

Chemical Analysis Report

NW-DIST-2023-04-27-02

Florida DEP Laboratory
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DOH Accreditation E31780

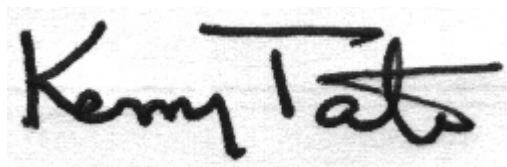
Event Description: **SCI**
Request ID: **RQ-2023-04-24-24**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 18-MAY-2023 13:29

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: Wilder Branch downstream of road crossing

Collection Date/Time: 04/26/2023 12:20

Field ID: G4NW0038

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2403647	DEP SOP: NU-094-1	Color (true)	16	A	PCU	P429093	
	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P429115	
	EPA 300.0 Rev. 2.1	Chloride	6.1		mg Cl/L	P429485	
		Sulfate	0.83		mg SO4/L	P429488	
	SM 2320 B-2011	Total Alkalinity	3.5		mg CaCO3/L	P429580	
	SM 2540 C-2015	TDS	20	I	mg/L	P429710	
	SM 2540 D-2015	TSS	6	I	mg/L	P429741	
2403648	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P429285	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P429353	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.14	I	mg N/L	P429168	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.63		mg N/L	P429408	
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P429233	
2403649	SM 5310 B-2011	Organic Carbon	1.3		mg C/L	P429306	
2403649	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P429102	
2403659	EPA 8321B	2,4-D	0.0020	U	ug/L	P429258	
		Acesulfame K	0.10	U	ug/L	P428982	
		2,4,5-T	0.0040	U	ug/L	P429258	
		AMPA	0.10	U	ug/L	P428982	
		Acetaminophen	0.0080	U	ug/L	P429258	
		Acetamiprid	0.0020	U	ug/L	P429258	
		Endothall	0.25	U	ug/L	P428982	
		Glufosinate	0.10	U	ug/L	P428982	
		Glyphosate	0.10	U	ug/L	P428982	
		Afidopyropen	0.0020	U	ug/L	P429258	
		Bentazon	8.0E-04	U	ug/L	P429258	
		Sucralose	0.53		ug/L	P428982	
		Benzovindiflupyr	0.0020	U	ug/L	P429258	
		Carbamazepine	8.5E-04	I	ug/L	P429258	
		Clothianidin	0.0020	U	ug/L	P429258	
		Dinotefuran	0.0020	U	ug/L	P429258	
		Diuron	0.0020	U	ug/L	P429258	
		Fenuron	0.032	U	ug/L	P429258	
		Fluridone	8.0E-04	U	ug/L	P429258	
		Imazapyr	0.0040	U	ug/L	P429258	
		Hydrocodone	0.0020	U	ug/L	P429258	
		Ibuprofen	0.080	U	ug/L	P429258	
		Imidacloprid	0.0049	I	ug/L	P429258	
		Linuron	0.0040	U	ug/L	P429258	
		Mandestrobin	0.0020	U	ug/L	P429258	
		MCPP	0.0020	U	ug/L	P429258	
		Naproxen	0.0080	U	ug/L	P429258	
		Primidone	0.0040	U	ug/L	P429258	
		Pyraclostrobin	0.0020	U	ug/L	P429258	

Field ID: G4NW0038

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2403659	EPA 8321B	Silvex	0.0040	U	ug/L	P429258	
		Thiamethoxam	0.0020	U	ug/L	P429258	
		Tolfenpyrad	0.0020	U	ug/L	P429258	
		Triclopyr	0.0040	U	ug/L	P429258	
2403660	EPA 200.7 Rev. 4.4	Calcium	1.47		mg/L	P429136	
		Iron	660		ug/L	P429136	
		Magnesium	1.21		mg/L	P429136	
		Potassium	0.61	I	mg/L	P429136	
		Sodium	2.8		mg/L	P429136	
		Strontium	11.5		ug/L	P429136	
		Tin	3.0	U	ug/L	P429136	
		Titanium	0.97	I	ug/L	P429136	
		Vanadium	2.0	U	ug/L	P429136	
		Zinc	5.0	U	ug/L	P429136	
	EPA 200.8 Rev. 5.4	Aluminum	76		ug/L	P429136	
		Antimony	0.050	U	ug/L	P429136	
		Arsenic	0.18	I	ug/L	P429136	
		Barium	33.4		ug/L	P429136	
		Beryllium	0.023	I	ug/L	P429136	
		Boron	11.3		ug/L	P429136	
		Cadmium	0.020	U	ug/L	P429136	
		Chromium	0.40	U	ug/L	P429136	
		Cobalt	0.197		ug/L	P429136	
		Copper	0.40	U	ug/L	P429136	
		Lead	0.20	U	ug/L	P429136	
		Manganese	19.6		ug/L	P429136	
		Molybdenum	0.15	U	ug/L	P429136	
		Nickel	0.50	U	ug/L	P429136	
		Selenium	0.20	U	ug/L	P429136	
		Silver	0.010	U	ug/L	P429136	
		Thallium	0.10	U	ug/L	P429136	
	SM 2340 B-2011	Hardness	8.7		mg/L	P429136	
2403661	EPA 8270E	Oxybenzone**	12	U	ng/L	P429161	
		Acetochlor	0.23	U	ng/L	P429161	
		Octinoxate**	94	V	ng/L	P429161	MS
		Alachlor	0.46	U	ng/L	P429161	
		Avobenzone**	120	U	ng/L	P429161	
		Ametryn	1.3	U	ng/L	P429161	
		Atrazine	1.8		ng/L	P429161	
		PBDE-47**	4.6	U	ng/L	P429161	
		Atrazine Desethyl	3.7	I	ng/L	P429161	
		PBDE-99**	5.8	U	ng/L	P429161	
		Azinphos Methyl	3.5	U	ng/L	P429161	
		Tri-o-cresyl Phosphate**	6.9	U	ng/L	P429161	
		Azoxystrobin	0.46	U	ng/L	P429161	

Field ID: G4NW0038

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2403661	EPA 8270E	Bromacil	0.69	U	ng/L	P429161	
		2-Ethylhexyl	14	U	ng/L	P429161	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.23	U	ng/L	P429161	
		Dechlorane Plus**	35	U	ng/L	P429161	
		Caffeine**	8.7	U	ng/L	P429161	
		Dechlorane 602**	5.8	U	ng/L	P429161	
		Carbophenothion	0.58	U	ng/L	P429161	RPD
		Dechlorane 603**	4.6	U	ng/L	P429161	
		Carfentrazone Ethyl	0.17	U	ng/L	P429161	
		Hexabromobenzene**	6.9	U	ng/L	P429161	
		Chlorfenapyr	0.35	U	ng/L	P429161	
		PBB-153**	9.3	U	ng/L	P429161	
		Chlorpyrifos Ethyl	0.35	U	ng/L	P429161	
		Pentabromotoluene**	3.5	U	ng/L	P429161	
		Chlorpyrifos Methyl	0.12	U	ng/L	P429161	
		Tris(2-chloroethyl) phosphate (TCEP)**	81	U	ng/L	P429161	
		Coumaphos	1.2	U	ng/L	P429161	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	17	U	ng/L	P429161	MS
		Cyanazine	5.8	U	ng/L	P429161	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.9	U	ng/L	P429161	
		Cyprodinil	0.23	U	ng/L	P429161	
		Tetradecachloro-m-terphenyl**	8.7	U	ng/L	P429161	MS
		Demeton	4.1	U	ng/L	P429161	
		Diazinon	0.14	U	ng/L	P429161	
		Difenoconazole	0.69	U	ng/L	P429161	MS, RPD
		Dimethenamid	0.12	U	ng/L	P429161	MS
		Dimethomorph	0.35	U	ng/L	P429161	
		Disulfoton	0.69	U	ng/L	P429161	
		Dithiopyr	1.2	U	ng/L	P429161	MS
		EPTC	0.58	U	ng/L	P429161	
		Ethion	0.35	U	ng/L	P429161	
		Ethoprop	0.14	U	ng/L	P429161	
		Etridiazole	0.12	U	ng/L	P429161	
		Fenamiphos	0.52	U	ng/L	P429161	
		Fenbuconazole	0.58	U	ng/L	P429161	
		Fipronil	0.23	U	ng/L	P429161	MS, RPD
		Fipronil Desulfinyl**	0.12	U	ng/L	P429161	
		Fipronil Sulfide	0.12	U	ng/L	P429161	
		Fipronil Sulfone	0.41	I	ng/L	P429161	
		Fluazifop-P-butyl	0.12	U	ng/L	P429161	
		Fludioxonil	0.12	U	ng/L	P429161	
		Flumioxazin	3.5	U	ng/L	P429161	
		Flutolanil	0.12	U	ng/L	P429161	
		Fluxapyroxad	0.29	U	ng/L	P429161	MS, RPD

Field ID: G4NW0038

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2403661	EPA 8270E	Fonofos	0.17	U	ng/L	P429161	
		Hexazinone	0.58	U	ng/L	P429161	
		Imazalil	0.75	U	ng/L	P429161	
		Iprodione	0.58	U	ng/L	P429161	MS
		Loratadine**	0.35	U	ng/L	P429161	
		Malathion	0.41	U	ng/L	P429161	
		Metalaxyl	0.58	U	ng/L	P429161	
		Metolachlor	0.87	U	ng/L	P429161	
		Metribuzin	0.46	U	ng/L	P429161	
		Mevinphos	1.2	U	ng/L	P429161	
		Molinate	0.29	U	ng/L	P429161	
		Myclobutanil	0.41	U	ng/L	P429161	
		Naled	2.9	U	ng/L	P429161	
		Napropamide	0.81	U	ng/L	P429161	
		Norflurazon	1.2	U	ng/L	P429161	RPD
		Oxadiazon	0.41	UJ	ng/L	P429161	LCS
		Oxyfluorfen	0.23	U	ng/L	P429161	
		Parathion Ethyl	0.17	U	ng/L	P429161	
		Parathion Methyl	0.23	U	ng/L	P429161	
		Pendimethalin	0.87	U	ng/L	P429161	
		Phenytol**	6.1	U	ng/L	P429161	
		Phorate	0.29	U	ng/L	P429161	
		Prodiamine	0.23	U	ng/L	P429161	
		Prometon	3.5	U	ng/L	P429161	
		Prometryn	0.41	U	ng/L	P429161	MS
		Pronamide	0.12	U	ng/L	P429161	
		Propanil	0.12	U	ng/L	P429161	
		Propargite	0.93	U	ng/L	P429161	
		Propiconazole	0.69	U	ng/L	P429161	
		Pyraflufen Ethyl	0.35	U	ng/L	P429161	RPD
		Pyridaben	1.6	U	ng/L	P429161	RPD
		Pyriproxyfen	0.29	U	ng/L	P429161	
		Simazine	0.29	U	ng/L	P429161	
		Stirophos	0.46	U	ng/L	P429161	
		Sulfentrazone	1.6	U	ng/L	P429161	RPD
		Tebuconazole	1.6	U	ng/L	P429161	
		Terbufos	0.23	U	ng/L	P429161	
		Terbutylazine	0.23	U	ng/L	P429161	
		Thiobencarb	0.58	U	ng/L	P429161	
		Triadimefon	0.17	U	ng/L	P429161	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: V - Due to the presence of octinoxate in both the Method Blank and the sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P429093

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429115

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429136

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: P429136

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: P429485

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: P429488

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429353

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429168

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429408

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429233

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P429102

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

Reference Method: EPA 8270E
Batch ID: P429161

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: P429161

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	1.3	I	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: P429161

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: P429161

Component	Result	Code	Units
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	230		ng/L
Octinoxate	71		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: P429161

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: P428982

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: P429258

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
Afidopyopen	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: P429258

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: P429580

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

Reference Method: SM 2540 C-2015
Batch ID: P429710

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P429741

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P429285

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P429306

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: P429093

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.1		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429115

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	99.2		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429136

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	103		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	101		P	85 - 115
Sodium	99.6		P	85 - 115
Strontium	94.3		P	85 - 115
Tin	96.9		P	85 - 115
Titanium	97.2		P	85 - 115
Vanadium	98.6		P	85 - 115
Zinc	99.2		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P429136

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	106		P	85 - 115
Arsenic	100		P	85 - 115
Barium	104		P	85 - 115
Beryllium	90.7		P	85 - 115
Boron	104		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	99.3		P	85 - 115
Cobalt	103		P	85 - 115
Copper	98.1		P	85 - 115
Lead	104		P	85 - 115
Manganese	100		P	85 - 115
Molybdenum	100		P	85 - 115
Nickel	98.4		P	85 - 115
Selenium	99.2		P	85 - 115
Silver	105		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429485

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429488

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429353

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429168

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.9		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429408

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	108		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429233

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P429102

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.7		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P429161

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	111		P	42 - 162
Acetochlor	73.8		P	69 - 123
Alachlor	68.9		P	65 - 118
Ametryn	116		P	58 - 141
Atrazine	113		P	73 - 118
Atrazine Desethyl	100		P	32 - 125
Avobenzone	138		P	40 - 203
Azinphos Methyl	110		P	36 - 197
Azoxystrobin	86.4		P	58 - 226
Bromacil	95.3		P	48 - 120
Butylate	72.3		P	27 - 85.0
Caffeine	131		P	40 - 137
Carbophenothion	83.6		P	54 - 132
Carfentrazone Ethyl	77.3		P	60 - 142
Chlorfenapyr	60.6		P	53 - 117
Chlorpyrifos Ethyl	86.4		P	59 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P429161

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	79.0		P	66 - 119
Coumaphos	50.3		P	11 - 234
Cyanazine	151		P	61 - 248
Cyprodinil	86.5		P	50 - 147
Dechlorane 602	94.4		P	50 - 150
Dechlorane 603	132		P	50 - 150
Dechlorane Plus	78.1		P	47 - 182
Demeton	80.3		P	30 - 138
Diazinon	108		P	67 - 126
Difenoconazole	83.8		P	38 - 205
Dimethenamid	85.2		P	57 - 111
Dimethomorph	162		P	16 - 212
Disulfoton	107		P	46 - 126
Dithiopyr	96.4		P	62 - 115
EPTC	58.3		P	28 - 80.0
Ethion	72.5		P	24 - 122
Ethoprop	88.3		P	62 - 113
Etridiazole	68.7		P	28 - 92.0
Fenamiphos	64.5		P	57 - 128
Fenbuconazole	130		P	52 - 155
Fipronil	86.9		P	63 - 130
Fipronil Desulfinyl	86.3		P	61 - 130
Fipronil Sulfide	89.3		P	56 - 117
Fipronil Sulfone	83.2		P	52 - 118
Fluazifop-P-butyl	67.6		P	61 - 128
Fludioxonil	67.5		P	59 - 129
Flumioxazin	39.8		P	30 - 250
Flutolanil	56.2		P	53 - 127
Fluxapyroxad	63.6		P	42 - 132
Fonofos	92.5		P	61 - 110
Hexabromobenzene	110		P	50 - 150
Hexazinone	91.0		P	46 - 139
Imazalil	50.2		P	40 - 139
Iprodione	118		P	40 - 146
Loratadine	51.6		P	10 - 224
Malathion	120		P	61 - 135
Metalaxyl	95.4		P	58 - 121
Metolachlor	88.9		P	64 - 118
Metribuzin	94.2		P	45 - 245
Mevinphos	67.7		P	49 - 118
Molinate	63.1		P	42 - 92.0
Myclobutanil	83.8		P	55 - 127
Naled	37.3		P	10 - 114
Napropamide	71.3		P	39 - 121
Norflurazon	64.8		P	55 - 129
Octinoxate	135		P	26 - 166
Oxadiazon	125		F	54 - 115
Oxybenzone	86.7		P	49 - 135
Oxyfluorfen	90.8		P	64 - 139
Parathion Ethyl	83.2		P	70 - 111
Parathion Methyl	85.3		P	76 - 136
PBB-153	129		P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P429161

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	95.5		P	41 - 148
PBDE-99	104		P	38 - 147
Pendimethalin	115		P	52 - 118
Pentabromotoluene	89.3		P	50 - 150
Phenytoin	51.8		P	10 - 162
Phorate	93.9		P	40 - 122
Prodiamine	65.1		P	26 - 141
Prometon	99.2		P	54 - 122
Prometryn	115		P	61 - 128
Pronamide	99.7		P	72 - 121
Propanil	91.5		P	45 - 144
Propargite	44.2		P	10 - 199
Propiconazole	62.7		P	56 - 127
Pyraflufen Ethyl	87.4		P	56 - 140
Pyridaben	114		P	26 - 211
Pyriproxyfen	147		P	33 - 194
Simazine	67.6		P	67 - 121
Stirophos	53.9		P	20 - 142
Sulfentrazone	49.4		P	21 - 144
Tebuconazole	50.2		P	10 - 122
Terbufos	123		P	60 - 129
Terbutylazine	71.6		P	69 - 113
Tetradecachloro-m-terphenyl	156		P	70 - 200
Thiobencarb	92.9		P	51 - 120
Tri-o-cresyl Phosphate	93.0		P	49 - 150
Triadimefon	99.4		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	50.9		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	80.6		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	79.2		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P428982

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	122		P	40 - 150
AMPA	96.2		P	40 - 150
Endothall	80.7		P	40 - 150
Glufosinate	77.6		P	40 - 150
Glyphosate	98.2		P	40 - 150
Sucralose	102		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P429258

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	85.2		P	40 - 150
2,4,5-T	83.2		P	40 - 150
Acetaminophen	78.2		P	30 - 150
Acetamiprid	79.9		P	40 - 150
Afidopyropen	49.8		P	30 - 150
Bentazon	141		P	30 - 150
Benzovindiflupyr	81.6		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P429258

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbamazepine	83.9		P	40 - 150
Clothianidin	86.8		P	40 - 150
Dinotefuran	105		P	40 - 150
Diuron	77.1		P	40 - 150
Fenuron	87.0		P	40 - 150
Fluridone	77.1		P	40 - 150
Hydrocodone	86.5		P	40 - 150
Ibuprofen	91.0		P	40 - 150
Imazapyr	84.2		P	40 - 150
Imidacloprid	83.9		P	40 - 150
Linuron	81.2		P	40 - 150
Mandestrobin	86.4		P	40 - 150
MCPP	87.7		P	40 - 150
Naproxen	77.0		P	40 - 150
Primidone	85.2		P	40 - 150
Pyraclostrobin	85.6		P	40 - 150
Silvex	81.7		P	40 - 150
Thiamethoxam	88.4		P	40 - 150
Tolfenpyrad	55.3		P	30 - 150
Triclopyr	85.9		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P429580

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.1		P	94 - 106

Reference Method: SM 2540 C-2015

Batch ID: P429710

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

Reference Method: SM 2540 D-2015

Batch ID: P429741

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	93.8		P	85 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P429285

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.3		P	96 - 104

Reference Method: SM 5310 B-2011

Batch ID: P429306

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	103		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P429136

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403376	Calcium	99.2	99.1	P/P	80 - 120
2403376	Iron	102	103	P/P	80 - 120
2403376	Magnesium	103	103	P/P	80 - 120
2403376	Potassium	101	100	P/P	80 - 120
2403376	Sodium	101	104	P/P	80 - 120
2403376	Strontium	97.6	97.6	P/P	80 - 120
2403376	Tin	97.4	95.6	P/P	80 - 120
2403376	Titanium	95.3	96.3	P/P	80 - 120
2403376	Vanadium	99.5	98.7	P/P	80 - 120
2403376	Zinc	96.0	94.7	P/P	80 - 120
2403660	Calcium	98.3		P	80 - 120
2403660	Iron	99.4		P	80 - 120
2403660	Magnesium	101		P	80 - 120
2403660	Potassium	99.4		P	80 - 120
2403660	Sodium	100		P	80 - 120
2403660	Strontium	96.1		P	80 - 120
2403660	Tin	97.1		P	80 - 120
2403660	Titanium	98.0		P	80 - 120
2403660	Vanadium	99.0		P	80 - 120
2403660	Zinc	95.4		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P429136

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403376	Aluminum	97.3	96.5	P/P	80 - 120
2403376	Antimony	104	105	P/P	80 - 120
2403376	Arsenic	99.6	101	P/P	80 - 120
2403376	Barium	102	101	P/P	80 - 120
2403376	Beryllium	84.4	89.0	P/P	80 - 120
2403376	Boron	101	101	P/P	80 - 120
2403376	Cadmium	102	102	P/P	80 - 120
2403376	Chromium	99.2	99.6	P/P	80 - 120
2403376	Cobalt	100	101	P/P	80 - 120
2403376	Copper	97.7	98.4	P/P	80 - 120
2403376	Lead	103	103	P/P	80 - 120
2403376	Manganese	101	102	P/P	80 - 120
2403376	Molybdenum	98.0	99.5	P/P	80 - 120
2403376	Nickel	98.4	98.3	P/P	80 - 120
2403376	Selenium	96.4	97.2	P/P	80 - 120
2403376	Silver	99.8	101	P/P	80 - 120
2403376	Thallium	101	100	P/P	80 - 120
2403660	Aluminum	99.0		P	80 - 120
2403660	Antimony	109		P	80 - 120
2403660	Arsenic	101		P	80 - 120
2403660	Barium	106		P	80 - 120
2403660	Beryllium	88.2		P	80 - 120
2403660	Boron	101		P	80 - 120
2403660	Cadmium	103		P	80 - 120
2403660	Chromium	96.5		P	80 - 120
2403660	Cobalt	97.1		P	80 - 120
2403660	Copper	94.2		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P429136

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403660	Lead	105		P	80 - 120
2403660	Manganese	103		P	80 - 120
2403660	Molybdenum	99.4		P	80 - 120
2403660	Nickel	95.7		P	80 - 120
2403660	Selenium	100		P	80 - 120
2403660	Silver	102		P	80 - 120
2403660	Thallium	101		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P429485

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403614	Chloride	104		P	90 - 110
2403823	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P429488

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403614	Sulfate	102		P	90 - 110
2403823	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P429353

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403648	Ammonia-N	96.2	96.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P429168

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403689	Kjeldahl Nitrogen	104	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P429408

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403615	NO2NO3-N	108	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P429233

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403825	Total-P	98.9	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P429102

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403649	O-Phosphate-P	99.3	100	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P429161

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402681	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	107	86.3	P/P	26 - 165
2402681	Acetochlor	90.2	75.2	P/P	67 - 124
2402681	Alachlor	102	92.0	P/P	60 - 120
2402681	Ametryn	169	185	P/P	54 - 216
2402681	Atrazine	97.9	86.7	P/P	66 - 128
2402681	Atrazine Desethyl	120	116	P/P	15 - 122
2402681	Avobenzone	145	125	P/P	37 - 178
2402681	Azinphos Methyl	128	102	P/P	40 - 292
2402681	Azoxystrobin	111	128	P/P	35 - 220
2402681	Bromacil	107	92.0	P/P	45 - 127
2402681	Butylate	79.4	78.1	P/P	20 - 83.0
2402681	Caffeine	143	142	P/P	10 - 194
2402681	Carbophenothion	115	84.3	P/P	57 - 127
2402681	Carfentrazone Ethyl	104	79.8	P/P	51 - 141
2402681	Chlorfenapyr	74.3	72.2	P/P	46 - 111
2402681	Chlorpyrifos Ethyl	72.6	66.0	P/P	52 - 120
2402681	Chlorpyrifos Methyl	98.9	92.4	P/P	63 - 119
2402681	Coumaphos	90.3	68.4	P/P	10 - 228
2402681	Cyanazine	188	169	P/P	59 - 241
2402681	Cyprodinil	124	116	P/P	47 - 146
2402681	Dechlorane 602	89.5	68.2	P/P	50 - 150
2402681	Dechlorane 603	139	118	P/P	50 - 150
2402681	Dechlorane Plus	84.6	72.6	P/P	50 - 150
2402681	Demeton	99.5	101	P/P	40 - 136
2402681	Diazinon	131	122	P/P	69 - 132
2402681	Difenoconazole	103	48.8	P/F	57 - 258
2402681	Dimethenamid	116	100	F/P	54 - 110
2402681	Dimethomorph	120	141	P/P	28 - 210
2402681	Disulfoton	132	101	P/P	43 - 133
2402681	Dithiopyr	138	109	F/P	39 - 116
2402681	EPTC	70.9	64.9	P/P	20 - 78.0
2402681	Ethion	110	119	P/P	17 - 119
2402681	Ethoprop	102	109	P/P	66 - 120
2402681	Etridiazole	75.6	70.5	P/P	28 - 96.0
2402681	Fenamiphos	76.2	75.0	P/P	41 - 126
2402681	Fenbuconazole	76.4	53.1	P/P	42 - 169
2402681	Fipronil	62.6	42.9	P/F	61 - 132
2402681	Fipronil Desulfinyl	91.1	82.1	P/P	56 - 132
2402681	Fipronil Sulfide	73.0	70.4	P/P	48 - 119
2402681	Fipronil Sulfone	90.8	68.3	P/P	42 - 131
2402681	Fluazifop-P-butyl	107	96.3	P/P	53 - 131
2402681	Fludioxonil	91.4	71.2	P/P	56 - 127
2402681	Flumioxazin	140	93.7	P/P	19 - 300
2402681	Flutolanil	85.2	79.8	P/P	41 - 127
2402681	Fluxapyroxad	168	32.6	P/F	42 - 172
2402681	Fonofos	108	102	P/P	59 - 113
2402681	Hexabromobenzene	112	88.1	P/P	50 - 150
2402681	Hexazinone	103	101	P/P	66 - 122
2402681	Imazalil	63.7	56.8	P/P	21 - 283
2402681	Iprodione	23.1	22.6	F/F	43 - 150
2402681	Loratadine	187	116	P/P	23 - 201
2402681	Malathion	79.7	76.3	P/P	58 - 136

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P429161

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402681	Metalaxyl	117	110	P/P	55 - 120
2402681	Metolachlor	74.7	81.5	P/P	57 - 121
2402681	Metribuzin	143	117	P/P	58 - 294
2402681	Mevinphos	74.7	84.5	P/P	50 - 126
2402681	Molinate	76.7	74.4	P/P	42 - 93.0
2402681	Myclobutanil	108	87.8	P/P	55 - 125
2402681	Naled	49.7	49.7	P/P	18 - 200
2402681	Napropamide	105	75.5	P/P	39 - 110
2402681	Norflurazon	110	75.8	P/P	48 - 128
2402681	Octinoxate	159	218	F/F	21 - 159
2402681	Oxadiazon	91.0	69.1	P/P	43 - 112
2402681	Oxybenzone	89.3	88.6	P/P	41 - 142
2402681	Oxyfluorfen	92.1	87.4	P/P	64 - 153
2402681	Parathion Ethyl	106	99.9	P/P	69 - 114
2402681	Parathion Methyl	118	119	P/P	79 - 139
2402681	PBB-153	130	116	P/P	50 - 150
2402681	PBDE-47	91.1	76.5	P/P	27 - 144
2402681	PBDE-99	98.0	71.0	P/P	18 - 150
2402681	Pendimethalin	117	117	P/P	50 - 139
2402681	Pentabromotoluene	91.5	84.9	P/P	50 - 150
2402681	Phenytoin	138	137	P/P	10 - 146
2402681	Phorate	131	126	P/P	54 - 161
2402681	Prodiamine	65.4	68.5	P/P	30 - 161
2402681	Prometon	131	117	P/P	45 - 134
2402681	Prometryn	157	139	F/F	45 - 137
2402681	Pronamide	118	95.0	P/P	65 - 133
2402681	Propanil	124	115	P/P	49 - 142
2402681	Propargite	78.5	62.6	P/P	10 - 203
2402681	Propiconazole	85.9	63.4	P/P	38 - 146
2402681	Pyraflufen Ethyl	89.3	66.0	P/P	34 - 153
2402681	Pyridaben	68.5	45.4	P/P	12 - 192
2402681	Pyriproxyfen	74.3	54.8	P/P	33 - 180
2402681	Simazine	88.7	88.6	P/P	51 - 157
2402681	Stirophos	65.7	42.3	P/P	10 - 128
2402681	Sulfentrazone	115	58.1	P/P	53 - 186
2402681	Tebuconazole	90.3	58.0	P/P	10 - 133
2402681	Terbufos	138	131	P/P	65 - 139
2402681	Terbutylazine	92.6	84.4	P/P	66 - 117
2402681	Tetradecachloro-m-terphenyl	202	156	F/P	70 - 200
2402681	Thiobencarb	118	101	P/P	51 - 119
2402681	Tri-o-cresyl Phosphate	92.5	86.2	P/P	31 - 144
2402681	Triadimefon	104	83.1	P/P	48 - 119
2402681	Tris(1-chloro-2-propyl) phosphate (TCPP)	48.1	49.8	F/F	50 - 150
2402681	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	82.2	69.7	P/P	50 - 150
2402681	Tris(2-chloroethyl) phosphate (TCEP)	79.4	75.2	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P428982

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402494	Acesulfame K	144	144	P/P	40 - 150
2402494	AMPA	90.5	88.5	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P428982

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402494	Endothall	80.5	81.7	P/P	40 - 150
2402494	Glufosinate	111	88.7	P/P	40 - 150
2402494	Glyphosate	121	149	P/P	40 - 150
2402494	Sucralose	119	108	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P429258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403675	2,4-D	104	111	P/P	40 - 150
2403675	2,4,5-T	108	105	P/P	40 - 150
2403675	Acetaminophen	84.2	87.7	P/P	30 - 150
2403675	Acetamiprid	84.2	78.9	P/P	40 - 150
2403675	Afidopyropen	92.3	88.5	P/P	30 - 150
2403675	Benzovindiflupyr	80.6	80.2	P/P	40 - 150
2403675	Carbamazepine	71.6	67.3	P/P	40 - 150
2403675	Clothianidin	105	104	P/P	40 - 150
2403675	Dinotefuran	104	102	P/P	40 - 150
2403675	Diuron	65.6	62.4	P/P	40 - 150
2403675	Fenuron	63.5	63.4	P/P	40 - 150
2403675	Fluridone	61.3	62.1	P/P	40 - 150
2403675	Hydrocodone	71.9	69.9	P/P	40 - 150
2403675	Ibuprofen	60.5	52.8	P/P	40 - 150
2403675	Imazapyr	105	108	P/P	40 - 150
2403675	Imidacloprid	115	116	P/P	40 - 150
2403675	Linuron	70.3	67.5	P/P	40 - 150
2403675	Mandestrobin	77.7	79.5	P/P	40 - 150
2403675	MCCP	121	106	P/P	40 - 150
2403675	Naproxen	57.1	56.0	P/P	40 - 150
2403675	Primidone	96.7	97.0	P/P	40 - 150
2403675	Pyraclostrobin	81.5	76.8	P/P	40 - 150
2403675	Silvex	114	118	P/P	40 - 150
2403675	Thiamethoxam	101	99.4	P/P	40 - 150
2403675	Tolfenpyrad	54.5	49.3	P/P	30 - 150
2403675	Triclopyr	101	105	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P429285

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403612	Fluoride	102	103	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P429306

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403854	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P429093

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403647	Color (true)	7.33	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429115

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403613	Turbidity	7.58	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429136

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403376	Calcium	0.106	Spike	P	0 - 20
2403376	Iron	0.177	Spike	P	0 - 20
2403376	Magnesium	0.113	Spike	P	0 - 20
2403376	Potassium	0.520	Spike	P	0 - 20
2403376	Sodium	1.50	Spike	P	0 - 20
2403376	Strontium	0.0280	Spike	P	0 - 20
2403376	Tin	1.81	Spike	P	0 - 20
2403376	Titanium	0.908	Spike	P	0 - 20
2403376	Vanadium	0.787	Spike	P	0 - 20
2403376	Zinc	1.28	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P429136

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403376	Aluminum	0.620	Spike	P	0 - 20
2403376	Antimony	0.960	Spike	P	0 - 20
2403376	Arsenic	1.15	Spike	P	0 - 20
2403376	Barium	0.959	Spike	P	0 - 20
2403376	Beryllium	4.89	Spike	P	0 - 20
2403376	Boron	0.0459	Spike	P	0 - 20
2403376	Cadmium	0.283	Spike	P	0 - 20
2403376	Chromium	0.373	Spike	P	0 - 20
2403376	Cobalt	0.444	Spike	P	0 - 20
2403376	Copper	0.739	Spike	P	0 - 20
2403376	Lead	0.268	Spike	P	0 - 20
2403376	Manganese	0.676	Spike	P	0 - 20
2403376	Molybdenum	1.49	Spike	P	0 - 20
2403376	Nickel	0.0937	Spike	P	0 - 20
2403376	Selenium	0.810	Spike	P	0 - 20
2403376	Silver	0.854	Spike	P	0 - 20
2403376	Thallium	0.536	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429485

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403614	Chloride	0.0609	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429488

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403614	Sulfate	0.684	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429353

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403648	Ammonia-N	0.380	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429168

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403689	Kjeldahl Nitrogen	2.60	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429408

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403615	NO2NO3-N	0.378	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429233

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403825	Total-P	0.0935	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P429102

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403649	O-Phosphate-P	1.10	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P429161

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402681	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	21.8	Spike	P	0 - 37
2402681	Acetochlor	18.1	Spike	P	0 - 28

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P429161

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402681	Alachlor	9.90	Spike	P	0 - 30
2402681	Ametryn	9.09	Spike	P	0 - 32
2402681	Atrazine	10.8	Spike	P	0 - 41
2402681	Atrazine Desethyl	3.36	Spike	P	0 - 36
2402681	Avobenzone	14.8	Spike	P	0 - 36
2402681	Azinphos Methyl	22.9	Spike	P	0 - 75
2402681	Azoxystrobin	14.1	Spike	P	0 - 39
2402681	Bromacil	15.1	Spike	P	0 - 33
2402681	Butylate	1.61	Spike	P	0 - 44
2402681	Caffeine	0.919	Spike	P	0 - 74
2402681	Carbophenothion	30.7	Spike	F	0 - 25
2402681	Carfentrazone Ethyl	26.3	Spike	P	0 - 27
2402681	Chlorfenapyr	2.93	Spike	P	0 - 24
2402681	Chlorpyrifos Ethyl	9.51	Spike	P	0 - 26
2402681	Chlorpyrifos Methyl	6.86	Spike	P	0 - 26
2402681	Coumaphos	27.5	Spike	P	0 - 28
2402681	Cyanazine	10.8	Spike	P	0 - 48
2402681	Cyprodinil	6.81	Spike	P	0 - 29
2402681	Dechlorane 602	27.1	Spike	P	0 - 30
2402681	Dechlorane 603	16.3	Spike	P	0 - 30
2402681	Dechlorane Plus	15.3	Spike	P	0 - 30
2402681	Demeton	1.93	Spike	P	0 - 33
2402681	Diazinon	7.12	Spike	P	0 - 29
2402681	Difenoconazole	71.3	Spike	F	0 - 34
2402681	Dimethenamid	14.5	Spike	P	0 - 39
2402681	Dimethomorph	16.0	Spike	P	0 - 51
2402681	Disulfoton	26.8	Spike	P	0 - 30
2402681	Dithiopyr	23.1	Spike	P	0 - 26
2402681	EPTC	8.91	Spike	P	0 - 43
2402681	Ethion	7.74	Spike	P	0 - 79
2402681	Ethoprop	6.54	Spike	P	0 - 29
2402681	Etridiazole	6.97	Spike	P	0 - 33
2402681	Fenamiphos	1.60	Spike	P	0 - 40
2402681	Fenbuconazole	35.9	Spike	P	0 - 74
2402681	Fipronil	37.4	Spike	F	0 - 29
2402681	Fipronil Desulfinyl	10.3	Spike	P	0 - 32
2402681	Fipronil Sulfide	3.64	Spike	P	0 - 30
2402681	Fipronil Sulfone	28.4	Spike	P	0 - 33
2402681	Fluazifop-P-butyl	10.5	Spike	P	0 - 38
2402681	Fludioxonil	24.9	Spike	P	0 - 29
2402681	Flumioxazin	39.4	Spike	P	0 - 51
2402681	Flutolanil	6.53	Spike	P	0 - 25
2402681	Fluxapyroxad	135	Spike	F	0 - 45
2402681	Fonofos	5.15	Spike	P	0 - 27
2402681	Hexabromobenzene	23.7	Spike	P	0 - 30
2402681	Hexazinone	2.49	Spike	P	0 - 30
2402681	Imazalil	11.4	Spike	P	0 - 100
2402681	Iprodione	2.14	Spike	P	0 - 33
2402681	Loratadine	47.1	Spike	P	0 - 56
2402681	Malathion	4.27	Spike	P	0 - 37
2402681	Metalaxyl	6.49	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P429161

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402681	Metolachlor	8.73	Spike	P	0 - 29
2402681	Metribuzin	20.2	Spike	P	0 - 45
2402681	Mevinphos	12.3	Spike	P	0 - 29
2402681	Molinate	2.95	Spike	P	0 - 33
2402681	Myclobutanil	20.7	Spike	P	0 - 26
2402681	Naled	0.0511	Spike	P	0 - 37
2402681	Napropamide	32.4	Spike	P	0 - 44
2402681	Norflurazon	36.6	Spike	F	0 - 30
2402681	Octinoxate	28.3	Spike	P	0 - 45
2402681	Oxadiazon	27.4	Spike	P	0 - 28
2402681	Oxybenzone	0.672	Spike	P	0 - 46
2402681	Oxyfluorfen	5.22	Spike	P	0 - 28
2402681	Parathion Ethyl	6.02	Spike	P	0 - 31
2402681	Parathion Methyl	0.477	Spike	P	0 - 29
2402681	PBB-153	11.0	Spike	P	0 - 30
2402681	PBDE-47	17.4	Spike	P	0 - 36
2402681	PBDE-99	31.9	Spike	P	0 - 40
2402681	Pendimethalin	0.107	Spike	P	0 - 33
2402681	Pentabromotoluene	7.45	Spike	P	0 - 30
2402681	Phenytoin	0.931	Spike	P	0 - 100
2402681	Phorate	3.73	Spike	P	0 - 36
2402681	Prodiamine	4.62	Spike	P	0 - 71
2402681	Prometon	11.6	Spike	P	0 - 36
2402681	Prometryn	12.1	Spike	P	0 - 28
2402681	Pronamide	21.7	Spike	P	0 - 24
2402681	Propanil	6.84	Spike	P	0 - 28
2402681	Propargite	22.6	Spike	P	0 - 43
2402681	Propiconazole	30.1	Spike	P	0 - 33
2402681	Pyraflufen Ethyl	30.1	Spike	F	0 - 29
2402681	Pyridaben	40.6	Spike	F	0 - 30
2402681	Pyriproxyfen	30.2	Spike	P	0 - 79
2402681	Simazine	0.0793	Spike	P	0 - 29
2402681	Stirophos	43.3	Spike	P	0 - 61
2402681	Sulfentrazone	65.9	Spike	F	0 - 33
2402681	Tebuconazole	43.5	Spike	P	0 - 69
2402681	Terbufos	4.92	Spike	P	0 - 29
2402681	Terbuthylazine	9.26	Spike	P	0 - 32
2402681	Tetradecachloro-m-terphenyl	25.3	Spike	P	0 - 30
2402681	Thiobencarb	15.6	Spike	P	0 - 26
2402681	Tri-o-cresyl Phosphate	7.07	Spike	P	0 - 33
2402681	Triadimefon	22.6	Spike	P	0 - 28
2402681	Tris(1-chloro-2-propyl) phosphate (TCPP)	3.35	Spike	P	0 - 30
2402681	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	16.5	Spike	P	0 - 30
2402681	Tris(2-chloroethyl) phosphate (TCEP)	5.46	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P428982

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402494	Acesulfame K	0.560	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P428982

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402494	AMPA	1.58	Spike	P	0 - 30
2402494	Endothall	1.50	Spike	P	0 - 30
2402494	Glufosinate	22.3	Spike	P	0 - 30
2402494	Glyphosate	13.4	Spike	P	0 - 30
2402494	Sucralose	9.46	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P429258

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403675	2,4-D	6.31	Spike	P	0 - 30
2403675	2,4,5-T	3.12	Spike	P	0 - 30
2403675	Acetaminophen	4.06	Spike	P	0 - 30
2403675	Acetamiprid	6.41	Spike	P	0 - 30
2403675	Afidopyropen	4.21	Spike	P	0 - 30
2403675	Bentazon	10.9	Spike	P	0 - 30
2403675	Benzovindiflupyr	0.506	Spike	P	0 - 30
2403675	Carbamazepine	5.81	Spike	P	0 - 30
2403675	Clothianidin	1.03	Spike	P	0 - 30
2403675	Dinotefuran	2.22	Spike	P	0 - 30
2403675	Diuron	4.96	Spike	P	0 - 30
2403675	Fenuron	0.219	Spike	P	0 - 30
2403675	Fluridone	1.19	Spike	P	0 - 30
2403675	Hydrocodone	2.95	Spike	P	0 - 30
2403675	Ibuprofen	13.7	Spike	P	0 - 30
2403675	Imazapyr	2.30	Spike	P	0 - 30
2403675	Imidacloprid	0.536	Spike	P	0 - 30
2403675	Linuron	4.04	Spike	P	0 - 30
2403675	Mandestrobin	2.35	Spike	P	0 - 30
2403675	MCPP	12.5	Spike	P	0 - 30
2403675	Naproxen	1.85	Spike	P	0 - 30
2403675	Primidone	0.400	Spike	P	0 - 30
2403675	Pyraclostrobin	6.03	Spike	P	0 - 30
2403675	Silvex	3.21	Spike	P	0 - 30
2403675	Thiamethoxam	1.96	Spike	P	0 - 30
2403675	Tolfenpyrad	10.0	Spike	P	0 - 30
2403675	Triclopyr	4.08	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P429580

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404020	Total Alkalinity	1.30	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P429710

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

Reference Method: SM 2540 C-2015
Batch ID: P429710

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403853	TDS	0.692	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P429285

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403612	Fluoride	0.527	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P429306

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403854	Organic Carbon	0.257	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2403659

Field Sample ID: G4NW0038

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	108	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.9	P	30 - 160
EPA 8321B	Diuron-d6	84.1	P	30 - 160
EPA 8321B	Endothall-d6	86.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	84.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	68.7	P	30 - 160
EPA 8321B	Primidone-d5	93.6	P	30 - 160
EPA 8321B	Sucralose-d6	108	P	30 - 160

Lab Sample ID: 2403661

Field Sample ID: G4NW0038

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	116	P	20 - 200
EPA 8270E	Simazine-d10	90.2	P	62 - 142
EPA 8270E	Terbufos-d10	81.0	P	58 - 132
EPA 8270E	Terphenyl-d14	82.7	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A118826

Included Lab Sample IDs: 2403647

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	96.1	99.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A118829

Included Lab Sample IDs: 2403649

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.5	98.4	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118832

Included Lab Sample IDs: 2403647

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

Reference Method: EPA 8321B

Run ID: A118862

Included Lab Sample IDs: 2403659

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	153	151	P/P	60 - 160
Sucralose	101	109	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A118863

Included Lab Sample IDs: 2403659

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	95.5	94.0	P/P	60 - 160
Endothall	84.9	83.3	P/P	60 - 160
Glufosinate	79.0	79.7	P/P	60 - 160
Glyphosate	101	97.5	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A118889

Included Lab Sample IDs: 2403660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.6	99.0	P/P	90 - 110
Antimony	106	109	P/P	90 - 110
Arsenic	100	101	P/P	90 - 110
Barium	99.7	102	P/P	90 - 110
Beryllium	97.2	97.5	P/P	90 - 110
Boron	97.1	95.6	P/P	90 - 110
Cadmium	102	104	P/P	90 - 110
Chromium	97.9	96.4	P/P	90 - 110
Cobalt	99.6	97.6	P/P	90 - 110
Copper	95.8	93.4	P/P	90 - 110
Lead	102	101	P/P	90 - 110
Manganese	101	104	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A118889

Included Lab Sample IDs: 2403660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Molybdenum	98.8	98.5	P/P	90 - 110
Nickel	96.3	94.5	P/P	90 - 110
Selenium	101	102	P/P	90 - 110
Silver	101	102	P/P	90 - 110
Thallium	98.1	97.8	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A118897

Included Lab Sample IDs: 2403660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	98.9	99.0	P/P	90 - 110
Iron	101	99.7	P/P	90 - 110
Magnesium	99.9	98.3	P/P	90 - 110
Potassium	101	99.0	P/P	90 - 110
Sodium	103	100	P/P	90 - 110
Strontium	99.0	97.1	P/P	90 - 110
Tin	96.4	94.8	P/P	90 - 110
Titanium	98.9	98.3	P/P	90 - 110
Vanadium	98.1	97.9	P/P	90 - 110
Zinc	94.7	95.0	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A118916

Included Lab Sample IDs: 2403647

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A118919

Included Lab Sample IDs: 2403647

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: SM 5310 B-2011

Run ID: A118925

Included Lab Sample IDs: 2403648

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.1	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118938

Included Lab Sample IDs: 2403648

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118939

Included Lab Sample IDs: 2403648

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.3	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A118940

Included Lab Sample IDs: 2403648

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	99.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A118952

Included Lab Sample IDs: 2403648

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	108	110	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A118978

Included Lab Sample IDs: 2403659

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	96.5	94.7	P/P	50 - 150
2,4,5-T	103	103	P/P	50 - 150
Acetaminophen	95.6	85.2	P/P	60 - 160
Acetamiprid	104	109	P/P	50 - 150
Afidopyropen	103	93.4	P/P	50 - 150
Bentazon	123	120	P/P	50 - 160
Benzovindiflupyr	100	99.3	P/P	50 - 150
Carbamazepine	95.3	108	P/P	60 - 150
Clothianidin	103	98.8	P/P	60 - 150
Dinotefuran	116	119	P/P	50 - 150
Diuron	107	106	P/P	60 - 160
Fenuron	107	95.3	P/P	60 - 150
Fluridone	101	106	P/P	60 - 160
Hydrocodone	104	109	P/P	60 - 150
Ibuprofen	101	84.5	P/P	50 - 160
Imazapyr	87.0	91.6	P/P	50 - 150
Imidacloprid	94.8	92.1	P/P	60 - 150
Linuron	114	97.1	P/P	60 - 150
Mandestrobin	101	100	P/P	50 - 150
MCPP	92.2	102	P/P	50 - 150
Naproxen	68.8	74.6	P/P	50 - 160
Primidone	99.8	102	P/P	60 - 150
Pyraclostrobin	105	105	P/P	60 - 150
Silvex	79.6	95.2	P/P	50 - 150
Thiamethoxam	103	97.2	P/P	50 - 150
Tolfenpyrad	99.5	97.7	P/P	60 - 150
Triclopyr	80.6	82.5	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119025
Included Lab Sample IDs: 2403661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.7		P	80 - 120
Avobenzene	94.1		P	80 - 120
Dechlorane 602	98.2		P	80 - 120
Dechlorane 603	100		P	80 - 120
Dechlorane Plus	101		P	80 - 120
Hexabromobenzene	95.6		P	80 - 120
Octinoxate	94.7		P	80 - 120
Oxybenzone	95.9		P	80 - 120
PBB-153	94.8		P	80 - 120
PBDE-47	93.1		P	80 - 120
PBDE-99	95.8		P	80 - 120
Pentabromotoluene	98.5		P	80 - 120
Tetradecachloro-m-terphenyl	101		P	80 - 120
Tri-o-cresyl Phosphate	94.7		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	84.1		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	95.4		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	94.0		P	80 - 120

Reference Method: SM 2320 B-2011
Run ID: A119028
Included Lab Sample IDs: 2403647

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.2	95.4	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A119168
Included Lab Sample IDs: 2403661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	94.0		P	80 - 120
Alachlor	90.8		P	80 - 120
Ametryn	100		P	80 - 120
Atrazine	89.4		P	80 - 120
Atrazine Desethyl	93.3		P	80 - 120
Azinphos Methyl	92.0		P	80 - 120
Azoxystrobin	98.9		P	80 - 120
Bromacil	102		P	80 - 120
Butylate	106		P	80 - 120
Caffeine	113		P	80 - 120
Carbophenothion	98.7		P	80 - 120
Carfentrazone Ethyl	96.9		P	80 - 120
Chlorfenapyr	94.1		P	80 - 120
Chlorpyrifos Ethyl	92.3		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	98.3		P	80 - 120
Cyanazine	111		P	80 - 120
Cyprodinil	97.7		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	99.1		P	80 - 120
Difenoconazole	93.9		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E
 Run ID: A119168
 Included Lab Sample IDs: 2403661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dimethenamid	102		P	80 - 120
Dimethomorph	81.2		P	80 - 120
Disulfoton	102		P	80 - 120
Dithiopyr	99.9		P	80 - 120
EPTC	98.4		P	80 - 120
Ethion	95.3		P	80 - 120
Ethoprop	100		P	80 - 120
Etridiazole	97.5		P	80 - 120
Fenamiphos	88.3		P	80 - 120
Fenbuconazole	83.8		P	80 - 120
Fipronil	88.0		P	80 - 120
Fipronil Desulfinyl	97.0		P	80 - 120
Fipronil Sulfide	97.7		P	80 - 120
Fipronil Sulfone	97.5		P	80 - 120
Fluazifop-P-butyl	96.2		P	80 - 120
Fludioxonil	91.9		P	80 - 120
Flumioxazin	94.0		P	80 - 120
Flutolanil	99.1		P	80 - 120
Fluxapyroxad	97.6		P	80 - 120
Fonofos	97.5		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	90.5		P	80 - 120
Iprodione	84.6		P	80 - 120
Loratadine	83.5		P	80 - 120
Malathion	85.6		P	80 - 120
Metalaxyl	95.8		P	80 - 120
Metolachlor	98.4		P	80 - 120
Metribuzin	101		P	80 - 120
Mevinphos	95.9		P	80 - 120
Molinate	87.1		P	80 - 120
Myclobutanil	86.8		P	80 - 120
Naled	99.4		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	96.3		P	80 - 120
Oxadiazon	102		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	89.2		P	80 - 120
Pendimethalin	111		P	80 - 120
Phenytoin	99.0		P	80 - 120
Phorate	93.8		P	80 - 120
Prodiamine	120		P	80 - 120
Prometon	106		P	80 - 120
Prometryn	98.8		P	80 - 120
Pronamide	99.5		P	80 - 120
Propanil	102		P	80 - 120
Propargite	97.9		P	80 - 120
Propiconazole	86.9		P	80 - 120
Pyraflufen Ethyl	96.1		P	80 - 120
Pyridaben	94.0		P	80 - 120
Pyriproxyfen	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119168
Included Lab Sample IDs: 2403661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Simazine	87.2		P	80 - 120
Stirophos	90.5		P	80 - 120
Sulfentrazone	95.4		P	80 - 120
Tebuconazole	97.7		P	80 - 120
Terbufos	99.8		P	80 - 120
Terbutylazine	91.6		P	80 - 120
Thiobencarb	96.4		P	80 - 120
Triadimefon	101		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)	97.1					7.33	
EPA 180.1 Rev. 2.0	Turbidity	99.2					7.58	
EPA 200.7 Rev. 4.4	Calcium	104	99.2	99.1	98.3			0.106
	Iron	103	102	103	99.4			0.177
	Magnesium	104	103	103	101			0.113
	Potassium	101	101	100	99.4			0.520
	Sodium	99.6	101	104	100			1.50
	Strontium	94.3	97.6	97.6	96.1			0.0280
	Tin	96.9	97.4	95.6	97.1			1.81
	Titanium	97.2	95.3	96.3	98.0			0.908
	Vanadium	98.6	99.5	98.7	99.0			0.787
	Zinc	99.2	96.0	94.7	95.4			1.28
EPA 200.8 Rev. 5.4	Aluminum	101	97.3	96.5	99.0			0.620
	Antimony	106	104	105	109			0.960
	Arsenic	100	99.6	101	101			1.15
	Barium	104	102	101	106			0.959
	Beryllium	90.7	84.4	89.0	88.2			4.89
	Boron	104	101	101	101			0.0459
	Cadmium	103	102	102	103			0.283
	Chromium	99.3	99.2	99.6	96.5			0.373
	Cobalt	103	100	101	97.1			0.444
	Copper	98.1	97.7	98.4	94.2			0.739
	Lead	104	103	103	105			0.268
	Manganese	100	101	102	103			0.676
	Molybdenum	100	98.0	99.5	99.4			1.49
	Nickel	98.4	98.4	98.3	95.7			0.0937
	Selenium	99.2	96.4	97.2	100			0.810
	Silver	105	99.8	101	102			0.854
	Thallium	102	101	100	101			0.536
EPA 300.0 Rev. 2.1	Chloride	104	104	104			0.0609	
	Sulfate	104	102	103			0.684	
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	96.2	96.6				0.380
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.9	104	107				2.60
EPA 353.2 Rev. 2.0	NO2NO3-N	108	108	108				0.378
EPA 365.1 Rev. 2.0	Total-P	97.5	98.9	99.0				0.0935
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.7	99.3	100				1.10
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	111	107	86.3				21.8
	Acetochlor	73.8	90.2	75.2				18.1
	Alachlor	68.9	102	92.0				9.90
	Ametryn	116	169	185				9.09
	Atrazine	113	97.9	86.7				10.8
	Atrazine Desethyl	100	120	116				3.36
	Avobenzone	138	145	125				14.8
	Azinphos Methyl	110	128	102				22.9
	Azoxystrobin	86.4	111	128				14.1
	Bromacil	95.3	107	92.0				15.1
	Butylate	72.3	79.4	78.1				1.61
	Caffeine	131	143	142				0.919
	Carbophenothion	83.6	115	84.3				30.7
	Carfentrazone Ethyl	77.3	104	79.8				26.3
	Chlorfenapyr	60.6	74.3	72.2				2.93
	Chlorpyrifos Ethyl	86.4	72.6	66.0				9.51

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Chlorpyrifos Methyl	79.0	98.9	92.4		6.86
	Coumaphos	50.3	90.3	68.4		27.5
	Cyanazine	151	188	169		10.8
	Cyprodinil	86.5	124	116		6.81
	Dechlorane 602	94.4	89.5	68.2		27.1
	Dechlorane 603	132	139	118		16.3
	Dechlorane Plus	78.1	84.6	72.6		15.3
	Demeton	80.3	99.5	101		1.93
	Diazinon	108	131	122		7.12
	Difenoconazole	83.8	103	48.8		71.3
	Dimethenamid	85.2	116	100		14.5
	Dimethomorph	162	120	141		16.0
	Disulfoton	107	132	101		26.8
	Dithiopyr	96.4	138	109		23.1
	EPTC	58.3	70.9	64.9		8.91
	Ethion	72.5	110	119		7.74
	Ethoprop	88.3	102	109		6.54
	Etridiazole	68.7	75.6	70.5		6.97
	Fenamiphos	64.5	76.2	75.0		1.60
	Fenbuconazole	130	76.4	53.1		35.9
	Fipronil	86.9	62.6	42.9		37.4
	Fipronil Desulfinyl	86.3	91.1	82.1		10.3
	Fipronil Sulfide	89.3	73.0	70.4		3.64
	Fipronil Sulfone	83.2	90.8	68.3		28.4
	Fluazifop-P-butyl	67.6	107	96.3		10.5
	Fludioxonil	67.5	91.4	71.2		24.9
	Flumioxazin	39.8	140	93.7		39.4
	Flutolanil	56.2	85.2	79.8		6.53
	Fluxapyroxad	63.6	168	32.6		135
	Fonofos	92.5	108	102		5.15
	Hexabromobenzene	110	112	88.1		23.7
	Hexazinone	91.0	103	101		2.49
	Imazalil	50.2	63.7	56.8		11.4
	Iprodione	118	23.1	22.6		2.14
	Loratadine	51.6	187	116		47.1
	Malathion	120	79.7	76.3		4.27
	Metalaxyl	95.4	117	110		6.49
	Metolachlor	88.9	74.7	81.5		8.73
	Metribuzin	94.2	143	117		20.2
	Mevinphos	67.7	74.7	84.5		12.3
	Molinate	63.1	76.7	74.4		2.95
	Myclobutanil	83.8	108	87.8		20.7
	Naled	37.3	49.7	49.7		0.0511
	Napropamide	71.3	105	75.5		32.4
	Norflurazon	64.8	110	75.8		36.6
	Octinoxate	135	159	218		28.3
	Oxadiazon	125	91.0	69.1		27.4
	Oxybenzone	86.7	89.3	88.6		0.672
	Oxyfluorfen	90.8	92.1	87.4		5.22
	Parathion Ethyl	83.2	106	99.9		6.02
	Parathion Methyl	85.3	118	119		0.477
	PBB-153	129	130	116		11.0
	PBDE-47	95.5	91.1	76.5		17.4
	PBDE-99	104	98.0	71.0		31.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Pendimethalin	115	117	117		0.107
	Pentabromotoluene	89.3	91.5	84.9		7.45
	Phenytoin	51.8	138	137		0.931
	Phorate	93.9	131	126		3.73
	Prodiamine	65.1	65.4	68.5		4.62
	Prometon	99.2	131	117		11.6
	Prometryn	115	157	139		12.1
	Pronamide	99.7	118	95.0		21.7
	Propanil	91.5	124	115		6.84
	Propargite	44.2	78.5	62.6		22.6
	Propiconazole	62.7	85.9	63.4		30.1
	Pyraflufen Ethyl	87.4	89.3	66.0		30.1
	Pyridaben	114	68.5	45.4		40.6
	Pyriproxyfen	147	74.3	54.8		30.2
	Simazine	67.6	88.7	88.6		0.0793
	Stiropfos	53.9	65.7	42.3		43.3
	Sulfentrazone	49.4	115	58.1		65.9
	Tebuconazole	50.2	90.3	58.0		43.5
	Terbufos	123	138	131		4.92
	Terbutylazine	71.6	92.6	84.4		9.26
	Tetradecachloro-m-terphenyl	156	202	156		25.3
	Thiobencarb	92.9	118	101		15.6
	Tri-o-cresyl Phosphate	93.0	92.5	86.2		7.07
	Triadimefon	99.4	104	83.1		22.6
	Tris(1-chloro-2-propyl) phosphate (TCPP)	50.9	48.1	49.8		3.35
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	80.6	82.2	69.7		16.5
	Tris(2-chloroethyl) phosphate (TCEP)	79.2	79.4	75.2		5.46
EPA 8321B	2,4-D	85.2	104	111		6.31
	2,4,5-T	83.2	108	105		3.12
	Acesulfame K	122	144	144		0.560
	Acetaminophen	78.2	84.2	87.7		4.06
	Acetamiprid	79.9	84.2	78.9		6.41
	Afidopyropen	49.8	92.3	88.5		4.21
	AMPA	96.2	90.5	88.5		1.58
	Bentazon	141				10.9
	Benzovindiflupyr	81.6	80.6	80.2		0.506
	Carbamazepine	83.9	71.6	67.3		5.81
	Clothianidin	86.8	105	104		1.03
	Dinotefuran	105	104	102		2.22
	Diuron	77.1	65.6	62.4		4.96
	Endothall	80.7	80.5	81.7		1.50
	Fenuron	87.0	63.5	63.4		0.219
	Fluridone	77.1	61.3	62.1		1.19
	Glufosinate	77.6	111	88.7		22.3
	Glyphosate	98.2	121	149		13.4
	Hydrocodone	86.5	71.9	69.9		2.95
	Ibuprofen	91.0	60.5	52.8		13.7
	Imazapyr	84.2	105	108		2.30
	Imidacloprid	83.9	115	116		0.536
	Linuron	81.2	70.3	67.5		4.04
	Mandestrobin	86.4	77.7	79.5		2.35

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
EPA 8321B	MCP	87.7	121	106			12.5
	Naproxen	77.0	57.1	56.0			1.85
	Primidone	85.2	96.7	97.0			0.400
	Pyraclostrobin	85.6	81.5	76.8			6.03
	Silvex	81.7	114	118			3.21
	Sucralose	102	119	108			9.46
	Thiamethoxam	88.4	101	99.4			1.96
	Tolfenpyrad	55.3	54.5	49.3			10.0
	Triclopyr	85.9	101	105			4.08
SM 2320 B-2011	Total Alkalinity	98.1				1.30	
SM 2540 C-2015	TDS	97.4				0.692	
SM 2540 D-2015	TSS	93.8					
SM 4500-F- C-2011	Fluoride	99.3	102	103			0.527
SM 5310 B-2011	Organic Carbon	103	101	101			0.257

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2403647
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2403647
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2403660
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2403660
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2403647
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2403647
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2403648
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2403648
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2403648
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2403648
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2403649
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2403661
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2403661
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2403659
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2403647
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2403660
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2403647
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2403647
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2403647
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2403648

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	04/27/2023			04/27/2023 13:30	Samantha L Bates	2403647
EPA 180.1 Rev. 2.0	04/27/2023			04/27/2023 14:12	Anna M. Plaviak	2403647
EPA 200.7 Rev. 4.4	04/27/2023	04/28/2023 11:50	George D Taylor	05/01/2023 23:01	McKinley C Carter	2403660
EPA 200.8 Rev. 5.4	04/27/2023	04/28/2023 11:50	George D Taylor	05/01/2023 18:46	Conrad Hartmann	2403660
EPA 300.0 Rev. 2.1	04/27/2023			05/04/2023 07:22	James L Waggeberby	2403647
EPA 350.1 Rev. 2.0	04/27/2023			05/03/2023 12:52	Khloe J Berg	2403648
EPA 351.2 Rev. 2.0	04/27/2023	05/01/2023 13:37	Simonne.V. Calhoun	05/03/2023 14:06	Samantha L Bates	2403648
EPA 353.2 Rev. 2.0	04/27/2023			05/04/2023 10:18	Beverly Y. Sanders	2403648
EPA 365.1 Rev. 2.0	04/27/2023	05/02/2023 15:26	Adam P Silver	05/03/2023 13:54	Simonne.V. Calhoun	2403648
EPA 365.1 Rev. 2.0 dissolved	04/27/2023			04/27/2023 13:50	Elise M. Gillis	2403649
EPA 8270E	04/27/2023	05/01/2023 08:00	Rasheda Ghaffari	05/05/2023 20:46	Vandana T. Nagar	2403661
	04/27/2023	05/01/2023 08:00	Rasheda Ghaffari	05/06/2023 01:57	Arthur Maknenko	2403661
EPA 8321B	04/27/2023	04/28/2023 09:00	Manjita Shrestha	04/28/2023 16:58	Manjita Shrestha	2403659
	04/27/2023	04/28/2023 09:00	Manjita Shrestha	04/29/2023 06:00	Manjita Shrestha	2403659
	04/27/2023	05/03/2023 09:00	Hoor Shaik	05/04/2023 19:24	Juyoung Kim	2403659
SM 2320 B-2011	04/27/2023			05/09/2023 00:45	Dale L. Simmons	2403647
SM 2340 B-2011	04/27/2023			05/01/2023 23:01	McKinley C Carter	2403660
SM 2540 C-2015	04/27/2023			04/28/2023 13:45	Dana G. Hughes	2403647
SM 2540 D-2015	04/27/2023			04/28/2023 13:45	Dana G. Hughes	2403647
SM 4500-F- C-2011	04/27/2023			05/03/2023 01:26	Dale L. Simmons	2403647
SM 5310 B-2011	04/27/2023			05/02/2023 19:00	Elise M. Gillis	2403648