

Chemical Analysis Report

CEN-DIST-2022-08-09-01

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

Event Description: **LAKES Kathryn and Triplet - LVI**

Request ID: **RQ-2022-08-08-21**

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: Colin Wright, Program Administrator

Date Certified: 31-AUG-2022 10:42



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: Lake Kathryn @ Center

Collection Date/Time: 08/08/2022 10:07

Field ID: G2CE0217

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2347243	DEP SOP: NU-094-1	Color (true)	26	A	PCU	P417851	
	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P417855	
	EPA 300.0 Rev. 2.1	Chloride	17	A	mg Cl/L	P418210	
		Sulfate	8.5	A	mg SO4/L	P418213	
	SM 2320 B-2011	Total Alkalinity	38		mg CaCO3/L	P418286	
	SM 2540 C-2011	TDS	95	A	mg/L	P418253	
	SM 2540 D-2011	TSS	2	UA	mg/L	P418125	
2347245	SM 4500-F- C-2011	Fluoride	0.061	I	mg F/L	P418593	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P418055	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P418077	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P417997	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P417949	
2347247	SM 5310 B-2011	Organic Carbon	7.6		mg C/L	P417957	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P417849	
2347261	EPA 8321B	2,4-D	0.0076	I	ug/L	P417898	
		Acesulfame K	0.10	U	ug/L	P417828	
		2,4,5-T	0.0040	U	ug/L	P417898	
		AMPA	0.10	U	ug/L	P417828	
		Acetaminophen	0.0080	U	ug/L	P417898	
		Acetamiprid	0.0020	U	ug/L	P417898	
		Endothall	0.25	U	ug/L	P417828	
		Glufosinate	0.10	U	ug/L	P417828	
		Glyphosate	0.10	U	ug/L	P417828	
		Afidopyrophen	0.0020	U	ug/L	P417898	
		Bentazon	0.013		ug/L	P417898	
		Sucralose	0.96		ug/L	P417828	
		Benzovindiflupyr	0.0020	U	ug/L	P417898	
		Carbamazepine	9.0E-04	I	ug/L	P417898	
		Clothianidin	0.0020	U	ug/L	P417898	
		Dinotefuran	0.0020	U	ug/L	P417898	
		Diuron	0.0051	I	ug/L	P417898	
		Fenuron	0.032	U	ug/L	P417898	
		Fluridone	0.030		ug/L	P417898	
		Imazapyr	0.049		ug/L	P417898	
		Hydrocodone	0.0020	U	ug/L	P417898	
		Ibuprofen	0.080	U	ug/L	P417898	
		Imidacloprid	0.0025	I	ug/L	P417898	MS
		Linuron	0.0040	U	ug/L	P417898	
		Mandestrobin	0.0020	U	ug/L	P417898	
		MCP	0.0040	U	ug/L	P417898	
		Naproxen	0.0080	U	ug/L	P417898	
		Primidone	0.0040	U	ug/L	P417898	
		Pyraclostrobin	0.0020	U	ug/L	P417898	

Field ID: G2CE0217

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2347261	EPA 8321B	Silvex	0.0040	U	ug/L	P417898	
		Thiamethoxam	0.0020	U	ug/L	P417898	
		Tolfenpyrad	0.0020	U	ug/L	P417898	
		Triclopyr	0.0040	U	ug/L	P417898	
2347263	EPA 200.7 Rev. 4.4	Calcium	15.9		mg/L	P417935	
		Iron	30	U	ug/L	P417935	
		Magnesium	1.75		mg/L	P417935	
		Potassium	1.9		mg/L	P417935	
		Sodium	9.8		mg/L	P417935	
		Strontium	40.9		ug/L	P417935	
		Tin	3.0	U	ug/L	P417935	
		Titanium	0.75	U	ug/L	P417935	
		Vanadium	2.0	U	ug/L	P417935	
		Zinc	5.0	U	ug/L	P417935	
	EPA 200.8 Rev. 5.4	Aluminum	27		ug/L	P417935	
		Antimony	0.19	I	ug/L	P417935	
		Arsenic	1.41		ug/L	P417935	
		Barium	8.94		ug/L	P417935	
		Beryllium	0.010	U	ug/L	P417935	
		Boron	36.8		ug/L	P417935	
		Cadmium	0.020	U	ug/L	P417935	
		Chromium	0.40	U	ug/L	P417935	
		Cobalt	0.020	U	ug/L	P417935	
		Copper	0.59	I	ug/L	P417935	
		Lead	0.20	U	ug/L	P417935	
		Manganese	6.76		ug/L	P417935	
		Molybdenum	0.59	I	ug/L	P417935	
		Nickel	0.50	U	ug/L	P417935	
		Selenium	0.20	U	ug/L	P417935	
		Silver	0.010	U	ug/L	P417935	
		Thallium	0.10	U	ug/L	P417935	
		Hardness	47.0		mg/L	P417935	
2347265	SM 2340 B-2011	Oxybenzone**	10	U	ng/L	P417895	
	EPA 8270E	Acetochlor	0.25	U	ng/L	P417895	
		Octinoxate**	20	U	ng/L	P417895	
		Alachlor	0.25	U	ng/L	P417895	
		Avobenzone**	100	U	ng/L	P417895	
		Ametryn	1.8	I	ng/L	P417895	
		Atrazine	20		ng/L	P417895	
		PBDE-47**	4.1	U	ng/L	P417895	
		Atrazine Desethyl	4.8	I	ng/L	P417895	
		PBDE-99**	5.1	U	ng/L	P417895	
		Azinphos Methyl	2.0	U	ng/L	P417895	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P417895	
		Azoxystrobin	0.51	U	ng/L	P417895	

Field ID: G2CE0217

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2347265	EPA 8270E	Bromacil	0.51	U	ng/L	P417895	
		2-Ethylhexyl	12	U	ng/L	P417895	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.41	U	ng/L	P417895	
		Caffeine**	15	I	ng/L	P417895	
		Carbophenothion	0.20	U	ng/L	P417895	
		Carfentrazone Ethyl	0.10	U	ng/L	P417895	
		Chlorfenapyr	0.18	U	ng/L	P417895	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P417895	
		Chlorpyrifos Methyl	0.051	U	ng/L	P417895	
		Coumaphos	0.51	U	ng/L	P417895	
		Cyanazine	3.3	U	ng/L	P417895	
		Cyprodinil	0.10	U	ng/L	P417895	
		Demeton	1.5	U	ng/L	P417895	
		Diazinon	0.13	U	ng/L	P417895	
		Difenoconazole	0.61	U	ng/L	P417895	
		Dimethenamid	0.10	U	ng/L	P417895	
		Dimethomorph	0.18	UJ	ng/L	P417895	RPD
		Disulfoton	0.51	U	ng/L	P417895	
		Dithiopyr	2.4	V	ng/L	P417895	
		EPTC	1.3	U	ng/L	P417895	
		Ethion	0.15	U	ng/L	P417895	
		Ethoprop	0.10	U	ng/L	P417895	
		Etridiazole	0.15	U	ng/L	P417895	
		Fenamiphos	0.51	U	ng/L	P417895	
		Fenbuconazole	0.13	U	ng/L	P417895	
		Fipronil	0.25	U	ng/L	P417895	
		Fipronil Desulfinyl**	1.5		ng/L	P417895	
		Fipronil Sulfide	0.67		ng/L	P417895	
		Fipronil Sulfone	1.4		ng/L	P417895	
		Fluazifop-P-butyl	0.10	U	ng/L	P417895	
		Fludioxonil	0.13	U	ng/L	P417895	
		Flumioxazin	1.8	U	ng/L	P417895	
		Flutolanil	0.10	U	ng/L	P417895	
		Fluxapyroxad	0.24	I	ng/L	P417895	
		Fonofos	0.20	U	ng/L	P417895	
		Hexazinone	0.51	U	ng/L	P417895	
		Imazalil	0.76	U	ng/L	P417895	
		Iprodione	0.61	U	ng/L	P417895	
		Loratadine**	0.10	UJ	ng/L	P417895	MS
		Malathion	0.36	U	ng/L	P417895	
		Metaxyl	0.76	U	ng/L	P417895	
		Metolachlor	0.36	U	ng/L	P417895	
		Metribuzin	2.5	U	ng/L	P417895	
		Mevinphos	1.1	U	ng/L	P417895	

Field ID: G2CE0217

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2347265	EPA 8270E	Molinate	0.31	U	ng/L	P417895	
		Myclobutanil	0.61	I	ng/L	P417895	
		Naled	1.5	U	ng/L	P417895	
		Napropamide	0.41	U	ng/L	P417895	
		Norflurazon	0.51	U	ng/L	P417895	
		Oxadiazon	0.53	I	ng/L	P417895	
		Oxyfluorfen	0.15	U	ng/L	P417895	
		Parathion Ethyl	0.25	U	ng/L	P417895	
		Parathion Methyl	0.56	U	ng/L	P417895	
		Pendimethalin	1.0	U	ng/L	P417895	
		Phenytol**	3.6	UJ	ng/L	P417895	MS, RPD
		Phorate	0.54	U	ng/L	P417895	
		Prodiamine	0.18	U	ng/L	P417895	
		Prometon	0.92	U	ng/L	P417895	
		Prometryn	0.20	U	ng/L	P417895	
		Pronamide	0.15	U	ng/L	P417895	
		Propanil	0.13	U	ng/L	P417895	
		Propargite	1.5	U	ng/L	P417895	
		Propiconazole	3.7		ng/L	P417895	
		Pyraflufen Ethyl	0.25	U	ng/L	P417895	
		Pyridaben	10		ng/L	P417895	
		Pyriproxyfen	0.13	U	ng/L	P417895	
		Simazine	0.51	U	ng/L	P417895	
		Stirophos	0.13	UJ	ng/L	P417895	MS, RPD
		Sulfentrazone	0.64	I	ng/L	P417895	
		Tebuconazole	5.6		ng/L	P417895	
		Terbufos	0.10	U	ng/L	P417895	
		Terbutylazine	0.43	U	ng/L	P417895	
		Thiobencarb	0.61	U	ng/L	P417895	
		Triadimefon	0.25	U	ng/L	P417895	

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 8270E: V - Due to the presence of dithiopyr in both the Method Blanks and the sample. MS accuracy for atrazine and pyridaben not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Triplet Lake @ Center of Middle Lobe

Collection Date/Time: 08/08/2022 12:05

Field ID: G2CE0213

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2347244	DEP SOP: NU-094-1	Color (true)	57	A	PCU	P417852	
	EPA 180.1 Rev. 2.0	Turbidity	2.7	A	NTU	P417855	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P418210	
		Sulfate	3.6		mg SO4/L	P418213	
	SM 2320 B-2011	Total Alkalinity	37		mg CaCO3/L	P418286	
	SM 2540 C-2011	TDS	101		mg/L	P418253	
	SM 2540 D-2011	TSS	3	I	mg/L	P418125	
2347246	SM 4500-F- C-2011	Fluoride	0.068	I	mg F/L	P418593	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P418055	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P418077	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P417997	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P417949	
2347248	SM 5310 B-2011	Organic Carbon	11		mg C/L	P418224	
2347262	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P417849	
	EPA 8321B	2,4-D	0.019		ug/L	P417898	
		Acesulfame K	0.10	U	ug/L	P417828	
		2,4,5-T	0.0040	U	ug/L	P417898	
		AMPA	0.10	U	ug/L	P417828	
		Acetaminophen	0.0080	U	ug/L	P417898	
		Acetamiprid	0.0020	U	ug/L	P417898	
		Endothall	0.25	U	ug/L	P417828	
		Glufosinate	0.10	U	ug/L	P417828	
		Glyphosate	0.10	U	ug/L	P417828	
		Afidopyropen	0.0020	U	ug/L	P417898	
		Bentazon	0.011		ug/L	P417898	
		Sucralose	1.6		ug/L	P417828	
		Benzovindiflupyr	0.0020	U	ug/L	P417898	
		Carbamazepine	9.4E-04	I	ug/L	P417898	
		Clothianidin	0.0020	U	ug/L	P417898	
		Dinotefuran	0.0020	U	ug/L	P417898	
		Diuron	0.0020	U	ug/L	P417898	
		Fenuron	0.032	U	ug/L	P417898	
		Fluridone	0.084		ug/L	P417898	
		Imazapyr	0.16		ug/L	P417898	
		Hydrocodone	0.0020	U	ug/L	P417898	
		Ibuprofen	0.080	U	ug/L	P417898	
		Imidacloprid	0.0021	I	ug/L	P417898	MS
		Linuron	0.0040	U	ug/L	P417898	
		Mandestrobin	0.0020	U	ug/L	P417898	
		MCPP	0.0040	U	ug/L	P417898	
		Naproxen	0.0080	U	ug/L	P417898	
		Primidone	0.0062	I	ug/L	P417898	
		Pyraclostrobin	0.0020	U	ug/L	P417898	

Field ID: G2CE0213

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2347262	EPA 8321B	Silvex	0.0040	U	ug/L	P417898	
		Thiamethoxam	0.0020	U	ug/L	P417898	
		Tolfenpyrad	0.0020	U	ug/L	P417898	
		Triclopyr	0.0040	U	ug/L	P417898	
2347264	EPA 200.7 Rev. 4.4	Calcium	13.8		mg/L	P417935	
		Iron	68	I	ug/L	P417935	
		Magnesium	1.85		mg/L	P417935	
		Potassium	1.7		mg/L	P417935	
		Sodium	11.8		mg/L	P417935	
		Strontium	38.3		ug/L	P417935	
		Tin	3.0	U	ug/L	P417935	
		Titanium	0.75	U	ug/L	P417935	
		Vanadium	2.0	U	ug/L	P417935	
		Zinc	5.0	U	ug/L	P417935	
	EPA 200.8 Rev. 5.4	Aluminum	66		ug/L	P417935	
		Antimony	0.11	I	ug/L	P417935	
		Arsenic	1.45		ug/L	P417935	
		Barium	6.37		ug/L	P417935	
		Beryllium	0.010	U	ug/L	P417935	
		Boron	39.7		ug/L	P417935	
		Cadmium	0.020	U	ug/L	P417935	
		Chromium	0.40	U	ug/L	P417935	
		Cobalt	0.022	I	ug/L	P417935	
		Copper	0.40	U	ug/L	P417935	
		Lead	0.20	U	ug/L	P417935	
		Manganese	7.70		ug/L	P417935	
		Molybdenum	0.21	I	ug/L	P417935	
		Nickel	0.50	U	ug/L	P417935	
		Selenium	0.20	U	ug/L	P417935	
		Silver	0.010	U	ug/L	P417935	
		Thallium	0.10	U	ug/L	P417935	
	SM 2340 B-2011	Hardness	42.2		mg/L	P417935	
2347266	EPA 8270E	Oxybenzone**	10	U	ng/L	P417895	
		Acetochlor	0.25	U	ng/L	P417895	
		Octinoxate**	20	U	ng/L	P417895	
		Alachlor	0.25	U	ng/L	P417895	
		Avobenzone**	100	U	ng/L	P417895	
		Ametryn	2.1	I	ng/L	P417895	
		Atrazine	7.0		ng/L	P417895	
		PBDE-47**	4.1	U	ng/L	P417895	
		Atrazine Desethyl	1.5	U	ng/L	P417895	
		PBDE-99**	5.1	U	ng/L	P417895	
		Azinphos Methyl	2.0	U	ng/L	P417895	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P417895	
		Azoxystrobin	0.51	U	ng/L	P417895	

Field ID: G2CE0213

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2347266	EPA 8270E	Bromacil	0.51	U	ng/L	P417895	
		2-Ethylhexyl	12	U	ng/L	P417895	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.41	U	ng/L	P417895	
		Caffeine**	7.6	U	ng/L	P417895	
		Carbophenothion	0.20	U	ng/L	P417895	
		Carfentrazone Ethyl	0.10	U	ng/L	P417895	
		Chlorfenapyr	0.18	U	ng/L	P417895	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P417895	
		Chlorpyrifos Methyl	0.051	U	ng/L	P417895	
		Coumaphos	0.51	U	ng/L	P417895	
		Cyanazine	3.3	U	ng/L	P417895	
		Cyprodinil	0.10	U	ng/L	P417895	
		Demeton	1.5	U	ng/L	P417895	
		Diazinon	0.13	U	ng/L	P417895	
		Difenoconazole	0.61	U	ng/L	P417895	
		Dimethenamid	0.10	U	ng/L	P417895	
		Dimethomorph	0.18	U	ng/L	P417895	RPD
		Disulfoton	0.51	U	ng/L	P417895	
		Dithiopyr	6.9	V	ng/L	P417895	
		EPTC	1.3	U	ng/L	P417895	
		Ethion	0.15	U	ng/L	P417895	
		Ethoprop	0.10	U	ng/L	P417895	
		Etridiazole	0.15	U	ng/L	P417895	
		Fenamiphos	0.51	U	ng/L	P417895	
		Fenbuconazole	0.13	U	ng/L	P417895	
		Fipronil	0.25	U	ng/L	P417895	
		Fipronil Desulfinyl**	1.3		ng/L	P417895	
		Fipronil Sulfide	0.63		ng/L	P417895	
		Fipronil Sulfone	1.2		ng/L	P417895	
		Fluazifop-P-butyl	0.10	U	ng/L	P417895	
		Fludioxonil	0.13	U	ng/L	P417895	
		Flumioxazin	1.8	U	ng/L	P417895	
		Flutolanil	0.12	I	ng/L	P417895	
		Fluxapyroxad	0.46		ng/L	P417895	
		Fonofos	0.20	U	ng/L	P417895	
		Hexazinone	0.51	U	ng/L	P417895	
		Imazalil	0.76	U	ng/L	P417895	
		Iprodione	0.61	U	ng/L	P417895	
		Loratadine**	0.10	U	ng/L	P417895	MS
		Malathion	0.35	U	ng/L	P417895	
		Metaxyl	0.76	U	ng/L	P417895	
		Metolachlor	0.35	U	ng/L	P417895	
		Metribuzin	2.8	I	ng/L	P417895	
		Mevinphos	1.1	U	ng/L	P417895	

Field ID: G2CE0213

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2347266	EPA 8270E	Molinate	0.30	U	ng/L	P417895	
		Myclobutanil	0.81	I	ng/L	P417895	
		Naled	1.5	U	ng/L	P417895	
		Napropamide	0.41	U	ng/L	P417895	
		Norflurazon	0.51	U	ng/L	P417895	
		Oxadiazon	2.2		ng/L	P417895	
		Oxyfluorfen	0.15	U	ng/L	P417895	
		Parathion Ethyl	0.25	U	ng/L	P417895	
		Parathion Methyl	0.56	U	ng/L	P417895	
		Pendimethalin	1.0	U	ng/L	P417895	
		Phenytol**	3.5	U	ng/L	P417895	MS, RPD
		Phorate	0.53	U	ng/L	P417895	
		Prodiamine	0.18	U	ng/L	P417895	
		Prometon	0.91	U	ng/L	P417895	
		Prometryn	0.20	U	ng/L	P417895	
		Pronamide	0.15	U	ng/L	P417895	
		Propanil	0.13	U	ng/L	P417895	
		Propargite	1.5	U	ng/L	P417895	
		Propiconazole	1.8	I	ng/L	P417895	
		Pyraflufen Ethyl	0.25	U	ng/L	P417895	
		Pyridaben	0.46	U	ng/L	P417895	
		Pyriproxyfen	0.13	U	ng/L	P417895	
		Simazine	0.51	U	ng/L	P417895	
		Stirophos	0.13	U	ng/L	P417895	MS, RPD
		Sulfentrazone	4.0		ng/L	P417895	
		Tebuconazole	2.4		ng/L	P417895	
		Terbufos	0.10	U	ng/L	P417895	
		Terbutylazine	0.43	U	ng/L	P417895	
		Thiobencarb	0.61	U	ng/L	P417895	
		Triadimefon	0.25	U	ng/L	P417895	

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 8270E: V - Due to the presence of dithiopyr in both the Method Blanks and the sample. MS accuracy for atrazine and pyridaben not assessed due to high content of these parameters in the sample spiked.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P417851

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P417852

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P417855

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P417935

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: P417935

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418210

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418213

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418055

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418077

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P417997

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P417949

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P417849

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

Reference Method: EPA 8270E
Batch ID: P417895

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P417895

Component	Result	Code	Units
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
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	2.8		ng/L
Dithiopyr	2.9		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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P417895

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P417895

Component	Result	Code	Units
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
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	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
Prodiatone	0.18	U	ng/L
Prodiatone	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P417895

Component	Result	Code	Units
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8321B

Batch ID: P417828

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: P417898

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
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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P418286

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

Reference Method: SM 2540 C-2011
Batch ID: P418253

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P418125

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P418593

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P417957

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

Reference Method: SM 5310 B-2011
Batch ID: P418224

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: P417851

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	103		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P417852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	104		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P417855

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.5		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P417935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	107		P	85 - 115
Magnesium	107		P	85 - 115
Potassium	106		P	85 - 115
Sodium	105		P	85 - 115
Strontium	106		P	85 - 115
Tin	105		P	85 - 115
Titanium	107		P	85 - 115
Vanadium	106		P	85 - 115
Zinc	106		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	102		P	85 - 115
Arsenic	101		P	85 - 115
Barium	106		P	85 - 115
Beryllium	96.1		P	85 - 115
Boron	101		P	85 - 115
Cadmium	98.2		P	85 - 115
Chromium	101		P	85 - 115
Cobalt	99.0		P	85 - 115
Copper	99.4		P	85 - 115
Lead	95.0		P	85 - 115
Manganese	101		P	85 - 115
Molybdenum	98.8		P	85 - 115
Nickel	101		P	85 - 115
Selenium	97.6		P	85 - 115
Silver	98.9		P	85 - 115
Thallium	99.3		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418210

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418213

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418055

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418077

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: P417997

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: P417949

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P417849

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.8		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P417895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	80.2		P	50 - 150
Acetochlor	87.9		P	70 - 121
Alachlor	80.3		P	68 - 119
Ametryn	109		P	64 - 139
Atrazine	78.7		P	76 - 120
Atrazine Desethyl	65.9		P	44 - 126
Avobenzone	97.2		P	59 - 206
Azinphos Methyl	166		P	43 - 192
Azoxystrobin	86.0		P	36 - 224
Bromacil	90.8		P	52 - 121

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P417895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Butylate	39.8		P	28 - 91.0
Caffeine	97.1		P	50 - 134
Carbophenothion	70.9		P	56 - 129
Carfentrazone Ethyl	88.5		P	60 - 141
Chlorfenapyr	88.3		P	56 - 115
Chlorpyrifos Ethyl	97.4		P	60 - 118
Chlorpyrifos Methyl	90.5		P	68 - 119
Coumaphos	185		P	18 - 250
Cyanazine	96.3		P	61 - 250
Cyprodinil	97.1		P	55 - 145
Demeton	86.1		P	30 - 159
Diazinon	105		P	70 - 123
Difenoconazole	153		P	49 - 204
Dimethenamid	71.8		P	64 - 115
Dimethomorph	126		P	12 - 219
Disulfoton	92.2		P	44 - 125
Dithiopyr	112		P	64 - 115
EPTC	34.9		P	28 - 86.0
Ethion	82.4		P	33 - 125
Ethoprop	76.9		P	64 - 116
Etridiazole	45.5		P	34 - 91.0
Fenamiphos	116		P	12 - 127
Fenbuconazole	141		P	59 - 151
Fipronil	71.3		P	67 - 129
Fipronil Desulfinyl	86.8		P	65 - 127
Fipronil Sulfide	83.3		P	61 - 116
Fipronil Sulfone	88.8		P	55 - 117
Fluazifop-P-butyl	73.6		P	62 - 127
Fludioxonil	90.8		P	62 - 128
Flumioxazin	131		P	33 - 250
Flutolanil	98.1		P	56 - 127
Fluxapyroxad	114		P	45 - 128
Fonofos	78.4		P	62 - 111
Hexazinone	93.2		P	46 - 139
Imazalil	84.1		P	38 - 142
Iprodione	97.8		P	47 - 135
Loratadine	114		P	10 - 244
Malathion	133		P	61 - 139
Metalaxyl	90.4		P	10 - 119
Metolachlor	106		P	65 - 118
Metribuzin	85.2		P	51 - 250
Mevinphos	67.6		P	53 - 121
Molinate	55.5		P	42 - 96.0
Myclobutanil	92.2		P	55 - 128
Naled	92.6		P	10 - 98.0
Napropamide	73.9		P	49 - 121
Norflurazon	98.5		P	61 - 126
Octinoxate	87.4		P	25 - 150
Oxadiazon	87.9		P	59 - 116
Oxybenzone	81.6		P	59 - 147
Oxyfluorfen	105		P	64 - 137
Parathion Ethyl	82.5		P	70 - 112

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P417895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Parathion Methyl	97.4		P	76 - 133
PBDE-47	88.3		P	50 - 150
PBDE-99	84.1		P	50 - 150
Pendimethalin	79.5		P	52 - 117
Phenytoin	51.7		P	10 - 199
Phorate	77.8		P	48 - 121
Prodiamine	60.7		P	26 - 142
Prometon	73.6		P	43 - 123
Prometryn	111		P	66 - 127
Pronamide	117		P	75 - 121
Propanil	103		P	45 - 150
Propargite	138		P	42 - 208
Propiconazole	103		P	60 - 125
Pyraflufen Ethyl	93.1		P	70 - 138
Pyridaben	148		P	35 - 245
Pyriproxyfen	131		P	30 - 149
Simazine	79.3		P	72 - 125
Stirophos	76.0		P	29 - 164
Sulfentrazone	77.1		P	21 - 139
Tebuconazole	110		P	10 - 115
Terbufos	95.6		P	60 - 123
Terbutylazine	74.8		P	72 - 115
Thiobencarb	84.1		P	31 - 139
Tri-o-cresyl Phosphate	89.4		P	50 - 150
Triadimefon	77.2		P	65 - 116

Reference Method: EPA 8321B

Batch ID: P417828

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	116		P	40 - 150
AMPA	113		P	40 - 150
Endothall	117		P	40 - 150
Glufosinate	112		P	40 - 150
Glyphosate	111		P	40 - 150
Sucralose	110		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P417898

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	112		P	40 - 150
2,4,5-T	82.6		P	40 - 150
Acetaminophen	56.4		P	30 - 150
Acetamiprid	92.4		P	40 - 150
Afidopyropen	77.5		P	30 - 150
Bentazon	65.7		P	30 - 150
Benzovindiflupyr	98.7		P	40 - 150
Carbamazepine	90.3		P	40 - 150
Clothianidin	93.0		P	40 - 150
Dinotefuran	104		P	40 - 150
Diuron	77.4		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P417898

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fenuron	95.5		P	40 - 150
Fluridone	95.3		P	40 - 150
Hydrocodone	95.0		P	40 - 150
Ibuprofen	85.7		P	40 - 150
Imazapyr	109		P	40 - 150
Imidacloprid	118		P	40 - 150
Linuron	102		P	40 - 150
Mandestrobin	90.8		P	40 - 150
MCPP	122		P	40 - 150
Naproxen	71.2		P	40 - 150
Primidone	107		P	40 - 150
Pyraclostrobin	87.2		P	40 - 150
Silvex	89.6		P	40 - 150
Thiamethoxam	103		P	40 - 150
Tolfenpyrad	63.4		P	30 - 150
Triclopyr	145		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P418286

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.4		P	94 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P418593

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.7		P	96 - 104

Reference Method: SM 5310 B-2011

Batch ID: P417957

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.6		P	85 - 115

Reference Method: SM 5310 B-2011

Batch ID: P418224

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P417935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347436	Calcium	104		P	80 - 120
2347436	Iron	107	107	P/P	80 - 120
2347436	Magnesium	107	106	P/P	80 - 120
2347436	Potassium	105	107	P/P	80 - 120
2347436	Sodium	103	105	P/P	80 - 120
2347436	Strontium	103	105	P/P	80 - 120
2347436	Tin	101	102	P/P	80 - 120
2347436	Titanium	105	105	P/P	80 - 120
2347436	Vanadium	103	104	P/P	80 - 120
2347436	Zinc	101	103	P/P	80 - 120
2347500	Calcium	106		P	80 - 120
2347500	Iron	106		P	80 - 120
2347500	Magnesium	106		P	80 - 120
2347500	Potassium	110		P	80 - 120
2347500	Sodium	103		P	80 - 120
2347500	Strontium	105		P	80 - 120
2347500	Tin	104		P	80 - 120
2347500	Titanium	105		P	80 - 120
2347500	Vanadium	104		P	80 - 120
2347500	Zinc	105		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P417935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347436	Aluminum	101	101	P/P	80 - 120
2347436	Antimony	103	104	P/P	80 - 120
2347436	Arsenic	99.5	101	P/P	80 - 120
2347436	Barium	104	105	P/P	80 - 120
2347436	Beryllium	98.2	94.3	P/P	80 - 120
2347436	Boron	100	102	P/P	80 - 120
2347436	Cadmium	96.8	99.4	P/P	80 - 120
2347436	Chromium	101	102	P/P	80 - 120
2347436	Cobalt	98.6	99.3	P/P	80 - 120
2347436	Copper	99.4	101	P/P	80 - 120
2347436	Lead	95.7	95.6	P/P	80 - 120
2347436	Manganese	102	103	P/P	80 - 120
2347436	Molybdenum	95.4	101	P/P	80 - 120
2347436	Nickel	100	99.5	P/P	80 - 120
2347436	Selenium	97.9	97.2	P/P	80 - 120
2347436	Silver	98.1	98.5	P/P	80 - 120
2347436	Thallium	102	102	P/P	80 - 120
2347500	Aluminum	104		P	80 - 120
2347500	Antimony	103		P	80 - 120
2347500	Arsenic	99.6		P	80 - 120
2347500	Barium	105		P	80 - 120
2347500	Beryllium	93.0		P	80 - 120
2347500	Boron	106		P	80 - 120
2347500	Cadmium	100		P	80 - 120
2347500	Chromium	100		P	80 - 120
2347500	Cobalt	97.3		P	80 - 120
2347500	Copper	97.8		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347500	Lead	96.3		P	80 - 120
2347500	Manganese	103		P	80 - 120
2347500	Molybdenum	99.1		P	80 - 120
2347500	Nickel	97.7		P	80 - 120
2347500	Selenium	94.6		P	80 - 120
2347500	Silver	99.9		P	80 - 120
2347500	Thallium	102		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418210

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347243	Chloride	99.5		P	90 - 110
2347333	Chloride	99.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418213

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347243	Sulfate	98.9		P	90 - 110
2347333	Sulfate	98.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418055

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347231	Ammonia-N	98.4	99.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P417997

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347196	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P417949

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347211	Total-P	107	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P417849

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347247	O-Phosphate-P	98.8	100	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P417895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347265	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	79.0	94.0	P/P	50 - 150
2347265	Acetochlor	101	93.2	P/P	65 - 124

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P417895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347265	Alachlor	91.0	86.7	P/P	61 - 121
2347265	Ametryn	107	79.2	P/P	52 - 216
2347265	Atrazine Desethyl	56.6	41.3	P/P	15 - 160
2347265	Avobenzone	77.5	90.5	P/P	59 - 206
2347265	Azinphos Methyl	99.5	152	P/P	40 - 292
2347265	Azoxystrobin	95.4	96.6	P/P	12 - 242
2347265	Bromacil	98.7	97.7	P/P	54 - 167
2347265	Butylate	40.4	55.4	P/P	14 - 94.0
2347265	Caffeine	91.2	94.9	P/P	10 - 226
2347265	Carbophenothion	64.8	74.1	P/P	49 - 122
2347265	Carfentrazone Ethyl	74.2	81.2	P/P	53 - 138
2347265	Chlorfenapyr	74.0	79.1	P/P	50 - 150
2347265	Chlorpyrifos Ethyl	92.1	104	P/P	52 - 122
2347265	Chlorpyrifos Methyl	89.6	88.4	P/P	66 - 117
2347265	Coumaphos	136	168	P/P	50 - 220
2347265	Cyanazine	112	104	P/P	43 - 245
2347265	Cyprodinil	107	95.6	P/P	50 - 150
2347265	Demeton	83.6	72.4	P/P	43 - 188
2347265	Diazinon	114	109	P/P	69 - 131
2347265	Difenoconazole	208	221	P/P	34 - 231
2347265	Dimethenamid	80.8	79.0	P/P	55 - 118
2347265	Dimethomorph	144	94.0	P/P	50 - 150
2347265	Disulfoton	95.8	92.2	P/P	38 - 141
2347265	Dithiopyr	46.1	68.9	P/P	42 - 116
2347265	EPTC	47.9	45.1	P/P	18 - 85.0
2347265	Ethion	57.9	79.5	P/P	10 - 131
2347265	Ethoprop	95.8	80.7	P/P	65 - 129
2347265	Etridiazole	62.8	51.4	P/P	50 - 150
2347265	Fenamiphos	94.7	99.4	P/P	31 - 137
2347265	Fenbuconazole	149	156	P/P	57 - 160
2347265	Fipronil	80.5	85.5	P/P	62 - 132
2347265	Fipronil Desulfinyl	83.0	79.4	P/P	57 - 131
2347265	Fipronil Sulfide	81.1	74.4	P/P	15 - 138
2347265	Fipronil Sulfone	50.9	77.1	P/P	21 - 134
2347265	Fluazifop-P-butyl	61.9	73.2	P/P	54 - 133
2347265	Fludioxonil	97.8	103	P/P	58 - 127
2347265	Flumioxazin	161	140	P/P	33 - 300
2347265	Flutolanil	103	105	P/P	42 - 130
2347265	Fluxapyroxad	115	125	P/P	23 - 141
2347265	Fonofos	88.5	79.2	P/P	58 - 119
2347265	Hexazinone	95.2	95.2	P/P	68 - 172
2347265	Imazalil	93.1	105	P/P	48 - 283
2347265	Iprodione	90.8	96.0	P/P	38 - 140
2347265	Loratadine	161	162	F/F	50 - 150
2347265	Malathion	114	129	P/P	40 - 137
2347265	Metalaxyl	94.2	91.0	P/P	21 - 129
2347265	Metolachlor	105	104	P/P	55 - 122
2347265	Metribuzin	84.0	102	P/P	38 - 187
2347265	Mevinphos	88.4	75.0	P/P	54 - 134
2347265	Molinate	69.3	62.0	P/P	41 - 97.0
2347265	Myclobutanil	111	102	P/P	56 - 125
2347265	Naled	84.8	84.2	P/P	10 - 108

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P417895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347265	Napropamide	58.3	78.4	P/P	50 - 150
2347265	Norflurazon	103	112	P/P	32 - 122
2347265	Octinoxate	93.0	90.3	P/P	25 - 150
2347265	Oxadiazon	95.2	86.0	P/P	40 - 119
2347265	Oxybenzone	87.5	85.7	P/P	59 - 147
2347265	Oxyfluorfen	110	115	P/P	61 - 153
2347265	Parathion Ethyl	79.3	78.7	P/P	59 - 130
2347265	Parathion Methyl	105	85.6	P/P	65 - 155
2347265	PBDE-47	77.5	86.4	P/P	50 - 150
2347265	PBDE-99	69.7	82.7	P/P	50 - 150
2347265	Pendimethalin	81.4	76.0	P/P	49 - 138
2347265	Phenytoin	36.9	71.2	F/P	50 - 200
2347265	Phorate	87.4	71.1	P/P	54 - 161
2347265	Prodiamine	60.5	63.3	P/P	33 - 161
2347265	Prometon	92.8	99.1	P/P	48 - 140
2347265	Prometryn	129	114	P/P	55 - 134
2347265	Pronamide	133	109	P/P	66 - 137
2347265	Propanil	112	113	P/P	50 - 150
2347265	Propargite	122	145	P/P	50 - 200
2347265	Propiconazole	115	95.7	P/P	36 - 150
2347265	Pyraflufen Ethyl	97.2	100	P/P	50 - 150
2347265	Pyriproxyfen	76.5	76.0	P/P	10 - 165
2347265	Simazine	96.1	86.1	P/P	57 - 145
2347265	Stirophos	42.6	69.1	F/P	50 - 150
2347265	Sulfentrazone	105	92.5	P/P	34 - 140
2347265	Tebuconazole	104	125	P/P	10 - 127
2347265	Terbufos	110	98.9	P/P	59 - 138
2347265	Terbuthylazine	78.9	70.7	P/P	68 - 119
2347265	Thiobencarb	84.2	87.8	P/P	50 - 150
2347265	Tri-o-cresyl Phosphate	86.5	87.9	P/P	50 - 150
2347265	Triadimefon	74.2	85.7	P/P	50 - 150

Reference Method: EPA 8321B

Batch ID: P417828

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347237	Acesulfame K	79.6	79.0	P/P	40 - 150
2347237	AMPA	93.6	91.9	P/P	40 - 150
2347237	Endothall	108	107	P/P	40 - 150
2347237	Glufosinate	95.3	99.9	P/P	40 - 150
2347237	Glyphosate	82.0	87.9	P/P	40 - 150
2347237	Sucralose	94.8	94.2	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P417898

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347418	2,4-D	111	121	P/P	40 - 150
2347418	2,4,5-T	83.6	92.5	P/P	40 - 150
2347418	Acetaminophen	64.8	70.4	P/P	30 - 150
2347418	Acetamiprid	84.8	67.8	P/P	40 - 150
2347418	Afidopyropen	81.0	94.6	P/P	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P417898

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347418	Bentazon	57.5	54.4	P/P	30 - 150
2347418	Benzovindiflupyr	102	106	P/P	40 - 150
2347418	Carbamazepine	106	105	P/P	40 - 150
2347418	Clothianidin	107	98.9	P/P	40 - 150
2347418	Dinotefuran	127	135	P/P	40 - 150
2347418	Diuron	85.5	81.3	P/P	40 - 150
2347418	Fenuron	90.8	93.7	P/P	40 - 150
2347418	Fluridone	89.1	98.2	P/P	40 - 150
2347418	Hydrocodone	112	117	P/P	40 - 150
2347418	Ibuprofen	58.4	78.9	P/P	40 - 150
2347418	Imazapyr	94.0	94.1	P/P	40 - 150
2347418	Imidacloprid	161	152	F/F	40 - 150
2347418	Linuron	82.8	63.8	P/P	40 - 150
2347418	Mandestrobin	92.0	93.6	P/P	40 - 150
2347418	MCPP	98.0	80.0	P/P	40 - 150
2347418	Naproxen	71.7	70.0	P/P	40 - 150
2347418	Primidone	111	113	P/P	40 - 150
2347418	Pyraclostrobin	91.9	97.1	P/P	40 - 150
2347418	Silvex	92.0	90.0	P/P	40 - 150
2347418	Thiamethoxam	145	139	P/P	40 - 150
2347418	Tolfenpyrad	61.4	61.0	P/P	30 - 150
2347418	Triclopyr	89.6	101	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P418593

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347762	Fluoride	97.2	98.3	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P417957

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2346589	Organic Carbon	96.4	98.6	P/P	85 - 115

Reference Method: SM 5310 B-2011

Batch ID: P418224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2347281	Organic Carbon	97.8	98.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P417851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347243	Color (true)	1.89	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P417852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347244	Color (true)	1.27	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P417855

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347244	Turbidity	4.40	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P417935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347436	Calcium	0.527	Spike	P	0 - 20
2347436	Iron	0.288	Spike	P	0 - 20
2347436	Magnesium	0.764	Spike	P	0 - 20
2347436	Potassium	1.21	Spike	P	0 - 20
2347436	Sodium	0.856	Spike	P	0 - 20
2347436	Strontium	1.25	Spike	P	0 - 20
2347436	Tin	1.30	Spike	P	0 - 20
2347436	Titanium	0.227	Spike	P	0 - 20
2347436	Vanadium	0.508	Spike	P	0 - 20
2347436	Zinc	1.78	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347436	Aluminum	0.0245	Spike	P	0 - 20
2347436	Antimony	0.933	Spike	P	0 - 20
2347436	Arsenic	1.56	Spike	P	0 - 20
2347436	Barium	1.42	Spike	P	0 - 20
2347436	Beryllium	4.06	Spike	P	0 - 20
2347436	Boron	1.24	Spike	P	0 - 20
2347436	Cadmium	2.65	Spike	P	0 - 20
2347436	Chromium	1.34	Spike	P	0 - 20
2347436	Cobalt	0.778	Spike	P	0 - 20
2347436	Copper	1.26	Spike	P	0 - 20
2347436	Lead	0.0303	Spike	P	0 - 20
2347436	Manganese	1.40	Spike	P	0 - 20
2347436	Molybdenum	2.12	Spike	P	0 - 20
2347436	Nickel	0.445	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P417935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347436	Selenium	0.657	Spike	P	0 - 20
2347436	Silver	0.460	Spike	P	0 - 20
2347436	Thallium	0.419	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418210

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347243	Chloride	1.15	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418213

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347243	Sulfate	0.284	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418055

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347231	Ammonia-N	1.06	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418077

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347252	Kjeldahl Nitrogen	1.48	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P417997

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347196	NO2NO3-N	0.489	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P417949

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347211	Total-P	1.34	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P417849

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

Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P417849

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347247	O-Phosphate-P	1.61	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P417895

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347265	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	17.4	Spike	P	0 - 30
2347265	Acetochlor	8.13	Spike	P	0 - 27
2347265	Alachlor	4.89	Spike	P	0 - 27
2347265	Ametryn	20.2	Spike	P	0 - 34
2347265	Atrazine	7.82	Spike	P	0 - 41
2347265	Atrazine Desethyl	19.6	Spike	P	0 - 38
2347265	Avobenzone	15.5	Spike	P	0 - 30
2347265	Azinphos Methyl	42.0	Spike	P	0 - 62
2347265	Azoxystrobin	1.25	Spike	P	0 - 32
2347265	Bromacil	1.04	Spike	P	0 - 30
2347265	Butylate	31.1	Spike	P	0 - 59
2347265	Caffeine	3.91	Spike	P	0 - 60
2347265	Carbophenothion	13.4	Spike	P	0 - 25
2347265	Carfentrazone Ethyl	9.09	Spike	P	0 - 26
2347265	Chlorfenapyr	6.73	Spike	P	0 - 30
2347265	Chlorpyrifos Ethyl	11.8	Spike	P	0 - 27
2347265	Chlorpyrifos Methyl	1.39	Spike	P	0 - 26
2347265	Coumaphos	20.8	Spike	P	0 - 30
2347265	Cyanazine	7.57	Spike	P	0 - 58
2347265	Cyprodinil	11.4	Spike	P	0 - 30
2347265	Demeton	12.6	Spike	P	0 - 25
2347265	Diazinon	4.70	Spike	P	0 - 29
2347265	Difenoconazole	5.96	Spike	P	0 - 25
2347265	Dimethenamid	2.25	Spike	P	0 - 30
2347265	Dimethomorph	41.9	Spike	F	0 - 30
2347265	Disulfoton	3.83	Spike	P	0 - 33
2347265	Dithiopyr	19.7	Spike	P	0 - 22
2347265	EPTC	5.96	Spike	P	0 - 38
2347265	Ethion	31.5	Spike	P	0 - 79
2347265	Ethoprop	17.1	Spike	P	0 - 23
2347265	Etridiazole	20.0	Spike	P	0 - 30
2347265	Fenamiphos	4.86	Spike	P	0 - 58
2347265	Fenbuconazole	4.60	Spike	P	0 - 37
2347265	Fipronil	6.05	Spike	P	0 - 33
2347265	Fipronil Desulfinyl	3.01	Spike	P	0 - 26
2347265	Fipronil Sulfide	6.01	Spike	P	0 - 37
2347265	Fipronil Sulfone	19.9	Spike	P	0 - 50
2347265	Fluazifop-P-butyl	16.8	Spike	P	0 - 24
2347265	Fludioxonil	5.38	Spike	P	0 - 26
2347265	Flumioxazin	13.7	Spike	P	0 - 37
2347265	Flutolanil	2.57	Spike	P	0 - 26
2347265	Fluxapyroxad	7.55	Spike	P	0 - 34
2347265	Fonofos	11.0	Spike	P	0 - 27
2347265	Hexazinone	0.0696	Spike	P	0 - 36

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P417895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347265	Imazalil	11.9	Spike	P	0 - 65
2347265	Iprodione	5.50	Spike	P	0 - 33
2347265	Loratadine	0.586	Spike	P	0 - 30
2347265	Malathion	12.4	Spike	P	0 - 44
2347265	Metalaxyl	3.46	Spike	P	0 - 38
2347265	Metolachlor	1.24	Spike	P	0 - 36
2347265	Metribuzin	19.0	Spike	P	0 - 63
2347265	Mevinphos	16.4	Spike	P	0 - 26
2347265	Molinate	11.2	Spike	P	0 - 40
2347265	Myclobutanil	7.61	Spike	P	0 - 21
2347265	Naled	0.739	Spike	P	0 - 26
2347265	Napropamide	29.4	Spike	P	0 - 30
2347265	Norflurazon	7.73	Spike	P	0 - 24
2347265	Octinoxate	2.91	Spike	P	0 - 30
2347265	Oxadiazon	8.89	Spike	P	0 - 27
2347265	Oxybenzone	2.13	Spike	P	0 - 30
2347265	Oxyfluorfen	4.39	Spike	P	0 - 24
2347265	Parathion Ethyl	0.747	Spike	P	0 - 28
2347265	Parathion Methyl	20.8	Spike	P	0 - 27
2347265	PBDE-47	10.8	Spike	P	0 - 30
2347265	PBDE-99	17.0	Spike	P	0 - 30
2347265	Pendimethalin	6.94	Spike	P	0 - 31
2347265	Phenytoin	63.5	Spike	F	0 - 30
2347265	Phorate	20.7	Spike	P	0 - 27
2347265	Prodiamine	4.53	Spike	P	0 - 52
2347265	Prometon	6.56	Spike	P	0 - 31
2347265	Prometryn	12.5	Spike	P	0 - 28
2347265	Pronamide	19.9	Spike	P	0 - 26
2347265	Propanil	0.770	Spike	P	0 - 30
2347265	Propargite	17.6	Spike	P	0 - 30
2347265	Propiconazole	9.61	Spike	P	0 - 31
2347265	Pyraflufen Ethyl	3.17	Spike	P	0 - 30
2347265	Pyridaben	22.3	Spike	P	0 - 30
2347265	Pyriproxyfen	0.697	Spike	P	0 - 50
2347265	Simazine	11.0	Spike	P	0 - 29
2347265	Stirophos	47.4	Spike	F	0 - 30
2347265	Sulfentrazone	11.7	Spike	P	0 - 33
2347265	Tebuconazole	13.4	Spike	P	0 - 44
2347265	Terbufos	10.8	Spike	P	0 - 29
2347265	Terbuthylazine	10.9	Spike	P	0 - 27
2347265	Thiobencarb	4.16	Spike	P	0 - 30
2347265	Tri-o-cresyl Phosphate	1.62	Spike	P	0 - 30
2347265	Triadimefon	14.4	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P417828

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347237	Acesulfame K	0.843	Spike	P	0 - 30
2347237	AMPA	1.76	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P417828

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347237	Endothall	1.46	Spike	P	0 - 30
2347237	Glufosinate	4.64	Spike	P	0 - 30
2347237	Glyphosate	6.96	Spike	P	0 - 30
2347237	Sucralose	0.684	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P417898

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347418	2,4-D	8.51	Spike	P	0 - 30
2347418	2,4,5-T	10.1	Spike	P	0 - 30
2347418	Acetaminophen	8.34	Spike	P	0 - 30
2347418	Acetamiprid	22.2	Spike	P	0 - 30
2347418	Afidopyropen	15.5	Spike	P	0 - 30
2347418	Bentazon	4.08	Spike	P	0 - 30
2347418	Benzovindiflupyr	3.62	Spike	P	0 - 30
2347418	Carbamazepine	0.341	Spike	P	0 - 30
2347418	Clothianidin	8.04	Spike	P	0 - 30
2347418	Dinotefuran	6.25	Spike	P	0 - 30
2347418	Diuron	5.03	Spike	P	0 - 30
2347418	Fenuron	3.16	Spike	P	0 - 30
2347418	Fluridone	9.78	Spike	P	0 - 30
2347418	Hydrocodone	4.48	Spike	P	0 - 30
2347418	Ibuprofen	29.8	Spike	P	0 - 30
2347418	Imazapyr	0.0594	Spike	P	0 - 30
2347418	Imidacloprid	5.75	Spike	P	0 - 30
2347418	Linuron	25.9	Spike	P	0 - 30
2347418	Mandestrobin	1.68	Spike	P	0 - 30
2347418	MCP	20.2	Spike	P	0 - 30
2347418	Naproxen	2.41	Spike	P	0 - 30
2347418	Primidone	1.83	Spike	P	0 - 30
2347418	Pyraclostrobin	5.52	Spike	P	0 - 30
2347418	Silvex	2.26	Spike	P	0 - 30
2347418	Thiamethoxam	3.91	Spike	P	0 - 30
2347418	Tolfenpyrad	0.637	Spike	P	0 - 30
2347418	Triclopyr	12.4	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P418286

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347814	Total Alkalinity	0.447	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011

Batch ID: P418253

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347243	TDS	0.0	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P418593

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347762	Fluoride	1.01	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P417957

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2346589	Organic Carbon	1.52	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P418224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2347281	Organic Carbon	0.340	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2347261
Field Sample ID: G2CE0217

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	88.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	63.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	106	P	30 - 160
EPA 8321B	Diuron-d6	72.9	P	30 - 160
EPA 8321B	Endothall-d6	92.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	102	P	30 - 160
EPA 8321B	Ibuprofen-d3	114	P	30 - 160
EPA 8321B	Primidone-d5	115	P	30 - 160
EPA 8321B	Sucralose-d6	95.9	P	30 - 160

Lab Sample ID: 2347262
Field Sample ID: G2CE0213

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	95.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	57.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	96.9	P	30 - 160
EPA 8321B	Diuron-d6	66.3	P	30 - 160
EPA 8321B	Endothall-d6	100	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.3	P	30 - 160
EPA 8321B	Primidone-d5	105	P	30 - 160
EPA 8321B	Sucralose-d6	95.5	P	30 - 160

Lab Sample ID: 2347265
Field Sample ID: G2CE0217

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	64.2	P	20 - 200
EPA 8270E	Simazine-d10	91.6	P	71 - 140
EPA 8270E	Terbufos-d10	99.3	P	62 - 131
EPA 8270E	Terphenyl-d14	78.0	P	52 - 141

Lab Sample ID: 2347266
Field Sample ID: G2CE0213

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	59.1	P	20 - 200
EPA 8270E	Simazine-d10	89.0	P	71 - 140
EPA 8270E	Terbufos-d10	109	P	62 - 131
EPA 8270E	Terphenyl-d14	74.0	P	52 - 141

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A113989

Included Lab Sample IDs: 2347247, 2347248

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

Reference Method: DEP SOP: NU-094-1

Run ID: A113991

Included Lab Sample IDs: 2347243, 2347244

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	104	P/P	90 - 110
Color (true)	104	104	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A113992

Included Lab Sample IDs: 2347243, 2347244

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

Reference Method: SM 5310 B-2011

Run ID: A114022

Included Lab Sample IDs: 2347245

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.6	97.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A114027

Included Lab Sample IDs: 2347261, 2347262

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	102	97.9	P/P	60 - 160
Sucralose	98.1	96.6	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A114029

Included Lab Sample IDs: 2347261, 2347262

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	105	102	P/P	60 - 160
Endothall	102	104	P/P	60 - 160
Glufosinate	105	98.6	P/P	60 - 160
Glyphosate	103	104	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A114037

Included Lab Sample IDs: 2347245, 2347246

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114047

Included Lab Sample IDs: 2347263, 2347264

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.6	102	P/P	90 - 110
Antimony	98.1	98.9	P/P	90 - 110
Arsenic	102	101	P/P	90 - 110
Barium	99.0	100	P/P	90 - 110
Beryllium	97.3	99.9	P/P	90 - 110
Boron	93.4	101	P/P	90 - 110
Cadmium	100	101	P/P	90 - 110
Chromium	99.6	102	P/P	90 - 110
Cobalt	99.2	99.9	P/P	90 - 110
Copper	99.7	101	P/P	90 - 110
Lead	93.1	93.8	P/P	90 - 110
Manganese	101	104	P/P	90 - 110
Molybdenum	98.1	98.3	P/P	90 - 110
Nickel	99.6	101	P/P	90 - 110
Selenium	100	102	P/P	90 - 110
Silver	96.7	97.9	P/P	90 - 110
Thallium	104	106	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114064

Included Lab Sample IDs: 2347245, 2347246

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114065

Included Lab Sample IDs: 2347245, 2347246

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A114098

Included Lab Sample IDs: 2347263, 2347264

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	99.9	P/P	95 - 105
Iron	101	100	P/P	95 - 105
Magnesium	100	100	P/P	95 - 105
Potassium	100	102	P/P	95 - 105
Sodium	97.7	100	P/P	95 - 105
Strontium	99.8	102	P/P	95 - 105
Tin	99.4	102	P/P	95 - 105
Titanium	97.0	101	P/P	95 - 105
Vanadium	99.3	101	P/P	95 - 105
Zinc	101	102	P/P	95 - 105

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A114103

Included Lab Sample IDs: 2347261, 2347262

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	89.1	103	P/P	50 - 150
2,4,5-T	95.7	93.1	P/P	50 - 150
Acetaminophen	102	98.5	P/P	60 - 160
Acetamiprid	92.3	90.2	P/P	50 - 150
Afidopyropen	107	91.0	P/P	50 - 150
Bentazon	101	90.6	P/P	50 - 160
Benzovindiflupyr	97.0	104	P/P	50 - 150
Carbamazepine	104	89.1	P/P	60 - 150
Clothianidin	102	102	P/P	60 - 150
Dinotefuran	108	110	P/P	50 - 150
Diuron	95.4	104	P/P	60 - 160
Fenuron	95.4	100	P/P	60 - 150
Fluridone	88.1	95.1	P/P	60 - 160
Hydrocodone	107	102	P/P	60 - 150
Ibuprofen	89.5	74.0	P/P	50 - 160
Imazapyr	94.0	98.4	P/P	50 - 150
Imidacloprid	86.8	83.8	P/P	60 - 150
Linuron	97.5	111	P/P	60 - 150
Mandestrobin	100	105	P/P	50 - 150
MCPP	95.1	82.3	P/P	50 - 150
Naproxen	91.1	82.9	P/P	50 - 160
Primidone	113	94.0	P/P	60 - 150
Pyraclostrobin	103	104	P/P	60 - 150
Silvex	99.8	94.5	P/P	50 - 150
Thiamethoxam	103	106	P/P	50 - 150
Tolfenpyrad	100	99.8	P/P	60 - 150
Triclopyr	84.1	109	P/P	50 - 150

Reference Method: EPA 8270E

Run ID: A114106

Included Lab Sample IDs: 2347265, 2347266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	89.8		P	80 - 120
Avobenzone	94.1		P	80 - 120
Octinoxate	89.7		P	80 - 120
Oxybenzone	95.1		P	80 - 120
PBDE-47	93.4		P	80 - 120
PBDE-99	92.1		P	80 - 120
Tri-o-cresyl Phosphate	93.6		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A114137

Included Lab Sample IDs: 2347245, 2347246

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.5	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A114142

Included Lab Sample IDs: 2347243, 2347244

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	99.8	P/P	90 - 110
Sulfate	102	100	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A114150

Included Lab Sample IDs: 2347265, 2347266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	94.2		P	80 - 120
Alachlor	100		P	80 - 120
Ametryn	102		P	80 - 120
Atrazine	97.6		P	80 - 120
Atrazine Desethyl	106		P	80 - 120
Azinphos Methyl	111		P	80 - 120
Azoxystrobin	94.2		P	80 - 120
Bromacil	104		P	80 - 120
Butylate	98.9		P	80 - 120
Caffeine	95.0		P	80 - 120
Carbophenothion	100		P	80 - 120
Carfentrazone Ethyl	98.2		P	80 - 120
Chlorfenapyr	103		P	80 - 120
Chlorpyrifos Ethyl	98.1		P	80 - 120
Chlorpyrifos Methyl	98.4		P	80 - 120
Coumaphos	116		P	80 - 120
Cyanazine	100		P	80 - 120
Cyprodinil	102		P	80 - 120
Demeton	94.7		P	80 - 120
Diazinon	103		P	80 - 120
Difenoconazole	98.6		P	80 - 120
Dimethenamid	101		P	80 - 120
Dimethomorph	101		P	80 - 120
Disulfoton	106		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	101		P	80 - 120
Ethion	91.9		P	80 - 120
Ethoprop	97.4		P	80 - 120
Etridiazole	102		P	80 - 120
Fenamiphos	96.0		P	80 - 120
Fenbuconazole	108		P	80 - 120
Fipronil	103		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	108		P	80 - 120
Fipronil Sulfone	104		P	80 - 120
Fluazifop-P-butyl	104		P	80 - 120
Fludioxonil	107		P	80 - 120
Flumioxazin	86.5		P	80 - 120
Flutolanil	98.1		P	80 - 120
Fluxapyroxad	103		P	80 - 120
Fonofos	104		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	104		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A114150

Included Lab Sample IDs: 2347265, 2347266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iprodione	111		P	80 - 120
Loratadine	88.5		P	80 - 120
Malathion	103		P	80 - 120
Metalaxyl	103		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	93.9		P	80 - 120
Mevinphos	98.1		P	80 - 120
Molinate	106		P	80 - 120
Myclobutanil	106		P	80 - 120
Naled	104		P	80 - 120
Napropamide	102		P	80 - 120
Norflurazon	96.5		P	80 - 120
Oxadiazon	106		P	80 - 120
Oxyfluorfen	102		P	80 - 120
Parathion Ethyl	98.1		P	80 - 120
Parathion Methyl	95.8		P	80 - 120
Pendimethalin	106		P	80 - 120
Phenytoin	106		P	80 - 120
Phorate	102		P	80 - 120
Prodiamine	110		P	80 - 120
Prometon	99.1		P	80 - 120
Prometryn	101		P	80 - 120
Pronamide	99.5		P	80 - 120
Propanil	107		P	80 - 120
Propargite	99.9		P	80 - 120
Propiconazole	96.8		P	80 - 120
Pyraflufen Ethyl	106		P	80 - 120
Pyridaben	98.9		P	80 - 120
Pyriproxyfen	106		P	80 - 120
Simazine	98.3		P	80 - 120
Stirophos	101		P	80 - 120
Sulfentrazone	108		P	80 - 120
Tebuconazole	108		P	80 - 120
Terbufos	96.9		P	80 - 120
Terbuthylazine	105		P	80 - 120
Thiobencarb	99.4		P	80 - 120
Triadimefon	109		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A114152

Included Lab Sample IDs: 2347246

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.3	96.2	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A114177

Included Lab Sample IDs: 2347243, 2347244

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.6	97.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A114180
Included Lab Sample IDs: 2347265

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iprodione	93.4		P	80 - 120
Naled	104		P	80 - 120
Pyriproxyfen	95.3		P	80 - 120

Reference Method: SM 4500-F- C-2011
Run ID: A114295
Included Lab Sample IDs: 2347243, 2347244

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	100	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)	103				1.89	
	Color (true)	104				1.27	
EPA 180.1 Rev. 2.0	Turbidity	96.5				4.40	
EPA 200.7 Rev. 4.4	Calcium	101	104	106			0.527
	Iron	107	107	107	106		0.288
	Magnesium	107	107	106	106		0.764
	Potassium	106	105	107	110		1.21
	Sodium	105	103	105	103		0.856
	Strontium	106	103	105	105		1.25
	Tin	105	101	102	104		1.30
	Titanium	107	105	105	105		0.227
	Vanadium	106	103	104	104		0.508
	Zinc	106	101	103	105		1.78
EPA 200.8 Rev. 5.4	Aluminum	102	101	101	104		0.0245
	Antimony	102	103	104	103		0.933
	Arsenic	101	99.5	101	99.6		1.56
	Barium	106	104	105	105		1.42
	Beryllium	96.1	98.2	94.3	93.0		4.06
	Boron	101	100	102	106		1.24
	Cadmium	98.2	96.8	99.4	100		2.65
	Chromium	101	101	102	100		1.34
	Cobalt	99.0	98.6	99.3	97.3		0.778
	Copper	99.4	99.4	101	97.8		1.26
	Lead	95.0	95.7	95.6	96.3		0.0303
	Manganese	101	102	103	103		1.40
	Molybdenum	98.8	95.4	101	99.1		2.12
	Nickel	101	100	99.5	97.7		0.445
	Selenium	97.6	97.9	97.2	94.6		0.657
	Silver	98.9	98.1	98.5	99.9		0.460
	Thallium	99.3	102	102	102		0.419
EPA 300.0 Rev. 2.1	Chloride	102	99.5	99.1		1.15	
	Sulfate	101	98.9	98.7		0.284	
EPA 350.1 Rev. 2.0	Ammonia-N	95.0	98.4	99.6			1.06
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106					1.48
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	102			0.489
EPA 365.1 Rev. 2.0	Total-P	103	107	106			1.34
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.8	98.8	100			1.61
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	80.2	79.0	94.0			17.4
	Acetochlor	87.9	93.2	101			8.13
	Alachlor	80.3	86.7	91.0			4.89
	Ametryn	109	79.2	107			20.2
	Atrazine	78.7					7.82
	Atrazine Desethyl	65.9	41.3	56.6			19.6
	Avobenzone	97.2	77.5	90.5			15.5
	Azinphos Methyl	166	152	99.5			42.0
	Azoxystrobin	86.0	96.6	95.4			1.25
	Bromacil	90.8	97.7	98.7			1.04
	Butylate	39.8	55.4	40.4			31.1
	Caffeine	97.1	94.9	91.2			3.91
	Carbophenothion	70.9	74.1	64.8			13.4
	Carfentrazone Ethyl	88.5	81.2	74.2			9.09
	Chlorfenapyr	88.3	79.1	74.0			6.73

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	MS
			LCS	SMP		
EPA 8270E	Chlorpyrifos Ethyl	97.4	104	92.1		11.8
	Chlorpyrifos Methyl	90.5	88.4	89.6		1.39
	Coumaphos	185	168	136		20.8
	Cyanazine	96.3	112	104		7.57
	Cyprodinil	97.1	107	95.6		11.4
	Demeton	86.1	83.6	72.4		12.6
	Diazinon	105	114	109		4.70
	Difenoconazole	153	208	221		5.96
	Dimethenamid	71.8	80.8	79.0		2.25
	Dimethomorph	126	144	94.0		41.9
	Disulfoton	92.2	95.8	92.2		3.83
	Dithiopyr	112	46.1	68.9		19.7
	EPTC	34.9	47.9	45.1		5.96
	Ethion	82.4	57.9	79.5		31.5
	Ethoprop	76.9	95.8	80.7		17.1
	Etridiazole	45.5	62.8	51.4		20.0
	Fenamiphos	116	94.7	99.4		4.86
	Fenbuconazole	141	149	156		4.60
	Fipronil	71.3	80.5	85.5		6.05
	Fipronil Desulfinyl	86.8	83.0	79.4		3.01
	Fipronil Sulfide	83.3	81.1	74.4		6.01
	Fipronil Sulfone	88.8	50.9	77.1		19.9
	Fluazifop-P-butyl	73.6	61.9	73.2		16.8
	Fludioxonil	90.8	97.8	103		5.38
	Flumioxazin	131	161	140		13.7
	Flutolanil	98.1	103	105		2.57
	Fluxapyroxad	114	115	125		7.55
	Fonofos	78.4	88.5	79.2		11.0
	Hexazinone	93.2	95.2	95.2		0.0696
	Imazalil	84.1	93.1	105		11.9
	Iprodione	97.8	90.8	96.0		5.50
	Loratadine	114	161	162		0.586
	Malathion	133	114	129		12.4
	Metalaxyl	90.4	94.2	91.0		3.46
	Metolachlor	106	105	104		1.24
	Metribuzin	85.2	84.0	102		19.0
	Mevinphos	67.6	88.4	75.0		16.4
	Molinate	55.5	69.3	62.0		11.2
	Myclobutanil	92.2	111	102		7.61
	Naled	92.6	84.8	84.2		0.739
	Napropamide	73.9	58.3	78.4		29.4
	Norflurazon	98.5	103	112		7.73
	Octinoxate	87.4	93.0	90.3		2.91
	Oxadiazon	87.9	95.2	86.0		8.89
	Oxybenzone	81.6	87.5	85.7		2.13
	Oxyfluorfen	105	110	115		4.39
	Parathion Ethyl	82.5	79.3	78.7		0.747
	Parathion Methyl	97.4	105	85.6		20.8
	PBDE-47	88.3	77.5	86.4		10.8
	PBDE-99	84.1	69.7	82.7		17.0
	Pendimethalin	79.5	81.4	76.0		6.94
	Phenytol	51.7	36.9	71.2		63.5
	Phorate	77.8	87.4	71.1		20.7
	Prodiamine	60.7	60.5	63.3		4.53

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Prometon	73.6	92.8	99.1		6.56
	Prometryn	111	129	114		12.5
	Pronamide	117	133	109		19.9
	Propanil	103	112	113		0.770
	Propargite	138	122	145		17.6
	Propiconazole	103	115	95.7		9.61
	Pyraflufen Ethyl	93.1	97.2	100		3.17
	Pyridaben	148				22.3
	Pyriproxyfen	131	76.5	76.0		0.697
	Simazine	79.3	96.1	86.1		11.0
	Stirophos	76.0	42.6	69.1		47.4
	Sulfentrazone	77.1	105	92.5		11.7
	Tebuconazole	110	104	125		13.4
	Terbufos	95.6	110	98.9		10.8
	Terbuthylazine	74.8	78.9	70.7		10.9
	Thiobencarb	84.1	84.2	87.8		4.16
	Tri-o-cresyl Phosphate	89.4	86.5	87.9		1.62
	Triadimefon	77.2	74.2	85.7		14.4
EPA 8321B	2,4-D	112	111	121		8.51
	2,4,5-T	82.6	83.6	92.5		10.1
	Acesulfame K	116	79.6	79.0		0.843
	Acetaminophen	56.4	64.8	70.4		8.34
	Acetamiprid	92.4	84.8	67.8		22.2
	Afidopyropen	77.5	81.0	94.6		15.5
	AMPA	113	93.6	91.9		1.76
	Bentazon	65.7	57.5	54.4		4.08
	Benzovindiflupyr	98.7	102	106		3.62
	Carbamazepine	90.3	106	105		0.341
	Clothianidin	93.0	107	98.9		8.04
	Dinotefuran	104	127	135		6.25
	Diuron	77.4	85.5	81.3		5.03
	Endothall	117	108	107		1.46
	Fenuron	95.5	90.8	93.7		3.16
	Fluridone	95.3	89.1	98.2		9.78
	Glufosinate	112	95.3	99.9		4.64
	Glyphosate	111	82.0	87.9		6.96
	Hydrocodone	95.0	112	117		4.48
	Ibuprofen	85.7	58.4	78.9		29.8
	Imazapyr	109	94.0	94.1		0.0594
	Imidacloprid	118	161	152		5.75
	Linuron	102	82.8	63.8		25.9
	Mandestrobin	90.8	92.0	93.6		1.68
	MCPP	122	98.0	80.0		20.2
	Naproxen	71.2	71.7	70.0		2.41
	Primidone	107	111	113		1.83
	Pyraclostrobin	87.2	91.9	97.1		5.52
	Silvex	89.6	92.0	90.0		2.26
	Sucralose	110	94.8	94.2		0.684
	Thiamethoxam	103	145	139		3.91
	Tolfenpyrad	63.4	61.4	61.0		0.637
	Triclopyr	145	89.6	101		12.4
SM 2320 B-2011	Total Alkalinity	99.4			0.447	
SM 2540 C-2011	TDS				0.0	
SM 4500-F- C-2011	Fluoride	99.7	97.2	98.3		1.01

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 5310 B-2011	Organic Carbon	96.6	96.4	98.6		1.52
	Organic Carbon	95.2	97.8	98.3		0.340

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2347243, 2347244
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2347243, 2347244
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2347263, 2347264
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2347263, 2347264
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2347243, 2347244
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2347243, 2347244
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2347245, 2347246
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2347245, 2347246
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2347245, 2347246
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2347245, 2347246
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2347247, 2347248
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2347265, 2347266
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2347265, 2347266
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2347261, 2347262
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2347243, 2347244
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2347263, 2347264
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2347243, 2347244
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2347243, 2347244
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2347243, 2347244
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2347245, 2347246

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	08/09/2022			08/09/2022 15:38	Anna M. Plaviak	2347243
	08/09/2022			08/09/2022 15:44	Anna M. Plaviak	2347244
EPA 180.1 Rev. 2.0	08/09/2022			08/09/2022 14:28	Khloe J Berg	2347244
	08/09/2022			08/09/2022 14:39	Khloe J Berg	2347243
EPA 200.7 Rev. 4.4	08/09/2022	08/11/2022 09:36	Mackenzie Hunt	08/11/2022 18:02	McKinley C Carter	2347263
	08/09/2022	08/11/2022 09:36	Mackenzie Hunt	08/11/2022 18:10	McKinley C Carter	2347264
EPA 200.8 Rev. 5.4	08/09/2022	08/11/2022 09:36	Mackenzie Hunt	08/11/2022 15:20	Alexander Thompson	2347263
	08/09/2022	08/11/2022 09:36	Mackenzie Hunt	08/11/2022 15:29	Alexander Thompson	2347264
EPA 300.0 Rev. 2.1	08/09/2022			08/16/2022 19:13	Anna M. Plaviak	2347243
	08/09/2022			08/16/2022 20:49	Anna M. Plaviak	2347244
EPA 350.1 Rev. 2.0	08/09/2022			08/12/2022 13:11	Judith K. Clark	2347245
	08/09/2022			08/12/2022 13:12	Judith K. Clark	2347246
EPA 351.2 Rev. 2.0	08/09/2022	08/15/2022 14:45	Simonne.V. Calhoun	08/16/2022 15:07	Alexandra J Mattheus	2347245
	08/09/2022	08/15/2022 14:45	Simonne.V. Calhoun	08/16/2022 15:09	Alexandra J Mattheus	2347246
EPA 353.2 Rev. 2.0	08/09/2022			08/11/2022 11:27	Judith K. Clark	2347245
	08/09/2022			08/11/2022 11:28	Judith K. Clark	2347246
EPA 365.1 Rev. 2.0	08/09/2022	08/11/2022 09:30	Simonne.V. Calhoun	08/12/2022 13:15	Simonne.V. Calhoun	2347245
	08/09/2022	08/11/2022 09:30	Simonne.V. Calhoun	08/12/2022 13:16	Simonne.V. Calhoun	2347246
EPA 365.1 Rev. 2.0 dissolved	08/09/2022			08/09/2022 15:07	Elise M. Gillis	2347247
	08/09/2022			08/09/2022 15:12	Elise M. Gillis	2347248
EPA 8270E	08/09/2022	08/11/2022 08:00	Fe-Val Siddell	08/12/2022 16:56	Lipi Saha	2347265
	08/09/2022	08/11/2022 08:00	Fe-Val Siddell	08/12/2022 17:15	Lipi Saha	2347266
	08/09/2022	08/11/2022 08:00	Fe-Val Siddell	08/12/2022 17:43	Michael Poppell	2347265
	08/09/2022	08/11/2022 08:00	Fe-Val Siddell	08/12/2022 18:10	Michael Poppell	2347266
	08/09/2022	08/11/2022 08:00	Fe-Val Siddell	08/15/2022 19:51	Michael Poppell	2347265
EPA 8321B	08/09/2022	08/10/2022 12:00	Umesh Chiluwal	08/10/2022 13:38	Umesh Chiluwal	2347261
	08/09/2022	08/10/2022 12:00	Umesh Chiluwal	08/10/2022 13:51	Umesh Chiluwal	2347262
	08/09/2022	08/10/2022 12:00	Umesh Chiluwal	08/11/2022 04:11	Umesh Chiluwal	2347261
	08/09/2022	08/10/2022 12:00	Umesh Chiluwal	08/11/2022 04:26	Umesh Chiluwal	2347262
	08/09/2022	08/12/2022 09:00	Hoor Shaik	08/13/2022 06:24	Juyoung Kim	2347261
SM 2320 B-2011	08/09/2022	08/12/2022 09:00	Hoor Shaik	08/13/2022 06:44	Juyoung Kim	2347262
	08/09/2022			08/16/2022 22:27	Adam P Silver	2347243
	08/09/2022			08/16/2022 22:40	Adam P Silver	2347244
SM 2340 B-2011	08/09/2022			08/11/2022 18:02	McKinley C Carter	2347263
	08/09/2022			08/11/2022 18:10	McKinley C Carter	2347264
SM 2540 C-2011	08/09/2022			08/12/2022 14:14	Ping Hua	2347243, 2347244
SM 2540 D-2011	08/09/2022			08/12/2022 14:14	Ping Hua	2347243, 2347244
SM 4500-F- C-2011	08/09/2022			08/24/2022 00:01	Dale L. Simmons	2347243
	08/09/2022			08/24/2022 00:06	Dale L. Simmons	2347244
SM 5310 B-2011	08/09/2022			08/10/2022 22:58	Khloe J Berg	2347245

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2011	08/09/2022			08/15/2022 20:44	Khloe J Berg	2347246