

Chemical Analysis Report

SO-DIST-2023-09-12-05

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

Event Description: **2023 SMP: LVI Lake**
Request ID: **RQ-2023-09-11-62**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: Monica Jaeger

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

Date Certified: 06-OCT-2023 13:44



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: Hog Lake At Center

Collection Date/Time: 09/11/2023 12:35

Field ID: G3SD0242

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435986	DEP SOP: NU-094-1	Color (true)	31	A	PCU	P434861	
	EPA 180.1 Rev. 2.0	Turbidity	2.2	A	NTU	P434874	
	EPA 300.0 Rev. 2.1	Chloride	18	A	mg Cl/L	P435110	
		Sulfate	7.0	A	mg SO4/L	P435114	
	SM 2320 B-2011	Total Alkalinity	21	A	mg CaCO3/L	P435268	
	SM 2540 C-2015	TDS	85		mg/L	P435297	
	SM 2540 D-2015	TSS	3	I	mg/L	P435203	
	SM 4500-F- C-2011	Fluoride	0.033	I	mg F/L	P435051	
2435987	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P434996	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.87		mg N/L	P435447	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P435252	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P435001	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P435498	
2435988	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P434858	
2436004	EPA 8321B	2,4-D	0.0068	I	ug/L	P434924	
		Acesulfame K	0.10	U	ug/L	P434773	
		2,4,5-T	0.0040	U	ug/L	P434924	
		AMPA	0.10	U	ug/L	P434773	
		Acetaminophen	0.0080	U	ug/L	P434924	
		Acetamiprid	0.0020	U	ug/L	P434924	
		Endothall	0.25	U	ug/L	P434773	
		Glufosinate	0.10	U	ug/L	P434773	
		Glyphosate	0.10	U	ug/L	P434773	
		Afidopyrophen	0.0020	U	ug/L	P434924	
		Bentazon	0.019		ug/L	P434924	
		Sucralose	0.010	I	ug/L	P434773	
		Benzovindiflupyr	0.0020	U	ug/L	P434924	
		Carbamazepine	8.0E-04	U	ug/L	P434924	
		Clothianidin	0.0020	U	ug/L	P434924	
		Dinotefuran	0.0020	U	ug/L	P434924	
		Diuron	0.0020	U	ug/L	P434924	
		Fenuron	0.032	U	ug/L	P434924	
		Fluridone	8.0E-04	U	ug/L	P434924	
		Imazapyr	0.0049	I	ug/L	P434924	
		Hydrocodone	0.0020	U	ug/L	P434924	
		Ibuprofen	0.080	U	ug/L	P434924	
		Imidacloprid	0.0020	U	ug/L	P434924	
		Linuron	0.0040	U	ug/L	P434924	
		Mandestrobin	0.0020	U	ug/L	P434924	
		MCPD	0.0020	U	ug/L	P434924	
		Naproxen	0.0080	U	ug/L	P434924	
		Primidone	0.0040	U	ug/L	P434924	
		Pyraclostrobin	0.0020	U	ug/L	P434924	

Field ID: G3SD0242

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2436004	EPA 8321B	Silvex	0.0040	U	ug/L	P434924	
		Thiamethoxam	0.0020	U	ug/L	P434924	
		Tolfenpyrad	0.0020	U	ug/L	P434924	
		Triclopyr	0.0040	U	ug/L	P434924	
2436009	EPA 200.7 Rev. 4.4	Calcium	8.13		mg/L	P434907	
		Iron	110	I	ug/L	P434907	
		Magnesium	2.45		mg/L	P434907	
		Potassium	1.8		mg/L	P434907	
		Sodium	11.0		mg/L	P434907	
		Strontium	173		ug/L	P434907	
		Tin	3.0	U	ug/L	P434907	
		Titanium	0.75	U	ug/L	P434907	
		Vanadium	2.0	U	ug/L	P434907	
		Zinc	5.0	U	ug/L	P434907	
	EPA 200.8 Rev. 5.4	Aluminum	19	I	ug/L	P434907	
		Antimony	0.063	I	ug/L	P434907	
		Arsenic	2.03		ug/L	P434907	
		Barium	13.7		ug/L	P434907	
		Beryllium	0.010	U	ug/L	P434907	
		Boron	20.6		ug/L	P434907	
		Cadmium	0.020	U	ug/L	P434907	
		Chromium	0.40	U	ug/L	P434907	
		Cobalt	0.020	U	ug/L	P434907	
		Copper	0.49	I	ug/L	P434907	
		Lead	0.20	U	ug/L	P434907	
		Manganese	8.15		ug/L	P434907	
		Molybdenum	0.15	U	ug/L	P434907	
		Nickel	0.50	U	ug/L	P434907	
		Selenium	0.20	U	ug/L	P434907	
		Silver	0.010	U	ug/L	P434907	
		Thallium	0.10	U	ug/L	P434907	
		Hardness	30.4		mg/L	P434907	
2436010	SM 2340 B-2011	Oxybenzone**	10	U	ng/L	P434753	
	EPA 8270E	Acetochlor	0.21	U	ng/L	P434753	
		Octinoxate**	150	U	ng/L	P434753	
		Alachlor	0.41	UJ	ng/L	P434753	LCS
		Avobenzone**	100	U	ng/L	P434753	
		Ametryn	1.1	U	ng/L	P434753	
		Atrazine	7.5		ng/L	P434753	
		PBDE-47**	4.1	U	ng/L	P434753	
		Atrazine Desethyl	4.0	I	ng/L	P434753	
		PBDE-99**	5.1	U	ng/L	P434753	
		Azinphos Methyl	3.1	U	ng/L	P434753	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P434753	
		Azoxystrobin	0.57	I	ng/L	P434753	

Field ID: G3SD0242

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2436010	EPA 8270E	Bromacil	0.62	U	ng/L	P434753	
		2-Ethylhexyl	12	U	ng/L	P434753	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.21	U	ng/L	P434753	
		Dechlorane Plus**	31	U	ng/L	P434753	
		Caffeine**	9.4	I	ng/L	P434753	
		Dechlorane 602**	5.1	U	ng/L	P434753	RPD
		Carbophenothion	0.51	U	ng/L	P434753	
		Dechlorane 603**	4.1	U	ng/L	P434753	
		Carfentrazone Ethyl	0.15	U	ng/L	P434753	
		Hexabromobenzene**	6.2	U	ng/L	P434753	RPD
		Chlorfenapyr	0.31	U	ng/L	P434753	
		PBB-153**	8.2	U	ng/L	P434753	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P434753	
		Pentabromotoluene**	3.1	U	ng/L	P434753	
		Chlorpyrifos Methyl	0.10	U	ng/L	P434753	MS
		Tris(2-chloroethyl) phosphate (TCEP)**	72	U	ng/L	P434753	
		Coumaphos	1.1	U	ng/L	P434753	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	15	U	ng/L	P434753	
		Cyanazine	5.1	U	ng/L	P434753	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.7	I	ng/L	P434753	
		Cyprodinil	0.21	U	ng/L	P434753	
		Tetradecachloro-m-terphenyl**	7.7	UJ	ng/L	P434753	LCS
		Demeton	3.6	U	ng/L	P434753	
		Diazinon	0.13	UJ	ng/L	P434753	CCV
		Difenoconazole	0.62	U	ng/L	P434753	
		Dimethenamid	0.10	U	ng/L	P434753	
		Dimethomorph	0.31	U	ng/L	P434753	
		Disulfoton	0.62	U	ng/L	P434753	
		Dithiopyr	1.0	U	ng/L	P434753	
		EPTC	0.51	U	ng/L	P434753	
		Ethion	0.31	U	ng/L	P434753	
		Ethoprop	0.13	U	ng/L	P434753	
		Etridiazole	0.10	U	ng/L	P434753	
		Fenamiphos	0.46	U	ng/L	P434753	
		Fenbuconazole	0.51	U	ng/L	P434753	
		Fipronil	0.21	U	ng/L	P434753	
		Fipronil Desulfinyl**	0.23	I	ng/L	P434753	
		Fipronil Sulfide	0.10	U	ng/L	P434753	
		Fipronil Sulfone	0.21	I	ng/L	P434753	
		Fluazifop-P-butyl	0.10	U	ng/L	P434753	
		Fludioxonil	0.10	U	ng/L	P434753	
		Flumioxazin	3.1	U	ng/L	P434753	
		Flutolanil	0.58	J	ng/L	P434753	LCS
		Fluxapyroxad	1.9	J	ng/L	P434753	

Field ID: G3SD0242

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2436010	EPA 8270E	Fonofos	0.15	U	ng/L	P434753	
		Hexazinone	0.54	I	ng/L	P434753	
		Imazalil	0.67	U	ng/L	P434753	
		Iprodione	0.51	U	ng/L	P434753	MS
		Loratadine**	0.31	U	ng/L	P434753	
		Malathion	0.36	U	ng/L	P434753	
		Metalaxyl	0.51	U	ng/L	P434753	
		Metolachlor	1.1	I	ng/L	P434753	
		Metribuzin	0.41	U	ng/L	P434753	
		Mevinphos	1.0	U	ng/L	P434753	
		Molinate	0.26	UJ	ng/L	P434753	LCS
		Myclobutanil	0.36	U	ng/L	P434753	
		Naled	2.6	U	ng/L	P434753	
		Napropamide	0.72	U	ng/L	P434753	
		Norflurazon	1.0	U	ng/L	P434753	
		Oxadiazon	2.6	J	ng/L	P434753	
		Oxyfluorfen	0.21	U	ng/L	P434753	
		Parathion Ethyl	0.15	U	ng/L	P434753	
		Parathion Methyl	0.21	U	ng/L	P434753	MS
		Pendimethalin	0.77	U	ng/L	P434753	
		Phenytol**	5.5	U	ng/L	P434753	
		Phorate	0.26	U	ng/L	P434753	
		Prodiamine	0.21	U	ng/L	P434753	
		Prometon	3.1	U	ng/L	P434753	
		Prometryn	0.36	U	ng/L	P434753	
		Pronamide	0.10	U	ng/L	P434753	
		Propanil	0.10	U	ng/L	P434753	
		Propargite	0.82	U	ng/L	P434753	
		Propiconazole	0.62	U	ng/L	P434753	
		Pyraflufen Ethyl	0.31	U	ng/L	P434753	
		Pyridaben	1.4	U	ng/L	P434753	
		Pyriproxyfen	0.26	U	ng/L	P434753	
		Simazine	0.26	U	ng/L	P434753	
		Stiophos	0.41	U	ng/L	P434753	
		Sulfentrazone	6.1	I	ng/L	P434753	RPD
		Tebuconazole	1.4	U	ng/L	P434753	
		Terbufos	0.21	U	ng/L	P434753	
		Terbuthylazine	0.21	U	ng/L	P434753	
		Thiobencarb	0.51	U	ng/L	P434753	
		Triadimefon	0.15	U	ng/L	P434753	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 5310 B-2011: Batch matrix spike recoveries are unavailable 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: Estimation for oxadiazon and fluxapyroxad due to internal standard recovery exceeding control limits. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: FB

Collection Date/Time: 09/11/2023 12:55

Field ID: FB_09112023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435989	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P434861	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P434874	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P435110	
		Sulfate	0.20	U	mg SO4/L	P435114	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P435268	
	SM 2540 C-2015	TDS	15	U	mg/L	P435297	
	SM 2540 D-2015	TSS	2	U	mg/L	P435203	
2435990	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P435051	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P434996	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P435447	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P435253	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P435001	
2435991	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P435498	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P434858	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 5310 B-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P434861

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434874

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434907

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: P434907

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: P435110

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: P435114

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434996

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435447

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435252

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435253

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435001

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P434858

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

Reference Method: EPA 8270E
Batch ID: P434753

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P434753

Component	Result	Code	Units
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P434753

Component	Result	Code	Units
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P434753

Component	Result	Code	Units
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
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Octinoxate	150	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P434753

Component	Result	Code	Units
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
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
Terbuthylazine	0.20	U	ng/L
Terbuthylazine	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: P434773

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: P434924

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P434924

Component	Result	Code	Units
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	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: P435268

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

Reference Method: SM 2540 C-2015

Batch ID: P435297

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P435203

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P435051

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P435498

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: P434861

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.6		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434874

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434907

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	103		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	101		P	85 - 115
Sodium	103		P	85 - 115
Strontium	100		P	85 - 115
Tin	97.6		P	85 - 115
Titanium	96.8		P	85 - 115
Vanadium	98.9		P	85 - 115
Zinc	99.4		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434907

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.2		P	85 - 115
Antimony	96.8		P	85 - 115
Arsenic	101		P	85 - 115
Barium	101		P	85 - 115
Beryllium	96.4		P	85 - 115
Boron	101		P	85 - 115
Cadmium	100		P	85 - 115
Chromium	98.1		P	85 - 115
Cobalt	100		P	85 - 115
Copper	99.6		P	85 - 115
Lead	94.1		P	85 - 115
Manganese	98.0		P	85 - 115
Molybdenum	97.6		P	85 - 115
Nickel	100		P	85 - 115
Selenium	100		P	85 - 115
Silver	110		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435110

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435114

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434996

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435447

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435252

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435253

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435001

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P434858

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

Reference Method: EPA 8270E
Batch ID: P434753

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	74.7		P	42 - 162
Acetochlor	86.5		P	69 - 123
Alachlor	62.6		F	65 - 118
Ametryn	98.9		P	58 - 141
Atrazine	79.2		P	73 - 118
Atrazine Desethyl	80.2		P	32 - 125
Avobenzone	113		P	40 - 203
Azinphos Methyl	120		P	36 - 197
Azoxystrobin	70.9		P	58 - 226
Bromacil	80.3		P	48 - 120

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P434753

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Butylate	41.3		P	27 - 85.0
Caffeine	112		P	40 - 137
Carbophenothion	84.8		P	54 - 132
Carfentrazone Ethyl	98.3		P	60 - 142
Chlorfenapyr	96.2		P	53 - 117
Chlorpyrifos Ethyl	75.5		P	59 - 116
Chlorpyrifos Methyl	81.2		P	66 - 119
Coumaphos	129		P	11 - 234
Cyanazine	96.9		P	61 - 248
Cyprodinil	72.0		P	50 - 147
Dechlorane 602	77.4		P	50 - 150
Dechlorane 603	97.9		P	50 - 150
Dechlorane Plus	96.9		P	47 - 182
Demeton	49.6		P	30 - 138
Diazinon	82.8		P	67 - 126
Difenoconazole	85.4		P	38 - 205
Dimethenamid	78.8		P	57 - 111
Dimethomorph	100		P	16 - 212
Disulfoton	88.8		P	46 - 126
Dithiopyr	73.2		P	62 - 115
EPTC	39.5		P	28 - 80.0
Ethion	105		P	24 - 122
Ethoprop	71.2		P	62 - 113
Etridiazole	47.2		P	28 - 92.0
Fenamiphos	81.0		P	57 - 128
Fenbuconazole	58.9		P	52 - 155
Fipronil	81.5		P	63 - 130
Fipronil Desulfinyl	77.3		P	61 - 130
Fipronil Sulfide	84.7		P	56 - 117
Fipronil Sulfone	85.9		P	52 - 118
Fluazifop-P-butyl	79.2		P	61 - 128
Fludioxonil	62.6		P	59 - 129
Flumioxazin	99.0		P	30 - 250
Flutolanil	47.6		F	53 - 127
Fluxapyroxad	89.9		P	42 - 132
Fonofos	63.5		P	61 - 110
Hexabromobenzene	52.9		P	50 - 150
Hexazinone	72.7		P	46 - 139
Imazalil	80.5		P	40 - 139
Iprodione	56.5		P	40 - 146
Loratadine	117		P	10 - 224
Malathion	105		P	61 - 135
Metalaxyl	86.9		P	58 - 121
Metolachlor	85.9		P	64 - 118
Metribuzin	71.3		P	45 - 245
Mevinphos	71.6		P	49 - 118
Molinate	39.5		F	42 - 92.0
Myclobutanil	56.0		P	55 - 127
Naled	24.7		P	10 - 114
Napropamide	67.1		P	39 - 121
Norflurazon	83.1		P	55 - 129
Octinoxate	85.7		P	26 - 166

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P434753

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxadiazon	67.0		P	54 - 115
Oxybenzone	95.3		P	49 - 135
Oxyfluorfen	84.2		P	64 - 139
Parathion Ethyl	77.6		P	70 - 111
Parathion Methyl	104		P	76 - 136
PBB-153	76.5		P	50 - 150
PBDE-47	80.2		P	41 - 148
PBDE-99	70.6		P	38 - 147
Pendimethalin	99.7		P	52 - 118
Pentabromotoluene	70.6		P	50 - 150
Phenytoin	67.8		P	10 - 162
Phorate	78.3		P	40 - 122
Prodiamine	31.6		P	26 - 141
Prometon	60.5		P	54 - 122
Prometryn	88.9		P	61 - 128
Pronamide	88.7		P	72 - 121
Propanil	85.5		P	45 - 144
Propargite	86.1		P	10 - 199
Propiconazole	56.9		P	56 - 127
Pyraflufen Ethyl	109		P	56 - 140
Pyridaben	110		P	26 - 211
Pyriproxyfen	97.5		P	33 - 194
Simazine	86.2		P	67 - 121
Stiophos	83.6		P	20 - 142
Sulfentrazone	75.2		P	21 - 144
Tebuconazole	81.7		P	10 - 122
Terbufos	85.1		P	60 - 129
Terbutylazine	70.6		P	69 - 113
Tetradecachloro-m-terphenyl	62.6		F	70 - 200
Thiobencarb	87.7		P	51 - 120
Tri-o-cresyl Phosphate	95.0		P	49 - 150
Triadimefon	81.8		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	87.0		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	90.9		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	83.6		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P434773

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	137		P	40 - 150
AMPA	83.8		P	40 - 150
Endothall	100		P	40 - 150
Glufosinate	99.2		P	40 - 150
Glyphosate	98.6		P	40 - 150
Sucralose	94.9		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P434924

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	89.0		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P434924

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4,5-T	77.3		P	40 - 150
Acetaminophen	70.9		P	30 - 150
Acetamiprid	84.3		P	40 - 150
Afidopyropen	73.1		P	30 - 150
Bentazon	91.6		P	30 - 150
Benzovindiflupyr	82.8		P	40 - 150
Carbamazepine	89.8		P	40 - 150
Clothianidin	89.3		P	40 - 150
Dinotefuran	97.3		P	40 - 150
Diuron	87.2		P	40 - 150
Fenuron	90.6		P	40 - 150
Fluridone	80.5		P	40 - 150
Hydrocodone	94.6		P	40 - 150
Ibuprofen	77.2		P	40 - 150
Imazapyr	74.1		P	40 - 150
Imidacloprid	83.5		P	40 - 150
Linuron	77.8		P	40 - 150
Mandestrobin	97.2		P	40 - 150
MCPP	90.2		P	40 - 150
Naproxen	64.1		P	40 - 150
Primidone	87.1		P	40 - 150
Pyraclostrobin	78.3		P	40 - 150
Silvex	76.5		P	40 - 150
Thiamethoxam	91.0		P	40 - 150
Tolfenpyrad	42.8		P	30 - 150
Triclopyr	82.3		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P435268

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.1		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P435297

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	99.6		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P435203

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

Reference Method: SM 4500-F- C-2011
Batch ID: P435051

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.3		P	94 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P435498

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P434907

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435812	Calcium	98.9	98.7	P/P	80 - 120
2435812	Iron	100	100	P/P	80 - 120
2435812	Magnesium	100	100	P/P	80 - 120
2435812	Potassium	97.3	97.2	P/P	80 - 120
2435812	Sodium	100	98.1	P/P	80 - 120
2435812	Strontium	98.3	98.0	P/P	80 - 120
2435812	Tin	98.1	98.9	P/P	80 - 120
2435812	Titanium	92.2	90.6	P/P	80 - 120
2435812	Vanadium	99.2	98.8	P/P	80 - 120
2435812	Zinc	98.7	98.2	P/P	80 - 120
2435897	Calcium	101		P	80 - 120
2435897	Iron	106		P	80 - 120
2435897	Magnesium	105		P	80 - 120
2435897	Potassium	100		P	80 - 120
2435897	Sodium	101		P	80 - 120
2435897	Strontium	102		P	80 - 120
2435897	Tin	103		P	80 - 120
2435897	Titanium	100		P	80 - 120
2435897	Vanadium	104		P	80 - 120
2435897	Zinc	106		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P434907

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435812	Aluminum	101	98.6	P/P	80 - 120
2435812	Antimony	94.2	95.1	P/P	80 - 120
2435812	Arsenic	100	101	P/P	80 - 120
2435812	Barium	102	102	P/P	80 - 120
2435812	Beryllium	97.5	98.1	P/P	80 - 120
2435812	Boron	102	101	P/P	80 - 120
2435812	Cadmium	99.9	98.9	P/P	80 - 120
2435812	Chromium	97.2	97.2	P/P	80 - 120
2435812	Cobalt	101	101	P/P	80 - 120
2435812	Copper	101	102	P/P	80 - 120
2435812	Lead	94.6	95.2	P/P	80 - 120
2435812	Manganese	97.4	96.0	P/P	80 - 120
2435812	Molybdenum	99.2	98.9	P/P	80 - 120
2435812	Nickel	101	102	P/P	80 - 120
2435812	Selenium	97.9	99.4	P/P	80 - 120
2435812	Silver	109	109	P/P	80 - 120
2435812	Thallium	103	104	P/P	80 - 120
2435897	Aluminum	96.4		P	80 - 120
2435897	Antimony	96.9		P	80 - 120
2435897	Arsenic	98.3		P	80 - 120
2435897	Barium	98.6		P	80 - 120
2435897	Beryllium	98.7		P	80 - 120
2435897	Boron	102		P	80 - 120
2435897	Cadmium	101		P	80 - 120
2435897	Chromium	98.2		P	80 - 120
2435897	Cobalt	96.3		P	80 - 120
2435897	Copper	97.0		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434907

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435897	Lead	94.2		P	80 - 120
2435897	Manganese	98.0		P	80 - 120
2435897	Molybdenum	98.8		P	80 - 120
2435897	Nickel	95.0		P	80 - 120
2435897	Selenium	96.7		P	80 - 120
2435897	Silver	107		P	80 - 120
2435897	Thallium	102		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435110

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435986	Chloride	101		P	90 - 110
2436023	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435114

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435986	Sulfate	99.3		P	90 - 110
2436023	Sulfate	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434996

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435987	Ammonia-N	96.8	98.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435447

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436026	Kjeldahl Nitrogen	108	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435252

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435311	NO2NO3-N	92.0	93.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435253

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436211	NO2NO3-N	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435001

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435987	Total-P	109	109	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P434858

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435841	O-Phosphate-P	96.6	97.9	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P434753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436113	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	109	85.3	P/P	26 - 165
2436113	Acetochlor	87.3	88.9	P/P	67 - 124
2436113	Alachlor	77.6	88.2	P/P	60 - 120
2436113	Ametryn	103	108	P/P	54 - 216
2436113	Atrazine	91.4	95.0	P/P	66 - 128
2436113	Atrazine Desethyl	77.5	80.2	P/P	15 - 122
2436113	Avobenzene	108	117	P/P	37 - 178
2436113	Azinphos Methyl	155	154	P/P	40 - 292
2436113	Azoxystrobin	86.8	86.0	P/P	35 - 220
2436113	Bromacil	98.4	97.4	P/P	45 - 127
2436113	Butylate	57.2	65.3	P/P	20 - 83.0
2436113	Caffeine	110	104	P/P	10 - 194
2436113	Carbophenothion	89.1	83.9	P/P	57 - 127
2436113	Carfentrazone Ethyl	90.5	77.3	P/P	51 - 141
2436113	Chlorfenapyr	107	108	P/P	46 - 111
2436113	Chlorpyrifos Ethyl	112	110	P/P	52 - 120
2436113	Chlorpyrifos Methyl	135	133	F/F	63 - 119
2436113	Coumaphos	194	190	P/P	10 - 228
2436113	Cyanazine	81.8	86.5	P/P	59 - 241
2436113	Cyprodinil	63.8	67.6	P/P	47 - 146
2436113	Dechlorane 602	82.2	60.0	P/P	50 - 150
2436113	Dechlorane 603	119	111	P/P	50 - 150
2436113	Dechlorane Plus	119	95.2	P/P	50 - 150
2436113	Demeton	95.9	107	P/P	40 - 136
2436113	Diazinon	75.3	80.0	P/P	69 - 132
2436113	Difenoconazole	61.7	70.2	P/P	57 - 258
2436113	Dimethenamid	81.5	80.6	P/P	54 - 110
2436113	Dimethomorph	70.0	83.8	P/P	28 - 210
2436113	Disulfoton	93.8	104	P/P	43 - 133
2436113	Dithiopyr	88.1	79.6	P/P	39 - 116
2436113	EPTC	46.5	57.2	P/P	20 - 78.0
2436113	Ethion	74.2	60.6	P/P	17 - 119
2436113	Ethoprop	91.4	85.4	P/P	66 - 120
2436113	Etridiazole	69.2	83.5	P/P	28 - 96.0
2436113	Fenamiphos	95.7	81.1	P/P	41 - 126
2436113	Fenbuconazole	136	129	P/P	42 - 169
2436113	Fipronil	98.4	96.9	P/P	61 - 132
2436113	Fipronil Desulfinyl	97.4	95.7	P/P	56 - 132
2436113	Fipronil Sulfide	86.0	85.4	P/P	48 - 119
2436113	Fipronil Sulfone	104	103	P/P	42 - 131
2436113	Fluazifop-P-butyl	92.1	101	P/P	53 - 131
2436113	Fludioxonil	111	112	P/P	56 - 127
2436113	Flumioxazin	69.7	77.8	P/P	19 - 300
2436113	Flutolanil	99.1	94.4	P/P	41 - 127
2436113	Fluxapyroxad	145	131	P/P	42 - 172
2436113	Fonofos	97.8	97.9	P/P	59 - 113

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P434753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436113	Hexabromobenzene	93.2	67.2	P/P	50 - 150
2436113	Hexazinone	84.4	85.1	P/P	66 - 122
2436113	Imazalil	102	108	P/P	21 - 283
2436113	Iprodione	186	183	F/F	43 - 150
2436113	Loratadine	185	198	P/P	23 - 201
2436113	Malathion	114	118	P/P	58 - 136
2436113	Metalaxyl	85.3	84.0	P/P	55 - 120
2436113	Metolachlor	74.1	85.4	P/P	57 - 121
2436113	Metribuzin	78.7	86.9	P/P	58 - 294
2436113	Mevinphos	109	109	P/P	50 - 126
2436113	Molinate	62.9	70.9	P/P	42 - 93.0
2436113	Myclobutanil	65.6	66.7	P/P	55 - 125
2436113	Naled	48.4	49.4	P/P	18 - 200
2436113	Napropamide	89.5	88.4	P/P	39 - 110
2436113	Norflurazon	85.4	77.3	P/P	48 - 128
2436113	Octinoxate	98.1	100	P/P	21 - 159
2436113	Oxadiazon	94.3	92.0	P/P	43 - 112
2436113	Oxybenzone	107	108	P/P	41 - 142
2436113	Oxyfluorfen	78.5	78.0	P/P	64 - 153
2436113	Parathion Ethyl	84.7	79.3	P/P	69 - 114
2436113	Parathion Methyl	171	183	F/F	79 - 139
2436113	PBB-153	108	98.4	P/P	50 - 150
2436113	PBDE-47	84.9	70.5	P/P	27 - 144
2436113	PBDE-99	86.4	61.8	P/P	18 - 150
2436113	Pendimethalin	64.9	67.5	P/P	50 - 139
2436113	Pentabromotoluene	89.1	87.5	P/P	50 - 150
2436113	Phenytoin	41.6	35.6	P/P	10 - 146
2436113	Phorate	76.7	66.5	P/P	54 - 161
2436113	Prodiamine	81.1	90.3	P/P	30 - 161
2436113	Prometon	64.0	71.3	P/P	45 - 134
2436113	Prometryn	73.7	76.6	P/P	45 - 137
2436113	Pronamide	90.2	94.3	P/P	65 - 133
2436113	Propanil	91.2	91.8	P/P	49 - 142
2436113	Propargite	120	110	P/P	10 - 203
2436113	Propiconazole	126	110	P/P	38 - 146
2436113	Pyraflufen Ethyl	84.4	81.4	P/P	34 - 153
2436113	Pyridaben	103	107	P/P	12 - 192
2436113	Pyriproxyfen	82.8	76.4	P/P	33 - 180
2436113	Simazine	88.9	94.0	P/P	51 - 157
2436113	Stirophos	46.8	45.6	P/P	10 - 128
2436113	Sulfentrazone	173	78.4	P/P	53 - 186
2436113	Tebuconazole	116	102	P/P	10 - 133
2436113	Terbufos	94.6	104	P/P	65 - 139
2436113	Terbutylazine	88.6	91.4	P/P	66 - 117
2436113	Tetradecachloro-m-terphenyl	95.7	96.9	P/P	70 - 200
2436113	Thiobencarb	80.8	84.4	P/P	51 - 119
2436113	Tri-o-cresyl Phosphate	108	109	P/P	31 - 144
2436113	Triadimefon	69.5	75.6	P/P	48 - 119
2436113	Tris(1-chloro-2-propyl) phosphate (TCPP)	94.5	97.6	P/P	50 - 150
2436113	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	98.3	99.4	P/P	50 - 150
2436113	Tris(2-chloroethyl) phosphate (TCEP)	87.3	88.3	P/P	70 - 180

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P434773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435764	Acesulfame K	147	144	P/P	40 - 150
2435764	AMPA	68.0	66.8	P/P	40 - 150
2435764	Endothall	146	145	P/P	40 - 150
2435764	Glufosinate	85.3	90.6	P/P	40 - 150
2435764	Glyphosate	80.8	88.5	P/P	40 - 150
2435764	Sucralose	101	97.9	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P434924

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435764	2,4-D	105	112	P/P	40 - 150
2435764	2,4,5-T	106	108	P/P	40 - 150
2435764	Acetaminophen	84.0	83.8	P/P	30 - 150
2435764	Acetamiprid	61.2	62.7	P/P	40 - 150
2435764	Afidopyropen	73.7	68.9	P/P	30 - 150
2435764	Bentazon	57.6	56.6	P/P	30 - 150
2435764	Benzovindiflupyr	113	110	P/P	40 - 150
2435764	Carbamazepine	74.8	75.5	P/P	40 - 150
2435764	Clothianidin	90.5	90.6	P/P	40 - 150
2435764	Dinotefuran	61.3	60.4	P/P	40 - 150
2435764	Diuron	64.1	64.3	P/P	40 - 150
2435764	Fenuron	48.7	49.4	P/P	40 - 150
2435764	Fluridone	70.6	66.5	P/P	40 - 150
2435764	Hydrocodone	59.6	58.3	P/P	40 - 150
2435764	Ibuprofen	74.2	76.6	P/P	40 - 150
2435764	Imazapyr	76.0	76.5	P/P	40 - 150
2435764	Imidacloprid	116	116	P/P	40 - 150
2435764	Linuron	74.2	73.9	P/P	40 - 150
2435764	Mandestrobin	107	101	P/P	40 - 150
2435764	MCPP	117	122	P/P	40 - 150
2435764	Naproxen	82.6	94.2	P/P	40 - 150
2435764	Primidone	92.2	88.8	P/P	40 - 150
2435764	Pyraclostrobin	98.2	97.5	P/P	40 - 150
2435764	Silvex	110	105	P/P	40 - 150
2435764	Thiamethoxam	74.7	77.0	P/P	40 - 150
2435764	Tolfenpyrad	72.6	70.0	P/P	30 - 150
2435764	Triclopyr	122	117	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P435051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435986	Fluoride	99.1	100	P/P	94 - 106

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P434861

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435986	Color (true)	6.11	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434874

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435986	Turbidity	2.75	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434907

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435812	Calcium	0.114	Spike	P	0 - 20
2435812	Iron	0.00180	Spike	P	0 - 20
2435812	Magnesium	0.109	Spike	P	0 - 20
2435812	Potassium	0.0983	Spike	P	0 - 20
2435812	Sodium	1.14	Spike	P	0 - 20
2435812	Strontium	0.284	Spike	P	0 - 20
2435812	Tin	0.783	Spike	P	0 - 20
2435812	Titanium	1.47	Spike	P	0 - 20
2435812	Vanadium	0.401	Spike	P	0 - 20
2435812	Zinc	0.496	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434907

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435812	Aluminum	1.94	Spike	P	0 - 20
2435812	Antimony	0.924	Spike	P	0 - 20
2435812	Arsenic	0.741	Spike	P	0 - 20
2435812	Barium	0.0813	Spike	P	0 - 20
2435812	Beryllium	0.578	Spike	P	0 - 20
2435812	Boron	0.855	Spike	P	0 - 20
2435812	Cadmium	0.989	Spike	P	0 - 20
2435812	Chromium	0.0550	Spike	P	0 - 20
2435812	Cobalt	0.286	Spike	P	0 - 20
2435812	Copper	0.338	Spike	P	0 - 20
2435812	Lead	0.635	Spike	P	0 - 20
2435812	Manganese	0.857	Spike	P	0 - 20
2435812	Molybdenum	0.321	Spike	P	0 - 20
2435812	Nickel	0.343	Spike	P	0 - 20
2435812	Selenium	1.50	Spike	P	0 - 20
2435812	Silver	0.200	Spike	P	0 - 20
2435812	Thallium	0.842	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435110

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435986	Chloride	0.0131	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P435114

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435986	Sulfate	0.0440	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434996

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435987	Ammonia-N	1.36	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435447

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436026	Kjeldahl Nitrogen	5.35	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435252

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435311	NO2NO3-N	1.08	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435253

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436211	NO2NO3-N	1.46	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435001

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435987	Total-P	0.114	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P434858

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435841	O-Phosphate-P	1.27	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P434753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436113	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	24.7	Spike	P	0 - 37
2436113	Acetochlor	1.82	Spike	P	0 - 28
2436113	Alachlor	12.9	Spike	P	0 - 30
2436113	Ametryn	5.07	Spike	P	0 - 32
2436113	Atrazine	2.39	Spike	P	0 - 41
2436113	Atrazine Desethyl	3.45	Spike	P	0 - 36
2436113	Avobenzone	8.57	Spike	P	0 - 36
2436113	Azinphos Methyl	0.395	Spike	P	0 - 75
2436113	Azoxystrobin	0.919	Spike	P	0 - 39
2436113	Bromacil	0.926	Spike	P	0 - 33
2436113	Butylate	13.3	Spike	P	0 - 44
2436113	Caffeine	4.82	Spike	P	0 - 74
2436113	Carbophenothion	6.08	Spike	P	0 - 25
2436113	Carfentrazone Ethyl	15.7	Spike	P	0 - 27
2436113	Chlorfenapyr	0.681	Spike	P	0 - 24
2436113	Chlorpyrifos Ethyl	2.13	Spike	P	0 - 26
2436113	Chlorpyrifos Methyl	1.72	Spike	P	0 - 26
2436113	Coumaphos	1.91	Spike	P	0 - 28
2436113	Cyanazine	5.53	Spike	P	0 - 48
2436113	Cyprodinil	5.81	Spike	P	0 - 29
2436113	Dechlorane 602	31.3	Spike	F	0 - 30
2436113	Dechlorane 603	6.76	Spike	P	0 - 30
2436113	Dechlorane Plus	22.0	Spike	P	0 - 30
2436113	Demeton	10.9	Spike	P	0 - 33
2436113	Diazinon	5.93	Spike	P	0 - 29
2436113	Difenoconazole	12.8	Spike	P	0 - 34
2436113	Dimethenamid	1.05	Spike	P	0 - 39
2436113	Dimethomorph	18.0	Spike	P	0 - 51
2436113	Disulfoton	9.88	Spike	P	0 - 30
2436113	Dithiopyr	10.2	Spike	P	0 - 26
2436113	EPTC	20.7	Spike	P	0 - 43
2436113	Ethion	20.2	Spike	P	0 - 79
2436113	Ethoprop	6.80	Spike	P	0 - 29
2436113	Etridiazole	18.8	Spike	P	0 - 33
2436113	Fenamiphos	16.5	Spike	P	0 - 40
2436113	Fenbuconazole	5.75	Spike	P	0 - 74
2436113	Fipronil	1.52	Spike	P	0 - 29
2436113	Fipronil Desulfinyl	1.62	Spike	P	0 - 32
2436113	Fipronil Sulfide	0.622	Spike	P	0 - 30
2436113	Fipronil Sulfone	0.145	Spike	P	0 - 33
2436113	Fluazifop-P-butyl	8.89	Spike	P	0 - 38
2436113	Fludioxonil	0.586	Spike	P	0 - 29
2436113	Flumioxazin	11.1	Spike	P	0 - 51
2436113	Flutolanil	4.83	Spike	P	0 - 25
2436113	Fluxapyroxad	9.09	Spike	P	0 - 45
2436113	Fonofos	0.0527	Spike	P	0 - 27
2436113	Hexabromobenzene	32.4	Spike	F	0 - 30
2436113	Hexazinone	0.673	Spike	P	0 - 30
2436113	Imazalil	6.08	Spike	P	0 - 100
2436113	Iprodione	2.01	Spike	P	0 - 33
2436113	Loratadine	7.04	Spike	P	0 - 56

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P434753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436113	Malathion	3.22	Spike	P	0 - 37
2436113	Metalaxyl	1.61	Spike	P	0 - 40
2436113	Metolachlor	6.16	Spike	P	0 - 29
2436113	Metribuzin	7.52	Spike	P	0 - 45
2436113	Mevinphos	0.647	Spike	P	0 - 29
2436113	Molinate	11.9	Spike	P	0 - 33
2436113	Myclobutanil	1.63	Spike	P	0 - 26
2436113	Naled	1.96	Spike	P	0 - 37
2436113	Napropamide	1.19	Spike	P	0 - 44
2436113	Norflurazon	9.95	Spike	P	0 - 30
2436113	Octinoxate	2.35	Spike	P	0 - 45
2436113	Oxadiazon	1.32	Spike	P	0 - 28
2436113	Oxybenzone	0.578	Spike	P	0 - 46
2436113	Oxyfluorfen	0.508	Spike	P	0 - 28
2436113	Parathion Ethyl	6.55	Spike	P	0 - 31
2436113	Parathion Methyl	6.60	Spike	P	0 - 29
2436113	PBB-153	8.85	Spike	P	0 - 30
2436113	PBDE-47	18.5	Spike	P	0 - 36
2436113	PBDE-99	33.2	Spike	P	0 - 40
2436113	Pendimethalin	3.92	Spike	P	0 - 33
2436113	Pentabromotoluene	1.85	Spike	P	0 - 30
2436113	Phenytol	15.7	Spike	P	0 - 100
2436113	Phorate	14.1	Spike	P	0 - 36
2436113	Prodiamine	10.7	Spike	P	0 - 71
2436113	Prometon	4.93	Spike	P	0 - 36
2436113	Prometryn	3.93	Spike	P	0 - 28
2436113	Pronamide	4.36	Spike	P	0 - 24
2436113	Propanil	0.598	Spike	P	0 - 28
2436113	Propargite	9.21	Spike	P	0 - 43
2436113	Propiconazole	12.1	Spike	P	0 - 33
2436113	Pyraflufen Ethyl	3.59	Spike	P	0 - 29
2436113	Pyridaben	3.35	Spike	P	0 - 30
2436113	Pyriproxyfen	7.98	Spike	P	0 - 79
2436113	Simazine	2.56	Spike	P	0 - 29
2436113	Stirophos	2.52	Spike	P	0 - 61
2436113	Sulfentrazone	75.1	Spike	F	0 - 33
2436113	Tebuconazole	9.84	Spike	P	0 - 69
2436113	Terbufos	9.19	Spike	P	0 - 29
2436113	Terbuthylazine	3.15	Spike	P	0 - 32
2436113	Tetradecachloro-m-terphenyl	1.19	Spike	P	0 - 30
2436113	Thiobencarb	4.46	Spike	P	0 - 26
2436113	Tri-o-cresyl Phosphate	0.764	Spike	P	0 - 33
2436113	Triadimefon	8.39	Spike	P	0 - 28
2436113	Tris(1-chloro-2-propyl) phosphate (TCPP)	2.82	Spike	P	0 - 30
2436113	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	1.02	Spike	P	0 - 30
2436113	Tris(2-chloroethyl) phosphate (TCEP)	1.15	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P434773

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435764	Acesulfame K	2.10	Spike	P	0 - 30
2435764	AMPA	1.75	Spike	P	0 - 30
2435764	Endothall	0.524	Spike	P	0 - 30
2435764	Glufosinate	6.02	Spike	P	0 - 30
2435764	Glyphosate	9.12	Spike	P	0 - 30
2435764	Sucralose	3.11	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P434924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435764	2,4-D	6.19	Spike	P	0 - 30
2435764	2,4,5-T	1.74	Spike	P	0 - 30
2435764	Acetaminophen	0.272	Spike	P	0 - 30
2435764	Acetamiprid	2.54	Spike	P	0 - 30
2435764	Afidopyropen	6.73	Spike	P	0 - 30
2435764	Bentazon	1.65	Spike	P	0 - 30
2435764	Benzovindiflupyr	2.30	Spike	P	0 - 30
2435764	Carbamazepine	1.02	Spike	P	0 - 30
2435764	Clothianidin	0.161	Spike	P	0 - 30
2435764	Dinotefuran	1.49	Spike	P	0 - 30
2435764	Diuron	0.295	Spike	P	0 - 30
2435764	Fenuron	1.58	Spike	P	0 - 30
2435764	Fluridone	5.92	Spike	P	0 - 30
2435764	Hydrocodone	2.10	Spike	P	0 - 30
2435764	Ibuprofen	3.17	Spike	P	0 - 30
2435764	Imazapyr	0.580	Spike	P	0 - 30
2435764	Imidacloprid	0.332	Spike	P	0 - 30
2435764	Linuron	0.444	Spike	P	0 - 30
2435764	Mandestrobin	5.32	Spike	P	0 - 30
2435764	MCPP	3.92	Spike	P	0 - 30
2435764	Naproxen	13.2	Spike	P	0 - 30
2435764	Primidone	3.70	Spike	P	0 - 30
2435764	Pyraclostrobin	0.746	Spike	P	0 - 30
2435764	Silvex	4.77	Spike	P	0 - 30
2435764	Thiamethoxam	3.09	Spike	P	0 - 30
2435764	Tolfenpyrad	3.60	Spike	P	0 - 30
2435764	Triclopyr	3.85	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P435268

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435986	Total Alkalinity	1.56	Sample	P	0 - 3.9

Quality Assurance Report Precision

Reference Method: SM 2540 C-2015
Batch ID: P435297

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435580	TDS	2.50	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P435051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435986	Fluoride	1.00	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P435498

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435840	Organic Carbon	0.287	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2436004
Field Sample ID: G3SD0242

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	103	P	30 - 160
EPA 8321B	Acetaminophen-d4	64.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	57.0	P	30 - 160
EPA 8321B	Diuron-d6	48.2	P	30 - 160
EPA 8321B	Endothall-d6	110	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	56.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.8	P	30 - 160
EPA 8321B	Primidone-d5	69.2	P	30 - 160
EPA 8321B	Sucralose-d6	96.1	P	30 - 160

Lab Sample ID: 2436010
Field Sample ID: G3SD0242

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	75.2	P	20 - 200
EPA 8270E	Simazine-d10	102	P	62 - 142
EPA 8270E	Terbufos-d10	78.7	P	58 - 132
EPA 8270E	Terphenyl-d14	57.9	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A121475

Included Lab Sample IDs: 2435986, 2435989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.0	99.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A121477

Included Lab Sample IDs: 2435988, 2435991

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	97.0	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A121482

Included Lab Sample IDs: 2435986, 2435989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	98.5	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A121513

Included Lab Sample IDs: 2436004

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	139	129	P/P	60 - 160
Sucralose	106	91.2	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A121515

Included Lab Sample IDs: 2436004

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	80.9	86.1	P/P	60 - 160
Endothall	96.2	103	P/P	60 - 160
Glufosinate	102	105	P/P	60 - 160
Glyphosate	89.1	96.8	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A121518

Included Lab Sample IDs: 2436004

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	88.2	95.5	P/P	50 - 150
2,4,5-T	88.6	82.6	P/P	50 - 150
Acetaminophen	89.4	89.6	P/P	60 - 160
Acetamiprid	113	114	P/P	50 - 150
Afidopyropen	96.6	119	P/P	50 - 150
Bentazon	121	113	P/P	50 - 160
Benzovindiflupyr	106	105	P/P	50 - 150
Carbamazepine	113	114	P/P	60 - 150
Clothianidin	103	105	P/P	60 - 150
Dinotefuran	117	116	P/P	50 - 150
Diuron	114	112	P/P	60 - 160
Fenuron	110	109	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A121518
Included Lab Sample IDs: 2436004

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluridone	102	101	P/P	60 - 160
Hydrocodone	116	118	P/P	60 - 150
Ibuprofen	110	77.3	P/P	50 - 160
Imazapyr	88.8	90.2	P/P	50 - 150
Imidacloprid	99.5	101	P/P	60 - 150
Linuron	121	104	P/P	60 - 150
Mandestrobin	122	114	P/P	50 - 150
MCPP	90.0	89.0	P/P	50 - 150
Naproxen	87.8	74.5	P/P	50 - 160
Primidone	103	105	P/P	60 - 150
Pyraclostrobin	111	111	P/P	60 - 150
Silvex	97.0	83.1	P/P	50 - 150
Thiamethoxam	113	114	P/P	50 - 150
Tolfenpyrad	99.9	103	P/P	60 - 150
Triclopyr	102	89.9	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A121535
Included Lab Sample IDs: 2435987, 2435990

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.0	98.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A121551
Included Lab Sample IDs: 2436009

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	96.2	94.8	P/P	90 - 110
Antimony	93.6	92.9	P/P	90 - 110
Arsenic	96.4	96.1	P/P	90 - 110
Barium	96.3	96.1	P/P	90 - 110
Boron	98.4	96.1	P/P	90 - 110
Cadmium	100	98.9	P/P	90 - 110
Chromium	101	98.8	P/P	90 - 110
Cobalt	96.3	95.9	P/P	90 - 110
Copper	94.7	94.3	P/P	90 - 110
Lead	92.8	91.5	P/P	90 - 110
Manganese	99.8	99.4	P/P	90 - 110
Molybdenum	96.3	95.7	P/P	90 - 110
Nickel	95.5	95.3	P/P	90 - 110
Selenium	97.7	98.3	P/P	90 - 110
Silver	99.1	97.5	P/P	90 - 110
Thallium	98.1	96.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A121553
Included Lab Sample IDs: 2435986, 2435989

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

Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A121553

Included Lab Sample IDs: 2435986, 2435989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	104	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A121555

Included Lab Sample IDs: 2436009

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	106	94.1	P/P	90 - 110
Iron	109	98.3	P/P	90 - 110
Magnesium	108	97.8	P/P	90 - 110
Potassium	103	94.9	P/P	90 - 110
Sodium	104	94.0	P/P	90 - 110
Strontium	99.4	95.0	P/P	90 - 110
Tin	96.3	93.1	P/P	90 - 110
Titanium	96.9	92.9	P/P	90 - 110
Vanadium	97.1	93.0	P/P	90 - 110
Zinc	97.8	93.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A121585

Included Lab Sample IDs: 2435986, 2435989

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A121586

Included Lab Sample IDs: 2436009

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121626

Included Lab Sample IDs: 2435987, 2435990

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A121654

Included Lab Sample IDs: 2435987, 2435990

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	96.0	95.0	P/P	90 - 110
NO2NO3-N	96.5	96.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A121658

Included Lab Sample IDs: 2435986, 2435989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.1	97.5	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A121716

Included Lab Sample IDs: 2436010

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.8		P	80 - 120
Avobenzone	94.2		P	80 - 120
Dechlorane 602	99.2		P	80 - 120
Dechlorane 603	102		P	80 - 120
Dechlorane Plus	105		P	80 - 120
Hexabromobenzene	92.7		P	80 - 120
Octinoxate	95.9		P	80 - 120
Oxybenzone	102		P	80 - 120
PBB-153	95.3		P	80 - 120
PBDE-47	95.2		P	80 - 120
PBDE-99	96.1		P	80 - 120
Pentabromotoluene	102		P	80 - 120
Tetradecachloro-m-terphenyl	96.1		P	80 - 120
Tri-o-cresyl Phosphate	102		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	93.3		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	101		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	91.4		P	80 - 120

Reference Method: EPA 8270E

Run ID: A121720

Included Lab Sample IDs: 2436010

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phenytoin	95.0		P	80 - 120
Sulfentrazone	119		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A121761

Included Lab Sample IDs: 2435987, 2435990

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.9	99.6	P/P	90 - 110
Organic Carbon	97.5	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A121776

Included Lab Sample IDs: 2435987, 2435990

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	106	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A121927
 Included Lab Sample IDs: 2436010

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	106		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	99.1		P	80 - 120
Atrazine	103		P	80 - 120
Atrazine Desethyl	112		P	80 - 120
Azinphos Methyl	94.1		P	80 - 120
Azoxystrobin	100		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	104		P	80 - 120
Caffeine	95.6		P	80 - 120
Carbophenothion	103		P	80 - 120
Carfentrazone Ethyl	97.1		P	80 - 120
Chlorfenapyr	107		P	80 - 120
Chlorpyrifos Ethyl	97.0		P	80 - 120
Chlorpyrifos Methyl	108		P	80 - 120
Coumaphos	92.9		P	80 - 120
Cyanazine	114		P	80 - 120
Cyprodinil	97.6		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	127*		F	80 - 120
Difenoconazole	92.2		P	80 - 120
Dimethenamid	111		P	80 - 120
Dimethomorph	110		P	80 - 120
Disulfoton	108		P	80 - 120
Dithiopyr	108		P	80 - 120
EPTC	109		P	80 - 120
Ethion	114		P	80 - 120
Ethoprop	97.4		P	80 - 120
Etridiazole	107		P	80 - 120
Fenamiphos	93.4		P	80 - 120
Fenbuconazole	106		P	80 - 120
Fipronil	90.9		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	89.4		P	80 - 120
Fipronil Sulfone	95.7		P	80 - 120
Fluazifop-P-butyl	98.6		P	80 - 120
Fludioxonil	105		P	80 - 120
Flumioxazin	93.5		P	80 - 120
Flutolanil	89.0		P	80 - 120
Fluxapyroxad	95.7		P	80 - 120
Fonofos	99.9		P	80 - 120
Hexazinone	94.3		P	80 - 120
Imazalil	91.4		P	80 - 120
Iprodione	90.7		P	80 - 120
Loratadine	102		P	80 - 120
Malathion	97.4		P	80 - 120
Metalaxyl	111		P	80 - 120
Metolachlor	104		P	80 - 120
Metribuzin	91.4		P	80 - 120
Mevinphos	103		P	80 - 120
Molinate	96.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121927
Included Lab Sample IDs: 2436010

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	97.7		P	80 - 120
Naled	116		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	103		P	80 - 120
Oxadiazon	96.7		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	99.3		P	80 - 120
Pendimethalin	97.9		P	80 - 120
Phorate	104		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	114		P	80 - 120
Prometryn	107		P	80 - 120
Pronamide	107		P	80 - 120
Propanil	110		P	80 - 120
Propargite	93.9		P	80 - 120
Propiconazole	93.0		P	80 - 120
Pyraflufen Ethyl	104		P	80 - 120
Pyridaben	107		P	80 - 120
Pyriproxyfen	97.0		P	80 - 120
Simazine	100		P	80 - 120
Stirophos	89.6		P	80 - 120
Tebuconazole	90.3		P	80 - 120
Terbufos	102		P	80 - 120
Terbuthylazine	106		P	80 - 120
Thiobencarb	106		P	80 - 120
Triadimefon	109		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			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	99.6					6.11	
EPA 180.1 Rev. 2.0	Turbidity	103					2.75	
EPA 200.7 Rev. 4.4	Calcium	101	98.9	98.7	101			0.114
	Iron	103	100	100	106			0.0018
	Magnesium	104	100	100	105			0.109
	Potassium	101	97.3	97.2	100			0.0983
	Sodium	103	100	98.1	101			1.14
	Strontium	100	98.3	98.0	102			0.284
	Tin	97.6	98.1	98.9	103			0.783
	Titanium	96.8	92.2	90.6	100			1.47
	Vanadium	98.9	99.2	98.8	104			0.401
	Zinc	99.4	98.7	98.2	106			0.496
EPA 200.8 Rev. 5.4	Aluminum	98.2	101	98.6	96.4			1.94
	Antimony	96.8	94.2	95.1	96.9			0.924
	Arsenic	101	100	101	98.3			0.741
	Barium	101	102	102	98.6			0.0813
	Beryllium	96.4	97.5	98.1	98.7			0.578
	Boron	101	102	101	102			0.855
	Cadmium	100	99.9	98.9	101			0.989
	Chromium	98.1	97.2	97.2	98.2			0.0550
	Cobalt	100	101	101	96.3			0.286
	Copper	99.6	101	102	97.0			0.338
	Lead	94.1	94.6	95.2	94.2			0.635
	Manganese	98.0	97.4	96.0	98.0			0.857
	Molybdenum	97.6	99.2	98.9	98.8			0.321
	Nickel	100	101	102	95.0			0.343
	Selenium	100	97.9	99.4	96.7			1.50
	Silver	110	109	109	107			0.200
	Thallium	102	103	104	102			0.842
EPA 300.0 Rev. 2.1	Chloride	102	101	102			0.0131	
	Sulfate	101	99.3	98.4			0.0440	
EPA 350.1 Rev. 2.0	Ammonia-N	97.0	96.8	98.6				1.36
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	108	102				5.35
EPA 353.2 Rev. 2.0	NO2NO3-N	96.5	92.0	93.0				1.08
	NO2NO3-N	96.5	102					1.46
EPA 365.1 Rev. 2.0	Total-P	102	109	109				0.114
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	96.6	97.9				1.27
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	74.7	109	85.3				24.7
	Acetochlor	86.5	87.3	88.9				1.82
	Alachlor	62.6	77.6	88.2				12.9
	Ametryn	98.9	103	108				5.07
	Atrazine	79.2	91.4	95.0				2.39
	Atrazine Desethyl	80.2	77.5	80.2				3.45
	Avobenzone	113	108	117				8.57
	Azinphos Methyl	120	155	154				0.395
	Azoxystrobin	70.9	86.8	86.0				0.919
	Bromacil	80.3	98.4	97.4				0.926
	Butylate	41.3	57.2	65.3				13.3
	Caffeine	112	110	104				4.82
	Carbophenothion	84.8	89.1	83.9				6.08
	Carfentrazone Ethyl	98.3	90.5	77.3				15.7
	Chlorfenapyr	96.2	107	108				0.681

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Chlorpyrifos Ethyl	75.5	112	110		2.13
	Chlorpyrifos Methyl	81.2	135	133		1.72
	Coumaphos	129	194	190		1.91
	Cyanazine	96.9	81.8	86.5		5.53
	Cyprodinil	72.0	63.8	67.6		5.81
	Dechlorane 602	77.4	82.2	60.0		31.3
	Dechlorane 603	97.9	119	111		6.76
	Dechlorane Plus	96.9	119	95.2		22.0
	Demeton	49.6	95.9	107		10.9
	Diazinon	82.8	75.3	80.0		5.93
	Difenoconazole	85.4	61.7	70.2		12.8
	Dimethenamid	78.8	81.5	80.6		1.05
	Dimethomorph	100	70.0	83.8		18.0
	Disulfoton	88.8	93.8	104		9.88
	Dithiopyr	73.2	88.1	79.6		10.2
	EPTC	39.5	46.5	57.2		20.7
	Ethion	105	74.2	60.6		20.2
	Ethoprop	71.2	91.4	85.4		6.80
	Etridiazole	47.2	69.2	83.5		18.8
	Fenamiphos	81.0	95.7	81.1		16.5
	Fenbuconazole	58.9	136	129		5.75
	Fipronil	81.5	98.4	96.9		1.52
	Fipronil Desulfinyl	77.3	97.4	95.7		1.62
	Fipronil Sulfide	84.7	86.0	85.4		0.622
	Fipronil Sulfone	85.9	104	103		0.145
	Fluazifop-P-butyl	79.2	92.1	101		8.89
	Fludioxonil	62.6	111	112		0.586
	Flumioxazin	99.0	69.7	77.8		11.1
	Flutolanil	47.6	99.1	94.4		4.83
	Fluxapyroxad	89.9	145	131		9.09
	Fonofos	63.5	97.8	97.9		0.0527
	Hexabromobenzene	52.9	93.2	67.2		32.4
	Hexazinone	72.7	84.4	85.1		0.673
	Imazalil	80.5	102	108		6.08
	Iprodione	56.5	186	183		2.01
	Loratadine	117	185	198		7.04
	Malathion	105	114	118		3.22
	Metalaxyl	86.9	85.3	84.0		1.61
	Metolachlor	85.9	74.1	85.4		6.16
	Metribuzin	71.3	78.7	86.9		7.52
	Mevinphos	71.6	109	109		0.647
	Molinate	39.5	62.9	70.9		11.9
	Myclobutanil	56.0	65.6	66.7		1.63
	Naled	24.7	48.4	49.4		1.96
	Napropamide	67.1	89.5	88.4		1.19
	Norflurazon	83.1	85.4	77.3		9.95
	Octinoxate	85.7	98.1	100		2.35
	Oxadiazon	67.0	94.3	92.0		1.32
	Oxybenzone	95.3	107	108		0.578
	Oxyfluorfen	84.2	78.5	78.0		0.508
	Parathion Ethyl	77.6	84.7	79.3		6.55
	Parathion Methyl	104	171	183		6.60
	PBB-153	76.5	108	98.4		8.85
	PBDE-47	80.2	84.9	70.5		18.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	PBDE-99	70.6	86.4	61.8		33.2
	Pendimethalin	99.7	64.9	67.5		3.92
	Pentabromotoluene	70.6	89.1	87.5		1.85
	Phenytoln	67.8	41.6	35.6		15.7
	Phorate	78.3	76.7	66.5		14.1
	Prodiamine	31.6	81.1	90.3		10.7
	Prometon	60.5	64.0	71.3		4.93
	Prometryn	88.9	73.7	76.6		3.93
	Pronamide	88.7	90.2	94.3		4.36
	Propanil	85.5	91.2	91.8		0.598
	Propargite	86.1	120	110		9.21
	Propiconazole	56.9	126	110		12.1
	Pyraflufen Ethyl	109	84.4	81.4		3.59
	Pyridaben	110	103	107		3.35
	Pyriproxyfen	97.5	82.8	76.4		7.98
	Simazine	86.2	88.9	94.0		2.56
	Stirophos	83.6	46.8	45.6		2.52
	Sulfentrazone	75.2	173	78.4		75.1
	Tebuconazole	81.7	116	102		9.84
	Terbufos	85.1	94.6	104		9.19
	Terbutylazine	70.6	88.6	91.4		3.15
	Tetradecachloro-m-terphenyl	62.6	95.7	96.9		1.19
	Thiobencarb	87.7	80.8	84.4		4.46
	Tri-o-cresyl Phosphate	95.0	108	109		0.764
	Triadimefon	81.8	69.5	75.6		8.39
	Tris(1-chloro-2-propyl) phosphate (TCPP)	87.0	94.5	97.6		2.82
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	90.9	98.3	99.4		1.02
	Tris(2-chloroethyl) phosphate (TCEP)	83.6	87.3	88.3		1.15
EPA 8321B	2,4-D	89.0	105	112		6.19
	2,4,5-T	77.3	106	108		1.74
	Acesulfame K	137	147	144		2.10
	Acetaminophen	70.9	84.0	83.8		0.272
	Acetamiprid	84.3	61.2	62.7		2.54
	Afidopyropen	73.1	73.7	68.9		6.73
	AMPA	83.8	68.0	66.8		1.75
	Bentazon	91.6	57.6	56.6		1.65
	Benzovindiflupyr	82.8	113	110		2.30
	Carbamazepine	89.8	74.8	75.5		1.02
	Clothianidin	89.3	90.5	90.6		0.161
	Dinotefuran	97.3	61.3	60.4		1.49
	Diuron	87.2	64.1	64.3		0.295
	Endothall	100	146	145		0.524
	Fenuron	90.6	48.7	49.4		1.58
	Fluridone	80.5	70.6	66.5		5.92
	Glufosinate	99.2	85.3	90.6		6.02
	Glyphosate	98.6	80.8	88.5		9.12
	Hydrocodone	94.6	59.6	58.3		2.10
	Ibuprofen	77.2	74.2	76.6		3.17
	Imazapyr	74.1	76.0	76.5		0.580
	Imidacloprid	83.5	116	116		0.332
	Linuron	77.8	74.2	73.9		0.444

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Mandestrobin	97.2	107	101		5.32
	MCP	90.2	117	122		3.92
	Naproxen	64.1	82.6	94.2		13.2
	Primidone	87.1	92.2	88.8		3.70
	Pyraclostrobin	78.3	98.2	97.5		0.746
	Silvex	76.5	110	105		4.77
	Sucralose	94.9	101	97.9		3.11
	Thiamethoxam	91.0	74.7	77.0		3.09
	Tolfenpyrad	42.8	72.6	70.0		3.60
	Triclopyr	82.3	122	117		3.85
SM 2320 B-2011	Total Alkalinity	98.1			1.56	
SM 2540 C-2015	TDS	99.6			2.50	
SM 2540 D-2015	TSS	95.3				
SM 4500-F- C-2011	Fluoride	99.3	99.1	100		1.00
SM 5310 B-2011	Organic Carbon	96.3				0.287

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2435986, 2435989
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2435986, 2435989
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2436009
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2436009
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2435986, 2435989
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2435986, 2435989
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2435987, 2435990
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2435987, 2435990
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2435987, 2435990
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2435987, 2435990
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2435988, 2435991
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2436010
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2436010
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2436004
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2435986, 2435989
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2436009
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2435986, 2435989
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2435986, 2435989
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2435986, 2435989
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2435987, 2435990

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	09/12/2023			09/12/2023 14:20	Chandler E Cox	2435986
	09/12/2023			09/12/2023 14:21	Chandler E Cox	2435989
EPA 180.1 Rev. 2.0	09/12/2023			09/12/2023 15:40	Khloe J Berg	2435986
	09/12/2023			09/12/2023 15:44	Khloe J Berg	2435989
EPA 200.7 Rev. 4.4	09/12/2023	09/13/2023 12:15	George D Taylor	09/14/2023 20:22	McKinley C Carter	2436009
EPA 200.8 Rev. 5.4	09/12/2023	09/13/2023 12:15	George D Taylor	09/14/2023 21:29	Emily M Philpot	2436009
EPA 300.0 Rev. 2.1	09/12/2023	09/13/2023 12:15	George D Taylor	09/15/2023 15:43	Emily M Philpot	2436009
	09/12/2023			09/16/2023 00:20	James L Waggeberby	2435986
EPA 350.1 Rev. 2.0	09/12/2023			09/16/2023 02:36	James L Waggeberby	2435989
	09/12/2023			09/14/2023 13:12	Khloe J Berg	2435987
EPA 351.2 Rev. 2.0	09/12/2023			09/14/2023 13:16	Khloe J Berg	2435990
	09/12/2023	09/25/2023 15:30	Simonne.V. Calhoun	09/26/2023 16:44	Samantha L Bates	2435987
EPA 353.2 Rev. 2.0	09/12/2023	09/25/2023 15:30	Simonne.V. Calhoun	09/26/2023 16:46	Samantha L Bates	2435990
	09/12/2023			09/18/2023 15:52	Anna M. Plaviak	2435987
EPA 365.1 Rev. 2.0	09/12/2023			09/18/2023 16:06	Anna M. Plaviak	2435990
	09/12/2023	09/14/2023 14:42	Adam P Silver	09/19/2023 12:56	James L Waggeberby	2435987
EPA 365.1 Rev. 2.0 dissolved	09/12/2023	09/14/2023 14:42	Adam P Silver	09/19/2023 12:57	James L Waggeberby	2435990
	09/12/2023			09/12/2023 14:10	Elise M. Gillis	2435988
EPA 8270E	09/12/2023			09/12/2023 14:11	Elise M. Gillis	2435991
	09/12/2023	09/13/2023 08:30	Rasheda Ghaffari	09/15/2023 22:20	Julie Wi	2436010
EPA 8321B	09/12/2023	09/13/2023 08:30	Rasheda Ghaffari	09/20/2023 00:10	Arthur Maknenko	2436010
	09/12/2023	09/13/2023 08:30	Rasheda Ghaffari	09/28/2023 23:00	Julie Wi	2436010
SM 2320 B-2011	09/12/2023	09/13/2023 08:00	Hana Lee	09/13/2023 11:59	Tae K Lee	2436004
	09/12/2023	09/13/2023 08:00	Hana Lee	09/13/2023 21:38	Tae K Lee	2436004
SM 2340 B-2011	09/12/2023	09/13/2023 14:00	Hoor Shaik	09/13/2023 22:43	Juyoung Kim	2436004
	09/12/2023			09/20/2023 13:21	Adam P Silver	2435986
SM 2540 C-2015	09/12/2023			09/20/2023 14:32	Adam P Silver	2435989
SM 2540 D-2015	09/12/2023			09/14/2023 20:22	McKinley C Carter	2436009
SM 4500-F- C-2011	09/12/2023			09/13/2023 15:46	Yijie Li	2435986, 2435989
	09/12/2023			09/13/2023 15:46	Yijie Li	2435986, 2435989
SM 5310 B-2011	09/12/2023			09/14/2023 06:10	Chandler E Cox	2435986
	09/12/2023			09/14/2023 08:44	Chandler E Cox	2435989
	09/12/2023			09/25/2023 16:31	Elise M. Gillis	2435987
	09/12/2023			09/25/2023 21:53	Elise M. Gillis	2435990