

Chemical Analysis Report

CEN-DIST-2023-05-19-01

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Park Lake and Lake Lily LVIs**
Request ID: **RQ-2023-05-22-11**
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: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 06-JUN-2023 08:44

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

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: Park Lake at Center

Collection Date/Time: 05/18/2023 10:26

Field ID: G2CE0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2411324	DEP SOP: NU-094-1	Color (true)	14	A	PCU	P430130	
	EPA 180.1 Rev. 2.0	Turbidity	6.4		NTU	P430134	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P430450	
		Sulfate	8.7		mg SO4/L	P430453	
	SM 2320 B-2011	Total Alkalinity	47		mg CaCO3/L	P430538	
	SM 2540 C-2015	TDS	85		mg/L	P430781	
	SM 2540 D-2015	TSS	7	I	mg/L	P430685	
2411325	SM 4500-F- C-2011	Fluoride	0.075	I	mg F/L	P430547	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P430656	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P430322	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P430678	
	EPA 365.1 Rev. 2.0	Total-P	0.052		mg P/L	P430215	
2411326	SM 5310 B-2011	Organic Carbon	4.9		mg C/L	P430288	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P430133	
2411328	EPA 8321B	2,4-D	0.026		ug/L	P430178	
		Acesulfame K	0.10	U	ug/L	P430081	
		2,4,5-T	0.0040	U	ug/L	P430178	
		AMPA	0.10	U	ug/L	P430081	
		Acetaminophen	0.0080	U	ug/L	P430178	
		Acetamiprid	0.0020	U	ug/L	P430178	
		Endothall	0.25	U	ug/L	P430081	
		Glufosinate	0.10	U	ug/L	P430081	
		Glyphosate	0.10	U	ug/L	P430081	
		Afidopyrophen	0.0020	U	ug/L	P430178	
		Bentazon	8.0E-04	U	ug/L	P430178	
		Sucralose	0.30		ug/L	P430081	
		Benzovindiflupyr	0.0020	U	ug/L	P430178	
		Carbamazepine	8.0E-04	U	ug/L	P430178	
		Clothianidin	0.0020	U	ug/L	P430178	
		Dinotefuran	0.0051	I	ug/L	P430178	
		Diuron	0.0038	I	ug/L	P430178	
		Fenuron	0.032	U	ug/L	P430178	
		Fluridone	0.0016	I	ug/L	P430178	
		Imazapyr	0.0040	U	ug/L	P430178	
		Hydrocodone	0.0020	U	ug/L	P430178	
		Ibuprofen	0.080	U	ug/L	P430178	
		Imidacloprid	0.0042	I	ug/L	P430178	MS
		Linuron	0.0040	U	ug/L	P430178	
		Mandestrobin	0.0020	U	ug/L	P430178	
		MCP	0.0020	U	ug/L	P430178	
		Naproxen	0.0080	U	ug/L	P430178	
		Primidone	0.0040	U	ug/L	P430178	
		Pyraclostrobin	0.0020	U	ug/L	P430178	

Field ID: G2CE0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2411328	EPA 8321B	Silvex	0.0040	U	ug/L	P430178	
		Thiamethoxam	0.0020	U	ug/L	P430178	
		Tolfenpyrad	0.0020	U	ug/L	P430178	
		Triclopyr	0.0040	U	ug/L	P430178	
2411329	EPA 200.7 Rev. 4.4	Calcium	18.1		mg/L	P430189	
		Iron	30	U	ug/L	P430189	
		Magnesium	3.13		mg/L	P430189	
		Potassium	1.5		mg/L	P430189	
		Sodium	8.6		mg/L	P430189	
		Strontium	36.4		ug/L	P430189	
		Tin	3.0	U	ug/L	P430189	
		Titanium	0.75	U	ug/L	P430189	
		Vanadium	2.0	U	ug/L	P430189	
	EPA 200.8 Rev. 5.4	Aluminum	33		ug/L	P430189	
		Antimony	0.59		ug/L	P430189	
		Arsenic	0.65		ug/L	P430189	
		Barium	11.2		ug/L	P430189	
		Beryllium	0.010	U	ug/L	P430189	
		Boron	24.7		ug/L	P430189	
		Cadmium	0.020	U	ug/L	P430189	
		Chromium	0.40	U	ug/L	P430189	
		Cobalt	0.020	U	ug/L	P430189	
		Copper	1.09		ug/L	P430189	
		Lead	0.95		ug/L	P430189	
		Manganese	8.24		ug/L	P430189	
		Molybdenum	0.77		ug/L	P430189	
		Nickel	0.50	U	ug/L	P430189	
		Selenium	0.20	U	ug/L	P430189	
		Silver	0.010	U	ug/L	P430189	
		Thallium	0.10	U	ug/L	P430189	
		Zinc	7.0	U	ug/L	P430189	
	SM 2340 B-2011	Hardness	58.1		mg/L	P430189	
2411330	EPA 8270E	Oxybenzone**	11	U	ng/L	P430033	
		Acetochlor	0.21	U	ng/L	P430033	
		Octinoxate**	21	U	ng/L	P430033	
		Alachlor	0.42	U	ng/L	P430033	
		Avobenzone**	110	U	ng/L	P430033	MS
		Ametryn	1.2	U	ng/L	P430033	
		Atrazine	20		ng/L	P430033	
		PBDE-47**	4.2	U	ng/L	P430033	
		Atrazine Desethyl	1.4	U	ng/L	P430033	
		PBDE-99**	5.3	U	ng/L	P430033	
		Azinphos Methyl	3.2	U	ng/L	P430033	
		Tri-o-cresyl Phosphate**	6.3	U	ng/L	P430033	
		Azoxystrobin	0.42	U	ng/L	P430033	

Field ID: G2CE0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2411330	EPA 8270E	Bromacil	0.63	U	ng/L	P430033	
		2-Ethylhexyl	13	UJ	ng/L	P430033	LCS
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.21	U	ng/L	P430033	
		Dechlorane Plus**	32	U	ng/L	P430033	
		Caffeine**	55		ng/L	P430033	
		Dechlorane 602**	5.3	U	ng/L	P430033	RPD
		Carbophenothion	0.53	U	ng/L	P430033	
		Dechlorane 603**	4.2	U	ng/L	P430033	
		Carfentrazone Ethyl	0.16	U	ng/L	P430033	
		Hexabromobenzene**	6.3	U	ng/L	P430033	
		Chlorfenapyr	0.32	U	ng/L	P430033	
		PBB-153**	8.4	U	ng/L	P430033	MS, RPD
		Chlorpyrifos Ethyl	0.32	U	ng/L	P430033	
		Pentabromotoluene**	3.2	U	ng/L	P430033	
		Chlorpyrifos Methyl	0.11	U	ng/L	P430033	
		Tris(2-chloroethyl) phosphate (TCEP)**	74	U	ng/L	P430033	
		Coumaphos	1.1	U	ng/L	P430033	RPD
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	110		ng/L	P430033	
		Cyanazine	5.3	U	ng/L	P430033	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	15		ng/L	P430033	
		Cyprodinil	0.21	U	ng/L	P430033	
		Tetradecachloro-m-terphenyl**	7.9	U	ng/L	P430033	MS
		Demeton	3.7	U	ng/L	P430033	
		Diazinon	0.13	U	ng/L	P430033	
		Difenoconazole	0.63	U	ng/L	P430033	MS, RPD
		Dimethenamid	0.11	U	ng/L	P430033	
		Dimethomorph	0.32	U	ng/L	P430033	
		Disulfoton	0.63	U	ng/L	P430033	
		Dithiopyr	1.1	U	ng/L	P430033	
		EPTC	0.53	U	ng/L	P430033	
		Ethion	0.32	U	ng/L	P430033	
		Ethoprop	0.13	U	ng/L	P430033	
		Etridiazole	0.11	U	ng/L	P430033	
		Fenamiphos	0.47	U	ng/L	P430033	
		Fenbuconazole	0.53	U	ng/L	P430033	MS
		Fipronil	0.31	I	ng/L	P430033	
		Fipronil Desulfinyl**	5.3		ng/L	P430033	
		Fipronil Sulfide	1.1		ng/L	P430033	
		Fipronil Sulfone	1.8		ng/L	P430033	
		Fluazifop-P-butyl	0.11	U	ng/L	P430033	
		Fludioxonil	0.11	U	ng/L	P430033	
		Flumioxazin	3.2	U	ng/L	P430033	RPD
		Flutolanil	0.11	U	ng/L	P430033	
		Fluxapyroxad	0.26	U	ng/L	P430033	

Field ID: G2CE0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2411330	EPA 8270E	Fonofos	0.16	U	ng/L	P430033	
		Hexazinone	0.53	U	ng/L	P430033	
		Imazalil	0.68	U	ng/L	P430033	
		Iprodione	0.53	U	ng/L	P430033	RPD
		Loratadine**	0.32	U	ng/L	P430033	
		Malathion	0.37	U	ng/L	P430033	
		Metalaxyl	0.53	U	ng/L	P430033	
		Metolachlor	0.79	U	ng/L	P430033	
		Metribuzin	0.42	U	ng/L	P430033	
		Mevinphos	1.1	U	ng/L	P430033	
		Molinate	0.26	U	ng/L	P430033	
		Myclobutanil	1.2	I	ng/L	P430033	
		Naled	2.6	U	ng/L	P430033	
		Napropamide	0.74	U	ng/L	P430033	
		Norflurazon	1.1	U	ng/L	P430033	
		Oxadiazon	0.37	U	ng/L	P430033	
		Oxyfluorfen	0.21	U	ng/L	P430033	
		Parathion Ethyl	0.16	U	ng/L	P430033	
		Parathion Methyl	0.21	U	ng/L	P430033	
		Pendimethalin	0.79	U	ng/L	P430033	
		Phenytion**	5.6	U	ng/L	P430033	
		Phorate	0.26	U	ng/L	P430033	
		Prodiamine	0.21	U	ng/L	P430033	
		Prometon	3.2	U	ng/L	P430033	
		Prometryn	0.37	U	ng/L	P430033	
		Pronamide	0.11	U	ng/L	P430033	
		Propanil	0.11	U	ng/L	P430033	
		Propargite	0.84	U	ng/L	P430033	
		Propiconazole	0.63	U	ng/L	P430033	
		Pyraflufen Ethyl	0.32	U	ng/L	P430033	
		Pyridaben	1.5	U	ng/L	P430033	RPD
		Pyriproxyfen	0.26	U	ng/L	P430033	
		Simazine	0.26	U	ng/L	P430033	
		Stirophos	0.42	U	ng/L	P430033	
		Sulfentrazone	1.5	U	ng/L	P430033	
		Tebuconazole	1.5	U	ng/L	P430033	
		Terbufos	0.21	U	ng/L	P430033	
		Terbuthylazine	0.21	U	ng/L	P430033	
		Thiobencarb	0.53	U	ng/L	P430033	RPD
		Triadimefon	0.16	U	ng/L	P430033	

Field ID: G2CE0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy and/or precision for several analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P430130

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P430134

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P430189

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P430189

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
Zinc	7.0	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430450

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: P430453

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430656

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430322

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430678

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430215

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P430133

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

Reference Method: EPA 8270E
Batch ID: P430033

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	0.20	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azinphos Methyl	3.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430033

Component	Result	Code	Units
Azoxystrobin	0.40	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Demeton	3.5	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	0.30	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Etridiazole	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430033

Component	Result	Code	Units
Fenamiphos	0.45	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Napropamide	0.70	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430033

Component	Result	Code	Units
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	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	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430033

Component	Result	Code	Units
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Reference Method: EPA 8321B

Batch ID: P430081

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: P430178

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P430178

Component	Result	Code	Units
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	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P430538

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-2015

Batch ID: P430781

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P430685

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P430547

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P430288

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: P430130

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.4		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P430134

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.6		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P430189

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	85 - 115
Iron	105		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	101		P	85 - 115
Sodium	97.2		P	85 - 115
Strontium	100		P	85 - 115
Tin	100		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P430189

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	96.1		P	80 - 120
Antimony	100		P	80 - 120
Arsenic	96.8		P	80 - 120
Barium	100		P	80 - 120
Beryllium	91.0		P	80 - 120
Boron	98.1		P	80 - 120
Cadmium	98.6		P	80 - 120
Chromium	93.6		P	85 - 115
Cobalt	95.1		P	80 - 120
Copper	96.2		P	80 - 120
Lead	98.6		P	80 - 120
Manganese	97.0		P	80 - 120
Molybdenum	96.3		P	80 - 120
Nickel	93.4		P	80 - 120
Selenium	98.5		P	80 - 120
Silver	100		P	80 - 120
Thallium	96.2		P	80 - 120
Zinc	95.2		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430450

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: P430453

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

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P430656

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P430322

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P430678

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	105		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P430215

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.7		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P430133

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

Reference Method: EPA 8270E
 Batch ID: P430033

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	34.7		F	42 - 162
Acetochlor	83.3		P	69 - 123
Alachlor	117		P	65 - 118
Ametryn	97.7		P	58 - 141
Atrazine	92.1		P	73 - 118
Atrazine Desethyl	93.9		P	32 - 125
Avobenzone	168		P	40 - 203
Azinphos Methyl	94.7		P	36 - 197
Azoxystrobin	104		P	58 - 226
Bromacil	92.9		P	48 - 120
Butylate	61.6		P	27 - 85.0
Caffeine	107		P	40 - 137
Carbophenothion	130		P	54 - 132
Carfentrazone Ethyl	101		P	60 - 142
Chlorfenapyr	85.0		P	53 - 117
Chlorpyrifos Ethyl	86.7		P	59 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P430033

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	94.1		P	66 - 119
Coumaphos	114		P	11 - 234
Cyanazine	202		P	61 - 248
Cyprodinil	95.6		P	50 - 147
Dechlorane 602	99.8		P	50 - 150
Dechlorane 603	124		P	50 - 150
Dechlorane Plus	129		P	47 - 182
Demeton	65.6		P	30 - 138
Diazinon	92.8		P	67 - 126
Difenoconazole	116		P	38 - 205
Dimethenamid	91.3		P	57 - 111
Dimethomorph	132		P	16 - 212
Disulfoton	83.7		P	46 - 126
Dithiopyr	89.4		P	62 - 115
EPTC	47.0		P	28 - 80.0
Ethion	82.1		P	24 - 122
Ethoprop	80.9		P	62 - 113
Etridiazole	87.2		P	28 - 92.0
Fenamiphos	84.1		P	57 - 128
Fenbuconazole	86.9		P	52 - 155
Fipronil	125		P	63 - 130
Fipronil Desulfinyl	127		P	61 - 130
Fipronil Sulfide	91.3		P	56 - 117
Fipronil Sulfone	88.2		P	52 - 118
Fluazifop-P-butyl	80.4		P	61 - 128
Fludioxonil	95.3		P	59 - 129
Flumioxazin	111		P	30 - 250
Flutolanil	96.3		P	53 - 127
Fluxapyroxad	124		P	42 - 132
Fonofos	88.3		P	61 - 110
Hexabromobenzene	116		P	50 - 150
Hexazinone	92.0		P	46 - 139
Imazalil	97.7		P	40 - 139
Iprodione	132		P	40 - 146
Loratadine	120		P	10 - 224
Malathion	129		P	61 - 135
Metaxyl	112		P	58 - 121
Metolachlor	106		P	64 - 118
Metribuzin	100		P	45 - 245
Mevinphos	88.0		P	49 - 118
Molinate	58.2		P	42 - 92.0
Myclobutanil	89.5		P	55 - 127
Naled	43.1		P	10 - 114
Napropamide	81.3		P	39 - 121
Norflurazon	77.8		P	55 - 129
Octinoxate	120		P	26 - 166
Oxadiazon	81.1		P	54 - 115
Oxybenzone	119		P	49 - 135
Oxyfluorfen	108		P	64 - 139
Parathion Ethyl	98.3		P	70 - 111
Parathion Methyl	92.7		P	76 - 136
PBB-153	89.0		P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P430033

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	104		P	41 - 148
PBDE-99	64.6		P	38 - 147
Pendimethalin	103		P	52 - 118
Pentabromotoluene	111		P	50 - 150
Phenytoin	58.2		P	10 - 162
Phorate	84.4		P	40 - 122
Prodiamine	72.1		P	26 - 141
Prometon	85.5		P	54 - 122
Prometryn	128		P	61 - 128
Pronamide	93.6		P	72 - 121
Propanil	139		P	45 - 144
Propargite	119		P	10 - 199
Propiconazole	86.4		P	56 - 127
Pyraflufen Ethyl	68.1		P	56 - 140
Pyridaben	119		P	26 - 211
Pyriproxyfen	130		P	33 - 194
Simazine	79.7		P	67 - 121
Stirophos	105		P	20 - 142
Sulfentrazone	108		P	21 - 144
Tebuconazole	101		P	10 - 122
Terbufos	87.2		P	60 - 129
Terbutylazine	105		P	69 - 113
Tetradecachloro-m-terphenyl	180		P	70 - 200
Thiobencarb	84.2		P	51 - 120
Tri-o-cresyl Phosphate	123		P	49 - 150
Triadimefon	79.3		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	125		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	110		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	123		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P430081

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	98.8		P	40 - 150
AMPA	121		P	40 - 150
Endothall	88.2		P	40 - 150
Glufosinate	93.7		P	40 - 150
Glyphosate	106		P	40 - 150
Sucralose	122		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P430178

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	95.5		P	40 - 150
2,4,5-T	80.0		P	40 - 150
Acetaminophen	86.0		P	30 - 150
Acetamiprid	73.5		P	40 - 150
Afidopyropen	77.3		P	30 - 150
Bentazon	98.3		P	30 - 150
Benzovindiflupyr	77.9		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P430178

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbamazepine	75.7		P	40 - 150
Clothianidin	90.2		P	40 - 150
Dinotefuran	88.8		P	40 - 150
Diuron	76.7		P	40 - 150
Fenuron	87.0		P	40 - 150
Fluridone	88.4		P	40 - 150
Hydrocodone	83.5		P	40 - 150
Ibuprofen	81.1		P	40 - 150
Imazapyr	89.0		P	40 - 150
Imidacloprid	84.5		P	40 - 150
Linuron	79.8		P	40 - 150
Mandestrobin	76.3		P	40 - 150
MCPP	93.6		P	40 - 150
Naproxen	60.5		P	40 - 150
Primidone	81.1		P	40 - 150
Pyraclostrobin	78.0		P	40 - 150
Silvex	88.6		P	40 - 150
Thiamethoxam	89.7		P	40 - 150
Tolfenpyrad	63.7		P	30 - 150
Triclopyr	84.5		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P430538

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.8		P	92 - 105

Reference Method: SM 2540 C-2015

Batch ID: P430781

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

Reference Method: SM 2540 D-2015

Batch ID: P430685

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.3		P	85 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P430547

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P430288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P430189

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411040	Calcium	101		P	80 - 120
2411040	Iron	104	104	P/P	80 - 120
2411040	Magnesium	102	101	P/P	80 - 120
2411040	Potassium	99.6	99.0	P/P	80 - 120
2411040	Sodium	96.7	97.6	P/P	80 - 120
2411040	Strontium	100	100	P/P	80 - 120
2411040	Tin	99.8	97.4	P/P	80 - 120
2411040	Titanium	102	101	P/P	80 - 120
2411040	Vanadium	101	100	P/P	80 - 120
2411166	Iron	100		P	75 - 125
2411166	Magnesium	100		P	75 - 125
2411166	Potassium	99.0		P	75 - 125
2411166	Sodium	96.9		P	75 - 125
2411166	Strontium	100		P	75 - 125
2411166	Tin	98.5		P	75 - 125
2411166	Titanium	102		P	75 - 125
2411166	Vanadium	102		P	75 - 125

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P430189

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411040	Aluminum	97.0	95.7	P/P	80 - 120
2411040	Antimony	101	101	P/P	80 - 120
2411040	Arsenic	96.1	96.7	P/P	80 - 120
2411040	Barium	101	100	P/P	80 - 120
2411040	Beryllium	92.5	92.9	P/P	80 - 120
2411040	Boron	99.6	100	P/P	80 - 120
2411040	Cadmium	98.7	99.8	P/P	80 - 120
2411040	Chromium	92.8	94.6	P/P	80 - 120
2411040	Cobalt	94.1	94.7	P/P	80 - 120
2411040	Copper	90.6	91.5	P/P	80 - 120
2411040	Lead	98.5	99.4	P/P	80 - 120
2411040	Manganese	99.1	98.8	P/P	80 - 120
2411040	Molybdenum	97.1	98.5	P/P	80 - 120
2411040	Nickel	92.1	92.3	P/P	80 - 120
2411040	Selenium	97.4	97.5	P/P	80 - 120
2411040	Silver	101	100	P/P	80 - 120
2411040	Thallium	96.6	99.5	P/P	80 - 120
2411040	Zinc	95.9	96.1	P/P	80 - 120
2411166	Aluminum	94.4		P	75 - 125
2411166	Antimony	102		P	75 - 125
2411166	Arsenic	98.6		P	75 - 125
2411166	Barium	100		P	75 - 125
2411166	Beryllium	95.1		P	75 - 125
2411166	Boron	101		P	75 - 125
2411166	Cadmium	101		P	75 - 125
2411166	Chromium	91.4		P	75 - 125
2411166	Cobalt	93.9		P	75 - 125
2411166	Copper	92.0		P	75 - 125
2411166	Lead	100		P	75 - 125
2411166	Manganese	97.3		P	75 - 125

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P430189

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411166	Molybdenum	101		P	75 - 125
2411166	Nickel	90.9		P	75 - 125
2411166	Selenium	97.7		P	75 - 125
2411166	Silver	98.6		P	75 - 125
2411166	Thallium	100		P	75 - 125
2411166	Zinc	94.4		P	75 - 125

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P430450

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411064	Chloride	96.9		P	90 - 110
2411143	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P430453

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411143	Sulfate	98.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P430656

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411298	Ammonia-N	96.4	96.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P430322

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411362	Kjeldahl Nitrogen	104	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P430678

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411262	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P430215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411588	Total-P	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P430133

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411277	O-Phosphate-P	92.3	92.4	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P430033

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410434	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.3	127	P/P	26 - 165
2410434	Acetochlor	72.7	79.9	P/P	67 - 124
2410434	Alachlor	89.0	94.0	P/P	60 - 120
2410434	Ametryn	121	93.8	P/P	54 - 216
2410434	Atrazine Desethyl	86.2	107	P/P	15 - 122
2410434	Avobenzone	135	184	P/F	37 - 178
2410434	Azinphos Methyl	65.9	85.7	P/P	40 - 292
2410434	Azoxystrobin	81.3	96.4	P/P	35 - 220
2410434	Bromacil	65.4	76.4	P/P	45 - 127
2410434	Butylate	62.0	59.5	P/P	20 - 83.0
2410434	Caffeine	106	131	P/P	10 - 194
2410434	Carbophenothion	100	118	P/P	57 - 127
2410434	Carfentrazone Ethyl	69.1	77.1	P/P	51 - 141
2410434	Chlorfenapyr	68.7	75.3	P/P	46 - 111
2410434	Chlorpyrifos Ethyl	108	85.3	P/P	52 - 120
2410434	Chlorpyrifos Methyl	79.0	81.6	P/P	63 - 119
2410434	Coumaphos	61.4	92.8	P/P	10 - 228
2410434	Cyanazine	164	237	P/P	59 - 241
2410434	Cyprodinil	84.3	87.8	P/P	47 - 146
2410434	Dechlorane 602	75.7	109	P/P	50 - 150
2410434	Dechlorane 603	102	135	P/P	50 - 150
2410434	Dechlorane Plus	106	93.5	P/P	50 - 150
2410434	Demeton	63.1	70.6	P/P	40 - 136
2410434	Diazinon	89.5	86.1	P/P	69 - 132
2410434	Difenoconazole	45.9	114	F/P	57 - 258
2410434	Dimethenamid	72.9	84.6	P/P	54 - 110
2410434	Dimethomorph	143	101	P/P	28 - 210
2410434	Disulfoton	75.7	84.7	P/P	43 - 133
2410434	Dithiopyr	76.0	80.0	P/P	39 - 116
2410434	EPTC	51.0	49.6	P/P	20 - 78.0
2410434	Ethion	95.9	111	P/P	17 - 119
2410434	Ethoprop	100	94.8	P/P	66 - 120
2410434	Etridiazole	77.1	85.9	P/P	28 - 96.0
2410434	Fenamiphos	68.7	61.9	P/P	41 - 126
2410434	Fenbuconazole	37.4	73.6	F/P	42 - 169
2410434	Fipronil	98.6	111	P/P	61 - 132
2410434	Fipronil Desulfinyl	94.9	105	P/P	56 - 132
2410434	Fipronil Sulfide	75.5	86.7	P/P	48 - 119
2410434	Fipronil Sulfone	68.2	78.9	P/P	42 - 131
2410434	Fluazifop-P-butyl	75.1	77.3	P/P	53 - 131
2410434	Fludioxonil	73.9	84.7	P/P	56 - 127
2410434	Flumioxazin	57.0	112	P/P	19 - 300
2410434	Flutolanil	91.8	101	P/P	41 - 127
2410434	Fluxapyroxad	92.7	118	P/P	42 - 172
2410434	Fonofos	91.8	81.9	P/P	59 - 113
2410434	Hexabromobenzene	124	133	P/P	50 - 150
2410434	Hexazinone	97.6	84.9	P/P	66 - 122
2410434	Imazalil	178	104	P/P	21 - 283
2410434	Iprodione	81.2	53.7	P/P	43 - 150
2410434	Loratadine	146	90.5	P/P	23 - 201
2410434	Malathion	75.7	96.0	P/P	58 - 136
2410434	Metalaxyl	101	114	P/P	55 - 120

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P430033

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410434	Metolachlor	91.2	97.0	P/P	57 - 121
2410434	Metribuzin	94.3	94.5	P/P	58 - 294
2410434	Mevinphos	81.2	73.6	P/P	50 - 126
2410434	Molinate	57.7	61.5	P/P	42 - 93.0
2410434	Myclobutanil	72.4	80.7	P/P	55 - 125
2410434	Naled	37.9	40.9	P/P	18 - 200
2410434	Napropamide	62.2	73.3	P/P	39 - 110
2410434	Norflurazon	57.0	68.2	P/P	48 - 128
2410434	Octinoxate	106	116	P/P	21 - 159
2410434	Oxadiazon	65.1	74.1	P/P	43 - 112
2410434	Oxybenzone	114	124	P/P	41 - 142
2410434	Oxyfluorfen	100	97.1	P/P	64 - 153
2410434	Parathion Ethyl	93.8	96.5	P/P	69 - 114
2410434	Parathion Methyl	94.7	86.5	P/P	79 - 139
2410434	PBB-153	107	150	P/F	50 - 150
2410434	PBDE-47	101	118	P/P	27 - 144
2410434	PBDE-99	78.0	112	P/P	18 - 150
2410434	Pendimethalin	109	100	P/P	50 - 139
2410434	Pentabromotoluene	109	117	P/P	50 - 150
2410434	Phenytoin	65.8	58.1	P/P	10 - 146
2410434	Phorate	83.1	96.7	P/P	54 - 161
2410434	Prodiamine	57.9	59.8	P/P	30 - 161
2410434	Prometon	110	86.4	P/P	45 - 134
2410434	Prometryn	99.4	117	P/P	45 - 137
2410434	Pronamide	82.4	84.1	P/P	65 - 133
2410434	Propanil	125	126	P/P	49 - 142
2410434	Propargite	85.7	97.5	P/P	10 - 203
2410434	Propiconazole	63.7	67.5	P/P	38 - 146
2410434	Pyraflufen Ethyl	58.6	70.3	P/P	34 - 153
2410434	Pyridaben	71.8	111	P/P	12 - 192
2410434	Pyriproxyfen	90.8	122	P/P	33 - 180
2410434	Simazine	72.2	72.4	P/P	51 - 157
2410434	Stiropfos	79.3	98.0	P/P	10 - 128
2410434	Sulfentrazone	92.8	111	P/P	53 - 186
2410434	Tebuconazole	76.8	82.6	P/P	10 - 133
2410434	Terbufos	90.9	80.0	P/P	65 - 139
2410434	Terbuthylazine	96.9	94.6	P/P	66 - 117
2410434	Tetradecachloro-m-terphenyl	193	215	P/F	70 - 200
2410434	Thiobencarb	55.0	75.8	P/P	51 - 119
2410434	Tri-o-cresyl Phosphate	100	120	P/P	31 - 144
2410434	Triadimefon	77.4	83.8	P/P	48 - 119
2410434	Tris(1-chloro-2-propyl) phosphate (TCPP)	107	89.7	P/P	50 - 150
2410434	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	103	114	P/P	50 - 150
2410434	Tris(2-chloroethyl) phosphate (TCEP)	118	119	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P430081

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410800	Acesulfame K	68.4	67.5	P/P	40 - 150
2410800	AMPA	88.1	87.9	P/P	40 - 150
2410800	Endothall	102	93.9	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P430081

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410800	Glufosinate	78.4	84.9	P/P	40 - 150
2410800	Glyphosate	110	110	P/P	40 - 150
2410800	Sucralose	121	110	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P430178

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410774	2,4-D	85.5	83.4	P/P	40 - 150
2410774	2,4,5-T	98.1	96.2	P/P	40 - 150
2410774	Acetaminophen	93.3	92.7	P/P	30 - 150
2410774	Acetamiprid	68.3	71.1	P/P	40 - 150
2410774	Afidopyropen	69.2	72.0	P/P	30 - 150
2410774	Benzovindiflupyr	83.4	86.7	P/P	40 - 150
2410774	Carbamazepine	71.8	70.0	P/P	40 - 150
2410774	Clothianidin	96.8	109	P/P	40 - 150
2410774	Dinotefuran	87.4	85.9	P/P	40 - 150
2410774	Diuron	72.9	66.0	P/P	40 - 150
2410774	Fenuron	65.0	66.6	P/P	40 - 150
2410774	Hydrocodone	70.5	69.2	P/P	40 - 150
2410774	Ibuprofen	51.8	50.0	P/P	40 - 150
2410774	Imidacloprid	148	155	P/F	40 - 150
2410774	Linuron	68.9	76.2	P/P	40 - 150
2410774	Mandestrobin	81.2	80.3	P/P	40 - 150
2410774	MCP	101	101	P/P	40 - 150
2410774	Naproxen	65.3	60.7	P/P	40 - 150
2410774	Primidone	83.1	84.6	P/P	40 - 150
2410774	Pyraclostrobin	85.4	83.8	P/P	40 - 150
2410774	Silvex	80.8	93.5	P/P	40 - 150
2410774	Thiamethoxam	110	113	P/P	40 - 150
2410774	Tolfenpyrad	63.0	59.2	P/P	30 - 150
2410774	Triclopyr	88.1	93.4	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P430547

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411107	Fluoride	99.0	99.0	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P430288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411066	Organic Carbon	94.8	96.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P430130

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411324	Color (true)	2.95	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P430134

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411142	Turbidity	9.68	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P430189

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411040	Calcium	0.899	Spike	P	0 - 20
2411040	Iron	0.661	Spike	P	0 - 20
2411040	Magnesium	0.641	Spike	P	0 - 20
2411040	Potassium	0.515	Spike	P	0 - 20
2411040	Sodium	0.463	Spike	P	0 - 20
2411040	Strontium	0.0668	Spike	P	0 - 20
2411040	Tin	2.44	Spike	P	0 - 20
2411040	Titanium	1.03	Spike	P	0 - 20
2411040	Vanadium	0.717	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P430189

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411040	Aluminum	1.26	Spike	P	0 - 20
2411040	Antimony	0.569	Spike	P	0 - 20
2411040	Arsenic	0.636	Spike	P	0 - 20
2411040	Barium	0.327	Spike	P	0 - 20
2411040	Beryllium	0.419	Spike	P	0 - 20
2411040	Boron	0.351	Spike	P	0 - 20
2411040	Cadmium	1.08	Spike	P	0 - 20
2411040	Chromium	1.81	Spike	P	0 - 20
2411040	Cobalt	0.637	Spike	P	0 - 20
2411040	Copper	0.906	Spike	P	0 - 20
2411040	Lead	0.833	Spike	P	0 - 20
2411040	Manganese	0.312	Spike	P	0 - 20
2411040	Molybdenum	1.38	Spike	P	0 - 20
2411040	Nickel	0.294	Spike	P	0 - 20
2411040	Selenium	0.147	Spike	P	0 - 20
2411040	Silver	0.388	Spike	P	0 - 20
2411040	Thallium	2.90	Spike	P	0 - 20
2411040	Zinc	0.233	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430450

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411064	Chloride	0.419	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430453

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411064	Sulfate	0.0878	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430656

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411298	Ammonia-N	0.368	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430322

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411362	Kjeldahl Nitrogen	2.66	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430678

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411262	NO2NO3-N	0.473	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411588	Total-P	0.476	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P430133

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411277	O-Phosphate-P	0.108	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P430033

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410434	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	28.5	Spike	P	0 - 37
2410434	Acetochlor	9.52	Spike	P	0 - 28

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P430033

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410434	Alachlor	5.43	Spike	P	0 - 30
2410434	Ametryn	25.7	Spike	P	0 - 32
2410434	Atrazine	6.70	Spike	P	0 - 41
2410434	Atrazine Desethyl	21.8	Spike	P	0 - 36
2410434	Avobenzone	31.1	Spike	P	0 - 36
2410434	Azinphos Methyl	26.1	Spike	P	0 - 75
2410434	Azoxystrobin	17.0	Spike	P	0 - 39
2410434	Bromacil	15.6	Spike	P	0 - 33
2410434	Butylate	4.20	Spike	P	0 - 44
2410434	Caffeine	20.8	Spike	P	0 - 74
2410434	Carbophenothion	15.7	Spike	P	0 - 25
2410434	Carfentrazone Ethyl	10.9	Spike	P	0 - 27
2410434	Chlorfenapyr	9.20	Spike	P	0 - 24
2410434	Chlorpyrifos Ethyl	23.7	Spike	P	0 - 26
2410434	Chlorpyrifos Methyl	3.17	Spike	P	0 - 26
2410434	Coumaphos	40.7	Spike	F	0 - 28
2410434	Cyanazine	36.1	Spike	P	0 - 48
2410434	Cyprodinil	4.09	Spike	P	0 - 29
2410434	Dechlorane 602	35.8	Spike	F	0 - 30
2410434	Dechlorane 603	28.4	Spike	P	0 - 30
2410434	Dechlorane Plus	12.9	Spike	P	0 - 30
2410434	Demeton	11.3	Spike	P	0 - 33
2410434	Diazinon	3.86	Spike	P	0 - 29
2410434	Difenoconazole	84.9	Spike	F	0 - 34
2410434	Dimethenamid	15.0	Spike	P	0 - 39
2410434	Dimethomorph	34.5	Spike	P	0 - 51
2410434	Disulfoton	11.2	Spike	P	0 - 30
2410434	Dithiopyr	5.10	Spike	P	0 - 26
2410434	EPTC	2.66	Spike	P	0 - 43
2410434	Ethion	14.8	Spike	P	0 - 79
2410434	Ethoprop	5.55	Spike	P	0 - 29
2410434	Etridiazole	10.8	Spike	P	0 - 33
2410434	Fenamiphos	10.5	Spike	P	0 - 40
2410434	Fenbuconazole	65.3	Spike	P	0 - 74
2410434	Fipronil	11.8	Spike	P	0 - 29
2410434	Fipronil Desulfinyl	9.71	Spike	P	0 - 32
2410434	Fipronil Sulfide	13.8	Spike	P	0 - 30
2410434	Fipronil Sulfone	14.6	Spike	P	0 - 33
2410434	Fluazifop-P-butyl	2.92	Spike	P	0 - 38
2410434	Fludioxonil	13.7	Spike	P	0 - 29
2410434	Flumioxazin	65.0	Spike	F	0 - 51
2410434	Flutolanil	9.07	Spike	P	0 - 25
2410434	Fluxapyroxad	23.8	Spike	P	0 - 45
2410434	Fonofos	11.4	Spike	P	0 - 27
2410434	Hexabromobenzene	6.74	Spike	P	0 - 30
2410434	Hexazinone	13.9	Spike	P	0 - 30
2410434	Imazalil	52.4	Spike	P	0 - 100
2410434	Iprodione	40.9	Spike	F	0 - 33
2410434	Loratadine	46.9	Spike	P	0 - 56
2410434	Malathion	23.6	Spike	P	0 - 37
2410434	Metalaxyl	11.4	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P430033

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410434	Metolachlor	5.30	Spike	P	0 - 29
2410434	Metribuzin	0.195	Spike	P	0 - 45
2410434	Mevinphos	9.86	Spike	P	0 - 29
2410434	Molinate	6.38	Spike	P	0 - 33
2410434	Myclobutanil	10.8	Spike	P	0 - 26
2410434	Naled	7.60	Spike	P	0 - 37
2410434	Napropamide	16.3	Spike	P	0 - 44
2410434	Norflurazon	17.9	Spike	P	0 - 30
2410434	Octinoxate	9.85	Spike	P	0 - 45
2410434	Oxadiazon	12.9	Spike	P	0 - 28
2410434	Oxybenzone	8.10	Spike	P	0 - 46
2410434	Oxyfluorfen	3.10	Spike	P	0 - 28
2410434	Parathion Ethyl	2.81	Spike	P	0 - 31
2410434	Parathion Methyl	9.08	Spike	P	0 - 29
2410434	PBB-153	33.8	Spike	F	0 - 30
2410434	PBDE-47	15.4	Spike	P	0 - 36
2410434	PBDE-99	35.7	Spike	P	0 - 40
2410434	Pendimethalin	8.60	Spike	P	0 - 33
2410434	Pentabromotoluene	6.72	Spike	P	0 - 30
2410434	Phenytoin	12.4	Spike	P	0 - 100
2410434	Phorate	15.1	Spike	P	0 - 36
2410434	Prodiamine	3.24	Spike	P	0 - 71
2410434	Prometon	23.9	Spike	P	0 - 36
2410434	Prometryn	16.6	Spike	P	0 - 28
2410434	Pronamide	2.10	Spike	P	0 - 24
2410434	Propanil	1.03	Spike	P	0 - 28
2410434	Propargite	12.9	Spike	P	0 - 43
2410434	Propiconazole	5.70	Spike	P	0 - 33
2410434	Pyraflufen Ethyl	18.1	Spike	P	0 - 29
2410434	Pyridaben	43.2	Spike	F	0 - 30
2410434	Pyriproxyfen	29.1	Spike	P	0 - 79
2410434	Simazine	0.139	Spike	P	0 - 29
2410434	Stirophos	21.1	Spike	P	0 - 61
2410434	Sulfentrazone	17.8	Spike	P	0 - 33
2410434	Tebuconazole	7.27	Spike	P	0 - 69
2410434	Terbufos	12.8	Spike	P	0 - 29
2410434	Terbuthylazine	2.43	Spike	P	0 - 32
2410434	Tetradecachloro-m-terphenyl	10.4	Spike	P	0 - 30
2410434	Thiobencarb	31.7	Spike	F	0 - 26
2410434	Tri-o-cresyl Phosphate	17.8	Spike	P	0 - 33
2410434	Triadimefon	7.92	Spike	P	0 - 28
2410434	Tris(1-chloro-2-propyl) phosphate (TCPP)	18.0	Spike	P	0 - 30
2410434	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	9.69	Spike	P	0 - 30
2410434	Tris(2-chloroethyl) phosphate (TCEP)	0.807	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P430081

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410800	Acesulfame K	1.35	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P430081

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410800	AMPA	0.227	Spike	P	0 - 30
2410800	Endothall	8.17	Spike	P	0 - 30
2410800	Glufosinate	8.02	Spike	P	0 - 30
2410800	Glyphosate	0.433	Spike	P	0 - 30
2410800	Sucralose	9.33	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P430178

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410774	2,4-D	1.47	Spike	P	0 - 30
2410774	2,4,5-T	1.99	Spike	P	0 - 30
2410774	Acetaminophen	0.607	Spike	P	0 - 30
2410774	Acetamiprid	4.09	Spike	P	0 - 30
2410774	Afidopyropen	3.91	Spike	P	0 - 30
2410774	Benzovindiflupyr	3.86	Spike	P	0 - 30
2410774	Carbamazepine	2.21	Spike	P	0 - 30
2410774	Clothianidin	7.91	Spike	P	0 - 30
2410774	Dinotefuran	1.71	Spike	P	0 - 30
2410774	Diuron	9.91	Spike	P	0 - 30
2410774	Fenuron	2.49	Spike	P	0 - 30
2410774	Fluridone	0.155	Spike	P	0 - 30
2410774	Hydrocodone	1.85	Spike	P	0 - 30
2410774	Ibuprofen	3.43	Spike	P	0 - 30
2410774	Imazapyr	1.27	Spike	P	0 - 30
2410774	Imidacloprid	3.81	Spike	P	0 - 30
2410774	Linuron	10.2	Spike	P	0 - 30
2410774	Mandestrobin	1.10	Spike	P	0 - 30
2410774	MCP	0.226	Spike	P	0 - 30
2410774	Naproxen	7.29	Spike	P	0 - 30
2410774	Primidone	1.53	Spike	P	0 - 30
2410774	Pyraclostrobin	1.93	Spike	P	0 - 30
2410774	Silvex	14.6	Spike	P	0 - 30
2410774	Thiamethoxam	2.74	Spike	P	0 - 30
2410774	Tolfenpyrad	6.36	Spike	P	0 - 30
2410774	Triclopyr	5.80	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P430538

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411107	Total Alkalinity	1.60	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015

Batch ID: P430781

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411017	TDS	4.88	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P430547

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411107	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P430288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411066	Organic Carbon	1.59	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2411328
Field Sample ID: G2CE0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	105	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	87.6	P	30 - 160
EPA 8321B	Diuron-d6	70.1	P	30 - 160
EPA 8321B	Endothall-d6	86.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	56.1	P	30 - 160
EPA 8321B	Primidone-d5	92.8	P	30 - 160
EPA 8321B	Sucralose-d6	111	P	30 - 160

Lab Sample ID: 2411330
Field Sample ID: G2CE0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	92.3	P	20 - 200
EPA 8270E	Simazine-d10	68.3	P	62 - 142
EPA 8270E	Terbufos-d10	63.8	P	58 - 132
EPA 8270E	Terphenyl-d14	70.6	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A119281

Included Lab Sample IDs: 2411324

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A119285

Included Lab Sample IDs: 2411326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.5	98.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A119286

Included Lab Sample IDs: 2411324

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	97.5	97.5	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A119295

Included Lab Sample IDs: 2411328

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	100	98.5	P/P	60 - 160
Sucralose	119	114	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A119309

Included Lab Sample IDs: 2411328

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	122	121	P/P	60 - 160
Endothall	86.1	83.1	P/P	60 - 160
Glufosinate	89.6	86.2	P/P	60 - 160
Glyphosate	108	109	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A119351

Included Lab Sample IDs: 2411324

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.6	100	P/P	90 - 110
Sulfate	97.8	98.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119362

Included Lab Sample IDs: 2411329

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	95.8	97.3	P/P	90 - 110
Antimony	101	99.0	P/P	90 - 110
Arsenic	97.6	97.3	P/P	90 - 110
Barium	97.8	96.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119362

Included Lab Sample IDs: 2411329

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	94.0	94.2	P/P	90 - 110
Boron	94.8	95.4	P/P	90 - 110
Cadmium	98.6	97.5	P/P	90 - 110
Chromium	93.8	95.6	P/P	90 - 110
Cobalt	95.8	95.9	P/P	90 - 110
Copper	94.0	93.3	P/P	90 - 110
Lead	98.0	98.4	P/P	90 - 110
Manganese	96.5	97.6	P/P	90 - 110
Molybdenum	97.7	96.8	P/P	90 - 110
Nickel	93.4	93.6	P/P	90 - 110
Selenium	98.0	97.1	P/P	90 - 110
Silver	100	99.7	P/P	90 - 110
Thallium	98.9	96.9	P/P	90 - 110
Zinc	96.9	96.5	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A119363

Included Lab Sample IDs: 2411325

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.3	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A119379

Included Lab Sample IDs: 2411325

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	97.0	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A119398

Included Lab Sample IDs: 2411330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	101		P	80 - 120
Avobenzene	104		P	80 - 120
Dechlorane 602	100		P	80 - 120
Dechlorane 603	99.4		P	80 - 120
Dechlorane Plus	93.8		P	80 - 120
Hexabromobenzene	100		P	80 - 120
Octinoxate	97.5		P	80 - 120
Oxybenzone	96.9		P	80 - 120
PBB-153	100		P	80 - 120
PBDE-47	98.6		P	80 - 120
PBDE-99	101		P	80 - 120
Pentabromotoluene	101		P	80 - 120
Tetradecachloro-m-terphenyl	107		P	80 - 120
Tri-o-cresyl Phosphate	97.1		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	83.8		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	94.3		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	93.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119401

Included Lab Sample IDs: 2411325

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	98.8	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A119420

Included Lab Sample IDs: 2411330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	88.9		P	80 - 120
Alachlor	96.1		P	80 - 120
Ametryn	101		P	80 - 120
Atrazine	89.9		P	80 - 120
Atrazine Desethyl	108		P	80 - 120
Azinphos Methyl	89.8		P	80 - 120
Azoxystrobin	97.7		P	80 - 120
Bromacil	97.5		P	80 - 120
Butylate	98.3		P	80 - 120
Caffeine	103		P	80 - 120
Carbophenothion	106		P	80 - 120
Carfentrazone Ethyl	98.5		P	80 - 120
Chlorfenapyr	92.6		P	80 - 120
Chlorpyrifos Ethyl	87.8		P	80 - 120
Chlorpyrifos Methyl	95.7		P	80 - 120
Coumaphos	101		P	80 - 120
Cyanazine	102		P	80 - 120
Cyprodinil	94.8		P	80 - 120
Demeton	100		P	80 - 120
Diazinon	99.3		P	80 - 120
Difenoconazole	102		P	80 - 120
Dimethenamid	98.5		P	80 - 120
Dimethomorph	95.7		P	80 - 120
Disulfoton	96.5		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	96.5		P	80 - 120
Ethion	84.7		P	80 - 120
Ethoprop	101		P	80 - 120
Etridiazole	101		P	80 - 120
Fenamiphos	91.3		P	80 - 120
Fenbuconazole	88.6		P	80 - 120
Fipronil	92.8		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	100		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fluazifop-P-butyl	115		P	80 - 120
Fludioxonil	99.5		P	80 - 120
Flumioxazin	97.8		P	80 - 120
Flutolanil	87.4		P	80 - 120
Fluxapyroxad	107		P	80 - 120
Fonofos	98.0		P	80 - 120
Hexazinone	98.1		P	80 - 120
Imazalil	105		P	80 - 120
Iprodione	88.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A119420
 Included Lab Sample IDs: 2411330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Loratadine	93.0		P	80 - 120
Malathion	91.5		P	80 - 120
Metalaxyl	89.8		P	80 - 120
Metolachlor	98.7		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	93.2		P	80 - 120
Molinate	85.2		P	80 - 120
Myclobutanil	91.9		P	80 - 120
Naled	94.2		P	80 - 120
Napropamide	98.3		P	80 - 120
Norflurazon	99.5		P	80 - 120
Oxadiazon	107		P	80 - 120
Oxyfluorfen	95.0		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	87.1		P	80 - 120
Pendimethalin	113		P	80 - 120
Phenytoin	95.7		P	80 - 120
Phorate	90.9		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	108		P	80 - 120
Pronamide	98.6		P	80 - 120
Propanil	94.0		P	80 - 120
Propargite	108		P	80 - 120
Propiconazole	91.6		P	80 - 120
Pyraflufen Ethyl	112		P	80 - 120
Pyridaben	111		P	80 - 120
Pyriproxyfen	110		P	80 - 120
Simazine	91.8		P	80 - 120
Stirophos	85.4		P	80 - 120
Sulfentrazone	107		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	97.4		P	80 - 120
Terbuthylazine	90.3		P	80 - 120
Thiobencarb	102		P	80 - 120
Triadimefon	104		P	80 - 120

Reference Method: EPA 8321B
 Run ID: A119438
 Included Lab Sample IDs: 2411328

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	99.2	107	P/P	50 - 150
2,4,5-T	97.3	93.7	P/P	50 - 150
Acetaminophen	106	104	P/P	60 - 160
Acetamiprid	118	118	P/P	50 - 150
Afidopyropen	90.5	111	P/P	50 - 150
Bentazon	129	124	P/P	50 - 160
Benzovindiflupyr	106	101	P/P	50 - 150
Carbamazepine	106	114	P/P	60 - 150
Clothianidin	117	113	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A119438
Included Lab Sample IDs: 2411328

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dinotefuran	115	113	P/P	50 - 150
Diuron	114	121	P/P	60 - 160
Fenuron	113	116	P/P	60 - 150
Fluridone	120	118	P/P	60 - 160
Hydrocodone	113	109	P/P	60 - 150
Ibuprofen	115	119	P/P	50 - 160
Imazapyr	102	102	P/P	50 - 150
Imidacloprid	107	108	P/P	60 - 150
Linuron	99.8	102	P/P	60 - 150
Mandestrobin	101	102	P/P	50 - 150
MCPP	107	107	P/P	50 - 150
Naproxen	96.2	131	P/P	50 - 160
Primidone	110	107	P/P	60 - 150
Pyraclostrobin	110	112	P/P	60 - 150
Silvex	117	102	P/P	50 - 150
Thiamethoxam	117	117	P/P	50 - 150
Tolfenpyrad	118	117	P/P	60 - 150
Triclopyr	109	92.3	P/P	50 - 150

Reference Method: SM 2320 B-2011
Run ID: A119461
Included Lab Sample IDs: 2411324

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.2	95.1	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A119461
Included Lab Sample IDs: 2411324

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A119475
Included Lab Sample IDs: 2411329

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	103	P/P	90 - 110
Iron	105	102	P/P	90 - 110
Magnesium	103	100	P/P	90 - 110
Potassium	100	98.8	P/P	90 - 110
Sodium	95.4	95.8	P/P	90 - 110
Strontium	102	100	P/P	90 - 110
Tin	99.8	100	P/P	90 - 110
Titanium	102	102	P/P	90 - 110
Vanadium	101	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A119511

Included Lab Sample IDs: 2411325

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.9	98.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A119514

Included Lab Sample IDs: 2411325

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	105	105	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	98.4					2.95	
EPA 180.1 Rev. 2.0	Turbidity	96.6					9.68	
EPA 200.7 Rev. 4.4	Calcium	102		101				0.899
	Iron	105	104	104	100			0.661
	Magnesium	102	102	101	100			0.641
	Potassium	101	99.6	99.0	99.0			0.515
	Sodium	97.2	96.7	97.6	96.9			0.463
	Strontium	100	100	100	100			0.0668
	Tin	100	99.8	97.4	98.5			2.44
	Titanium	102	102	101	102			1.03
	Vanadium	101	101	100	102			0.717
EPA 200.8 Rev. 5.4	Aluminum	96.1	97.0	95.7	94.4			1.26
	Antimony	100	101	101	102			0.569
	Arsenic	96.8	96.1	96.7	98.6			0.636
	Barium	100	101	100	100			0.327
	Beryllium	91.0	92.9	95.1	92.5			0.419
	Boron	98.1	99.6	100	101			0.351
	Cadmium	98.6	98.7	99.8	101			1.08
	Chromium	93.6	91.4	92.8	94.6			1.81
	Cobalt	95.1	94.1	94.7	93.9			0.637
	Copper	96.2	90.6	91.5	92.0			0.906
	Lead	98.6	98.5	99.4	100			0.833
	Manganese	97.0	99.1	98.8	97.3			0.312
	Molybdenum	96.3	97.1	98.5	101			1.38
	Nickel	93.4	92.1	92.3	90.9			0.294
	Selenium	98.5	97.4	97.5	97.7			0.147
	Silver	100	101	100	98.6			0.388
	Thallium	96.2	96.6	99.5	100			2.90
	Zinc	95.2	95.9	96.1	94.4			0.233
EPA 300.0 Rev. 2.1	Chloride	98.0	96.9	101			0.419	
	Sulfate	96.0	98.2				0.0878	
EPA 350.1 Rev. 2.0	Ammonia-N	97.8	96.4	96.0				0.368
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	104	100				2.66
EPA 353.2 Rev. 2.0	NO2NO3-N	105	106	106				0.473
EPA 365.1 Rev. 2.0	Total-P	99.7	105	105				0.476
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.9	92.3	92.4				0.108
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	34.7	95.3	127				28.5
	Acetochlor	83.3	72.7	79.9				9.52
	Alachlor	117	89.0	94.0				5.43
	Ametryn	97.7	121	93.8				25.7
	Atrazine	92.1						6.70
	Atrazine Desethyl	93.9	86.2	107				21.8
	Avobenzone	168	135	184				31.1
	Azinphos Methyl	94.7	65.9	85.7				26.1
	Azoxystrobin	104	81.3	96.4				17.0
	Bromacil	92.9	65.4	76.4				15.6
	Butylate	61.6	62.0	59.5				4.20
	Caffeine	107	106	131				20.8
	Carbophenothion	130	100	118				15.7
	Carfentrazone Ethyl	101	69.1	77.1				10.9
	Chlorfenapyr	85.0	68.7	75.3				9.20
	Chlorpyrifos Ethyl	86.7	108	85.3				23.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Chlorpyrifos Methyl	94.1	79.0	81.6		3.17
	Coumaphos	114	61.4	92.8		40.7
	Cyanazine	202	164	237		36.1
	Cyprodinil	95.6	84.3	87.8		4.09
	Dechlorane 602	99.8	75.7	109		35.8
	Dechlorane 603	124	102	135		28.4
	Dechlorane Plus	129	106	93.5		12.9
	Demeton	65.6	63.1	70.6		11.3
	Diazinon	92.8	89.5	86.1		3.86
	Difenoconazole	116	45.9	114		84.9
	Dimethenamid	91.3	72.9	84.6		15.0
	Dimethomorph	132	143	101		34.5
	Disulfoton	83.7	75.7	84.7		11.2
	Dithiopyr	89.4	76.0	80.0		5.10
	EPTC	47.0	51.0	49.6		2.66
	Ethion	82.1	95.9	111		14.8
	Ethoprop	80.9	100	94.8		5.55
	Etridiazole	87.2	77.1	85.9		10.8
	Fenamiphos	84.1	68.7	61.9		10.5
	Fenbuconazole	86.9	37.4	73.6		65.3
	Fipronil	125	98.6	111		11.8
	Fipronil Desulfinyl	127	94.9	105		9.71
	Fipronil Sulfide	91.3	75.5	86.7		13.8
	Fipronil Sulfone	88.2	68.2	78.9		14.6
	Fluazifop-P-butyl	80.4	75.1	77.3		2.92
	Fludioxonil	95.3	73.9	84.7		13.7
	Flumioxazin	111	57.0	112		65.0
	Flutolanil	96.3	91.8	101		9.07
	Fluxapyroxad	124	92.7	118		23.8
	Fonofos	88.3	91.8	81.9		11.4
	Hexabromobenzene	116	124	133		6.74
	Hexazinone	92.0	97.6	84.9		13.9
	Imazalil	97.7	178	104		52.4
	Iprodione	132	81.2	53.7		40.9
	Loratadine	120	146	90.5		46.9
	Malathion	129	75.7	96.0		23.6
	Metalaxyl	112	101	114		11.4
	Metolachlor	106	91.2	97.0		5.30
	Metribuzin	100	94.3	94.5		0.195
	Mevinphos	88.0	81.2	73.6		9.86
	Molinate	58.2	57.7	61.5		6.38
	Myclobutanil	89.5	80.7	72.4		10.8
	Naled	43.1	40.9	37.9		7.60
	Napropamide	81.3	73.3	62.2		16.3
	Norflurazon	77.8	68.2	57.0		17.9
	Octinoxate	120	106	116		9.85
	Oxadiazon	81.1	74.1	65.1		12.9
	Oxybenzone	119	114	124		8.10
	Oxyfluorfen	108	97.1	100		3.10
	Parathion Ethyl	98.3	96.5	93.8		2.81
	Parathion Methyl	92.7	86.5	94.7		9.08
	PBB-153	89.0	107	150		33.8
	PBDE-47	104	101	118		15.4
	PBDE-99	64.6	78.0	112		35.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8270E	Pendimethalin	103	100	109			8.60
	Pentabromotoluene	111	109	117			6.72
	Phenytain	58.2	58.1	65.8			12.4
	Phorate	84.4	96.7	83.1			15.1
	Prodiamine	72.1	59.8	57.9			3.24
	Prometon	85.5	86.4	110			23.9
	Prometryn	128	117	99.4			16.6
	Pronamide	93.6	84.1	82.4			2.10
	Propanil	139	126	125			1.03
	Propargite	119	97.5	85.7			12.9
	Propiconazole	86.4	67.5	63.7			5.70
	Pyraflufen Ethyl	68.1	70.3	58.6			18.1
	Pyridaben	119	111	71.8			43.2
	Pyriproxyfen	130	122	90.8			29.1
	Simazine	79.7	72.4	72.2			0.139
	Stiropfos	105	98.0	79.3			21.1
	Sulfentrazone	108	111	92.8			17.8
	Tebuconazole	101	82.6	76.8			7.27
	Terbufos	87.2	80.0	90.9			12.8
	Terbutylazine	105	94.6	96.9			2.43
	Tetradecachloro-m-terphenyl	180	193	215			10.4
	Thiobencarb	84.2	75.8	55.0			31.7
	Tri-o-cresyl Phosphate	123	100	120			17.8
	Triadimefon	79.3	83.8	77.4			7.92
	Tris(1-chloro-2-propyl) phosphate (TCPP)	125	107	89.7			18.0
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	110	103	114			9.69
	Tris(2-chloroethyl) phosphate (TCEP)	123	118	119			0.807
EPA 8321B	2,4-D	95.5	85.5	83.4			1.47
	2,4,5-T	80.0	98.1	96.2			1.99
	Acesulfame K	98.8	68.4	67.5			1.35
	Acetaminophen	86.0	93.3	92.7			0.607
	Acetamiprid	73.5	68.3	71.1			4.09
	Afidopyropen	77.3	69.2	72.0			3.91
	AMPA	121	88.1	87.9			0.227
	Bentazon	98.3					
	Benzovindiflupyr	77.9	83.4	86.7			3.86
	Carbamazepine	75.7	71.8	70.0			2.21
	Clothianidin	90.2	96.8	109			7.91
	Dinotefuran	88.8	87.4	85.9			1.71
	Diuron	76.7	72.9	66.0			9.91
	Endothall	88.2	102	93.9			8.17
	Fenuron	87.0	65.0	66.6			2.49
	Fluridone	88.4					0.155
	Glufosinate	93.7	78.4	84.9			8.02
	Glyphosate	106	110	110			0.433
	Hydrocodone	83.5	70.5	69.2			1.85
	Ibuprofen	81.1	51.8	50.0			3.43
	Imazapyr	89.0					1.27
	Imidacloprid	84.5	148	155			3.81
	Linuron	79.8	68.9	76.2			10.2
	Mandestrobin	76.3	81.2	80.3			1.10

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	MCP	93.6	101	101			0.226
	Naproxen	60.5	65.3	60.7			7.29
	Primidone	81.1	83.1	84.6			1.53
	Pyraclostrobin	78.0	85.4	83.8			1.93
	Silvex	88.6	80.8	93.5			14.6
	Sucralose	122	121	110			9.33
	Thiamethoxam	89.7	110	113			2.74
	Tolfenpyrad	63.7	63.0	59.2			6.36
	Triclopyr	84.5	88.1	93.4			5.80
SM 2320 B-2011	Total Alkalinity	96.8				1.60	
SM 2540 C-2015	TDS	103				4.88	
SM 2540 D-2015	TSS	95.3					
SM 4500-F- C-2011	Fluoride	100	99.0	99.0			0.0
SM 5310 B-2011	Organic Carbon	96.2	94.8	96.4			1.59

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2411324
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2411324
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2411329
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2411329
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2411324
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2411324
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2411325
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2411325
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2411325
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2411325
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2411326
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2411330
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2411330
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2411328
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2411324
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2411329
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2411324
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2411324
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2411324
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2411325

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	05/19/2023			05/19/2023 14:44	Alexis Price	2411324
EPA 180.1 Rev. 2.0	05/19/2023			05/19/2023 13:47	Alexis Price	2411324
EPA 200.7 Rev. 4.4	05/19/2023	05/22/2023 12:50	George D Taylor	05/31/2023 01:56	McKinley C Carter	2411329
EPA 200.8 Rev. 5.4	05/19/2023	05/22/2023 12:50	George D Taylor	05/23/2023 23:53	Conrad Hartmann	2411329
EPA 300.0 Rev. 2.1	05/19/2023			05/25/2023 16:28	James L Waggeberby	2411324
EPA 350.1 Rev. 2.0	05/19/2023			05/31/2023 12:29	Khloe J Berg	2411325
EPA 351.2 Rev. 2.0	05/19/2023	05/24/2023 11:48	Dana G. Hughes	05/25/2023 10:53	Samantha L Bates	2411325
EPA 353.2 Rev. 2.0	05/19/2023			06/01/2023 10:20	Beverly Y. Sanders	2411325
EPA 365.1 Rev. 2.0	05/19/2023	05/23/2023 14:40	Simonne.V. Calhoun	05/24/2023 12:08	Simonne.V. Calhoun	2411325
EPA 365.1 Rev. 2.0 dissolved	05/19/2023			05/19/2023 15:29	Elise M. Gillis	2411326
EPA 8270E	05/19/2023	05/22/2023 08:00	Fe-Val Siddell	05/23/2023 19:11	Vandana T. Nagar	2411330
	05/19/2023	05/22/2023 08:00	Fe-Val Siddell	05/24/2023 21:19	Arthur Maknenko	2411330
EPA 8321B	05/19/2023	05/19/2023 14:00	Touraj Touran	05/20/2023 03:21	Manjita Shrestha	2411328
	05/19/2023	05/19/2023 14:00	Touraj Touran	05/21/2023 05:13	Manjita Shrestha	2411328
	05/19/2023	05/23/2023 09:00	Hoor Shaik	05/26/2023 04:39	Juyoung Kim	2411328
SM 2320 B-2011	05/19/2023			05/26/2023 10:58	Dale L. Simmons	2411324
SM 2340 B-2011	05/19/2023			05/31/2023 01:56	McKinley C Carter	2411329
SM 2540 C-2015	05/19/2023			05/23/2023 15:32	Yijie Li	2411324
SM 2540 D-2015	05/19/2023			05/23/2023 15:32	Yijie Li	2411324
SM 4500-F- C-2011	05/19/2023			05/26/2023 10:58	Dale L. Simmons	2411324
SM 5310 B-2011	05/19/2023			05/23/2023 22:52	Elise M. Gillis	2411325