

Chemical Analysis Report

CEN-DIST-2022-06-08-02

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

Event Description: **Florence Lake, Faulk Canal, Eau Gallie**
Request ID: **RQ-2022-06-06-36**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Matthew Bearden

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 30-JUN-2022 14:23

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

Case Narrative

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

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

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

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

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Florence Lake @ Center

Collection Date/Time: 06/07/2022 13:05

Field ID: G3CE0012

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2333104	DEP SOP: NU-094-1	Color (true)**	100		PCU	P414914	
	EPA 180.1 Rev. 2.0	Turbidity	36		NTU	P414916	
	EPA 300.0 Rev. 2.1	Chloride	540		mg Cl/L	P415411	
		Sulfate	260		mg SO4/L	P415416	
	SM 2320 B-2011	Total Alkalinity	97		mg CaCO3/L	P415388	
	SM 2540 C-2011	TDS	1.48E+03		mg/L	P415243	
	SM 2540 D-2011	TSS	40		mg/L	P415246	
	SM 4500-F- C-2011	Fluoride	0.20		mg F/L	P415393	
2333105	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P415564	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.6		mg N/L	P415361	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P415721	
	EPA 365.1 Rev. 2.0	Total-P	0.21		mg P/L	P415465	
	SM 5310 B-2011	Organic Carbon	24		mg C/L	P415135	
2333106	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P414906	
2333134	EPA 200.7 Rev. 4.4	Calcium	121		mg/L	P415009	
		Iron	1.17E+03		ug/L	P415009	
		Magnesium	49.0		mg/L	P415009	
		Potassium	6.4		mg/L	P415009	
		Sodium	277		mg/L	P415009	
		Strontium	5.71E+03		ug/L	P415009	
		Tin	15	U	ug/L	P415009	
	EPA 200.8 Rev. 5.4	Titanium	4.6		ug/L	P415009	
		Vanadium	2.2	I	ug/L	P415009	
		Zinc	11	I	ug/L	P415009	
		Aluminum	1.04E+03		ug/L	P415208	
		Antimony	0.32		ug/L	P415009	
		Arsenic	1.71		ug/L	P415009	
		Barium	85.2		ug/L	P415009	
		Beryllium	0.035	I	ug/L	P415009	
		Boron**	64.1		ug/L	P415009	
		Cadmium	0.027	I	ug/L	P415009	
		Chromium	0.42	I	ug/L	P415009	
		Cobalt	0.350		ug/L	P415009	
		Copper	2.11		ug/L	P415009	
		Lead	4.45		ug/L	P415009	
		Manganese	27.2		ug/L	P415009	
		Molybdenum	7.77		ug/L	P415009	
		Nickel	0.77	I	ug/L	P415009	
		Selenium	0.33	I	ug/L	P415009	
		Silver	0.010	U	ug/L	P415009	
		Thallium	0.10	U	ug/L	P415009	
	SM 2340 B-2011	Hardness	503		mg/L	P415009	

Field ID: G3CE0012

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Falk Canal @ 50m upstream of Fiske Blvd

Collection Date/Time: 06/07/2022 12:12

Field ID: G3CE0016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2333107	DEP SOP: NU-094-1	Color (true)**	58	A	PCU	P414911	
	EPA 180.1 Rev. 2.0	Turbidity	4.2	A	NTU	P414917	
	EPA 300.0 Rev. 2.1	Chloride	65		mg Cl/L	P415411	
		Sulfate	18		mg SO4/L	P415416	
	SM 2320 B-2011	Total Alkalinity	44		mg CaCO3/L	P415388	
	SM 2540 C-2011	TDS	215	A	mg/L	P415244	
	SM 2540 D-2011	TSS	4	IA	mg/L	P415247	
	SM 4500-F- C-2011	Fluoride	0.056	I	mg F/L	P415393	
2333108	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P415564	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.71		mg N/L	P415099	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.074		mg N/L	P415721	
	EPA 365.1 Rev. 2.0	Total-P	0.069		mg P/L	P415065	
	SM 5310 B-2011	Organic Carbon	7.8		mg C/L	P415295	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: Eau Gallie River 145m E of N Wickham Rd

Collection Date/Time: 06/07/2022 11:17

Field ID: G5CE0131

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2333122	EPA 8321B	Aldicarb	0.020	U	ug/L	P415081	
		Aldicarb Sulfone	0.0020	U	ug/L	P415081	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P415081	
		Carbaryl	0.0020	U	ug/L	P415081	
		Carbofuran	0.0020	U	ug/L	P415081	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P415081	
		Methiocarb	0.0020	U	ug/L	P415081	
		Methomyl	0.0020	U	ug/L	P415081	
		Oxamyl	0.0020	U	ug/L	P415081	
		Propoxur	0.0020	U	ug/L	P415081	
2333123		2,4-D	0.047		ug/L	P414950	
		Acesulfame K	0.14	I	ug/L	P414891	
		2,4,5-T	0.0040	U	ug/L	P414950	
		AMPA	0.31	I	ug/L	P414891	MS
		Acetaminophen	0.0080	U	ug/L	P414950	
		Acetamiprid	0.0020	U	ug/L	P414950	
		Endothall	0.25	U	ug/L	P414891	
		Glufosinate	0.10	U	ug/L	P414891	
		Glyphosate	0.95		ug/L	P414891	
		Afidopyropen	0.0020	U	ug/L	P414950	
		Bentazon	0.17		ug/L	P414950	
		Sucralose	0.62		ug/L	P414891	
		Benzovindiflupyr	0.0020	U	ug/L	P414950	
		Carbamazepine	0.0042		ug/L	P414950	
		Clothianidin	0.042		ug/L	P414950	
		Dinotefuran	0.0024	I	ug/L	P414950	
		Diuron	0.0076	I	ug/L	P414950	
		Fenuron	0.032	U	ug/L	P414950	
		Fluridone	0.0048		ug/L	P414950	
		Imazapyr	0.48		ug/L	P414950	
		Hydrocodone	0.0020	U	ug/L	P414950	
		Ibuprofen	0.080	U	ug/L	P414950	
		Imidacloprid	0.070		ug/L	P414950	
		Linuron	0.0040	U	ug/L	P414950	
		Mandestrobin	0.0020	U	ug/L	P414950	
		MCPP	0.0071	I	ug/L	P414950	
		Naproxen	0.0080	U	ug/L	P414950	
		Primidone	0.0040	U	ug/L	P414950	
		Pyraclostrobin	0.0020	U	ug/L	P414950	
		Silvex	0.0040	U	ug/L	P414950	
		Thiamethoxam	0.0028	I	ug/L	P414950	
		Tolfenpyrad	0.0020	U	ug/L	P414950	
		Triclopyr	0.0040	U	ug/L	P414950	
2333132	EPA 8270E	Aldrin	0.70	U	ng/L	P414979	

Field ID: G5CE0131

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2333132	EPA 8270E	Alpha-BHC	0.11	U	ng/L	P414979	
		Alpha-Chlordane	0.21	U	ng/L	P414979	
		Beta-BHC	0.11	U	ng/L	P414979	
		Beta-Cyfluthrin**	1.3	U	ng/L	P414979	
		Bifenthrin**	0.54	U	ng/L	P414979	
		Chlorothalonil	1.3	U	ng/L	P414979	
		Cis-Nonachlor**	0.21	U	ng/L	P414979	
		Cypermethrin	1.6	U	ng/L	P414979	
		Dacthal**	0.16	U	ng/L	P414979	
		DDD-p,p'	0.27	U	ng/L	P414979	
		DDE-p,p'	0.21	U	ng/L	P414979	
		DDT-p,p'	0.27	U	ng/L	P414979	
		Delta-BHC	0.43	UJ	ng/L	P414979	LCS
		Deltamethrin**	1.3	U	ng/L	P414979	
		Dichlobenil**	0.27	U	ng/L	P414979	
		Dicofol	1.3	U	ng/L	P414979	
		Dieldrin	0.43	U	ng/L	P414979	
		Endosulfan I	0.43	U	ng/L	P414979	
		Endosulfan II	0.43	U	ng/L	P414979	
		Endosulfan Sulfate	0.32	U	ng/L	P414979	
		Endrin	0.43	U	ng/L	P414979	
		Endrin Aldehyde	0.80	U	ng/L	P414979	
		Endrin Ketone	0.43	U	ng/L	P414979	
		Esfenvalerate**	0.80	U	ng/L	P414979	
		Ethalfuralin**	0.16	U	ng/L	P414979	
		Fenpropathrin**	0.27	U	ng/L	P414979	
		Gamma-BHC	0.13	U	ng/L	P414979	
		Gamma-Chlordane	0.22	I	ng/L	P414979	
		Heptachlor	0.21	U	ng/L	P414979	
		Heptachlor Epoxide	0.27	U	ng/L	P414979	
		Hexachlorobenzene**	1.1	U	ng/L	P414979	
		Kepone**	5.4	UJ	ng/L	P414979	LCS, MS
		Lambda-Cyhalothrin**	0.80	U	ng/L	P414979	
		Methoprene**	0.80	U	ng/L	P414979	
		Methoxychlor	0.32	U	ng/L	P414979	
		MGK-264**	0.21	U	ng/L	P414979	
		Mirex	0.75	U	ng/L	P414979	
		Oxychlordane**	0.32	U	ng/L	P414979	
		Permethrin	1.7	U	ng/L	P414979	
		Phenothrin**	0.97	U	ng/L	P414979	
		Piperonyl Butoxide**	2.7		ng/L	P414979	
		Prallethrin**	2.1	U	ng/L	P414979	
		Tau-Fluvalinate**	0.27	U	ng/L	P414979	
		Tetramethrin**	0.80	U	ng/L	P414979	
		Trans-Nonachlor**	0.21	U	ng/L	P414979	

Field ID: G5CE0131

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2333132	EPA 8270E	Triclosan Methyl**	0.16	U	ng/L	P414979	
		Trifluralin	0.21	U	ng/L	P414979	
	EPA 8276	Chlordane	2.7	U	ng/L	P414979	
		Toxaphene	16	U	ng/L	P414979	
2333133	EPA 8270E	Oxybenzone**	9.6	U	ng/L	P415071	
		Acetochlor	0.24	U	ng/L	P415071	
		Octinoxate**	19	U	ng/L	P415071	
		Alachlor	0.24	U	ng/L	P415071	
		Avobenzone**	96	U	ng/L	P415071	
		Ametryn	5.6		ng/L	P415071	
		Atrazine	400		ng/L	P415071	
		Atrazine Desethyl	30		ng/L	P415071	
		Azinphos Methyl	1.9	U	ng/L	P415071	
		Azoxystrobin**	0.59	I	ng/L	P415071	
		Bromacil	0.76	I	ng/L	P415071	
		Butylate	0.38	U	ng/L	P415071	
		Caffeine**	46		ng/L	P415071	
		Carbophenothion	0.19	U	ng/L	P415071	
		Carfentrazone Ethyl**	0.096	U	ng/L	P415071	
		Chlorfenapyr**	0.17	U	ng/L	P415071	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P415071	
		Chlorpyrifos Methyl	0.048	U	ng/L	P415071	
		Coumaphos**	0.48	U	ng/L	P415071	
		Cyanazine	3.1	U	ng/L	P415071	
		Cyprodinil**	0.096	U	ng/L	P415071	
		Demeton	1.4	U	ng/L	P415071	
		Diazinon	0.12	U	ng/L	P415071	
		Difenoconazole**	0.58	U	ng/L	P415071	
		Dimethenamid**	0.096	U	ng/L	P415071	
		Dimethomorph**	0.17	U	ng/L	P415071	
		Disulfoton	0.48	U	ng/L	P415071	
		Dithiopyr**	0.22	I	ng/L	P415071	
		EPTC	1.2	U	ng/L	P415071	
		Ethion	0.14	U	ng/L	P415071	
		Ethoprop	0.096	U	ng/L	P415071	
		Etridiazole**	0.14	U	ng/L	P415071	
		Fenamiphos	0.48	U	ng/L	P415071	
		Fenbuconazole**	0.12	U	ng/L	P415071	
		Fipronil	5.2		ng/L	P415071	
		Fipronil Desulfinyl**	2.5		ng/L	P415071	
		Fipronil Sulfide	1.2		ng/L	P415071	
		Fipronil Sulfone	3.0		ng/L	P415071	
		Fluazifop-P-butyl**	0.096	U	ng/L	P415071	
		Fludioxonil**	0.12	U	ng/L	P415071	
		Flumioxazin**	1.7	U	ng/L	P415071	

Field ID: G5CE0131

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2333133	EPA 8270E	Flutolanil**	0.096	U	ng/L	P415071	
		Fluxapyroxad**	0.33	I	ng/L	P415071	
		Fonofos	0.19	U	ng/L	P415071	
		Hexazinone	0.48	U	ng/L	P415071	
		Imazalil**	0.72	U	ng/L	P415071	
		Iprodione**	0.58	U	ng/L	P415071	
		Loratadine**	0.096	U	ng/L	P415071	
		Malathion	0.34	U	ng/L	P415071	
		Metalaxyl	0.72	U	ng/L	P415071	
		Metolachlor	0.34	U	ng/L	P415071	
		Metribuzin	2.4	U	ng/L	P415071	
		Mevinphos	1.0	U	ng/L	P415071	
		Molinate	0.29	U	ng/L	P415071	
		Myclobutanil**	3.4		ng/L	P415071	
		Naled**	1.4	UJ	ng/L	P415071	LCS
		Napropamide**	0.38	U	ng/L	P415071	
		Norflurazon	0.48	U	ng/L	P415071	
		Oxadiazon	0.58	I	ng/L	P415071	
		Oxyfluorfen**	0.14	U	ng/L	P415071	
		Parathion Ethyl	0.24	U	ng/L	P415071	
		Parathion Methyl	0.53	U	ng/L	P415071	
		Pendimethalin	0.96	U	ng/L	P415071	
		Phenytol**	3.4	U	ng/L	P415071	
		Phorate	0.50	U	ng/L	P415071	
		Prodiamine**	0.17	U	ng/L	P415071	
		Prometon	0.87	U	ng/L	P415071	
		Prometryn	0.19	U	ng/L	P415071	
		Pronamide**	0.14	U	ng/L	P415071	
		Propanil**	0.12	U	ng/L	P415071	
		Propargite**	1.4	U	ng/L	P415071	
		Propiconazole**	19		ng/L	P415071	
		Pyraflufen Ethyl**	0.24	U	ng/L	P415071	
		Pyridaben**	0.43	U	ng/L	P415071	
		Pyriproxyfen**	0.12	U	ng/L	P415071	
		Simazine	0.48	U	ng/L	P415071	
		Stirophos**	0.12	UJ	ng/L	P415071	LCS, MS, RPD
		Sulfentrazone**	38		ng/L	P415071	
		Tebuconazole**	0.86	I	ng/L	P415071	
		Terbufos	0.096	U	ng/L	P415071	
		Terbutylazine	0.41	U	ng/L	P415071	
		Thiobencarb**	0.58	U	ng/L	P415071	
		Triadimefon**	0.24	U	ng/L	P415071	

Field ID: G5CE0131

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8321B: MS accuracy for sucralose 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 atrazine and metolachlor not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P414911

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P414914

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414916

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414917

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P415009

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: P415009

Component	Result	Code	Units
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P415009

Component	Result	Code	Units
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P415208

Component	Result	Code	Units
Aluminum	5.0	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415411

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415416

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415564

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415099

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415361

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415721

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P415065

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P415465

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P414906

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

Reference Method: EPA 8270E

Batch ID: P414979

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
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

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Reference Method: EPA 8270E

Batch ID: P414979

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414979

Component	Result	Code	Units
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 8270E

Batch ID: P415071

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
Avobenzone	100	U	ng/L
Avobenzone	100	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
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

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P415071

Component	Result	Code	Units
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
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

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P415071

Component	Result	Code	Units
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
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	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
Phenytol	3.5	U	ng/L
Phenytol	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E**Batch ID: P415071**

Component	Result	Code	Units
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 8276**Batch ID: P414979**

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: P414891**

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: P414950**

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P414950

Component	Result	Code	Units
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	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: P415081

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

Reference Method: SM 2320 B-2011

Batch ID: P415388

Component	Result	Code	Units
Total Alkalinity	1.0	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-2011

Batch ID: P415243

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011

Batch ID: P415244

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P415246

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P415247

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P415393

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P415135

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

Reference Method: SM 5310 B-2011
Batch ID: P415295

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: P414911

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Reference Method: DEP SOP: NU-094-1
Batch ID: P414914

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	105		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414916

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.1		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414917

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P415009

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	103		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	106		P	85 - 115
Sodium	102		P	85 - 115
Strontium	103		P	85 - 115
Tin	100		P	85 - 115
Titanium	100		P	85 - 115
Vanadium	94.3		P	85 - 115
Zinc	99.2		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P415009

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Antimony	99.7		P	85 - 115
Arsenic	101		P	85 - 115
Barium	103		P	85 - 115
Beryllium	96.5		P	85 - 115
Boron	106		P	85 - 115
Cadmium	97.8		P	85 - 115
Chromium	95.9		P	85 - 115
Cobalt	99.1		P	85 - 115
Copper	99.1		P	85 - 115
Lead	101		P	85 - 115
Manganese	96.6		P	85 - 115
Molybdenum	99.2		P	85 - 115
Nickel	100		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P415009

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Selenium	98.6		P	85 - 115
Silver	99.4		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P415208

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415411

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415416

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415564

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415099

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415361

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415721

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P415065

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P415465

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: P414906

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

Reference Method: EPA 8270E

Batch ID: P414979

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	74.6		P	10 - 93.0
Alpha-BHC	97.9		P	75 - 106
Alpha-Chlordane	99.3		P	50 - 109
Beta-BHC	81.4		P	36 - 138
Beta-Cyfluthrin	111		P	23 - 167
Bifenthrin	72.8		P	11 - 123
Chlorothalonil	124		P	27 - 190
Cis-Nonachlor	84.5		P	40 - 111
Cypermethrin	97.3		P	25 - 155
Dacthal	105		P	72 - 119
DDD-p,p'	85.6		P	47 - 108
DDE-p,p'	89.1		P	48 - 107
DDT-p,p'	93.6		P	49 - 111
Delta-BHC	140		F	54 - 138
Deltamethrin	135		P	22 - 189
Dichlobenil	89.3		P	32 - 113
Dicofol	88.1		P	50 - 108
Dieldrin	87.1		P	56 - 110
Endosulfan I	94.3		P	60 - 105
Endosulfan II	104		P	50 - 120
Endosulfan Sulfate	108		P	55 - 121
Endrin	98.1		P	31 - 119
Endrin Aldehyde	90.6		P	36 - 116
Endrin Ketone	99.3		P	69 - 177
Esfenvalerate	111		P	10 - 179
Ethalfuralin	92.5		P	49 - 99.0
Fenpropathrin	89.7		P	35 - 119
Gamma-BHC	118		P	69 - 120
Gamma-Chlordane	92.5		P	45 - 107
Heptachlor	71.3		P	41 - 100
Heptachlor Epoxide	89.2		P	58 - 106
Hexachlorobenzene	87.6		P	39 - 100
Kepone	245		F	10 - 191
Lambda-Cyhalothrin	80.4		P	21 - 206
Methoprene	83.1		P	10 - 129
Methoxychlor	96.3		P	61 - 111
MGK-264	101		P	20 - 123
Mirex	73.1		P	10 - 182
Oxychlordane	95.6		P	39 - 110
Permethrin	95.4		P	26 - 152

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P414979

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Phenothrin	65.8		P	10 - 109
Piperonyl Butoxide	136		P	19 - 147
Prallethrin	103		P	14 - 109
Tau-Fluvalinate	99.9		P	16 - 134
Tetramethrin	117		P	10 - 125
Trans-Nonachlor	86.3		P	45 - 107
Triclosan Methyl	93.7		P	60 - 110
Trifluralin	90.5		P	44 - 101

Reference Method: EPA 8270E

Batch ID: P415071

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	111		P	70 - 121
Alachlor	100		P	68 - 119
Ametryn	118		P	64 - 139
Atrazine	98.4		P	76 - 120
Atrazine Desethyl	69.9		P	44 - 126
Avobenzone	107		P	76 - 212
Azinphos Methyl	170		P	43 - 192
Azoxystrobin	96.9		P	36 - 224
Bromacil	95.7		P	52 - 121
Butylate	41.7		P	28 - 91.0
Caffeine	74.0		P	50 - 134
Carbophenothion	95.9		P	56 - 129
Carfentrazone Ethyl	129		P	60 - 141
Chlorfenapyr	81.8		P	56 - 115
Chlorpyrifos Ethyl	82.6		P	60 - 118
Chlorpyrifos Methyl	82.3		P	68 - 119
Coumaphos	114		P	18 - 250
Cyanazine	159		P	61 - 250
Cyprodinil	111		P	55 - 145
Demeton	64.4		P	30 - 159
Diazinon	107		P	70 - 123
Difenoconazole	197		P	49 - 204
Dimethenamid	93.4		P	64 - 115
Dimethomorph	77.1		P	12 - 219
Disulfoton	75.9		P	44 - 125
Dithiopyr	104		P	64 - 115
EPTC	44.1		P	28 - 86.0
Ethion	73.7		P	33 - 125
Ethoprop	71.1		P	64 - 116
Etridiazole	67.5		P	34 - 91.0
Fenamiphos	87.9		P	12 - 127
Fenbuconazole	146		P	59 - 151
Fipronil	108		P	67 - 129
Fipronil Desulfinyl	105		P	65 - 127
Fipronil Sulfide	78.5		P	61 - 116
Fipronil Sulfone	86.1		P	55 - 117
Fluazifop-P-butyl	103		P	62 - 127
Fludioxonil	112		P	62 - 128
Flumioxazin	222		P	33 - 250

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P415071

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Flutolanil	97.3		P	56 - 127
Fluxapyroxad	84.3		P	45 - 128
Fonofos	72.2		P	62 - 111
Hexazinone	98.0		P	46 - 139
Imazalil	94.2		P	38 - 142
Iprodione	107		P	47 - 135
Loratadine	69.4		P	10 - 244
Malathion	101		P	61 - 139
Metalaxyl	96.0		P	10 - 119
Metolachlor	106		P	65 - 118
Metribuzin	91.5		P	51 - 250
Mevinphos	58.6		P	53 - 121
Molinate	55.9		P	42 - 96.0
Myclobutanil	110		P	55 - 128
Naled	105		F	10 - 98.0
Napropamide	86.0		P	49 - 121
Norflurazon	117		P	61 - 126
Octinoxate	102		P	30 - 159
Oxadiazon	90.7		P	59 - 116
Oxybenzone	99.0		P	61 - 139
Oxyfluorfen	129		P	64 - 137
Parathion Ethyl	89.9		P	70 - 112
Parathion Methyl	106		P	76 - 133
Pendimethalin	81.7		P	52 - 117
Phenytoin	112		P	10 - 199
Phorate	50.8		P	48 - 121
Prodiamine	98.4		P	26 - 142
Prometon	107		P	43 - 123
Prometryn	102		P	66 - 127
Pronamide	112		P	75 - 121
Propanil	88.5		P	45 - 150
Propargite	145		P	42 - 208
Propiconazole	110		P	60 - 125
Pyraflufen Ethyl	117		P	70 - 138
Pyridaben	99.3		P	35 - 245
Pyriproxyfen	142		P	30 - 149
Simazine	98.6		P	72 - 125
Stirophos	16.8		F	29 - 164
Sulfentrazone	139		P	21 - 139
Tebuconazole	58.1		P	10 - 115
Terbufos	80.0		P	60 - 123
Terbutylazine	89.8		P	72 - 115
Thiobencarb	96.6		P	31 - 139
Triadimefon	87.4		P	65 - 116

Reference Method: EPA 8276

Batch ID: P414979

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	105		P	61 - 118
Toxaphene	106		P	51 - 122

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P414891

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	102		P	40 - 150
AMPA	97.9		P	40 - 150
Endothall	72.4		P	40 - 150
Glufosinate	104		P	40 - 150
Glyphosate	92.8		P	40 - 150
Sucralose	96.9		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P414950

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	88.3		P	40 - 150
2,4,5-T	82.6		P	40 - 150
Acetaminophen	81.6		P	30 - 150
Acetamiprid	69.6		P	40 - 150
Afidopyropen	59.1		P	30 - 150
Bentazon	93.8		P	30 - 150
Benzovindiflupyr	52.5		P	40 - 150
Carbamazepine	66.1		P	40 - 150
Clothianidin	76.6		P	40 - 150
Dinotefuran	78.4		P	40 - 150
Diuron	66.8		P	40 - 150
Fenuron	72.1		P	40 - 150
Fluridone	75.0		P	40 - 150
Hydrocodone	75.3		P	40 - 150
Ibuprofen	84.2		P	40 - 150
Imazapyr	84.7		P	40 - 150
Imidacloprid	70.8		P	40 - 150
Linuron	61.3		P	40 - 150
Mandestrobin	53.5		P	40 - 150
MCPP	91.7		P	40 - 150
Naproxen	78.9		P	40 - 150
Primidone	81.6		P	40 - 150
Pyraclostrobin	50.9		P	40 - 150
Silvex	75.8		P	40 - 150
Thiamethoxam	73.9		P	40 - 150
Tolfenpyrad	40.5		P	30 - 150
Triclopyr	84.0		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P415081

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	89.9		P	40 - 150
Aldicarb	84.5		P	30 - 150
Aldicarb Sulfone	93.7		P	40 - 150
Aldicarb Sulfoxide	87.4		P	40 - 150
Carbaryl	85.9		P	40 - 150
Carbofuran	89.0		P	40 - 150
Methiocarb	88.5		P	40 - 150
Methomyl	90.4		P	40 - 150
Oxamyl	94.4		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P415081

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Propoxur	89.0		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P415388

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P415393

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P415135

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	89.1		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P415295

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P415009

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332350	Calcium	101		P	80 - 120
2332350	Iron	102	105	P/P	80 - 120
2332350	Magnesium	101	102	P/P	80 - 120
2332350	Potassium	103	104	P/P	80 - 120
2332350	Sodium	101		P	80 - 120
2332350	Strontium	104	104	P/P	80 - 120
2332350	Tin	97.9	99.3	P/P	80 - 120
2332350	Titanium	104	113	P/P	80 - 120
2332350	Vanadium	96.1	96.5	P/P	80 - 120
2332350	Zinc	98.1	98.9	P/P	80 - 120
2332352	Calcium	98.8		P	80 - 120
2332352	Iron	103		P	80 - 120
2332352	Magnesium	104		P	80 - 120
2332352	Potassium	111		P	80 - 120
2332352	Sodium	102		P	80 - 120
2332352	Strontium	105		P	80 - 120
2332352	Tin	103		P	80 - 120
2332352	Titanium	101		P	80 - 120
2332352	Vanadium	97.5		P	80 - 120
2332352	Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P415009

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332350	Antimony	97.7	100	P/P	80 - 120
2332350	Arsenic	98.9	101	P/P	80 - 120
2332350	Barium	101	104	P/P	80 - 120
2332350	Beryllium	96.6	98.6	P/P	80 - 120
2332350	Boron	107	108	P/P	80 - 120
2332350	Cadmium	98.1	101	P/P	80 - 120
2332350	Chromium	99.2	100	P/P	80 - 120
2332350	Cobalt	98.1	99.3	P/P	80 - 120
2332350	Copper	97.7	99.0	P/P	80 - 120
2332350	Lead	100	102	P/P	80 - 120
2332350	Molybdenum	99.7	101	P/P	80 - 120
2332350	Nickel	100	102	P/P	80 - 120
2332350	Selenium	96.7	97.7	P/P	80 - 120
2332350	Silver	98.5	99.2	P/P	80 - 120
2332350	Thallium	102	105	P/P	80 - 120
2332352	Antimony	101		P	80 - 120
2332352	Arsenic	100		P	80 - 120
2332352	Barium	104		P	80 - 120
2332352	Beryllium	95.3		P	80 - 120
2332352	Boron	105		P	80 - 120
2332352	Cadmium	101		P	80 - 120
2332352	Chromium	97.4		P	80 - 120
2332352	Cobalt	99.4		P	80 - 120
2332352	Copper	100		P	80 - 120
2332352	Lead	102		P	80 - 120
2332352	Manganese	99.7		P	80 - 120
2332352	Molybdenum	101		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P415009

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332352	Nickel	102		P	80 - 120
2332352	Selenium	98.4		P	80 - 120
2332352	Silver	100		P	80 - 120
2332352	Thallium	104		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P415208

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332374	Aluminum	102	99.5	P/P	80 - 120
2333022	Aluminum	109		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P415411

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333069	Chloride	101		P	90 - 110
2333176	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P415416

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333069	Sulfate	101		P	90 - 110
2333176	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P415564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333047	Ammonia-N	94.6	97.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P415099

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332730	Kjeldahl Nitrogen	104	95.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P415721

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332480	NO2NO3-N	100	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P415065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333149	Total-P	105	105	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P415465

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333840	Total-P	107	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P414906

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333048	O-Phosphate-P	97.7	99.3	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P414979

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332611	Aldrin	73.2	70.7	P/P	10 - 89.0
2332611	Alpha-BHC	97.9	99.4	P/P	71 - 105
2332611	Alpha-Chlordane	95.3	99.1	P/P	43 - 107
2332611	Beta-BHC	76.5	82.4	P/P	57 - 152
2332611	Beta-Cyfluthrin	103	98.1	P/P	29 - 186
2332611	Bifenthrin	75.0	80.3	P/P	19 - 119
2332611	Chlorothalonil	122	115	P/P	10 - 245
2332611	Cis-Nonachlor	90.5	96.4	P/P	36 - 110
2332611	Cypermethrin	95.6	102	P/P	24 - 169
2332611	Dacthal	107	102	P/P	62 - 115
2332611	DDD-p,p'	92.5	97.2	P/P	36 - 109
2332611	DDE-p,p'	92.0	91.2	P/P	30 - 114
2332611	DDT-p,p'	92.6	88.9	P/P	42 - 108
2332611	Delta-BHC	143	137	P/P	60 - 164
2332611	Deltamethrin	122	109	P/P	10 - 210
2332611	Dichlobenil	82.8	97.0	P/P	23 - 108
2332611	Dicofol	88.5	85.2	P/P	44 - 109
2332611	Dieldrin	92.4	100	P/P	37 - 119
2332611	Endosulfan I	93.2	99.4	P/P	52 - 105
2332611	Endosulfan II	96.4	92.8	P/P	35 - 127
2332611	Endosulfan Sulfate	96.4	89.2	P/P	39 - 130
2332611	Endrin	91.8	90.8	P/P	30 - 116
2332611	Endrin Aldehyde	88.9	81.2	P/P	20 - 110
2332611	Endrin Ketone	95.1	98.2	P/P	48 - 134
2332611	Esfenvalerate	104	96.4	P/P	10 - 199
2332611	Ethalfuralin	89.1	93.4	P/P	48 - 95.0
2332611	Fenpropathrin	81.8	85.6	P/P	37 - 121
2332611	Gamma-BHC	120	118	P/P	61 - 126
2332611	Gamma-Chlordane	91.2	95.4	P/P	39 - 105
2332611	Heptachlor	75.6	83.6	P/P	38 - 96.0
2332611	Heptachlor Epoxide	89.6	99.7	P/P	42 - 114
2332611	Hexachlorobenzene	85.9	90.4	P/P	39 - 93.0
2332611	Kepone	227	201	F/P	10 - 215
2332611	Lambda-Cyhalothrin	81.5	82.3	P/P	10 - 204
2332611	Methoprene	80.8	82.6	P/P	17 - 108
2332611	Methoxychlor	90.4	86.2	P/P	56 - 115
2332611	MGK-264	98.0	99.9	P/P	35 - 120
2332611	Mirex	76.5	78.3	P/P	10 - 178
2332611	Oxychlordane	90.2	87.2	P/P	47 - 91.0
2332611	Permethrin	99.3	95.6	P/P	27 - 170

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P414979

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332611	Phenothrin	68.1	78.2	P/P	10 - 133
2332611	Piperonyl Butoxide	128	145	P/P	23 - 150
2332611	Prallethrin	94.7	89.9	P/P	21 - 113
2332611	Tau-Fluvalinate	91.0	86.7	P/P	16 - 158
2332611	Tetramethrin	117	113	P/P	22 - 132
2332611	Trans-Nonachlor	89.1	87.7	P/P	43 - 102
2332611	Triclosan Methyl	94.8	100	P/P	49 - 109
2332611	Trifluralin	88.7	88.6	P/P	48 - 93.0

Reference Method: EPA 8270E

Batch ID: P415071

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332309	Acetochlor	88.5	106	P/P	65 - 124
2332309	Alachlor	83.7	96.4	P/P	61 - 121
2332309	Ametryn	108	108	P/P	52 - 216
2332309	Atrazine Desethyl	50.1	61.9	P/P	15 - 160
2332309	Avobenzene	82.1	69.3	P/P	59 - 206
2332309	Azinphos Methyl	143	170	P/P	40 - 292
2332309	Azoxystrobin	70.1	109	P/P	12 - 242
2332309	Bromacil	79.3	96.5	P/P	54 - 167
2332309	Butylate	42.4	54.1	P/P	14 - 94.0
2332309	Caffeine	88.8	83.6	P/P	10 - 226
2332309	Carbophenothion	88.4	99.7	P/P	49 - 122
2332309	Carfentrazone Ethyl	108	125	P/P	53 - 138
2332309	Chlorfenapyr	81.0	85.7	P/P	50 - 150
2332309	Chlorpyrifos Ethyl	75.6	82.4	P/P	52 - 122
2332309	Chlorpyrifos Methyl	80.2	86.5	P/P	66 - 117
2332309	Coumaphos	110	113	P/P	50 - 220
2332309	Cyanazine	94.0	113	P/P	43 - 245
2332309	Cyprodinil	93.4	103	P/P	50 - 150
2332309	Demeton	77.4	84.7	P/P	43 - 188
2332309	Diazinon	88.5	99.9	P/P	69 - 131
2332309	Difenoconazole	174	196	P/P	34 - 231
2332309	Dimethenamid	82.1	91.6	P/P	55 - 118
2332309	Dimethomorph	78.6	82.9	P/P	50 - 150
2332309	Disulfoton	80.4	84.6	P/P	38 - 141
2332309	Dithiopyr	87.6	94.9	P/P	42 - 116
2332309	EPTC	36.2	52.3	P/P	18 - 85.0
2332309	Ethion	75.8	76.3	P/P	10 - 131
2332309	Ethoprop	71.9	81.3	P/P	65 - 129
2332309	Etridiazole	52.2	63.5	P/P	50 - 150
2332309	Fenamiphos	95.0	99.3	P/P	31 - 137
2332309	Fenbuconazole	126	148	P/P	57 - 160
2332309	Fipronil	91.9	106	P/P	62 - 132
2332309	Fipronil Desulfinyl	85.5	99.0	P/P	57 - 131
2332309	Fipronil Sulfide	78.1	83.6	P/P	15 - 138
2332309	Fipronil Sulfone	85.6	92.3	P/P	21 - 134
2332309	Fluazifop-P-butyl	84.7	98.0	P/P	54 - 133
2332309	Fludioxonil	88.9	111	P/P	58 - 127
2332309	Flumioxazin	202	228	P/P	33 - 300
2332309	Flutolanil	82.6	95.3	P/P	42 - 130

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P415071

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332309	Fluxapyroxad	62.7	84.0	P/P	23 - 141
2332309	Fonofos	73.6	75.7	P/P	58 - 119
2332309	Hexazinone	89.4	98.2	P/P	68 - 172
2332309	Imazalil	79.1	107	P/P	48 - 283
2332309	Iprodione	103	113	P/P	38 - 140
2332309	Loratadine	73.1	75.0	P/P	50 - 150
2332309	Malathion	97.3	107	P/P	40 - 137
2332309	Metalaxyl	79.8	88.0	P/P	21 - 129
2332309	Metribuzin	105	120	P/P	38 - 187
2332309	Mevinphos	65.6	69.0	P/P	54 - 134
2332309	Molinate	51.1	65.8	P/P	41 - 97.0
2332309	Myclobutanil	95.1	110	P/P	56 - 125
2332309	Naled	92.5	108	P/P	10 - 108
2332309	Napropamide	76.9	82.4	P/P	50 - 150
2332309	Norflurazon	102	115	P/P	32 - 122
2332309	Octinoxate	66.5	51.7	P/P	25 - 150
2332309	Oxadiazon	78.0	85.4	P/P	40 - 119
2332309	Oxybenzone	70.2	59.6	P/P	59 - 147
2332309	Oxyfluorfen	114	122	P/P	61 - 153
2332309	Parathion Ethyl	81.7	93.3	P/P	59 - 130
2332309	Parathion Methyl	103	113	P/P	65 - 155
2332309	Pendimethalin	90.4	101	P/P	49 - 138
2332309	Phenytoin	95.3	107	P/P	50 - 200
2332309	Phorate	72.7	83.1	P/P	54 - 161
2332309	Prodiamine	91.9	106	P/P	33 - 161
2332309	Prometon	71.8	82.6	P/P	48 - 140
2332309	Prometryn	93.3	96.5	P/P	55 - 134
2332309	Pronamide	99.3	111	P/P	66 - 137
2332309	Propanil	76.2	85.6	P/P	50 - 150
2332309	Propargite	117	142	P/P	50 - 200
2332309	Propiconazole	86.7	107	P/P	36 - 150
2332309	Pyraflufen Ethyl	98.5	113	P/P	50 - 150
2332309	Pyridaben	93.4	97.9	P/P	50 - 200
2332309	Pyriproxyfen	120	145	P/P	10 - 165
2332309	Simazine	93.6	106	P/P	57 - 145
2332309	Stirophos	81.4	30.2	P/F	50 - 150
2332309	Sulfentrazone	94.4	109	P/P	34 - 140
2332309	Tebuconazole	56.9	63.2	P/P	10 - 127
2332309	Terbufos	80.9	92.1	P/P	59 - 138
2332309	Terbuthylazine	82.4	91.9	P/P	68 - 119
2332309	Thiobencarb	79.7	92.3	P/P	50 - 150
2332309	Triadimefon	70.7	69.6	P/P	50 - 150

Reference Method: EPA 8276

Batch ID: P414979

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333132	Chlordane	105	105	P/P	55 - 128
2333132	Toxaphene	127	126	P/P	57 - 211

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P414891

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332928	Acesulfame K	82.6	84.8	P/P	40 - 150
2332928	AMPA	37.9	37.6	F/F	40 - 150
2332928	Endothall	89.4	86.8	P/P	40 - 150
2332928	Glufosinate	50.9	53.8	P/P	40 - 150
2332928	Glyphosate	48.7	52.1	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P414950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333123	2,4-D	121	121	P/P	40 - 150
2333123	2,4,5-T	109	112	P/P	40 - 150
2333123	Acetaminophen	121	123	P/P	30 - 150
2333123	Acetamiprid	75.6	74.9	P/P	40 - 150
2333123	Afidopyropen	63.1	61.5	P/P	30 - 150
2333123	Benzovindiflupyr	57.5	61.6	P/P	40 - 150
2333123	Carbamazepine	91.4	93.5	P/P	40 - 150
2333123	Clothianidin	104	100	P/P	40 - 150
2333123	Dinotefuran	126	124	P/P	40 - 150
2333123	Diuron	80.8	85.3	P/P	40 - 150
2333123	Fenuron	76.9	78.4	P/P	40 - 150
2333123	Fluridone	87.4	85.6	P/P	40 - 150
2333123	Hydrocodone	93.2	98.2	P/P	40 - 150
2333123	Ibuprofen	96.3	92.1	P/P	40 - 150
2333123	Imidacloprid	126	124	P/P	40 - 150
2333123	Linuron	74.7	71.0	P/P	40 - 150
2333123	Mandestrobin	61.1	62.6	P/P	40 - 150
2333123	MCP	131	133	P/P	40 - 150
2333123	Naproxen	113	94.3	P/P	40 - 150
2333123	Primidone	109	106	P/P	40 - 150
2333123	Pyraclostrobin	57.0	57.9	P/P	40 - 150
2333123	Silvex	109	104	P/P	40 - 150
2333123	Thiamethoxam	126	126	P/P	40 - 150
2333123	Tolfenpyrad	45.8	44.6	P/P	30 - 150
2333123	Triclopyr	123	126	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P415081

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333508	3-Hydroxycarbofuran	103	95.0	P/P	40 - 150
2333508	Aldicarb	83.5	80.4	P/P	30 - 150
2333508	Aldicarb Sulfone	107	102	P/P	40 - 150
2333508	Aldicarb Sulfoxide	44.8	43.3	P/P	40 - 150
2333508	Carbaryl	82.0	79.6	P/P	40 - 150
2333508	Carbofuran	90.8	84.3	P/P	40 - 150
2333508	Methiocarb	87.5	84.7	P/P	40 - 150
2333508	Methomyl	89.1	83.4	P/P	40 - 150
2333508	Oxamyl	96.8	89.0	P/P	40 - 150
2333508	Propoxur	88.7	87.8	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P415393

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333178	Fluoride	103	103	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P415135

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332876	Organic Carbon	90.0	93.2	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P415295

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2332821	Organic Carbon	94.5	95.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P414911

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333107	Color (true)	2.31	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P414914

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332873	Color (true)	5.56	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414916

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332874	Turbidity	5.39	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414917

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333107	Turbidity	4.08	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P415009

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332350	Calcium	2.31	Spike	P	0 - 20
2332350	Iron	2.61	Spike	P	0 - 20
2332350	Magnesium	1.02	Spike	P	0 - 20
2332350	Potassium	0.864	Spike	P	0 - 20
2332350	Sodium	1.16	Spike	P	0 - 20
2332350	Strontium	0.0407	Spike	P	0 - 20
2332350	Tin	1.39	Spike	P	0 - 20
2332350	Titanium	7.49	Spike	P	0 - 20
2332350	Vanadium	0.405	Spike	P	0 - 20
2332350	Zinc	0.759	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P415009

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332350	Antimony	2.59	Spike	P	0 - 20
2332350	Arsenic	2.27	Spike	P	0 - 20
2332350	Barium	2.05	Spike	P	0 - 20
2332350	Beryllium	1.81	Spike	P	0 - 20
2332350	Boron	1.45	Spike	P	0 - 20
2332350	Cadmium	3.11	Spike	P	0 - 20
2332350	Chromium	1.31	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P415009

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332350	Cobalt	1.23	Spike	P	0 - 20
2332350	Copper	1.23	Spike	P	0 - 20
2332350	Lead	1.43	Spike	P	0 - 20
2332350	Manganese	1.35	Spike	P	0 - 20
2332350	Molybdenum	0.894	Spike	P	0 - 20
2332350	Nickel	1.17	Spike	P	0 - 20
2332350	Selenium	1.05	Spike	P	0 - 20
2332350	Silver	0.742	Spike	P	0 - 20
2332350	Thallium	2.48	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P415208

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332374	Aluminum	2.15	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P415411

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333069	Chloride	0.739	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P415564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333047	Ammonia-N	1.79	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P415099

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332730	Kjeldahl Nitrogen	6.34	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P415361

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332995	Kjeldahl Nitrogen	5.95	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P415721

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332480	NO2NO3-N	1.06	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P415065

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333149	Total-P	0.222	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P415465

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333840	Total-P	1.98	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P414906

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333048	O-Phosphate-P	1.50	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P414979

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332611	Aldrin	3.53	Spike	P	0 - 37
2332611	Alpha-BHC	1.54	Spike	P	0 - 16
2332611	Alpha-Chlordane	3.89	Spike	P	0 - 28
2332611	Beta-BHC	7.46	Spike	P	0 - 32
2332611	Beta-Cyfluthrin	5.09	Spike	P	0 - 41
2332611	Bifenthrin	6.87	Spike	P	0 - 36
2332611	Chlorothalonil	6.18	Spike	P	0 - 54
2332611	Cis-Nonachlor	6.37	Spike	P	0 - 33
2332611	Cypermethrin	6.56	Spike	P	0 - 38
2332611	Dacthal	5.11	Spike	P	0 - 23
2332611	DDD-p,p'	4.98	Spike	P	0 - 35
2332611	DDE-p,p'	0.880	Spike	P	0 - 27
2332611	DDT-p,p'	3.99	Spike	P	0 - 31
2332611	Delta-BHC	4.42	Spike	P	0 - 30
2332611	Deltamethrin	10.8	Spike	P	0 - 76
2332611	Dichlobenil	15.8	Spike	P	0 - 33
2332611	Dicofol	3.82	Spike	P	0 - 24
2332611	Dieldrin	8.01	Spike	P	0 - 35
2332611	Endosulfan I	6.45	Spike	P	0 - 25
2332611	Endosulfan II	3.74	Spike	P	0 - 31
2332611	Endosulfan Sulfate	7.76	Spike	P	0 - 38
2332611	Endrin	1.05	Spike	P	0 - 53
2332611	Endrin Aldehyde	9.12	Spike	P	0 - 81
2332611	Endrin Ketone	3.16	Spike	P	0 - 33
2332611	Esfenvalerate	8.06	Spike	P	0 - 46
2332611	Ethalfuralin	4.72	Spike	P	0 - 22
2332611	Fenpropathrin	4.60	Spike	P	0 - 29
2332611	Gamma-BHC	1.77	Spike	P	0 - 17
2332611	Gamma-Chlordane	4.44	Spike	P	0 - 28
2332611	Heptachlor	10.0	Spike	P	0 - 28

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P414979

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332611	Heptachlor Epoxide	10.6	Spike	P	0 - 23
2332611	Hexachlorobenzene	5.18	Spike	P	0 - 22
2332611	Kepone	12.1	Spike	P	0 - 61
2332611	Lambda-Cyhalothrin	0.984	Spike	P	0 - 52
2332611	Methoprene	2.18	Spike	P	0 - 38
2332611	Methoxychlor	4.70	Spike	P	0 - 29
2332611	MGK-264	1.93	Spike	P	0 - 41
2332611	Mirex	2.35	Spike	P	0 - 39
2332611	Oxychlordane	3.41	Spike	P	0 - 33
2332611	Permethrin	3.71	Spike	P	0 - 39
2332611	Phenothrin	13.8	Spike	P	0 - 52
2332611	Piperonyl Butoxide	12.6	Spike	P	0 - 91
2332611	Prallethrin	5.28	Spike	P	0 - 34
2332611	Tau-Fluvalinate	4.82	Spike	P	0 - 41
2332611	Tetramethrin	4.13	Spike	P	0 - 43
2332611	Trans-Nonachlor	1.59	Spike	P	0 - 31
2332611	Triclosan Methyl	5.82	Spike	P	0 - 24
2332611	Trifluralin	0.102	Spike	P	0 - 23

Reference Method: EPA 8270E

Batch ID: P415071

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332309	Acetochlor	15.3	Spike	P	0 - 27
2332309	Alachlor	14.1	Spike	P	0 - 27
2332309	Ametryn	0.402	Spike	P	0 - 34
2332309	Atrazine	11.6	Spike	P	0 - 41
2332309	Atrazine Desethyl	16.2	Spike	P	0 - 38
2332309	Avobenzone	16.8	Spike	P	0 - 30
2332309	Azinphos Methyl	17.1	Spike	P	0 - 62
2332309	Azoxystrobin	22.0	Spike	P	0 - 32
2332309	Bromacil	19.6	Spike	P	0 - 30
2332309	Butylate	24.2	Spike	P	0 - 59
2332309	Caffeine	5.89	Spike	P	0 - 60
2332309	Carbophenothion	12.0	Spike	P	0 - 25
2332309	Carfentrazone Ethyl	14.6	Spike	P	0 - 26
2332309	Chlorfenapyr	5.60	Spike	P	0 - 30
2332309	Chlorpyrifos Ethyl	8.59	Spike	P	0 - 27
2332309	Chlorpyrifos Methyl	7.54	Spike	P	0 - 26
2332309	Coumaphos	2.88	Spike	P	0 - 30
2332309	Cyanazine	18.5	Spike	P	0 - 58
2332309	Cyprodinil	8.78	Spike	P	0 - 30
2332309	Demeton	9.01	Spike	P	0 - 25
2332309	Diazinon	12.1	Spike	P	0 - 29
2332309	Difenoconazole	10.4	Spike	P	0 - 25
2332309	Dimethenamid	11.0	Spike	P	0 - 30
2332309	Dimethomorph	5.35	Spike	P	0 - 30
2332309	Disulfoton	5.16	Spike	P	0 - 33
2332309	Dithiopyr	8.00	Spike	P	0 - 22
2332309	EPTC	36.4	Spike	P	0 - 38

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P415071

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332309	Ethion	0.729	Spike	P	0 - 79
2332309	Ethoprop	12.2	Spike	P	0 - 23
2332309	Etridiazole	19.6	Spike	P	0 - 30
2332309	Fenamiphos	4.45	Spike	P	0 - 58
2332309	Fenbuconazole	16.4	Spike	P	0 - 37
2332309	Fipronil	14.5	Spike	P	0 - 33
2332309	Fipronil Desulfinyl	14.6	Spike	P	0 - 26
2332309	Fipronil Sulfide	6.83	Spike	P	0 - 37
2332309	Fipronil Sulfone	7.56	Spike	P	0 - 50
2332309	Fluazifop-P-butyl	14.5	Spike	P	0 - 24
2332309	Fludioxonil	16.1	Spike	P	0 - 26
2332309	Flumioxazin	12.1	Spike	P	0 - 37
2332309	Flutolanil	13.1	Spike	P	0 - 26
2332309	Fluxapyroxad	13.9	Spike	P	0 - 34
2332309	Fonofos	2.79	Spike	P	0 - 27
2332309	Hexazinone	8.84	Spike	P	0 - 36
2332309	Imazalil	29.9	Spike	P	0 - 65
2332309	Iprodione	9.09	Spike	P	0 - 33
2332309	Loratadine	2.57	Spike	P	0 - 30
2332309	Malathion	9.87	Spike	P	0 - 44
2332309	Metalaxyl	8.98	Spike	P	0 - 38
2332309	Metolachlor	14.5	Spike	P	0 - 36
2332309	Metribuzin	13.9	Spike	P	0 - 63
2332309	Mevinphos	5.01	Spike	P	0 - 26
2332309	Molinate	25.1	Spike	P	0 - 40
2332309	Myclobutanil	14.7	Spike	P	0 - 21
2332309	Naled	15.4	Spike	P	0 - 26
2332309	Napropamide	6.86	Spike	P	0 - 30
2332309	Norflurazon	11.7	Spike	P	0 - 24
2332309	Octinoxate	18.1	Spike	P	0 - 30
2332309	Oxadiazon	9.06	Spike	P	0 - 27
2332309	Oxybenzone	16.4	Spike	P	0 - 30
2332309	Oxyfluorfen	6.89	Spike	P	0 - 24
2332309	Parathion Ethyl	13.2	Spike	P	0 - 28
2332309	Parathion Methyl	9.78	Spike	P	0 - 27
2332309	Pendimethalin	10.9	Spike	P	0 - 31
2332309	Phenytol	11.7	Spike	P	0 - 30
2332309	Phorate	13.3	Spike	P	0 - 27
2332309	Prodiamine	13.9	Spike	P	0 - 52
2332309	Prometon	13.9	Spike	P	0 - 31
2332309	Prometryn	3.32	Spike	P	0 - 28
2332309	Pronamide	11.2	Spike	P	0 - 26
2332309	Propanil	11.6	Spike	P	0 - 30
2332309	Propargite	19.1	Spike	P	0 - 30
2332309	Propiconazole	15.9	Spike	P	0 - 31
2332309	Pyraflufen Ethyl	13.8	Spike	P	0 - 30
2332309	Pyridaben	4.71	Spike	P	0 - 30
2332309	Pyriproxyfen	18.5	Spike	P	0 - 50
2332309	Simazine	12.0	Spike	P	0 - 29
2332309	Stirophos	91.7	Spike	F	0 - 30
2332309	Sulfentrazone	14.7	Spike	P	0 - 33

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P415071

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332309	Tebuconazole	9.03	Spike	P	0 - 44
2332309	Terbufos	12.9	Spike	P	0 - 29
2332309	Terbuthylazine	10.9	Spike	P	0 - 27
2332309	Thiobencarb	14.6	Spike	P	0 - 30
2332309	Triadimefon	1.48	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P414979

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333132	Chlordane	0.573	Spike	P	0 - 25
2333132	Toxaphene	1.10	Spike	P	0 - 24

Reference Method: EPA 8321B
Batch ID: P414891

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332928	Acesulfame K	2.59	Spike	P	0 - 30
2332928	AMPA	0.419	Spike	P	0 - 30
2332928	Endothall	2.91	Spike	P	0 - 30
2332928	Glufosinate	5.63	Spike	P	0 - 30
2332928	Glyphosate	3.45	Spike	P	0 - 30
2332928	Sucralose	14.5	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P414950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333123	2,4-D	0.143	Spike	P	0 - 30
2333123	2,4,5-T	2.94	Spike	P	0 - 30
2333123	Acetaminophen	1.80	Spike	P	0 - 30
2333123	Acetamiprid	0.910	Spike	P	0 - 30
2333123	Afidopyropen	2.55	Spike	P	0 - 30
2333123	Bentazon	2.42	Spike	P	0 - 30
2333123	Benzovindiflupyr	6.97	Spike	P	0 - 30
2333123	Carbamazepine	1.86	Spike	P	0 - 30
2333123	Clothianidin	2.70	Spike	P	0 - 30
2333123	Dinotefuran	1.81	Spike	P	0 - 30
2333123	Diuron	4.85	Spike	P	0 - 30
2333123	Fenuron	1.95	Spike	P	0 - 30
2333123	Fluridone	1.68	Spike	P	0 - 30
2333123	Hydrocodone	5.26	Spike	P	0 - 30
2333123	Ibuprofen	4.41	Spike	P	0 - 30
2333123	Imazapyr	7.54	Spike	P	0 - 30
2333123	Imidacloprid	0.924	Spike	P	0 - 30
2333123	Linuron	5.09	Spike	P	0 - 30
2333123	Mandestrobin	2.36	Spike	P	0 - 30
2333123	MCP	1.41	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P414950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333123	Naproxen	18.1	Spike	P	0 - 30
2333123	Primidone	3.41	Spike	P	0 - 30
2333123	Pyraclostrobin	1.57	Spike	P	0 - 30
2333123	Silvex	5.21	Spike	P	0 - 30
2333123	Thiamethoxam	0.388	Spike	P	0 - 30
2333123	Tolfenpyrad	2.48	Spike	P	0 - 30
2333123	Triclopyr	1.94	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P415081

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333508	3-Hydroxycarbofuran	7.86	Spike	P	0 - 30
2333508	Aldicarb	3.84	Spike	P	0 - 30
2333508	Aldicarb Sulfone	5.34	Spike	P	0 - 30
2333508	Aldicarb Sulfoxide	3.49	Spike	P	0 - 30
2333508	Carbaryl	2.92	Spike	P	0 - 30
2333508	Carbofuran	7.41	Spike	P	0 - 30
2333508	Methiocarb	3.30	Spike	P	0 - 30
2333508	Methomyl	6.56	Spike	P	0 - 30
2333508	Oxamyl	8.42	Spike	P	0 - 30
2333508	Propoxur	1.04	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P415388

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333178	Total Alkalinity	0.100	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P415243

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332513	TDS	7.00	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
Batch ID: P415244

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333107	TDS	5.58	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P415393

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333178	Fluoride	0.0	Spike	P	0 - 1.6

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P415135

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332876	Organic Carbon	1.91	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P415295

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2332821	Organic Carbon	0.428	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2333122
Field Sample ID: G5CE0131

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	98.8	P	30 - 160

Lab Sample ID: 2333123
Field Sample ID: G5CE0131

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	121	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.7	P	30 - 160
EPA 8321B	Diuron-d6	68.6	P	30 - 160
EPA 8321B	Endothall-d6	79.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	71.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	87.2	P	30 - 160
EPA 8321B	Primidone-d5	97.0	P	30 - 160
EPA 8321B	Sucralose-d6	92.7	P	30 - 160

Lab Sample ID: 2333132
Field Sample ID: G5CE0131

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	91.0	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	76.3	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	78.5	P	30 - 97.0
EPA 8276	PCNB	101	P	45 - 119

Lab Sample ID: 2333133
Field Sample ID: G5CE0131

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	57.5	P	20 - 200
EPA 8270E	Simazine-d10	76.0	P	71 - 140
EPA 8270E	Terbufos-d10	68.5	P	62 - 131
EPA 8270E	Terphenyl-d14	71.8	P	52 - 141

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A112678

Included Lab Sample IDs: 2333106

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.9	99.9	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A112681

Included Lab Sample IDs: 2333104, 2333107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	103	P/P	85 - 115
Color (true)	105	105	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A112682

Included Lab Sample IDs: 2333104, 2333107

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

Reference Method: EPA 8321B

Run ID: A112689

Included Lab Sample IDs: 2333123

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	100	98.1	P/P	60 - 160
Endothall	81.5	82.4	P/P	60 - 160
Glufosinate	109	109	P/P	60 - 160
Glyphosate	100	100	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A112698

Included Lab Sample IDs: 2333123

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	113	114	P/P	60 - 160
Sucralose	100	102	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A112753

Included Lab Sample IDs: 2333134

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	99.7	100	P/P	90 - 110
Iron	102	101	P/P	90 - 110
Magnesium	102	101	P/P	90 - 110
Potassium	101	101	P/P	90 - 110
Sodium	98.6	99.1	P/P	90 - 110
Strontium	103	104	P/P	90 - 110
Tin	100	101	P/P	90 - 110
Titanium	100	99.1	P/P	90 - 110
Vanadium	100	101	P/P	90 - 110
Zinc	102	103	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A112755

Included Lab Sample IDs: 2333134

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	98.2	98.9	P/P	90 - 110
Arsenic	99.1	99.2	P/P	90 - 110
Barium	98.3	99.3	P/P	90 - 110
Beryllium	94.2	95.7	P/P	90 - 110
Boron	98.5	95.8	P/P	90 - 110
Cadmium	97.2	98.4	P/P	90 - 110
Chromium	95.5	97.0	P/P	90 - 110
Cobalt	97.2	98.1	P/P	90 - 110
Copper	98.7	99.8	P/P	90 - 110
Lead	98.7	98.2	P/P	90 - 110
Manganese	96.8	97.4	P/P	90 - 110
Molybdenum	98.1	98.2	P/P	90 - 110
Nickel	98.0	99.9	P/P	90 - 110
Selenium	96.8	97.5	P/P	90 - 110
Silver	99.2	99.7	P/P	90 - 110
Thallium	98.6	96.9	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A112788

Included Lab Sample IDs: 2333122

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	96.8	98.1	P/P	60 - 150
Aldicarb	97.7	93.4	P/P	60 - 150
Aldicarb Sulfone	98.6	96.8	P/P	50 - 150
Aldicarb Sulfoxide	101	96.1	P/P	50 - 150
Carbaryl	100	97.1	P/P	60 - 150
Carbofuran	101	97.9	P/P	50 - 150
Methiocarb	99.1	98.4	P/P	50 - 150
Methomyl	97.6	99.6	P/P	50 - 150
Oxamyl	98.2	97.1	P/P	50 - 150
Propoxur	100	99.4	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A112791

Included Lab Sample IDs: 2333123

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	108	109	P/P	50 - 150
2,4,5-T	119	114	P/P	50 - 150
Acetaminophen	108	108	P/P	60 - 160
Acetamiprid	88.1	89.9	P/P	50 - 150
Afidopyropen	79.9	82.1	P/P	50 - 150
Bentazon	114	119	P/P	50 - 160
Benzovindiflupyr	78.4	78.0	P/P	50 - 150
Carbamazepine	82.3	84.9	P/P	60 - 150
Clothianidin	94.9	95.5	P/P	60 - 150
Dinotefuran	97.3	94.3	P/P	50 - 150
Diuron	86.2	90.6	P/P	60 - 160
Fenuron	87.7	87.7	P/P	60 - 150
Fluridone	97.6	96.0	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A112791
Included Lab Sample IDs: 2333123

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Hydrocodone	94.4	94.8	P/P	60 - 150
Ibuprofen	106	99.7	P/P	50 - 160
Imazapyr	100	88.0	P/P	50 - 150
Imidacloprid	87.7	88.6	P/P	60 - 150
Linuron	70.5	78.2	P/P	60 - 150
Mandestrobin	80.7	81.9	P/P	50 - 150
MCPP	101	108	P/P	50 - 150
Naproxen	111	116	P/P	50 - 160
Primidone	92.0	106	P/P	60 - 150
Pyraclostrobin	78.2	79.3	P/P	60 - 150
Silvex	111	107	P/P	50 - 150
Thiamethoxam	94.8	91.1	P/P	50 - 150
Tolfenpyrad	83.9	84.0	P/P	60 - 150
Triclopyr	99.6	111	P/P	50 - 150

Reference Method: SM 5310 B-2011
Run ID: A112797
Included Lab Sample IDs: 2333105

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.4	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A112842
Included Lab Sample IDs: 2333108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.4	99.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A112854
Included Lab Sample IDs: 2333134

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	104	106	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A112869
Included Lab Sample IDs: 2333108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.8	96.5	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A112881
Included Lab Sample IDs: 2333132

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	107		P	80 - 120
Alpha-BHC	95.8		P	80 - 120
Alpha-Chlordane	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A112881
Included Lab Sample IDs: 2333132

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beta-BHC	97.2		P	80 - 120
Beta-Cyfluthrin	106		P	80 - 120
Bifenthrin	98.8		P	80 - 120
Chlorothalonil	94.2		P	80 - 120
Cis-Nonachlor	95.3		P	80 - 120
Cypermethrin	99.0		P	80 - 120
Dacthal	108		P	80 - 120
DDD-p,p'	96.9		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	100		P	80 - 120
Delta-BHC	102		P	80 - 120
Deltamethrin	118		P	80 - 120
Dichlobenil	105		P	80 - 120
Dicofol	100		P	80 - 120
Dieldrin	97.6		P	80 - 120
Endosulfan I	102		P	80 - 120
Endosulfan II	102		P	80 - 120
Endosulfan Sulfate	105		P	80 - 120
Endrin	104		P	80 - 120
Endrin Aldehyde	93.3		P	80 - 120
Endrin Ketone	97.0		P	80 - 120
Esfenvalerate	105		P	80 - 120
Ethalfuralin	97.7		P	80 - 120
Fenpropathrin	99.7		P	80 - 120
Gamma-BHC	109		P	80 - 120
Gamma-Chlordane	102		P	80 - 120
Heptachlor	95.0		P	80 - 120
Heptachlor Epoxide	93.6		P	80 - 120
Hexachlorobenzene	95.0		P	80 - 120
Kepone	101		P	80 - 120
Lambda-Cyhalothrin	95.3		P	80 - 120
Methoprene	106		P	80 - 120
Methoxychlor	98.2		P	80 - 120
MGK-264	103		P	80 - 120
Mirex	95.7		P	80 - 120
Oxychlordane	99.5		P	80 - 120
Permethrin	96.0		P	80 - 120
Phenothrin	91.8		P	80 - 120
Piperonyl Butoxide	115		P	80 - 120
Prallethrin	108		P	80 - 120
Tau-Fluvalinate	107		P	80 - 120
Tetramethrin	99.5		P	80 - 120
Trans-Nonachlor	99.9		P	80 - 120
Triclosan Methyl	102		P	80 - 120
Trifluralin	97.3		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112887
Included Lab Sample IDs: 2333108

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A112887

Included Lab Sample IDs: 2333108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.0	94.1	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A112906

Included Lab Sample IDs: 2333104, 2333107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.9	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A112906

Included Lab Sample IDs: 2333104, 2333107

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

Reference Method: EPA 8270E

Run ID: A112909

Included Lab Sample IDs: 2333133

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	97.3		P	80 - 120
Carbophenothion	107		P	80 - 120
Chlorfenapyr	108		P	80 - 120
Coumaphos	116		P	80 - 120
Fluxapyroxad	98.6		P	80 - 120
Malathion	101		P	80 - 120
Naled	104		P	80 - 120
Pyridaben	106		P	80 - 120
Stirophos	108		P	80 - 120
Tebuconazole	98.2		P	80 - 120

Reference Method: EPA 8270E

Run ID: A112918

Included Lab Sample IDs: 2333133

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	103		P	80 - 120
Octinoxate	94.5		P	80 - 120
Oxybenzone	98.7		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A112925

Included Lab Sample IDs: 2333104, 2333107

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A112959
 Included Lab Sample IDs: 2333133

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	103		P	80 - 120
Alachlor	96.0		P	80 - 120
Ametryn	91.9		P	80 - 120
Atrazine Desethyl	92.1		P	80 - 120
Azinphos Methyl	97.8		P	80 - 120
Azoxystrobin	95.5		P	80 - 120
Bromacil	98.6		P	80 - 120
Butylate	111		P	80 - 120
Caffeine	98.6		P	80 - 120
Carfentrazone Ethyl	102		P	80 - 120
Chlorpyrifos Ethyl	109		P	80 - 120
Chlorpyrifos Methyl	106		P	80 - 120
Cyanazine	89.9		P	80 - 120
Cyprodinil	89.2		P	80 - 120
Demeton	109		P	80 - 120
Diazinon	93.9		P	80 - 120
Difenoconazole	94.9		P	80 - 120
Dimethenamid	105		P	80 - 120
Dimethomorph	99.0		P	80 - 120
Disulfoton	106		P	80 - 120
Dithiopyr	99.8		P	80 - 120
EPTC	103		P	80 - 120
Ethion	105		P	80 - 120
Ethoprop	97.5		P	80 - 120
Etridiazole	93.7		P	80 - 120
Fenamiphos	115		P	80 - 120
Fenbuconazole	97.3		P	80 - 120
Fipronil	103		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	119		P	80 - 120
Fipronil Sulfone	119		P	80 - 120
Fluazifop-P-butyl	100		P	80 - 120
Fludioxonil	98.2		P	80 - 120
Flumioxazin	88.5		P	80 - 120
Flutolanil	96.3		P	80 - 120
Fonofos	103		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	98.5		P	80 - 120
Iprodione	96.7		P	80 - 120
Loratadine	98.7		P	80 - 120
Metalaxyl	103		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	98.6		P	80 - 120
Mevinphos	93.5		P	80 - 120
Molinate	97.9		P	80 - 120
Myclobutanil	105		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	99.5		P	80 - 120
Oxadiazon	105		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	96.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A112959
Included Lab Sample IDs: 2333133

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Parathion Methyl	96.1		P	80 - 120
Pendimethalin	98.3		P	80 - 120
Phenytoin	106		P	80 - 120
Phorate	103		P	80 - 120
Prodiamine	106		P	80 - 120
Prometon	97.9		P	80 - 120
Prometryn	92.0		P	80 - 120
Pronamide	99.0		P	80 - 120
Propanil	101		P	80 - 120
Propargite	102		P	80 - 120
Propiconazole	98.6		P	80 - 120
Pyraflufen Ethyl	105		P	80 - 120
Pyriproxyfen	100		P	80 - 120
Simazine	99.9		P	80 - 120
Sulfentrazone	102		P	80 - 120
Terbufos	102		P	80 - 120
Terbutylazine	102		P	80 - 120
Thiobencarb	98.9		P	80 - 120
Triadimefon	101		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112973
Included Lab Sample IDs: 2333105

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	106	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A112983
Included Lab Sample IDs: 2333105, 2333108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.4	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A113008
Included Lab Sample IDs: 2333105

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

Reference Method: EPA 8276
Run ID: A113035
Included Lab Sample IDs: 2333132

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.9		P	80 - 120
Toxaphene	103		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A113042

Included Lab Sample IDs: 2333105, 2333108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	99.0	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			Precision SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	101				2.31	
	Color (true)	105				5.56	
EPA 180.1 Rev. 2.0	Turbidity	97.1				5.39	
	Turbidity	97.0				4.08	
EPA 200.7 Rev. 4.4	Calcium	103	98.8	101			2.31
	Iron	103	102	105	103		2.61
	Magnesium	104	101	102	104		1.02
	Potassium	106	103	104	111		0.864
	Sodium	102	101	102			1.16
	Strontium	103	104	104	105		0.0407
	Tin	100	97.9	99.3	103		1.39
	Titanium	100	104	113	101		7.49
	Vanadium	94.3	96.1	96.5	97.5		0.405
	Zinc	99.2	98.1	98.9	102		0.759
EPA 200.8 Rev. 5.4	Aluminum	102	102	99.5	109		2.15
	Antimony	99.7	97.7	100	101		2.59
	Arsenic	101	98.9	101	100		2.27
	Barium	103	104	101	104		2.05
	Beryllium	96.5	96.6	98.6	95.3		1.81
	Boron	106	107	108	105		1.45
	Cadmium	97.8	98.1	101	101		3.11
	Chromium	95.9	99.2	100	97.4		1.31
	Cobalt	99.1	98.1	99.3	99.4		1.23
	Copper	99.1	97.7	99.0	100		1.23
	Lead	101	100	102	102		1.43
	Manganese	96.6	99.7				1.35
	Molybdenum	99.2	99.7	101	101		0.894
	Nickel	100	100	102	102		1.17
	Selenium	98.6	96.7	97.7	98.4		1.05
	Silver	99.4	98.5	99.2	100		0.742
	Thallium	102	102	105	104		2.48
EPA 300.0 Rev. 2.1	Chloride	102	101	101		0.739	
	Sulfate	101	101	101			
EPA 350.1 Rev. 2.0	Ammonia-N	94.4	94.6	97.0			1.79
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.2	104	95.6			6.34
	Kjeldahl Nitrogen	106					5.95
EPA 353.2 Rev. 2.0	NO2NO3-N	100	100	98.5			1.06
EPA 365.1 Rev. 2.0	Total-P	102	105	105			0.222
	Total-P	107	107	105			1.98
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.9	97.7	99.3			1.50
EPA 8270E	Acetochlor	111	88.5	106			15.3
	Alachlor	100	83.7	96.4			14.1
	Aldrin	74.6	70.7	73.2			3.53
	Alpha-BHC	97.9	97.9	99.4			1.54
	Alpha-Chlordane	99.3	95.3	99.1			3.89
	Ametryn	118	108	108			0.402
	Atrazine	98.4					11.6
	Atrazine Desethyl	69.9	50.1	61.9			16.2
	Avobenzone	107	82.1	69.3			16.8
	Azinphos Methyl	170	143	170			17.1
	Azoxystrobin	96.9	70.1	109			22.0
	Beta-BHC	81.4	76.5	82.4			7.46
	Beta-Cyfluthrin	111	103	98.1			5.09
	Bifenthrin	72.8	75.0	80.3			6.87

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Bromacil	95.7	79.3	96.5		19.6
	Butylate	41.7	42.4	54.1		24.2
	Caffeine	74.0	88.8	83.6		5.89
	Carbophenothion	95.9	88.4	99.7		12.0
	Carfentrazone Ethyl	129	108	125		14.6
	Chlorfenapyr	81.8	81.0	85.7		5.60
	Chlorothalonil	124	122	115		6.18
	Chlorpyrifos Ethyl	82.6	75.6	82.4		8.59
	Chlorpyrifos Methyl	82.3	80.2	86.5		7.54
	Cis-Nonachlor	84.5	90.5	96.4		6.37
	Coumaphos	114	110	113		2.88
	Cyanazine	159	94.0	113		18.5
	Cypermethrin	97.3	95.6	102		6.56
	Cyprodinil	111	93.4	103		8.78
	Dacthal	105	107	102		5.11
	DDD-p,p'	85.6	92.5	97.2		4.98
	DDE-p,p'	89.1	92.0	91.2		0.880
	DDT-p,p'	93.6	92.6	88.9		3.99
	Delta-BHC	140	143	137		4.42
	Deltamethrin	135	122	109		10.8
	Demeton	64.4	77.4	84.7		9.01
	Diazinon	107	88.5	99.9		12.1
	Dichlobenil	89.3	82.8	97.0		15.8
	Dicofol	88.1	88.5	85.2		3.82
	Dieldrin	87.1	92.4	100		8.01
	Difenoconazole	197	174	196		10.4
	Dimethenamid	93.4	82.1	91.6		11.0
	Dimethomorph	77.1	78.6	82.9		5.35
	Disulfoton	75.9	80.4	84.6		5.16
	Dithiopyr	104	87.6	94.9		8.00
	Endosulfan I	94.3	93.2	99.4		6.45
	Endosulfan II	104	96.4	92.8		3.74
	Endosulfan Sulfate	108	96.4	89.2		7.76
	Endrin	98.1	91.8	90.8		1.05
	Endrin Aldehyde	90.6	88.9	81.2		9.12
	Endrin Ketone	99.3	95.1	98.2		3.16
	EPTC	44.1	36.2	52.3		36.4
	Esfenvalerate	111	104	96.4		8.06
	Ethalfuralin	92.5	89.1	93.4		4.72
	Ethion	73.7	75.8	76.3		0.729
	Ethoprop	71.1	71.9	81.3		12.2
	Etridiazole	67.5	52.2	63.5		19.6
	Fenamiphos	87.9	95.0	99.3		4.45
	Fenbuconazole	146	126	148		16.4
	Fenpropathrin	89.7	81.8	85.6		4.60
	Fipronil	108	91.9	106		14.5
	Fipronil Desulfinyl	105	85.5	99.0		14.6
	Fipronil Sulfide	78.5	78.1	83.6		6.83
	Fipronil Sulfone	86.1	85.6	92.3		7.56
	Fluazifop-P-butyl	103	84.7	98.0		14.5
	Fludioxonil	112	88.9	111		16.1
	Flumioxazin	222	202	228		12.1
	Flutolanil	97.3	82.6	95.3		13.1
	Fluxapyroxad	84.3	62.7	84.0		13.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Fonofos	72.2	73.6	75.7		2.79
	Gamma-BHC	118	120	118		1.77
	Gamma-Chlordane	92.5	91.2	95.4		4.44
	Heptachlor	71.3	75.6	83.6		10.0
	Heptachlor Epoxide	89.2	89.6	99.7		10.6
	Hexachlorobenzene	87.6	85.9	90.4		5.18
	Hexazinone	98.0	89.4	98.2		8.84
	Imazalil	94.2	79.1	107		29.9
	Iprodione	107	103	113		9.09
	Kepone	245	227	201		12.1
	Lambda-Cyhalothrin	80.4	81.5	82.3		0.984
	Loratadine	69.4	73.1	75.0		2.57
	Malathion	101	97.3	107		9.87
	Metalaxyl	96.0	79.8	88.0		8.98
	Methoprene	83.1	80.8	82.6		2.18
	Methoxychlor	96.3	90.4	86.2		4.70
	Metolachlor	106				14.5
	Metribuzin	91.5	105	120		13.9
	Mevinphos	58.6	65.6	69.0		5.01
	MGK-264	101	98.0	99.9		1.93
	Mirex	73.1	76.5	78.3		2.35
	Molinate	55.9	51.1	65.8		25.1
	Myclobutanil	110	95.1	110		14.7
	Naled	105	92.5	108		15.4
	Napropamide	86.0	76.9	82.4		6.86
	Norflurazon	117	102	115		11.7
	Octinoxate	102	66.5	51.7		18.1
	Oxadiazon	90.7	78.0	85.4		9.06
	Oxybenzone	99.0	70.2	59.6		16.4
	Oxychlordane	95.6	90.2	87.2		3.41
	Oxyfluorfen	129	114	122		6.89
	Parathion Ethyl	89.9	81.7	93.3		13.2
	Parathion Methyl	106	103	113		9.78
	Pendimethalin	81.7	90.4	101		10.9
	Permethrin	95.4	99.3	95.6		3.71
	Phenothrin	65.8	68.1	78.2		13.8
	Phenytol	112	95.3	107		11.7
	Phorate	50.8	72.7	83.1		13.3
	Piperonyl Butoxide	136	128	145		12.6
	Prallethrin	103	94.7	89.9		5.28
	Prodiamine	98.4	91.9	106		13.9
	Prometon	107	71.8	82.6		13.9
	Prometryn	102	93.3	96.5		3.32
	Pronamide	112	99.3	111		11.2
	Propanil	88.5	76.2	85.6		11.6
	Propargite	145	117	142		19.1
	Propiconazole	110	86.7	107		15.9
	Pyraflufen Ethyl	117	98.5	113		13.8
	Pyridaben	99.3	93.4	97.9		4.71
	Pyriproxyfen	142	120	145		18.5
	Simazine	98.6	93.6	106		12.0
	Stirophos	16.8	81.4	30.2		91.7
	Sulfentrazone	139	94.4	109		14.7
	Tau-Fluvalinate	99.9	91.0	86.7		4.82

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Tebuconazole	58.1	56.9	63.2		9.03
	Terbufos	80.0	80.9	92.1		12.9
	Terbutylazine	89.8	82.4	91.9		10.9
	Tetramethrin	117	117	113		4.13
	Thiobencarb	96.6	79.7	92.3		14.6
	Trans-Nonachlor	86.3	89.1	87.7		1.59
	Triadimefon	87.4	70.7	69.6		1.48
	Triclosan Methyl	93.7	94.8	100		5.82
	Trifluralin	90.5	88.7	88.6		0.102
EPA 8276	Chlordane	105	105	105		0.573
	Toxaphene	106	127	126		1.10
EPA 8321B	2,4-D	88.3	121	121		0.143
	2,4,5-T	82.6	112	109		2.94
	3-Hydroxycarbofuran	89.9	95.0	103		7.86
	Acesulfame K	102	82.6	84.8		2.59
	Acetaminophen	81.6	121	123		1.80
	Acetamiprid	69.6	75.6	74.9		0.910
	Afidopyropen	59.1	63.1	61.5		2.55
	Aldicarb	84.5	80.4	83.5		3.84
	Aldicarb Sulfone	93.7	102	107		5.34
	Aldicarb Sulfoxide	87.4	44.8	43.3		3.49
	AMPA	97.9	37.9	37.6		0.419
	Bentazon	93.8				2.42
	Benzovindiflupyr	52.5	61.6	57.5		6.97
	Carbamazepine	66.1	91.4	93.5		1.86
	Carbaryl	85.9	79.6	82.0		2.92
	Carbofuran	89.0	84.3	90.8		7.41
	Clothianidin	76.6	104	100		2.70
	Dinotefuran	78.4	126	124		1.81
	Diuron	66.8	80.8	85.3		4.85
	Endothall	72.4	89.4	86.8		2.91
	Fenuron	72.1	76.9	78.4		1.95
	Fluridone	75.0	87.4	85.6		1.68
	Glufosinate	104	50.9	53.8		5.63
	Glyphosate	92.8	48.7	52.1		3.45
	Hydrocodone	75.3	93.2	98.2		5.26
	Ibuprofen	84.2	92.1	96.3		4.41
	Imazapyr	84.7				7.54
	Imidacloprid	70.8	126	124		0.924
	Linuron	61.3	74.7	71.0		5.09
	Mandestrobin	53.5	62.6	61.1		2.36
	MCPP	91.7	133	131		1.41
	Methiocarb	88.5	84.7	87.5		3.30
	Methomyl	90.4	83.4	89.1		6.56
	Naproxen	78.9	94.3	113		18.1
	Oxamyl	94.4	96.8	89.0		8.42
	Primidone	81.6	109	106		3.41
	Propoxur	89.0	87.8	88.7		1.04
	Pyraclostrobin	50.9	57.9	57.0		1.57
	Silvex	75.8	104	109		5.21
	Sucralose	96.9				14.5
	Thiamethoxam	73.9	126	126		0.388
	Tolfenpyrad	40.5	44.6	45.8		2.48
	Triclopyr	84.0	126	123		1.94

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
SM 2320 B-2011	Total Alkalinity	103				0.100	
SM 2540 C-2011	TDS					7.00	
	TDS					5.58	
SM 4500-F- C-2011	Fluoride	102	103	103			0.0
SM 5310 B-2011	Organic Carbon	89.1	90.0	93.2			1.91
	Organic Carbon	93.2	94.5	95.0			0.428

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2333104, 2333107
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2333104, 2333107
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2333134
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2333134
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2333104, 2333107
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2333104, 2333107
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2333105, 2333108
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2333105, 2333108
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2333105, 2333108
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2333105, 2333108
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2333106
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2333133
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2333132
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2333133
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2333132
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2333122
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2333123
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2333104, 2333107
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2333134
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2333104, 2333107
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2333104, 2333107
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2333104, 2333107
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2333105, 2333108

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	06/08/2022			06/08/2022 16:14	Samantha L Bates	2333107
	06/08/2022			06/08/2022 16:36	Samantha L Bates	2333104
EPA 180.1 Rev. 2.0	06/08/2022			06/08/2022 14:41	Khloe J Berg	2333104
	06/08/2022			06/08/2022 14:50	Khloe J Berg	2333107
EPA 200.7 Rev. 4.4	06/08/2022	06/10/2022 10:12	Megan Whitefoot	06/11/2022 16:51	Betina Topolski	2333134
	06/08/2022	06/10/2022 10:12	Megan Whitefoot	06/11/2022 16:59	Betina Topolski	2333134
EPA 200.8 Rev. 5.4	06/08/2022	06/10/2022 10:12	Megan Whitefoot	06/10/2022 22:07	Alexander Thompson	2333134
	06/08/2022	06/15/2022 09:35	Megan Whitefoot	06/15/2022 17:19	Alexander Thompson	2333134
EPA 300.0 Rev. 2.1	06/08/2022			06/16/2022 01:25	Anna M. Plaviak	2333104
	06/08/2022			06/16/2022 01:37	Anna M. Plaviak	2333107
EPA 350.1 Rev. 2.0	06/08/2022			06/22/2022 13:12	Ping Hua	2333105
	06/08/2022			06/22/2022 13:13	Ping Hua	2333108
EPA 351.2 Rev. 2.0	06/08/2022	06/14/2022 16:18	Samantha L Bates	06/16/2022 11:30	Alexandra J Mattheus	2333108
	06/08/2022	06/20/2022 16:20	Samantha L Bates	06/21/2022 13:36	Alexandra J Mattheus	2333105
EPA 353.2 Rev. 2.0	06/08/2022			06/24/2022 11:39	Beverly Y. Sanders	2333105
	06/08/2022			06/24/2022 11:40	Beverly Y. Sanders	2333108
EPA 365.1 Rev. 2.0	06/08/2022	06/13/2022 16:25	Simonne.V. Calhoun	06/14/2022 14:51	James L Waggeberby	2333108
	06/08/2022	06/22/2022 17:36	Adam P Silver	06/23/2022 11:08	James L Waggeberby	2333105
EPA 365.1 Rev. 2.0 dissolved	06/08/2022			06/08/2022 14:27	James L Waggeberby	2333106
EPA 8270E	06/08/2022	06/10/2022 08:00	Rasheda Ghaffari	06/15/2022 20:57	Michael Poppell	2333132
	06/08/2022	06/13/2022 08:00	Rasheda Ghaffari	06/16/2022 23:23	Michael Poppell	2333133
	06/08/2022	06/13/2022 08:00	Rasheda Ghaffari	06/16/2022 23:37	Arthur Maknenko	2333133
	06/08/2022	06/13/2022 08:00	Rasheda Ghaffari	06/18/2022 23:54	Michael Poppell	2333133
	06/08/2022	06/13/2022 08:00	Rasheda Ghaffari	06/19/2022 00:46	Michael Poppell	2333133
EPA 8276	06/08/2022	06/10/2022 08:00	Rasheda Ghaffari	06/23/2022 20:06	Julie Wi	2333132
EPA 8321B	06/08/2022	06/08/2022 14:00	Umesh Chiluwal	06/08/2022 20:27	Umesh Chiluwal	2333123
	06/08/2022	06/08/2022 14:00	Umesh Chiluwal	06/09/2022 11:01	Umesh Chiluwal	2333123
	06/08/2022	06/10/2022 13:00	Hoor Shaik	06/11/2022 09:59	Juyoung Kim	2333123
	06/08/2022	06/10/2022 13:00	Hoor Shaik	06/13/2022 14:35	Juyoung Kim	2333123
	06/08/2022	06/13/2022 09:30	June Rhew	06/14/2022 01:01	Juyoung Kim	2333122
SM 2320 B-2011	06/08/2022			06/16/2022 23:12	Dale L. Simmons	2333107
	06/08/2022			06/17/2022 01:34	Dale L. Simmons	2333104
SM 2340 B-2011	06/08/2022			06/11/2022 16:51	Betina Topolski	2333134
SM 2540 C-2011	06/08/2022			06/10/2022 14:26	Yijie Li	2333104, 2333107
SM 2540 D-2011	06/08/2022			06/10/2022 14:26	Yijie Li	2333104, 2333107
SM 4500-F- C-2011	06/08/2022			06/16/2022 23:12	Dale L. Simmons	2333107
	06/08/2022			06/17/2022 01:34	Dale L. Simmons	2333104
SM 5310 B-2011	06/08/2022			06/13/2022 22:04	Judith K. Clark	2333105
	06/08/2022			06/15/2022 18:55	Khloe J Berg	2333108