

Chemical Analysis Report

SO-DIST-2023-07-28-02

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

Event Description: **2023 SMP : Land O' Lakes**
Request ID: **RQ-2023-07-24-46**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 314
Fort Myers, FL 33901-3381
Attn: Monica Jaeger

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Certified by: Colin Wright, Program Administrator

Date Certified: 17-AUG-2023 10:38

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light pink rectangular background.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Lake June in Winter

Collection Date/Time: 07/27/2023 10:00

Field ID: G4SD0186

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2427606	DEP SOP: NU-094-1	Color (true)	12		PCU	P433184	
	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P433186	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P433407	
		Sulfate	27		mg SO4/L	P433410	
	SM 2320 B-2011	Total Alkalinity	20		mg CaCO3/L	P433355	
	SM 2540 C-2015	TDS	114		mg/L	P433609	
	SM 2540 D-2015	TSS	2	I	mg/L	P433522	
2427607	SM 4500-F- C-2011	Fluoride	0.061	I	mg F/L	P433358	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P433463	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P433319	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P433246	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P433293	
2427608	SM 5310 B-2011	Organic Carbon	6.5		mg C/L	P433376	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P433172	
2427613	EPA 200.7 Rev. 4.4	Calcium	11.7		mg/L	P433239	
		Iron	30	U	ug/L	P433239	
		Magnesium	4.80		mg/L	P433239	
		Potassium	6.9		mg/L	P433239	
		Sodium	9.0		mg/L	P433239	
		Strontium	172		ug/L	P433239	
		Tin	3.5	I	ug/L	P433239	
	EPA 200.8 Rev. 5.4	Titanium	0.75	U	ug/L	P433239	
		Vanadium	2.0	U	ug/L	P433239	
		Zinc	5.0	U	ug/L	P433239	
		Aluminum	33		ug/L	P433239	
		Antimony	0.070	I	ug/L	P433239	
		Arsenic	2.62		ug/L	P433239	
		Barium	4.89		ug/L	P433239	
		Beryllium	0.010	U	ug/L	P433239	
		Boron	46.9		ug/L	P433239	
		Cadmium	0.020	U	ug/L	P433239	
		Chromium	0.40	U	ug/L	P433239	
		Cobalt	0.020	U	ug/L	P433239	
		Copper	0.55	I	ug/L	P433239	
		Lead	0.20	U	ug/L	P433239	
		Manganese	23.9		ug/L	P433239	
		Molybdenum	0.35	I	ug/L	P433239	
		Nickel	0.50	U	ug/L	P433239	
		Selenium	0.20	U	ug/L	P433239	
		Silver	0.010	U	ug/L	P433239	
		Thallium	0.10	U	ug/L	P433239	
	SM 2340 B-2011	Hardness	49.1		mg/L	P433239	
2427617	EPA 8270E	Oxybenzone**	10	U	ng/L	P433263	

Field ID: G4SD0186

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2427617	EPA 8270E	Acetochlor	0.21	U	ng/L	P433263	
		Octinoxate**	150	U	ng/L	P433263	
		Alachlor	0.41	U	ng/L	P433263	
		Avobenzone**	100	U	ng/L	P433263	
		Ametryn	1.1	U	ng/L	P433263	
		Atrazine	28		ng/L	P433263	
		PBDE-47**	4.1	U	ng/L	P433263	
		Atrazine Desethyl	12		ng/L	P433263	
		PBDE-99**	5.2	U	ng/L	P433263	
		Azinphos Methyl	3.1	U	ng/L	P433263	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P433263	
		Azoxystrobin	0.41	U	ng/L	P433263	
		Bromacil	18		ng/L	P433263	
		2-Ethylhexyl	12	U	ng/L	P433263	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.21	U	ng/L	P433263	
		Dechlorane Plus**	31	U	ng/L	P433263	
		Caffeine**	18	I	ng/L	P433263	
		Dechlorane 602**	5.2	U	ng/L	P433263	
		Carbophenothion	0.52	U	ng/L	P433263	
		Dechlorane 603**	4.1	U	ng/L	P433263	
		Carfentrazone Ethyl	0.15	U	ng/L	P433263	
		Hexabromobenzene**	6.2	U	ng/L	P433263	
		Chlorfenapyr	0.31	U	ng/L	P433263	
		PBB-153**	8.3	U	ng/L	P433263	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P433263	
		Pentabromotoluene**	3.1	U	ng/L	P433263	
		Chlorpyrifos Methyl	0.10	U	ng/L	P433263	
		Tris(2-chloroethyl) phosphate (TCEP)**	72	U	ng/L	P433263	
		Coumaphos	1.1	U	ng/L	P433263	
		Tris(1-chloro-2-propyl) phosphate (TCP)**	21	I	ng/L	P433263	
		Cyanazine	5.2	U	ng/L	P433263	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	20		ng/L	P433263	
		Cyprodinil	0.21	U	ng/L	P433263	
		Tetradecachloro-m-terphenyl**	7.7	U	ng/L	P433263	
		Demeton	3.6	U	ng/L	P433263	
		Diazinon	0.13	U	ng/L	P433263	
		Difenoconazole	0.62	U	ng/L	P433263	
		Dimethenamid	0.10	U	ng/L	P433263	
		Dimethomorph	0.31	U	ng/L	P433263	
		Disulfoton	0.62	U	ng/L	P433263	
		Dithiopyr	1.0	U	ng/L	P433263	
		EPTC	0.52	U	ng/L	P433263	
		Ethion	0.31	U	ng/L	P433263	
		Ethoprop	0.13	U	ng/L	P433263	

Field ID: G4SD0186

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2427617	EPA 8270E	Etridiazole	0.10	U	ng/L	P433263	
		Fenamiphos	0.46	U	ng/L	P433263	
		Fenbuconazole	0.52	U	ng/L	P433263	
		Fipronil	0.21	U	ng/L	P433263	MS
		Fipronil Desulfinyl**	0.12	I	ng/L	P433263	
		Fipronil Sulfide	0.10	U	ng/L	P433263	
		Fipronil Sulfone	0.10	U	ng/L	P433263	
		Fluazifop-P-butyl	0.10	U	ng/L	P433263	
		Fludioxonil	0.10	U	ng/L	P433263	
		Flumioxazin	3.1	U	ng/L	P433263	
		Flutolanil	0.10	U	ng/L	P433263	
		Fluxapyroxad	0.26	U	ng/L	P433263	
		Fonofos	0.15	U	ng/L	P433263	
		Hexazinone	0.52	U	ng/L	P433263	
		Imazalil	0.67	U	ng/L	P433263	
		Iprodione	0.52	U	ng/L	P433263	
		Loratadine**	0.31	U	ng/L	P433263	
		Malathion	0.36	U	ng/L	P433263	
		Metalaxyl	8.0		ng/L	P433263	
		Metolachlor	1.3	I	ng/L	P433263	
		Metribuzin	0.41	U	ng/L	P433263	
		Mevinphos	1.0	U	ng/L	P433263	
		Molinate	0.26	UJ	ng/L	P433263	LCS
		Myclobutanil	0.36	U	ng/L	P433263	
		Naled	2.6	U	ng/L	P433263	
		Napropamide	0.72	U	ng/L	P433263	
		Norflurazon	10		ng/L	P433263	
		Oxadiazon	0.36	U	ng/L	P433263	
		Oxyfluorfen	0.21	U	ng/L	P433263	
		Parathion Ethyl	0.15	U	ng/L	P433263	
		Parathion Methyl	0.21	U	ng/L	P433263	MS
		Pendimethalin	0.77	U	ng/L	P433263	
		Phenytain**	5.5	U	ng/L	P433263	
		Phorate	0.26	U	ng/L	P433263	
		Prodiamine	0.21	U	ng/L	P433263	
		Prometon	3.1	U	ng/L	P433263	
		Prometryn	0.36	U	ng/L	P433263	
		Pronamide	0.10	U	ng/L	P433263	
		Propanil	0.10	U	ng/L	P433263	
		Propargite	0.83	U	ng/L	P433263	
		Propiconazole	0.62	U	ng/L	P433263	
		Pyraflufen Ethyl	0.31	U	ng/L	P433263	
		Pyridaben	18		ng/L	P433263	
		Pyriproxyfen	0.26	U	ng/L	P433263	
		Simazine	0.26	U	ng/L	P433263	

Field ID: G4SD0186

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2427617	EPA 8270E	Stirophos	0.41	U	ng/L	P433263	
		Sulfentrazone	1.4	U	ng/L	P433263	
		Tebuconazole	1.4	U	ng/L	P433263	
		Terbufos	0.21	U	ng/L	P433263	
		Terbuthylazine	0.21	U	ng/L	P433263	
		Thiobencarb	0.52	U	ng/L	P433263	
		Triadimefon	0.15	U	ng/L	P433263	
2427625	EPA 8321B	2,4-D	0.035		ug/L	P433126	
		Acesulfame K	0.10	U	ug/L	P433285	
		2,4,5-T	0.0040	U	ug/L	P433126	
		AMPA	0.10	U	ug/L	P433285	
		Acetaminophen	0.0080	U	ug/L	P433126	
		Acetamiprid	0.0020	U	ug/L	P433126	
		Endothall	0.25	U	ug/L	P433285	
		Glufosinate	0.10	U	ug/L	P433285	
		Glyphosate	0.10	U	ug/L	P433285	
		Afidopyropen	0.0020	U	ug/L	P433126	
		Bentazon	0.0076		ug/L	P433126	
		Sucralose	0.56		ug/L	P433285	
		Benzovindiflupyr	0.0020	U	ug/L	P433126	
		Carbamazepine	8.0E-04	U	ug/L	P433126	
		Clothianidin	0.0025	I	ug/L	P433126	
		Dinotefuran	0.0020	U	ug/L	P433126	
		Diuron	0.0020	U	ug/L	P433126	MS
		Fenuron	0.032	U	ug/L	P433126	
		Fluridone	8.0E-04	U	ug/L	P433126	
		Imazapyr	0.0043	I	ug/L	P433126	
		Hydrocodone	0.0020	U	ug/L	P433126	
		Ibuprofen	0.080	U	ug/L	P433126	
		Imidacloprid	0.020		ug/L	P433126	
		Linuron	0.0040	U	ug/L	P433126	
		Mandestrobin	0.0020	U	ug/L	P433126	
		MCPP	0.0020	U	ug/L	P433126	
		Naproxen	0.0080	U	ug/L	P433126	
		Primidone	0.0040	U	ug/L	P433126	
		Pyraclostrobin	0.0020	U	ug/L	P433126	
		Silvex	0.0040	U	ug/L	P433126	
		Thiamethoxam	0.0020	U	ug/L	P433126	
		Tolfenpyrad	0.0020	U	ug/L	P433126	
		Triclopyr	0.0040	U	ug/L	P433126	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P433184

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433186

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433239

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: P433239

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	0.89	I	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: P433407

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: P433410

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433463

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433319

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433246

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433293

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433172

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

Reference Method: EPA 8270E
Batch ID: P433263

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: P433263

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433263

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: P433263

Component	Result	Code	Units
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
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: P433263

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: P433126

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P433126

Component	Result	Code	Units
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P433285

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: SM 2320 B-2011
Batch ID: P433355

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

Reference Method: SM 2540 C-2015
Batch ID: P433609

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P433522

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P433358

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P433376

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: P433184

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.0		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433186

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433239

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	99.9		P	85 - 115
Magnesium	99.5		P	85 - 115
Potassium	102		P	85 - 115
Sodium	111		P	85 - 115
Strontium	103		P	85 - 115
Tin	99.5		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	100		P	85 - 115
Zinc	96.5		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433239

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.8		P	80 - 120
Antimony	98.9		P	80 - 120
Arsenic	99.7		P	80 - 120
Barium	101		P	80 - 120
Beryllium	93.3		P	80 - 120
Boron	102		P	80 - 120
Cadmium	98.9		P	80 - 120
Chromium	97.9		P	80 - 120
Cobalt	98.4		P	80 - 120
Copper	95.5		P	85 - 115
Lead	101		P	80 - 120
Manganese	97.0		P	80 - 120
Molybdenum	99.5		P	80 - 120
Nickel	98.2		P	80 - 120
Selenium	98.3		P	80 - 120
Silver	111		P	80 - 120
Thallium	99.9		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433407

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433410

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433463

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433319

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	94.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433246

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433293

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433172

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

Reference Method: EPA 8270E
Batch ID: P433263

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	106		P	42 - 162
Acetochlor	88.1		P	69 - 123
Alachlor	92.0		P	65 - 118
Ametryn	104		P	58 - 141
Atrazine	88.8		P	73 - 118
Atrazine Desethyl	84.6		P	32 - 125
Avobenzone	124		P	40 - 203
Azinphos Methyl	122		P	36 - 197
Azoxystrobin	90.8		P	58 - 226
Bromacil	98.7		P	48 - 120
Butylate	32.0		P	27 - 85.0
Caffeine	82.4		P	40 - 137
Carbophenothion	101		P	54 - 132
Carfentrazone Ethyl	113		P	60 - 142
Chlorfenapyr	92.8		P	53 - 117
Chlorpyrifos Ethyl	84.7		P	59 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P433263

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	91.9		P	66 - 119
Coumaphos	167		P	11 - 234
Cyanazine	111		P	61 - 248
Cyprodinil	82.9		P	50 - 147
Dechlorane 602	107		P	50 - 150
Dechlorane 603	122		P	50 - 150
Dechlorane Plus	113		P	47 - 182
Demeton	58.1		P	30 - 138
Diazinon	93.8		P	67 - 126
Difenoconazole	159		P	38 - 205
Dimethenamid	83.4		P	57 - 111
Dimethomorph	81.8		P	16 - 212
Disulfoton	92.7		P	46 - 126
Dithiopyr	94.4		P	62 - 115
EPTC	30.3		P	28 - 80.0
Ethion	93.8		P	24 - 122
Ethoprop	79.6		P	62 - 113
Etridiazole	33.5		P	28 - 92.0
Fenamiphos	97.6		P	57 - 128
Fenbuconazole	101		P	52 - 155
Fipronil	81.5		P	63 - 130
Fipronil Desulfinyl	91.2		P	61 - 130
Fipronil Sulfide	84.5		P	56 - 117
Fipronil Sulfone	98.9		P	52 - 118
Fluazifop-P-butyl	105		P	61 - 128
Fludioxonil	78.5		P	59 - 129
Flumioxazin	179		P	30 - 250
Flutolanil	81.0		P	53 - 127
Fluxapyroxad	100		P	42 - 132
Fonofos	76.2		P	61 - 110
Hexabromobenzene	107		P	50 - 150
Hexazinone	96.7		P	46 - 139
Imazalil	108		P	40 - 139
Iprodione	97.8		P	40 - 146
Loratadine	65.5		P	10 - 224
Malathion	127		P	61 - 135
Metalaxyl	87.2		P	58 - 121
Metolachlor	105		P	64 - 118
Metribuzin	94.7		P	45 - 245
Mevinphos	67.9		P	49 - 118
Molinate	32.8		F	42 - 92.0
Myclobutanil	90.5		P	55 - 127
Naled	56.6		P	10 - 114
Napropamide	84.9		P	39 - 121
Norflurazon	95.4		P	55 - 129
Octinoxate	122		P	26 - 166
Oxadiazon	84.4		P	54 - 115
Oxybenzone	105		P	49 - 135
Oxyfluorfen	103		P	64 - 139
Parathion Ethyl	86.9		P	70 - 111
Parathion Methyl	87.5		P	76 - 136
PBB-153	119		P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P433263

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	111		P	41 - 148
PBDE-99	111		P	38 - 147
Pendimethalin	89.5		P	52 - 118
Pentabromotoluene	97.0		P	50 - 150
Phenytoin	141		P	10 - 162
Phorate	81.2		P	40 - 122
Prodiamine	42.8		P	26 - 141
Prometon	82.8		P	54 - 122
Prometryn	90.4		P	61 - 128
Pronamide	108		P	72 - 121
Propanil	118		P	45 - 144
Propargite	121		P	10 - 199
Propiconazole	95.4		P	56 - 127
Pyraflufen Ethyl	101		P	56 - 140
Pyridaben	143		P	26 - 211
Pyriproxyfen	106		P	33 - 194
Simazine	91.1		P	67 - 121
Stirophos	73.6		P	20 - 142
Sulfentrazone	90.0		P	21 - 144
Tebuconazole	97.5		P	10 - 122
Terbufos	87.0		P	60 - 129
Terbutylazine	80.7		P	69 - 113
Tetradecachloro-m-terphenyl	88.1		P	70 - 200
Thiobencarb	96.3		P	51 - 120
Tri-o-cresyl Phosphate	117		P	49 - 150
Triadimefon	89.9		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	114		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	107		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	113		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P433126

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	76.6		P	40 - 150
2,4,5-T	69.9		P	40 - 150
Acetaminophen	77.6		P	30 - 150
Acetamiprid	83.8		P	40 - 150
Afidopyropen	49.9		P	30 - 150
Bentazon	120		P	30 - 150
Benzovindiflupyr	77.3		P	40 - 150
Carbamazepine	71.5		P	40 - 150
Clothianidin	86.3		P	40 - 150
Dinotefuran	103		P	40 - 150
Diuron	66.8		P	40 - 150
Fenuron	95.0		P	40 - 150
Fluridone	88.5		P	40 - 150
Hydrocodone	101		P	40 - 150
Ibuprofen	73.9		P	40 - 150
Imazapyr	80.5		P	40 - 150
Imidacloprid	82.2		P	40 - 150
Linuron	71.8		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P433126

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mandestrobin	87.4		P	40 - 150
MCPD	83.0		P	40 - 150
Naproxen	84.0		P	40 - 150
Primidone	83.4		P	40 - 150
Pyraclostrobin	67.5		P	40 - 150
Silvex	81.3		P	40 - 150
Thiamethoxam	90.9		P	40 - 150
Tolfenpyrad	34.4		P	30 - 150
Triclopyr	75.2		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P433285

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	99.3		P	40 - 150
AMPA	127		P	40 - 150
Endothall	103		P	40 - 150
Glufosinate	99.2		P	40 - 150
Glyphosate	106		P	40 - 150
Sucralose	100		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P433355

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	94.9		P	92 - 105

Reference Method: SM 2540 C-2015

Batch ID: P433609

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	97.1		P	90 - 110

Reference Method: SM 2540 D-2015

Batch ID: P433522

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	103		P	85 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P433358

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.9		P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P433376

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P433239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427266	Calcium	93.0		P	80 - 120
2427266	Iron	100	101	P/P	80 - 120
2427266	Magnesium	98.6	99.9	P/P	80 - 120
2427266	Potassium	103	99.6	P/P	80 - 120
2427266	Sodium	103		P	80 - 120
2427266	Strontium	104	103	P/P	80 - 120
2427266	Tin	97.0	96.7	P/P	80 - 120
2427266	Titanium	102	99.6	P/P	80 - 120
2427266	Vanadium	102	100	P/P	80 - 120
2427266	Zinc	97.4	95.4	P/P	80 - 120
2427396	Calcium	91.5		P	80 - 120
2427396	Iron	101		P	80 - 120
2427396	Magnesium	100		P	80 - 120
2427396	Potassium	101		P	80 - 120
2427396	Sodium	107		P	80 - 120
2427396	Strontium	104		P	80 - 120
2427396	Tin	94.6		P	80 - 120
2427396	Titanium	100		P	80 - 120
2427396	Vanadium	99.6		P	80 - 120
2427396	Zinc	92.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P433239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427266	Aluminum	101	99.3	P/P	80 - 120
2427266	Antimony	100	99.5	P/P	80 - 120
2427266	Arsenic	100	99.3	P/P	80 - 120
2427266	Barium	103	101	P/P	80 - 120
2427266	Beryllium	97.1	96.4	P/P	80 - 120
2427266	Boron	103	101	P/P	80 - 120
2427266	Cadmium	102	99.2	P/P	80 - 120
2427266	Chromium	98.7	97.0	P/P	80 - 120
2427266	Cobalt	97.0	95.6	P/P	80 - 120
2427266	Copper	98.4	93.7	P/P	80 - 120
2427266	Lead	103	102	P/P	80 - 120
2427266	Manganese	97.8	96.0	P/P	80 - 120
2427266	Molybdenum	99.7	98.5	P/P	80 - 120
2427266	Nickel	98.2	96.7	P/P	80 - 120
2427266	Selenium	98.1	96.3	P/P	80 - 120
2427266	Silver	109	109	P/P	80 - 120
2427266	Thallium	104	103	P/P	80 - 120
2427396	Aluminum	94.9		P	80 - 120
2427396	Antimony	95.6		P	80 - 120
2427396	Arsenic	92.5		P	80 - 120
2427396	Barium	96.8		P	80 - 120
2427396	Beryllium	92.0		P	80 - 120
2427396	Boron	95.8		P	80 - 120
2427396	Cadmium	94.2		P	80 - 120
2427396	Chromium	91.7		P	80 - 120
2427396	Cobalt	90.3		P	80 - 120
2427396	Copper	85.9		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427396	Lead	96.4		P	80 - 120
2427396	Manganese	93.8		P	80 - 120
2427396	Molybdenum	94.8		P	80 - 120
2427396	Nickel	92.2		P	80 - 120
2427396	Selenium	91.3		P	80 - 120
2427396	Silver	106		P	80 - 120
2427396	Thallium	96.6		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433407

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427501	Chloride	102		P	90 - 110
2427752	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433410

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427501	Sulfate	102		P	90 - 110
2427752	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427564	Ammonia-N	98.0	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433246

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427567	NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433293

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427567	Total-P	108	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433172

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427391	O-Phosphate-P	97.9	97.6	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P433263

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427270	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	89.4	107	P/P	26 - 165
2427270	Acetochlor	77.4	73.5	P/P	67 - 124

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P433263

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427270	Alachlor	70.7	72.1	P/P	60 - 120
2427270	Ametryn	105	104	P/P	54 - 216
2427270	Atrazine Desethyl	66.2	63.9	P/P	15 - 122
2427270	Avobenzone	109	131	P/P	37 - 178
2427270	Azinphos Methyl	113	117	P/P	40 - 292
2427270	Azoxystrobin	108	103	P/P	35 - 220
2427270	Bromacil	88.3	95.5	P/P	45 - 127
2427270	Butylate	46.2	50.1	P/P	20 - 83.0
2427270	Caffeine	65.4	64.1	P/P	10 - 194
2427270	Carbophenothion	83.0	90.1	P/P	57 - 127
2427270	Carfentrazone Ethyl	92.0	93.7	P/P	51 - 141
2427270	Chlorfenapyr	77.9	75.1	P/P	46 - 111
2427270	Chlorpyrifos Ethyl	85.1	79.4	P/P	52 - 120
2427270	Chlorpyrifos Methyl	75.9	80.4	P/P	63 - 119
2427270	Coumaphos	137	147	P/P	10 - 228
2427270	Cyanazine	101	108	P/P	59 - 241
2427270	Cyprodinil	52.2	61.8	P/P	47 - 146
2427270	Dechlorane 602	66.0	73.3	P/P	50 - 150
2427270	Dechlorane 603	94.8	110	P/P	50 - 150
2427270	Dechlorane Plus	77.2	86.6	P/P	50 - 150
2427270	Demeton	70.5	74.9	P/P	40 - 136
2427270	Diazinon	85.9	96.5	P/P	69 - 132
2427270	Difenoconazole	143	139	P/P	57 - 258
2427270	Dimethenamid	69.7	62.6	P/P	54 - 110
2427270	Dimethomorph	151	136	P/P	28 - 210
2427270	Disulfoton	86.3	94.9	P/P	43 - 133
2427270	Dithiopyr	76.6	75.7	P/P	39 - 116
2427270	EPTC	41.5	46.1	P/P	20 - 78.0
2427270	Ethion	48.5	50.7	P/P	17 - 119
2427270	Ethoprop	82.2	87.9	P/P	66 - 120
2427270	Etridiazole	47.5	47.9	P/P	28 - 96.0
2427270	Fenamiphos	60.3	62.2	P/P	41 - 126
2427270	Fenbuconazole	87.5	81.7	P/P	42 - 169
2427270	Fipronil	60.1	63.7	F/P	61 - 132
2427270	Fipronil Desulfinyl	62.5	66.7	P/P	56 - 132
2427270	Fipronil Sulfide	50.8	59.6	P/P	48 - 119
2427270	Fipronil Sulfone	51.7	57.1	P/P	42 - 131
2427270	Fluazifop-P-butyl	81.6	84.3	P/P	53 - 131
2427270	Fludioxonil	65.2	61.9	P/P	56 - 127
2427270	Flumioxazin	188	181	P/P	19 - 300
2427270	Flutolanil	55.1	56.1	P/P	41 - 127
2427270	Fluxapyroxad	68.0	69.5	P/P	42 - 172
2427270	Fonofos	79.3	79.4	P/P	59 - 113
2427270	Hexabromobenzene	108	125	P/P	50 - 150
2427270	Hexazinone	79.8	80.7	P/P	66 - 122
2427270	Imazail	80.5	71.9	P/P	21 - 283
2427270	Iprodione	73.6	77.8	P/P	43 - 150
2427270	Loratadine	107	110	P/P	23 - 201
2427270	Malathion	116	123	P/P	58 - 136
2427270	Metalaxyl	71.4	78.4	P/P	55 - 120
2427270	Metolachlor	91.2	98.0	P/P	57 - 121
2427270	Metribuzin	87.8	90.2	P/P	58 - 294

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P433263

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427270	Mevinphos	86.6	91.7	P/P	50 - 126
2427270	Molinate	47.4	50.0	P/P	42 - 93.0
2427270	Myclobutanil	76.6	76.1	P/P	55 - 125
2427270	Naled	59.5	69.4	P/P	18 - 200
2427270	Napropamide	69.5	69.6	P/P	39 - 110
2427270	Norflurazon	76.8	81.2	P/P	48 - 128
2427270	Octinoxate	129	141	P/P	21 - 159
2427270	Oxadiazon	71.9	76.1	P/P	43 - 112
2427270	Oxybenzone	111	124	P/P	41 - 142
2427270	Oxyfluorfen	88.2	89.8	P/P	64 - 153
2427270	Parathion Ethyl	80.7	87.1	P/P	69 - 114
2427270	Parathion Methyl	78.6	78.3	F/F	79 - 139
2427270	PBB-153	105	125	P/P	50 - 150
2427270	PBDE-47	93.0	107	P/P	27 - 144
2427270	PBDE-99	83.6	97.5	P/P	18 - 150
2427270	Pendimethalin	68.8	83.7	P/P	50 - 139
2427270	Pentabromotoluene	98.2	108	P/P	50 - 150
2427270	Phenytoin	131	142	P/P	10 - 146
2427270	Phorate	94.4	99.6	P/P	54 - 161
2427270	Prodiamine	35.2	32.8	P/P	30 - 161
2427270	Prometon	103	114	P/P	45 - 134
2427270	Prometryn	72.7	72.0	P/P	45 - 137
2427270	Pronamide	99.8	95.7	P/P	65 - 133
2427270	Propanil	108	103	P/P	49 - 142
2427270	Propargite	57.0	62.4	P/P	10 - 203
2427270	Propiconazole	67.2	82.8	P/P	38 - 146
2427270	Pyraflufen Ethyl	76.6	95.6	P/P	34 - 153
2427270	Pyridaben	55.7	70.3	P/P	12 - 192
2427270	Pyriproxyfen	69.7	79.0	P/P	33 - 180
2427270	Simazine	92.0	88.7	P/P	51 - 157
2427270	Stiropfos	26.9	31.3	P/P	10 - 128
2427270	Sulfentrazone	70.0	76.3	P/P	53 - 186
2427270	Tebuconazole	48.1	55.4	P/P	10 - 133
2427270	Terbufos	95.8	97.5	P/P	65 - 139
2427270	Terbuthylazine	74.0	76.2	P/P	66 - 117
2427270	Tetradecachloro-m-terphenyl	85.4	87.6	P/P	70 - 200
2427270	Thiobencarb	77.3	76.7	P/P	51 - 119
2427270	Tri-o-cresyl Phosphate	106	122	P/P	31 - 144
2427270	Triadimefon	73.0	70.5	P/P	48 - 119
2427270	Tris(1-chloro-2-propyl) phosphate (TCPP)	114	122	P/P	50 - 150
2427270	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	103	112	P/P	50 - 150
2427270	Tris(2-chloroethyl) phosphate (TCEP)	121	125	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P433126

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427264	2,4,5-T	127	111	P/P	40 - 150
2427264	Acetaminophen	78.9	77.1	P/P	30 - 150
2427264	Acetamiprid	42.4	42.3	P/P	40 - 150
2427264	Afidopyropen	50.1	51.9	P/P	30 - 150
2427264	Benzovindiflupyr	84.0	80.6	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P433126

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427264	Carbamazepine	43.7	43.2	P/P	40 - 150
2427264	Clothianidin	68.4	69.1	P/P	40 - 150
2427264	Dinotefuran	63.4	61.3	P/P	40 - 150
2427264	Diuron	30.4	39.8	F/F	40 - 150
2427264	Fenuron	44.2	52.0	P/P	40 - 150
2427264	Fluridone	92.4	87.6	P/P	40 - 150
2427264	Hydrocodone	54.5	52.4	P/P	40 - 150
2427264	Ibuprofen	73.5	70.1	P/P	40 - 150
2427264	Imidacloprid	105	101	P/P	40 - 150
2427264	Linuron	49.4	48.3	P/P	40 - 150
2427264	Mandestrobin	83.7	80.5	P/P	40 - 150
2427264	MCPPP	133	135	P/P	40 - 150
2427264	Naproxen	99.2	91.9	P/P	40 - 150
2427264	Primidone	69.9	62.7	P/P	40 - 150
2427264	Pyraclostrobin	81.1	73.7	P/P	40 - 150
2427264	Silvex	125	126	P/P	40 - 150
2427264	Thiamethoxam	67.6	67.4	P/P	40 - 150
2427264	Tolfenpyrad	58.7	54.2	P/P	30 - 150
2427264	Triclopyr	109	105	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P433285

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427498	Acesulfame K	115	117	P/P	40 - 150
2427498	AMPA	88.0	89.1	P/P	40 - 150
2427498	Endothall	112	111	P/P	40 - 150
2427498	Glufosinate	79.2	80.9	P/P	40 - 150
2427498	Glyphosate	81.4	96.2	P/P	40 - 150
2427498	Sucralose	97.1	105	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P433358

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427387	Fluoride	101	102	P/P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P433376

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427388	Organic Carbon	92.2	93.9	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P433184

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427500	Color (true)	5.21	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433186

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427400	Turbidity	1.52	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433239

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427266	Calcium	0.257	Spike	P	0 - 20
2427266	Iron	0.510	Spike	P	0 - 20
2427266	Magnesium	0.893	Spike	P	0 - 20
2427266	Potassium	2.43	Spike	P	0 - 20
2427266	Sodium	0.578	Spike	P	0 - 20
2427266	Strontium	1.67	Spike	P	0 - 20
2427266	Tin	0.242	Spike	P	0 - 20
2427266	Titanium	2.74	Spike	P	0 - 20
2427266	Vanadium	2.24	Spike	P	0 - 20
2427266	Zinc	2.13	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433239

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427266	Aluminum	1.64	Spike	P	0 - 20
2427266	Antimony	0.941	Spike	P	0 - 20
2427266	Arsenic	1.13	Spike	P	0 - 20
2427266	Barium	2.01	Spike	P	0 - 20
2427266	Beryllium	0.745	Spike	P	0 - 20
2427266	Boron	1.31	Spike	P	0 - 20
2427266	Cadmium	2.52	Spike	P	0 - 20
2427266	Chromium	1.80	Spike	P	0 - 20
2427266	Cobalt	1.47	Spike	P	0 - 20
2427266	Copper	4.29	Spike	P	0 - 20
2427266	Lead	1.50	Spike	P	0 - 20
2427266	Manganese	1.48	Spike	P	0 - 20
2427266	Molybdenum	1.17	Spike	P	0 - 20
2427266	Nickel	1.54	Spike	P	0 - 20
2427266	Selenium	1.80	Spike	P	0 - 20
2427266	Silver	0.387	Spike	P	0 - 20
2427266	Thallium	0.539	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433407

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427501	Chloride	0.0568	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433410

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427501	Sulfate	0.0167	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427564	Ammonia-N	2.63	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433319

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427675	Kjeldahl Nitrogen	14.2	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433246

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427567	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433293

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427567	Total-P	0.567	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433172

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427391	O-Phosphate-P	0.276	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P433263

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427270	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	17.9	Spike	P	0 - 37
2427270	Acetochlor	5.09	Spike	P	0 - 28

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P433263

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427270	Alachlor	1.87	Spike	P	0 - 30
2427270	Ametryn	0.882	Spike	P	0 - 32
2427270	Atrazine	1.74	Spike	P	0 - 41
2427270	Atrazine Desethyl	2.49	Spike	P	0 - 36
2427270	Avobenzone	18.4	Spike	P	0 - 36
2427270	Azinphos Methyl	3.37	Spike	P	0 - 75
2427270	Azoxystrobin	4.80	Spike	P	0 - 39
2427270	Bromacil	7.81	Spike	P	0 - 33
2427270	Butylate	8.06	Spike	P	0 - 44
2427270	Caffeine	0.581	Spike	P	0 - 74
2427270	Carbophenothion	8.22	Spike	P	0 - 25
2427270	Carfentrazone Ethyl	1.77	Spike	P	0 - 27
2427270	Chlorfenapyr	3.60	Spike	P	0 - 24
2427270	Chlorpyrifos Ethyl	6.96	Spike	P	0 - 26
2427270	Chlorpyrifos Methyl	5.78	Spike	P	0 - 26
2427270	Coumaphos	7.04	Spike	P	0 - 28
2427270	Cyanazine	6.21	Spike	P	0 - 48
2427270	Cyprodinil	16.9	Spike	P	0 - 29
2427270	Dechlorane 602	10.4	Spike	P	0 - 30
2427270	Dechlorane 603	15.1	Spike	P	0 - 30
2427270	Dechlorane Plus	11.5	Spike	P	0 - 30
2427270	Demeton	5.98	Spike	P	0 - 33
2427270	Diazinon	11.6	Spike	P	0 - 29
2427270	Difenoconazole	2.45	Spike	P	0 - 34
2427270	Dimethenamid	10.7	Spike	P	0 - 39
2427270	Dimethomorph	10.3	Spike	P	0 - 51
2427270	Disulfoton	9.43	Spike	P	0 - 30
2427270	Dithiopyr	1.21	Spike	P	0 - 26
2427270	EPTC	10.4	Spike	P	0 - 43
2427270	Ethion	4.39	Spike	P	0 - 79
2427270	Ethoprop	6.74	Spike	P	0 - 29
2427270	Etridiazole	0.688	Spike	P	0 - 33
2427270	Fenamiphos	3.12	Spike	P	0 - 40
2427270	Fenbuconazole	6.78	Spike	P	0 - 74
2427270	Fipronil	5.14	Spike	P	0 - 29
2427270	Fipronil Desulfinyl	4.24	Spike	P	0 - 32
2427270	Fipronil Sulfide	11.9	Spike	P	0 - 30
2427270	Fipronil Sulfone	5.29	Spike	P	0 - 33
2427270	Fluazifop-P-butyl	3.21	Spike	P	0 - 38
2427270	Fludioxonil	5.18	Spike	P	0 - 29
2427270	Flumioxazin	3.80	Spike	P	0 - 51
2427270	Flutolanil	1.74	Spike	P	0 - 25
2427270	Fluxapyroxad	2.17	Spike	P	0 - 45
2427270	Fonofos	0.132	Spike	P	0 - 27
2427270	Hexabromobenzene	14.9	Spike	P	0 - 30
2427270	Hexazinone	1.12	Spike	P	0 - 30
2427270	Imazalil	11.2	Spike	P	0 - 100
2427270	Iprodione	5.50	Spike	P	0 - 33
2427270	Loratadine	2.46	Spike	P	0 - 56
2427270	Malathion	5.64	Spike	P	0 - 37
2427270	Metalaxyl	9.31	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P433263

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427270	Metolachlor	7.18	Spike	P	0 - 29
2427270	Metribuzin	2.60	Spike	P	0 - 45
2427270	Mevinphos	5.71	Spike	P	0 - 29
2427270	Molinate	5.31	Spike	P	0 - 33
2427270	Myclobutanil	0.609	Spike	P	0 - 26
2427270	Naled	15.4	Spike	P	0 - 37
2427270	Napropamide	0.112	Spike	P	0 - 44
2427270	Norflurazon	5.54	Spike	P	0 - 30
2427270	Octinoxate	8.74	Spike	P	0 - 45
2427270	Oxadiazon	5.65	Spike	P	0 - 28
2427270	Oxybenzone	11.3	Spike	P	0 - 46
2427270	Oxyfluorfen	1.80	Spike	P	0 - 28
2427270	Parathion Ethyl	7.63	Spike	P	0 - 31
2427270	Parathion Methyl	0.362	Spike	P	0 - 29
2427270	PBB-153	17.2	Spike	P	0 - 30
2427270	PBDE-47	13.7	Spike	P	0 - 36
2427270	PBDE-99	15.3	Spike	P	0 - 40
2427270	Pendimethalin	19.6	Spike	P	0 - 33
2427270	Pentabromotoluene	9.76	Spike	P	0 - 30
2427270	Phenytoin	8.36	Spike	P	0 - 100
2427270	Phorate	5.39	Spike	P	0 - 36
2427270	Prodiamine	7.23	Spike	P	0 - 71
2427270	Prometon	10.6	Spike	P	0 - 36
2427270	Prometryn	0.996	Spike	P	0 - 28
2427270	Pronamide	4.17	Spike	P	0 - 24
2427270	Propanil	4.18	Spike	P	0 - 28
2427270	Propargite	9.12	Spike	P	0 - 43
2427270	Propiconazole	12.5	Spike	P	0 - 33
2427270	Pyraflufen Ethyl	22.1	Spike	P	0 - 29
2427270	Pyridaben	6.61	Spike	P	0 - 30
2427270	Pyriproxyfen	12.5	Spike	P	0 - 79
2427270	Simazine	3.65	Spike	P	0 - 29
2427270	Stirophos	14.9	Spike	P	0 - 61
2427270	Sulfentrazone	8.59	Spike	P	0 - 33
2427270	Tebuconazole	11.2	Spike	P	0 - 69
2427270	Terbufos	1.74	Spike	P	0 - 29
2427270	Terbuthylazine	2.96	Spike	P	0 - 32
2427270	Tetradecachloro-m-terphenyl	2.51	Spike	P	0 - 30
2427270	Thiobencarb	0.705	Spike	P	0 - 26
2427270	Tri-o-cresyl Phosphate	13.4	Spike	P	0 - 33
2427270	Triadimefon	3.38	Spike	P	0 - 28
2427270	Tris(1-chloro-2-propyl) phosphate (TCPP)	5.40	Spike	P	0 - 30
2427270	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	8.33	Spike	P	0 - 30
2427270	Tris(2-chloroethyl) phosphate (TCEP)	2.93	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P433126

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427264	2,4-D	8.54	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P433126

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427264	2,4,5-T	13.1	Spike	P	0 - 30
2427264	Acetaminophen	2.25	Spike	P	0 - 30
2427264	Acetamiprid	0.0553	Spike	P	0 - 30
2427264	Afidopyropen	3.52	Spike	P	0 - 30
2427264	Bentazon	4.23	Spike	P	0 - 30
2427264	Benzovindiflupyr	4.14	Spike	P	0 - 30
2427264	Carbamazepine	1.19	Spike	P	0 - 30
2427264	Clothianidin	0.980	Spike	P	0 - 30
2427264	Dinotefuran	3.31	Spike	P	0 - 30
2427264	Diuron	26.7	Spike	P	0 - 30
2427264	Fenuron	16.2	Spike	P	0 - 30
2427264	Fluridone	3.34	Spike	P	0 - 30
2427264	Hydrocodone	4.00	Spike	P	0 - 30
2427264	Ibuprofen	4.74	Spike	P	0 - 30
2427264	Imazapyr	17.0	Spike	P	0 - 30
2427264	Imidacloprid	3.90	Spike	P	0 - 30
2427264	Linuron	2.21	Spike	P	0 - 30
2427264	Mandestrobin	3.85	Spike	P	0 - 30
2427264	MCP	1.83	Spike	P	0 - 30
2427264	Naproxen	7.62	Spike	P	0 - 30
2427264	Primidone	10.9	Spike	P	0 - 30
2427264	Pyraclostrobin	9.65	Spike	P	0 - 30
2427264	Silvex	0.871	Spike	P	0 - 30
2427264	Thiamethoxam	0.222	Spike	P	0 - 30
2427264	Tolfenpyrad	8.07	Spike	P	0 - 30
2427264	Triclopyr	3.66	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P433285

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427498	Acesulfame K	1.58	Spike	P	0 - 30
2427498	AMPA	1.28	Spike	P	0 - 30
2427498	Endothall	1.33	Spike	P	0 - 30
2427498	Glufosinate	2.13	Spike	P	0 - 30
2427498	Glyphosate	16.7	Spike	P	0 - 30
2427498	Sucralose	7.95	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P433355

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427387	Total Alkalinity	0.00734	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P433609

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: P433609

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427563	TDS	7.23	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P433358

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427387	Fluoride	0.542	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P433376

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427388	Organic Carbon	1.78	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2427617
Field Sample ID: G4SD0186

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	84.3	P	20 - 200
EPA 8270E	Simazine-d10	96.4	P	62 - 142
EPA 8270E	Terbufos-d10	115	P	58 - 132
EPA 8270E	Terphenyl-d14	95.5	P	52 - 137

Lab Sample ID: 2427625
Field Sample ID: G4SD0186

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	107	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	54.5	P	30 - 160
EPA 8321B	Diuron-d6	53.5	P	30 - 160
EPA 8321B	Endothall-d6	102	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	80.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.2	P	30 - 160
EPA 8321B	Primidone-d5	79.1	P	30 - 160
EPA 8321B	Sucralose-d6	122	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A120705

Included Lab Sample IDs: 2427608

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.6	100	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A120710

Included Lab Sample IDs: 2427606

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.4	99.5	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A120711

Included Lab Sample IDs: 2427606

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A120733

Included Lab Sample IDs: 2427607

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

Reference Method: EPA 8321B

Run ID: A120735

Included Lab Sample IDs: 2427625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	94.0	93.8	P/P	50 - 150
2,4,5-T	102	88.9	P/P	50 - 150
Acetaminophen	77.8	94.3	P/P	60 - 160
Acetamiprid	105	107	P/P	50 - 150
Afidopyropen	74.4	94.9	P/P	50 - 150
Bentazon	134	121	P/P	50 - 160
Benzovindiflupyr	105	110	P/P	50 - 150
Carbamazepine	103	102	P/P	60 - 150
Clothianidin	107	109	P/P	60 - 150
Dinotefuran	129	130	P/P	50 - 150
Diuron	97.0	85.4	P/P	60 - 160
Fenuron	109	106	P/P	60 - 150
Fluridone	103	103	P/P	60 - 160
Hydrocodone	111	117	P/P	60 - 150
Ibuprofen	102	105	P/P	50 - 160
Imazapyr	94.7	88.1	P/P	50 - 150
Imidacloprid	96.6	101	P/P	60 - 150
Linuron	96.6	103	P/P	60 - 150
Mandestrobin	107	106	P/P	50 - 150
MCPP	95.6	90.0	P/P	50 - 150
Naproxen	104	119	P/P	50 - 160
Primidone	98.9	110	P/P	60 - 150
Pyraclostrobin	118	116	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A120735
Included Lab Sample IDs: 2427625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silvex	89.1	86.0	P/P	50 - 150
Thiamethoxam	117	116	P/P	50 - 150
Tolfenpyrad	107	100	P/P	60 - 150
Triclopyr	101	94.1	P/P	50 - 150

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A120763
Included Lab Sample IDs: 2427606

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: A120776
Included Lab Sample IDs: 2427613

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	94.9	94.5	P/P	90 - 110
Antimony	93.8	94.0	P/P	90 - 110
Arsenic	94.1	93.7	P/P	90 - 110
Barium	95.2	95.1	P/P	90 - 110
Beryllium	94.3	92.5	P/P	90 - 110
Boron	98.0	93.5	P/P	90 - 110
Cadmium	95.8	94.0	P/P	90 - 110
Chromium	94.4	93.5	P/P	90 - 110
Cobalt	93.0	92.2	P/P	90 - 110
Lead	96.9	94.5	P/P	90 - 110
Manganese	92.9	90.7	P/P	90 - 110
Molybdenum	93.9	92.6	P/P	90 - 110
Nickel	94.7	92.7	P/P	90 - 110
Selenium	93.2	93.3	P/P	90 - 110
Silver	97.5	95.6	P/P	90 - 110
Thallium	98.1	95.1	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A120803
Included Lab Sample IDs: 2427606

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.8	94.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A120803
Included Lab Sample IDs: 2427606

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A120811
Included Lab Sample IDs: 2427625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	70.9	99.5	P/P	60 - 160
Endothall	90.7	90.8	P/P	60 - 160
Glufosinate	86.0	89.8	P/P	60 - 160
Glyphosate	97.8	98.4	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A120812
Included Lab Sample IDs: 2427625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	105	104	P/P	60 - 160
Sucralose	96.6	105	P/P	60 - 160

Reference Method: SM 5310 B-2011
Run ID: A120813
Included Lab Sample IDs: 2427607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.2	95.5	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A120816
Included Lab Sample IDs: 2427613

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	94.8	95.2	P/P	90 - 110
Iron	97.7	97.7	P/P	90 - 110
Magnesium	96.8	96.8	P/P	90 - 110
Potassium	99.8	98.8	P/P	90 - 110
Sodium	105	103	P/P	90 - 110
Strontium	105	101	P/P	90 - 110
Tin	97.7	98.4	P/P	90 - 110
Titanium	98.9	98.9	P/P	90 - 110
Vanadium	98.3	98.4	P/P	90 - 110
Zinc	95.2	97.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A120829
Included Lab Sample IDs: 2427607

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A120832
Included Lab Sample IDs: 2427607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	98.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A120838

Included Lab Sample IDs: 2427613

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A120846

Included Lab Sample IDs: 2427607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.1	97.3	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A120910

Included Lab Sample IDs: 2427617

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	89.8		P	80 - 120
Avobenzone	85.2		P	80 - 120
Dechlorane 602	97.2		P	80 - 120
Dechlorane 603	94.6		P	80 - 120
Dechlorane Plus	92.6		P	80 - 120
Hexabromobenzene	90.1		P	80 - 120
Octinoxate	92.2		P	80 - 120
Oxybenzone	95.1		P	80 - 120
PBB-153	91.2		P	80 - 120
PBDE-47	91.4		P	80 - 120
PBDE-99	95.8		P	80 - 120
Pentabromotoluene	94.5		P	80 - 120
Tetradecachloro-m-terphenyl	82.7		P	80 - 120
Tri-o-cresyl Phosphate	94.0		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	95.2		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	94.5		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	95.1		P	80 - 120

Reference Method: EPA 8270E

Run ID: A120986

Included Lab Sample IDs: 2427617

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	89.1		P	80 - 120
Alachlor	86.0		P	80 - 120
Ametryn	94.5		P	80 - 120
Atrazine	97.9		P	80 - 120
Atrazine Desethyl	94.5		P	80 - 120
Azinphos Methyl	105		P	80 - 120
Azoxystrobin	96.0		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	99.4		P	80 - 120
Caffeine	95.5		P	80 - 120
Carbophenothion	100		P	80 - 120
Carfentrazone Ethyl	95.8		P	80 - 120
Chlorfenapyr	101		P	80 - 120
Chlorpyrifos Ethyl	87.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120986
Included Lab Sample IDs: 2427617

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorpyrifos Methyl	100		P	80 - 120
Coumaphos	113		P	80 - 120
Cyanazine	103		P	80 - 120
Cyprodinil	96.2		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	100		P	80 - 120
Difenoconazole	105		P	80 - 120
Dimethenamid	97.1		P	80 - 120
Dimethomorph	92.4		P	80 - 120
Disulfoton	100		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	101		P	80 - 120
Ethion	90.5		P	80 - 120
Ethoprop	105		P	80 - 120
Etridiazole	95.6		P	80 - 120
Fenamiphos	99.2		P	80 - 120
Fenbuconazole	91.6		P	80 - 120
Fipronil	90.6		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	103		P	80 - 120
Fipronil Sulfone	104		P	80 - 120
Fluazifop-P-butyl	105		P	80 - 120
Fludioxonil	94.6		P	80 - 120
Flumioxazin	106		P	80 - 120
Flutolanil	96.6		P	80 - 120
Fluxapyroxad	103		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	98.1		P	80 - 120
Imazalil	97.7		P	80 - 120
Iprodione	90.2		P	80 - 120
Loratadine	86.2		P	80 - 120
Malathion	103		P	80 - 120
Metaxyl	87.5		P	80 - 120
Metolachlor	100		P	80 - 120
Metribuzin	96.1		P	80 - 120
Mevinphos	99.9		P	80 - 120
Molinate	88.1		P	80 - 120
Myclobutanil	88.1		P	80 - 120
Naled	104		P	80 - 120
Napropamide	97.8		P	80 - 120
Norflurazon	103		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	105		P	80 - 120
Parathion Ethyl	96.9		P	80 - 120
Parathion Methyl	88.2		P	80 - 120
Pendimethalin	101		P	80 - 120
Phenytol	101		P	80 - 120
Phorate	114		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	91.8		P	80 - 120
Prometryn	94.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120986
Included Lab Sample IDs: 2427617

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pronamide	105		P	80 - 120
Propanil	103		P	80 - 120
Propargite	108		P	80 - 120
Propiconazole	85.7		P	80 - 120
Pyraflufen Ethyl	99.0		P	80 - 120
Pyridaben	106		P	80 - 120
Pyriproxyfen	102		P	80 - 120
Simazine	90.9		P	80 - 120
Stirophos	88.8		P	80 - 120
Sulfentrazone	86.3		P	80 - 120
Tebuconazole	104		P	80 - 120
Terbufos	94.4		P	80 - 120
Terbuthylazine	87.7		P	80 - 120
Thiobencarb	99.2		P	80 - 120
Triadimefon	92.6		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)	98.0					5.21	
EPA 180.1 Rev. 2.0	Turbidity	99.7					1.52	
EPA 200.7 Rev. 4.4	Calcium	101	93.0	91.5				0.257
	Iron	99.9	100	101	101			0.510
	Magnesium	99.5	98.6	99.9	100			0.893
	Potassium	102	103	99.6	101			2.43
	Sodium	111	103	107				0.578
	Strontium	103	104	103	104			1.67
	Tin	99.5	97.0	96.7	94.6			0.242
	Titanium	101	102	99.6	100			2.74
	Vanadium	100	102	100	99.6			2.24
	Zinc	96.5	97.4	95.4	92.7			2.13
EPA 200.8 Rev. 5.4	Aluminum	98.8	101	99.3	94.9			1.64
	Antimony	98.9	100	99.5	95.6			0.941
	Arsenic	99.7	100	99.3	92.5			1.13
	Barium	101	103	101	96.8			2.01
	Beryllium	93.3	97.1	96.4	92.0			0.745
	Boron	102	103	101	95.8			1.31
	Cadmium	98.9	102	99.2	94.2			2.52
	Chromium	97.9	98.7	97.0	91.7			1.80
	Cobalt	98.4	97.0	95.6	90.3			1.47
	Copper	95.5	98.4	93.7	85.9			4.29
	Lead	101	103	102	96.4			1.50
	Manganese	97.0	97.8	96.0	93.8			1.48
	Molybdenum	99.5	99.7	98.5	94.8			1.17
	Nickel	98.2	98.2	96.7	92.2			1.54
	Selenium	98.3	98.1	96.3	91.3			1.80
	Silver	111	109	109	106			0.387
	Thallium	99.9	104	103	96.6			0.539
EPA 300.0 Rev. 2.1	Chloride	101	102	102			0.0568	
	Sulfate	101	102	101			0.0167	
EPA 350.1 Rev. 2.0	Ammonia-N	94.8	98.0	101				2.63
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	94.8						14.2
EPA 353.2 Rev. 2.0	NO2NO3-N	101	101	101				0.0
EPA 365.1 Rev. 2.0	Total-P	108	108	107				0.567
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.7	97.9	97.6				0.276
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	106	89.4	107				17.9
	Acetochlor	88.1	77.4	73.5				5.09
	Alachlor	92.0	70.7	72.1				1.87
	Ametryn	104	105	104				0.882
	Atrazine	88.8						1.74
	Atrazine Desethyl	84.6	66.2	63.9				2.49
	Avobenzone	124	109	131				18.4
	Azinphos Methyl	122	113	117				3.37
	Azoxystrobin	90.8	108	103				4.80
	Bromacil	98.7	88.3	95.5				7.81
	Butylate	32.0	46.2	50.1				8.06
	Caffeine	82.4	65.4	64.1				0.581
	Carbophenothion	101	83.0	90.1				8.22
	Carfentrazone Ethyl	113	92.0	93.7				1.77
	Chlorfenapyr	92.8	77.9	75.1				3.60
	Chlorpyrifos Ethyl	84.7	85.1	79.4				6.96

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Chlorpyrifos Methyl	91.9	75.9	80.4			5.78
	Coumaphos	167	137	147			7.04
	Cyanazine	111	101	108			6.21
	Cyprodinil	82.9	52.2	61.8			16.9
	Dechlorane 602	107	66.0	73.3			10.4
	Dechlorane 603	122	94.8	110			15.1
	Dechlorane Plus	113	77.2	86.6			11.5
	Demeton	58.1	70.5	74.9			5.98
	Diazinon	93.8	85.9	96.5			11.6
	Difenoconazole	159	143	139			2.45
	Dimethenamid	83.4	69.7	62.6			10.7
	Dimethomorph	81.8	151	136			10.3
	Disulfoton	92.7	86.3	94.9			9.43
	Dithiopyr	94.4	76.6	75.7			1.21
	EPTC	30.3	41.5	46.1			10.4
	Ethion	93.8	48.5	50.7			4.39
	Ethoprop	79.6	82.2	87.9			6.74
	Etridiazole	33.5	47.5	47.9			0.688
	Fenamiphos	97.6	60.3	62.2			3.12
	Fenbuconazole	101	87.5	81.7			6.78
	Fipronil	81.5	60.1	63.7			5.14
	Fipronil Desulfinyl	91.2	62.5	66.7			4.24
	Fipronil Sulfide	84.5	50.8	59.6			11.9
	Fipronil Sulfone	98.9	51.7	57.1			5.29
	Fluazifop-P-butyl	105	81.6	84.3			3.21
	Fludioxonil	78.5	65.2	61.9			5.18
	Flumioxazin	179	188	181			3.80
	Flutolanil	81.0	55.1	56.1			1.74
	Fluxapyroxad	100	68.0	69.5			2.17
	Fonofos	76.2	79.3	79.4			0.132
	Hexabromobenzene	107	108	125			14.9
	Hexazinone	96.7	79.8	80.7			1.12
	Imazalil	108	80.5	71.9			11.2
	Iprodione	97.8	73.6	77.8			5.50
	Loratadine	65.5	107	110			2.46
	Malathion	127	116	123			5.64
	Metalaxyl	87.2	71.4	78.4			9.31
	Metolachlor	105	91.2	98.0			7.18
	Metribuzin	94.7	87.8	90.2			2.60
	Mevinphos	67.9	86.6	91.7			5.71
	Molinate	32.8	47.4	50.0			5.31
	Myclobutanil	90.5	76.6	76.1			0.609
	Naled	56.6	59.5	69.4			15.4
	Napropamide	84.9	69.5	69.6			0.112
	Norflurazon	95.4	76.8	81.2			5.54
	Octinoxate	122	129	141			8.74
	Oxadiazon	84.4	71.9	76.1			5.65
	Oxybenzone	105	111	124			11.3
	Oxyfluorfen	103	88.2	89.8			1.80
	Parathion Ethyl	86.9	80.7	87.1			7.63
	Parathion Methyl	87.5	78.6	78.3			0.362
	PBB-153	119	105	125			17.2
	PBDE-47	111	93.0	107			13.7
	PBDE-99	111	83.6	97.5			15.3

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Pendimethalin	89.5	68.8	83.7		19.6
	Pentabromotoluene	97.0	98.2	108		9.76
	Phenytoin	141	131	142		8.36
	Phorate	81.2	94.4	99.6		5.39
	Prodiamine	42.8	35.2	32.8		7.23
	Prometon	82.8	103	114		10.6
	Prometryn	90.4	72.7	72.0		0.996
	Pronamide	108	99.8	95.7		4.17
	Propanil	118	108	103		4.18
	Propargite	121	57.0	62.4		9.12
	Propiconazole	95.4	67.2	82.8		12.5
	Pyraflufen Ethyl	101	76.6	95.6		22.1
	Pyridaben	143	55.7	70.3		6.61
	Pyriproxyfen	106	69.7	79.0		12.5
	Simazine	91.1	92.0	88.7		3.65
	Stirophos	73.6	26.9	31.3		14.9
	Sulfentrazone	90.0	70.0	76.3		8.59
	Tebuconazole	97.5	48.1	55.4		11.2
	Terbufos	87.0	95.8	97.5		1.74
	Terbutylazine	80.7	74.0	76.2		2.96
	Tetradecachloro-m-terphenyl	88.1	85.4	87.6		2.51
	Thiobencarb	96.3	77.3	76.7		0.705
	Tri-o-cresyl Phosphate	117	106	122		13.4
	Triadimefon	89.9	73.0	70.5		3.38
	Tris(1-chloro-2-propyl) phosphate (TCPP)	114	114	122		5.40
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	107	103	112		8.33
	Tris(2-chloroethyl) phosphate (TCEP)	113	121	125		2.93
EPA 8321B	2,4-D	76.6				8.54
	2,4,5-T	69.9	127	111		13.1
	Acesulfame K	99.3	115	117		1.58
	Acetaminophen	77.6	77.1	78.9		2.25
	Acetamiprid	83.8	42.3	42.4		0.0553
	Afidopyropen	49.9	50.1	51.9		3.52
	AMPA	127	88.0	89.1		1.28
	Bentazon	120				4.23
	Benzovindiflupyr	77.3	84.0	80.6		4.14
	Carbamazepine	71.5	43.7	43.2		1.19
	Clothianidin	86.3	69.1	68.4		0.980
	Dinotefuran	103	61.3	63.4		3.31
	Diuron	66.8	30.4	39.8		26.7
	Endothall	103	112	111		1.33
	Fenuron	95.0	52.0	44.2		16.2
	Fluridone	88.5	92.4	87.6		3.34
	Glufosinate	99.2	79.2	80.9		2.13
	Glyphosate	106	81.4	96.2		16.7
	Hydrocodone	101	52.4	54.5		4.00
	Ibuprofen	73.9	73.5	70.1		4.74
	Imazapyr	80.5				17.0
	Imidacloprid	82.2	101	105		3.90
	Linuron	71.8	49.4	48.3		2.21
	Mandestrobin	87.4	83.7	80.5		3.85

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	MCCP	83.0	133	135		
	Naproxen	84.0	99.2	91.9		
	Primidone	83.4	62.7	69.9		
	Pyraclostrobin	67.5	81.1	73.7		
	Silvex	81.3	125	126		
	Sucralose	100	97.1	105		
	Thiamethoxam	90.9	67.4	67.6		
	Tolfenpyrad	34.4	58.7	54.2		
	Triclopyr	75.2	109	105		
SM 2320 B-2011	Total Alkalinity	94.9				0.0073
SM 2540 C-2015	TDS	97.1				7.23
SM 2540 D-2015	TSS	103				
SM 4500-F- C-2011	Fluoride	96.9	101	102		
SM 5310 B-2011	Organic Carbon	95.4	92.2	93.9		

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2427606
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2427606
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2427613
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2427613
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2427606
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2427606
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2427607
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2427607
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2427607
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2427607
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2427608
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2427617
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2427617
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2427625
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2427606
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2427613
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2427606
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2427606
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2427606
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2427607

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	07/28/2023			07/28/2023 14:20	Anna M. Plaviak	2427606
EPA 180.1 Rev. 2.0	07/28/2023			07/28/2023 13:09	Alexis Price	2427606
EPA 200.7 Rev. 4.4	07/28/2023	07/31/2023 13:25	George D Taylor	08/02/2023 21:11	Samatha Luckman	2427613
EPA 200.8 Rev. 5.4	07/28/2023	07/31/2023 13:25	George D Taylor	08/01/2023 23:17	Conrad Hartmann	2427613
	07/28/2023	07/31/2023 13:25	George D Taylor	08/03/2023 14:26	Emily M Philpot	2427613
EPA 300.0 Rev. 2.1	07/28/2023			08/02/2023 21:57	James L Waggeberby	2427606
EPA 350.1 Rev. 2.0	07/28/2023			08/04/2023 13:20	Ping Hua	2427607
EPA 351.2 Rev. 2.0	07/28/2023	08/02/2023 10:37	Dana G. Hughes	08/03/2023 14:57	Samantha L Bates	2427607
EPA 353.2 Rev. 2.0	07/28/2023			07/31/2023 11:31	Beverly Y. Sanders	2427607
EPA 365.1 Rev. 2.0	07/28/2023	08/02/2023 14:24	Alexis Price	08/03/2023 15:18	James L Waggeberby	2427607
EPA 365.1 Rev. 2.0 dissolved	07/28/2023			07/28/2023 13:20	Chandler E Cox	2427608
EPA 8270E	07/28/2023	08/02/2023 09:00	Rasheda Ghaffari	08/08/2023 23:49	Arthur Maknenko	2427617
	07/28/2023	08/02/2023 09:00	Rasheda Ghaffari	08/09/2023 18:29	Vandana T. Nagar	2427617
EPA 8321B	07/28/2023	07/28/2023 14:00	Hoor Shaik	07/29/2023 09:41	Juyoung Kim	2427625
	07/28/2023	08/02/2023 08:00	Tae K Lee	08/02/2023 13:10	Hana Lee	2427625
	07/28/2023	08/02/2023 08:00	Tae K Lee	08/03/2023 06:39	Hana Lee	2427625
SM 2320 B-2011	07/28/2023			08/02/2023 13:02	Dale L. Simmons	2427606
SM 2340 B-2011	07/28/2023			08/02/2023 21:11	Samatha Luckman	2427613
SM 2540 C-2015	07/28/2023			07/31/2023 14:17	Yijie Li	2427606
SM 2540 D-2015	07/28/2023			07/31/2023 14:17	Yijie Li	2427606
SM 4500-F- C-2011	07/28/2023			08/02/2023 13:02	Dale L. Simmons	2427606
SM 5310 B-2011	07/28/2023			08/03/2023 03:11	Elise M. Gillis	2427607