
2203658	Prodiamine	15.8	Spike	P	0 - 30
2203658	Prometon	22.3	Spike	P	0 - 30
2203658	Prometryn	17.8	Spike	P	0 - 30
2203658	Pronamide	11.1	Spike	P	0 - 30
2203658	Propiconazole	19.7	Spike	P	0 - 30
2203658	Pyriproxyfen	9.87	Spike	P	0 - 30
2203658	Simazine	15.8	Spike	P	0 - 30
2203658	Sulfentrazone	17.9	Spike	P	0 - 30
2203658	Tebuconazole	9.39	Spike	P	0 - 30
2203658	Terbufos	14.6	Spike	P	0 - 30
2203658	Terbutylazine	13.6	Spike	P	0 - 30
LFB	Acetochlor	4.46	LCS	P	0 - 30
LFB	Alachlor	5.97	LCS	P	0 - 30
LFB	Ametryn	6.17	LCS	P	0 - 30
LFB	Atrazine	0.376	LCS	P	0 - 30
LFB	Atrazine Desethyl	4.72	LCS	P	0 - 30
LFB	Azinphos Methyl	12.7	LCS	P	0 - 30
LFB	Azoxystrobin	18.7	LCS	P	0 - 30
LFB	Bromacil	17.1	LCS	P	0 - 30
LFB	Butylate	1.01	LCS	P	0 - 30
LFB	Carbophenothion	3.25	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Carfentrazone Ethyl	0.118	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	1.70	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	3.66	LCS	P	0 - 30
LFB	Cyanazine	0.635	LCS	P	0 - 30
LFB	Demeton	2.06	LCS	P	0 - 30
LFB	Diazinon	0.132	LCS	P	0 - 30
LFB	Difenoconazole	17.5	LCS	P	0 - 30
LFB	Dimethenamid	1.46	LCS	P	0 - 30
LFB	Disulfoton	8.75	LCS	P	0 - 30
LFB	Dithiopyr	1.28	LCS	P	0 - 30
LFB	EPTC	1.88	LCS	P	0 - 30
LFB	Ethion	1.28	LCS	P	0 - 30
LFB	Ethoprop	0.552	LCS	P	0 - 30
LFB	Fenamiphos	8.22	LCS	P	0 - 30
LFB	Fenbuconazole	34.9	LCS	F	0 - 30
LFB	Fipronil	3.18	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	5.43	LCS	P	0 - 30
LFB	Fipronil Sulfide	1.46	LCS	P	0 - 30
LFB	Fipronil Sulfone	3.19	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	2.94	LCS	P	0 - 30
LFB	Fludioxonil	3.05	LCS	P	0 - 30
LFB	Flumioxazin	0.681	LCS	P	0 - 30
LFB	Flutolanil	1.34	LCS	P	0 - 30
LFB	Fluxapyroxad	6.13	LCS	P	0 - 30
LFB	Fonofos	0.121	LCS	P	0 - 30
LFB	Hexazinone	29.9	LCS	P	0 - 30
LFB	Imazalil	2.90	LCS	P	0 - 30
LFB	Iprodione	5.10	LCS	P	0 - 30
LFB	Malathion	3.21	LCS	P	0 - 30
LFB	Metalaxyl	5.83	LCS	P	0 - 30
LFB	Metolachlor	3.83	LCS	P	0 - 30
LFB	Metribuzin	0.154	LCS	P	0 - 30
LFB	Mevinphos	9.04	LCS	P	0 - 30
LFB	Molinate	3.63	LCS	P	0 - 30
LFB	Myclobutanil	27.8	LCS	P	0 - 30
LFB	Naled	3.56	LCS	P	0 - 30
LFB	Norflurazon	7.89	LCS	P	0 - 30
LFB	Oxadiazon	4.61	LCS	P	0 - 30
LFB	Parathion Ethyl	2.76	LCS	P	0 - 30
LFB	Parathion Methyl	5.46	LCS	P	0 - 30
LFB	Pendimethalin	4.43	LCS	P	0 - 30
LFB	Phorate	9.52	LCS	P	0 - 30
LFB	Prodiamine	7.47	LCS	P	0 - 30
LFB	Prometon	4.25	LCS	P	0 - 30
LFB	Prometryn	4.18	LCS	P	0 - 30
LFB	Pronamide	0.756	LCS	P	0 - 30
LFB	Propiconazole	7.18	LCS	P	0 - 30
LFB	Pyriproxyfen	0.641	LCS	P	0 - 30
LFB	Simazine	0.894	LCS	P	0 - 30
LFB	Sulfentrazone	29.7	LCS	P	0 - 30
LFB	Tebuconazole	16.7	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Terbufos	3.14	LCS	P	0 - 30
LFB	Terbuthylazine	4.01	LCS	P	0 - 30

Reference Method: EPA 8270E dissolved
Batch ID: P389270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203658	Oxyfluorfen	15.5	Spike	P	0 - 30
LFB	Oxyfluorfen	5.39	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P389028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203933	Chlordane	1.91	Spike	P	0 - 30
2203933	Toxaphene	5.96	Spike	P	0 - 30
LFB	Chlordane	2.35	LCS	P	0 - 30
LFB	Toxaphene	8.43	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203277	Acesulfame K	0.737	Spike	P	0 - 30
2203277	AMPA	2.38	Spike	P	0 - 30
2203277	Endothall	3.88	Spike	P	0 - 30
2203277	Glufosinate	2.45	Spike	P	0 - 30
2203277	Glyphosate	9.13	Spike	P	0 - 30
2203277	Sucralose	12.1	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389104

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203654	2,4-D	14.0	Spike	P	0 - 30
2203654	Acetaminophen	0.237	Spike	P	0 - 30
2203654	Acetamiprid	9.32	Spike	P	0 - 30
2203654	Afidopyropen	15.0	Spike	P	0 - 30
2203654	Bentazon	10.6	Spike	P	0 - 30
2203654	Benzovindiflupyr	2.72	Spike	P	0 - 30
2203654	Carbamazepine	6.84	Spike	P	0 - 30
2203654	Clothianidin	9.37	Spike	P	0 - 30
2203654	Dinotefuran	5.95	Spike	P	0 - 30
2203654	Diuron	2.38	Spike	P	0 - 30
2203654	Fenuron	2.16	Spike	P	0 - 30
2203654	Fluridone	12.6	Spike	P	0 - 30
2203654	Hydrocodone	1.05	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P389104

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203654	Ibuprofen	0.506	Spike	P	0 - 30
2203654	Imazapyr	6.11	Spike	P	0 - 30
2203654	Imidacloprid	3.59	Spike	P	0 - 30
2203654	Linuron	12.9	Spike	P	0 - 30
2203654	Mandestrobin	8.48	Spike	P	0 - 30
2203654	MCCP	1.89	Spike	P	0 - 30
2203654	Naproxen	16.5	Spike	P	0 - 30
2203654	Primidone	0.499	Spike	P	0 - 30
2203654	Pyraclostrobin	5.85	Spike	P	0 - 30
2203654	Thiamethoxam	22.8	Spike	P	0 - 30
2203654	Tolfenpyrad	0.880	Spike	P	0 - 30
2203654	Triclopyr	4.15	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389300

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203921	3-Hydroxycarbofuran	20.7	Spike	P	0 - 30
2203921	Aldicarb	2.54	Spike	P	0 - 30
2203921	Aldicarb Sulfone	11.1	Spike	P	0 - 30
2203921	Aldicarb Sulfoxide	2.84	Spike	P	0 - 30
2203921	Carbaryl	3.79	Spike	P	0 - 30
2203921	Carbofuran	1.56	Spike	P	0 - 30
2203921	Methiocarb	5.45	Spike	P	0 - 30
2203921	Methomyl	8.90	Spike	P	0 - 30
2203921	Oxamyl	11.2	Spike	P	0 - 30
2203921	Propoxur	4.59	Spike	P	0 - 30
LFB	3-Hydroxycarbofuran	8.74	LCS	P	0 - 30
LFB	Aldicarb	10.8	LCS	P	0 - 30
LFB	Aldicarb Sulfone	10.1	LCS	P	0 - 30
LFB	Aldicarb Sulfoxide	4.00	LCS	P	0 - 30
LFB	Carbaryl	0.847	LCS	P	0 - 30
LFB	Carbofuran	2.35	LCS	P	0 - 30
LFB	Methiocarb	11.1	LCS	P	0 - 30
LFB	Methomyl	11.3	LCS	P	0 - 30
LFB	Oxamyl	9.87	LCS	P	0 - 30
LFB	Propoxur	2.44	LCS	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P389053

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203985	Color (true)	0.206	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P389230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P389230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204041	Total Alkalinity	5.18	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P389661

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203944	TDS	3.92	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P389236

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204041	Fluoride	1.50	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P389222

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203987	Organic Carbon	0.222	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2204068
Field Sample ID: G1TLHR0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	52.3	P	30 - 160

Lab Sample ID: 2204069
Field Sample ID: G1TLHR0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	86.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	65.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	41.0	P	30 - 160
EPA 8321B	Diuron-d6	54.2	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	107	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	107	P	30 - 160
EPA 8321B	Ibuprofen-d3	78.1	P	30 - 160
EPA 8321B	Primidone-d5	76.8	P	30 - 160
EPA 8321B	Sucralose-d6	114	P	30 - 160
EPA 8321B	Sucralose-d6	114	P	30 - 160

Lab Sample ID: 2204070
Field Sample ID: G1TLHR0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	66.8	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	61.3	P	34 - 106
EPA 8276	Decachlorobiphenyl	48.7	P	26 - 97.0
EPA 8276	PCNB	74.8	P	38 - 141

Lab Sample ID: 2204071
Field Sample ID: G1TLHR0048

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	95.2	P	72 - 135
EPA 8270E	Terbufos-d10	91.0	P	57 - 134
EPA 8270E dissolved	Simazine-d10	95.2	P	72 - 135
EPA 8270E dissolved	Terbufos-d10	91.0	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A101664

Included Lab Sample IDs: 2204043

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.5	99.9	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A101665

Included Lab Sample IDs: 2204041

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: A101666

Included Lab Sample IDs: 2204041

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.0	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A101706

Included Lab Sample IDs: 2204069

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	81.0	80.3	P/P	50 - 160
Endothall	113	109	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A101728

Included Lab Sample IDs: 2204069

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	100	94.1	P/P	50 - 160
Glufosinate	100	96.7	P/P	50 - 160
Glyphosate	96.0	105	P/P	50 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A101740

Included Lab Sample IDs: 2204042

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

Reference Method: SM 5310 B-2011

Run ID: A101747

Included Lab Sample IDs: 2204042

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	99.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A101749

Included Lab Sample IDs: 2204041

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.3	102	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A101749

Included Lab Sample IDs: 2204041

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A101763

Included Lab Sample IDs: 2204042

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	99.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A101788

Included Lab Sample IDs: 2204069

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	117	121	P/P	50 - 160

Reference Method: EPA 8321B

Run ID: A101797

Included Lab Sample IDs: 2204069

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	91.4	107	P/P	50 - 150
Acetaminophen	115	108	P/P	60 - 160
Acetamiprid	111	111	P/P	50 - 150
Afidopyropen	82.3	93.7	P/P	50 - 150
Bentazon	98.9	96.4	P/P	50 - 160
Benzovindiflupyr	89.0	92.3	P/P	50 - 150
Carbamazepine	71.5	80.2	P/P	60 - 150
Clothianidin	99.8	91.5	P/P	60 - 150
Dinotefuran	84.1	77.9	P/P	50 - 150
Diuron	71.0	83.1	P/P	60 - 160
Fenuron	103	100	P/P	60 - 150
Fluridone	93.4	85.3	P/P	60 - 160
Hydrocodone	120	110	P/P	60 - 150
Ibuprofen	123	73.3	P/P	50 - 160
Imazapyr	120	106	P/P	50 - 160
Imidacloprid	93.3	93.8	P/P	60 - 150
Linuron	68.6	73.5	P/P	60 - 150
Mandestrobin	94.9	93.6	P/P	50 - 150
MCPP	87.4	91.6	P/P	50 - 150
Naproxen	64.4	114	P/P	50 - 160
Primidone	102	81.8	P/P	60 - 150
Pyraclostrobin	93.6	93.1	P/P	60 - 150
Thiamethoxam	109	109	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A101797
Included Lab Sample IDs: 2204069

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tolfenpyrad	110	116	P/P	60 - 150
Triclopyr	92.5	83.8	P/P	50 - 150

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A101798
Included Lab Sample IDs: 2204041

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A101801
Included Lab Sample IDs: 2204042

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.4	99.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A101807
Included Lab Sample IDs: 2204072

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	97.2	97.2	P/P	90 - 110
Calcium	99.0	97.6	P/P	90 - 110
Iron	100	98.5	P/P	90 - 110
Magnesium	98.8	97.4	P/P	90 - 110
Potassium	97.4	95.4	P/P	90 - 110
Sodium	97.4	94.7	P/P	90 - 110
Zinc	97.5	98.4	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A101818
Included Lab Sample IDs: 2204070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.6		P	80 - 120
Alpha-BHC	102		P	80 - 120
Alpha-Chlordane	98.1		P	80 - 120
Beta-BHC	111		P	80 - 120
Beta-Cyfluthrin	71.8*		F	80 - 120
Bifenthrin	99.0		P	80 - 120
Chlorothalonil	116		P	80 - 120
Cis-Nonachlor	98.6		P	80 - 120
Cypermethrin	93.7		P	80 - 120
Dacthal	97.9		P	80 - 120
DDD-p,p'	99.2		P	80 - 120
DDE-p,p'	103		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	106		P	80 - 120
Deltamethrin	99.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A101818
Included Lab Sample IDs: 2204070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dichlobenil	99.0		P	80 - 120
Dicofol	109		P	80 - 120
Dieldrin	97.8		P	80 - 120
Endosulfan I	90.8		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	96.3		P	80 - 120
Endrin	101		P	80 - 120
Endrin Aldehyde	99.3		P	80 - 120
Endrin Ketone	94.6		P	80 - 120
Esfenvalerate	89.5		P	80 - 120
Ethalfuralin	95.9		P	80 - 120
Fenpropathrin	91.9		P	80 - 120
Gamma-BHC	107		P	80 - 120
Gamma-Chlordane	97.0		P	80 - 120
Heptachlor	96.2		P	80 - 120
Heptachlor Epoxide	98.4		P	80 - 120
Hexachlorobenzene	105		P	80 - 120
Lambda-Cyhalothrin	93.6		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	92.4		P	80 - 120
Mirex	99.6		P	80 - 120
Permethrin	91.8		P	80 - 120
Phenothrin	91.0		P	80 - 120
Piperonyl Butoxide	89.1		P	80 - 120
Prallethrin	85.3		P	80 - 120
Tau-Fluvalinate	94.6		P	80 - 120
Tetramethrin	87.7		P	80 - 120
Trans-Nonachlor	98.4		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	97.2		P	80 - 120

Reference Method: EPA 8276
Run ID: A101822
Included Lab Sample IDs: 2204070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.0		P	80 - 120
Toxaphene	105		P	80 - 120

Reference Method: EPA 8321B
Run ID: A101841
Included Lab Sample IDs: 2204068

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	111	118	P/P	60 - 150
Aldicarb	93.8	102	P/P	60 - 150
Aldicarb Sulfone	104	104	P/P	50 - 150
Aldicarb Sulfoxide	95.4	101	P/P	50 - 150
Carbaryl	114	111	P/P	60 - 150
Carbofuran	100	93.7	P/P	50 - 150
Methiocarb	77.8	97.7	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A101841

Included Lab Sample IDs: 2204068

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Methomyl	104	107	P/P	50 - 150
Oxamyl	101	110	P/P	50 - 150
Propoxur	115	110	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A101926

Included Lab Sample IDs: 2204042

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.0	96.0	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A101977

Included Lab Sample IDs: 2204071

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	103		P	80 - 120
Alachlor	108		P	80 - 120
Ametryn	106		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	100		P	80 - 120
Azinphos Methyl	95.8		P	80 - 120
Azoxystrobin	89.4		P	80 - 120
Bromacil	95.2		P	80 - 120
Butylate	101		P	80 - 120
Carbophenothion	96.6		P	80 - 120
Carfentrazone Ethyl	103		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	98.0		P	80 - 120
Cyanazine	103		P	80 - 120
Demeton	106		P	80 - 120
Diazinon	105		P	80 - 120
Difenoconazole	99.5		P	80 - 120
Dimethenamid	103		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	106		P	80 - 120
EPTC	99.2		P	80 - 120
Ethion	93.2		P	80 - 120
Ethoprop	118		P	80 - 120
Fenamiphos	87.7		P	80 - 120
Fenbuconazole	97.6		P	80 - 120
Fipronil	95.7		P	80 - 120
Fipronil Desulfinyl	96.3		P	80 - 120
Fipronil Sulfide	85.6		P	80 - 120
Fipronil Sulfone	85.4		P	80 - 120
Fluazifop-P-butyl	103		P	80 - 120
Fludioxonil	103		P	80 - 120
Flumioxazin	88.5		P	80 - 120
Flutolanil	99.3		P	80 - 120
Fluxapyroxad	96.6		P	80 - 120
Fonofos	103		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A101977
 Included Lab Sample IDs: 2204071

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Hexazinone	98.6		P	80 - 120
Imazalil	103		P	80 - 120
Iprodione	101		P	80 - 120
Malathion	88.6		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	107		P	80 - 120
Metribuzin	96.6		P	80 - 120
Mevinphos	127*		F	80 - 120
Molinate	99.4		P	80 - 120
Myclobutanil	99.7		P	80 - 120
Naled	92.1		P	80 - 120
Norflurazon	94.1		P	80 - 120
Oxadiazon	112		P	80 - 120
Oxyfluorfen	107		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	93.3		P	80 - 120
Pendimethalin	113		P	80 - 120
Phorate	130*		F	80 - 120
Prodiamine	101		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	96.3		P	80 - 120
Propiconazole	104		P	80 - 120
Pyriproxyfen	103		P	80 - 120
Simazine	99.3		P	80 - 120
Sulfentrazone	103		P	80 - 120
Tebuconazole	102		P	80 - 120
Terbufos	99.3		P	80 - 120
Terbutylazine	101		P	80 - 120

Reference Method: EPA 8270E dissolved
 Run ID: A101977
 Included Lab Sample IDs: 2204071

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	103		P	80 - 120
Alachlor	108		P	80 - 120
Ametryn	106		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	100		P	80 - 120
Azinphos Methyl	95.8		P	80 - 120
Azoxystrobin	89.4		P	80 - 120
Bromacil	95.2		P	80 - 120
Butylate	101		P	80 - 120
Carbophenothion	96.6		P	80 - 120
Carfentrazone Ethyl	103		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	98.0		P	80 - 120
Cyanazine	103		P	80 - 120
Demeton	106		P	80 - 120
Diazinon	105		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E dissolved

Run ID: A101977

Included Lab Sample IDs: 2204071

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Difenoconazole	99.5		P	80 - 120
Dimethenamid	103		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	106		P	80 - 120
EPTC	99.2		P	80 - 120
Ethion	93.2		P	80 - 120
Ethoprop	118		P	80 - 120
Fenamiphos	87.7		P	80 - 120
Fenbuconazole	97.6		P	80 - 120
Fipronil	95.7		P	80 - 120
Fipronil Desulfinyl	96.3		P	80 - 120
Fipronil Sulfide	85.6		P	80 - 120
Fipronil Sulfone	85.4		P	80 - 120
Fluazifop-P-butyl	103		P	80 - 120
Fludioxonil	103		P	80 - 120
Flumioxazin	88.5		P	80 - 120
Flutolanil	99.3		P	80 - 120
Fluxapyroxad	96.6		P	80 - 120
Fonofos	103		P	80 - 120
Hexazinone	98.6		P	80 - 120
Imazalil	103		P	80 - 120
Iprodione	101		P	80 - 120
Malathion	88.6		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	107		P	80 - 120
Metribuzin	96.6		P	80 - 120
Mevinphos	127*		F	80 - 120
Molinate	99.4		P	80 - 120
Myclobutanil	99.7		P	80 - 120
Naled	92.1		P	80 - 120
Norflurazon	94.1		P	80 - 120
Oxadiazon	112		P	80 - 120
Oxyfluorfen	107		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	93.3		P	80 - 120
Pendimethalin	113		P	80 - 120
Phorate	130*		F	80 - 120
Prodiamine	101		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	96.3		P	80 - 120
Propiconazole	104		P	80 - 120
Pyriproxyfen	103		P	80 - 120
Simazine	99.3		P	80 - 120
Sulfentrazone	103		P	80 - 120
Tebuconazole	102		P	80 - 120
Terbufos	99.3		P	80 - 120
Terbuthylazine	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A102002

Included Lab Sample IDs: 2204072

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	94.7	94.2	P/P	90 - 110
Antimony	99.6	98.7	P/P	90 - 110
Arsenic	96.1	96.3	P/P	90 - 110
Beryllium	101	98.7	P/P	90 - 110
Boron	98.1	99.4	P/P	90 - 110
Cadmium	99.4	96.9	P/P	90 - 110
Chromium	95.5	95.2	P/P	90 - 110
Lead	90.3	90.3	P/P	90 - 110
Nickel	96.4	96.1	P/P	90 - 110
Selenium	97.9	96.1	P/P	90 - 110
Silver	106	105	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A102029

Included Lab Sample IDs: 2204072

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	94.8	96.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A102030

Included Lab Sample IDs: 2204072

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Thallium	97.4	97.7	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			Precision	
							LCS	SMP
EPA 180.1 Rev. 2.0	Turbidity							1.18
EPA 200.7 Rev. 4.4	Barium	101		100	98.7	99.3		0.618
	Calcium	105		98.0	105	106		0.505
	Iron	104		106	105	103		2.24
	Magnesium	103		97.1	106	104		1.59
	Potassium	102		94.4	103	103		0.500
	Sodium	99.4		95.9	96.9			0.316
	Zinc	96.8		97.8	97.9	97.2		0.720
EPA 200.8 Rev. 5.4	Aluminum	97.5		93.8	96.8	96.9		3.01
	Antimony	100		97.4	99.6	101		2.27
	Arsenic	96.8		95.2	97.6	99.5		2.39
	Beryllium	93.1		92.8	95.0	100		2.40
	Boron	99.3		92.9	96.6	96.6		3.08
	Cadmium	100		95.2	98.6	99.1		3.54
	Chromium	98.4		97.2	98.4	99.5		1.20
	Copper	98.8		98.4	102	100		3.68
	Lead	95.6		92.5	95.5	95.4		3.11
	Nickel	98.1		95.5	97.7	99.0		2.29
	Selenium	93.8		94.6	96.4	95.0		1.93
	Silver	102		101	102	102		1.39
	Thallium	102		101	104	104		3.31
EPA 300.0 Rev. 2.1	Chloride	101		100	101			0.0268
	Sulfate	101		101	102			0.388
EPA 350.1 Rev. 2.0	Ammonia-N	102		102	102			0.132
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105		114	109			2.96
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5		97.8				0.0
EPA 365.1 Rev. 2.0	Total-P	107		108	108			0.0232
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.8		96.1	96.6			0.519
EPA 8270E	Acetochlor	96.1	91.9	99.4	81.9	4.46		19.3
	Alachlor	94.1	88.6	95.2	80.3	5.97		17.0
	Aldrin	30.8	30.6	58.6	56.7	0.721		3.20
	Alpha-BHC	79.3	79.9	83.7	85.5	0.653		2.17
	Alpha-Chlordane	72.4	71.7	88.5	86.6	0.883		2.14
	Ametryn	112	105	118	106	6.17		10.9
	Atrazine	99.4	99.7	129	107	0.376		15.5
	Atrazine Desethyl	83.8	87.8	84.7	73.4	4.72		12.4
	Azinphos Methyl	137	121	143	135	12.7		6.36
	Azoxystrobin	117	141	87.7	88.5	18.7		0.845
	Beta-BHC	105	105	114	118	0.292		3.39
	Beta-Cyfluthrin	56.8	60.0	82.6	104	5.51		22.7
	Bifenthrin	60.1	60.4	85.5	87.0	0.483		1.74
	Bromacil	85.0	101	94.8	80.7	17.1		16.0
	Butylate	74.4	75.1	96.8	81.5	1.01		17.2
	Carbophenothion	91.0	88.1	96.9	78.3	3.25		21.2
	Carfentrazone Ethyl	99.0	99.1	101	78.4	0.118		24.7
	Chlorothalonil	26.2	26.8	60.1	101	2.27		50.5
	Chlorpyrifos Ethyl	88.0	86.5	96.5	78.4	1.70		20.7
	Chlorpyrifos Methyl	94.5	91.1	104	83.9	3.66		21.2
	Cis-Nonachlor	75.4	73.6	89.6	87.9	2.31		1.90
	Cyanazine	118	117	120	103	0.635		14.9
	Cypermethrin	65.3	67.4	96.1	101	3.23		4.75
	Dacthal	85.3	83.7	94.1	93.0	1.81		1.18
	DDD-p,p'	80.9	78.5	95.5	93.3	3.12		2.28
	DDE-p,p'	69.8	69.6	82.4	81.9	0.312		0.619

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	DDT-p,p'	71.3	72.1	87.6	91.4	1.09		4.27
	Delta-BHC	128	123	141	158	4.12		11.1
	Deltamethrin	77.2	77.3	114	121	0.188		6.19
	Demeton	87.9	86.1	117	99.0	2.06		17.0
	Diazinon	94.4	94.3	105	89.6	0.132		16.2
	Dichlobenil	76.4	74.2	79.6	77.9	2.89		2.14
	Dicofol	111	103	102	103	7.59		0.606
	Dieldrin	78.4	76.4	91.7	90.7	2.60		1.16
	Difenoconazole	125	149	118	111	17.5		5.80
	Dimethenamid	96.3	94.9	96.7	78.4	1.46		20.9
	Disulfoton	87.0	79.7	99.1	80.0	8.75		21.3
	Dithiopyr	87.1	86.0	91.7	76.5	1.28		18.1
	Endosulfan I	79.2	78.0	93.9	98.3	1.53		4.56
	Endosulfan II	92.8	92.0	116	114	0.859		2.30
	Endosulfan Sulfate	84.2	82.3	97.7	103	2.31		5.37
	Endrin	81.2	79.3	91.4	98.3	2.39		7.35
	Endrin Aldehyde	91.3	87.7	96.9	105	3.99		8.00
	Endrin Ketone	85.7	85.2	96.9	99.9	0.632		3.02
	EPTC	70.6	72.0	80.9	67.9	1.88		17.5
	Esfenvalerate	63.5	64.4	85.9	90.2	1.33		4.87
	Ethalfuralin	65.2	67.8	75.5	76.1	3.91		0.797
	Ethion	81.9	80.8	41.3	36.9	1.28		11.2
	Ethoprop	101	101	109	88.1	0.552		21.4
	Fenamiphos	89.1	96.7	106	87.9	8.22		18.2
	Fenbuconazole	88.2	125	118	102	34.9		14.5
	Fenpropathrin	67.9	67.5	96.1	106	0.494		9.77
	Fipronil	102	105	109	93.3	3.18		16.0
	Fipronil Desulfinyl	99.8	94.5	103	87.2	5.43		17.1
	Fipronil Sulfide	93.1	94.5	105	86.7	1.46		18.9
	Fipronil Sulfone	83.8	86.5	105	83.7	3.19		23.0
	Fluazifop-P-butyl	92.1	94.9	97.7	81.3	2.94		18.3
	Fludioxonil	90.4	93.2	87.3	73.9	3.05		16.6
	Flumioxazin	240	242	150	137	0.681		8.60
	Flutolanil	99.5	98.2	89.6	75.6	1.34		17.0
	Fluxapyroxad	83.4	88.6	56.0	51.7	6.13		7.86
	Fonofos	86.8	86.9	97.9	87.0	0.121		11.8
	Gamma-BHC	101	99.7	107	109	1.38		1.42
	Gamma-Chlordane	67.6	67.7	82.4	81.2	0.201		1.53
	Heptachlor	60.6	61.1	71.7	71.4	0.782		0.496
	Heptachlor Epoxide	78.5	77.6	90.2	89.4	1.16		0.891
	Hexachlorobenzene	66.3	66.1	73.7	73.4	0.253		0.385
	Hexazinone	73.3	99.1	96.1	80.4	29.9		16.4
	Imazalil	50.1	48.7	69.8	60.2	2.90		14.8
	Iprodione	97.3	92.5	82.5	71.5	5.10		14.2
	Lambda-Cyhalothrin	65.2	67.2	98.0	103	2.95		5.44
	Malathion	111	108	118	100	3.21		15.9
	Metalaxyl	60.6	64.2	93.1	77.2	5.83		18.8
	Methoxychlor	77.3	78.5	87.8	87.3	1.56		0.507
	Metolachlor	92.8	89.3	91.8	76.4	3.83		18.3
	Metribuzin	96.8	96.7	110	102	0.154		7.55
	Mevinphos	83.2	91.1	108	90.9	9.04		16.8
	MGK-264	43.0	40.9	73.9	79.7	5.00		7.66
	Mirex	55.2	55.8	70.5	70.4	1.09		0.0823
	Molinate	80.0	82.9	94.7	78.2	3.63		19.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Myclobutanil	78.9	104	86.2	72.3	27.8	17.5
	Naled	61.0	63.3	63.0	52.9	3.56	17.5
	Norflurazon	89.2	96.5	87.9	74.1	7.89	17.0
	Oxadiazon	88.2	84.2	85.6	72.4	4.61	16.6
	Parathion Ethyl	96.0	93.4	110	89.5	2.76	20.4
	Parathion Methyl	106	100	120	104	5.46	13.8
	Pendimethalin	72.2	69.0	88.4	72.3	4.43	20.0
	Permethrin	61.1	62.3	85.3	88.2	1.94	3.31
	Phenothrin	32.0	32.6	65.0	66.1	2.05	1.65
	Phorate	89.8	81.6	120	97.1	9.52	20.8
	Piperonyl Butoxide	83.9	85.0	101	106	1.31	4.06
	Prallethrin	43.0	43.4	61.4	61.8	0.776	0.587
	Prodiamine	78.4	72.7	52.2	44.5	7.47	15.8
	Prometon	88.6	92.5	107	85.6	4.25	22.3
	Prometryn	104	99.4	112	93.4	4.18	17.8
	Pronamide	103	102	110	98.5	0.756	11.1
	Propiconazole	87.4	93.9	88.4	72.6	7.18	19.7
	Pyriproxyfen	107	108	101	91.2	0.641	9.87
	Simazine	99.3	98.4			0.894	15.8
	Sulfentrazone	71.5	96.5	86.6	72.4	29.7	17.9
	Tau-Fluvalinate	75.1	75.1	112	119	0.0386	5.67
	Tebuconazole	40.0	47.3	17.7	16.1	16.7	9.39
	Terbufos	85.4	82.7	101	87.5	3.14	14.6
	Terbutylazine	97.0	93.2	101	87.7	4.01	13.6
	Tetramethrin	52.4	54.0	69.0	71.5	3.11	3.53
	Trans-Nonachlor	69.4	69.0	82.0	80.0	0.653	2.49
	Triclosan Methyl	87.0	86.4	99.1	96.6	0.703	2.53
	Trifluralin	66.4	66.2	74.7	74.4	0.409	0.367
EPA 8270E dissolved	Oxyfluorfen	97.5	92.3	104	88.9	5.39	15.5
EPA 8276	Chlordane	97.1	99.4	110	112	2.35	1.91
	Toxaphene	74.7	81.2	108	115	8.43	5.96
EPA 8321B	2,4-D	71.8		78.3	68.1		14.0
	3-Hydroxycarbofuran	78.7	85.9	59.9	73.8	8.74	20.7
	Acesulfame K	81.7		27.0	27.2		0.737
	Acetaminophen	51.6		64.4	64.2		0.237
	Acetamiprid	55.2		67.5	61.5		9.32
	Afidopyropen	43.0		49.5	42.6		15.0
	Aldicarb	44.2	49.3	45.2	46.3	10.8	2.54
	Aldicarb Sulfone	78.3	86.6	73.7	82.4	10.1	11.1
	Aldicarb Sulfoxide	38.9	40.5	53.7	55.3	4.00	2.84
	AMPA	101		98.9	96.6		2.38
	Bentazon	53.7		50.8	45.7		10.6
	Benzovindiflupyr	66.9		66.5	68.4		2.72
	Carbamazepine	49.2		59.8	55.9		6.84
	Carbaryl	72.4	71.8	55.6	53.5	0.847	3.79
	Carbofuran	56.9	58.3	40.9	41.5	2.35	1.56
	Clothianidin	83.6		92.2	83.9		9.37
	Dinotefuran	71.2		80.8	76.1		5.95
	Diuron	55.1		54.4	53.1		2.38
	Endothall	83.7		79.5	82.6		3.88
	Fenuron	102		38.5	40.5		2.16
	Fluridone	73.8		70.5	80.0		12.6
	Glufosinate	100		91.9	89.7		2.45
	Glyphosate	95.2		82.4	75.2		9.13

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8321B	Hydrocodone	99.9		112	113			1.05
	Ibuprofen	86.3		75.3	74.9			0.506
	Imazapyr	100		108	101			6.11
	Imidacloprid	82.2		99.0	103			3.59
	Linuron	61.8		62.0	70.6			12.9
	Mandestrobin	75.2		72.4	78.8			8.48
	MCPP	74.1		91.1	92.8			1.89
	Methiocarb	74.0	82.7	59.2	62.5	11.1		5.45
	Methomyl	85.9	96.2	70.4	76.9	11.3		8.90
	Naproxen	81.1		66.7	56.6			16.5
	Oxamyl	86.6	95.6	69.1	77.2	9.87		11.2
	Primidone	93.1		86.9	87.3			0.499
	Propoxur	57.3	58.7	46.3	48.5	2.44		4.59
	Pyraclostrobin	55.5		59.8	63.4			5.85
	Sucralose	116		113	100			12.1
	Thiamethoxam	95.5		93.0	117			22.8
	Tolfenpyrad	53.4		53.7	54.2			0.880
	Triclopyr	61.0		69.6	66.8			4.15
SM 2120 B-2011	Color (true)	102					0.206	
SM 2320 B-2011	Total Alkalinity	102					5.18	
SM 2540 C-2011	TDS						3.92	
SM 4500 F-C-2011	Fluoride	97.6		99.7	98.0			1.50
SM 5310 B-2011	Organic Carbon	102		101	101			0.222

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2204041
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2204072
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2204072
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2204041
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2204041
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2204042
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2204042
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2204042
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2204042
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2204043
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2204070
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2204071
EPA 8270E dissolved	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2204071
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2204070
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2204068
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2204069
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2204069
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2204041
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2204041
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2204072
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2204041
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2204041
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2204041

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2204042

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	10/21/2020			10/21/2020 17:12	Samantha Davila	2204041
EPA 200.7 Rev. 4.4	10/21/2020	10/26/2020 13:40	Elliott D. Healy	10/27/2020 16:22	Betina Topolski	2204072
EPA 200.8 Rev. 5.4	10/21/2020	10/26/2020 13:40	Elliott D. Healy	11/05/2020 19:38	Alexander Thompson	2204072
	10/21/2020	10/26/2020 13:40	Elliott D. Healy	11/06/2020 12:47	Alexander Thompson	2204072
	10/21/2020	10/26/2020 13:40	Elliott D. Healy	11/06/2020 21:03	Alexander Thompson	2204072
EPA 300.0 Rev. 2.1	10/21/2020			10/28/2020 17:13	Lipi Saha	2204041
EPA 350.1 Rev. 2.0	10/21/2020			10/25/2020 11:46	Ping Hua	2204042
EPA 351.2 Rev. 2.0	10/21/2020	10/26/2020 11:45	David Boose	10/27/2020 14:33	Elliott Rodriguez	2204042
EPA 353.2 Rev. 2.0	10/21/2020			10/26/2020 11:07	Beverly Y. Sanders	2204042
EPA 365.1 Rev. 2.0	10/21/2020	10/29/2020 15:54	Yen Ta	11/03/2020 13:05	Shengyu Wang	2204042
EPA 365.1 Rev. 2.0 dissolved	10/21/2020			10/21/2020 16:56	Blanca Fach	2204043
EPA 8270E	10/21/2020	10/22/2020 08:30	Rasheda Ghaffari	10/28/2020 00:26	Arthur Maknenko	2204070
	10/21/2020	10/27/2020 09:00	Rasheda Ghaffari	10/30/2020 16:41	Vandana T. Nagar	2204071
EPA 8270E dissolved	10/21/2020	10/27/2020 09:00	Rasheda Ghaffari	10/30/2020 16:41	Vandana T. Nagar	2204071
EPA 8276	10/21/2020	10/22/2020 08:30	Rasheda Ghaffari	10/27/2020 09:01	Michael Poppell	2204070
EPA 8321B	10/21/2020	10/22/2020 10:00	Rebecca Ware	10/22/2020 18:13	Rebecca Ware	2204069
	10/21/2020	10/22/2020 10:00	Rebecca Ware	10/23/2020 14:07	Rebecca Ware	2204069
	10/21/2020	10/22/2020 10:00	Rebecca Ware	10/26/2020 17:01	Rebecca Ware	2204069
	10/21/2020	10/23/2020 12:00	Hoor Shaik	10/24/2020 11:22	Juyoung Kim	2204069
	10/21/2020	10/27/2020 09:00	Hoor Shaik	10/28/2020 17:02	Juyoung Kim	2204068
SM 2120 B-2011	10/21/2020			10/21/2020 17:30	Benjamin T. Nordmann	2204041
SM 2320 B-2011	10/21/2020			10/24/2020 03:43	Samantha Davila	2204041
SM 2340B	10/21/2020			10/27/2020 16:22	Betina Topolski	2204072
SM 2540 C-2011	10/21/2020			10/26/2020 15:36	Yijie Li	2204041
SM 2540 D-2011	10/21/2020			10/26/2020 15:36	Yijie Li	2204041
SM 4500 F-C-2011	10/21/2020			10/24/2020 03:33	Samantha Davila	2204041
SM 5310 B-2011	10/21/2020			10/24/2020 02:33	Lauren Lees	2204042