

Chemical Analysis Report

CEN-DIST-2022-07-19-01

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

Event Description: **Lakes Douglas and Gear - LVI**

Request ID: **RQ-2022-07-18-26**

Customer: **CEN-DIST**

Project ID: **SMP**

Send Reports to:

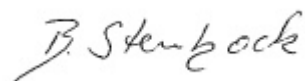
FL Dept. of Environmental Protection
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Attn: Matthew Bearden

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

Date Certified: 04-AUG-2022 13:05



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 Gear @ Center

Collection Date/Time: 07/18/2022 12:54

Field ID: G2CE0154

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2342174	DEP SOP: NU-094-1	Color (true)	22		PCU	P416852	
	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P416869	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P417207	
		Sulfate	2.9		mg SO4/L	P417210	
	SM 2320 B-2011	Total Alkalinity	65		mg CaCO3/L	P417081	
	SM 2540 C-2011	TDS	89	A	mg/L	P417297	
	SM 2540 D-2011	TSS	2	IA	mg/L	P417286	
2342176	SM 4500-F- C-2011	Fluoride	0.082	I	mg F/L	P417087	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P417265	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.62		mg N/L	P417155	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P417033	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P416950	
2342178	SM 5310 B-2011	Organic Carbon	7.2		mg C/L	P417157	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P416861	
2342182	EPA 8321B	2,4-D	0.23		ug/L	P416992	
		Acesulfame K	0.10	U	ug/L	P416713	
		2,4,5-T	0.0040	U	ug/L	P416992	
		AMPA	0.10	U	ug/L	P416713	
		Acetaminophen	0.0080	U	ug/L	P416992	
		Acetamiprid	0.0020	U	ug/L	P416992	
		Endothall	0.25	U	ug/L	P416713	
		Glufosinate	0.10	U	ug/L	P416713	
		Glyphosate	2.7		ug/L	P416713	
		Afidopyropen	0.0020	U	ug/L	P416992	
		Bentazon	0.0040		ug/L	P416992	
		Sucralose	0.79		ug/L	P416713	
		Benzovindiflupyr	0.0020	U	ug/L	P416992	
		Carbamazepine	8.0E-04	U	ug/L	P416992	
		Clothianidin	0.0020	U	ug/L	P416992	
		Dinotefuran	0.0020	U	ug/L	P416992	
		Diuron	0.0020	U	ug/L	P416992	
		Fenuron	0.032	U	ug/L	P416992	
		Fluridone	0.61		ug/L	P416992	
		Imazapyr	1.1		ug/L	P416992	
		Hydrocodone	0.0020	U	ug/L	P416992	
		Ibuprofen	0.080	U	ug/L	P416992	
		Imidacloprid	0.0020	U	ug/L	P416992	
		Linuron	0.0040	U	ug/L	P416992	
		Mandestrobin	0.0020	U	ug/L	P416992	
		MCP	0.0040	U	ug/L	P416992	
		Naproxen	0.0080	U	ug/L	P416992	
		Primidone	0.0040	U	ug/L	P416992	
		Pyraclostrobin	0.0020	U	ug/L	P416992	

MS

Field ID: G2CE0154

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2342182	EPA 8321B	Silvex	0.0040	U	ug/L	P416992	
		Thiamethoxam	0.0020	U	ug/L	P416992	
		Tolfenpyrad	0.0020	U	ug/L	P416992	
		Triclopyr	0.0040	U	ug/L	P416992	
2342184	EPA 200.7 Rev. 4.4	Calcium	21.7		mg/L	P416877	
		Iron	30	U	ug/L	P416877	
		Magnesium	1.31		mg/L	P416877	
		Potassium	1.8		mg/L	P416877	
		Sodium	7.9		mg/L	P416877	
		Strontium	49.5		ug/L	P416877	
		Tin	3.0	U	ug/L	P416877	
		Titanium	0.75	I	ug/L	P416877	
		Vanadium	2.0	U	ug/L	P416877	
		Zinc	5.0	U	ug/L	P416877	
	EPA 200.8 Rev. 5.4	Aluminum	25		ug/L	P416877	
		Antimony	0.27		ug/L	P416877	
		Arsenic	2.90		ug/L	P416877	
		Barium	8.01		ug/L	P416877	
		Beryllium	0.010	U	ug/L	P416877	
		Boron	24.0		ug/L	P416877	
		Cadmium	0.020	U	ug/L	P416877	
		Chromium	0.40	U	ug/L	P416877	
		Cobalt	0.020	U	ug/L	P416877	
		Copper	6.46		ug/L	P416877	
		Lead	0.20	U	ug/L	P416877	
		Manganese	3.11		ug/L	P416877	
		Molybdenum	0.71		ug/L	P416877	
		Nickel	0.50	U	ug/L	P416877	
		Selenium	0.20	U	ug/L	P416877	
		Silver	0.010	U	ug/L	P416877	
		Thallium	0.10	U	ug/L	P416877	
		Hardness	59.5		mg/L	P416877	
2342186	SM 2340 B-2011	Oxybenzone**	9.7	U	ng/L	P416814	
	EPA 8270E	Acetochlor	0.24	U	ng/L	P416814	
		Octinoxate**	19	U	ng/L	P416814	
		Alachlor	0.24	U	ng/L	P416814	
		Avobenzone**	97	U	ng/L	P416814	
		Ametryn	0.58	U	ng/L	P416814	
		Atrazine	12		ng/L	P416814	
		PBDE-47**	3.9	U	ng/L	P416814	
		Atrazine Desethyl	4.7	I	ng/L	P416814	
		PBDE-99**	4.8	U	ng/L	P416814	
		Azinphos Methyl	1.9	U	ng/L	P416814	
		Tri-o-cresyl Phosphate**	5.8	U	ng/L	P416814	
		Azoxystrobin	0.48	U	ng/L	P416814	

Field ID: G2CE0154

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2342186	EPA 8270E	Bromacil	0.48	U	ng/L	P416814	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P416814	
		Butylate	0.39	U	ng/L	P416814	
		Caffeine**	35		ng/L	P416814	
		Carbophenothion	0.19	U	ng/L	P416814	
		Carfentrazone Ethyl	0.097	U	ng/L	P416814	
		Chlorfenapyr	0.17	U	ng/L	P416814	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P416814	
		Chlorpyrifos Methyl	0.048	U	ng/L	P416814	
		Coumaphos	0.48	U	ng/L	P416814	
		Cyanazine	3.1	U	ng/L	P416814	
		Cyprodinil	0.097	U	ng/L	P416814	
		Demeton	1.4	U	ng/L	P416814	
		Diazinon	0.12	U	ng/L	P416814	
		Difenoconazole	0.58	U	ng/L	P416814	
		Dimethenamid	0.097	U	ng/L	P416814	
		Dimethomorph	0.17	U	ng/L	P416814	
		Disulfoton	0.48	U	ng/L	P416814	
		Dithiopyr	0.22	I	ng/L	P416814	
		EPTC	1.2	U	ng/L	P416814	
		Ethion	0.14	U	ng/L	P416814	
		Ethoprop	0.097	U	ng/L	P416814	
		Etridiazole	0.14	U	ng/L	P416814	
		Fenamiphos	0.48	U	ng/L	P416814	
		Fenbuconazole	0.12	I	ng/L	P416814	
		Fipronil	0.24	U	ng/L	P416814	
		Fipronil Desulfinyl**	0.47	I	ng/L	P416814	
		Fipronil Sulfide	0.14	U	ng/L	P416814	
		Fipronil Sulfone	0.36	I	ng/L	P416814	
		Fluazifop-P-butyl	0.097	U	ng/L	P416814	
		Fludioxonil	0.12	U	ng/L	P416814	
		Flumioxazin	1.7	U	ng/L	P416814	
		Flutolanil	0.097	U	ng/L	P416814	
		Fluxapyroxad	0.097	U	ng/L	P416814	
		Fonofos	0.19	U	ng/L	P416814	
		Hexazinone	0.48	U	ng/L	P416814	
		Imazalil	0.72	U	ng/L	P416814	
		Iprodione	0.58	U	ng/L	P416814	
		Loratadine**	0.097	U	ng/L	P416814	
		Malathion	0.34	U	ng/L	P416814	
		Metalaxyl	0.72	U	ng/L	P416814	
		Metolachlor	0.34	U	ng/L	P416814	
		Metribuzin	2.4	U	ng/L	P416814	
		Mevinphos	1.0	U	ng/L	P416814	

Field ID: G2CE0154

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2342186	EPA 8270E	Molinate	0.29	U	ng/L	P416814	
		Myclobutanil	0.24	U	ng/L	P416814	
		Naled	1.4	U	ng/L	P416814	
		Napropamide	0.39	U	ng/L	P416814	
		Norflurazon	0.48	U	ng/L	P416814	
		Oxadiazon	0.31	I	ng/L	P416814	
		Oxyfluorfen	0.14	U	ng/L	P416814	
		Parathion Ethyl	0.24	U	ng/L	P416814	
		Parathion Methyl	0.53	U	ng/L	P416814	
		Pendimethalin	0.97	U	ng/L	P416814	
		Phenytol**	3.4	U	ng/L	P416814	MS
		Phorate	0.51	U	ng/L	P416814	
		Prodiamine	0.17	U	ng/L	P416814	
		Prometon	0.87	U	ng/L	P416814	
		Prometryn	0.19	U	ng/L	P416814	
		Pronamide	0.14	U	ng/L	P416814	
		Propanil	0.12	U	ng/L	P416814	
		Propargite	1.4	U	ng/L	P416814	
		Propiconazole	0.85	I	ng/L	P416814	
		Pyraflufen Ethyl	0.24	U	ng/L	P416814	
		Pyridaben	3.1		ng/L	P416814	
		Pyriproxyfen	0.12	U	ng/L	P416814	
		Simazine	27		ng/L	P416814	
		Stirophos	0.12	U	ng/L	P416814	MS
		Sulfentrazone	0.53	I	ng/L	P416814	
		Tebuconazole	1.6	I	ng/L	P416814	
		Terbufos	0.097	U	ng/L	P416814	
		Terbutylazine	0.41	U	ng/L	P416814	
		Thiobencarb	0.58	U	ng/L	P416814	
		Triadimefon	0.24	U	ng/L	P416814	

Ref. Method and Comment:

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

EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 07/27/2022.

EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked.

Sample Location: Lake Douglas @ Center

Collection Date/Time: 07/18/2022 10:57

Field ID: G2CE0210

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2342175	DEP SOP: NU-094-1	Color (true)	40		PCU	P416852	
	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P416869	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P417207	
		Sulfate	5.5		mg SO4/L	P417210	
	SM 2320 B-2011	Total Alkalinity	30		mg CaCO3/L	P417081	
	SM 2540 C-2011	TDS	84		mg/L	P417297	
	SM 2540 D-2011	TSS	2	U	mg/L	P417286	
2342177	SM 4500-F- C-2011	Fluoride	0.037	I	mg F/L	P417087	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P417265	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.56		mg N/L	P416991	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P417033	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P416950	
2342179	SM 5310 B-2011	Organic Carbon	6.8		mg C/L	P417157	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P416861	
2342183	EPA 8321B	2,4-D	0.0029	I	ug/L	P416992	
		Acesulfame K	0.10	U	ug/L	P416713	
		2,4,5-T	0.0040	U	ug/L	P416992	
		AMPA	0.10	U	ug/L	P416713	
		Acetaminophen	0.0080	U	ug/L	P416992	
		Acetamiprid	0.0020	U	ug/L	P416992	
		Endothall	0.25	U	ug/L	P416713	MS
		Glufosinate	0.10	U	ug/L	P416713	
		Glyphosate	0.10	U	ug/L	P416713	
		Afidopyrophen	0.0020	U	ug/L	P416992	
		Bentazon	0.0083		ug/L	P416992	
		Sucralose	0.020	I	ug/L	P416713	
		Benzovindiflupyr	0.0020	U	ug/L	P416992	
		Carbamazepine	8.0E-04	U	ug/L	P416992	
		Clothianidin	0.0020	U	ug/L	P416992	
		Dinotefuran	0.0020	U	ug/L	P416992	
		Diuron	0.0027	I	ug/L	P416992	
		Fenuron	0.032	U	ug/L	P416992	
		Fluridone	0.0035		ug/L	P416992	
		Imazapyr	0.040		ug/L	P416992	
		Hydrocodone	0.0020	U	ug/L	P416992	
		Ibuprofen	0.080	U	ug/L	P416992	
		Imidacloprid	0.0020	U	ug/L	P416992	
		Linuron	0.0040	U	ug/L	P416992	
		Mandestrobin	0.0020	U	ug/L	P416992	
		MCPD	0.0040	U	ug/L	P416992	
		Naproxen	0.0080	U	ug/L	P416992	
		Primidone	0.0040	U	ug/L	P416992	
		Pyraclostrobin	0.0020	U	ug/L	P416992	

Field ID: G2CE0210

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2342183	EPA 8321B	Silvex	0.0040	U	ug/L	P416992	
		Thiamethoxam	0.0020	U	ug/L	P416992	
		Tolfenpyrad	0.0020	U	ug/L	P416992	
		Triclopyr	0.0040	U	ug/L	P416992	
2342185	EPA 200.7 Rev. 4.4	Calcium	12.7		mg/L	P416877	
		Iron	52	I	ug/L	P416877	
		Magnesium	1.35		mg/L	P416877	
		Potassium	1.2	I	mg/L	P416877	
		Sodium	9.7		mg/L	P416877	
		Strontium	62.1		ug/L	P416877	
		Tin	3.0	U	ug/L	P416877	
		Titanium	0.75	U	ug/L	P416877	
		Vanadium	2.0	U	ug/L	P416877	
		Zinc	5.0	U	ug/L	P416877	
	EPA 200.8 Rev. 5.4	Aluminum	9.3	I	ug/L	P416877	
		Antimony	0.072	I	ug/L	P416877	
		Arsenic	1.74		ug/L	P416877	
		Barium	15.1		ug/L	P416877	
		Beryllium	0.010	U	ug/L	P416877	
		Boron	23.9		ug/L	P416877	
		Cadmium	0.020	U	ug/L	P416877	
		Chromium	0.40	U	ug/L	P416877	
		Cobalt	0.020	U	ug/L	P416877	
		Copper	0.40	U	ug/L	P416877	
		Lead	0.20	U	ug/L	P416877	
		Manganese	9.92		ug/L	P416877	
		Molybdenum	0.15	U	ug/L	P416877	
		Nickel	0.50	U	ug/L	P416877	
		Selenium	0.20	U	ug/L	P416877	
		Silver	0.010	U	ug/L	P416877	
		Thallium	0.10	U	ug/L	P416877	
		Hardness	37.4		mg/L	P416877	
2342187	SM 2340 B-2011	Oxybenzone**	9.7	U	ng/L	P416814	
	EPA 8270E	Acetochlor	0.24	U	ng/L	P416814	
		Octinoxate**	19	U	ng/L	P416814	
		Alachlor	0.24	U	ng/L	P416814	
		Avobenzone**	97	U	ng/L	P416814	
		Ametryn	0.58	U	ng/L	P416814	
		Atrazine	15		ng/L	P416814	
		PBDE-47**	3.9	U	ng/L	P416814	
		Atrazine Desethyl	1.5	U	ng/L	P416814	
		PBDE-99**	4.9	U	ng/L	P416814	
		Azinphos Methyl	1.9	U	ng/L	P416814	
		Tri-o-cresyl Phosphate**	5.8	U	ng/L	P416814	
		Azoxystrobin	0.49	U	ng/L	P416814	

Field ID: G2CE0210

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2342187	EPA 8270E	Bromacil	0.49	U	ng/L	P416814	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P416814	
		Butylate	0.39	U	ng/L	P416814	
		Caffeine**	12	I	ng/L	P416814	
		Carbophenothion	0.19	U	ng/L	P416814	
		Carfentrazone Ethyl	0.097	U	ng/L	P416814	
		Chlorfenapyr	0.17	U	ng/L	P416814	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P416814	
		Chlorpyrifos Methyl	0.049	U	ng/L	P416814	
		Coumaphos	0.49	U	ng/L	P416814	
		Cyanazine	3.2	U	ng/L	P416814	
		Cyprodinil	0.097	U	ng/L	P416814	
		Demeton	1.5	U	ng/L	P416814	
		Diazinon	0.12	U	ng/L	P416814	
		Difenoconazole	0.58	U	ng/L	P416814	
		Dimethenamid	0.097	U	ng/L	P416814	
		Dimethomorph	0.17	U	ng/L	P416814	
		Disulfoton	0.49	U	ng/L	P416814	
		Dithiopyr	1.2		ng/L	P416814	
		EPTC	1.2	U	ng/L	P416814	
		Ethion	0.15	U	ng/L	P416814	
		Ethoprop	0.097	U	ng/L	P416814	
		Etridiazole	0.15	U	ng/L	P416814	
		Fenamiphos	0.49	U	ng/L	P416814	
		Fenbuconazole	0.12	U	ng/L	P416814	
		Fipronil	0.24	U	ng/L	P416814	
		Fipronil DesulfinyI**	0.99		ng/L	P416814	
		Fipronil Sulfide	0.45	I	ng/L	P416814	
		Fipronil Sulfone	1.4		ng/L	P416814	
		Fluazifop-P-butyl	0.097	U	ng/L	P416814	
		Fludioxonil	0.12	U	ng/L	P416814	
		Flumioxazin	1.7	U	ng/L	P416814	
		Flutolanil	0.097	U	ng/L	P416814	
		Fluxapyroxad	0.097	U	ng/L	P416814	
		Fonofos	0.19	U	ng/L	P416814	
		Hexazinone	0.49	U	ng/L	P416814	
		Imazalil	0.73	U	ng/L	P416814	
		Iprodione	0.58	U	ng/L	P416814	
		Loratadine**	0.097	U	ng/L	P416814	
		Malathion	0.34	U	ng/L	P416814	
		Metalaxyl	0.73	U	ng/L	P416814	
		Metolachlor	0.48	I	ng/L	P416814	
		Metribuzin	2.4	U	ng/L	P416814	
		Mevinphos	1.0	U	ng/L	P416814	

Field ID: G2CE0210

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2342187	EPA 8270E	Molinate	0.29	U	ng/L	P416814	
		Myclobutanil	0.24	U	ng/L	P416814	
		Naled	1.5	U	ng/L	P416814	
		Napropamide	0.39	U	ng/L	P416814	
		Norflurazon	0.49	U	ng/L	P416814	
		Oxadiazon	0.35	I	ng/L	P416814	
		Oxyfluorfen	0.15	U	ng/L	P416814	
		Parathion Ethyl	0.24	U	ng/L	P416814	
		Parathion Methyl	0.54	U	ng/L	P416814	
		Pendimethalin	0.97	U	ng/L	P416814	
		Phenytain**	3.4	U	ng/L	P416814	MS
		Phorate	0.51	U	ng/L	P416814	
		Prodiamine	0.17	U	ng/L	P416814	
		Prometon	0.88	U	ng/L	P416814	
		Prometryn	0.19	U	ng/L	P416814	
		Pronamide	0.15	U	ng/L	P416814	
		Propanil	0.12	U	ng/L	P416814	
		Propargite	1.5	U	ng/L	P416814	
		Propiconazole	0.60	I	ng/L	P416814	
		Pyraflufen Ethyl	0.24	U	ng/L	P416814	
		Pyridaben	5.8		ng/L	P416814	
		Pyriproxyfen	0.12	U	ng/L	P416814	
		Simazine	0.49	U	ng/L	P416814	
		Stiophos	0.12	U	ng/L	P416814	MS
		Sulfentrazone	0.49	U	ng/L	P416814	
		Tebuconazole	5.2		ng/L	P416814	
		Terbufos	0.097	U	ng/L	P416814	
		Terbutylazine	0.41	U	ng/L	P416814	
		Thiobencarb	0.58	U	ng/L	P416814	
		Triadimefon	0.24	U	ng/L	P416814	

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: MS accuracy for multiple parameters 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: P416852

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P416869

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416877

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: P416877

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417207

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417210

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P417265

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416991

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417155

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P417033

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416950

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P416861

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

Reference Method: EPA 8270E
Batch ID: P416814

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: P416814

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	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P416814

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: P416814

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
Prodiatamine	0.18	U	ng/L
Prodiatamine	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: P416814

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: P416713

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: P416992

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: P417081

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

Reference Method: SM 2540 C-2011
Batch ID: P417297

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P417286

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P417087

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P417157

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: P416852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P416869

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: P416877

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	98.8		P	85 - 115
Magnesium	98.6		P	85 - 115
Potassium	98.5		P	85 - 115
Sodium	101		P	85 - 115
Strontium	102		P	85 - 115
Tin	98.8		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	100		P	85 - 115
Zinc	99.2		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416877

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	105		P	85 - 115
Arsenic	103		P	85 - 115
Barium	107		P	85 - 115
Beryllium	101		P	85 - 115
Boron	98.9		P	85 - 115
Cadmium	99.4		P	85 - 115
Chromium	102		P	85 - 115
Cobalt	101		P	85 - 115
Copper	102		P	85 - 115
Lead	96.8		P	85 - 115
Manganese	103		P	85 - 115
Molybdenum	98.6		P	85 - 115
Nickel	103		P	85 - 115
Selenium	104		P	85 - 115
Silver	99.1		P	85 - 115
Thallium	100		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417207

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417210

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P417265

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416991

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417155

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P417033

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: P416950

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P416861

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

Reference Method: EPA 8270E
Batch ID: P416814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	104		P	50 - 150
Acetochlor	101		P	70 - 121
Alachlor	84.1		P	68 - 119
Ametryn	67.1		P	64 - 139
Atrazine	97.6		P	76 - 120
Atrazine Desethyl	65.1		P	44 - 126
Avobenzone	101		P	76 - 212
Azinphos Methyl	102		P	43 - 192
Azoxystrobin	110		P	36 - 224
Bromacil	84.6		P	52 - 121

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P416814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Butylate	57.6		P	28 - 91.0
Caffeine	64.9		P	50 - 134
Carbophenothion	88.3		P	56 - 129
Carfentrazone Ethyl	83.1		P	60 - 141
Chlorfenapyr	81.2		P	56 - 115
Chlorpyrifos Ethyl	86.0		P	60 - 118
Chlorpyrifos Methyl	98.9		P	68 - 119
Coumaphos	94.9		P	18 - 250
Cyanazine	110		P	61 - 250
Cyprodinil	78.0		P	55 - 145
Demeton	81.6		P	30 - 159
Diazinon	91.5		P	70 - 123
Difenoconazole	129		P	49 - 204
Dimethenamid	89.4		P	64 - 115
Dimethomorph	112		P	12 - 219
Disulfoton	87.8		P	44 - 125
Dithiopyr	83.2		P	64 - 115
EPTC	42.3		P	28 - 86.0
Ethion	84.0		P	33 - 125
Ethoprop	92.9		P	64 - 116
Etridiazole	53.4		P	34 - 91.0
Fenamiphos	84.6		P	12 - 127
Fenbuconazole	91.0		P	59 - 151
Fipronil	88.2		P	67 - 129
Fipronil Desulfinyl	87.3		P	65 - 127
Fipronil Sulfide	85.3		P	61 - 116
Fipronil Sulfone	83.2		P	55 - 117
Fluazifop-P-butyl	96.7		P	62 - 127
Fludioxonil	100		P	62 - 128
Flumioxazin	136		P	33 - 250
Flutolanil	88.5		P	56 - 127
Fluxapyroxad	87.6		P	45 - 128
Fonofos	94.3		P	62 - 111
Hexazinone	97.9		P	46 - 139
Imazalil	92.0		P	38 - 142
Iprodione	100		P	47 - 135
Loratadine	95.9		P	10 - 244
Malathion	87.4		P	61 - 139
Metalaxyl	79.1		P	10 - 119
Metolachlor	82.3		P	65 - 118
Metribuzin	83.7		P	51 - 250
Mevinphos	89.3		P	53 - 121
Molinate	77.3		P	42 - 96.0
Myclobutanil	83.8		P	55 - 128
Naled	85.0		P	10 - 98.0
Napropamide	80.5		P	49 - 121
Norflurazon	82.3		P	61 - 126
Octinoxate	99.0		P	30 - 159
Oxadiazon	77.2		P	59 - 116
Oxybenzone	80.4		P	61 - 139
Oxyfluorfen	116		P	64 - 137
Parathion Ethyl	88.7		P	70 - 112

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P416814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Parathion Methyl	119		P	76 - 133
PBDE-47	90.0		P	50 - 150
PBDE-99	91.4		P	50 - 150
Pendimethalin	98.4		P	52 - 117
Phenytoin	25.8		P	10 - 199
Phorate	93.2		P	48 - 121
Prodiamine	37.6		P	26 - 142
Prometon	81.3		P	43 - 123
Prometryn	86.9		P	66 - 127
Pronamide	93.0		P	75 - 121
Propanil	115		P	45 - 150
Propargite	57.4		P	42 - 208
Propiconazole	77.8		P	60 - 125
Pyraflufen Ethyl	83.4		P	70 - 138
Pyridaben	80.3		P	35 - 245
Pyriproxyfen	82.0		P	30 - 149
Simazine	87.8		P	72 - 125
Stirophos	69.1		P	29 - 164
Sulfentrazone	113		P	21 - 139
Tebuconazole	53.6		P	10 - 115
Terbufos	103		P	60 - 123
Terbutylazine	88.0		P	72 - 115
Thiobencarb	72.0		P	31 - 139
Tri-o-cresyl Phosphate	96.8		P	50 - 150
Triadimefon	79.6		P	65 - 116

Reference Method: EPA 8321B

Batch ID: P416713

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	80.2		P	40 - 150
AMPA	112		P	40 - 150
Endothall	102		P	40 - 150
Glufosinate	128		P	40 - 150
Glyphosate	103		P	40 - 150
Sucralose	102		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P416992

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	72.9		P	40 - 150
2,4,5-T	64.6		P	40 - 150
Acetaminophen	85.8		P	30 - 150
Acetamiprid	63.4		P	40 - 150
Afidopyropen	66.2		P	30 - 150
Bentazon	104		P	30 - 150
Benzovindiflupyr	93.8		P	40 - 150
Carbamazepine	92.5		P	40 - 150
Clothianidin	101		P	40 - 150
Dinotefuran	90.9		P	40 - 150
Diuron	80.7		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P416992

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fenuron	93.0		P	40 - 150
Fluridone	100		P	40 - 150
Hydrocodone	90.6		P	40 - 150
Ibuprofen	89.2		P	40 - 150
Imazapyr	89.8		P	40 - 150
Imidacloprid	92.2		P	40 - 150
Linuron	87.9		P	40 - 150
Mandestrobin	90.7		P	40 - 150
MCPP	87.6		P	40 - 150
Naproxen	66.2		P	40 - 150
Primidone	79.7		P	40 - 150
Pyraclostrobin	77.1		P	40 - 150
Silvex	55.3		P	40 - 150
Thiamethoxam	90.4		P	40 - 150
Tolfenpyrad	44.8		P	30 - 150
Triclopyr	66.5		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P417081

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P417087

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P417157

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416877

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342139	Calcium	103		P	80 - 120
2342139	Iron	101	103	P/P	80 - 120
2342139	Magnesium	99.8	103	P/P	80 - 120
2342139	Potassium	99.4	102	P/P	80 - 120
2342139	Sodium	98.5		P	80 - 120
2342139	Strontium	103	105	P/P	80 - 120
2342139	Tin	98.4	102	P/P	80 - 120
2342139	Titanium	97.5	101	P/P	80 - 120
2342139	Vanadium	102	105	P/P	80 - 120
2342139	Zinc	99.8	104	P/P	80 - 120
2342141	Calcium	102		P	80 - 120
2342141	Iron	103		P	80 - 120
2342141	Magnesium	104		P	80 - 120
2342141	Potassium	105		P	80 - 120
2342141	Sodium	105		P	80 - 120
2342141	Strontium	106		P	80 - 120
2342141	Tin	100		P	80 - 120
2342141	Titanium	100		P	80 - 120
2342141	Vanadium	107		P	80 - 120
2342141	Zinc	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416877

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342139	Aluminum	97.7	99.9	P/P	80 - 120
2342139	Antimony	103	104	P/P	80 - 120
2342139	Arsenic	100	102	P/P	80 - 120
2342139	Barium	103	106	P/P	80 - 120
2342139	Beryllium	93.9	94.9	P/P	80 - 120
2342139	Boron	98.2	101	P/P	80 - 120
2342139	Cadmium	97.4	100	P/P	80 - 120
2342139	Chromium	102	98.6	P/P	80 - 120
2342139	Cobalt	97.5	97.7	P/P	80 - 120
2342139	Copper	98.1	98.7	P/P	80 - 120
2342139	Lead	95.1	96.3	P/P	80 - 120
2342139	Manganese	104	110	P/P	80 - 120
2342139	Molybdenum	98.1	98.7	P/P	80 - 120
2342139	Nickel	97.6	96.9	P/P	80 - 120
2342139	Selenium	98.7	99.2	P/P	80 - 120
2342139	Silver	95.9	98.0	P/P	80 - 120
2342139	Thallium	100	102	P/P	80 - 120
2342141	Aluminum	107		P	80 - 120
2342141	Antimony	106		P	80 - 120
2342141	Arsenic	101		P	80 - 120
2342141	Barium	107		P	80 - 120
2342141	Beryllium	95.2		P	80 - 120
2342141	Boron	102		P	80 - 120
2342141	Cadmium	104		P	80 - 120
2342141	Chromium	104		P	80 - 120
2342141	Cobalt	98.6		P	80 - 120
2342141	Copper	97.2		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P416877

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342141	Lead	96.7		P	80 - 120
2342141	Manganese	113		P	80 - 120
2342141	Molybdenum	102		P	80 - 120
2342141	Nickel	100		P	80 - 120
2342141	Selenium	99.9		P	80 - 120
2342141	Silver	98.0		P	80 - 120
2342141	Thallium	102		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P417207

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342089	Chloride	95.5		P	90 - 110
2342115	Chloride	93.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P417210

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342089	Sulfate	94.1		P	90 - 110
2342115	Sulfate	93.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P417265

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342007	Ammonia-N	99.2	97.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P417155

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342214	Kjeldahl Nitrogen	94.1	94.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P417033

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342122	NO2NO3-N	99.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P416950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342091	Total-P	103	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P416861

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342178	O-Phosphate-P	99.8	99.2	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P416814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341420	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.0	95.7	P/P	50 - 150
2341420	Acetochlor	104	106	P/P	65 - 124
2341420	Alachlor	94.7	114	P/P	61 - 121
2341420	Ametryn	176	128	P/P	52 - 216
2341420	Atrazine	96.7	101	P/P	68 - 133
2341420	Atrazine Desethyl	33.0	19.8	P/P	15 - 160
2341420	Avobenzone	89.5	91.5	P/P	59 - 206
2341420	Azinphos Methyl	99.9	121	P/P	40 - 292
2341420	Azoxystrobin	133	140	P/P	12 - 242
2341420	Bromacil	80.9	113	P/P	54 - 167
2341420	Butylate	61.1	62.7	P/P	14 - 94.0
2341420	Caffeine	78.5	71.3	P/P	10 - 226
2341420	Carbophenothion	83.7	83.7	P/P	49 - 122
2341420	Carfentrazone Ethyl	110	101	P/P	53 - 138
2341420	Chlorfenapyr	73.1	69.1	P/P	50 - 150
2341420	Chlorpyrifos Ethyl	83.2	99.9	P/P	52 - 122
2341420	Chlorpyrifos Methyl	106	107	P/P	66 - 117
2341420	Coumaphos	80.5	83.1	P/P	50 - 220
2341420	Cyanazine	105	126	P/P	43 - 245
2341420	Cyprodinil	75.7	101	P/P	50 - 150
2341420	Demeton	84.8	102	P/P	43 - 188
2341420	Diazinon	108	102	P/P	69 - 131
2341420	Difenoconazole	116	118	P/P	34 - 231
2341420	Dimethenamid	89.4	92.5	P/P	55 - 118
2341420	Dimethomorph	131	144	P/P	50 - 150
2341420	Disulfoton	92.6	96.1	P/P	38 - 141
2341420	Dithiopyr	64.5	77.9	P/P	42 - 116
2341420	EPTC	33.6	36.3	P/P	18 - 85.0
2341420	Ethion	77.2	114	P/P	10 - 131
2341420	Ethoprop	108	114	P/P	65 - 129
2341420	Etridiazole	61.4	65.0	P/P	50 - 150
2341420	Fenamiphos	95.7	78.0	P/P	31 - 137
2341420	Fenbuconazole	82.1	110	P/P	57 - 160
2341420	Fipronil	79.3	121	P/P	62 - 132
2341420	Fipronil Desulfinyl	101	119	P/P	57 - 131
2341420	Fluazifop-P-butyl	106	103	P/P	54 - 133
2341420	Fludioxonil	82.2	102	P/P	58 - 127
2341420	Flumioxazin	126	121	P/P	33 - 300
2341420	Flutolanil	72.0	81.7	P/P	42 - 130
2341420	Fluxapyroxad	95.3	93.4	P/P	23 - 141
2341420	Fonofos	103	107	P/P	58 - 119
2341420	Hexazinone	121	119	P/P	68 - 172
2341420	Imazalil	95.0	87.5	P/P	48 - 283
2341420	Iprodione	74.4	100	P/P	38 - 140
2341420	Loratadine	113	128	P/P	50 - 150
2341420	Malathion	81.1	109	P/P	40 - 137
2341420	Metalaxyl	111	121	P/P	21 - 129
2341420	Metolachlor	85.6	98.0	P/P	55 - 122
2341420	Metribuzin	73.9	74.3	P/P	38 - 187
2341420	Mevinphos	101	115	P/P	54 - 134
2341420	Molinate	85.9	83.1	P/P	41 - 97.0
2341420	Myclobutanil	86.3	101	P/P	56 - 125

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P416814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341420	Naled	68.7	78.3	P/P	10 - 108
2341420	Napropamide	74.5	86.1	P/P	50 - 150
2341420	Norflurazon	72.6	89.9	P/P	32 - 122
2341420	Octinoxate	80.8	86.5	P/P	25 - 150
2341420	Oxadiazon	63.7	77.8	P/P	40 - 119
2341420	Oxybenzone	83.2	80.1	P/P	59 - 147
2341420	Oxyfluorfen	121	126	P/P	61 - 153
2341420	Parathion Ethyl	96.0	91.5	P/P	59 - 130
2341420	Parathion Methyl	137	120	P/P	65 - 155
2341420	PBDE-47	87.1	83.0	P/P	50 - 150
2341420	PBDE-99	85.0	80.8	P/P	50 - 150
2341420	Pendimethalin	120	122	P/P	49 - 138
2341420	Phenytoin	24.3	27.2	F/F	50 - 200
2341420	Phorate	104	126	P/P	54 - 161
2341420	Prodiamine	61.0	66.5	P/P	33 - 161
2341420	Prometon	80.8	101	P/P	48 - 140
2341420	Prometryn	67.9	75.1	P/P	55 - 134
2341420	Pronamide	96.4	91.6	P/P	66 - 137
2341420	Propanil	116	113	P/P	50 - 150
2341420	Propargite	61.0	66.7	P/P	50 - 200
2341420	Propiconazole	50.9	80.0	P/P	36 - 150
2341420	Pyraflufen Ethyl	87.5	86.8	P/P	50 - 150
2341420	Pyridaben	80.6	91.5	P/P	50 - 200
2341420	Pyriproxyfen	69.0	78.4	P/P	10 - 165
2341420	Simazine	89.1	88.4	P/P	57 - 145
2341420	Stirophos	27.3	29.8	F/F	50 - 150
2341420	Tebuconazole	23.0	50.8	P/P	10 - 127
2341420	Terbufos	121	125	P/P	59 - 138
2341420	Terbuthylazine	107	108	P/P	68 - 119
2341420	Thiobencarb	69.1	74.2	P/P	50 - 150
2341420	Tri-o-cresyl Phosphate	91.2	85.0	P/P	50 - 150
2341420	Triadimefon	76.7	87.5	P/P	50 - 150

Reference Method: EPA 8321B

Batch ID: P416713

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342112	Acesulfame K	67.2	64.6	P/P	40 - 150
2342112	AMPA	87.5	88.8	P/P	40 - 150
2342112	Endothall	158	148	F/P	40 - 150
2342112	Glufosinate	84.7	85.2	P/P	40 - 150
2342112	Glyphosate	88.0	81.5	P/P	40 - 150
2342112	Sucralose	98.9	96.0	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P416992

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342488	2,4-D	78.5	74.0	P/P	40 - 150
2342488	2,4,5-T	58.5	63.9	P/P	40 - 150
2342488	Acetaminophen	81.5	83.3	P/P	30 - 150
2342488	Acetamiprid	76.2	69.8	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P416992

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342488	Afidopyropen	61.9	63.4	P/P	30 - 150
2342488	Bentazon	94.7	109	P/P	30 - 150
2342488	Benzovindiflupyr	75.0	92.8	P/P	40 - 150
2342488	Carbamazepine	84.4	87.8	P/P	40 - 150
2342488	Clothianidin	95.5	94.4	P/P	40 - 150
2342488	Dinotefuran	83.0	87.9	P/P	40 - 150
2342488	Diuron	72.6	74.2	P/P	40 - 150
2342488	Fenuron	87.0	89.2	P/P	40 - 150
2342488	Fluridone	88.2	94.5	P/P	40 - 150
2342488	Hydrocodone	81.8	85.3	P/P	40 - 150
2342488	Ibuprofen	68.7	68.9	P/P	40 - 150
2342488	Imazapyr	75.6	81.9	P/P	40 - 150
2342488	Imidacloprid	89.0	90.5	P/P	40 - 150
2342488	Linuron	83.9	73.8	P/P	40 - 150
2342488	Mandestrobin	79.8	85.4	P/P	40 - 150
2342488	MCPP	79.1	78.8	P/P	40 - 150
2342488	Naproxen	74.4	67.7	P/P	40 - 150
2342488	Primidone	84.8	85.3	P/P	40 - 150
2342488	Pyraclostrobin	74.4	76.0	P/P	40 - 150
2342488	Silvex	59.0	65.8	P/P	40 - 150
2342488	Thiamethoxam	84.9	87.1	P/P	40 - 150
2342488	Tolfenpyrad	47.5	49.4	P/P	30 - 150
2342488	Triclopyr	64.1	68.1	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P417087

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342086	Fluoride	101	100	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P417157

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2342121	Organic Carbon	98.2	97.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P416852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342119	Color (true)	2.50	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P416869

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342105	Turbidity	2.29	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342139	Calcium	0.0565	Spike	P	0 - 20
2342139	Iron	1.77	Spike	P	0 - 20
2342139	Magnesium	1.87	Spike	P	0 - 20
2342139	Potassium	1.49	Spike	P	0 - 20
2342139	Sodium	0.336	Spike	P	0 - 20
2342139	Strontium	1.65	Spike	P	0 - 20
2342139	Tin	3.81	Spike	P	0 - 20
2342139	Titanium	3.34	Spike	P	0 - 20
2342139	Vanadium	3.51	Spike	P	0 - 20
2342139	Zinc	3.73	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342139	Aluminum	1.92	Spike	P	0 - 20
2342139	Antimony	1.47	Spike	P	0 - 20
2342139	Arsenic	1.97	Spike	P	0 - 20
2342139	Barium	2.01	Spike	P	0 - 20
2342139	Beryllium	1.03	Spike	P	0 - 20
2342139	Boron	2.84	Spike	P	0 - 20
2342139	Cadmium	2.96	Spike	P	0 - 20
2342139	Chromium	3.40	Spike	P	0 - 20
2342139	Cobalt	0.267	Spike	P	0 - 20
2342139	Copper	0.646	Spike	P	0 - 20
2342139	Lead	1.27	Spike	P	0 - 20
2342139	Manganese	1.96	Spike	P	0 - 20
2342139	Molybdenum	0.545	Spike	P	0 - 20
2342139	Nickel	0.681	Spike	P	0 - 20
2342139	Selenium	0.501	Spike	P	0 - 20
2342139	Silver	2.16	Spike	P	0 - 20
2342139	Thallium	1.88	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417207

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342089	Chloride	0.136	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P417210

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342089	Sulfate	0.173	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P417265

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342007	Ammonia-N	1.23	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416991

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342669	Kjeldahl Nitrogen	1.28	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417155

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342214	Kjeldahl Nitrogen	0.313	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P417033

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342122	NO2NO3-N	0.962	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342091	Total-P	1.84	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P416861

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342178	O-Phosphate-P	0.603	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P416814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341420	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	1.76	Spike	P	0 - 30
2341420	Acetochlor	2.13	Spike	P	0 - 27
2341420	Alachlor	18.9	Spike	P	0 - 27
2341420	Ametryn	31.4	Spike	P	0 - 34
2341420	Atrazine	2.64	Spike	P	0 - 41
2341420	Atrazine Desethyl	22.8	Spike	P	0 - 38
2341420	Avobenzone	2.14	Spike	P	0 - 30
2341420	Azinphos Methyl	18.8	Spike	P	0 - 62
2341420	Azoxystrobin	5.25	Spike	P	0 - 32
2341420	Bromacil	22.4	Spike	P	0 - 30
2341420	Butylate	2.53	Spike	P	0 - 59
2341420	Caffeine	8.70	Spike	P	0 - 60
2341420	Carbophenothion	0.0385	Spike	P	0 - 25
2341420	Carfentrazone Ethyl	8.55	Spike	P	0 - 26
2341420	Chlorfenapyr	5.55	Spike	P	0 - 30
2341420	Chlorpyrifos Ethyl	18.3	Spike	P	0 - 27
2341420	Chlorpyrifos Methyl	0.687	Spike	P	0 - 26
2341420	Coumaphos	3.26	Spike	P	0 - 30
2341420	Cyanazine	17.8	Spike	P	0 - 58
2341420	Cyprodinil	28.9	Spike	P	0 - 30
2341420	Demeton	18.8	Spike	P	0 - 25
2341420	Diazinon	5.10	Spike	P	0 - 29
2341420	Difenoconazole	1.78	Spike	P	0 - 25
2341420	Dimethenamid	3.40	Spike	P	0 - 30
2341420	Dimethomorph	9.22	Spike	P	0 - 30
2341420	Disulfoton	3.74	Spike	P	0 - 33
2341420	Dithiopyr	16.8	Spike	P	0 - 22
2341420	EPTC	7.47	Spike	P	0 - 38
2341420	Ethion	38.7	Spike	P	0 - 79
2341420	Ethoprop	5.41	Spike	P	0 - 23
2341420	Etridiazole	5.77	Spike	P	0 - 30
2341420	Fenamiphos	20.4	Spike	P	0 - 58
2341420	Fenbuconazole	29.0	Spike	P	0 - 37
2341420	Fipronil	29.4	Spike	P	0 - 33
2341420	Fipronil Desulfinyl	15.6	Spike	P	0 - 26
2341420	Fipronil Sulfide	33.9	Spike	P	0 - 37
2341420	Fipronil Sulfone	24.0	Spike	P	0 - 50
2341420	Fluazifop-P-butyl	2.95	Spike	P	0 - 24
2341420	Fludioxonil	21.8	Spike	P	0 - 26
2341420	Flumioxazin	3.66	Spike	P	0 - 37
2341420	Flutolanil	12.7	Spike	P	0 - 26
2341420	Fluxapyroxad	2.10	Spike	P	0 - 34
2341420	Fonofos	4.44	Spike	P	0 - 27
2341420	Hexazinone	1.54	Spike	P	0 - 36
2341420	Imazalil	8.19	Spike	P	0 - 65
2341420	Iprodione	29.9	Spike	P	0 - 33
2341420	Loratadine	12.7	Spike	P	0 - 30
2341420	Malathion	29.2	Spike	P	0 - 44
2341420	Metalaxyl	8.27	Spike	P	0 - 38
2341420	Metolachlor	13.5	Spike	P	0 - 36
2341420	Metribuzin	0.464	Spike	P	0 - 63

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P416814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341420	Mevinphos	13.7	Spike	P	0 - 26
2341420	Molinate	3.28	Spike	P	0 - 40
2341420	Myclobutanil	15.5	Spike	P	0 - 21
2341420	Naled	13.0	Spike	P	0 - 26
2341420	Napropamide	14.4	Spike	P	0 - 30
2341420	Norflurazon	21.3	Spike	P	0 - 24
2341420	Octinoxate	5.48	Spike	P	0 - 30
2341420	Oxadiazon	20.0	Spike	P	0 - 27
2341420	Oxybenzone	3.83	Spike	P	0 - 30
2341420	Oxyfluorfen	3.60	Spike	P	0 - 24
2341420	Parathion Ethyl	4.87	Spike	P	0 - 28
2341420	Parathion Methyl	13.3	Spike	P	0 - 27
2341420	PBDE-47	4.89	Spike	P	0 - 30
2341420	PBDE-99	5.05	Spike	P	0 - 30
2341420	Pendimethalin	1.32	Spike	P	0 - 31
2341420	Phenytoin	11.4	Spike	P	0 - 30
2341420	Phorate	18.6	Spike	P	0 - 27
2341420	Prodiamine	8.55	Spike	P	0 - 52
2341420	Prometon	22.1	Spike	P	0 - 31
2341420	Prometryn	10.1	Spike	P	0 - 28
2341420	Pronamide	5.13	Spike	P	0 - 26
2341420	Propanil	2.53	Spike	P	0 - 30
2341420	Propargite	8.97	Spike	P	0 - 30
2341420	Propiconazole	25.3	Spike	P	0 - 31
2341420	Pyraflufen Ethyl	0.794	Spike	P	0 - 30
2341420	Pyridaben	12.6	Spike	P	0 - 30
2341420	Pyriproxyfen	12.8	Spike	P	0 - 50
2341420	Simazine	0.752	Spike	P	0 - 29
2341420	Stirophos	8.76	Spike	P	0 - 30
2341420	Sulfentrazone	25.9	Spike	P	0 - 33
2341420	Tebuconazole	36.0	Spike	P	0 - 44
2341420	Terbufos	3.52	Spike	P	0 - 29
2341420	Terbutylazine	0.176	Spike	P	0 - 27
2341420	Thiobencarb	7.14	Spike	P	0 - 30
2341420	Tri-o-cresyl Phosphate	6.93	Spike	P	0 - 30
2341420	Triadimefon	13.1	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P416713

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342112	Acesulfame K	4.01	Spike	P	0 - 30
2342112	AMPA	1.43	Spike	P	0 - 30
2342112	Endothall	7.17	Spike	P	0 - 30
2342112	Glufosinate	0.539	Spike	P	0 - 30
2342112	Glyphosate	7.69	Spike	P	0 - 30
2342112	Sucralose	2.96	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P416992

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342488	2,4-D	5.91	Spike	P	0 - 30
2342488	2,4,5-T	8.79	Spike	P	0 - 30
2342488	Acetaminophen	2.14	Spike	P	0 - 30
2342488	Acetamiprid	8.76	Spike	P	0 - 30
2342488	Afidopyropen	2.46	Spike	P	0 - 30
2342488	Bentazon	14.2	Spike	P	0 - 30
2342488	Benzovindiflupyr	21.3	Spike	P	0 - 30
2342488	Carbamazepine	3.87	Spike	P	0 - 30
2342488	Clothianidin	1.10	Spike	P	0 - 30
2342488	Dinotefuran	5.69	Spike	P	0 - 30
2342488	Diuron	2.17	Spike	P	0 - 30
2342488	Fenuron	2.48	Spike	P	0 - 30
2342488	Fluridone	6.89	Spike	P	0 - 30
2342488	Hydrocodone	4.15	Spike	P	0 - 30
2342488	Ibuprofen	0.292	Spike	P	0 - 30
2342488	Imazapyr	7.95	Spike	P	0 - 30
2342488	Imidacloprid	1.70	Spike	P	0 - 30
2342488	Linuron	12.8	Spike	P	0 - 30
2342488	Mandestrobin	6.73	Spike	P	0 - 30
2342488	MCP	0.342	Spike	P	0 - 30
2342488	Naproxen	9.37	Spike	P	0 - 30
2342488	Primidone	0.636	Spike	P	0 - 30
2342488	Pyraclostrobin	2.16	Spike	P	0 - 30
2342488	Silvex	10.9	Spike	P	0 - 30
2342488	Thiamethoxam	2.59	Spike	P	0 - 30
2342488	Tolfenpyrad	3.91	Spike	P	0 - 30
2342488	Triclopyr	6.00	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P417081

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342086	Total Alkalinity	1.82	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011

Batch ID: P417297

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342174	TDS	6.74	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011

Batch ID: P417087

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342086	Fluoride	0.476	Spike	P	0 - 1.6

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P417157

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2342121	Organic Carbon	0.491	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2342182
Field Sample ID: G2CE0154

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	99.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	105	P	30 - 160
EPA 8321B	Diuron-d6	82.1	P	30 - 160
EPA 8321B	Endothall-d6	122	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	84.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	65.3	P	30 - 160
EPA 8321B	Primidone-d5	116	P	30 - 160
EPA 8321B	Sucralose-d6	98.8	P	30 - 160

Lab Sample ID: 2342183
Field Sample ID: G2CE0210

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	83.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	95.0	P	30 - 160
EPA 8321B	Diuron-d6	79.1	P	30 - 160
EPA 8321B	Endothall-d6	117	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	83.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	51.1	P	30 - 160
EPA 8321B	Primidone-d5	102	P	30 - 160
EPA 8321B	Sucralose-d6	98.5	P	30 - 160

Lab Sample ID: 2342186
Field Sample ID: G2CE0154

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	82.2	P	20 - 200
EPA 8270E	Simazine-d10	120	P	71 - 140
EPA 8270E	Terbufos-d10	117	P	62 - 131
EPA 8270E	Terphenyl-d14	83.7	P	52 - 141

Lab Sample ID: 2342187
Field Sample ID: G2CE0210

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	89.5	P	20 - 200
EPA 8270E	Simazine-d10	120	P	71 - 140
EPA 8270E	Terbufos-d10	120	P	62 - 131
EPA 8270E	Terphenyl-d14	84.2	P	52 - 141

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A113584

Included Lab Sample IDs: 2342174, 2342175

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A113586

Included Lab Sample IDs: 2342178, 2342179

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A113588

Included Lab Sample IDs: 2342174, 2342175

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

Reference Method: EPA 8321B

Run ID: A113640

Included Lab Sample IDs: 2342182, 2342183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	82.7	81.8	P/P	60 - 160
Sucralose	98.1	98.0	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A113642

Included Lab Sample IDs: 2342182, 2342183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	109	108	P/P	60 - 160
Endothall	104	100	P/P	60 - 160
Glufosinate	100	97.1	P/P	60 - 160
Glyphosate	102	103	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A113656

Included Lab Sample IDs: 2342182, 2342183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	91.2	89.2	P/P	50 - 150
2,4,5-T	105	100	P/P	50 - 150
Acetaminophen	92.9	96.6	P/P	60 - 160
Acetamiprid	92.1	101	P/P	50 - 150
Afidopyropen	91.6	93.6	P/P	50 - 150
Bentazon	99.2	102	P/P	50 - 160
Benzovindiflupyr	98.7	107	P/P	50 - 150
Carbamazepine	99.2	97.5	P/P	60 - 150
Clothianidin	96.4	103	P/P	60 - 150
Dinotefuran	94.2	95.0	P/P	50 - 150
Diuron	85.7	97.2	P/P	60 - 160
Fenuron	94.2	95.7	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A113656

Included Lab Sample IDs: 2342182, 2342183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluridone	107	109	P/P	60 - 160
Fluridone	110	110	P/P	60 - 160
Hydrocodone	94.7	101	P/P	60 - 150
Ibuprofen	89.4	92.2	P/P	50 - 160
Imazapyr	78.3	82.3	P/P	50 - 150
Imazapyr	85.7	82.4	P/P	50 - 150
Imidacloprid	88.6	91.4	P/P	60 - 150
Linuron	100	109	P/P	60 - 150
Mandestrobin	101	100	P/P	50 - 150
MCPP	97.5	93.5	P/P	50 - 150
Naproxen	76.4	86.0	P/P	50 - 160
Primidone	96.0	95.4	P/P	60 - 150
Pyraclostrobin	96.4	95.3	P/P	60 - 150
Silvex	82.3	87.3	P/P	50 - 150
Thiamethoxam	98.0	99.0	P/P	50 - 150
Tolfenpyrad	97.3	91.2	P/P	60 - 150
Triclopyr	92.3	94.2	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A113662

Included Lab Sample IDs: 2342176, 2342177

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

Reference Method: SM 2320 B-2011

Run ID: A113683

Included Lab Sample IDs: 2342174, 2342175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	99.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A113683

Included Lab Sample IDs: 2342174, 2342175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A113693

Included Lab Sample IDs: 2342176, 2342177

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

Reference Method: SM 5310 B-2011

Run ID: A113703

Included Lab Sample IDs: 2342176, 2342177

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

Reference Method: SM 5310 B-2011

Run ID: A113703

Included Lab Sample IDs: 2342176, 2342177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.8	97.7	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A113717

Included Lab Sample IDs: 2342184, 2342185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	102	P/P	90 - 110
Iron	102	100	P/P	90 - 110
Magnesium	102	101	P/P	90 - 110
Potassium	102	102	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Strontium	106	108	P/P	90 - 110
Tin	104	105	P/P	90 - 110
Titanium	106	107	P/P	90 - 110
Vanadium	105	107	P/P	90 - 110
Zinc	103	106	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A113719

Included Lab Sample IDs: 2342184, 2342185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.0	98.7	P/P	90 - 110
Antimony	100	102	P/P	90 - 110
Arsenic	99.6	98.9	P/P	90 - 110
Barium	99.2	99.6	P/P	90 - 110
Beryllium	96.4	96.5	P/P	90 - 110
Boron	94.7	97.1	P/P	90 - 110
Cadmium	100	102	P/P	90 - 110
Chromium	98.9	99.6	P/P	90 - 110
Cobalt	97.1	96.6	P/P	90 - 110
Copper	98.2	98.1	P/P	90 - 110
Lead	92.5	93.1	P/P	90 - 110
Manganese	99.9	102	P/P	90 - 110
Molybdenum	96.7	96.8	P/P	90 - 110
Nickel	97.6	97.1	P/P	90 - 110
Selenium	99.6	99.7	P/P	90 - 110
Silver	97.6	98.2	P/P	90 - 110
Thallium	96.3	96.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A113720

Included Lab Sample IDs: 2342177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.7	99.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A113721

Included Lab Sample IDs: 2342174, 2342175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.9	100	P/P	90 - 110
Sulfate	98.4	99.3	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A113723

Included Lab Sample IDs: 2342186, 2342187

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	101		P	80 - 120
Avobenzene	98.6		P	80 - 120
Octinoxate	97.1		P	80 - 120
Oxybenzone	103		P	80 - 120
PBDE-47	97.8		P	80 - 120
PBDE-99	97.8		P	80 - 120
Tri-o-cresyl Phosphate	99.0		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A113731

Included Lab Sample IDs: 2342176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.6	96.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A113739

Included Lab Sample IDs: 2342176, 2342177

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

Reference Method: EPA 8270E

Run ID: A113779

Included Lab Sample IDs: 2342186, 2342187

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	106		P	80 - 120
Alachlor	97.6		P	80 - 120
Ametryn	110		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	89.0		P	80 - 120
Azinphos Methyl	94.7		P	80 - 120
Azoxystrobin	95.5		P	80 - 120
Bromacil	109		P	80 - 120
Caffeine	94.6		P	80 - 120
Carbophenothion	99.0		P	80 - 120
Carfentrazone Ethyl	103		P	80 - 120
Chlorfenapyr	114		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	111		P	80 - 120
Coumaphos	110		P	80 - 120
Cyanazine	95.9		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E

Run ID: A113779

Included Lab Sample IDs: 2342186, 2342187

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cyprodinil	104		P	80 - 120
Demeton	94.7		P	80 - 120
Diazinon	102		P	80 - 120
Difenoconazole	114		P	80 - 120
Dimethenamid	107		P	80 - 120
Dimethomorph	107		P	80 - 120
Disulfoton	98.6		P	80 - 120
Dithiopyr	110		P	80 - 120
EPTC	101		P	80 - 120
Ethion	108		P	80 - 120
Ethoprop	102		P	80 - 120
Etridiazole	96.7		P	80 - 120
Fenamiphos	108		P	80 - 120
Fenbuconazole	103		P	80 - 120
Fipronil	100		P	80 - 120
Fipronil Desulfinyl	114		P	80 - 120
Fipronil Sulfide	108		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	115		P	80 - 120
Fludioxonil	105		P	80 - 120
Flumioxazin	99.2		P	80 - 120
Flutolanil	107		P	80 - 120
Fluxapyroxad	96.4		P	80 - 120
Fonofos	92.0		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	106		P	80 - 120
Iprodione	110		P	80 - 120
Loratadine	93.1		P	80 - 120
Malathion	104		P	80 - 120
Metaxyl	105		P	80 - 120
Metolachlor	107		P	80 - 120
Metribuzin	104		P	80 - 120
Mevinphos	110		P	80 - 120
Molinate	107		P	80 - 120
Myclobutanil	96.3		P	80 - 120
Naled	114		P	80 - 120
Napropamide	116		P	80 - 120
Norflurazon	98.8		P	80 - 120
Oxadiazon	99.0		P	80 - 120
Oxyfluorfen	96.9		P	80 - 120
Parathion Ethyl	89.3		P	80 - 120
Parathion Methyl	109		P	80 - 120
Pendimethalin	97.7		P	80 - 120
Phenytoin	102		P	80 - 120
Phorate	98.5		P	80 - 120
Prodiamine	94.7		P	80 - 120
Prometon	118		P	80 - 120
Prometryn	114		P	80 - 120
Pronamide	98.3		P	80 - 120
Propanil	118		P	80 - 120
Propargite	96.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A113779

Included Lab Sample IDs: 2342186, 2342187

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Propiconazole	98.6		P	80 - 120
Pyraflufen Ethyl	119		P	80 - 120
Pyridaben	97.5		P	80 - 120
Pyriproxyfen	91.7		P	80 - 120
Simazine	94.6		P	80 - 120
Stirophos	119		P	80 - 120
Sulfentrazone	100		P	80 - 120
Tebuconazole	99.7		P	80 - 120
Terbufos	112		P	80 - 120
Terbuthylazine	113		P	80 - 120
Thiobencarb	104		P	80 - 120
Triadimefon	103		P	80 - 120

Reference Method: EPA 8270E

Run ID: A113781

Included Lab Sample IDs: 2342186, 2342187

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

* 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				2.50	
EPA 180.1 Rev. 2.0	Turbidity	97.0				2.29	
EPA 200.7 Rev. 4.4	Calcium	103	103	102			0.0565
	Iron	98.8	101	103	103		1.77
	Magnesium	98.6	99.8	103	104		1.87
	Potassium	98.5	99.4	102	105		1.49
	Sodium	101	98.5	105			0.336
	Strontium	102	103	105	106		1.65
	Tin	98.8	98.4	102	100		3.81
	Titanium	101	97.5	101	100		3.34
	Vanadium	100	102	105	107		3.51
	Zinc	99.2	99.8	104	101		3.73
EPA 200.8 Rev. 5.4	Aluminum	102	97.7	99.9	107		1.92
	Antimony	105	103	104	106		1.47
	Arsenic	103	100	102	101		1.97
	Barium	107	103	106	107		2.01
	Beryllium	101	93.9	94.9	95.2		1.03
	Boron	98.9	98.2	101	102		2.84
	Cadmium	99.4	97.4	100	104		2.96
	Chromium	102	102	98.6	104		3.40
	Cobalt	101	97.5	97.7	98.6		0.267
	Copper	102	98.1	98.7	97.2		0.646
	Lead	96.8	95.1	96.3	96.7		1.27
	Manganese	103	104	110	113		1.96
	Molybdenum	98.6	98.1	98.7	102		0.545
	Nickel	103	97.6	96.9	100		0.681
	Selenium	104	98.7	99.2	99.9		0.501
	Silver	99.1	95.9	98.0	98.0		2.16
	Thallium	100	100	102	102		1.88
EPA 300.0 Rev. 2.1	Chloride	98.0	95.5	93.7		0.136	
	Sulfate	97.4	94.1	93.6		0.173	
EPA 350.1 Rev. 2.0	Ammonia-N	98.0	99.2	97.0			1.23
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	110					1.28
	Kjeldahl Nitrogen	101	94.1	94.7			0.313
EPA 353.2 Rev. 2.0	NO2NO3-N	100	99.2				0.962
EPA 365.1 Rev. 2.0	Total-P	99.8	103	101			1.84
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.5	99.8	99.2			0.603
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	104	94.0	95.7			1.76
	Acetochlor	101	104	106			2.13
	Alachlor	84.1	94.7	114			18.9
	Ametryn	67.1	176	128			31.4
	Atrazine	97.6	96.7	101			2.64
	Atrazine Desethyl	65.1	33.0	19.8			22.8
	Avobenzone	101	89.5	91.5			2.14
	Azinphos Methyl	102	99.9	121			18.8
	Azoxystrobin	110	133	140			5.25
	Bromacil	84.6	80.9	113			22.4
	Butylate	57.6	61.1	62.7			2.53
	Caffeine	64.9	78.5	71.3			8.70
	Carbophenothion	88.3	83.7	83.7			0.0385
	Carfentrazone Ethyl	83.1	110	101			8.55
	Chlorfenapyr	81.2	73.1	69.1			5.55

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Chlorpyrifos Ethyl	86.0	83.2	99.9		18.3
	Chlorpyrifos Methyl	98.9	106	107		0.687
	Coumaphos	94.9	80.5	83.1		3.26
	Cyanazine	110	105	126		17.8
	Cyprodinil	78.0	75.7	101		28.9
	Demeton	81.6	84.8	102		18.8
	Diazinon	91.5	108	102		5.10
	Difenoconazole	129	116	118		1.78
	Dimethenamid	89.4	89.4	92.5		3.40
	Dimethomorph	112	131	144		9.22
	Disulfoton	87.8	92.6	96.1		3.74
	Dithiopyr	83.2	64.5	77.9		16.8
	EPTC	42.3	33.6	36.3		7.47
	Ethion	84.0	77.2	114		38.7
	Ethoprop	92.9	108	114		5.41
	Etridiazole	53.4	61.4	65.0		5.77
	Fenamiphos	84.6	95.7	78.0		20.4
	Fenbuconazole	91.0	82.1	110		29.0
	Fipronil	88.2	79.3	121		29.4
	Fipronil Desulfinyl	87.3	101	119		15.6
	Fipronil Sulfide	85.3				33.9
	Fipronil Sulfone	83.2				24.0
	Fluazifop-P-butyl	96.7	106	103		2.95
	Fludioxonil	100	82.2	102		21.8
	Flumioxazin	136	126	121		3.66
	Flutolanil	88.5	72.0	81.7		12.7
	Fluxapyroxad	87.6	95.3	93.4		2.10
	Fonofos	94.3	103	107		4.44
	Hexazinone	97.9	121	119		1.54
	Imazalil	92.0	95.0	87.5		8.19
	Iprodione	100	74.4	100		29.9
	Loratadine	95.9	113	128		12.7
	Malathion	87.4	81.1	109		29.2
	Metalaxyl	79.1	111	121		8.27
	Metolachlor	82.3	85.6	98.0		13.5
	Metribuzin	83.7	73.9	74.3		0.464
	Mevinphos	89.3	101	115		13.7
	Molinate	77.3	85.9	83.1		3.28
	Myclobutanil	83.8	86.3	101		15.5
	Naled	85.0	68.7	78.3		13.0
	Napropamide	80.5	74.5	86.1		14.4
	Norflurazon	82.3	72.6	89.9		21.3
	Octinoxate	99.0	80.8	86.5		5.48
	Oxadiazon	77.2	63.7	77.8		20.0
	Oxybenzone	80.4	83.2	80.1		3.83
	Oxyfluorfen	116	121	126		3.60
	Parathion Ethyl	88.7	96.0	91.5		4.87
	Parathion Methyl	119	137	120		13.3
	PBDE-47	90.0	87.1	83.0		4.89
	PBDE-99	91.4	85.0	80.8		5.05
	Pendimethalin	98.4	120	122		1.32
	Phenytol	25.8	24.3	27.2		11.4
	Phorate	93.2	104	126		18.6
	Prodiamine	37.6	61.0	66.5		8.55

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Prometon	81.3	80.8	101		22.1
	Prometryn	86.9	67.9	75.1		10.1
	Pronamide	93.0	96.4	91.6		5.13
	Propanil	115	116	113		2.53
	Propargite	57.4	61.0	66.7		8.97
	Propiconazole	77.8	50.9	80.0		25.3
	Pyraflufen Ethyl	83.4	87.5	86.8		0.794
	Pyridaben	80.3	80.6	91.5		12.6
	Pyriproxyfen	82.0	69.0	78.4		12.8
	Simazine	87.8	89.1	88.4		0.752
	Stirophos	69.1	27.3	29.8		8.76
	Sulfentrazone	113				25.9
	Tebuconazole	53.6	23.0	50.8		36.0
	Terbufos	103	121	125		3.52
	Terbuthylazine	88.0	107	108		0.176
	Thiobencarb	72.0	69.1	74.2		7.14
	Tri-o-cresyl Phosphate	96.8	91.2	85.0		6.93
	Triadimefon	79.6	76.7	87.5		13.1
EPA 8321B	2,4-D	72.9	78.5	74.0		5.91
	2,4,5-T	64.6	58.5	63.9		8.79
	Acesulfame K	80.2	67.2	64.6		4.01
	Acetaminophen	85.8	81.5	83.3		2.14
	Acetamiprid	63.4	76.2	69.8		8.76
	Afidopyropen	66.2	61.9	63.4		2.46
	AMPA	112	87.5	88.8		1.43
	Bentazon	104	94.7	109		14.2
	Benzovindiflupyr	93.8	75.0	92.8		21.3
	Carbamazepine	92.5	84.4	87.8		3.87
	Clothianidin	101	95.5	94.4		1.10
	Dinotefuran	90.9	83.0	87.9		5.69
	Diuron	80.7	72.6	74.2		2.17
	Endothall	102	158	148		7.17
	Fenuron	93.0	87.0	89.2		2.48
	Fluridone	100	88.2	94.5		6.89
	Glufosinate	128	84.7	85.2		0.539
	Glyphosate	103	88.0	81.5		7.69
	Hydrocodone	90.6	81.8	85.3		4.15
	Ibuprofen	89.2	68.7	68.9		0.292
	Imazapyr	89.8	75.6	81.9		7.95
	Imidacloprid	92.2	89.0	90.5		1.70
	Linuron	87.9	83.9	73.8		12.8
	Mandestrobin	90.7	79.8	85.4		6.73
	MCPP	87.6	79.1	78.8		0.342
	Naproxen	66.2	74.4	67.7		9.37
	Primidone	79.7	84.8	85.3		0.636
	Pyraclostrobin	77.1	74.4	76.0		2.16
	Silvex	55.3	59.0	65.8		10.9
	Sucralose	102	98.9	96.0		2.96
	Thiamethoxam	90.4	84.9	87.1		2.59
	Tolfenpyrad	44.8	47.5	49.4		3.91
	Triclopyr	66.5	64.1	68.1		6.00
SM 2320 B-2011	Total Alkalinity	101			1.82	
SM 2540 C-2011	TDS				6.74	
SM 4500-F- C-2011	Fluoride	101	101	100		0.476

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	Precision	MS
				LCS	SMP
SM 5310 B-2011	Organic Carbon	99.8	98.2 97.6		0.491

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2342174, 2342175
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2342174, 2342175
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2342184, 2342185
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2342184, 2342185
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2342174, 2342175
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2342174, 2342175
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2342176, 2342177
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2342176, 2342177
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2342176, 2342177
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2342176, 2342177
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2342178, 2342179
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2342186, 2342187
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2342186, 2342187
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2342182, 2342183
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2342174, 2342175
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2342184, 2342185
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2342174, 2342175
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2342174, 2342175
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2342174, 2342175
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2342176, 2342177

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	07/19/2022			07/19/2022 14:33	Samantha L Bates	2342174
	07/19/2022			07/19/2022 14:34	Samantha L Bates	2342175
EPA 180.1 Rev. 2.0	07/19/2022			07/19/2022 13:34	Anna M. Plaviak	2342174
	07/19/2022			07/19/2022 13:36	Anna M. Plaviak	2342175
EPA 200.7 Rev. 4.4	07/19/2022	07/20/2022 09:34	Megan Whitefoot	07/27/2022 02:29	McKinley C Carter	2342184
	07/19/2022	07/20/2022 09:34	Megan Whitefoot	07/27/2022 02:36	McKinley C Carter	2342185
EPA 200.8 Rev. 5.4	07/19/2022	07/20/2022 09:34	Megan Whitefoot	07/26/2022 16:05	Emily M Philpot	2342184
	07/19/2022	07/20/2022 09:34	Megan Whitefoot	07/26/2022 16:14	Emily M Philpot	2342185
EPA 300.0 Rev. 2.1	07/19/2022			07/26/2022 15:17	Anna M. Plaviak	2342174
	07/19/2022			07/26/2022 15:29	Anna M. Plaviak	2342175
EPA 350.1 Rev. 2.0	07/19/2022			07/27/2022 15:38	Judith K. Clark	2342176
	07/19/2022			07/27/2022 15:39	Judith K. Clark	2342177
EPA 351.2 Rev. 2.0	07/19/2022	07/25/2022 15:00	Simonne.V. Calhoun	07/26/2022 15:35	Samantha L Bates	2342177
	07/19/2022	07/26/2022 11:30	Simonne.V. Calhoun	07/27/2022 12:10	Samantha L Bates	2342176
EPA 353.2 Rev. 2.0	07/19/2022			07/22/2022 10:50	Beverly Y. Sanders	2342176
	07/19/2022			07/22/2022 10:51	Beverly Y. Sanders	2342177
EPA 365.1 Rev. 2.0	07/19/2022	07/22/2022 16:03	Adam P Silver	07/25/2022 15:24	James L Waggeberby	2342176, 2342177
EPA 365.1 Rev. 2.0 dissolved	07/19/2022			07/19/2022 14:54	Chandler E Cox	2342178
	07/19/2022			07/19/2022 14:58	Chandler E Cox	2342179
EPA 8270E	07/19/2022	07/20/2022 08:15	Rasheda Ghaffari	07/24/2022 22:06	Michael Poppell	2342186
	07/19/2022	07/20/2022 08:15	Rasheda Ghaffari	07/24/2022 22:31	Michael Poppell	2342187
	07/19/2022	07/20/2022 08:15	Rasheda Ghaffari	07/26/2022 16:36	Lipi Saha	2342186
	07/19/2022	07/20/2022 08:15	Rasheda Ghaffari	07/26/2022 16:56	Lipi Saha	2342187
	07/19/2022	07/20/2022 08:15	Rasheda Ghaffari	07/28/2022 20:32	Michael Poppell	2342186
	07/19/2022	07/20/2022 08:15	Rasheda Ghaffari	07/28/2022 20:58	Michael Poppell	2342187
EPA 8321B	07/19/2022	07/20/2022 14:30	Umesh Chiluwal	07/20/2022 17:13	Umesh Chiluwal	2342182
	07/19/2022	07/20/2022 14:30	Umesh Chiluwal	07/20/2022 17:28	Umesh Chiluwal	2342183
	07/19/2022	07/20/2022 14:30	Umesh Chiluwal	07/21/2022 02:15	Umesh Chiluwal	2342182
	07/19/2022	07/20/2022 14:30	Umesh Chiluwal	07/21/2022 02:28	Umesh Chiluwal	2342183
	07/19/2022	07/22/2022 09:30	June Rhew	07/23/2022 04:51	Juyoung Kim	2342182
	07/19/2022	07/22/2022 09:30	June Rhew	07/23/2022 05:12	Juyoung Kim	2342183
	07/19/2022	07/22/2022 09:30	June Rhew	07/25/2022 09:12	Juyoung Kim	2342182
SM 2320 B-2011	07/19/2022			07/23/2022 10:12	Dale L. Simmons	2342174
	07/19/2022			07/23/2022 10:26	Dale L. Simmons	2342175
SM 2340 B-2011	07/19/2022			07/27/2022 02:29	McKinley C Carter	2342184
	07/19/2022			07/27/2022 02:36	McKinley C Carter	2342185
SM 2540 C-2011	07/19/2022			07/22/2022 15:32	Yijie Li	2342174, 2342175
SM 2540 D-2011	07/19/2022			07/22/2022 15:32	Yijie Li	2342174, 2342175
SM 4500-F- C-2011	07/19/2022			07/23/2022 10:12	Dale L. Simmons	2342174
	07/19/2022			07/23/2022 10:26	Dale L. Simmons	2342175

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2011	07/19/2022			07/23/2022 00:22	Touraj Touran	2342176
	07/19/2022			07/23/2022 00:35	Touraj Touran	2342177