

Chemical Analysis Report

CEN-DIST-2023-07-06-02

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

Event Description: **Ruth Lake - LVI**
Request ID: **RQ-2023-06-12-28**
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: Colin Wright, Program Administrator

Date Certified: 21-JUL-2023 14:13

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light blue 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: Ruth Lake at Center

Collection Date/Time: 07/05/2023 11:26

Field ID: G3CE0021

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2421458	DEP SOP: NU-094-1	Color (true)	110		PCU	P432118	
	EPA 180.1 Rev. 2.0	Turbidity	9.4		NTU	P432131	
	EPA 300.0 Rev. 2.1	Chloride	440		mg Cl/L	P432317	
		Sulfate	120		mg SO4/L	P432320	
	SM 2320 B-2011	Total Alkalinity	68		mg CaCO3/L	P432220	
	SM 2540 C-2015	TDS	1.04E+03		mg/L	P432425	
	SM 2540 D-2015	TSS	14		mg/L	P432324	
	SM 4500-F- C-2011	Fluoride	0.19		mg F/L	P432224	
2421459	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P432182	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P432146	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P432239	
	EPA 365.1 Rev. 2.0	Total-P	0.067		mg P/L	P432190	
	SM 5310 B-2011	Organic Carbon	21		mg C/L	P432215	
2421460	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P432155	
2421470	EPA 8321B	2,4-D	0.014		ug/L	P432171	
		Acesulfame K	0.10	U	ug/L	P432281	
		2,4,5-T	0.0040	U	ug/L	P432171	
		AMPA	0.10	U	ug/L	P432281	
		Acetaminophen	0.0080	U	ug/L	P432171	
		Acetamiprid	0.0020	U	ug/L	P432171	
		Endothall	0.25	U	ug/L	P432281	
		Glufosinate	0.10	U	ug/L	P432281	
		Glyphosate	0.10	U	ug/L	P432281	
		Afidopyrophen	0.0020	U	ug/L	P432171	
		Bentazon	0.069		ug/L	P432171	
		Sucralose	0.67		ug/L	P432281	
		Benzovindiflupyr	0.0020	U	ug/L	P432171	
		Carbamazepine	8.0E-04	U	ug/L	P432171	
		Clothianidin	0.0020	U	ug/L	P432171	
		Dinotefuran	0.0020	U	ug/L	P432171	
		Diuron	0.0020	U	ug/L	P432171	
		Fenuron	0.032	U	ug/L	P432171	
		Fluridone	0.015		ug/L	P432171	
		Imazapyr	0.061		ug/L	P432171	
		Hydrocodone	0.0020	U	ug/L	P432171	
		Ibuprofen	0.080	U	ug/L	P432171	
		Imidacloprid	0.0024	I	ug/L	P432171	
		Linuron	0.0040	U	ug/L	P432171	
		Mandestrobin	0.0020	U	ug/L	P432171	
		MCP	0.0020	U	ug/L	P432171	
		Naproxen	0.0080	U	ug/L	P432171	
		Primidone	0.0040	U	ug/L	P432171	
		Pyraclostrobin	0.0020	U	ug/L	P432171	

Field ID: G3CE0021

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2421470	EPA 8321B	Silvex	0.0040	U	ug/L	P432171	
		Thiamethoxam	0.0020	U	ug/L	P432171	
		Tolfenpyrad	0.0020	U	ug/L	P432171	
		Triclopyr	0.0040	U	ug/L	P432171	
2421471	EPA 200.7 Rev. 4.4	Calcium	75.0		mg/L	P432174	
		Iron	450		ug/L	P432174	
		Magnesium	31.9		mg/L	P432174	
		Potassium	7.4		mg/L	P432174	
		Sodium	239		mg/L	P432174	
		Strontium	2.57E+03		ug/L	P432174	
		Tin	3.4	I	ug/L	P432174	
		Titanium	3.5		ug/L	P432174	
		Vanadium	2.0	U	ug/L	P432174	
		Zinc	5.0	U	ug/L	P432174	
	EPA 200.8 Rev. 5.4	Aluminum	150		ug/L	P432174	
		Antimony	0.10	I	ug/L	P432174	
		Arsenic	1.08		ug/L	P432174	
		Barium	54.9		ug/L	P432174	
		Beryllium	0.017	I	ug/L	P432174	
		Boron	96.6		ug/L	P432174	
		Cadmium	0.020	U	ug/L	P432174	
		Chromium	0.40	U	ug/L	P432174	
		Cobalt	0.194		ug/L	P432174	
		Copper	0.55	I	ug/L	P432174	
		Lead	0.37	I	ug/L	P432174	
		Manganese	15.9		ug/L	P432174	
2421472	SM 2340 B-2011	Molybdenum	1.73		ug/L	P432174	
		Nickel	0.50	U	ug/L	P432174	
		Selenium	0.20	U	ug/L	P432174	
		Silver	0.010	U	ug/L	P432512	
		Thallium	0.10	U	ug/L	P432174	
		Hardness	319		mg/L	P432174	
	EPA 8270E	Oxybenzone**	10	U	ng/L	P432051	
		Acetochlor	0.20	U	ng/L	P432051	
		Octinoxate**	150	U	ng/L	P432051	
		Alachlor	0.41	U	ng/L	P432051	
		Avobenzone**	100	U	ng/L	P432051	
		Ametryn	1.1	U	ng/L	P432051	
		Atrazine	57		ng/L	P432051	
		PBDE-47**	4.1	U	ng/L	P432051	
		Atrazine Desethyl	14		ng/L	P432051	
		PBDE-99**	5.1	U	ng/L	P432051	
		Azinphos Methyl	3.1	U	ng/L	P432051	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P432051	
		Azoxystrobin	0.41	U	ng/L	P432051	

Field ID: G3CE0021

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2421472	EPA 8270E	Bromacil	0.61	U	ng/L	P432051	
		2-Ethylhexyl	12	U	ng/L	P432051	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.20	U	ng/L	P432051	
		Dechlorane Plus**	31	U	ng/L	P432051	
		Caffeine**	40		ng/L	P432051	MS
		Dechlorane 602**	5.1	U	ng/L	P432051	
		Carbophenothion	0.51	U	ng/L	P432051	
		Dechlorane 603**	4.1	U	ng/L	P432051	
		Carfentrazone Ethyl	0.15	U	ng/L	P432051	
		Hexabromobenzene**	6.1	U	ng/L	P432051	RPD
		Chlorfenapyr	0.31	U	ng/L	P432051	
		PBB-153**	8.2	U	ng/L	P432051	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P432051	
		Pentabromotoluene**	3.1	U	ng/L	P432051	
		Chlorpyrifos Methyl	0.10	U	ng/L	P432051	
		Tris(2-chloroethyl) phosphate (TCEP)**	72	U	ng/L	P432051	
		Coumaphos	1.1	U	ng/L	P432051	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	35	I	ng/L	P432051	
		Cyanazine	5.1	U	ng/L	P432051	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	6.2	I	ng/L	P432051	
		Cyprodinil	0.20	U	ng/L	P432051	
		Tetradecachloro-m-terphenyl**	7.7	U	ng/L	P432051	
		Demeton	3.6	U	ng/L	P432051	
		Diazinon	0.13	U	ng/L	P432051	RPD
		Difenoconazole	0.61	U	ng/L	P432051	
		Dimethenamid	0.10	U	ng/L	P432051	
		Dimethomorph	0.31	U	ng/L	P432051	MS
		Disulfoton	0.61	U	ng/L	P432051	
		Dithiopyr	1.0	U	ng/L	P432051	RPD
		EPTC	0.51	U	ng/L	P432051	
		Ethion	0.31	U	ng/L	P432051	
		Ethoprop	0.13	U	ng/L	P432051	
		Etridiazole	0.10	U	ng/L	P432051	
		Fenamiphos	0.46	U	ng/L	P432051	
		Fenbuconazole	0.51	UJ	ng/L	P432051	LCS
		Fipronil	0.20	U	ng/L	P432051	
		Fipronil Desulfinyl**	0.41	I	ng/L	P432051	
		Fipronil Sulfide	0.14	I	ng/L	P432051	
		Fipronil Sulfone	0.37	I	ng/L	P432051	
		Fluazifop-P-butyl	0.10	UJ	ng/L	P432051	LCS, MS
		Fludioxonil	0.10	U	ng/L	P432051	
		Flumioxazin	3.1	U	ng/L	P432051	
		Flutolanil	0.10	U	ng/L	P432051	
		Fluxapyroxad	0.26	U	ng/L	P432051	

Field ID: G3CE0021

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2421472	EPA 8270E	Fonofos	0.15	U	ng/L	P432051	RPD
		Hexazinone	3.4		ng/L	P432051	
		Imazalil	0.66	U	ng/L	P432051	
		Iprodione	0.51	U	ng/L	P432051	
		Loratadine**	0.31	U	ng/L	P432051	
		Malathion	0.36	U	ng/L	P432051	
		Metalaxyl	0.51	U	ng/L	P432051	
		Metolachlor	3.3	I	ng/L	P432051	
		Metribuzin	0.56	I	ng/L	P432051	
		Mevinphos	1.0	U	ng/L	P432051	
		Molinate	0.26	U	ng/L	P432051	
		Myclobutanil	0.36	U	ng/L	P432051	
		Naled	2.6	U	ng/L	P432051	
		Napropamide	0.72	U	ng/L	P432051	
		Norflurazon	1.0	U	ng/L	P432051	
		Oxadiazon	0.38	I	ng/L	P432051	
		Oxyfluorfen	0.20	U	ng/L	P432051	
		Parathion Ethyl	0.15	U	ng/L	P432051	
		Parathion Methyl	0.20	U	ng/L	P432051	
		Pendimethalin	0.77	U	ng/L	P432051	
		Phenytol**	5.4	U	ng/L	P432051	
		Phorate	0.26	U	ng/L	P432051	
		Prodiamine	0.20	U	ng/L	P432051	MS
		Prometon	3.1	U	ng/L	P432051	
		Prometryn	0.36	U	ng/L	P432051	
		Pronamide	0.10	U	ng/L	P432051	
		Propanil	0.10	U	ng/L	P432051	
		Propargite	0.82	U	ng/L	P432051	
		Propiconazole	1.6	I	ng/L	P432051	
		Pyraflufen Ethyl	0.31	U	ng/L	P432051	
		Pyridaben	1.4	U	ng/L	P432051	
		Pyriproxyfen	0.26	U	ng/L	P432051	
		Simazine	6.3		ng/L	P432051	
		Stirophos	0.41	U	ng/L	P432051	
		Sulfentrazone	2.0	I	ng/L	P432051	
		Tebuconazole	1.4	U	ng/L	P432051	
		Terbufos	0.20	U	ng/L	P432051	
		Terbutylazine	0.20	U	ng/L	P432051	
		Thiobencarb	0.51	U	ng/L	P432051	
		Triadimefon	0.15	U	ng/L	P432051	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

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

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P432118

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432131

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P432174

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: P432174

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
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P432512

Component	Result	Code	Units
Silver	0.010	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432317

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432320

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432182

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432146

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432239

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432190

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P432155

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

Reference Method: EPA 8270E
Batch ID: P432051

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432051

Component	Result	Code	Units
Atrazine Desethyl	1.3	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
EPTC	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432051

Component	Result	Code	Units
Ethion	0.30	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Molinate	0.25	U	ng/L

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432051

Component	Result	Code	Units
Myclobutanil	0.35	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432051

Component	Result	Code	Units
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Reference Method: EPA 8321B

Batch ID: P432171

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P432171

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

Reference Method: EPA 8321B

Batch ID: P432281

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: P432220

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

Reference Method: SM 2540 C-2015

Batch ID: P432425

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P432324

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P432224

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P432215

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: P432118

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432131

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P432174

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	106		P	85 - 115
Iron	105		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	101		P	85 - 115
Sodium	104		P	85 - 115
Strontium	100		P	85 - 115
Tin	101		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	101		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P432174

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	99.3		P	85 - 115
Arsenic	103		P	85 - 115
Barium	103		P	85 - 115
Beryllium	96.2		P	85 - 115
Boron	102		P	85 - 115
Cadmium	98.5		P	85 - 115
Chromium	94.4		P	85 - 115
Cobalt	99.0		P	85 - 115
Copper	99.9		P	85 - 115
Lead	92.3		P	85 - 115
Manganese	95.9		P	85 - 115
Molybdenum	99.6		P	85 - 115
Nickel	99.2		P	85 - 115
Selenium	104		P	85 - 115
Thallium	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P432512

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Silver	98.3		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432317

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432320

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432182

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432146

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432239

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432190

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P432155

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

Reference Method: EPA 8270E
Batch ID: P432051

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	75.2		P	42 - 162
Acetochlor	88.0		P	69 - 123
Alachlor	67.3		P	65 - 118
Ametryn	140		P	58 - 141
Atrazine	89.2		P	73 - 118
Atrazine Desethyl	79.6		P	32 - 125
Avobenzone	92.9		P	40 - 203
Azinphos Methyl	85.4		P	36 - 197
Azoxystrobin	67.5		P	58 - 226
Bromacil	88.2		P	48 - 120

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P432051

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Butylate	49.4		P	27 - 85.0
Caffeine	103		P	40 - 137
Carbophenothion	96.9		P	54 - 132
Carfentrazone Ethyl	108		P	60 - 142
Chlorfenapyr	68.2		P	53 - 117
Chlorpyrifos Ethyl	82.3		P	59 - 116
Chlorpyrifos Methyl	83.8		P	66 - 119
Coumaphos	71.3		P	11 - 234
Cyanazine	120		P	61 - 248
Cyprodinil	65.6		P	50 - 147
Dechlorane 602	78.0		P	50 - 150
Dechlorane 603	94.1		P	50 - 150
Dechlorane Plus	91.9		P	47 - 182
Demeton	61.0		P	30 - 138
Diazinon	98.1		P	67 - 126
Difenoconazole	56.2		P	38 - 205
Dimethenamid	77.8		P	57 - 111
Dimethomorph	105		P	16 - 212
Disulfoton	95.0		P	46 - 126
Dithiopyr	92.4		P	62 - 115
EPTC	46.9		P	28 - 80.0
Ethion	88.4		P	24 - 122
Ethoprop	81.7		P	62 - 113
Etridiazole	62.7		P	28 - 92.0
Fenamiphos	78.4		P	57 - 128
Fenbuconazole	35.6		F	52 - 155
Fipronil	109		P	63 - 130
Fipronil Desulfinyl	91.7		P	61 - 130
Fipronil Sulfide	91.5		P	56 - 117
Fipronil Sulfone	98.2		P	52 - 118
Fluazifop-P-butyl	51.9		F	61 - 128
Fludioxonil	67.7		P	59 - 129
Flumioxazin	110		P	30 - 250
Flutolanil	67.0		P	53 - 127
Fluxapyroxad	91.7		P	42 - 132
Fonofos	75.3		P	61 - 110
Hexabromobenzene	92.0		P	50 - 150
Hexazinone	89.2		P	46 - 139
Imazalil	69.8		P	40 - 139
Iprodione	108		P	40 - 146
Loratadine	105		P	10 - 224
Malathion	125		P	61 - 135
Metalaxyl	97.7		P	58 - 121
Metolachlor	108		P	64 - 118
Metribuzin	82.2		P	45 - 245
Mevinphos	78.7		P	49 - 118
Molinate	56.0		P	42 - 92.0
Myclobutanil	85.7		P	55 - 127
Naled	27.6		P	10 - 114
Napropamide	88.8		P	39 - 121
Norflurazon	81.4		P	55 - 129
Octinoxate	93.3		P	26 - 166

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Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P432051

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxadiazon	82.0		P	54 - 115
Oxybenzone	95.8		P	49 - 135
Oxyfluorfen	101		P	64 - 139
Parathion Ethyl	86.5		P	70 - 111
Parathion Methyl	99.7		P	76 - 136
PBB-153	94.6		P	50 - 150
PBDE-47	94.2		P	41 - 148
PBDE-99	81.2		P	38 - 147
Pendimethalin	104		P	52 - 118
Pentabromotoluene	80.6		P	50 - 150
Phenytoln	63.1		P	10 - 162
Phorate	65.7		P	40 - 122
Prodiamine	37.3		P	26 - 141
Prometon	74.3		P	54 - 122
Prometryn	71.5		P	61 - 128
Pronamide	100		P	72 - 121
Propanil	112		P	45 - 144
Propargite	97.3		P	10 - 199
Propiconazole	72.4		P	56 - 127
Pyraflufen Ethyl	98.0		P	56 - 140
Pyridaben	67.1		P	26 - 211
Pyriproxyfen	73.2		P	33 - 194
Simazine	71.9		P	67 - 121
Stiophos	121		P	20 - 142
Sulfentrazone	75.6		P	21 - 144
Tebuconazole	79.7		P	10 - 122
Terbufos	95.2		P	60 - 129
Terbutylazine	81.6		P	69 - 113
Tetradecachloro-m-terphenyl	113		P	70 - 200
Thiobencarb	89.4		P	51 - 120
Tri-o-cresyl Phosphate	95.4		P	49 - 150
Triadimefon	93.7		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	102		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	89.3		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	98.7		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P432171

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	90.9		P	40 - 150
2,4,5-T	93.6		P	40 - 150
Acetaminophen	83.5		P	30 - 150
Acetamiprid	75.4		P	40 - 150
Afidopyropen	57.1		P	30 - 150
Bentazon	124		P	30 - 150
Benzovindiflupyr	87.1		P	40 - 150
Carbamazepine	77.9		P	40 - 150
Clothianidin	88.6		P	40 - 150
Dinotefuran	102		P	40 - 150
Diuron	43.2		P	40 - 150
Fenuron	90.9		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P432171

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluridone	93.2		P	40 - 150
Hydrocodone	76.8		P	40 - 150
Ibuprofen	93.2		P	40 - 150
Imazapyr	85.7		P	40 - 150
Imidacloprid	89.2		P	40 - 150
Linuron	78.6		P	40 - 150
Mandestrobin	77.9		P	40 - 150
MCPP	104		P	40 - 150
Naproxen	85.2		P	40 - 150
Primidone	82.8		P	40 - 150
Pyraclostrobin	83.9		P	40 - 150
Silvex	108		P	40 - 150
Thiamethoxam	87.7		P	40 - 150
Tolfenpyrad	60.2		P	30 - 150
Triclopyr	96.0		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P432281

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	105		P	40 - 150
AMPA	80.7		P	40 - 150
Endothall	71.5		P	40 - 150
Glufosinate	119		P	40 - 150
Glyphosate	125		P	40 - 150
Sucralose	89.4		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P432220

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.4		P	92 - 105

Reference Method: SM 2540 C-2015

Batch ID: P432425

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

Reference Method: SM 2540 D-2015

Batch ID: P432324

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

Reference Method: SM 4500-F- C-2011

Batch ID: P432224

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.2		P	94 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P432215

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P432174

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421584	Calcium	106	106	P/P	80 - 120
2421584	Iron	105	105	P/P	80 - 120
2421584	Magnesium	105	105	P/P	80 - 120
2421584	Potassium	101	101	P/P	80 - 120
2421584	Sodium	103	102	P/P	80 - 120
2421584	Strontium	100	99.8	P/P	80 - 120
2421584	Tin	104	102	P/P	80 - 120
2421584	Titanium	101	104	P/P	80 - 120
2421584	Vanadium	102	103	P/P	80 - 120
2421584	Zinc	101	103	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P432174

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421584	Aluminum	103	100	P/P	80 - 120
2421584	Antimony	101	99.0	P/P	80 - 120
2421584	Arsenic	102	100	P/P	80 - 120
2421584	Barium	106	103	P/P	80 - 120
2421584	Beryllium	97.8	97.9	P/P	80 - 120
2421584	Boron	105	102	P/P	80 - 120
2421584	Cadmium	102	99.2	P/P	80 - 120
2421584	Chromium	95.4	94.1	P/P	80 - 120
2421584	Cobalt	99.2	96.6	P/P	80 - 120
2421584	Copper	101	100	P/P	80 - 120
2421584	Lead	94.7	93.1	P/P	80 - 120
2421584	Manganese	97.7	94.5	P/P	80 - 120
2421584	Molybdenum	100	98.6	P/P	80 - 120
2421584	Nickel	101	99.7	P/P	80 - 120
2421584	Selenium	103	98.9	P/P	80 - 120
2421584	Thallium	104	102	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P432512

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421707	Silver	99.3	106	P/P	80 - 120
2423336	Silver	103		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P432317

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421280	Chloride	102		P	90 - 110
2421515	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P432320

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421280	Sulfate	98.9		P	90 - 110
2421515	Sulfate	96.4		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432182

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421518	Ammonia-N	98.6	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432146

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421750	Kjeldahl Nitrogen	106	111	P/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421459	NO2NO3-N	99.5	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P432155

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421398	O-Phosphate-P	95.1	95.4	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P432051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421091	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	61.4	85.1	P/P	26 - 165
2421091	Acetochlor	72.2	93.2	P/P	67 - 124
2421091	Alachlor	67.0	75.2	P/P	60 - 120
2421091	Ametryn	98.1	110	P/P	54 - 216
2421091	Atrazine	83.4	100	P/P	66 - 128
2421091	Atrazine Desethyl	84.8	88.1	P/P	15 - 122
2421091	Avobenzone	131	126	P/P	37 - 178
2421091	Azinphos Methyl	109	102	P/P	40 - 292
2421091	Azoxystrobin	114	105	P/P	35 - 220
2421091	Bromacil	93.1	113	P/P	45 - 127
2421091	Butylate	45.9	53.1	P/P	20 - 83.0
2421091	Caffeine	246	152	F/P	10 - 194
2421091	Carbophenothion	90.2	102	P/P	57 - 127
2421091	Carfentrazone Ethyl	101	114	P/P	51 - 141
2421091	Chlorfenapyr	54.7	67.7	P/P	46 - 111
2421091	Chlorpyrifos Ethyl	62.7	62.3	P/P	52 - 120
2421091	Chlorpyrifos Methyl	69.4	82.8	P/P	63 - 119
2421091	Coumaphos	104	115	P/P	10 - 228
2421091	Cyanazine	111	119	P/P	59 - 241
2421091	Cyprodinil	56.9	67.1	P/P	47 - 146
2421091	Dechlorane 602	60.4	58.4	P/P	50 - 150
2421091	Dechlorane 603	98.5	105	P/P	50 - 150
2421091	Dechlorane Plus	73.7	69.8	P/P	50 - 150
2421091	Demeton	76.2	77.6	P/P	40 - 136
2421091	Diazinon	70.2	109	P/P	69 - 132
2421091	Difenoconazole	97.1	100	P/P	57 - 258
2421091	Dimethenamid	55.2	64.1	P/P	54 - 110
2421091	Dimethomorph	211	197	F/P	28 - 210

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P432051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421091	Disulfoton	77.2	95.3	P/P	43 - 133
2421091	Dithiopyr	70.2	92.8	P/P	39 - 116
2421091	EPTC	41.3	47.4	P/P	20 - 78.0
2421091	Ethion	40.1	30.9	P/P	17 - 119
2421091	Ethoprop	94.1	93.0	P/P	66 - 120
2421091	Etridiazole	62.7	65.4	P/P	28 - 96.0
2421091	Fenamiphos	116	113	P/P	41 - 126
2421091	Fenbuconazole	69.0	68.1	P/P	42 - 169
2421091	Fipronil	81.3	109	P/P	61 - 132
2421091	Fipronil Desulfinyl	77.7	101	P/P	56 - 132
2421091	Fipronil Sulfide	68.9	89.5	P/P	48 - 119
2421091	Fipronil Sulfone	83.5	114	P/P	42 - 131
2421091	Fluazifop-P-butyl	44.7	57.2	F/P	53 - 131
2421091	Fludioxonil	61.2	68.0	P/P	56 - 127
2421091	Flumioxazin	163	125	P/P	19 - 300
2421091	Flutolanil	52.4	52.5	P/P	41 - 127
2421091	Fluxapyroxad	77.1	64.5	P/P	42 - 172
2421091	Fonofos	60.6	81.9	P/P	59 - 113
2421091	Hexabromobenzene	51.3	111	P/P	50 - 150
2421091	Hexazinone	77.0	78.4	P/P	66 - 122
2421091	Imazail	78.7	72.8	P/P	21 - 283
2421091	Iprodione	90.2	93.6	P/P	43 - 150
2421091	Loratadine	200	201	P/P	23 - 201
2421091	Malathion	106	125	P/P	58 - 136
2421091	Metalaxyl	88.5	97.5	P/P	55 - 120
2421091	Metolachlor	107	94.6	P/P	57 - 121
2421091	Metribuzin	79.3	93.0	P/P	58 - 294
2421091	Mevinphos	102	111	P/P	50 - 126
2421091	Molinate	58.6	66.4	P/P	42 - 93.0
2421091	Myclobutanil	81.6	88.1	P/P	55 - 125
2421091	Naled	24.3	30.9	P/P	18 - 200
2421091	Napropamide	51.5	40.9	P/P	39 - 110
2421091	Norflurazon	81.8	92.3	P/P	48 - 128
2421091	Octinoxate	98.2	107	P/P	21 - 159
2421091	Oxadiazon	73.8	79.9	P/P	43 - 112
2421091	Oxybenzone	91.1	104	P/P	41 - 142
2421091	Oxyfluorfen	101	106	P/P	64 - 153
2421091	Parathion Ethyl	83.2	84.6	P/P	69 - 114
2421091	Parathion Methyl	109	128	P/P	79 - 139
2421091	PBB-153	78.1	102	P/P	50 - 150
2421091	PBDE-47	79.0	89.6	P/P	27 - 144
2421091	PBDE-99	61.1	76.8	P/P	18 - 150
2421091	Pendimethalin	95.3	102	P/P	50 - 139
2421091	Pentabromotoluene	76.3	96.1	P/P	50 - 150
2421091	Phenytoin	22.3	18.3	P/P	10 - 146
2421091	Phorate	83.9	85.8	P/P	54 - 161
2421091	Prodiamine	28.0	32.2	F/P	30 - 161
2421091	Prometon	72.6	74.4	P/P	45 - 134
2421091	Prometryn	61.0	74.6	P/P	45 - 137
2421091	Pronamide	94.0	108	P/P	65 - 133
2421091	Propanil	93.2	120	P/P	49 - 142
2421091	Propargite	44.5	37.3	P/P	10 - 203

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P432051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421091	Propiconazole	68.9	76.8	P/P	38 - 146
2421091	Pyraflufen Ethyl	92.1	95.9	P/P	34 - 153
2421091	Pyridaben	73.6	66.0	P/P	12 - 192
2421091	Pyriproxyfen	67.9	53.1	P/P	33 - 180
2421091	Simazine	64.7	73.8	P/P	51 - 157
2421091	Stiropfos	22.5	42.1	P/P	10 - 128
2421091	Sulfentrazone	91.7	93.6	P/P	53 - 186
2421091	Tebuconazole	41.1	34.1	P/P	10 - 133
2421091	Terbufos	93.9	108	P/P	65 - 139
2421091	Terbuthylazine	68.2	90.9	P/P	66 - 117
2421091	Tetradecachloro-m-terphenyl	108	128	P/P	70 - 200
2421091	Thiobencarb	64.7	78.5	P/P	51 - 119
2421091	Tri-o-cresyl Phosphate	94.6	102	P/P	31 - 144
2421091	Triadimefon	81.1	80.8	P/P	48 - 119
2421091	Tris(1-chloro-2-propyl) phosphate (TCPP)	81.0	80.7	P/P	50 - 150
2421091	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	90.8	96.8	P/P	50 - 150
2421091	Tris(2-chloroethyl) phosphate (TCEP)	84.5	98.7	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P432171

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421581	2,4-D	101	95.4	P/P	40 - 150
2421581	2,4,5-T	110	111	P/P	40 - 150
2421581	Acetaminophen	80.9	81.4	P/P	30 - 150
2421581	Acetamiprid	55.1	55.9	P/P	40 - 150
2421581	Afidopyropen	48.7	48.3	P/P	30 - 150
2421581	Bentazon	72.1	70.8	P/P	30 - 150
2421581	Benzovindiflupyr	79.5	86.5	P/P	40 - 150
2421581	Carbamazepine	57.0	55.6	P/P	40 - 150
2421581	Clothianidin	81.8	80.1	P/P	40 - 150
2421581	Dinotefuran	68.4	75.5	P/P	40 - 150
2421581	Diuron	40.3	53.7	P/P	40 - 150
2421581	Fenuron	61.8	61.6	P/P	40 - 150
2421581	Fluridone	86.7	83.6	P/P	40 - 150
2421581	Hydrocodone	53.2	55.4	P/P	40 - 150
2421581	Ibuprofen	69.1	75.2	P/P	40 - 150
2421581	Imazapyr	91.1	92.4	P/P	40 - 150
2421581	Imidacloprid	117	118	P/P	40 - 150
2421581	Linuron	58.8	66.9	P/P	40 - 150
2421581	Mandestrobin	74.4	75.2	P/P	40 - 150
2421581	MCP	124	119	P/P	40 - 150
2421581	Naproxen	59.2	55.9	P/P	40 - 150
2421581	Primidone	76.5	78.3	P/P	40 - 150
2421581	Pyraclostrobin	78.5	79.0	P/P	40 - 150
2421581	Silvex	100	108	P/P	40 - 150
2421581	Thiamethoxam	67.3	59.9	P/P	40 - 150
2421581	Tolfenpyrad	51.7	53.1	P/P	30 - 150
2421581	Triclopyr	114	116	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P432281

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421699	Acesulfame K	110	113	P/P	40 - 150
2421699	AMPA	136	124	P/P	40 - 150
2421699	Endothall	74.5	71.9	P/P	40 - 150
2421699	Glufosinate	124	143	P/P	40 - 150
2421699	Glyphosate	124	123	P/P	40 - 150
2421699	Sucralose	94.8	98.2	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P432224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421625	Fluoride	100	100	P/P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P432215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2421317	Organic Carbon	95.1	96.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P432118

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421394	Color (true)	6.27	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432131

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421312	Turbidity	4.04	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P432174

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421584	Calcium	0.281	Spike	P	0 - 20
2421584	Iron	0.168	Spike	P	0 - 20
2421584	Magnesium	0.305	Spike	P	0 - 20
2421584	Potassium	0.144	Spike	P	0 - 20
2421584	Sodium	0.504	Spike	P	0 - 20
2421584	Strontium	0.307	Spike	P	0 - 20
2421584	Tin	1.90	Spike	P	0 - 20
2421584	Titanium	2.82	Spike	P	0 - 20
2421584	Vanadium	1.25	Spike	P	0 - 20
2421584	Zinc	1.69	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P432174

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421584	Aluminum	2.29	Spike	P	0 - 20
2421584	Antimony	2.09	Spike	P	0 - 20
2421584	Arsenic	1.94	Spike	P	0 - 20
2421584	Barium	2.68	Spike	P	0 - 20
2421584	Beryllium	0.0746	Spike	P	0 - 20
2421584	Boron	2.99	Spike	P	0 - 20
2421584	Cadmium	2.39	Spike	P	0 - 20
2421584	Chromium	1.43	Spike	P	0 - 20
2421584	Cobalt	2.62	Spike	P	0 - 20
2421584	Copper	1.32	Spike	P	0 - 20
2421584	Lead	1.72	Spike	P	0 - 20
2421584	Manganese	2.39	Spike	P	0 - 20
2421584	Molybdenum	1.62	Spike	P	0 - 20
2421584	Nickel	1.73	Spike	P	0 - 20
2421584	Selenium	3.65	Spike	P	0 - 20
2421584	Thallium	1.98	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P432512

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421707	Silver	6.34	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432317

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421280	Chloride	0.944	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432182

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421518	Ammonia-N	0.610	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432146

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421750	Kjeldahl Nitrogen	3.39	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432239

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421459	NO2NO3-N	1.01	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432190

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421479	Total-P	1.12	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P432155

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421398	O-Phosphate-P	0.315	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P432051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421091	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	32.4	Spike	P	0 - 37
2421091	Acetochlor	25.4	Spike	P	0 - 28

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P432051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421091	Alachlor	11.5	Spike	P	0 - 30
2421091	Ametryn	11.8	Spike	P	0 - 32
2421091	Atrazine	14.0	Spike	P	0 - 41
2421091	Atrazine Desethyl	3.83	Spike	P	0 - 36
2421091	Avobenzone	3.87	Spike	P	0 - 36
2421091	Azinphos Methyl	6.34	Spike	P	0 - 75
2421091	Azoxystrobin	8.21	Spike	P	0 - 39
2421091	Bromacil	19.2	Spike	P	0 - 33
2421091	Butylate	14.7	Spike	P	0 - 44
2421091	Caffeine	44.4	Spike	P	0 - 74
2421091	Carbophenothion	11.8	Spike	P	0 - 25
2421091	Carfentrazone Ethyl	12.2	Spike	P	0 - 27
2421091	Chlorfenapyr	21.3	Spike	P	0 - 24
2421091	Chlorpyrifos Ethyl	0.535	Spike	P	0 - 26
2421091	Chlorpyrifos Methyl	17.6	Spike	P	0 - 26
2421091	Coumaphos	9.88	Spike	P	0 - 28
2421091	Cyanazine	7.09	Spike	P	0 - 48
2421091	Cyprodinil	16.4	Spike	P	0 - 29
2421091	Dechlorane 602	3.24	Spike	P	0 - 30
2421091	Dechlorane 603	6.55	Spike	P	0 - 30
2421091	Dechlorane Plus	5.33	Spike	P	0 - 30
2421091	Demeton	1.80	Spike	P	0 - 33
2421091	Diazinon	43.3	Spike	F	0 - 29
2421091	Difenoconazole	2.87	Spike	P	0 - 34
2421091	Dimethenamid	14.8	Spike	P	0 - 39
2421091	Dimethomorph	6.91	Spike	P	0 - 51
2421091	Disulfoton	21.0	Spike	P	0 - 30
2421091	Dithiopyr	27.7	Spike	F	0 - 26
2421091	EPTC	13.8	Spike	P	0 - 43
2421091	Ethion	25.8	Spike	P	0 - 79
2421091	Ethoprop	1.13	Spike	P	0 - 29
2421091	Etridiazole	4.24	Spike	P	0 - 33
2421091	Fenamiphos	2.50	Spike	P	0 - 40
2421091	Fenbuconazole	1.26	Spike	P	0 - 74
2421091	Fipronil	28.8	Spike	P	0 - 29
2421091	Fipronil Desulfinyl	24.4	Spike	P	0 - 32
2421091	Fipronil Sulfide	22.3	Spike	P	0 - 30
2421091	Fipronil Sulfone	24.5	Spike	P	0 - 33
2421091	Fluazifop-P-butyl	24.5	Spike	P	0 - 38
2421091	Fludioxonil	10.5	Spike	P	0 - 29
2421091	Flumioxazin	26.1	Spike	P	0 - 51
2421091	Flutolanil	0.274	Spike	P	0 - 25
2421091	Fluxapyroxad	17.7	Spike	P	0 - 45
2421091	Fonofos	30.0	Spike	F	0 - 27
2421091	Hexabromobenzene	73.5	Spike	F	0 - 30
2421091	Hexazinone	1.77	Spike	P	0 - 30
2421091	Imazalil	7.86	Spike	P	0 - 100
2421091	Iprodione	3.78	Spike	P	0 - 33
2421091	Loratadine	0.109	Spike	P	0 - 56
2421091	Malathion	17.0	Spike	P	0 - 37
2421091	Metalaxyl	9.72	Spike	P	0 - 40

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P432051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421091	Metolachlor	11.9	Spike	P	0 - 29
2421091	Metribuzin	16.0	Spike	P	0 - 45
2421091	Mevinphos	8.83	Spike	P	0 - 29
2421091	Molinate	12.6	Spike	P	0 - 33
2421091	Myclobutanil	7.75	Spike	P	0 - 26
2421091	Naled	23.9	Spike	P	0 - 37
2421091	Napropamide	23.1	Spike	P	0 - 44
2421091	Norflurazon	12.0	Spike	P	0 - 30
2421091	Octinoxate	8.58	Spike	P	0 - 45
2421091	Oxadiazon	7.97	Spike	P	0 - 28
2421091	Oxybenzone	13.2	Spike	P	0 - 46
2421091	Oxyfluorfen	4.89	Spike	P	0 - 28
2421091	Parathion Ethyl	1.67	Spike	P	0 - 31
2421091	Parathion Methyl	15.8	Spike	P	0 - 29
2421091	PBB-153	26.9	Spike	P	0 - 30
2421091	PBDE-47	12.5	Spike	P	0 - 36
2421091	PBDE-99	22.7	Spike	P	0 - 40
2421091	Pendimethalin	6.39	Spike	P	0 - 33
2421091	Pentabromotoluene	23.1	Spike	P	0 - 30
2421091	Phenytoin	19.9	Spike	P	0 - 100
2421091	Phorate	2.24	Spike	P	0 - 36
2421091	Prodiamine	14.2	Spike	P	0 - 71
2421091	Prometon	2.52	Spike	P	0 - 36
2421091	Prometryn	20.0	Spike	P	0 - 28
2421091	Pronamide	14.0	Spike	P	0 - 24
2421091	Propanil	24.7	Spike	P	0 - 28
2421091	Propargite	17.4	Spike	P	0 - 43
2421091	Propiconazole	9.26	Spike	P	0 - 33
2421091	Pyraflufen Ethyl	4.03	Spike	P	0 - 29
2421091	Pyridaben	5.96	Spike	P	0 - 30
2421091	Pyriproxyfen	24.5	Spike	P	0 - 79
2421091	Simazine	13.1	Spike	P	0 - 29
2421091	Stirophos	60.7	Spike	P	0 - 61
2421091	Sulfentrazone	2.11	Spike	P	0 - 33
2421091	Tebuconazole	12.9	Spike	P	0 - 69
2421091	Terbufos	13.5	Spike	P	0 - 29
2421091	Terbuthylazine	28.5	Spike	P	0 - 32
2421091	Tetradecachloro-m-terphenyl	16.5	Spike	P	0 - 30
2421091	Thiobencarb	19.4	Spike	P	0 - 26
2421091	Tri-o-cresyl Phosphate	7.69	Spike	P	0 - 33
2421091	Triadimefon	0.380	Spike	P	0 - 28
2421091	Tris(1-chloro-2-propyl) phosphate (TCPP)	0.399	Spike	P	0 - 30
2421091	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	6.41	Spike	P	0 - 30
2421091	Tris(2-chloroethyl) phosphate (TCEP)	15.5	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P432171

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421581	2,4-D	5.43	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P432171

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421581	2,4,5-T	1.01	Spike	P	0 - 30
2421581	Acetaminophen	0.607	Spike	P	0 - 30
2421581	Acetamiprid	1.38	Spike	P	0 - 30
2421581	Afidopyropen	0.710	Spike	P	0 - 30
2421581	Bentazon	1.87	Spike	P	0 - 30
2421581	Benzovindiflupyr	8.42	Spike	P	0 - 30
2421581	Carbamazepine	2.42	Spike	P	0 - 30
2421581	Clothianidin	2.11	Spike	P	0 - 30
2421581	Dinotefuran	9.88	Spike	P	0 - 30
2421581	Diuron	28.5	Spike	P	0 - 30
2421581	Fenuron	0.416	Spike	P	0 - 30
2421581	Fluridone	3.75	Spike	P	0 - 30
2421581	Hydrocodone	3.96	Spike	P	0 - 30
2421581	Ibuprofen	8.48	Spike	P	0 - 30
2421581	Imazapyr	1.37	Spike	P	0 - 30
2421581	Imidacloprid	0.336	Spike	P	0 - 30
2421581	Linuron	12.8	Spike	P	0 - 30
2421581	Mandestrobin	0.994	Spike	P	0 - 30
2421581	MCP	4.20	Spike	P	0 - 30
2421581	Naproxen	5.72	Spike	P	0 - 30
2421581	Primidone	2.40	Spike	P	0 - 30
2421581	Pyraclostrobin	0.620	Spike	P	0 - 30
2421581	Silvex	7.16	Spike	P	0 - 30
2421581	Thiamethoxam	11.6	Spike	P	0 - 30
2421581	Tolfenpyrad	2.73	Spike	P	0 - 30
2421581	Triclopyr	1.63	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P432281

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421699	Acesulfame K	3.03	Spike	P	0 - 30
2421699	AMPA	9.17	Spike	P	0 - 30
2421699	Endothall	3.45	Spike	P	0 - 30
2421699	Glufosinate	13.7	Spike	P	0 - 30
2421699	Glyphosate	0.793	Spike	P	0 - 30
2421699	Sucralose	3.42	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P432220

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421625	Total Alkalinity	1.33	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015

Batch ID: P432425

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: P432425

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421478	TDS	0.690	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P432224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421625	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P432215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2421317	Organic Carbon	0.758	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2421470
Field Sample ID: G3CE0021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	95.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	74.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	51.9	P	30 - 160
EPA 8321B	Diuron-d6	40.7	P	30 - 160
EPA 8321B	Endothall-d6	91.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	99.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	67.7	P	30 - 160
EPA 8321B	Primidone-d5	59.2	P	30 - 160
EPA 8321B	Sucralose-d6	87.4	P	30 - 160

Lab Sample ID: 2421472
Field Sample ID: G3CE0021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	76.5	P	20 - 200
EPA 8270E	Simazine-d10	95.5	P	62 - 142
EPA 8270E	Terbufos-d10	96.4	P	58 - 132
EPA 8270E	Terphenyl-d14	92.5	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A120193

Included Lab Sample IDs: 2421458

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A120201

Included Lab Sample IDs: 2421458

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	101	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A120214

Included Lab Sample IDs: 2421460

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A120229

Included Lab Sample IDs: 2421459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.3	99.5	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A120247

Included Lab Sample IDs: 2421458

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.2	93.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A120247

Included Lab Sample IDs: 2421458

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

Reference Method: SM 5310 B-2011

Run ID: A120252

Included Lab Sample IDs: 2421459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.5	97.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A120259

Included Lab Sample IDs: 2421459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A120266

Included Lab Sample IDs: 2421459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	97.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A120267

Included Lab Sample IDs: 2421459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	106	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A120275

Included Lab Sample IDs: 2421472

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	87.9		P	80 - 120
Alachlor	86.9		P	80 - 120
Ametryn	105		P	80 - 120
Atrazine	95.2		P	80 - 120
Atrazine Desethyl	102		P	80 - 120
Azinphos Methyl	98.4		P	80 - 120
Azoxystrobin	98.1		P	80 - 120
Bromacil	98.1		P	80 - 120
Butylate	99.3		P	80 - 120
Caffeine	97.9		P	80 - 120
Carbophenothion	106		P	80 - 120
Carfentrazone Ethyl	105		P	80 - 120
Chlorfenapyr	90.4		P	80 - 120
Chlorpyrifos Ethyl	85.4		P	80 - 120
Chlorpyrifos Methyl	97.1		P	80 - 120
Coumaphos	100		P	80 - 120
Cyanazine	107		P	80 - 120
Cyprodinil	92.0		P	80 - 120
Demeton	105		P	80 - 120
Diazinon	102		P	80 - 120
Difenoconazole	95.4		P	80 - 120
Dimethenamid	96.6		P	80 - 120
Dimethomorph	87.4		P	80 - 120
Disulfoton	110		P	80 - 120
Dithiopyr	97.9		P	80 - 120
EPTC	103		P	80 - 120
Ethion	96.9		P	80 - 120
Ethoprop	105		P	80 - 120
Etridiazole	101		P	80 - 120
Fenamiphos	86.4		P	80 - 120
Fenbuconazole	84.7		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	102		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	82.2		P	80 - 120
Fludioxonil	88.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120275
Included Lab Sample IDs: 2421472

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Flumioxazin	105		P	80 - 120
Flutolanil	99.4		P	80 - 120
Fluxapyroxad	104		P	80 - 120
Fonofos	99.8		P	80 - 120
Hexazinone	98.6		P	80 - 120
Imazalil	95.2		P	80 - 120
Iprodione	96.4		P	80 - 120
Loratadine	101		P	80 - 120
Malathion	93.7		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	98.8		P	80 - 120
Mevinphos	113		P	80 - 120
Molinate	91.3		P	80 - 120
Myclobutanil	88.5		P	80 - 120
Naled	86.7		P	80 - 120
Napropamide	101		P	80 - 120
Norflurazon	101		P	80 - 120
Oxadiazon	101		P	80 - 120
Oxyfluorfen	106		P	80 - 120
Parathion Ethyl	99.0		P	80 - 120
Parathion Methyl	102		P	80 - 120
Pendimethalin	112		P	80 - 120
Phenytoin	107		P	80 - 120
Phorate	106		P	80 - 120
Prodiamine	118		P	80 - 120
Prometon	98.8		P	80 - 120
Prometryn	90.2		P	80 - 120
Pronamide	95.8		P	80 - 120
Propanil	101		P	80 - 120
Propargite	102		P	80 - 120
Propiconazole	87.7		P	80 - 120
Pyraflufen Ethyl	103		P	80 - 120
Pyridaben	107		P	80 - 120
Pyriproxyfen	99.4		P	80 - 120
Simazine	81.9		P	80 - 120
Stirophos	99.3		P	80 - 120
Sulfentrazone	102		P	80 - 120
Tebuconazole	105		P	80 - 120
Terbufos	101		P	80 - 120
Terbutylazine	84.3		P	80 - 120
Thiobencarb	98.1		P	80 - 120
Triadimefon	102		P	80 - 120

Reference Method: EPA 8270E
Run ID: A120277
Included Lab Sample IDs: 2421472

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.9		P	80 - 120
Avobenzene	99.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A120277
 Included Lab Sample IDs: 2421472

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dechlorane 602	101		P	80 - 120
Dechlorane 603	97.9		P	80 - 120
Dechlorane Plus	100		P	80 - 120
Hexabromobenzene	100		P	80 - 120
Octinoxate	93.0		P	80 - 120
Oxybenzone	95.1		P	80 - 120
PBB-153	95.9		P	80 - 120
PBDE-47	99.6		P	80 - 120
PBDE-99	100		P	80 - 120
Pentabromotoluene	98.3		P	80 - 120
Tetradecachloro-m-terphenyl	98.2		P	80 - 120
Tri-o-cresyl Phosphate	98.9		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	97.6		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	99.2		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	95.9		P	80 - 120

Reference Method: EPA 8321B
 Run ID: A120279
 Included Lab Sample IDs: 2421470

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	91.3	89.4	P/P	50 - 150
2,4,5-T	102	83.6	P/P	50 - 150
Acetaminophen	104	100	P/P	60 - 160
Acetamiprid	106	103	P/P	50 - 150
Afidopyropen	91.2	101	P/P	50 - 150
Bentazon	139	144	P/P	50 - 160
Benzovindiflupyr	99.6	98.9	P/P	50 - 150
Carbamazepine	110	105	P/P	60 - 150
Clothianidin	122	109	P/P	60 - 150
Dinotefuran	116	112	P/P	50 - 150
Diuron	117	101	P/P	60 - 160
Fenuron	107	104	P/P	60 - 150
Fluridone	103	112	P/P	60 - 160
Hydrocodone	112	112	P/P	60 - 150
Ibuprofen	118	103	P/P	50 - 160
Imazapyr	96.4	89.4	P/P	50 - 150
Imidacloprid	109	111	P/P	60 - 150
Linuron	118	102	P/P	60 - 150
Mandestrobin	97.4	107	P/P	50 - 150
MCPP	97.0	93.1	P/P	50 - 150
Naproxen	68.1	105	P/P	50 - 160
Primidone	108	101	P/P	60 - 150
Pyraclostrobin	108	115	P/P	60 - 150
Silvex	97.9	97.3	P/P	50 - 150
Thiamethoxam	117	112	P/P	50 - 150
Tolfenpyrad	105	108	P/P	60 - 150
Triclopyr	112	99.1	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A120281

Included Lab Sample IDs: 2421471

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	102	P/P	90 - 110
Antimony	98.5	98.4	P/P	90 - 110
Arsenic	102	103	P/P	90 - 110
Barium	101	100	P/P	90 - 110
Beryllium	99.4	98.8	P/P	90 - 110
Boron	97.7	99.7	P/P	90 - 110
Cadmium	99.5	99.4	P/P	90 - 110
Chromium	95.2	94.9	P/P	90 - 110
Cobalt	97.2	99.2	P/P	90 - 110
Copper	98.2	100	P/P	90 - 110
Lead	92.0	92.5	P/P	90 - 110
Manganese	96.1	96.5	P/P	90 - 110
Molybdenum	99.9	99.0	P/P	90 - 110
Nickel	99.6	101	P/P	90 - 110
Selenium	99.9	99.2	P/P	90 - 110
Thallium	101	101	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A120282

Included Lab Sample IDs: 2421471

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	95 - 105
Iron	102	101	P/P	95 - 105
Magnesium	101	101	P/P	95 - 105
Potassium	100	100	P/P	95 - 105
Sodium	100	100	P/P	95 - 105
Strontium	101	102	P/P	95 - 105
Tin	101	100	P/P	95 - 105
Titanium	100	100	P/P	95 - 105
Vanadium	101	100	P/P	95 - 105
Zinc	102	101	P/P	95 - 105

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A120300

Included Lab Sample IDs: 2421458

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	104	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A120301

Included Lab Sample IDs: 2421470

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	101	102	P/P	60 - 160
Endothall	72.5	74.6	P/P	60 - 160
Glufosinate	116	118	P/P	60 - 160
Glyphosate	129	127	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A120302
Included Lab Sample IDs: 2421470

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	107	126	P/P	60 - 160
Sucralose	103	90.7	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A120441
Included Lab Sample IDs: 2421471

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	103	97.8	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	102				6.27	
EPA 180.1 Rev. 2.0	Turbidity	101				4.04	
EPA 200.7 Rev. 4.4	Calcium	106	106	106			0.281
	Iron	105	105	105			0.168
	Magnesium	105	105	105			0.305
	Potassium	101	101	101			0.144
	Sodium	104	103	102			0.504
	Strontium	100	100	99.8			0.307
	Tin	101	104	102			1.90
	Titanium	101	101	104			2.82
	Vanadium	101	102	103			1.25
	Zinc	101	101	103			1.69
EPA 200.8 Rev. 5.4	Aluminum	100	103	100			2.29
	Antimony	99.3	101	99.0			2.09
	Arsenic	103	102	100			1.94
	Barium	103	106	103			2.68
	Beryllium	96.2	97.8	97.9			0.0746
	Boron	102	105	102			2.99
	Cadmium	98.5	102	99.2			2.39
	Chromium	94.4	95.4	94.1			1.43
	Cobalt	99.0	99.2	96.6			2.62
	Copper	99.9	101	100			1.32
	Lead	92.3	94.7	93.1			1.72
	Manganese	95.9	97.7	94.5			2.39
	Molybdenum	99.6	100	98.6			1.62
	Nickel	99.2	101	99.7			1.73
	Selenium	104	103	98.9			3.65
	Silver	98.3	99.3	106	103		6.34
	Thallium	100	104	102			1.98
EPA 300.0 Rev. 2.1	Chloride	101	102	102		0.944	
	Sulfate	97.3	98.9	96.4			
EPA 350.1 Rev. 2.0	Ammonia-N	96.8	98.6	98.0			0.610
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	106	111			3.39
EPA 353.2 Rev. 2.0	NO2NO3-N	102	99.5	98.5			1.01
EPA 365.1 Rev. 2.0	Total-P	103					1.12
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	95.1	95.4			0.315
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	75.2	61.4	85.1			32.4
	Acetochlor	88.0	72.2	93.2			25.4
	Alachlor	67.3	67.0	75.2			11.5
	Ametryn	140	98.1	110			11.8
	Atrazine	89.2	83.4	100			14.0
	Atrazine Desethyl	79.6	84.8	88.1			3.83
	Avobenzone	92.9	131	126			3.87
	Azinphos Methyl	85.4	109	102			6.34
	Azoxystrobin	67.5	114	105			8.21
	Bromacil	88.2	93.1	113			19.2
	Butylate	49.4	45.9	53.1			14.7
	Caffeine	103	246	152			44.4
	Carbophenothion	96.9	90.2	102			11.8
	Carfentrazone Ethyl	108	101	114			12.2
	Chlorfenapyr	68.2	54.7	67.7			21.3
	Chlorpyrifos Ethyl	82.3	62.7	62.3			0.535

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Chlorpyrifos Methyl	83.8	69.4	82.8		17.6
	Coumaphos	71.3	104	115		9.88
	Cyanazine	120	111	119		7.09
	Cyprodinil	65.6	56.9	67.1		16.4
	Dechlorane 602	78.0	60.4	58.4		3.24
	Dechlorane 603	94.1	98.5	105		6.55
	Dechlorane Plus	91.9	73.7	69.8		5.33
	Demeton	61.0	76.2	77.6		1.80
	Diazinon	98.1	70.2	109		43.3
	Difenoconazole	56.2	97.1	100		2.87
	Dimethenamid	77.8	55.2	64.1		14.8
	Dimethomorph	105	211	197		6.91
	Disulfoton	95.0	77.2	95.3		21.0
	Dithiopyr	92.4	70.2	92.8		27.7
	EPTC	46.9	41.3	47.4		13.8
	Ethion	88.4	40.1	30.9		25.8
	Ethoprop	81.7	94.1	93.0		1.13
	Etridiazole	62.7	62.7	65.4		4.24
	Fenamiphos	78.4	116	113		2.50
	Fenbuconazole	35.6	69.0	68.1		1.26
	Fipronil	109	81.3	109		28.8
	Fipronil Desulfinyl	91.7	77.7	101		24.4
	Fipronil Sulfide	91.5	68.9	89.5		22.3
	Fipronil Sulfone	98.2	83.5	114		24.5
	Fluazifop-P-butyl	51.9	57.2	44.7		24.5
	Fludioxonil	67.7	61.2	68.0		10.5
	Flumioxazin	110	163	125		26.1
	Flutolanil	67.0	52.4	52.5		0.274
	Fluxapyroxad	91.7	77.1	64.5		17.7
	Fonofos	75.3	60.6	81.9		30.0
	Hexabromobenzene	92.0	51.3	111		73.5
	Hexazinone	89.2	77.0	78.4		1.77
	Imazalil	69.8	78.7	72.8		7.86
	Iprodione	108	90.2	93.6		3.78
	Loratadine	105	200	201		0.109
	Malathion	125	106	125		17.0
	Metalaxyl	97.7	88.5	97.5		9.72
	Metolachlor	108	107	94.6		11.9
	Metribuzin	82.2	79.3	93.0		16.0
	Mevinphos	78.7	102	111		8.83
	Molinate	56.0	58.6	66.4		12.6
	Myclobutanil	85.7	81.6	88.1		7.75
	Naled	27.6	24.3	30.9		23.9
	Napropamide	88.8	51.5	40.9		23.1
	Norflurazon	81.4	81.8	92.3		12.0
	Octinoxate	93.3	98.2	107		8.58
	Oxadiazon	82.0	73.8	79.9		7.97
	Oxybenzone	95.8	91.1	104		13.2
	Oxyfluorfen	101	101	106		4.89
	Parathion Ethyl	86.5	83.2	84.6		1.67
	Parathion Methyl	99.7	109	128		15.8
	PBB-153	94.6	78.1	102		26.9
	PBDE-47	94.2	79.0	89.6		12.5
	PBDE-99	81.2	61.1	76.8		22.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Pendimethalin	104	95.3	102		6.39
	Pentabromotoluene	80.6	76.3	96.1		23.1
	Phenytoin	63.1	22.3	18.3		19.9
	Phorate	65.7	83.9	85.8		2.24
	Prodiamine	37.3	28.0	32.2		14.2
	Prometon	74.3	72.6	74.4		2.52
	Prometryn	71.5	61.0	74.6		20.0
	Pronamide	100	94.0	108		14.0
	Propanil	112	93.2	120		24.7
	Propargite	97.3	44.5	37.3		17.4
	Propiconazole	72.4	68.9	76.8		9.26
	Pyraflufen Ethyl	98.0	92.1	95.9		4.03
	Pyridaben	67.1	73.6	66.0		5.96
	Pyriproxyfen	73.2	67.9	53.1		24.5
	Simazine	71.9	64.7	73.8		13.1
	Stiropfos	121	22.5	42.1		60.7
	Sulfentrazone	75.6	91.7	93.6		2.11
	Tebuconazole	79.7	41.1	34.1		12.9
	Terbufos	95.2	93.9	108		13.5
	Terbutylazine	81.6	68.2	90.9		28.5
	Tetradecachloro-m-terphenyl	113	128	108		16.5
	Thiobencarb	89.4	64.7	78.5		19.4
	Tri-o-cresyl Phosphate	95.4	94.6	102		7.69
	Triadimefon	93.7	81.1	80.8		0.380
	Tris(1-chloro-2-propyl) phosphate (TCPP)	102	80.7	81.0		0.399
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	89.3	96.8	90.8		6.41
	Tris(2-chloroethyl) phosphate (TCEP)	98.7	98.7	84.5		15.5
EPA 8321B	2,4-D	90.9	101	95.4		5.43
	2,4,5-T	93.6	110	111		1.01
	Acesulfame K	105	110	113		3.03
	Acetaminophen	83.5	80.9	81.4		0.607
	Acetamiprid	75.4	55.1	55.9		1.38
	Afidopyropen	57.1	48.7	48.3		0.710
	AMPA	80.7	136	124		9.17
	Bentazon	124	72.1	70.8		1.87
	Benzovindiflupyr	87.1	79.5	86.5		8.42
	Carbamazepine	77.9	57.0	55.6		2.42
	Clothianidin	88.6	81.8	80.1		2.11
	Dinotefuran	102	68.4	75.5		9.88
	Diuron	43.2	40.3	53.7		28.5
	Endothall	71.5	74.5	71.9		3.45
	Fenuron	90.9	61.8	61.6		0.416
	Fluridone	93.2	86.7	83.6		3.75
	Glufosinate	119	124	143		13.7
	Glyphosate	125	124	123		0.793
	Hydrocodone	76.8	53.2	55.4		3.96
	Ibuprofen	93.2	69.1	75.2		8.48
	Imazapyr	85.7	91.1	92.4		1.37
	Imidacloprid	89.2	117	118		0.336
	Linuron	78.6	58.8	66.9		12.8
	Mandestrobin	77.9	74.4	75.2		0.994

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	MCCP	104	124	119			4.20
	Naproxen	85.2	59.2	55.9			5.72
	Primidone	82.8	76.5	78.3			2.40
	Pyraclostrobin	83.9	78.5	79.0			0.620
	Silvex	108	100	108			7.16
	Sucralose	89.4	94.8	98.2			3.42
	Thiamethoxam	87.7	67.3	59.9			11.6
	Tolfenpyrad	60.2	51.7	53.1			2.73
	Triclopyr	96.0	114	116			1.63
SM 2320 B-2011	Total Alkalinity	96.4				1.33	
SM 2540 C-2015	TDS	96.5				0.690	
SM 2540 D-2015	TSS	89.7					
SM 4500-F- C-2011	Fluoride	99.2	100	100			0.0
SM 5310 B-2011	Organic Carbon	93.9	95.1	96.0			0.758

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2421458
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2421458
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2421471
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2421471
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2421458
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2421458
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2421459
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2421459
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2421459
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2421459
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2421460
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2421472
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2421472
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2421470
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2421458
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2421471
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2421458
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2421458
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2421458
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2421459

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	07/06/2023			07/06/2023 14:00	Samantha L Bates	2421458
EPA 180.1 Rev. 2.0	07/06/2023			07/06/2023 13:43	Alexis Price	2421458
EPA 200.7 Rev. 4.4	07/06/2023	07/07/2023 13:25	George D Taylor	07/10/2023 13:55	Samatha Luckman	2421471
	07/06/2023	07/07/2023 13:25	George D Taylor	07/10/2023 14:03	Samatha Luckman	2421471
EPA 200.8 Rev. 5.4	07/06/2023	07/07/2023 13:25	George D Taylor	07/10/2023 16:41	Emily M Philpot	2421471
	07/06/2023	07/14/2023 12:55	George D Taylor	07/17/2023 13:30	Conrad Hartmann	2421471
EPA 300.0 Rev. 2.1	07/06/2023			07/10/2023 22:03	James L Waggeberby	2421458
EPA 350.1 Rev. 2.0	07/06/2023			07/07/2023 12:30	Ping Hua	2421459
EPA 351.2 Rev. 2.0	07/06/2023	07/07/2023 14:27	Simonne.V. Calhoun	07/10/2023 14:12	Samantha L Bates	2421459
EPA 353.2 Rev. 2.0	07/06/2023			07/10/2023 11:51	Beverly Y. Sanders	2421459
EPA 365.1 Rev. 2.0	07/06/2023	07/07/2023 16:02	Adam P Silver	07/10/2023 13:26	Chandler E Cox	2421459
EPA 365.1 Rev. 2.0 dissolved	07/06/2023			07/07/2023 10:26	James L Waggeberby	2421460
EPA 8270E	07/06/2023	07/06/2023 14:00	Rasheda Ghaffari	07/08/2023 18:56	Michael Poppell	2421472
	07/06/2023	07/06/2023 14:00	Rasheda Ghaffari	07/10/2023 20:54	Arthur Maknenko	2421472
EPA 8321B	07/06/2023	07/07/2023 13:05	Hoor Shaik	07/10/2023 18:31	Juyoung Kim	2421470
	07/06/2023	07/07/2023 13:05	Hoor Shaik	07/11/2023 14:16	Juyoung Kim	2421470
	07/06/2023	07/11/2023 12:30	Hana Lee	07/11/2023 14:42	Hana Lee	2421470
	07/06/2023	07/11/2023 12:30	Hana Lee	07/11/2023 23:20	Hana Lee	2421470
SM 2320 B-2011	07/06/2023			07/08/2023 06:45	Dale L. Simmons	2421458
SM 2340 B-2011	07/06/2023			07/10/2023 13:55	Samatha Luckman	2421471
SM 2540 C-2015	07/06/2023			07/10/2023 14:00	Dana G. Hughes	2421458
SM 2540 D-2015	07/06/2023			07/10/2023 12:20	Dana G. Hughes	2421458
SM 4500-F- C-2011	07/06/2023			07/08/2023 06:45	Dale L. Simmons	2421458
SM 5310 B-2011	07/06/2023			07/07/2023 22:41	Elise M. Gillis	2421459