

Chemical Analysis Report

NW-DIST-2022-02-02-01

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

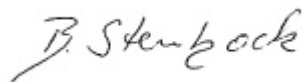
Event Description: **Choctawhatchee River Run**
Request ID: **RQ-2022-01-31-54**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
Attn: Myranda Butler

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

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

Date Certified: 23-FEB-2022 15:49



NON-CONFORMANCE REPORT INCLUDED

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: Choctawhatchee River upstream Hwy 90 Boat Ramp **Collection Date/Time: 01/31/2022 11:35**

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2302846	DEP SOP: NU-094-1	Color (true)**	32		PCU	P409322	
	EPA 180.1 Rev. 2.0	Turbidity	12	A	NTU	P409358	
	EPA 300.0 Rev. 2.1	Chloride	4.8		mg Cl/L	P409477	
		Sulfate	2.1		mg SO4/L	P409479	
	SM 2320 B-2011	Total Alkalinity	29		mg CaCO3/L	P409433	
	SM 2540 C-2011	TDS	55		mg/L	P409806	
	SM 2540 D-2011	TSS	8	I	mg/L	P409808	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P409436	
2302847	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P409637	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31		mg N/L	P409304	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.67		mg N/L	P409516	
	EPA 365.1 Rev. 2.0	Total-P	0.041		mg P/L	P409332	
	SM 5310 B-2011	Organic Carbon	2.6		mg C/L	P410065	
2302848	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.015		mg P/L	P409320	
2302853	EPA 8321B	Aldicarb	0.020	U	ug/L	P409339	RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P409339	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P409339	
		Carbaryl	0.0020	U	ug/L	P409339	
		Carbofuran	0.0020	U	ug/L	P409339	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P409339	
		Methiocarb	0.0020	U	ug/L	P409339	
		Methomyl	0.0020	U	ug/L	P409339	
		Oxamyl	0.0020	U	ug/L	P409339	
		Propoxur	0.0020	U	ug/L	P409339	
2302854		2,4-D	0.0033	I	ug/L	P409301	MS
		Acesulfame K	0.10	I	ug/L	P409328	
		2,4,5-T	0.0040	U	ug/L	P409301	
		AMPA	0.10	U	ug/L	P409328	
		Acetaminophen	0.0080	U	ug/L	P409301	
		Acetamiprid	0.0020	U	ug/L	P409301	
		Endothall	0.25	U	ug/L	P409328	
		Glufosinate	0.10	U	ug/L	P409328	
		Glyphosate	0.10	U	ug/L	P409328	
		Afidopyrophen	0.0020	U	ug/L	P409301	
		Bentazon	0.0017	I	ug/L	P409301	
		Sucralose	0.30		ug/L	P409328	
		Benzovindiflupyr	0.0020	U	ug/L	P409301	
		Carbamazepine	0.0010	I	ug/L	P409301	
		Clothianidin	0.0025	I	ug/L	P409301	
		Dinotefuran	0.0020	U	ug/L	P409301	
		Diuron	0.0022	I	ug/L	P409301	
		Fenuron	0.016	U	ug/L	P409301	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2302854	EPA 8321B	Fluridone	8.0E-04	U	ug/L	P409301	
		Imazapyr	0.015	I	ug/L	P409301	
		Hydrocodone	0.0020	U	ug/L	P409301	
		Ibuprofen	0.020	U	ug/L	P409301	
		Imidacloprid	0.0043	I	ug/L	P409301	
		Linuron	0.0040	U	ug/L	P409301	
		Mandestrobin	0.0020	U	ug/L	P409301	
		MCPP	0.0040	U	ug/L	P409301	
		Naproxen	0.0080	U	ug/L	P409301	
		Primidone	0.0040	U	ug/L	P409301	
		Pyraclostrobin	0.0020	U	ug/L	P409301	
		Silvex	0.0040	U	ug/L	P409301	
		Thiamethoxam	0.0020	U	ug/L	P409301	
		Tolfenpyrad	0.0020	U	ug/L	P409301	
		Triclopyr	0.0040	U	ug/L	P409301	
2302855	EPA 8270E	Aldrin	0.66	U	ng/L	P409392	
		Alpha-BHC	0.10	U	ng/L	P409392	
		Alpha-Chlordane	0.20	U	ng/L	P409392	
		Beta-BHC	0.10	U	ng/L	P409392	
		Beta-Cyfluthrin**	1.3	U	ng/L	P409392	
		Bifenthrin**	0.51	U	ng/L	P409392	
		Chlorothalonil	1.3	U	ng/L	P409392	
		Cis-Nonachlor**	0.20	U	ng/L	P409392	
		Cypermethrin	1.5	U	ng/L	P409392	
		Dacthal**	0.15	U	ng/L	P409392	
		DDD-p,p'	0.25	U	ng/L	P409392	
		DDE-p,p'	0.20	U	ng/L	P409392	
		DDT-p,p'	0.25	U	ng/L	P409392	
		Delta-BHC	0.41	U	ng/L	P409392	
		Deltamethrin**	1.3	U	ng/L	P409392	
		Dichlobenil**	0.25	U	ng/L	P409392	
		Dicofol	1.3	U	ng/L	P409392	
		Dieldrin	0.41	U	ng/L	P409392	
		Endosulfan I	0.41	U	ng/L	P409392	
		Endosulfan II	0.41	U	ng/L	P409392	
		Endosulfan Sulfate	0.30	U	ng/L	P409392	
		Endrin	0.41	UJ	ng/L	P409392	LCS
		Endrin Aldehyde	0.76	U	ng/L	P409392	
		Endrin Ketone	0.41	UJ	ng/L	P409392	LCS
		Esfenvalerate**	0.76	U	ng/L	P409392	
		Ethalfuralin**	0.15	U	ng/L	P409392	
		Fenpropathrin**	0.25	U	ng/L	P409392	
		Gamma-BHC	0.13	U	ng/L	P409392	
		Gamma-Chlordane	0.20	U	ng/L	P409392	
		Heptachlor	0.20	U	ng/L	P409392	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2302855	EPA 8270E	Heptachlor Epoxide	0.25	U	ng/L	P409392	CCV
		Hexachlorobenzene	1.0	U	ng/L	P409392	
		Kepone**	5.1	UJ	ng/L	P409392	
		Lambda-Cyhalothrin**	0.76	U	ng/L	P409392	
		Methoprene**	0.76	U	ng/L	P409392	
		Methoxychlor	0.30	U	ng/L	P409392	
		MGK-264**	0.20	U	ng/L	P409392	
		Mirex	0.71	U	ng/L	P409392	
		Oxychlorthane**	0.30	U	ng/L	P409392	
		Permethrin	1.6	U	ng/L	P409392	
		Phenothrin**	0.91	U	ng/L	P409392	LCS
		Piperonyl Butoxide**	0.15	UJ	ng/L	P409392	
		Prallethrin**	2.0	U	ng/L	P409392	
		Tau-Fluvalinate**	0.25	U	ng/L	P409392	
		Tetramethrin**	0.76	U	ng/L	P409392	
		Trans-Nonachlor**	0.20	U	ng/L	P409392	
		Triclosan Methyl**	0.15	U	ng/L	P409392	
		Trifluralin	0.20	U	ng/L	P409392	
		Chlordane	2.5	U	ng/L	P409392	
		Toxaphene	15	U	ng/L	P409392	
2302856	EPA 8270E	Acetochlor	0.26	I	ng/L	P409250	MS
		Alachlor	0.24	U	ng/L	P409250	
		Ametryn	0.57	U	ng/L	P409250	
		Atrazine	1.4		ng/L	P409250	
		Atrazine Desethyl	1.4	U	ng/L	P409250	
		Azinphos Methyl	1.9	U	ng/L	P409250	
		Azoxystrobin**	0.49	I	ng/L	P409250	
		Bromacil	1.0	I	ng/L	P409250	MS, RPD
		Butylate	0.38	U	ng/L	P409250	
		Caffeine**	12	I	ng/L	P409250	
		Carbophenothion	0.19	U	ng/L	P409250	
		Carfentrazone Ethyl**	0.095	U	ng/L	P409250	
		Chlorfenapyr**	0.17	U	ng/L	P409250	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P409250	
		Chlorpyrifos Methyl	0.047	U	ng/L	P409250	
		Coumaphos**	0.47	U	ng/L	P409250	
		Cyanazine	3.1	U	ng/L	P409250	
		Cyprodinil**	0.095	U	ng/L	P409250	
		Demeton	1.4	U	ng/L	P409250	
		Diazinon	0.12	U	ng/L	P409250	
		Difenoconazole**	0.57	U	ng/L	P409250	
		Dimethenamid**	0.20	I	ng/L	P409250	
		Dimethomorph**	0.60	I	ng/L	P409250	
		Disulfoton	0.47	U	ng/L	P409250	
		Dithiopyr**	0.17	U	ng/L	P409250	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2302856	EPA 8270E	EPTC	1.2	U	ng/L	P409250	
		Ethion	0.14	U	ng/L	P409250	
		Ethoprop	0.095	U	ng/L	P409250	
		Etridiazole**	0.14	U	ng/L	P409250	
		Fenamiphos	0.47	U	ng/L	P409250	
		Fenbuconazole**	0.12	U	ng/L	P409250	
		Fipronil	0.26	I	ng/L	P409250	
		Fipronil Desulfinyl**	0.12	U	ng/L	P409250	
		Fipronil Sulfide	0.14	U	ng/L	P409250	
		Fipronil Sulfone	0.14	U	ng/L	P409250	
		Fluazifop-P-butyl**	0.095	U	ng/L	P409250	
		Fludioxonil**	0.12	U	ng/L	P409250	
		Flumioxazin**	1.7	U	ng/L	P409250	
		Flutolanil**	0.49		ng/L	P409250	
		Fluxapyroxad**	0.73		ng/L	P409250	
		Fonofos	0.19	U	ng/L	P409250	
		Hexazinone	0.47	U	ng/L	P409250	
		Imazalil**	0.71	U	ng/L	P409250	
		Iprodione**	0.57	U	ng/L	P409250	
		Loratadine**	0.095	U	ng/L	P409250	
		Malathion	0.33	U	ng/L	P409250	
		Metalaxyl	0.71	U	ng/L	P409250	
		Metolachlor	2.7		ng/L	P409250	
		Metribuzin	2.4	U	ng/L	P409250	
		Mevinphos	1.0	U	ng/L	P409250	RPD
		Molinate	0.28	U	ng/L	P409250	
		Myclobutanil**	0.24	U	ng/L	P409250	
		Naled**	1.4	U	ng/L	P409250	
		Napropamide**	0.38	U	ng/L	P409250	
		Norflurazon	0.47	U	ng/L	P409250	
		Oxadiazon	0.28	U	ng/L	P409250	
		Oxyfluorfen**	0.14	U	ng/L	P409250	
		Parathion Ethyl	0.24	U	ng/L	P409250	
		Parathion Methyl	0.52	U	ng/L	P409250	
		Pendimethalin	0.95	U	ng/L	P409250	
		Phenytol**	3.3	U	ng/L	P409250	
		Phorate	0.50	U	ng/L	P409250	
		Prodiamine**	0.17	U	ng/L	P409250	
		Prometon	0.85	U	ng/L	P409250	
		Prometryn	0.19	U	ng/L	P409250	
		Pronamide**	0.14	U	ng/L	P409250	MS
		Propanil**	0.12	U	ng/L	P409250	RPD
		Propargite**	1.4	U	ng/L	P409250	
		Propiconazole**	0.47	U	ng/L	P409250	
		Pyraflufen Ethyl**	0.24	U	ng/L	P409250	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2302856	EPA 8270E	Pyridaben**	0.43	U	ng/L	P409250	RPD
		Pyriproxyfen**	0.12	U	ng/L	P409250	
		Simazine	2.3		ng/L	P409250	
		Stirophos**	0.12	U	ng/L	P409250	
		Sulfentrazone**	0.47	U	ng/L	P409250	
		Tebuconazole**	1.4	I	ng/L	P409250	
		Terbufos	0.095	U	ng/L	P409250	
		Terbutylazine	0.40	U	ng/L	P409250	
		Thiobencarb**	0.57	U	ng/L	P409250	
		Triadimefon**	0.24	U	ng/L	P409250	
2302857	EPA 200.7 Rev. 4.4	Calcium	10.3		mg/L	P409367	
		Iron	1.39E+03		ug/L	P409367	
		Magnesium	1.87		mg/L	P409367	
		Potassium	1.1	I	mg/L	P409367	
		Sodium	2.9		mg/L	P409367	
		Strontium	29.8		ug/L	P409367	
		Tin	3.0	U	ug/L	P409367	
		Titanium	3.4		ug/L	P409367	
		Vanadium	2.0	U	ug/L	P409367	
		Zinc	5.0	U	ug/L	P409367	
	EPA 200.8 Rev. 5.4	Aluminum	270		ug/L	P409367	
		Antimony	0.050	U	ug/L	P409367	
		Arsenic	0.49		ug/L	P409367	
		Barium	22.3		ug/L	P409367	
		Beryllium	0.019	I	ug/L	P409367	
		Boron**	10.5		ug/L	P409367	
		Cadmium	0.020	U	ug/L	P409367	
		Chromium	0.74	I	ug/L	P409367	
		Cobalt	0.260		ug/L	P409367	
		Copper	0.40	U	ug/L	P409367	
		Lead	0.33	I	ug/L	P409367	
		Manganese	49.6		ug/L	P409367	
		Molybdenum	0.18	I	ug/L	P409367	
		Nickel	0.50	U	ug/L	P409367	
		Selenium	0.20	U	ug/L	P409367	
		Silver	0.010	U	ug/L	P409367	
		Thallium	0.10	U	ug/L	P409367	
	SM 2340B	Hardness	33.5		mg/L	P409367	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

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

EPA 8321B: MS accuracy for oxamyl could not be assessed due to high concentration of parameter in the spiked sample.

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

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

Sample Location: Choctawhatchee River South of Carlisle Lake Collection Date/Time: 01/31/2022 13:15

Field ID: G3NW0130

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2302858	EPA 200.7 Rev. 4.4	Calcium	10.4		mg/L	P409367	
		Iron	1.27E+03		ug/L	P409367	
		Magnesium	1.97		mg/L	P409367	
		Potassium	1.1	I	mg/L	P409367	
		Sodium	2.8		mg/L	P409367	
		Strontium	28.6		ug/L	P409367	
		Tin	3.0	U	ug/L	P409367	
		Titanium	3.5		ug/L	P409367	
		Vanadium	2.0	U	ug/L	P409367	
		Zinc	5.0	U	ug/L	P409367	
	EPA 200.8 Rev. 5.4	Aluminum	295		ug/L	P409367	
		Antimony	0.050	U	ug/L	P409367	
		Arsenic	0.47		ug/L	P409367	
		Barium	20.7		ug/L	P409367	
		Beryllium	0.015	I	ug/L	P409367	
		Boron**	10.2		ug/L	P409367	
		Cadmium	0.020	U	ug/L	P409367	
		Chromium	0.77	I	ug/L	P409367	
		Cobalt	0.206		ug/L	P409367	
		Copper	0.52	I	ug/L	P409367	
		Lead	0.32	I	ug/L	P409367	
		Manganese	39.1		ug/L	P409367	
		Molybdenum	0.17	I	ug/L	P409367	
		Nickel	0.53	I	ug/L	P409367	
		Selenium	0.20	U	ug/L	P409367	
		Silver	0.010	U	ug/L	P409367	
		Thallium	0.10	U	ug/L	P409367	
	SM 2340B	Hardness	34.1		mg/L	P409367	

Non-Conformance Report

NCR ID: 9244

<u>Event(s)</u>	<u>Job(s)</u>	<u>Sample(s)</u>	<u>Test(s)</u>
NW-DIST-2022-02-02-01	TLH-2022-02-02-03	2302846	
NW-DIST-2022-02-02-01	TLH-2022-02-02-03	2302848	

NCR Type: SHIPPING/RECEIVING

NCR Category: Samples arrived late

Observation: Samples arrived late, samples received within the acceptable temperature range.

Resolution: Samples will be qualified as appropriate. Customer contacted, email correspondence attached to sample submittal forms. Biology and Chemistry supervisors were notified by email.

Authorized by/Date: Kyle Klug 2/7/2022

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P409322

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P409358

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P409367

Component	Result	Code	Units
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
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P409367

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	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
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	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: P409477

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409479

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409637

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409304

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409516

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409332

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409320

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

Reference Method: EPA 8270E
Batch ID: P409250

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P409250

Component	Result	Code	Units
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P409250

Component	Result	Code	Units
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P409250

Component	Result	Code	Units
Phenytoin	3.5	U	ng/L
Phenytoin	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8270E

Batch ID: P409392

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P409392

Component	Result	Code	Units
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P409392

Component	Result	Code	Units
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P409392

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B

Batch ID: P409301

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P409301

Component	Result	Code	Units
2,4,5-T	0.0040	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	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	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: P409328

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

Reference Method: EPA 8321B

Batch ID: P409339

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P409433

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

Reference Method: SM 2540 C-2011
Batch ID: P409806

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P409808

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P409436

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P410065

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P409322

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.9		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P409358

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.2		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P409367

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	105		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	105		P	85 - 115
Sodium	99.0		P	85 - 115
Strontium	104		P	85 - 115
Tin	110		P	85 - 115
Titanium	105		P	85 - 115
Vanadium	98.4		P	85 - 115
Zinc	108		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P409367

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	99.6		P	85 - 115
Arsenic	102		P	85 - 115
Barium	105		P	85 - 115
Beryllium	94.8		P	85 - 115
Boron	103		P	85 - 115
Cadmium	104		P	85 - 115
Chromium	101		P	85 - 115
Cobalt	102		P	85 - 115
Copper	99.7		P	85 - 115
Lead	101		P	85 - 115
Manganese	102		P	85 - 115
Molybdenum	98.8		P	85 - 115
Nickel	103		P	85 - 115
Selenium	102		P	85 - 115
Silver	106		P	85 - 115
Thallium	104		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409477

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	99.1		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409479

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409637

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	90.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409304

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409516

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409332

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409320

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

Reference Method: EPA 8270E
Batch ID: P409250

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	96.2		P	70 - 121
Alachlor	88.6		P	68 - 119
Ametryn	96.4		P	64 - 139
Atrazine	94.2		P	76 - 120
Atrazine Desethyl	50.0		P	44 - 126
Azinphos Methyl	82.2		P	43 - 192
Azoxystrobin	91.4		P	36 - 224
Bromacil	68.6		P	52 - 121
Butylate	66.3		P	28 - 91.0
Caffeine	131		P	50 - 134
Carbophenothion	90.5		P	56 - 129
Carfentrazone Ethyl	88.5		P	60 - 141
Chlorfenapyr	91.5		P	56 - 115
Chlorpyrifos Ethyl	111		P	60 - 118
Chlorpyrifos Methyl	97.5		P	68 - 119
Coumaphos	137		P	18 - 250

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P409250

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cyanazine	86.3		P	61 - 250
Cyprodinil	85.9		P	55 - 145
Demeton	85.5		P	30 - 159
Diazinon	108		P	70 - 123
Difenoconazole	89.8		P	49 - 204
Dimethenamid	82.6		P	64 - 115
Dimethomorph	86.6		P	12 - 219
Disulfoton	87.3		P	44 - 125
Dithiopyr	101		P	64 - 115
EPTC	62.6		P	28 - 86.0
Ethion	97.5		P	33 - 125
Ethoprop	87.2		P	64 - 116
Etridiazole	65.7		P	34 - 91.0
Fenamiphos	107		P	12 - 127
Fenbuconazole	113		P	59 - 151
Fipronil	96.3		P	67 - 129
Fipronil Desulfinyl	90.6		P	65 - 127
Fipronil Sulfide	90.2		P	61 - 116
Fipronil Sulfone	86.9		P	55 - 117
Fluazifop-P-butyl	87.6		P	62 - 127
Fludioxonil	92.9		P	62 - 128
Flumioxazin	121		P	33 - 250
Flutolanil	84.7		P	56 - 127
Fluxapyroxad	109		P	45 - 128
Fonofos	85.4		P	62 - 111
Hexazinone	88.3		P	46 - 139
Imazalil	79.3		P	38 - 142
Iprodione	62.7		P	47 - 135
Loratadine	76.1		P	10 - 244
Malathion	122		P	61 - 139
Metalaxyl	84.3		P	10 - 119
Metolachlor	93.5		P	65 - 118
Metribuzin	85.8		P	51 - 250
Mevinphos	80.1		P	53 - 121
Molinate	75.2		P	42 - 96.0
Myclobutanil	91.0		P	55 - 128
Naled	90.1		P	10 - 98.0
Napropamide	82.8		P	49 - 121
Norflurazon	93.2		P	61 - 126
Oxadiazon	80.4		P	59 - 116
Oxyfluorfen	107		P	64 - 137
Parathion Ethyl	88.8		P	70 - 112
Parathion Methyl	108		P	76 - 133
Pendimethalin	80.5		P	52 - 117
Phenytol	53.8		P	10 - 199
Phorate	97.5		P	48 - 121
Prodiamine	124		P	26 - 142
Prometon	101		P	43 - 123
Prometryn	82.9		P	66 - 127
Pronamide	92.3		P	75 - 121
Propanil	100		P	45 - 150
Propargite	127		P	42 - 208

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P409250

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Propiconazole	101		P	60 - 125
Pyraflufen Ethyl	113		P	70 - 138
Pyridaben	117		P	35 - 245
Pyriproxyfen	70.1		P	30 - 149
Simazine	84.0		P	72 - 125
Stirophos	88.0		P	29 - 164
Sulfentrazone	59.6		P	21 - 139
Tebuconazole	115		P	10 - 115
Terbufos	105		P	60 - 123
Terbuthylazine	86.6		P	72 - 115
Thiobencarb	99.1		P	31 - 139
Triadimefon	82.3		P	65 - 116

Reference Method: EPA 8270E
Batch ID: P409392

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	62.2		P	10 - 93.0
Alpha-BHC	89.1		P	75 - 106
Alpha-Chlordane	78.1		P	50 - 109
Beta-BHC	97.8		P	65 - 135
Beta-Cyfluthrin	107		P	23 - 167
Bifenthrin	63.8		P	11 - 123
Chlorothalonil	134		P	26 - 182
Cis-Nonachlor	70.6		P	40 - 111
Cypermethrin	86.7		P	25 - 155
Dacthal	90.4		P	73 - 112
DDD-p,p'	72.3		P	47 - 108
DDE-p,p'	81.8		P	48 - 107
DDT-p,p'	91.5		P	49 - 111
Delta-BHC	107		P	68 - 143
Deltamethrin	106		P	16 - 176
Dichlobenil	91.3		P	32 - 113
Dicofol	74.7		P	50 - 108
Dieldrin	75.4		P	56 - 110
Endosulfan I	84.0		P	60 - 105
Endosulfan II	80.6		P	50 - 120
Endosulfan Sulfate	88.3		P	55 - 121
Endrin	9.30		F	35 - 117
Endrin Aldehyde	57.0		P	36 - 116
Endrin Ketone	148		F	56 - 130
Esfenvalerate	90.6		P	10 - 179
Ethalfuralin	70.1		P	49 - 99.0
Fenpropathrin	69.3		P	35 - 119
Gamma-BHC	89.3		P	72 - 115
Gamma-Chlordane	76.1		P	45 - 107
Heptachlor	73.3		P	41 - 100
Heptachlor Epoxide	78.4		P	58 - 106
Hexachlorobenzene	78.4		P	39 - 100
Kepone	62.9		P	10 - 191
Lambda-Cyhalothrin	96.7		P	10 - 186
Methoprene	25.6		P	10 - 129

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P409392

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Methoxychlor	87.6		P	61 - 111
MGK-264	86.0		P	20 - 123
Mirex	58.1		P	10 - 182
Oxychlorane	76.9		P	39 - 110
Permethrin	83.8		P	26 - 152
Phenothrin	64.9		P	10 - 109
Piperonyl Butoxide	0.166		F	27 - 142
Prallethrin	62.1		P	14 - 109
Tau-Fluvalinate	69.6		P	16 - 134
Tetramethrin	61.6		P	10 - 125
Trans-Nonachlor	76.9		P	45 - 107
Triclosan Methyl	83.8		P	60 - 110
Trifluralin	74.5		P	49 - 98.0

Reference Method: EPA 8276
Batch ID: P409392

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	88.1		P	61 - 118
Toxaphene	91.3		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P409301

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	91.8		P	40 - 150
2,4,5-T	73.8		P	40 - 150
Acetaminophen	87.0		P	30 - 150
Acetamiprid	94.5		P	40 - 150
Afidopyropen	75.7		P	40 - 150
Bentazon	101		P	30 - 150
Benzovindiflupyr	85.1		P	40 - 150
Carbamazepine	84.1		P	40 - 150
Clothianidin	86.7		P	40 - 150
Dinotefuran	90.6		P	40 - 150
Diuron	102		P	40 - 150
Fenuron	94.9		P	40 - 150
Fluridone	88.9		P	40 - 150
Hydrocodone	93.5		P	40 - 150
Ibuprofen	80.5		P	40 - 150
Imazapyr	96.2		P	40 - 150
Imidacloprid	94.7		P	40 - 150
Linuron	76.0		P	40 - 150
Mandestrobin	96.6		P	40 - 150
MCPP	92.2		P	40 - 150
Naproxen	60.9		P	40 - 150
Primidone	118		P	40 - 150
Pyraclostrobin	79.5		P	40 - 150
Silvex	69.8		P	40 - 150
Thiamethoxam	91.1		P	40 - 150
Tolfenpyrad	59.2		P	30 - 150
Triclopyr	75.3		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P409328

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	80.3		P	40 - 150
AMPA	86.2		P	40 - 150
Endothall	78.3		P	40 - 150
Glufosinate	94.3		P	40 - 150
Glyphosate	88.9		P	40 - 150
Sucralose	81.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P409339

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	65.1		P	40 - 150
Aldicarb	53.2		P	30 - 150
Aldicarb Sulfone	111		P	40 - 150
Aldicarb Sulfoxide	82.4		P	40 - 150
Carbaryl	73.5		P	40 - 150
Carbofuran	85.9		P	40 - 150
Methiocarb	78.5		P	40 - 150
Methomyl	82.9		P	40 - 150
Oxamyl	112		P	40 - 150
Propoxur	88.2		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P409433

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.6		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P409436

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.7		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P410065

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P409367

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302658	Calcium	103		P	80 - 120
2302658	Iron	105	108	P/P	80 - 120
2302658	Magnesium	102		P	80 - 120
2302658	Potassium	101	104	P/P	80 - 120
2302658	Sodium	101	104	P/P	80 - 120
2302658	Strontium	103	104	P/P	80 - 120
2302658	Tin	109	109	P/P	80 - 120
2302658	Titanium	110	105	P/P	80 - 120
2302658	Vanadium	101	98.8	P/P	80 - 120
2302658	Zinc	106	105	P/P	80 - 120
2302782	Calcium	102		P	80 - 120
2302782	Iron	107		P	80 - 120
2302782	Magnesium	106		P	80 - 120
2302782	Potassium	103		P	80 - 120
2302782	Sodium	104		P	80 - 120
2302782	Strontium	103		P	80 - 120
2302782	Tin	107		P	80 - 120
2302782	Titanium	103		P	80 - 120
2302782	Vanadium	97.9		P	80 - 120
2302782	Zinc	104		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P409367

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302658	Aluminum	101	103	P/P	80 - 120
2302658	Antimony	99.9	99.9	P/P	80 - 120
2302658	Arsenic	98.9	99.3	P/P	80 - 120
2302658	Barium	105	105	P/P	80 - 120
2302658	Beryllium	100	98.2	P/P	80 - 120
2302658	Boron	106	107	P/P	80 - 120
2302658	Cadmium	102	109	P/P	80 - 120
2302658	Chromium	103	103	P/P	80 - 120
2302658	Cobalt	99.4	99.5	P/P	80 - 120
2302658	Copper	96.9	96.9	P/P	80 - 120
2302658	Lead	101	100	P/P	80 - 120
2302658	Manganese	106	106	P/P	80 - 120
2302658	Molybdenum	98.2	104	P/P	80 - 120
2302658	Nickel	100	99.8	P/P	80 - 120
2302658	Selenium	97.5	96.0	P/P	80 - 120
2302658	Silver	105	105	P/P	80 - 120
2302658	Thallium	106	106	P/P	80 - 120
2302782	Aluminum	99.6		P	80 - 120
2302782	Antimony	99.6		P	80 - 120
2302782	Arsenic	98.4		P	80 - 120
2302782	Barium	102		P	80 - 120
2302782	Beryllium	96.8		P	80 - 120
2302782	Boron	107		P	80 - 120
2302782	Cadmium	107		P	80 - 120
2302782	Chromium	99.0		P	80 - 120
2302782	Cobalt	98.3		P	80 - 120
2302782	Copper	94.3		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P409367

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302782	Lead	99.6		P	80 - 120
2302782	Manganese	99.9		P	80 - 120
2302782	Molybdenum	104		P	80 - 120
2302782	Nickel	97.3		P	80 - 120
2302782	Selenium	95.4		P	80 - 120
2302782	Silver	105		P	80 - 120
2302782	Thallium	107		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302705	Chloride	92.6		P	90 - 110
2302862	Chloride	94.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409479

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302705	Sulfate	94.5		P	90 - 110
2302862	Sulfate	94.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409637

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302706	Ammonia-N	96.8	95.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409516

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302780	NO2NO3-N	97.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409320

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302848	O-Phosphate-P	96.7	98.4	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P409250

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303075	Acetochlor	78.7	96.7	P/P	65 - 124
2303075	Alachlor	73.5	88.4	P/P	61 - 121
2303075	Ametryn	82.4	90.6	P/P	52 - 216
2303075	Atrazine	55.9	102	F/P	68 - 133
2303075	Atrazine Desethyl	32.5	44.3	P/P	15 - 160
2303075	Azinphos Methyl	74.0	87.2	P/P	40 - 292
2303075	Azoxystrobin	77.2	92.6	P/P	12 - 242
2303075	Bromacil	46.3	64.8	F/P	54 - 167

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P409250

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303075	Butylate	49.0	59.8	P/P	14 - 94.0
2303075	Caffeine	97.3	115	P/P	10 - 226
2303075	Carbophenothion	88.1	88.2	P/P	49 - 122
2303075	Carfentrazone Ethyl	72.6	83.5	P/P	53 - 138
2303075	Chlorfenapyr	88.6	81.9	P/P	50 - 150
2303075	Chlorpyrifos Ethyl	96.9	110	P/P	52 - 122
2303075	Chlorpyrifos Methyl	86.5	96.3	P/P	66 - 117
2303075	Coumaphos	135	152	P/P	50 - 220
2303075	Cyanazine	73.3	86.8	P/P	43 - 245
2303075	Cyprodinil	74.4	90.2	P/P	50 - 150
2303075	Demeton	75.8	90.3	P/P	43 - 188
2303075	Diazinon	85.4	104	P/P	69 - 131
2303075	Difenoconazole	85.0	90.9	P/P	34 - 231
2303075	Dimethenamid	70.3	86.7	P/P	55 - 118
2303075	Dimethomorph	75.8	91.2	P/P	50 - 150
2303075	Disulfoton	78.6	96.5	P/P	38 - 141
2303075	Dithiopyr	86.6	93.1	P/P	42 - 116
2303075	EPTC	46.3	55.3	P/P	18 - 85.0
2303075	Ethion	92.8	88.1	P/P	10 - 131
2303075	Ethoprop	78.5	95.9	P/P	65 - 129
2303075	Etridiazole	52.1	63.0	P/P	50 - 150
2303075	Fenamiphos	101	114	P/P	31 - 137
2303075	Fenbuconazole	96.7	115	P/P	57 - 160
2303075	Fipronil	74.1	95.3	P/P	62 - 132
2303075	Fipronil Desulfanyl	65.2	88.7	P/P	57 - 131
2303075	Fipronil Sulfide	70.2	88.2	P/P	15 - 138
2303075	Fipronil Sulfone	70.4	83.7	P/P	21 - 134
2303075	Fluazifop-P-butyl	79.2	83.7	P/P	54 - 133
2303075	Fludioxonil	72.6	86.8	P/P	58 - 127
2303075	Flumioxazin	127	164	P/P	33 - 300
2303075	Flutolanil	64.4	85.5	P/P	42 - 130
2303075	Fluxapyroxad	88.9	127	P/P	23 - 141
2303075	Fonofos	72.3	87.7	P/P	58 - 119
2303075	Hexazinone	68.6	90.8	P/P	68 - 172
2303075	Imazalil	76.7	74.3	P/P	48 - 283
2303075	Iprodione	58.8	70.2	P/P	38 - 140
2303075	Loratadine	71.5	81.9	P/P	50 - 150
2303075	Malathion	103	116	P/P	40 - 137
2303075	Metalaxyl	69.9	82.5	P/P	21 - 129
2303075	Metolachlor	72.0	87.8	P/P	55 - 122
2303075	Metribuzin	70.5	74.5	P/P	38 - 187
2303075	Mevinphos	62.0	82.7	P/P	54 - 134
2303075	Molinate	63.4	77.5	P/P	41 - 97.0
2303075	Myclobutanil	76.8	89.0	P/P	56 - 125
2303075	Naled	75.1	88.7	P/P	10 - 108
2303075	Napropamide	67.1	80.3	P/P	50 - 150
2303075	Norflurazon	74.4	91.9	P/P	32 - 122
2303075	Oxadiazon	71.0	74.7	P/P	40 - 119
2303075	Oxyfluorfen	102	108	P/P	61 - 153
2303075	Parathion Ethyl	74.0	80.5	P/P	59 - 130
2303075	Parathion Methyl	91.7	108	P/P	65 - 155
2303075	Pendimethalin	72.1	78.3	P/P	49 - 138

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P409250

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303075	Phenytoin	50.1	66.3	P/P	50 - 200
2303075	Phorate	95.2	88.9	P/P	54 - 161
2303075	Prodiamine	109	117	P/P	33 - 161
2303075	Prometon	95.4	111	P/P	48 - 140
2303075	Prometryn	72.4	88.8	P/P	55 - 134
2303075	Pronamide	54.6	92.9	F/P	66 - 137
2303075	Propanil	76.2	104	P/P	50 - 150
2303075	Propargite	114	127	P/P	50 - 200
2303075	Propiconazole	89.9	104	P/P	36 - 150
2303075	Pyraflufen Ethyl	96.6	109	P/P	50 - 150
2303075	Pyridaben	108	117	P/P	50 - 200
2303075	Pyriproxyfen	64.5	67.2	P/P	10 - 165
2303075	Simazine	70.6	87.4	P/P	57 - 145
2303075	Stirophos	78.2	84.4	P/P	50 - 150
2303075	Tebuconazole	86.4	111	P/P	10 - 127
2303075	Terbufos	103	117	P/P	59 - 138
2303075	Terbuthylazine	73.9	89.8	P/P	68 - 119
2303075	Thiobencarb	78.5	96.1	P/P	50 - 150
2303075	Triadimefon	63.6	85.9	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P409392

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303520	Aldrin	64.5	61.6	P/P	10 - 89.0
2303520	Alpha-BHC	89.8	85.6	P/P	71 - 105
2303520	Alpha-Chlordane	75.3	80.8	P/P	43 - 107
2303520	Beta-BHC	91.6	100	P/P	57 - 152
2303520	Beta-Cyfluthrin	115	109	P/P	29 - 186
2303520	Bifenthrin	74.9	69.7	P/P	19 - 119
2303520	Chlorothalonil	138	124	P/P	10 - 245
2303520	Cis-Nonachlor	79.0	73.9	P/P	36 - 110
2303520	Cypermethrin	95.8	87.9	P/P	24 - 169
2303520	Dacthal	90.3	90.3	P/P	62 - 115
2303520	DDD-p,p'	74.5	72.5	P/P	36 - 109
2303520	DDE-p,p'	80.9	80.2	P/P	30 - 114
2303520	DDT-p,p'	95.7	94.7	P/P	42 - 108
2303520	Delta-BHC	102	105	P/P	60 - 164
2303520	Deltamethrin	113	106	P/P	10 - 210
2303520	Dichlobenil	88.5	86.4	P/P	23 - 108
2303520	Dicofol	77.6	76.1	P/P	44 - 109
2303520	Dieldrin	84.4	83.8	P/P	37 - 119
2303520	Endosulfan I	85.4	83.4	P/P	52 - 105
2303520	Endosulfan II	78.8	77.3	P/P	35 - 127
2303520	Endosulfan Sulfate	86.2	83.3	P/P	39 - 130
2303520	Endrin	54.4	65.9	P/P	30 - 116
2303520	Endrin Aldehyde	55.0	55.7	P/P	20 - 110
2303520	Endrin Ketone	101	89.3	P/P	48 - 134
2303520	Esfenvalerate	95.7	87.1	P/P	10 - 199
2303520	Ethalfuralin	74.5	73.1	P/P	48 - 95.0
2303520	Fenpropathrin	85.8	80.6	P/P	37 - 121
2303520	Gamma-BHC	89.3	87.6	P/P	61 - 126

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P409392

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303520	Gamma-Chlordane	77.8	76.7	P/P	39 - 105
2303520	Heptachlor	74.7	68.1	P/P	38 - 96.0
2303520	Heptachlor Epoxide	81.9	76.5	P/P	42 - 114
2303520	Hexachlorobenzene	77.8	73.8	P/P	39 - 93.0
2303520	Kepone	63.8	67.4	P/P	10 - 215
2303520	Lambda-Cyhalothrin	107	94.7	P/P	10 - 204
2303520	Methoprene	49.7	64.7	P/P	17 - 108
2303520	Methoxychlor	86.6	86.8	P/P	56 - 115
2303520	MGK-264	81.8	82.3	P/P	35 - 120
2303520	Mirex	63.1	61.5	P/P	10 - 178
2303520	Oxychlordane	80.6	77.0	P/P	47 - 91.0
2303520	Permethrin	90.0	87.7	P/P	27 - 170
2303520	Phenothrin	77.3	82.5	P/P	10 - 133
2303520	Piperonyl Butoxide	48.0	100	P/P	23 - 150
2303520	Prallethrin	66.9	74.6	P/P	21 - 113
2303520	Tau-Fluvalinate	82.6	80.6	P/P	16 - 158
2303520	Tetramethrin	86.2	89.0	P/P	22 - 132
2303520	Trans-Nonachlor	79.2	78.0	P/P	43 - 102
2303520	Triclosan Methyl	81.5	84.3	P/P	49 - 109
2303520	Trifluralin	72.7	71.2	P/P	48 - 93.0

Reference Method: EPA 8276

Batch ID: P409392

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303522	Chlordane	94.4	79.4	P/P	55 - 128
2303522	Toxaphene	95.2	82.5	P/P	57 - 211

Reference Method: EPA 8321B

Batch ID: P409301

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302437	2,4-D	96.7	108	P/P	40 - 150
2302437	2,4,5-T	77.3	77.0	P/P	40 - 150
2302437	Acetaminophen	93.1	103	P/P	30 - 150
2302437	Acetamiprid	95.7	94.3	P/P	40 - 150
2302437	Afidopyrophen	37.0	46.4	F/P	40 - 150
2302437	Bentazon	62.6	66.8	P/P	30 - 150
2302437	Benzovindiflupyr	76.4	95.6	P/P	40 - 150
2302437	Carbamazepine	88.4	89.6	P/P	40 - 150
2302437	Clothianidin	91.2	103	P/P	40 - 150
2302437	Dinotefuran	109	116	P/P	40 - 150
2302437	Diuron	72.3	90.8	P/P	40 - 150
2302437	Fenuron	83.6	91.1	P/P	40 - 150
2302437	Fluridone	78.6	88.9	P/P	40 - 150
2302437	Hydrocodone	89.3	75.4	P/P	40 - 150
2302437	Ibuprofen	68.3	72.9	P/P	40 - 150
2302437	Imazapyr	80.1	89.8	P/P	40 - 150
2302437	Imidacloprid	140	148	P/P	40 - 150
2302437	Linuron	83.3	81.3	P/P	40 - 150
2302437	Mandestrobin	88.5	92.8	P/P	40 - 150
2302437	MCPP	87.2	115	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P409301

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302437	Naproxen	78.5	73.3	P/P	40 - 150
2302437	Primidone	108	109	P/P	40 - 150
2302437	Pyraclostrobin	80.8	91.6	P/P	40 - 150
2302437	Silvex	67.1	76.3	P/P	40 - 150
2302437	Thiamethoxam	105	115	P/P	40 - 150
2302437	Tolfenpyrad	43.9	50.5	P/P	30 - 150
2302437	Triclopyr	77.0	70.7	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P409328

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302854	Acesulfame K	87.9	86.9	P/P	40 - 150
2302854	AMPA	97.4	101	P/P	40 - 150
2302854	Endothall	117	112	P/P	40 - 150
2302854	Glufosinate	84.4	88.2	P/P	40 - 150
2302854	Glyphosate	84.2	80.9	P/P	40 - 150
2302854	Sucralose	73.6	88.3	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P409339

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302736	3-Hydroxycarbofuran	114	87.9	P/P	40 - 150
2302736	Aldicarb	76.7	55.4	P/P	30 - 150
2302736	Aldicarb Sulfone	104	123	P/P	40 - 150
2302736	Aldicarb Sulfoxide	54.3	40.6	P/P	40 - 150
2302736	Carbaryl	79.9	69.3	P/P	40 - 150
2302736	Carbofuran	95.4	98.0	P/P	40 - 150
2302736	Methiocarb	80.3	76.3	P/P	40 - 150
2302736	Methomyl	91.8	98.1	P/P	40 - 150
2302736	Propoxur	85.3	85.4	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P409436

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302600	Fluoride	99.2	98.5	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P410065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303636	Organic Carbon	93.4	94.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P409322

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302832	Color (true)	1.57	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P409358

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302846	Turbidity	3.23	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P409367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302658	Calcium	0.940	Spike	P	0 - 20
2302658	Iron	2.42	Spike	P	0 - 20
2302658	Magnesium	2.41	Spike	P	0 - 20
2302658	Potassium	2.09	Spike	P	0 - 20
2302658	Sodium	2.17	Spike	P	0 - 20
2302658	Strontium	0.931	Spike	P	0 - 20
2302658	Tin	0.199	Spike	P	0 - 20
2302658	Titanium	3.99	Spike	P	0 - 20
2302658	Vanadium	1.74	Spike	P	0 - 20
2302658	Zinc	1.58	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P409367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302658	Aluminum	0.926	Spike	P	0 - 20
2302658	Antimony	0.00774	Spike	P	0 - 20
2302658	Arsenic	0.320	Spike	P	0 - 20
2302658	Barium	0.457	Spike	P	0 - 20
2302658	Beryllium	1.78	Spike	P	0 - 20
2302658	Boron	0.848	Spike	P	0 - 20
2302658	Cadmium	6.93	Spike	P	0 - 20
2302658	Chromium	0.169	Spike	P	0 - 20
2302658	Cobalt	0.104	Spike	P	0 - 20
2302658	Copper	0.0410	Spike	P	0 - 20
2302658	Lead	0.322	Spike	P	0 - 20
2302658	Manganese	0.0581	Spike	P	0 - 20
2302658	Molybdenum	5.86	Spike	P	0 - 20
2302658	Nickel	0.181	Spike	P	0 - 20
2302658	Selenium	1.51	Spike	P	0 - 20
2302658	Silver	0.0346	Spike	P	0 - 20
2302658	Thallium	0.488	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409477

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302705	Chloride	0.974	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409479

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302705	Sulfate	1.26	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409637

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302706	Ammonia-N	0.965	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409304

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302753	Kjeldahl Nitrogen	3.87	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409516

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302780	NO2NO3-N	0.250	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409332

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302894	Total-P	0.432	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409320

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302848	O-Phosphate-P	1.51	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P409250

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303075	Acetochlor	20.6	Spike	P	0 - 27
2303075	Alachlor	18.5	Spike	P	0 - 27

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P409250

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303075	Ametryn	9.53	Spike	P	0 - 34
2303075	Atrazine	27.7	Spike	P	0 - 41
2303075	Atrazine Desethyl	30.8	Spike	P	0 - 38
2303075	Azinphos Methyl	16.4	Spike	P	0 - 62
2303075	Azoxystrobin	13.8	Spike	P	0 - 32
2303075	Bromacil	33.2	Spike	F	0 - 30
2303075	Butylate	19.8	Spike	P	0 - 59
2303075	Caffeine	13.3	Spike	P	0 - 60
2303075	Carbophenothion	0.0908	Spike	P	0 - 25
2303075	Carfentrazone Ethyl	13.9	Spike	P	0 - 26
2303075	Chlorfenapyr	7.88	Spike	P	0 - 30
2303075	Chlorpyrifos Ethyl	12.3	Spike	P	0 - 27
2303075	Chlorpyrifos Methyl	10.7	Spike	P	0 - 26
2303075	Coumaphos	11.9	Spike	P	0 - 30
2303075	Cyanazine	16.9	Spike	P	0 - 58
2303075	Cyprodinil	19.2	Spike	P	0 - 30
2303075	Demeton	17.5	Spike	P	0 - 25
2303075	Diazinon	19.5	Spike	P	0 - 29
2303075	Difenoconazole	6.68	Spike	P	0 - 25
2303075	Dimethenamid	20.9	Spike	P	0 - 30
2303075	Dimethomorph	18.4	Spike	P	0 - 30
2303075	Disulfoton	20.4	Spike	P	0 - 33
2303075	Dithiopyr	7.19	Spike	P	0 - 22
2303075	EPTC	17.7	Spike	P	0 - 38
2303075	Ethion	5.20	Spike	P	0 - 79
2303075	Ethoprop	19.9	Spike	P	0 - 23
2303075	Etridiazole	18.9	Spike	P	0 - 30
2303075	Fenamiphos	11.9	Spike	P	0 - 58
2303075	Fenbuconazole	16.9	Spike	P	0 - 37
2303075	Fipronil	21.8	Spike	P	0 - 33
2303075	Fipronil Desulfinyl	23.7	Spike	P	0 - 26
2303075	Fipronil Sulfide	12.1	Spike	P	0 - 37
2303075	Fipronil Sulfone	8.88	Spike	P	0 - 50
2303075	Fluazifop-P-butyl	5.56	Spike	P	0 - 24
2303075	Fludioxonil	17.8	Spike	P	0 - 26
2303075	Flumioxazin	25.9	Spike	P	0 - 37
2303075	Flutolanil	19.1	Spike	P	0 - 26
2303075	Fluxapyroxad	32.8	Spike	P	0 - 34
2303075	Fonofos	19.2	Spike	P	0 - 27
2303075	Hexazinone	25.0	Spike	P	0 - 36
2303075	Imazalil	3.14	Spike	P	0 - 65
2303075	Iprodione	17.7	Spike	P	0 - 33
2303075	Loratadine	13.5	Spike	P	0 - 30
2303075	Malathion	12.5	Spike	P	0 - 44
2303075	Metalaxyl	16.6	Spike	P	0 - 38
2303075	Metolachlor	18.0	Spike	P	0 - 36
2303075	Metribuzin	5.56	Spike	P	0 - 63
2303075	Mevinphos	28.7	Spike	F	0 - 26
2303075	Molinate	20.0	Spike	P	0 - 40
2303075	Myclobutanil	14.7	Spike	P	0 - 21
2303075	Naled	16.6	Spike	P	0 - 26

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P409250

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303075	Napropamide	17.9	Spike	P	0 - 30
2303075	Norflurazon	21.0	Spike	P	0 - 24
2303075	Oxadiazon	5.14	Spike	P	0 - 27
2303075	Oxyfluorfen	5.99	Spike	P	0 - 24
2303075	Parathion Ethyl	8.40	Spike	P	0 - 28
2303075	Parathion Methyl	16.6	Spike	P	0 - 27
2303075	Pendimethalin	8.24	Spike	P	0 - 31
2303075	Phenytoin	27.9	Spike	P	0 - 30
2303075	Phorate	6.85	Spike	P	0 - 27
2303075	Prodiamine	7.15	Spike	P	0 - 52
2303075	Prometon	15.5	Spike	P	0 - 31
2303075	Prometryn	20.4	Spike	P	0 - 28
2303075	Pronamide	23.2	Spike	P	0 - 26
2303075	Propanil	30.8	Spike	F	0 - 30
2303075	Propargite	11.2	Spike	P	0 - 30
2303075	Propiconazole	14.9	Spike	P	0 - 31
2303075	Pyraflufen Ethyl	12.5	Spike	P	0 - 30
2303075	Pyridaben	7.44	Spike	P	0 - 30
2303075	Pyriproxyfen	4.09	Spike	P	0 - 50
2303075	Simazine	21.4	Spike	P	0 - 29
2303075	Stirophos	7.59	Spike	P	0 - 30
2303075	Sulfentrazone	36.8	Spike	F	0 - 33
2303075	Tebuconazole	20.3	Spike	P	0 - 44
2303075	Terbufos	12.6	Spike	P	0 - 29
2303075	Terbuthylazine	19.4	Spike	P	0 - 27
2303075	Thiobencarb	20.1	Spike	P	0 - 30
2303075	Triadimefon	29.8	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P409392

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303520	Aldrin	4.62	Spike	P	0 - 37
2303520	Alpha-BHC	4.79	Spike	P	0 - 16
2303520	Alpha-Chlordane	7.04	Spike	P	0 - 28
2303520	Beta-BHC	8.82	Spike	P	0 - 32
2303520	Beta-Cyfluthrin	5.72	Spike	P	0 - 41
2303520	Bifenthrin	7.28	Spike	P	0 - 36
2303520	Chlorothalonil	11.3	Spike	P	0 - 54
2303520	Cis-Nonachlor	6.71	Spike	P	0 - 33
2303520	Cypermethrin	8.60	Spike	P	0 - 38
2303520	Dacthal	0.0623	Spike	P	0 - 23
2303520	DDD-p,p'	2.70	Spike	P	0 - 35
2303520	DDE-p,p'	0.858	Spike	P	0 - 27
2303520	DDT-p,p'	1.05	Spike	P	0 - 31
2303520	Delta-BHC	3.59	Spike	P	0 - 30
2303520	Deltamethrin	6.26	Spike	P	0 - 76
2303520	Dichlobenil	2.37	Spike	P	0 - 33
2303520	Dicofol	1.95	Spike	P	0 - 24
2303520	Dieldrin	0.692	Spike	P	0 - 35

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P409392

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303520	Endosulfan I	2.42	Spike	P	0 - 25
2303520	Endosulfan II	1.92	Spike	P	0 - 31
2303520	Endosulfan Sulfate	3.47	Spike	P	0 - 38
2303520	Endrin	19.1	Spike	P	0 - 53
2303520	Endrin Aldehyde	1.19	Spike	P	0 - 81
2303520	Endrin Ketone	12.1	Spike	P	0 - 33
2303520	Esfenvalerate	9.44	Spike	P	0 - 46
2303520	Ethalfuralin	1.93	Spike	P	0 - 22
2303520	Fenpropathrin	6.15	Spike	P	0 - 29
2303520	Gamma-BHC	1.94	Spike	P	0 - 17
2303520	Gamma-Chlordane	1.41	Spike	P	0 - 28
2303520	Heptachlor	9.26	Spike	P	0 - 28
2303520	Heptachlor Epoxide	6.02	Spike	P	0 - 23
2303520	Hexachlorobenzene	5.26	Spike	P	0 - 22
2303520	Kepone	5.61	Spike	P	0 - 61
2303520	Lambda-Cyhalothrin	11.8	Spike	P	0 - 52
2303520	Methoprene	26.3	Spike	P	0 - 38
2303520	Methoxychlor	0.222	Spike	P	0 - 29
2303520	MGK-264	0.586	Spike	P	0 - 41
2303520	Mirex	2.49	Spike	P	0 - 39
2303520	Oxychlordane	4.57	Spike	P	0 - 33
2303520	Permethrin	2.64	Spike	P	0 - 39
2303520	Phenothrin	6.57	Spike	P	0 - 52
2303520	Piperonyl Butoxide	70.5	Spike	P	0 - 91
2303520	Prallethrin	11.0	Spike	P	0 - 34
2303520	Tau-Fluvalinate	2.44	Spike	P	0 - 41
2303520	Tetramethrin	3.19	Spike	P	0 - 43
2303520	Trans-Nonachlor	1.50	Spike	P	0 - 31
2303520	Triclosan Methyl	3.33	Spike	P	0 - 24
2303520	Trifluralin	2.09	Spike	P	0 - 23

Reference Method: EPA 8276
Batch ID: P409392

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303522	Chlordane	17.2	Spike	P	0 - 25
2303522	Toxaphene	14.3	Spike	P	0 - 24

Reference Method: EPA 8321B
Batch ID: P409301

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302437	2,4-D	7.92	Spike	P	0 - 30
2302437	2,4,5-T	0.436	Spike	P	0 - 30
2302437	Acetaminophen	10.1	Spike	P	0 - 30
2302437	Acetamiprid	1.43	Spike	P	0 - 30
2302437	Afidopyropen	22.6	Spike	P	0 - 30
2302437	Bentazon	3.89	Spike	P	0 - 30
2302437	Benzovindiflupyr	22.3	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P409301

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302437	Carbamazepine	1.35	Spike	P	0 - 30
2302437	Clothianidin	11.8	Spike	P	0 - 30
2302437	Dinotefuran	5.57	Spike	P	0 - 30
2302437	Diuron	22.7	Spike	P	0 - 30
2302437	Fenuron	8.58	Spike	P	0 - 30
2302437	Fluridone	12.4	Spike	P	0 - 30
2302437	Hydrocodone	16.9	Spike	P	0 - 30
2302437	Ibuprofen	6.48	Spike	P	0 - 30
2302437	Imazapyr	8.12	Spike	P	0 - 30
2302437	Imidacloprid	5.35	Spike	P	0 - 30
2302437	Linuron	2.43	Spike	P	0 - 30
2302437	Mandestrobin	4.81	Spike	P	0 - 30
2302437	MCPPP	27.2	Spike	P	0 - 30
2302437	Naproxen	6.88	Spike	P	0 - 30
2302437	Primidone	0.580	Spike	P	0 - 30
2302437	Pyraclostrobin	12.4	Spike	P	0 - 30
2302437	Silvex	12.8	Spike	P	0 - 30
2302437	Thiamethoxam	7.81	Spike	P	0 - 30
2302437	Tolfenpyrad	14.1	Spike	P	0 - 30
2302437	Triclopyr	8.55	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P409328

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302854	Acesulfame K	1.05	Spike	P	0 - 30
2302854	AMPA	3.83	Spike	P	0 - 30
2302854	Endothall	4.94	Spike	P	0 - 30
2302854	Glufosinate	4.34	Spike	P	0 - 30
2302854	Glyphosate	3.99	Spike	P	0 - 30
2302854	Sucralose	15.9	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P409339

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302736	3-Hydroxycarbofuran	25.5	Spike	P	0 - 30
2302736	Aldicarb	32.4	Spike	F	0 - 30
2302736	Aldicarb Sulfone	16.2	Spike	P	0 - 30
2302736	Aldicarb Sulfoxide	28.8	Spike	P	0 - 30
2302736	Carbaryl	14.2	Spike	P	0 - 30
2302736	Carbofuran	2.73	Spike	P	0 - 30
2302736	Methiocarb	5.11	Spike	P	0 - 30
2302736	Methomyl	6.68	Spike	P	0 - 30
2302736	Oxamyl	4.41	Spike	P	0 - 30
2302736	Propoxur	0.146	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P409433

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302600	Total Alkalinity	0.518	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P409806

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302832	TDS	5.84	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P409436

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302600	Fluoride	0.480	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P410065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303636	Organic Carbon	0.491	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2302853
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	81.4	P	30 - 160

Lab Sample ID: 2302854
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	110	P	30 - 160
EPA 8321B	Acetaminophen-d4	107	P	30 - 160
EPA 8321B	Carbamazepine-d10	117	P	30 - 160
EPA 8321B	Diuron-d6	87.2	P	30 - 160
EPA 8321B	Endothall-d6	93.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	84.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	68.7	P	30 - 160
EPA 8321B	Primidone-d5	108	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	30 - 160

Lab Sample ID: 2302855
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	68.3	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	57.3	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	60.0	P	30 - 97.0
EPA 8276	PCNB	81.5	P	45 - 119

Lab Sample ID: 2302856
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	43.2	P	20 - 200
EPA 8270E	Simazine-d10	92.1	P	71 - 140
EPA 8270E	Terbufos-d10	97.0	P	62 - 131

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A110154

Included Lab Sample IDs: 2302846

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.1	98.6	P/P	90 - 110
Sulfate	98.6	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A110172

Included Lab Sample IDs: 2302848

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

Reference Method: DEP SOP: NU-094-1

Run ID: A110174

Included Lab Sample IDs: 2302846

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.4	99.8	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A110185

Included Lab Sample IDs: 2302846

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A110219

Included Lab Sample IDs: 2302857, 2302858

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	96.9	P/P	90 - 110
Antimony	94.2	93.9	P/P	90 - 110
Arsenic	97.3	96.2	P/P	90 - 110
Barium	97.3	96.1	P/P	90 - 110
Beryllium	94.9	95.1	P/P	90 - 110
Boron	103	101	P/P	90 - 110
Chromium	98.1	96.8	P/P	90 - 110
Cobalt	96.7	96.1	P/P	90 - 110
Copper	96.0	94.5	P/P	90 - 110
Lead	96.7	95.7	P/P	90 - 110
Manganese	99.3	98.1	P/P	90 - 110
Nickel	97.7	96.9	P/P	90 - 110
Selenium	95.7	95.3	P/P	90 - 110
Silver	95.1	94.3	P/P	90 - 110
Thallium	103	101	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A110225

Included Lab Sample IDs: 2302846

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.3	97.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A110225

Included Lab Sample IDs: 2302846

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

Reference Method: EPA 8321B

Run ID: A110230

Included Lab Sample IDs: 2302854

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	84.6	81.0	P/P	60 - 160
Endothall	91.8	75.1	P/P	60 - 160
Sucralose	77.6	73.5	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A110234

Included Lab Sample IDs: 2302854

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	119	129	P/P	60 - 160
Glufosinate	83.8	89.7	P/P	60 - 160
Glyphosate	79.4	89.4	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A110243

Included Lab Sample IDs: 2302854

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	111	106	P/P	50 - 150
2,4,5-T	103	100	P/P	50 - 150
Acetaminophen	109	109	P/P	60 - 160
Acetamiprid	103	112	P/P	50 - 150
Afidopyropen	98.2	100	P/P	50 - 150
Bentazon	85.4	105	P/P	50 - 160
Benzovindiflupyr	104	108	P/P	50 - 150
Carbamazepine	95.0	97.0	P/P	60 - 150
Clothianidin	89.8	117	P/P	60 - 150
Dinotefuran	100	104	P/P	50 - 150
Diuron	113	105	P/P	60 - 160
Fenuron	99.7	104	P/P	60 - 150
Fluridone	105	103	P/P	60 - 160
Hydrocodone	102	102	P/P	60 - 150
Ibuprofen	111	61.8	P/P	50 - 160
Imazapyr	107	83.1	P/P	50 - 150
Imidacloprid	93.5	94.2	P/P	60 - 150
Linuron	87.5	91.9	P/P	60 - 150
Mandestrobin	106	106	P/P	50 - 150
MCPP	92.2	82.0	P/P	50 - 150
Naproxen	125	89.6	P/P	50 - 160
Primidone	69.1	115	P/P	60 - 150
Pyraclostrobin	95.4	92.9	P/P	60 - 150
Silvex	107	103	P/P	50 - 150
Thiamethoxam	106	106	P/P	50 - 150
Tolfenpyrad	114	101	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A110243
Included Lab Sample IDs: 2302854

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclopyr	93.3	89.3	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A110249
Included Lab Sample IDs: 2302857, 2302858

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cadmium	99.6	100	P/P	90 - 110
Molybdenum	97.2	97.3	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A110255
Included Lab Sample IDs: 2302857, 2302858

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	98.7	99.5	P/P	90 - 110
Iron	102	102	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Potassium	96.8	97.5	P/P	90 - 110
Sodium	99.0	99.1	P/P	90 - 110
Strontium	101	101	P/P	90 - 110
Tin	104	103	P/P	90 - 110
Titanium	101	103	P/P	90 - 110
Vanadium	101	101	P/P	90 - 110
Zinc	104	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A110264
Included Lab Sample IDs: 2302847

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A110265
Included Lab Sample IDs: 2302847

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

Reference Method: EPA 8321B
Run ID: A110271
Included Lab Sample IDs: 2302853

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	104	103	P/P	60 - 150
Aldicarb	90.0	122	P/P	60 - 150
Aldicarb Sulfone	106	110	P/P	50 - 150
Aldicarb Sulfoxide	102	89.1	P/P	50 - 150
Carbaryl	86.3	108	P/P	60 - 150
Carbofuran	101	106	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
 Run ID: A110271
 Included Lab Sample IDs: 2302853

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Methiocarb	102	107	P/P	50 - 150
Methomyl	109	95.9	P/P	50 - 150
Oxamyl	113	94.8	P/P	50 - 150
Propoxur	106	115	P/P	50 - 150

Reference Method: EPA 8270E
 Run ID: A110280
 Included Lab Sample IDs: 2302856

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	104		P	80 - 120
Alachlor	97.7		P	80 - 120
Ametryn	103		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	97.8		P	80 - 120
Azinphos Methyl	104		P	80 - 120
Azoxystrobin	103		P	80 - 120
Bromacil	109		P	80 - 120
Butylate	99.6		P	80 - 120
Caffeine	99.4		P	80 - 120
Carbophenothion	84.6		P	80 - 120
Carfentrazone Ethyl	88.7		P	80 - 120
Chlorfenapyr	103		P	80 - 120
Chlorpyrifos Ethyl	108		P	80 - 120
Chlorpyrifos Methyl	99.1		P	80 - 120
Coumaphos	102		P	80 - 120
Cyanazine	93.4		P	80 - 120
Cyprodinil	95.2		P	80 - 120
Demeton	107		P	80 - 120
Diazinon	109		P	80 - 120
Difenoconazole	104		P	80 - 120
Dimethenamid	106		P	80 - 120
Dimethomorph	101		P	80 - 120
Disulfoton	100		P	80 - 120
Dithiopyr	103		P	80 - 120
EPTC	99.2		P	80 - 120
Ethion	105		P	80 - 120
Ethoprop	96.7		P	80 - 120
Etridiazole	99.8		P	80 - 120
Fenamiphos	106		P	80 - 120
Fenbuconazole	94.0		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	92.9		P	80 - 120
Fipronil Sulfide	104		P	80 - 120
Fipronil Sulfone	97.4		P	80 - 120
Fluazifop-P-butyl	92.2		P	80 - 120
Fludioxonil	101		P	80 - 120
Flumioxazin	91.2		P	80 - 120
Flutolanil	95.6		P	80 - 120
Fluxapyroxad	102		P	80 - 120
Fonofos	99.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A110280
Included Lab Sample IDs: 2302856

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Hexazinone	99.7		P	80 - 120
Imazalil	101		P	80 - 120
Iprodione	101		P	80 - 120
Loratadine	109		P	80 - 120
Malathion	102		P	80 - 120
Metalaxyl	101		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	96.3		P	80 - 120
Mevinphos	107		P	80 - 120
Molinate	102		P	80 - 120
Myclobutanil	104		P	80 - 120
Naled	103		P	80 - 120
Napropamide	97.6		P	80 - 120
Norflurazon	93.8		P	80 - 120
Oxadiazon	99.0		P	80 - 120
Oxyfluorfen	99.1		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	103		P	80 - 120
Pendimethalin	105		P	80 - 120
Phenytoin	98.5		P	80 - 120
Phorate	96.8		P	80 - 120
Prodiamine	101		P	80 - 120
Prometon	104		P	80 - 120
Prometryn	97.2		P	80 - 120
Pronamide	97.5		P	80 - 120
Propanil	106		P	80 - 120
Propargite	96.5		P	80 - 120
Propiconazole	99.0		P	80 - 120
Pyraflufen Ethyl	92.8		P	80 - 120
Pyridaben	94.5		P	80 - 120
Pyriproxyfen	105		P	80 - 120
Simazine	98.5		P	80 - 120
Stirophos	90.7		P	80 - 120
Sulfentrazone	94.8		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	97.6		P	80 - 120
Terbuthylazine	99.3		P	80 - 120
Thiobencarb	103		P	80 - 120
Triadimefon	104		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A110285
Included Lab Sample IDs: 2302847

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A110313

Included Lab Sample IDs: 2302847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	94.4	94.7	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A110329

Included Lab Sample IDs: 2302855

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	100		P	80 - 120
Alpha-BHC	100		P	80 - 120
Alpha-Chlordane	102		P	80 - 120
Beta-BHC	106		P	80 - 120
Beta-Cyfluthrin	104		P	80 - 120
Bifenthrin	102		P	80 - 120
Chlorothalonil	102		P	80 - 120
Cis-Nonachlor	105		P	80 - 120
Cypermethrin	93.7		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	101		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	102		P	80 - 120
Delta-BHC	104		P	80 - 120
Deltamethrin	101		P	80 - 120
Dichlobenil	88.4		P	80 - 120
Dicofol	104		P	80 - 120
Dieldrin	102		P	80 - 120
Endosulfan I	99.9		P	80 - 120
Endosulfan II	102		P	80 - 120
Endosulfan Sulfate	105		P	80 - 120
Endrin	101		P	80 - 120
Endrin Aldehyde	110		P	80 - 120
Endrin Ketone	103		P	80 - 120
Esfenvalerate	98.9		P	80 - 120
Ethalfuralin	96.4		P	80 - 120
Fenpropathrin	101		P	80 - 120
Gamma-BHC	100		P	80 - 120
Gamma-Chlordane	100		P	80 - 120
Heptachlor	101		P	80 - 120
Heptachlor Epoxide	103		P	80 - 120
Hexachlorobenzene	99.6		P	80 - 120
Kepone	62.6*		F	80 - 120
Lambda-Cyhalothrin	102		P	80 - 120
Methoprene	96.9		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	100		P	80 - 120
Mirex	101		P	80 - 120
Oxychlordane	103		P	80 - 120
Permethrin	99.6		P	80 - 120
Phenothrin	99.6		P	80 - 120
Piperonyl Butoxide	92.5		P	80 - 120
Prallethrin	94.8		P	80 - 120
Tau-Fluvalinate	98.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A110329
Included Lab Sample IDs: 2302855

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tetramethrin	101		P	80 - 120
Trans-Nonachlor	98.9		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	94.1		P	80 - 120

Reference Method: EPA 8276
Run ID: A110347
Included Lab Sample IDs: 2302855

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.9		P	80 - 120
Toxaphene	99.0		P	80 - 120

Reference Method: SM 5310 B-2011
Run ID: A110496
Included Lab Sample IDs: 2302847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.1	95.0	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
DEP SOP: NU-094-1	Color (true)	97.9					1.57	
EPA 180.1 Rev. 2.0	Turbidity	96.2					3.23	
EPA 200.7 Rev. 4.4	Calcium	103	103	102				0.940
	Iron	105	105	108	107			2.42
	Magnesium	103	102	106				2.41
	Potassium	105	101	104	103			2.09
	Sodium	99.0	101	104	104			2.17
	Strontium	104	103	104	103			0.931
	Tin	110	109	109	107			0.199
	Titanium	105	110	105	103			3.99
	Vanadium	98.4	101	98.8	97.9			1.74
	Zinc	108	106	105	104			1.58
EPA 200.8 Rev. 5.4	Aluminum	102	101	103	99.6			0.926
	Antimony	99.6	99.9	99.9	99.6			0.0077
	Arsenic	102	98.9	99.3	98.4			0.320
	Barium	105	105	105	102			0.457
	Beryllium	94.8	100	98.2	96.8			1.78
	Boron	103	106	107	107			0.848
	Cadmium	104	102	109	107			6.93
	Chromium	101	103	103	99.0			0.169
	Cobalt	102	99.4	99.5	98.3			0.104
	Copper	99.7	96.9	96.9	94.3			0.0410
	Lead	101	101	100	99.6			0.322
	Manganese	102	106	106	99.9			0.0581
	Molybdenum	98.8	98.2	104	104			5.86
	Nickel	103	100	99.8	97.3			0.181
	Selenium	102	95.4	97.5	96.0			1.51
	Silver	106	105	105	105			0.0346
	Thallium	104	106	106	107			0.488
EPA 300.0 Rev. 2.1	Chloride	99.1	92.6	94.5			0.974	
	Sulfate	96.9	94.5	94.5			1.26	
EPA 350.1 Rev. 2.0	Ammonia-N	90.6	95.2	96.8				0.965
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.0						3.87
EPA 353.2 Rev. 2.0	NO2NO3-N	102	97.5					0.250
EPA 365.1 Rev. 2.0	Total-P	102						0.432
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	96.7	98.4				1.51
EPA 8270E	Acetochlor	96.2	78.7	96.7				20.6
	Alachlor	88.6	73.5	88.4				18.5
	Aldrin	62.2	64.5	61.6				4.62
	Alpha-BHC	89.1	89.8	85.6				4.79
	Alpha-Chlordane	78.1	75.3	80.8				7.04
	Ametryn	96.4	82.4	90.6				9.53
	Atrazine	94.2	55.9	102				27.7
	Atrazine Desethyl	50.0	32.5	44.3				30.8
	Azinphos Methyl	82.2	74.0	87.2				16.4
	Azoxystrobin	91.4	77.2	92.6				13.8
	Beta-BHC	97.8	91.6	100				8.82
	Beta-Cyfluthrin	107	115	109				5.72
	Bifenthrin	63.8	74.9	69.7				7.28
	Bromacil	68.6	46.3	64.8				33.2
	Butylate	66.3	49.0	59.8				19.8
	Caffeine	131	97.3	115				13.3
	Carbophenothion	90.5	88.1	88.2				0.0908
	Carfentrazone Ethyl	88.5	72.6	83.5				13.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Chlorfenapyr	91.5	88.6	81.9			7.88
	Chlorothalonil	134	138	124			11.3
	Chlorpyrifos Ethyl	111	96.9	110			12.3
	Chlorpyrifos Methyl	97.5	86.5	96.3			10.7
	Cis-Nonachlor	70.6	79.0	73.9			6.71
	Coumaphos	137	135	152			11.9
	Cyanazine	86.3	73.3	86.8			16.9
	Cypermethrin	86.7	95.8	87.9			8.60
	Cyprodinil	85.9	74.4	90.2			19.2
	Dacthal	90.4	90.3	90.3			0.0623
	DDD-p,p'	72.3	74.5	72.5			2.70
	DDE-p,p'	81.8	80.9	80.2			0.858
	DDT-p,p'	91.5	95.7	94.7			1.05
	Delta-BHC	107	102	105			3.59
	Deltamethrin	106	113	106			6.26
	Demeton	85.5	75.8	90.3			17.5
	Diazinon	108	85.4	104			19.5
	Dichlobenil	91.3	88.5	86.4			2.37
	Dicofol	74.7	77.6	76.1			1.95
	Dieldrin	75.4	84.4	83.8			0.692
	Difenoconazole	89.8	85.0	90.9			6.68
	Dimethenamid	82.6	70.3	86.7			20.9
	Dimethomorph	86.6	75.8	91.2			18.4
	Disulfoton	87.3	78.6	96.5			20.4
	Dithiopyr	101	86.6	93.1			7.19
	Endosulfan I	84.0	85.4	83.4			2.42
	Endosulfan II	80.6	78.8	77.3			1.92
	Endosulfan Sulfate	88.3	86.2	83.3			3.47
	Endrin	9.30	54.4	65.9			19.1
	Endrin Aldehyde	57.0	55.0	55.7			1.19
	Endrin Ketone	148	101	89.3			12.1
	EPTC	62.6	46.3	55.3			17.7
	Esfenvalerate	90.6	95.7	87.1			9.44
	Ethalfuralin	70.1	74.5	73.1			1.93
	Ethion	97.5	92.8	88.1			5.20
	Ethoprop	87.2	78.5	95.9			19.9
	Etridiazole	65.7	52.1	63.0			18.9
	Fenamiphos	107	101	114			11.9
	Fenbuconazole	113	96.7	115			16.9
	Fenpropathrin	69.3	85.8	80.6			6.15
	Fipronil	96.3	74.1	95.3			21.8
	Fipronil Desulfinyl	90.6	65.2	88.7			23.7
	Fipronil Sulfide	90.2	70.2	88.2			12.1
	Fipronil Sulfone	86.9	70.4	83.7			8.88
	Fluazifop-P-butyl	87.6	79.2	83.7			5.56
	Fludioxonil	92.9	72.6	86.8			17.8
	Flumioxazin	121	127	164			25.9
	Flutolanil	84.7	64.4	85.5			19.1
	Fluxapyroxad	109	88.9	127			32.8
	Fonofos	85.4	72.3	87.7			19.2
	Gamma-BHC	89.3	89.3	87.6			1.94
	Gamma-Chlordane	76.1	77.8	76.7			1.41
	Heptachlor	73.3	74.7	68.1			9.26
	Heptachlor Epoxide	78.4	81.9	76.5			6.02

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Hexachlorobenzene	78.4	77.8	73.8			5.26
	Hexazinone	88.3	68.6	90.8			25.0
	Imazalil	79.3	76.7	74.3			3.14
	Iprodione	62.7	58.8	70.2			17.7
	Kepone	62.9	63.8	67.4			5.61
	Lambda-Cyhalothrin	96.7	107	94.7			11.8
	Loratadine	76.1	71.5	81.9			13.5
	Malathion	122	116	103			12.5
	Metalaxyl	84.3	82.5	69.9			16.6
	Methoprene	25.6	49.7	64.7			26.3
	Methoxychlor	87.6	86.6	86.8			0.222
	Metolachlor	93.5	87.8	72.0			18.0
	Metribuzin	85.8	74.5	70.5			5.56
	Mevinphos	80.1	82.7	62.0			28.7
	MGK-264	86.0	81.8	82.3			0.586
	Mirex	58.1	63.1	61.5			2.49
	Molinate	75.2	77.5	63.4			20.0
	Myclobutanil	91.0	89.0	76.8			14.7
	Naled	90.1	88.7	75.1			16.6
	Napropamide	82.8	80.3	67.1			17.9
	Norflurazon	93.2	91.9	74.4			21.0
	Oxadiazon	80.4	74.7	71.0			5.14
	Oxychlordane	76.9	80.6	77.0			4.57
	Oxyfluorfen	107	108	102			5.99
	Parathion Ethyl	88.8	80.5	74.0			8.40
	Parathion Methyl	108	108	91.7			16.6
	Pendimethalin	80.5	78.3	72.1			8.24
	Permethrin	83.8	90.0	87.7			2.64
	Phenothrin	64.9	77.3	82.5			6.57
	Phenytoin	53.8	66.3	50.1			27.9
	Phorate	97.5	88.9	95.2			6.85
	Piperonyl Butoxide	0.166	48.0	100			70.5
	Prallethrin	62.1	66.9	74.6			11.0
	Prodimamine	124	117	109			7.15
	Prometon	101	111	95.4			15.5
	Prometryn	82.9	88.8	72.4			20.4
	Pronamide	92.3	54.6	92.9			23.2
	Propanil	100	104	76.2			30.8
	Propargite	127	127	114			11.2
	Propiconazole	101	104	89.9			14.9
	Pyraflufen Ethyl	113	109	96.6			12.5
	Pyridaben	117	117	108			7.44
	Pyriproxyfen	70.1	67.2	64.5			4.09
	Simazine	84.0	87.4	70.6			21.4
	Stirophos	88.0	84.4	78.2			7.59
	Sulfentrazone	59.6					36.8
	Tau-Fluvalinate	69.6	82.6	80.6			2.44
	Tebuconazole	115	111	86.4			20.3
	Terbufos	105	117	103			12.6
	Terbutylazine	86.6	89.8	73.9			19.4
	Tetramethrin	61.6	86.2	89.0			3.19
	Thiobencarb	99.1	96.1	78.5			20.1
	Trans-Nonachlor	76.9	79.2	78.0			1.50
	Triadimefon	82.3	85.9	63.6			29.8

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Triclosan Methyl	83.8	81.5	84.3			3.33
	Trifluralin	74.5	72.7	71.2			2.09
EPA 8276	Chlordane	88.1	94.4	79.4			17.2
	Toxaphene	91.3	95.2	82.5			14.3
EPA 8321B	2,4-D	91.8	96.7	108			7.92
	2,4,5-T	73.8	77.3	77.0			0.436
	3-Hydroxycarbofuran	65.1	114	87.9			25.5
	Acesulfame K	80.3	87.9	86.9			1.05
	Acetaminophen	87.0	93.1	103			10.1
	Acetamiprid	94.5	95.7	94.3			1.43
	Afidopyropen	75.7	37.0	46.4			22.6
	Aldicarb	53.2	76.7	55.4			32.4
	Aldicarb Sulfone	111	104	123			16.2
	Aldicarb Sulfoxide	82.4	54.3	40.6			28.8
	AMPA	86.2	97.4	101			3.83
	Bentazon	101	62.6	66.8			3.89
	Benzovindiflupyr	85.1	76.4	95.6			22.3
	Carbamazepine	84.1	88.4	89.6			1.35
	Carbaryl	73.5	79.9	69.3			14.2
	Carbofuran	85.9	95.4	98.0			2.73
	Clothianidin	86.7	91.2	103			11.8
	Dinotefuran	90.6	109	116			5.57
	Diuron	102	72.3	90.8			22.7
	Endothall	78.3	117	112			4.94
	Fenuron	94.9	83.6	91.1			8.58
	Fluridone	88.9	78.6	88.9			12.4
	Glufosinate	94.3	84.4	88.2			4.34
	Glyphosate	88.9	84.2	80.9			3.99
	Hydrocodone	93.5	89.3	75.4			16.9
	Ibuprofen	80.5	68.3	72.9			6.48
	Imazapyr	96.2	80.1	89.8			8.12
	Imidacloprid	94.7	140	148			5.35
	Linuron	76.0	83.3	81.3			2.43
	Mandestrobin	96.6	88.5	92.8			4.81
	MCPP	92.2	87.2	115			27.2
	Methiocarb	78.5	80.3	76.3			5.11
	Methomyl	82.9	91.8	98.1			6.68
	Naproxen	60.9	78.5	73.3			6.88
	Oxamyl	112					4.41
	Primidone	118	108	109			0.580
	Propoxur	88.2	85.3	85.4			0.146
	Pyraclostrobin	79.5	80.8	91.6			12.4
	Silvex	69.8	67.1	76.3			12.8
	Sucralose	81.9	73.6	88.3			15.9
	Thiamethoxam	91.1	105	115			7.81
	Tolfenpyrad	59.2	43.9	50.5			14.1
	Triclopyr	75.3	77.0	70.7			8.55
SM 2320 B-2011	Total Alkalinity	98.6				0.518	
SM 2540 C-2011	TDS					5.84	
SM 4500 F-C-2011	Fluoride	97.7	99.2	98.5			0.480
SM 5310 B-2011	Organic Carbon	93.4	93.4	94.0			0.491

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2302846
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2302846
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2302857, 2302858
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2302857, 2302858
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2302846
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2302846
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2302847
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2302847
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2302847
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2302847
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2302848
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2302855
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2302856
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2302855
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2302853
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2302854
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2302846
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2302857, 2302858
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2302846
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2302846
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2302846
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2302847

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	02/02/2022			02/02/2022 11:19	Anna M. Plaviak	2302846
EPA 180.1 Rev. 2.0	02/02/2022			02/02/2022 10:57	Khloe J Berg	2302846
EPA 200.7 Rev. 4.4	02/02/2022	02/03/2022 11:00	Emily M Philpot	02/04/2022 16:37	Josef B Mick	2302857
	02/02/2022	02/03/2022 11:00	Emily M Philpot	02/04/2022 16:44	Josef B Mick	2302858
EPA 200.8 Rev. 5.4	02/02/2022	02/03/2022 11:00	Emily M Philpot	02/03/2022 21:10	McKinley C Carter	2302857
	02/02/2022	02/03/2022 11:00	Emily M Philpot	02/03/2022 21:19	McKinley C Carter	2302858
	02/02/2022	02/03/2022 11:00	Emily M Philpot	02/04/2022 14:58	Alexander Thompson	2302857
	02/02/2022	02/03/2022 11:00	Emily M Philpot	02/04/2022 15:05	Alexander Thompson	2302858
EPA 300.0 Rev. 2.1	02/02/2022			02/04/2022 15:25	James L Waggeberby	2302846
EPA 350.1 Rev. 2.0	02/02/2022			02/09/2022 14:58	Roberta Tatti	2302847
EPA 351.2 Rev. 2.0	02/02/2022	02/03/2022 10:35	Samantha L Bates	02/04/2022 13:19	Alexandra J Mattheus	2302847
EPA 353.2 Rev. 2.0	02/02/2022			02/07/2022 10:36	Beverly Y. Sanders	2302847
EPA 365.1 Rev. 2.0	02/02/2022	02/03/2022 14:00	Simonne.V. Calhoun	02/08/2022 14:33	Shengyu Ding	2302847
EPA 365.1 Rev. 2.0 dissolved	02/02/2022			02/02/2022 10:51	James L Waggeberby	2302848
EPA 8270E	02/02/2022	02/03/2022 08:00	Fe-Val Siddell	02/07/2022 22:03	Michael Poppell	2302856
	02/02/2022	02/07/2022 08:00	Rasheda Ghaffari	02/09/2022 20:39	Vandana T. Nagar	2302855
EPA 8276	02/02/2022	02/07/2022 08:00	Rasheda Ghaffari	02/10/2022 11:09	Arthur Maknenko	2302855
EPA 8321B	02/02/2022	02/02/2022 14:30	Manjita Shrestha	02/02/2022 15:32	Manjita Shrestha	2302854
	02/02/2022	02/02/2022 14:30	Manjita Shrestha	02/03/2022 11:46	Manjita Shrestha	2302854
	02/02/2022	02/03/2022 08:55	Hoor Shaik	02/04/2022 04:06	Juyoung Kim	2302854
	02/02/2022	02/04/2022 10:00	June Rhew	02/08/2022 02:18	Juyoung Kim	2302853
SM 2320 B-2011	02/02/2022			02/04/2022 02:12	Dale L. Simmons	2302846
SM 2340B	02/02/2022			02/04/2022 16:37	Josef B Mick	2302857
	02/02/2022			02/04/2022 16:44	Josef B Mick	2302858
SM 2540 C-2011	02/02/2022			02/04/2022 14:55	Yijie Li	2302846
SM 2540 D-2011	02/02/2022			02/04/2022 14:55	Yijie Li	2302846
SM 4500 F-C-2011	02/02/2022			02/04/2022 02:12	Dale L. Simmons	2302846
SM 5310 B-2011	02/02/2022			02/17/2022 18:23	Khloe J Berg	2302847