

Chemical Analysis Report

CEN-DIST-2023-08-03-01

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

Event Description: **Little Lake Howell and Mirror Lake LVIs**
Request ID: **RQ-2023-07-31-09**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Matthew Bearden

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

Date Certified: 23-AUG-2023 16:00



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: MIRROR LAKE AT CENTER

Collection Date/Time: 08/02/2023 11:55

Field ID: G2CE0279

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2428377	DEP SOP: NU-094-1	Color (true)	22		PCU	P433400	
	EPA 180.1 Rev. 2.0	Turbidity	0.90	I	NTU	P433412	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P433480	
		Sulfate	10		mg SO4/L	P433482	
	SM 2320 B-2011	Total Alkalinity	48	A	mg CaCO3/L	P433491	
	SM 2540 C-2015	TDS	128		mg/L	P433808	
	SM 2540 D-2015	TSS	2	U	mg/L	P433689	
	SM 4500-F- C-2011	Fluoride	0.049	I	mg F/L	P433493	
2428378	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P433560	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P433432	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P433452	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P433468	
	SM 5310 B-2011	Organic Carbon	7.6		mg C/L	P433531	
2428379	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P433403	
2428381	EPA 8321B	2,4-D	0.92		ug/L	P433321	
		Acesulfame K	0.13	I	ug/L	P433416	
		2,4,5-T	0.0040	U	ug/L	P433321	
		AMPA	0.10	U	ug/L	P433416	
		Acetaminophen	0.0080	U	ug/L	P433321	
		Acetamiprid	0.0020	U	ug/L	P433321	
		Endothall	0.25	U	ug/L	P433416	
		Glufosinate	0.10	U	ug/L	P433416	
		Glyphosate	0.10	U	ug/L	P433416	
		Afidopyropen	0.0020	U	ug/L	P433321	
		Sucralose	1.9		ug/L	P433416	
		Bentazon	0.060		ug/L	P433321	MS
		Benzovindiflupyr	0.0020	U	ug/L	P433321	
		Carbamazepine	8.0E-04	U	ug/L	P433321	
		Clothianidin	0.0020	U	ug/L	P433321	
		Dinotefuran	0.0020	U	ug/L	P433321	
		Diuron	0.0020	U	ug/L	P433321	MS, RPD
		Fenuron	0.032	U	ug/L	P433321	
		Fluridone	0.0070		ug/L	P433321	
		Imazapyr	0.0040	U	ug/L	P433321	
		Hydrocodone	0.0020	U	ug/L	P433321	
		Ibuprofen	0.080	U	ug/L	P433321	
		Imidacloprid	0.0020	U	ug/L	P433321	
		Linuron	0.0040	U	ug/L	P433321	
		Mandestrobin	0.0020	U	ug/L	P433321	
		MCP	0.0020	U	ug/L	P433321	
		Naproxen	0.0080	U	ug/L	P433321	
		Primidone	0.018		ug/L	P433321	
		Pyraclostrobin	0.0020	U	ug/L	P433321	

Field ID: G2CE0279

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2428381	EPA 8321B	Silvex	0.0040	U	ug/L	P433321	
		Thiamethoxam	0.0020	U	ug/L	P433321	
		Tolfenpyrad	0.0020	U	ug/L	P433321	
		Triclopyr	0.0040	U	ug/L	P433321	
2428385	EPA 200.7 Rev. 4.4	Calcium	20.3		mg/L	P433459	
		Iron	30	U	ug/L	P433459	
		Magnesium	3.49		mg/L	P433459	
		Potassium	2.8		mg/L	P433459	
		Sodium	16.7		mg/L	P433459	
		Strontium	48.5		ug/L	P433459	
		Tin	3.0	U	ug/L	P433459	
		Titanium	0.75	U	ug/L	P433459	
		Vanadium	2.0	U	ug/L	P433459	
		Zinc	5.0	U	ug/L	P433459	
	EPA 200.8 Rev. 5.4	Aluminum	19	I	ug/L	P433459	
		Antimony	0.20		ug/L	P433459	
		Arsenic	0.66		ug/L	P433459	
		Barium	9.14		ug/L	P433459	
		Beryllium	0.010	U	ug/L	P433459	
		Boron	46.0		ug/L	P433459	
		Cadmium	0.020	U	ug/L	P433459	
		Chromium	0.40	U	ug/L	P433459	
		Cobalt	0.020	U	ug/L	P433459	
		Copper	0.40	U	ug/L	P433459	
		Lead	0.20	U	ug/L	P433459	
		Manganese	4.91		ug/L	P433459	
		Molybdenum	0.38	I	ug/L	P433459	
		Nickel	0.50	U	ug/L	P433459	
		Selenium	0.20	U	ug/L	P433459	
		Silver	0.010	U	ug/L	P433459	
		Thallium	0.10	U	ug/L	P433459	
		Hardness	65.1		mg/L	P433459	
2428389	SM 2340 B-2011						
	EPA 8270E	Oxybenzone**	10	U	ng/L	P433326	
		Acetochlor	0.21	U	ng/L	P433326	
		Octinoxate**	160	U	ng/L	P433326	
		Alachlor	0.42	U	ng/L	P433326	
		Avobenzone**	100	U	ng/L	P433326	
		Ametryn	1.1	U	ng/L	P433326	
		Atrazine	11		ng/L	P433326	
		PBDE-47**	4.2	U	ng/L	P433326	
		Atrazine Desethyl	1.4	U	ng/L	P433326	
		PBDE-99**	5.2	U	ng/L	P433326	
		Azinphos Methyl	3.1	U	ng/L	P433326	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P433326	
		Azoxystrobin	0.42	U	ng/L	P433326	

Field ID: G2CE0279

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2428389	EPA 8270E	Bromacil	0.62	U	ng/L	P433326	
		2-Ethylhexyl	12	U	ng/L	P433326	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.21	U	ng/L	P433326	
		Dechlorane Plus**	31	U	ng/L	P433326	
		Caffeine**	13	I	ng/L	P433326	
		Dechlorane 602**	5.2	UJ	ng/L	P433326	LCS
		Carbophenothion	0.52	U	ng/L	P433326	
		Dechlorane 603**	4.2	U	ng/L	P433326	
		Carfentrazone Ethyl	0.16	U	ng/L	P433326	
		Hexabromobenzene**	6.2	U	ng/L	P433326	
		Chlorfenapyr	0.31	UJ	ng/L	P433326	CCV
		PBB-153**	8.3	U	ng/L	P433326	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P433326	
		Pentabromotoluene**	3.1	U	ng/L	P433326	
		Chlorpyrifos Methyl	0.10	U	ng/L	P433326	
		Tris(2-chloroethyl) phosphate (TCEP)**	73	U	ng/L	P433326	
		Coumaphos	1.1	U	ng/L	P433326	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	33	I	ng/L	P433326	
		Cyanazine	5.2	U	ng/L	P433326	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	3.4	I	ng/L	P433326	
		Cyprodinil	0.21	U	ng/L	P433326	
		Tetradecachloro-m-terphenyl**	7.8	U	ng/L	P433326	
		Demeton	3.6	U	ng/L	P433326	
		Diazinon	0.13	U	ng/L	P433326	
		Difenoconazole	0.62	U	ng/L	P433326	
		Dimethenamid	0.10	U	ng/L	P433326	
		Dimethomorph	0.31	U	ng/L	P433326	
		Disulfoton	0.62	U	ng/L	P433326	
		Dithiopyr	1.0	U	ng/L	P433326	
		EPTC	0.52	U	ng/L	P433326	
		Ethion	0.31	U	ng/L	P433326	
		Ethoprop	0.13	U	ng/L	P433326	
		Etridiazole	0.10	U	ng/L	P433326	
		Fenamiphos	0.47	U	ng/L	P433326	
		Fenbuconazole	0.52	UJ	ng/L	P433326	LCS
		Fipronil	0.21	U	ng/L	P433326	
		Fipronil Desulfinyl**	0.81		ng/L	P433326	
		Fipronil Sulfide	0.74		ng/L	P433326	
		Fipronil Sulfone	0.75		ng/L	P433326	
		Fluazifop-P-butyl	0.10	U	ng/L	P433326	
		Fludioxonil	0.10	U	ng/L	P433326	
		Flumioxazin	5.4	I	ng/L	P433326	
		Flutolanil	0.10	U	ng/L	P433326	
		Fluxapyroxad	0.26	U	ng/L	P433326	

Field ID: G2CE0279

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2428389	EPA 8270E	Fonofos	0.16	U	ng/L	P433326	
		Hexazinone	0.52	U	ng/L	P433326	
		Imazalil	0.68	U	ng/L	P433326	
		Iprodione	0.52	U	ng/L	P433326	
		Loratadine**	0.31	U	ng/L	P433326	
		Malathion	0.36	U	ng/L	P433326	
		Metalaxyl	0.52	U	ng/L	P433326	
		Metolachlor	0.78	U	ng/L	P433326	
		Metribuzin	0.42	U	ng/L	P433326	
		Mevinphos	1.0	U	ng/L	P433326	
		Molinate	0.26	U	ng/L	P433326	
		Myclobutanil	0.39	I	ng/L	P433326	
		Naled	2.6	U	ng/L	P433326	
		Napropamide	0.73	U	ng/L	P433326	
		Norflurazon	1.0	U	ng/L	P433326	
		Oxadiazon	0.36	U	ng/L	P433326	
		Oxyfluorfen	0.21	U	ng/L	P433326	
		Parathion Ethyl	0.16	U	ng/L	P433326	
		Parathion Methyl	0.21	U	ng/L	P433326	
		Pendimethalin	0.78	U	ng/L	P433326	
		Phenytol**	5.5	U	ng/L	P433326	
		Phorate	0.26	U	ng/L	P433326	
		Prodiamine	0.21	U	ng/L	P433326	
		Prometon	3.1	U	ng/L	P433326	
		Prometryn	0.36	U	ng/L	P433326	
		Pronamide	0.10	U	ng/L	P433326	
		Propanil	0.10	U	ng/L	P433326	
		Propargite	0.83	U	ng/L	P433326	
		Propiconazole	0.94	I	ng/L	P433326	
		Pyraflufen Ethyl	0.31	U	ng/L	P433326	
		Pyridaben	14		ng/L	P433326	
		Pyriproxyfen	0.26	U	ng/L	P433326	
		Simazine	0.26	U	ng/L	P433326	
		Stirophos	0.42	U	ng/L	P433326	
		Sulfentrazone	1.5	U	ng/L	P433326	
		Tebuconazole	1.5	U	ng/L	P433326	
		Terbufos	0.21	U	ng/L	P433326	
		Terbuthylazine	0.21	U	ng/L	P433326	
		Thiobencarb	0.52	U	ng/L	P433326	
		Triadimefon	0.16	U	ng/L	P433326	

Ref. Method and Comment:

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

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. 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: P433400

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433412

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433459

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: P433459

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: P433480

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: P433482

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433560

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433432

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433452

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433468

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433403

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

Reference Method: EPA 8270E
Batch ID: P433326

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: P433326

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: P433326

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: P433326

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: P433326

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: P433321

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: P433321

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

Reference Method: EPA 8321B
Batch ID: P433416

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: P433491

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

Reference Method: SM 2540 C-2015
Batch ID: P433808

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P433689

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P433493

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P433531

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: P433400

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.9		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433412

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	98.4		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433459

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	108		P	85 - 115
Iron	108		P	85 - 115
Magnesium	108		P	85 - 115
Potassium	104		P	85 - 115
Sodium	107		P	85 - 115
Strontium	103		P	85 - 115
Tin	106		P	85 - 115
Titanium	105		P	85 - 115
Vanadium	106		P	85 - 115
Zinc	108		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433459

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.3		P	85 - 115
Antimony	99.5		P	85 - 115
Arsenic	98.3		P	85 - 115
Barium	101		P	85 - 115
Beryllium	97.3		P	85 - 115
Boron	104		P	85 - 115
Cadmium	99.8		P	85 - 115
Chromium	99.3		P	85 - 115
Cobalt	102		P	85 - 115
Copper	95.4		P	85 - 115
Lead	95.3		P	85 - 115
Manganese	101		P	85 - 115
Molybdenum	98.5		P	85 - 115
Nickel	101		P	85 - 115
Selenium	97.8		P	85 - 115
Silver	114		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433480

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433482

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433560

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433432

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433452

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433468

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433403

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

Reference Method: EPA 8270E
Batch ID: P433326

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	77.5		P	42 - 162
Acetochlor	81.7		P	69 - 123
Alachlor	79.2		P	65 - 118
Ametryn	74.5		P	58 - 141
Atrazine	80.2		P	73 - 118
Atrazine Desethyl	71.5		P	32 - 125
Avobenzone	96.6		P	40 - 203
Azinphos Methyl	77.4		P	36 - 197
Azoxystrobin	60.1		P	58 - 226
Bromacil	78.3		P	48 - 120
Butylate	62.0		P	27 - 85.0
Caffeine	90.6		P	40 - 137
Carbophenothion	72.5		P	54 - 132
Carfentrazone Ethyl	81.0		P	60 - 142
Chlorfenapyr	61.3		P	53 - 117
Chlorpyrifos Ethyl	107		P	59 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P433326

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	86.2		P	66 - 119
Coumaphos	49.0		P	11 - 234
Cyanazine	96.8		P	61 - 248
Cyprodinil	57.6		P	50 - 147
Dechlorane 602	40.9		F	50 - 150
Dechlorane 603	74.8		P	50 - 150
Dechlorane Plus	64.1		P	47 - 182
Demeton	78.0		P	30 - 138
Diazinon	89.7		P	67 - 126
Difenoconazole	53.6		P	38 - 205
Dimethenamid	70.7		P	57 - 111
Dimethomorph	131		P	16 - 212
Disulfoton	94.5		P	46 - 126
Dithiopyr	73.5		P	62 - 115
EPTC	59.5		P	28 - 80.0
Ethion	34.1		P	24 - 122
Ethoprop	96.4		P	62 - 113
Etridiazole	64.2		P	28 - 92.0
Fenamiphos	67.6		P	57 - 128
Fenbuconazole	35.7		F	52 - 155
Fipronil	125		P	63 - 130
Fipronil Desulfinyl	74.9		P	61 - 130
Fipronil Sulfide	116		P	56 - 117
Fipronil Sulfone	62.0		P	52 - 118
Fluazifop-P-butyl	67.0		P	61 - 128
Fludioxonil	75.5		P	59 - 129
Flumioxazin	68.6		P	30 - 250
Flutolanil	65.2		P	53 - 127
Fluxapyroxad	52.6		P	42 - 132
Fonofos	80.9		P	61 - 110
Hexabromobenzene	104		P	50 - 150
Hexazinone	83.3		P	46 - 139
Imazalil	81.2		P	40 - 139
Iprodione	51.1		P	40 - 146
Loratadine	96.8		P	10 - 224
Malathion	87.5		P	61 - 135
Metalaxyl	84.4		P	58 - 121
Metolachlor	101		P	64 - 118
Metribuzin	93.5		P	45 - 245
Mevinphos	97.2		P	49 - 118
Molinate	64.1		P	42 - 92.0
Myclobutanil	72.6		P	55 - 127
Naled	61.7		P	10 - 114
Napropamide	62.7		P	39 - 121
Norflurazon	71.0		P	55 - 129
Octinoxate	104		P	26 - 166
Oxadiazon	62.0		P	54 - 115
Oxybenzone	105		P	49 - 135
Oxyfluorfen	85.4		P	64 - 139
Parathion Ethyl	97.1		P	70 - 111
Parathion Methyl	85.6		P	76 - 136
PBB-153	64.9		P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P433326

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	75.4		P	41 - 148
PBDE-99	48.6		P	38 - 147
Pendimethalin	67.6		P	52 - 118
Pentabromotoluene	96.5		P	50 - 150
Phenytoin	36.1		P	10 - 162
Phorate	91.2		P	40 - 122
Prodiamine	57.2		P	26 - 141
Prometon	98.9		P	54 - 122
Prometryn	70.8		P	61 - 128
Pronamide	96.3		P	72 - 121
Propanil	81.7		P	45 - 144
Propargite	39.1		P	10 - 199
Propiconazole	127		P	56 - 127
Pyraflufen Ethyl	56.3		P	56 - 140
Pyridaben	58.2		P	26 - 211
Pyriproxyfen	42.8		P	33 - 194
Simazine	82.3		P	67 - 121
Stirophos	40.4		P	20 - 142
Sulfentrazone	33.8		P	21 - 144
Tebuconazole	36.4		P	10 - 122
Terbufos	102		P	60 - 129
Terbutylazine	76.0		P	69 - 113
Tetradecachloro-m-terphenyl	115		P	70 - 200
Thiobencarb	78.3		P	51 - 120
Tri-o-cresyl Phosphate	94.5		P	49 - 150
Triadimefon	71.4		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	112		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	86.0		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	102		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P433321

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	83.3		P	40 - 150
2,4,5-T	80.8		P	40 - 150
Acetaminophen	87.3		P	30 - 150
Acetamiprid	93.4		P	40 - 150
Afidopyropen	78.9		P	30 - 150
Bentazon	137		P	30 - 150
Benzovindiflupyr	88.3		P	40 - 150
Carbamazepine	66.2		P	40 - 150
Clothianidin	95.4		P	40 - 150
Dinotefuran	114		P	40 - 150
Diuron	63.2		P	40 - 150
Fenuron	94.7		P	40 - 150
Fluridone	102		P	40 - 150
Hydrocodone	97.6		P	40 - 150
Ibuprofen	72.2		P	40 - 150
Imazapyr	77.6		P	40 - 150
Imidacloprid	86.8		P	40 - 150
Linuron	73.7		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P433321

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mandestrobin	95.5		P	40 - 150
MCPP	90.8		P	40 - 150
Naproxen	76.1		P	40 - 150
Primidone	79.2		P	40 - 150
Pyraclostrobin	71.5		P	40 - 150
Silvex	89.4		P	40 - 150
Thiamethoxam	99.0		P	40 - 150
Tolfenpyrad	44.3		P	30 - 150
Triclopyr	82.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P433416

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	93.2		P	40 - 150
AMPA	74.6		P	40 - 150
Endothall	93.3		P	40 - 150
Glufosinate	86.6		P	40 - 150
Glyphosate	97.1		P	40 - 150
Sucralose	85.4		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P433491

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.2		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P433808

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	96.8		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P433689

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	89.7		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P433493

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

Reference Method: SM 5310 B-2011
Batch ID: P433531

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P433459

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428385	Calcium	104		P	80 - 120
2428385	Iron	106	104	P/P	80 - 120
2428385	Magnesium	102	100	P/P	80 - 120
2428385	Potassium	100	100	P/P	80 - 120
2428385	Sodium	103		P	80 - 120
2428385	Strontium	100	99.2	P/P	80 - 120
2428385	Tin	104	105	P/P	80 - 120
2428385	Titanium	104	101	P/P	80 - 120
2428385	Vanadium	106	103	P/P	80 - 120
2428385	Zinc	106	102	P/P	80 - 120
2428696	Calcium	107		P	80 - 120
2428696	Iron	108		P	80 - 120
2428696	Magnesium	108		P	80 - 120
2428696	Potassium	103		P	80 - 120
2428696	Sodium	103		P	80 - 120
2428696	Strontium	101		P	80 - 120
2428696	Tin	106		P	80 - 120
2428696	Titanium	102		P	80 - 120
2428696	Vanadium	103		P	80 - 120
2428696	Zinc	106		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P433459

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428385	Aluminum	97.2	97.9	P/P	80 - 120
2428385	Antimony	101	101	P/P	80 - 120
2428385	Arsenic	99.6	99.1	P/P	80 - 120
2428385	Barium	100	101	P/P	80 - 120
2428385	Beryllium	93.3	98.4	P/P	80 - 120
2428385	Boron	101	105	P/P	80 - 120
2428385	Cadmium	102	102	P/P	80 - 120
2428385	Chromium	98.5	99.7	P/P	80 - 120
2428385	Cobalt	98.5	99.9	P/P	80 - 120
2428385	Copper	95.4	96.2	P/P	80 - 120
2428385	Lead	95.9	96.7	P/P	80 - 120
2428385	Manganese	98.2	101	P/P	80 - 120
2428385	Molybdenum	100	99.6	P/P	80 - 120
2428385	Nickel	94.9	96.7	P/P	80 - 120
2428385	Selenium	95.1	95.4	P/P	80 - 120
2428385	Silver	112	113	P/P	80 - 120
2428385	Thallium	103	105	P/P	80 - 120
2428696	Aluminum	98.0		P	80 - 120
2428696	Antimony	99.7		P	80 - 120
2428696	Arsenic	97.4		P	80 - 120
2428696	Barium	102		P	80 - 120
2428696	Beryllium	91.6		P	80 - 120
2428696	Boron	103		P	80 - 120
2428696	Cadmium	99.9		P	80 - 120
2428696	Chromium	99.3		P	80 - 120
2428696	Cobalt	101		P	80 - 120
2428696	Copper	94.1		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433459

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428696	Lead	96.0		P	80 - 120
2428696	Manganese	102		P	80 - 120
2428696	Molybdenum	97.0		P	80 - 120
2428696	Nickel	95.3		P	80 - 120
2428696	Selenium	96.2		P	80 - 120
2428696	Silver	112		P	80 - 120
2428696	Thallium	102		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433480

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428113	Chloride	98.9		P	90 - 110
2428377	Chloride	99.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433482

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428113	Sulfate	99.7		P	90 - 110
2428377	Sulfate	98.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433560

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428327	Ammonia-N	96.0	97.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433432

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428354	Kjeldahl Nitrogen	94.7	97.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433452

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428316	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433468

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428378	Total-P	105	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433403

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428328	O-Phosphate-P	100	99.4	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P433326

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428120	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	96.4	93.2	P/P	26 - 165
2428120	Acetochlor	94.0	88.4	P/P	67 - 124
2428120	Alachlor	89.6	84.4	P/P	60 - 120
2428120	Ametryn	120	130	P/P	54 - 216
2428120	Atrazine	97.4	86.3	P/P	66 - 128
2428120	Atrazine Desethyl	85.6	77.9	P/P	15 - 122
2428120	Avobenzone	125	124	P/P	37 - 178
2428120	Azinphos Methyl	146	126	P/P	40 - 292
2428120	Azoxystrobin	107	101	P/P	35 - 220
2428120	Butylate	61.8	53.7	P/P	20 - 83.0
2428120	Caffeine	98.7	94.0	P/P	10 - 194
2428120	Carbophenothion	98.7	96.0	P/P	57 - 127
2428120	Carfentrazone Ethyl	113	108	P/P	51 - 141
2428120	Chlorfenapyr	88.4	80.4	P/P	46 - 111
2428120	Chlorpyrifos Ethyl	81.1	82.3	P/P	52 - 120
2428120	Chlorpyrifos Methyl	94.2	90.0	P/P	63 - 119
2428120	Coumaphos	147	148	P/P	10 - 228
2428120	Cyanazine	123	115	P/P	59 - 241
2428120	Cyprodinil	78.7	86.9	P/P	47 - 146
2428120	Dechlorane 602	69.0	70.6	P/P	50 - 150
2428120	Dechlorane 603	115	105	P/P	50 - 150
2428120	Dechlorane Plus	87.4	79.0	P/P	50 - 150
2428120	Demeton	91.4	85.5	P/P	40 - 136
2428120	Diazinon	105	98.4	P/P	69 - 132
2428120	Difenoconazole	155	151	P/P	57 - 258
2428120	Dimethenamid	82.8	76.0	P/P	54 - 110
2428120	Dimethomorph	174	177	P/P	28 - 210
2428120	Disulfoton	105	102	P/P	43 - 133
2428120	Dithiopyr	85.9	81.2	P/P	39 - 116
2428120	EPTC	32.2	38.9	P/P	20 - 78.0
2428120	Ethion	74.1	73.0	P/P	17 - 119
2428120	Ethoprop	106	96.0	P/P	66 - 120
2428120	Etridiazole	67.6	57.8	P/P	28 - 96.0
2428120	Fenamiphos	80.0	112	P/P	41 - 126
2428120	Fenbuconazole	106	96.8	P/P	42 - 169
2428120	Fipronil	93.5	93.2	P/P	61 - 132
2428120	Fipronil Desulfinyl	91.3	86.2	P/P	56 - 132
2428120	Fipronil Sulfide	92.4	87.5	P/P	48 - 119
2428120	Fipronil Sulfone	89.6	86.2	P/P	42 - 131
2428120	Fluazifop-P-butyl	92.8	85.2	P/P	53 - 131
2428120	Fludioxonil	73.9	64.9	P/P	56 - 127
2428120	Flumioxazin	182	162	P/P	19 - 300
2428120	Flutolanil	66.4	57.1	P/P	41 - 127
2428120	Fluxapyroxad	91.2	89.6	P/P	42 - 172
2428120	Fonofos	94.9	86.4	P/P	59 - 113
2428120	Hexabromobenzene	116	113	P/P	50 - 150
2428120	Hexazinone	96.0	86.9	P/P	66 - 122
2428120	Imazalil	105	97.0	P/P	21 - 283
2428120	Iprodione	87.4	80.3	P/P	43 - 150
2428120	Loratadine	142	137	P/P	23 - 201
2428120	Malathion	124	117	P/P	58 - 136
2428120	Metolachlor	99.3	93.3	P/P	57 - 121

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P433326

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428120	Metribuzin	99.8	83.9	P/P	58 - 294
2428120	Mevinphos	112	103	P/P	50 - 126
2428120	Molinate	62.7	54.2	P/P	42 - 93.0
2428120	Myclobutanil	91.7	86.2	P/P	55 - 125
2428120	Naled	59.1	61.2	P/P	18 - 200
2428120	Napropamide	82.7	81.1	P/P	39 - 110
2428120	Octinoxate	113	109	P/P	21 - 159
2428120	Oxadiazon	69.6	66.3	P/P	43 - 112
2428120	Oxybenzone	119	107	P/P	41 - 142
2428120	Oxyfluorfen	109	105	P/P	64 - 153
2428120	Parathion Ethyl	98.7	89.8	P/P	69 - 114
2428120	Parathion Methyl	102	95.1	P/P	79 - 139
2428120	PBB-153	111	103	P/P	50 - 150
2428120	PBDE-47	99.8	98.2	P/P	27 - 144
2428120	PBDE-99	87.9	82.5	P/P	18 - 150
2428120	Pendimethalin	95.2	87.6	P/P	50 - 139
2428120	Pentabromotoluene	102	100	P/P	50 - 150
2428120	Phenytoin	57.2	58.2	P/P	10 - 146
2428120	Phorate	112	105	P/P	54 - 161
2428120	Prodiamine	37.1	36.3	P/P	30 - 161
2428120	Prometon	85.3	79.1	P/P	45 - 134
2428120	Prometryn	95.0	90.1	P/P	45 - 137
2428120	Pronamide	105	111	P/P	65 - 133
2428120	Propanil	126	124	P/P	49 - 142
2428120	Propargite	66.9	82.5	P/P	10 - 203
2428120	Propiconazole	89.6	86.3	P/P	38 - 146
2428120	Pyraflufen Ethyl	97.4	96.6	P/P	34 - 153
2428120	Pyriproxyfen	87.4	93.1	P/P	33 - 180
2428120	Simazine	85.3	58.9	P/P	51 - 157
2428120	Stirophos	50.2	35.9	P/P	10 - 128
2428120	Sulfentrazone	80.8	75.2	P/P	53 - 186
2428120	Tebuconazole	58.1	67.0	P/P	10 - 133
2428120	Terbufos	115	107	P/P	65 - 139
2428120	Terbuthylazine	83.9	78.2	P/P	66 - 117
2428120	Tetradecachloro-m-terphenyl	81.8	80.8	P/P	70 - 200
2428120	Thiobencarb	79.1	82.3	P/P	51 - 119
2428120	Tri-o-cresyl Phosphate	116	111	P/P	31 - 144
2428120	Triadimefon	85.9	80.0	P/P	48 - 119
2428120	Tris(1-chloro-2-propyl) phosphate (TCPP)	126	115	P/P	50 - 150
2428120	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	106	99.6	P/P	50 - 150
2428120	Tris(2-chloroethyl) phosphate (TCEP)	122	113	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P433321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427704	2,4-D	88.2	95.9	P/P	40 - 150
2427704	2,4,5-T	90.9	102	P/P	40 - 150
2427704	Acetaminophen	104	98.3	P/P	30 - 150
2427704	Acetamiprid	71.7	70.5	P/P	40 - 150
2427704	Afidopyropen	75.4	75.7	P/P	30 - 150
2427704	Bentazon	159	153	F/F	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P433321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427704	Benzovindiflupyr	77.9	77.7	P/P	40 - 150
2427704	Carbamazepine	56.9	54.2	P/P	40 - 150
2427704	Clothianidin	115	102	P/P	40 - 150
2427704	Dinotefuran	104	86.7	P/P	40 - 150
2427704	Diuron	26.8	47.0	F/P	40 - 150
2427704	Fenuron	75.5	70.4	P/P	40 - 150
2427704	Fluridone	91.6	86.4	P/P	40 - 150
2427704	Hydrocodone	77.7	74.9	P/P	40 - 150
2427704	Ibuprofen	76.1	77.3	P/P	40 - 150
2427704	Imazapyr	83.6	85.1	P/P	40 - 150
2427704	Imidacloprid	124	120	P/P	40 - 150
2427704	Linuron	55.4	58.9	P/P	40 - 150
2427704	Mandestrobin	85.1	86.8	P/P	40 - 150
2427704	MCPP	97.6	103	P/P	40 - 150
2427704	Naproxen	62.7	70.6	P/P	40 - 150
2427704	Primidone	88.6	87.4	P/P	40 - 150
2427704	Pyraclostrobin	75.0	78.3	P/P	40 - 150
2427704	Silvex	108	101	P/P	40 - 150
2427704	Thiamethoxam	104	96.6	P/P	40 - 150
2427704	Tolfenpyrad	51.0	54.3	P/P	30 - 150
2427704	Triclopyr	91.4	94.2	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P433416

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428009	Acesulfame K	113	121	P/P	40 - 150
2428009	AMPA	64.2	62.1	P/P	40 - 150
2428009	Endothall	102	97.4	P/P	40 - 150
2428009	Glufosinate	92.7	78.5	P/P	40 - 150
2428009	Glyphosate	90.6	96.6	P/P	40 - 150
2428009	Sucralose	84.5	87.1	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P433493

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428377	Fluoride	99.0	97.9	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P433531

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428378	Organic Carbon	96.6	96.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P433400

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428326	Color (true)	0.493	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433412

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428313	Turbidity	10.1	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433459

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428385	Calcium	0.110	Spike	P	0 - 20
2428385	Iron	1.52	Spike	P	0 - 20
2428385	Magnesium	1.23	Spike	P	0 - 20
2428385	Potassium	0.0155	Spike	P	0 - 20
2428385	Sodium	0.501	Spike	P	0 - 20
2428385	Strontium	0.690	Spike	P	0 - 20
2428385	Tin	1.31	Spike	P	0 - 20
2428385	Titanium	2.98	Spike	P	0 - 20
2428385	Vanadium	3.02	Spike	P	0 - 20
2428385	Zinc	3.19	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433459

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428385	Aluminum	0.687	Spike	P	0 - 20
2428385	Antimony	0.636	Spike	P	0 - 20
2428385	Arsenic	0.482	Spike	P	0 - 20
2428385	Barium	0.756	Spike	P	0 - 20
2428385	Beryllium	5.33	Spike	P	0 - 20
2428385	Boron	2.58	Spike	P	0 - 20
2428385	Cadmium	0.166	Spike	P	0 - 20
2428385	Chromium	1.21	Spike	P	0 - 20
2428385	Cobalt	1.38	Spike	P	0 - 20
2428385	Copper	0.919	Spike	P	0 - 20
2428385	Lead	0.869	Spike	P	0 - 20
2428385	Manganese	2.15	Spike	P	0 - 20
2428385	Molybdenum	0.352	Spike	P	0 - 20
2428385	Nickel	1.86	Spike	P	0 - 20
2428385	Selenium	0.326	Spike	P	0 - 20
2428385	Silver	0.369	Spike	P	0 - 20
2428385	Thallium	1.22	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433480

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428113	Chloride	0.116	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433482

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428113	Sulfate	0.338	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433560

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428327	Ammonia-N	0.887	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433432

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428354	Kjeldahl Nitrogen	2.15	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433452

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428316	NO2NO3-N	0.471	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433468

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428378	Total-P	1.99	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433403

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428328	O-Phosphate-P	0.765	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P433326

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428120	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	3.34	Spike	P	0 - 37
2428120	Acetochlor	6.07	Spike	P	0 - 28

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P433326

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428120	Alachlor	5.95	Spike	P	0 - 30
2428120	Ametryn	7.79	Spike	P	0 - 32
2428120	Atrazine	7.03	Spike	P	0 - 41
2428120	Atrazine Desethyl	9.34	Spike	P	0 - 36
2428120	Avobenzone	0.718	Spike	P	0 - 36
2428120	Azinphos Methyl	14.7	Spike	P	0 - 75
2428120	Azoxystrobin	4.85	Spike	P	0 - 39
2428120	Bromacil	3.16	Spike	P	0 - 33
2428120	Butylate	14.1	Spike	P	0 - 44
2428120	Caffeine	4.85	Spike	P	0 - 74
2428120	Carbophenothion	2.83	Spike	P	0 - 25
2428120	Carfentrazone Ethyl	4.68	Spike	P	0 - 27
2428120	Chlorfenapyr	9.41	Spike	P	0 - 24
2428120	Chlorpyrifos Ethyl	1.46	Spike	P	0 - 26
2428120	Chlorpyrifos Methyl	4.55	Spike	P	0 - 26
2428120	Coumaphos	0.814	Spike	P	0 - 28
2428120	Cyanazine	6.79	Spike	P	0 - 48
2428120	Cyprodinil	9.96	Spike	P	0 - 29
2428120	Dechlorane 602	2.39	Spike	P	0 - 30
2428120	Dechlorane 603	8.40	Spike	P	0 - 30
2428120	Dechlorane Plus	10.1	Spike	P	0 - 30
2428120	Demeton	6.67	Spike	P	0 - 33
2428120	Diazinon	6.13	Spike	P	0 - 29
2428120	Difenoconazole	2.53	Spike	P	0 - 34
2428120	Dimethenamid	8.62	Spike	P	0 - 39
2428120	Dimethomorph	1.59	Spike	P	0 - 51
2428120	Disulfoton	3.21	Spike	P	0 - 30
2428120	Dithiopyr	5.59	Spike	P	0 - 26
2428120	EPTC	19.0	Spike	P	0 - 43
2428120	Ethion	1.49	Spike	P	0 - 79
2428120	Ethoprop	10.3	Spike	P	0 - 29
2428120	Etridiazole	15.7	Spike	P	0 - 33
2428120	Fenamiphos	33.2	Spike	P	0 - 40
2428120	Fenbuconazole	8.88	Spike	P	0 - 74
2428120	Fipronil	0.348	Spike	P	0 - 29
2428120	Fipronil Desulfinyl	5.72	Spike	P	0 - 32
2428120	Fipronil Sulfide	5.51	Spike	P	0 - 30
2428120	Fipronil Sulfone	3.89	Spike	P	0 - 33
2428120	Fluazifop-P-butyl	8.56	Spike	P	0 - 38
2428120	Fludioxonil	13.0	Spike	P	0 - 29
2428120	Flumioxazin	11.6	Spike	P	0 - 51
2428120	Flutolanil	15.1	Spike	P	0 - 25
2428120	Fluxapyroxad	1.76	Spike	P	0 - 45
2428120	Fonofos	9.47	Spike	P	0 - 27
2428120	Hexabromobenzene	1.88	Spike	P	0 - 30
2428120	Hexazinone	7.57	Spike	P	0 - 30
2428120	Imazalil	8.06	Spike	P	0 - 100
2428120	Iprodione	8.40	Spike	P	0 - 33
2428120	Loratadine	3.54	Spike	P	0 - 56
2428120	Malathion	6.33	Spike	P	0 - 37
2428120	Metalaxyl	0.380	Spike	P	0 - 40

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P433326

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428120	Metolachlor	6.23	Spike	P	0 - 29
2428120	Metribuzin	17.3	Spike	P	0 - 45
2428120	Mevinphos	8.16	Spike	P	0 - 29
2428120	Molinate	14.5	Spike	P	0 - 33
2428120	Myclobutanil	6.14	Spike	P	0 - 26
2428120	Naled	3.51	Spike	P	0 - 37
2428120	Napropamide	1.90	Spike	P	0 - 44
2428120	Norflurazon	3.69	Spike	P	0 - 30
2428120	Octinoxate	3.68	Spike	P	0 - 45
2428120	Oxadiazon	4.84	Spike	P	0 - 28
2428120	Oxybenzone	11.0	Spike	P	0 - 46
2428120	Oxyfluorfen	3.81	Spike	P	0 - 28
2428120	Parathion Ethyl	9.41	Spike	P	0 - 31
2428120	Parathion Methyl	7.05	Spike	P	0 - 29
2428120	PBB-153	7.12	Spike	P	0 - 30
2428120	PBDE-47	1.60	Spike	P	0 - 36
2428120	PBDE-99	6.27	Spike	P	0 - 40
2428120	Pendimethalin	8.33	Spike	P	0 - 33
2428120	Pentabromotoluene	1.60	Spike	P	0 - 30
2428120	Phenytoin	1.76	Spike	P	0 - 100
2428120	Phorate	6.07	Spike	P	0 - 36
2428120	Prodiamine	2.02	Spike	P	0 - 71
2428120	Prometon	3.99	Spike	P	0 - 36
2428120	Prometryn	5.29	Spike	P	0 - 28
2428120	Pronamide	6.03	Spike	P	0 - 24
2428120	Propanil	1.42	Spike	P	0 - 28
2428120	Propargite	20.9	Spike	P	0 - 43
2428120	Propiconazole	3.79	Spike	P	0 - 33
2428120	Pyraflufen Ethyl	0.802	Spike	P	0 - 29
2428120	Pyridaben	12.1	Spike	P	0 - 30
2428120	Pyriproxyfen	6.34	Spike	P	0 - 79
2428120	Simazine	16.6	Spike	P	0 - 29
2428120	Stirophos	33.2	Spike	P	0 - 61
2428120	Sulfentrazone	7.27	Spike	P	0 - 33
2428120	Tebuconazole	14.2	Spike	P	0 - 69
2428120	Terbufos	7.13	Spike	P	0 - 29
2428120	Terbuthylazine	7.01	Spike	P	0 - 32
2428120	Tetradecachloro-m-terphenyl	1.24	Spike	P	0 - 30
2428120	Thiobencarb	4.01	Spike	P	0 - 26
2428120	Tri-o-cresyl Phosphate	4.56	Spike	P	0 - 33
2428120	Triadimefon	7.09	Spike	P	0 - 28
2428120	Tris(1-chloro-2-propyl) phosphate (TCPP)	8.63	Spike	P	0 - 30
2428120	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	5.87	Spike	P	0 - 30
2428120	Tris(2-chloroethyl) phosphate (TCEP)	6.85	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P433321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427704	2,4-D	8.37	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P433321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427704	2,4,5-T	11.7	Spike	P	0 - 30
2427704	Acetaminophen	5.21	Spike	P	0 - 30
2427704	Acetamiprid	1.59	Spike	P	0 - 30
2427704	Afidopyropen	0.494	Spike	P	0 - 30
2427704	Bentazon	3.94	Spike	P	0 - 30
2427704	Benzovindiflupyr	0.209	Spike	P	0 - 30
2427704	Carbamazepine	4.86	Spike	P	0 - 30
2427704	Clothianidin	12.0	Spike	P	0 - 30
2427704	Dinotefuran	17.7	Spike	P	0 - 30
2427704	Diuron	54.7	Spike	F	0 - 30
2427704	Fenuron	7.00	Spike	P	0 - 30
2427704	Fluridone	5.83	Spike	P	0 - 30
2427704	Hydrocodone	3.60	Spike	P	0 - 30
2427704	Ibuprofen	1.65	Spike	P	0 - 30
2427704	Imazapyr	1.53	Spike	P	0 - 30
2427704	Imidacloprid	3.22	Spike	P	0 - 30
2427704	Linuron	6.05	Spike	P	0 - 30
2427704	Mandestrobin	2.00	Spike	P	0 - 30
2427704	MCPP	5.49	Spike	P	0 - 30
2427704	Naproxen	11.9	Spike	P	0 - 30
2427704	Primidone	1.33	Spike	P	0 - 30
2427704	Pyraclostrobin	4.30	Spike	P	0 - 30
2427704	Silvex	6.40	Spike	P	0 - 30
2427704	Thiamethoxam	7.56	Spike	P	0 - 30
2427704	Tolfenpyrad	6.16	Spike	P	0 - 30
2427704	Triclopyr	3.01	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P433416

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428009	Acesulfame K	6.32	Spike	P	0 - 30
2428009	AMPA	3.05	Spike	P	0 - 30
2428009	Endothall	4.58	Spike	P	0 - 30
2428009	Glufosinate	16.5	Spike	P	0 - 30
2428009	Glyphosate	5.25	Spike	P	0 - 30
2428009	Sucralose	3.04	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P433491

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428377	Total Alkalinity	1.31	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015

Batch ID: P433808

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: P433808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427726	TDS	7.36	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P433493

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428377	Fluoride	0.984	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P433531

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428378	Organic Carbon	0.448	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2428381
Field Sample ID: G2CE0279

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	106	P	30 - 160
EPA 8321B	Acetaminophen-d4	87.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	45.6	P	30 - 160
EPA 8321B	Diuron-d6	39.0	P	30 - 160
EPA 8321B	Endothall-d6	97.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	81.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.7	P	30 - 160
EPA 8321B	Primidone-d5	67.9	P	30 - 160
EPA 8321B	Sucralose-d6	93.5	P	30 - 160

Lab Sample ID: 2428389
Field Sample ID: G2CE0279

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	73.7	P	20 - 200
EPA 8270E	Simazine-d10	92.1	P	62 - 142
EPA 8270E	Terbufos-d10	102	P	58 - 132
EPA 8270E	Terphenyl-d14	98.4	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A120763

Included Lab Sample IDs: 2428377

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

Reference Method: DEP SOP: NU-094-1

Run ID: A120824

Included Lab Sample IDs: 2428377

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	96.9	99.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A120825

Included Lab Sample IDs: 2428379

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.1	98.6	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A120827

Included Lab Sample IDs: 2428377

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.0	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A120849

Included Lab Sample IDs: 2428378

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	105	106	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A120868

Included Lab Sample IDs: 2428377

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	93.9	96.8	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A120868

Included Lab Sample IDs: 2428377

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A120872

Included Lab Sample IDs: 2428378

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A120876

Included Lab Sample IDs: 2428378

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.4	94.6	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A120882

Included Lab Sample IDs: 2428385

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	105	108	P/P	90 - 110
Iron	106	107	P/P	90 - 110
Magnesium	106	107	P/P	90 - 110
Potassium	103	105	P/P	90 - 110
Sodium	104	107	P/P	90 - 110
Strontium	98.6	101	P/P	90 - 110
Tin	102	104	P/P	90 - 110
Titanium	101	103	P/P	90 - 110
Vanadium	101	102	P/P	90 - 110
Zinc	102	104	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A120883

Included Lab Sample IDs: 2428378

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.8	97.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A120884

Included Lab Sample IDs: 2428385

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.9	99.0	P/P	90 - 110
Antimony	97.5	99.3	P/P	90 - 110
Arsenic	99.7	97.0	P/P	90 - 110
Barium	99.2	97.8	P/P	90 - 110
Beryllium	98.3	97.0	P/P	90 - 110
Boron	99.3	101	P/P	90 - 110
Cadmium	98.7	101	P/P	90 - 110
Chromium	101	103	P/P	90 - 110
Cobalt	103	100	P/P	90 - 110
Copper	94.8	92.0	P/P	90 - 110
Lead	94.8	94.9	P/P	90 - 110
Manganese	102	103	P/P	90 - 110
Molybdenum	98.3	98.2	P/P	90 - 110
Nickel	99.7	96.6	P/P	90 - 110
Selenium	98.4	99.0	P/P	90 - 110
Silver	102	102	P/P	90 - 110
Thallium	99.4	99.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A120886
Included Lab Sample IDs: 2428381

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	99.8	100	P/P	60 - 160
Sucralose	81.8	78.8	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A120887
Included Lab Sample IDs: 2428381

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	111	122	P/P	60 - 160
Endothall	98.2	101	P/P	60 - 160
Glufosinate	82.2	86.0	P/P	60 - 160
Glyphosate	99.4	100	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A120891
Included Lab Sample IDs: 2428378

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	99.5	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A120922
Included Lab Sample IDs: 2428381

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	86.5	86.6	P/P	50 - 150
2,4,5-T	82.1	93.1	P/P	50 - 150
Acetaminophen	104	103	P/P	60 - 160
Acetamiprid	108	108	P/P	50 - 150
Afidopyropen	91.5	111	P/P	50 - 150
Bentazon	103	103	P/P	50 - 160
Benzovindiflupyr	115	107	P/P	50 - 150
Carbamazepine	104	109	P/P	60 - 150
Clothianidin	99.9	108	P/P	60 - 150
Dinotefuran	117	105	P/P	50 - 150
Diuron	109	107	P/P	60 - 160
Fenuron	105	104	P/P	60 - 150
Fluridone	127	116	P/P	60 - 160
Hydrocodone	114	106	P/P	60 - 150
Ibuprofen	90.0	91.4	P/P	50 - 160
Imazapyr	88.6	92.8	P/P	50 - 150
Imidacloprid	97.4	96.6	P/P	60 - 150
Linuron	98.0	89.6	P/P	60 - 150
Mandestrobin	113	109	P/P	50 - 150
MCPP	91.1	93.9	P/P	50 - 150
Naproxen	78.4	83.9	P/P	50 - 160
Primidone	103	103	P/P	60 - 150
Pyraclostrobin	108	112	P/P	60 - 150
Silvex	96.8	101	P/P	50 - 150
Thiamethoxam	115	102	P/P	50 - 150
Tolfenpyrad	98.5	105	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A120922
Included Lab Sample IDs: 2428381

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclopyr	104	90.7	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A120939
Included Lab Sample IDs: 2428389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	93.4		P	80 - 120
Alachlor	95.5		P	80 - 120
Ametryn	103		P	80 - 120
Atrazine	95.7		P	80 - 120
Atrazine Desethyl	109		P	80 - 120
Azinphos Methyl	102		P	80 - 120
Azoxystrobin	98.3		P	80 - 120
Bromacil	98.9		P	80 - 120
Butylate	92.3		P	80 - 120
Caffeine	92.5		P	80 - 120
Carbophenothion	101		P	80 - 120
Carfentrazone Ethyl	96.3		P	80 - 120
Chlorfenapyr	78.4*		F	80 - 120
Chlorpyrifos Ethyl	91.0		P	80 - 120
Chlorpyrifos Methyl	99.4		P	80 - 120
Coumaphos	91.9		P	80 - 120
Cyanazine	99.9		P	80 - 120
Cyprodinil	95.6		P	80 - 120
Demeton	96.1		P	80 - 120
Diazinon	101		P	80 - 120
Difenoconazole	105		P	80 - 120
Dimethenamid	94.8		P	80 - 120
Dimethomorph	109		P	80 - 120
Disulfoton	104		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	97.7		P	80 - 120
Ethion	93.2		P	80 - 120
Ethoprop	92.3		P	80 - 120
Etridiazole	103		P	80 - 120
Fenamiphos	85.9		P	80 - 120
Fenbuconazole	95.9		P	80 - 120
Fipronil	92.9		P	80 - 120
Fipronil Desulfinyl	99.4		P	80 - 120
Fipronil Sulfide	99.4		P	80 - 120
Fipronil Sulfone	96.2		P	80 - 120
Fluazifop-P-butyl	98.8		P	80 - 120
Fludioxonil	96.4		P	80 - 120
Flumioxazin	96.9		P	80 - 120
Flutolanil	100		P	80 - 120
Fluxapyroxad	103		P	80 - 120
Fonofos	107		P	80 - 120
Hexazinone	103		P	80 - 120
Imazalil	103		P	80 - 120
Iprodione	87.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120939
Included Lab Sample IDs: 2428389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Loratadine	95.6		P	80 - 120
Malathion	87.8		P	80 - 120
Metalaxyl	86.7		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	104		P	80 - 120
Mevinphos	96.6		P	80 - 120
Molinate	87.2		P	80 - 120
Myclobutanil	92.5		P	80 - 120
Naled	101		P	80 - 120
Napropamide	102		P	80 - 120
Norflurazon	95.1		P	80 - 120
Oxadiazon	104		P	80 - 120
Oxyfluorfen	96.6		P	80 - 120
Parathion Ethyl	99.8		P	80 - 120
Parathion Methyl	89.5		P	80 - 120
Pendimethalin	97.4		P	80 - 120
Phenytoin	101		P	80 - 120
Phorate	98.3		P	80 - 120
Prodiamine	111		P	80 - 120
Prometon	99.2		P	80 - 120
Prometryn	92.8		P	80 - 120
Pronamide	104		P	80 - 120
Propanil	109		P	80 - 120
Propargite	106		P	80 - 120
Propiconazole	91.4		P	80 - 120
Pyraflufen Ethyl	92.4		P	80 - 120
Pyridaben	106		P	80 - 120
Pyriproxyfen	99.0		P	80 - 120
Simazine	104		P	80 - 120
Stirophos	89.5		P	80 - 120
Sulfentrazone	117		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	103		P	80 - 120
Terbuthylazine	92.5		P	80 - 120
Thiobencarb	104		P	80 - 120
Triadimefon	99.7		P	80 - 120

Reference Method: EPA 8270E
Run ID: A120942
Included Lab Sample IDs: 2428389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	93.2		P	80 - 120
Avobenzone	97.8		P	80 - 120
Dechlorane 602	97.1		P	80 - 120
Dechlorane 603	95.8		P	80 - 120
Dechlorane Plus	95.8		P	80 - 120
Hexabromobenzene	94.1		P	80 - 120
Octinoxate	92.7		P	80 - 120
Oxybenzone	93.4		P	80 - 120
PBB-153	93.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120942
Included Lab Sample IDs: 2428389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PBDE-47	94.0		P	80 - 120
PBDE-99	94.0		P	80 - 120
Pentabromotoluene	93.9		P	80 - 120
Tetradecachloro-m-terphenyl	88.3		P	80 - 120
Tri-o-cresyl Phosphate	98.3		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	90.8		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	91.2		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	94.0		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)	97.9					0.493	
EPA 180.1 Rev. 2.0	Turbidity	98.4					10.1	
EPA 200.7 Rev. 4.4	Calcium	108	104	107				0.110
	Iron	108	106	104	108			1.52
	Magnesium	108	102	100	108			1.23
	Potassium	104	100	100	103			0.0155
	Sodium	107	103	103				0.501
	Strontium	103	100	99.2	101			0.690
	Tin	106	104	105	106			1.31
	Titanium	105	104	101	102			2.98
	Vanadium	106	106	103	103			3.02
	Zinc	108	106	102	106			3.19
EPA 200.8 Rev. 5.4	Aluminum	99.3	97.2	97.9	98.0			0.687
	Antimony	99.5	101	101	99.7			0.636
	Arsenic	98.3	99.6	99.1	97.4			0.482
	Barium	101	100	101	102			0.756
	Beryllium	97.3	93.3	98.4	91.6			5.33
	Boron	104	101	105	103			2.58
	Cadmium	99.8	102	102	99.9			0.166
	Chromium	99.3	98.5	99.7	99.3			1.21
	Cobalt	102	98.5	99.9	101			1.38
	Copper	95.4	95.4	96.2	94.1			0.919
	Lead	95.3	95.9	96.7	96.0			0.869
	Manganese	101	98.2	101	102			2.15
	Molybdenum	98.5	100	99.6	97.0			0.352
	Nickel	101	94.9	96.7	95.3			1.86
	Selenium	97.8	95.1	95.4	96.2			0.326
	Silver	114	112	113	112			0.369
	Thallium	101	103	105	102			1.22
EPA 300.0 Rev. 2.1	Chloride	99.9	98.9	99.2			0.116	
	Sulfate	99.7	99.7	98.0			0.338	
EPA 350.1 Rev. 2.0	Ammonia-N	101	96.0	97.0				0.887
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.1	94.7	97.5				2.15
EPA 353.2 Rev. 2.0	NO2NO3-N	104	106	106				0.471
EPA 365.1 Rev. 2.0	Total-P	102	105	103				1.99
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103	100	99.4				0.765
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	77.5	96.4	93.2				3.34
	Acetochlor	81.7	94.0	88.4				6.07
	Alachlor	79.2	89.6	84.4				5.95
	Ametryn	74.5	120	130				7.79
	Atrazine	80.2	97.4	86.3				7.03
	Atrazine Desethyl	71.5	85.6	77.9				9.34
	Avobenzone	96.6	125	124				0.718
	Azinphos Methyl	77.4	146	126				14.7
	Azoxystrobin	60.1	107	101				4.85
	Bromacil	78.3						3.16
	Butylate	62.0	61.8	53.7				14.1
	Caffeine	90.6	98.7	94.0				4.85
	Carbophenothion	72.5	98.7	96.0				2.83
	Carfentrazone Ethyl	81.0	113	108				4.68
	Chlorfenapyr	61.3	88.4	80.4				9.41
	Chlorpyrifos Ethyl	107	81.1	82.3				1.46

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Chlorpyrifos Methyl	86.2	94.2	90.0		4.55
	Coumaphos	49.0	147	148		0.814
	Cyanazine	96.8	123	115		6.79
	Cyprodinil	57.6	78.7	86.9		9.96
	Dechlorane 602	40.9	69.0	70.6		2.39
	Dechlorane 603	74.8	115	105		8.40
	Dechlorane Plus	64.1	87.4	79.0		10.1
	Demeton	78.0	91.4	85.5		6.67
	Diazinon	89.7	105	98.4		6.13
	Difenoconazole	53.6	155	151		2.53
	Dimethenamid	70.7	82.8	76.0		8.62
	Dimethomorph	131	174	177		1.59
	Disulfoton	94.5	105	102		3.21
	Dithiopyr	73.5	85.9	81.2		5.59
	EPTC	59.5	32.2	38.9		19.0
	Ethion	34.1	74.1	73.0		1.49
	Ethoprop	96.4	106	96.0		10.3
	Etridiazole	64.2	67.6	57.8		15.7
	Fenamiphos	67.6	80.0	112		33.2
	Fenbuconazole	35.7	106	96.8		8.88
	Fipronil	125	93.5	93.2		0.348
	Fipronil Desulfinyl	74.9	91.3	86.2		5.72
	Fipronil Sulfide	116	92.4	87.5		5.51
	Fipronil Sulfone	62.0	89.6	86.2		3.89
	Fluazifop-P-butyl	67.0	92.8	85.2		8.56
	Fludioxonil	75.5	73.9	64.9		13.0
	Flumioxazin	68.6	182	162		11.6
	Flutolanil	65.2	66.4	57.1		15.1
	Fluxapyroxad	52.6	91.2	89.6		1.76
	Fonofos	80.9	94.9	86.4		9.47
	Hexabromobenzene	104	116	113		1.88
	Hexazinone	83.3	96.0	86.9		7.57
	Imazalil	81.2	105	97.0		8.06
	Iprodione	51.1	87.4	80.3		8.40
	Loratadine	96.8	142	137		3.54
	Malathion	87.5	124	117		6.33
	Metalaxyl	84.4				0.380
	Metolachlor	101	99.3	93.3		6.23
	Metribuzin	93.5	99.8	83.9		17.3
	Mevinphos	97.2	112	103		8.16
	Molinate	64.1	62.7	54.2		14.5
	Myclobutanil	72.6	91.7	86.2		6.14
	Naled	61.7	59.1	61.2		3.51
	Napropamide	62.7	82.7	81.1		1.90
	Norflurazon	71.0				3.69
	Octinoxate	104	113	109		3.68
	Oxadiazon	62.0	69.6	66.3		4.84
	Oxybenzone	105	119	107		11.0
	Oxyfluorfen	85.4	109	105		3.81
	Parathion Ethyl	97.1	98.7	89.8		9.41
	Parathion Methyl	85.6	102	95.1		7.05
	PBB-153	64.9	111	103		7.12
	PBDE-47	75.4	99.8	98.2		1.60
	PBDE-99	48.6	87.9	82.5		6.27

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Pendimethalin	67.6	95.2	87.6		8.33
	Pentabromotoluene	96.5	102	100		1.60
	Phenytoin	36.1	57.2	58.2		1.76
	Phorate	91.2	112	105		6.07
	Prodiamine	57.2	37.1	36.3		2.02
	Prometon	98.9	85.3	79.1		3.99
	Prometryn	70.8	95.0	90.1		5.29
	Pronamide	96.3	105	111		6.03
	Propanil	81.7	126	124		1.42
	Propargite	39.1	66.9	82.5		20.9
	Propiconazole	127	89.6	86.3		3.79
	Pyraflufen Ethyl	56.3	97.4	96.6		0.802
	Pyridaben	58.2				12.1
	Pyriproxyfen	42.8	87.4	93.1		6.34
	Simazine	82.3	85.3	58.9		16.6
	Stiophos	40.4	50.2	35.9		33.2
	Sulfentrazone	33.8	80.8	75.2		7.27
	Tebuconazole	36.4	58.1	67.0		14.2
	Terbufos	102	115	107		7.13
	Terbutylazine	76.0	83.9	78.2		7.01
	Tetradecachloro-m-terphenyl	115	81.8	80.8		1.24
	Thiobencarb	78.3	79.1	82.3		4.01
	Tri-o-cresyl Phosphate	94.5	116	111		4.56
	Triadimefon	71.4	85.9	80.0		7.09
	Tris(1-chloro-2-propyl) phosphate (TCPP)	112	126	115		8.63
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	86.0	106	99.6		5.87
	Tris(2-chloroethyl) phosphate (TCEP)	102	122	113		6.85
EPA 8321B	2,4-D	83.3	88.2	95.9		8.37
	2,4,5-T	80.8	90.9	102		11.7
	Acesulfame K	93.2	113	121		6.32
	Acetaminophen	87.3	104	98.3		5.21
	Acetamiprid	93.4	71.7	70.5		1.59
	Afidopyropen	78.9	75.4	75.7		0.494
	AMPA	74.6	64.2	62.1		3.05
	Bentazon	137	159	153		3.94
	Benzovindiflupyr	88.3	77.9	77.7		0.209
	Carbamazepine	66.2	56.9	54.2		4.86
	Clothianidin	95.4	115	102		12.0
	Dinotefuran	114	104	86.7		17.7
	Diuron	63.2	26.8	47.0		54.7
	Endothall	93.3	102	97.4		4.58
	Fenuron	94.7	75.5	70.4		7.00
	Fluridone	102	91.6	86.4		5.83
	Glufosinate	86.6	92.7	78.5		16.5
	Glyphosate	97.1	90.6	96.6		5.25
	Hydrocodone	97.6	77.7	74.9		3.60
	Ibuprofen	72.2	76.1	77.3		1.65
	Imazapyr	77.6	83.6	85.1		1.53
	Imidacloprid	86.8	124	120		3.22
	Linuron	73.7	55.4	58.9		6.05
	Mandestrobin	95.5	85.1	86.8		2.00

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	MCCP	90.8	97.6	103		5.49
	Naproxen	76.1	62.7	70.6		11.9
	Primidone	79.2	88.6	87.4		1.33
	Pyraclostrobin	71.5	75.0	78.3		4.30
	Silvex	89.4	108	101		6.40
	Sucralose	85.4	84.5	87.1		3.04
	Thiamethoxam	99.0	104	96.6		7.56
	Tolfenpyrad	44.3	51.0	54.3		6.16
	Triclopyr	82.4	91.4	94.2		3.01
SM 2320 B-2011	Total Alkalinity	97.2				1.31
SM 2540 C-2015	TDS	96.8				7.36
SM 2540 D-2015	TSS	89.7				
SM 4500-F- C-2011	Fluoride	99.3	99.0	97.9		0.984
SM 5310 B-2011	Organic Carbon	94.8	96.6	96.0		0.448

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2428377
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2428377
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2428385
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2428385
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2428377
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2428377
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2428378
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2428378
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2428378
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2428378
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2428379
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2428389
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2428389
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2428381
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2428377
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2428385
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2428377
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2428377
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2428377
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2428378

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	08/03/2023			08/03/2023 14:03	Alexis Price	2428377
EPA 180.1 Rev. 2.0	08/03/2023			08/03/2023 13:28	Anna M. Plaviak	2428377
EPA 200.7 Rev. 4.4	08/03/2023	08/04/2023 12:20	George D Taylor	08/07/2023 19:23	McKinley C Carter	2428385
EPA 200.8 Rev. 5.4	08/03/2023	08/04/2023 12:20	George D Taylor	08/07/2023 17:49	Emily M Philpot	2428385
EPA 300.0 Rev. 2.1	08/03/2023			08/04/2023 19:43	James L Waggeberby	2428377
EPA 350.1 Rev. 2.0	08/03/2023			08/08/2023 11:54	Khloe J Berg	2428378
EPA 351.2 Rev. 2.0	08/03/2023	08/04/2023 10:07	Dana G. Hughes	08/07/2023 12:08	Samantha L Bates	2428378
EPA 353.2 Rev. 2.0	08/03/2023			08/04/2023 11:28	Beverly Y. Sanders	2428378
EPA 365.1 Rev. 2.0	08/03/2023	08/04/2023 15:30	Alexis Price	08/07/2023 11:23	Simonne.V. Calhoun	2428378
EPA 365.1 Rev. 2.0 dissolved	08/03/2023			08/03/2023 14:53	Elise M. Gillis	2428379
EPA 8270E	08/03/2023	08/04/2023 08:00	Fe-Val Siddell	08/07/2023 18:36	Vandana T. Nagar	2428389
	08/03/2023	08/04/2023 08:00	Fe-Val Siddell	08/09/2023 21:55	Arthur Maknenko	2428389
EPA 8321B	08/03/2023	08/03/2023 13:00	Hoor Shaik	08/05/2023 10:26	Juyoung Kim	2428381
	08/03/2023	08/03/2023 13:00	Hoor Shaik	08/07/2023 16:39	Juyoung Kim	2428381
	08/03/2023	08/07/2023 10:00	Tae K Lee	08/07/2023 14:11	Hana Lee	2428381
	08/03/2023	08/07/2023 10:00	Tae K Lee	08/07/2023 22:26	Hana Lee	2428381
SM 2320 B-2011	08/03/2023			08/04/2023 18:41	Dale L. Simmons	2428377
SM 2340 B-2011	08/03/2023			08/07/2023 19:23	McKinley C Carter	2428385
SM 2540 C-2015	08/03/2023			08/04/2023 16:14	Yijie Li	2428377
SM 2540 D-2015	08/03/2023			08/04/2023 16:14	Yijie Li	2428377
SM 4500-F- C-2011	08/03/2023			08/04/2023 18:30	Dale L. Simmons	2428377
SM 5310 B-2011	08/03/2023			08/07/2023 23:10	Elise M. Gillis	2428378