

Chemical Analysis Report

CEN-DIST-2023-06-23-01

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

Event Description: **Lake Spencer and Clear Lake LVIs**
Request ID: **RQ-2023-05-15-20**
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: 14-JUL-2023 08:05

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

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: LAKE SPENCER AT CENTER

Collection Date/Time: 06/22/2023 11:33

Field ID: G1CE0128

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2419545	DEP SOP: NU-094-1	Color (true)	17		PCU	P431728	
	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P431737	
	EPA 300.0 Rev. 2.1	Chloride	22		mg Cl/L	P431831	
		Sulfate	6.7		mg SO4/L	P431834	
	SM 2320 B-2011	Total Alkalinity	17		mg CaCO3/L	P431796	
	SM 2540 C-2015	TDS	95		mg/L	P432257	
	SM 2540 D-2015	TSS	2	U	mg/L	P432094	
2419546	SM 4500-F- C-2011	Fluoride	0.095	I	mg F/L	P431808	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P431807	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.77		mg N/L	P431803	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P431999	
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P431781	
2419547	SM 5310 B-2011	Organic Carbon	11		mg C/L	P431960	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P431727	
2419551	EPA 8321B	2,4-D	0.0036	I	ug/L	P431822	
		Acesulfame K	0.10	U	ug/L	P431715	
		2,4,5-T	0.0040	U	ug/L	P431822	
		AMPA	0.10	U	ug/L	P431715	
		Acetaminophen	0.0080	U	ug/L	P431822	
		Acetamiprid	0.0020	U	ug/L	P431822	
		Endothall	0.25	U	ug/L	P431715	
		Glufosinate	0.10	U	ug/L	P431715	
		Glyphosate	0.10	U	ug/L	P431715	
		Afidopyropen	0.0020	U	ug/L	P431822	
		Bentazon	8.0E-04	U	ug/L	P431822	
		Sucralose	0.046		ug/L	P431715	
		Benzovindiflupyr	0.0020	U	ug/L	P431822	
		Carbamazepine	8.0E-04	U	ug/L	P431822	
		Clothianidin	0.0020	U	ug/L	P431822	
		Dinotefuran	0.0020	U	ug/L	P431822	
		Diuron	0.0020	U	ug/L	P431822	MS
		Fenuron	0.032	U	ug/L	P431822	
		Fluridone	8.0E-04	U	ug/L	P431822	
		Imazapyr	0.0040	U	ug/L	P431822	
		Hydrocodone	0.0020	U	ug/L	P431822	
		Ibuprofen	0.080	U	ug/L	P431822	
		Imidacloprid	0.0020	U	ug/L	P431822	
		Linuron	0.0040	U	ug/L	P431822	
		Mandestrobin	0.0020	U	ug/L	P431822	
		MCPD	0.0020	U	ug/L	P431822	
		Naproxen	0.0080	U	ug/L	P431822	
		Primidone	0.0040	U	ug/L	P431822	
		Pyraclostrobin	0.0020	U	ug/L	P431822	

Field ID: G1CE0128

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2419551	EPA 8321B	Silvex	0.0040	U	ug/L	P431822	
		Thiamethoxam	0.0020	U	ug/L	P431822	
		Tolfenpyrad	0.0020	U	ug/L	P431822	
		Triclopyr	0.0040	U	ug/L	P431822	
2419552	EPA 200.7 Rev. 4.4	Calcium	6.10		mg/L	P431837	
		Iron	33	I	ug/L	P431837	
		Magnesium	4.45		mg/L	P431837	
		Potassium	3.6		mg/L	P431837	
		Sodium	10.5		mg/L	P431837	
		Strontium	21.1		ug/L	P431837	
		Tin	3.0	U	ug/L	P431837	
		Titanium	0.75	U	ug/L	P431837	
		Vanadium	2.0	U	ug/L	P431837	
		Zinc	5.0	U	ug/L	P431837	
	EPA 200.8 Rev. 5.4	Aluminum	6.0	I	ug/L	P431837	
		Antimony	0.12	I	ug/L	P431837	
		Arsenic	1.11		ug/L	P431837	
		Barium	7.26		ug/L	P431837	
		Beryllium	0.010	U	ug/L	P431837	
		Boron	41.2		ug/L	P431837	
		Cadmium	0.020	U	ug/L	P431837	
		Chromium	0.40	U	ug/L	P431837	
		Cobalt	0.020	U	ug/L	P431837	
		Copper	0.40	U	ug/L	P431837	
		Lead	0.20	U	ug/L	P431837	
		Manganese	14.9		ug/L	P431837	
		Molybdenum	0.15	U	ug/L	P431837	
		Nickel	0.50	U	ug/L	P431837	
		Selenium	0.20	U	ug/L	P431837	
		Silver	0.010	U	ug/L	P431837	
		Thallium	0.10	U	ug/L	P431837	
		Hardness	33.6		mg/L	P431837	
2419558	SM 2340 B-2011						
	EPA 8270E	Oxybenzone**	10	UJ	ng/L	P431793	MS
		Acetochlor	0.20	U	ng/L	P431793	
		Octinoxate**	150	UJ	ng/L	P431793	LCS, MS
		Alachlor	0.41	U	ng/L	P431793	
		Avobenzone**	100	U	ng/L	P431793	
		Ametryn	1.1	U	ng/L	P431793	
		Atrazine	4.0		ng/L	P431793	
		PBDE-47**	4.1	U	ng/L	P431793	
		Atrazine Desethyl	1.3	U	ng/L	P431793	
		PBDE-99**	5.1	U	ng/L	P431793	
		Azinphos Methyl	3.1	U	ng/L	P431793	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P431793	
		Azoxystrobin	0.64	I	ng/L	P431793	

Field ID: G1CE0128

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2419558	EPA 8270E	Bromacil	0.61	U	ng/L	P431793	
		2-Ethylhexyl	12	U	ng/L	P431793	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.20	U	ng/L	P431793	
		Dechlorane Plus**	31	U	ng/L	P431793	
		Caffeine**	7.7	UJ	ng/L	P431793	MS, RPD
		Dechlorane 602**	5.1	UJ	ng/L	P431793	RPD
		Carbophenothion	0.51	U	ng/L	P431793	
		Dechlorane 603**	4.1	UJ	ng/L	P431793	LCS, MS
		Carfentrazone Ethyl	0.15	U	ng/L	P431793	
		Hexabromobenzene**	6.1	UJ	ng/L	P431793	MS
		Chlorfenapyr	0.31	U	ng/L	P431793	
		PBB-153**	8.2	UJ	ng/L	P431793	MS
		Chlorpyrifos Ethyl	0.31	U	ng/L	P431793	
		Pentabromotoluene**	3.1	U	ng/L	P431793	
		Chlorpyrifos Methyl	0.10	U	ng/L	P431793	
		Tris(2-chloroethyl) phosphate (TCEP)**	72	U	ng/L	P431793	
		Coumaphos	1.1	U	ng/L	P431793	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	15	U	ng/L	P431793	
		Cyanazine	5.1	U	ng/L	P431793	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.6	U	ng/L	P431793	
		Cyprodinil	0.20	U	ng/L	P431793	
		Tetradecachloro-m-terphenyl**	7.7	U	ng/L	P431793	
		Demeton	3.6	U	ng/L	P431793	
		Diazinon	0.13	U	ng/L	P431793	
		Difenoconazole	0.61	U	ng/L	P431793	
		Dimethenamid	1.7		ng/L	P431793	
		Dimethomorph	0.31	U	ng/L	P431793	
		Disulfoton	0.61	U	ng/L	P431793	
		Dithiopyr	1.0	U	ng/L	P431793	
		EPTC	0.51	U	ng/L	P431793	
		Ethion	0.31	U	ng/L	P431793	
		Ethoprop	0.13	U	ng/L	P431793	
		Etridiazole	0.10	U	ng/L	P431793	
		Fenamiphos	0.46	U	ng/L	P431793	
		Fenbuconazole	0.51	UJ	ng/L	P431793	MS
		Fipronil	0.20	U	ng/L	P431793	
		Fipronil Desulfinyl**	0.11	I	ng/L	P431793	
		Fipronil Sulfide	0.10	U	ng/L	P431793	
		Fipronil Sulfone	0.10	U	ng/L	P431793	
		Fluazifop-P-butyl	0.10	U	ng/L	P431793	
		Fludioxonil	0.10	U	ng/L	P431793	
		Flumioxazin	3.1	U	ng/L	P431793	
		Flutolanil	0.10	U	ng/L	P431793	
		Fluxapyroxad	0.26	U	ng/L	P431793	

Field ID: G1CE0128

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2419558	EPA 8270E	Fonofos	0.15	U	ng/L	P431793	CCV
		Hexazinone	0.51	U	ng/L	P431793	
		Imazalil	0.67	U	ng/L	P431793	
		Iprodione	0.51	U	ng/L	P431793	
		Loratadine**	0.31	UJ	ng/L	P431793	
		Malathion	0.36	U	ng/L	P431793	
		Metalaxyl	0.51	U	ng/L	P431793	
		Metolachlor	0.77	U	ng/L	P431793	
		Metribuzin	0.41	U	ng/L	P431793	
		Mevinphos	1.0	U	ng/L	P431793	
		Molinate	0.26	U	ng/L	P431793	
		Myclobutanil	0.36	U	ng/L	P431793	
		Naled	2.6	U	ng/L	P431793	RPD
		Napropamide	0.72	UJ	ng/L	P431793	
		Norflurazon	1.0	U	ng/L	P431793	
		Oxadiazon	0.79	I	ng/L	P431793	
		Oxyfluorfen	0.20	U	ng/L	P431793	
		Parathion Ethyl	0.15	U	ng/L	P431793	
		Parathion Methyl	0.20	U	ng/L	P431793	
		Pendimethalin	0.77	U	ng/L	P431793	
		Phenytol**	5.4	U	ng/L	P431793	
		Phorate	0.26	U	ng/L	P431793	
		Prodiamine	0.20	U	ng/L	P431793	
		Prometon	3.1	U	ng/L	P431793	
		Prometryn	0.36	U	ng/L	P431793	
		Pronamide	0.10	U	ng/L	P431793	
		Propanil	0.10	U	ng/L	P431793	
		Propargite	0.82	U	ng/L	P431793	
		Propiconazole	0.61	U	ng/L	P431793	
		Pyraflufen Ethyl	0.31	U	ng/L	P431793	
		Pyridaben	1.4	U	ng/L	P431793	
		Pyriproxyfen	0.26	U	ng/L	P431793	
		Simazine	0.26	U	ng/L	P431793	
		Stirophos	0.41	U	ng/L	P431793	
		Sulfentrazone	1.4	U	ng/L	P431793	
		Tebuconazole	1.4	U	ng/L	P431793	
		Terbufos	0.20	U	ng/L	P431793	
		Terbuthylazine	0.20	U	ng/L	P431793	
		Thiobencarb	0.51	U	ng/L	P431793	
		Triadimefon	0.15	U	ng/L	P431793	

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 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: P431728

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P431737

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431837

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: P431837

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	0.017	I	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431831

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: P431834

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431807

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431803

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431999

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431781

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P431727

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

Reference Method: EPA 8270E
Batch ID: P431793

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: P431793

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: P431793

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: P431793

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: P431793**

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: P431715**

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B**Batch ID: P431822**

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyopen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P431822

Component	Result	Code	Units
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P431796

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

Reference Method: SM 2540 C-2015

Batch ID: P432257

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P432094

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P431808

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P431960

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: P431728

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P431737

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431837

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	100		P	85 - 115
Iron	104		P	85 - 115
Magnesium	101		P	85 - 115
Potassium	99.9		P	85 - 115
Sodium	98.4		P	85 - 115
Strontium	98.5		P	85 - 115
Tin	98.5		P	85 - 115
Titanium	98.9		P	85 - 115
Vanadium	98.5		P	85 - 115
Zinc	97.3		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431837

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	106		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	99.7		P	85 - 115
Barium	106		P	85 - 115
Beryllium	97.2		P	85 - 115
Boron	103		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	98.2		P	85 - 115
Cobalt	107		P	85 - 115
Copper	98.8		P	85 - 115
Lead	105		P	85 - 115
Manganese	102		P	85 - 115
Molybdenum	99.0		P	85 - 115
Nickel	99.7		P	85 - 115
Selenium	99.2		P	85 - 115
Silver	109		P	85 - 115
Thallium	99.5		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431831

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431834

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431807

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431803

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431999

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: P431781

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P431727

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

Reference Method: EPA 8270E
Batch ID: P431793

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	134		P	42 - 162
Acetochlor	85.9		P	69 - 123
Alachlor	82.8		P	65 - 118
Ametryn	123		P	58 - 141
Atrazine	102		P	73 - 118
Atrazine Desethyl	101		P	32 - 125
Avobenzone	161		P	40 - 203
Azinphos Methyl	123		P	36 - 197
Azoxystrobin	115		P	58 - 226
Bromacil	110		P	48 - 120
Butylate	61.6		P	27 - 85.0
Caffeine	99.7		P	40 - 137
Carbophenothion	116		P	54 - 132
Carfentrazone Ethyl	126		P	60 - 142
Chlorfenapyr	96.4		P	53 - 117
Chlorpyrifos Ethyl	79.2		P	59 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P431793

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	110		P	66 - 119
Coumaphos	154		P	11 - 234
Cyanazine	165		P	61 - 248
Cyprodinil	104		P	50 - 147
Dechlorane 602	123		P	50 - 150
Dechlorane 603	159		F	50 - 150
Dechlorane Plus	105		P	47 - 182
Demeton	89.0		P	30 - 138
Diazinon	115		P	67 - 126
Difenoconazole	153		P	38 - 205
Dimethenamid	98.2		P	57 - 111
Dimethomorph	124		P	16 - 212
Disulfoton	103		P	46 - 126
Dithiopyr	113		P	62 - 115
EPTC	53.3		P	28 - 80.0
Ethion	103		P	24 - 122
Ethoprop	112		P	62 - 113
Etridiazole	61.2		P	28 - 92.0
Fenamiphos	100		P	57 - 128
Fenbuconazole	98.2		P	52 - 155
Fipronil	75.9		P	63 - 130
Fipronil Desulfinyl	107		P	61 - 130
Fipronil Sulfide	79.8		P	56 - 117
Fipronil Sulfone	86.7		P	52 - 118
Fluazifop-P-butyl	74.3		P	61 - 128
Fludioxonil	86.9		P	59 - 129
Flumioxazin	171		P	30 - 250
Flutolanil	96.6		P	53 - 127
Fluxapyroxad	94.4		P	42 - 132
Fonofos	97.1		P	61 - 110
Hexabromobenzene	144		P	50 - 150
Hexazinone	104		P	46 - 139
Imazalil	78.1		P	40 - 139
Iprodione	111		P	40 - 146
Loratadine	188		P	10 - 224
Malathion	124		P	61 - 135
Metalaxyl	88.0		P	58 - 121
Metolachlor	89.3		P	64 - 118
Metribuzin	111		P	45 - 245
Mevinphos	102		P	49 - 118
Molinate	60.4		P	42 - 92.0
Myclobutanil	98.0		P	55 - 127
Naled	41.8		P	10 - 114
Napropamide	87.4		P	39 - 121
Norflurazon	114		P	55 - 129
Octinoxate	178		F	26 - 166
Oxadiazon	84.6		P	54 - 115
Oxybenzone	133		P	49 - 135
Oxyfluorfen	111		P	64 - 139
Parathion Ethyl	107		P	70 - 111
Parathion Methyl	107		P	76 - 136
PBB-153	144		P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P431793

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	118		P	41 - 148
PBDE-99	119		P	38 - 147
Pendimethalin	110		P	52 - 118
Pentabromotoluene	130		P	50 - 150
Phenytoin	151		P	10 - 162
Phorate	102		P	40 - 122
Prodiamine	58.8		P	26 - 141
Prometon	105		P	54 - 122
Prometryn	110		P	61 - 128
Pronamide	118		P	72 - 121
Propanil	120		P	45 - 144
Propargite	122		P	10 - 199
Propiconazole	104		P	56 - 127
Pyraflufen Ethyl	123		P	56 - 140
Pyridaben	131		P	26 - 211
Pyriproxyfen	101		P	33 - 194
Simazine	92.2		P	67 - 121
Stirophos	119		P	20 - 142
Sulfentrazone	98.0		P	21 - 144
Tebuconazole	95.2		P	10 - 122
Terbufos	117		P	60 - 129
Terbutylazine	94.8		P	69 - 113
Tetradecachloro-m-terphenyl	124		P	70 - 200
Thiobencarb	103		P	51 - 120
Tri-o-cresyl Phosphate	134		P	49 - 150
Triadimefon	106		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	126		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	128		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	131		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P431715

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	112		P	40 - 150
AMPA	95.4		P	40 - 150
Endothall	92.3		P	40 - 150
Glufosinate	99.5		P	40 - 150
Glyphosate	103		P	40 - 150
Sucralose	99.0		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P431822

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	110		P	40 - 150
2,4,5-T	97.6		P	40 - 150
Acetaminophen	72.8		P	30 - 150
Acetamiprid	72.9		P	40 - 150
Afidopyropen	51.2		P	30 - 150
Bentazon	117		P	30 - 150
Benzovindiflupyr	86.3		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P431822

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbamazepine	85.7		P	40 - 150
Clothianidin	89.9		P	40 - 150
Dinotefuran	85.1		P	40 - 150
Diuron	85.2		P	40 - 150
Fenuron	88.9		P	40 - 150
Fluridone	95.5		P	40 - 150
Hydrocodone	87.7		P	40 - 150
Ibuprofen	76.4		P	40 - 150
Imazapyr	79.6		P	40 - 150
Imidacloprid	86.6		P	40 - 150
Linuron	87.3		P	40 - 150
Mandestrobin	84.3		P	40 - 150
MCPPP	91.7		P	40 - 150
Naproxen	82.9		P	40 - 150
Primidone	74.9		P	40 - 150
Pyraclostrobin	76.0		P	40 - 150
Silvex	84.2		P	40 - 150
Thiamethoxam	86.4		P	40 - 150
Tolfenpyrad	53.7		P	30 - 150
Triclopyr	88.4		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P431796

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.9		P	92 - 105

Reference Method: SM 2540 C-2015

Batch ID: P432257

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

Reference Method: SM 2540 D-2015

Batch ID: P432094

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	97.4		P	85 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P431808

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

Reference Method: SM 5310 B-2011

Batch ID: P431960

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P431837

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419552	Calcium	99.7		P	80 - 120
2419552	Iron	104	106	P/P	80 - 120
2419552	Magnesium	101		P	80 - 120
2419552	Potassium	97.9	100	P/P	80 - 120
2419552	Sodium	96.8		P	80 - 120
2419552	Strontium	98.3	99.3	P/P	80 - 120
2419552	Tin	100	99.4	P/P	80 - 120
2419552	Titanium	100	99.9	P/P	80 - 120
2419552	Vanadium	99.8	99.5	P/P	80 - 120
2419552	Zinc	99.7	99.0	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P431837

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419552	Aluminum	104	104	P/P	80 - 120
2419552	Antimony	103	103	P/P	80 - 120
2419552	Arsenic	102	102	P/P	80 - 120
2419552	Barium	105	106	P/P	80 - 120
2419552	Beryllium	99.9	100	P/P	80 - 120
2419552	Boron	103	102	P/P	80 - 120
2419552	Cadmium	102	104	P/P	80 - 120
2419552	Chromium	99.3	98.1	P/P	80 - 120
2419552	Cobalt	104	104	P/P	80 - 120
2419552	Copper	102	101	P/P	80 - 120
2419552	Lead	107	107	P/P	80 - 120
2419552	Manganese	98.9	98.9	P/P	80 - 120
2419552	Molybdenum	103	102	P/P	80 - 120
2419552	Nickel	99.6	99.7	P/P	80 - 120
2419552	Selenium	101	100	P/P	80 - 120
2419552	Silver	109	107	P/P	80 - 120
2419552	Thallium	104	104	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P431831

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419489	Chloride	108		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P431834

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419489	Sulfate	106		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P431807

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419546	Ammonia-N	93.0	95.8	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P431803

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419564	Kjeldahl Nitrogen	107	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P431999

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419438	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P431781

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419511	Total-P	97.9	96.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P431727

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419547	O-Phosphate-P	98.1	98.2	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P431793

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419558	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	141	120	P/P	26 - 165
2419558	Acetochlor	80.7	87.0	P/P	67 - 124
2419558	Alachlor	85.5	88.1	P/P	60 - 120
2419558	Ametryn	146	128	P/P	54 - 216
2419558	Atrazine	96.7	101	P/P	66 - 128
2419558	Atrazine Desethyl	85.1	105	P/P	15 - 122
2419558	Avobenzone	168	152	P/P	37 - 178
2419558	Azinphos Methyl	113	102	P/P	40 - 292
2419558	Azoxystrobin	105	112	P/P	35 - 220
2419558	Bromacil	116	112	P/P	45 - 127
2419558	Butylate	58.6	65.0	P/P	20 - 83.0
2419558	Caffeine	690	259	F/F	10 - 194
2419558	Carbophenothion	113	117	P/P	57 - 127
2419558	Carfentrazone Ethyl	128	124	P/P	51 - 141
2419558	Chlorfenapyr	90.9	85.4	P/P	46 - 111
2419558	Chlorpyrifos Ethyl	68.9	64.6	P/P	52 - 120
2419558	Chlorpyrifos Methyl	110	112	P/P	63 - 119
2419558	Coumaphos	145	131	P/P	10 - 228
2419558	Cyanazine	169	159	P/P	59 - 241
2419558	Cyprodinil	100	104	P/P	47 - 146
2419558	Dechlorane 602	120	73.5	P/P	50 - 150
2419558	Dechlorane 603	180	170	F/F	50 - 150
2419558	Dechlorane Plus	113	97.0	P/P	50 - 150
2419558	Demeton	89.2	102	P/P	40 - 136
2419558	Diazinon	114	116	P/P	69 - 132
2419558	Difenoconazole	164	144	P/P	57 - 258
2419558	Dimethenamid	91.4	81.0	P/P	54 - 110
2419558	Dimethomorph	125	209	P/P	28 - 210

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P431793

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419558	Disulfoton	96.3	85.1	P/P	43 - 133
2419558	Dithiopyr	112	97.0	P/P	39 - 116
2419558	EPTC	53.5	59.6	P/P	20 - 78.0
2419558	Ethion	116	62.4	P/P	17 - 119
2419558	Ethoprop	103	107	P/P	66 - 120
2419558	Etridiazole	63.2	67.1	P/P	28 - 96.0
2419558	Fenamiphos	71.5	66.9	P/P	41 - 126
2419558	Fenbuconazole	101	189	P/F	42 - 169
2419558	Fipronil	84.7	77.6	P/P	61 - 132
2419558	Fipronil Desulfinyl	94.9	95.6	P/P	56 - 132
2419558	Fipronil Sulfide	72.0	73.3	P/P	48 - 119
2419558	Fipronil Sulfone	80.6	76.8	P/P	42 - 131
2419558	Fluazifop-P-butyl	88.4	78.9	P/P	53 - 131
2419558	Fludioxonil	82.9	80.3	P/P	56 - 127
2419558	Flumioxazin	164	143	P/P	19 - 300
2419558	Flutolanil	83.2	78.5	P/P	41 - 127
2419558	Fluxapyroxad	109	71.6	P/P	42 - 172
2419558	Fonofos	91.4	102	P/P	59 - 113
2419558	Hexabromobenzene	151	145	F/P	50 - 150
2419558	Hexazinone	110	106	P/P	66 - 122
2419558	Imazalil	70.1	70.9	P/P	21 - 283
2419558	Iprodione	123	97.9	P/P	43 - 150
2419558	Loratadine	161	194	P/P	23 - 201
2419558	Malathion	110	119	P/P	58 - 136
2419558	Metalaxyl	97.8	87.1	P/P	55 - 120
2419558	Metolachlor	92.5	83.0	P/P	57 - 121
2419558	Metribuzin	96.1	102	P/P	58 - 294
2419558	Mevinphos	111	125	P/P	50 - 126
2419558	Molinate	63.5	62.9	P/P	42 - 93.0
2419558	Myclobutanil	107	100	P/P	55 - 125
2419558	Naled	47.8	45.6	P/P	18 - 200
2419558	Napropamide	74.5	47.4	P/P	39 - 110
2419558	Norflurazon	117	106	P/P	48 - 128
2419558	Octinoxate	160	158	F/P	21 - 159
2419558	Oxadiazon	86.8	75.5	P/P	43 - 112
2419558	Oxybenzone	145	150	F/F	41 - 142
2419558	Oxyfluorfen	115	103	P/P	64 - 153
2419558	Parathion Ethyl	85.0	96.5	P/P	69 - 114
2419558	Parathion Methyl	107	113	P/P	79 - 139
2419558	PBB-153	159	150	F/F	50 - 150
2419558	PBDE-47	121	93.0	P/P	27 - 144
2419558	PBDE-99	119	92.4	P/P	18 - 150
2419558	Pendimethalin	103	94.7	P/P	50 - 139
2419558	Pentabromotoluene	133	132	P/P	50 - 150
2419558	Phenytoin	117	93.2	P/P	10 - 146
2419558	Phorate	111	123	P/P	54 - 161
2419558	Prodiamine	55.9	49.1	P/P	30 - 161
2419558	Prometon	105	119	P/P	45 - 134
2419558	Prometryn	101	107	P/P	45 - 137
2419558	Pronamide	121	116	P/P	65 - 133
2419558	Propanil	140	133	P/P	49 - 142
2419558	Propargite	128	89.3	P/P	10 - 203

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P431793

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419558	Propiconazole	115	103	P/P	38 - 146
2419558	Pyraflufen Ethyl	131	112	P/P	34 - 153
2419558	Pyridaben	120	103	P/P	12 - 192
2419558	Pyriproxyfen	104	50.0	P/P	33 - 180
2419558	Simazine	78.7	92.3	P/P	51 - 157
2419558	Stiropfos	65.9	73.3	P/P	10 - 128
2419558	Sulfentrazone	95.9	83.9	P/P	53 - 186
2419558	Tebuconazole	104	55.4	P/P	10 - 133
2419558	Terbufos	128	120	P/P	65 - 139
2419558	Terbuthylazine	89.8	93.5	P/P	66 - 117
2419558	Tetradecachloro-m-terphenyl	162	151	P/P	70 - 200
2419558	Thiobencarb	95.9	91.0	P/P	51 - 119
2419558	Tri-o-cresyl Phosphate	136	134	P/P	31 - 144
2419558	Triadimefon	89.9	87.9	P/P	48 - 119
2419558	Tris(1-chloro-2-propyl) phosphate (TCPP)	119	115	P/P	50 - 150
2419558	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	144	140	P/P	50 - 150
2419558	Tris(2-chloroethyl) phosphate (TCEP)	134	138	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P431715

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419423	Acesulfame K	128	129	P/P	40 - 150
2419423	AMPA	72.9	77.2	P/P	40 - 150
2419423	Endothall	106	110	P/P	40 - 150
2419423	Glufosinate	70.5	76.4	P/P	40 - 150
2419423	Glyphosate	109	115	P/P	40 - 150
2419423	Sucralose	105	99.9	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P431822

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419423	2,4-D	107	111	P/P	40 - 150
2419423	2,4,5-T	115	111	P/P	40 - 150
2419423	Acetaminophen	66.5	79.7	P/P	30 - 150
2419423	Acetamiprid	73.4	78.2	P/P	40 - 150
2419423	Afidopyrophen	52.8	57.4	P/P	30 - 150
2419423	Bentazon	78.5	91.9	P/P	30 - 150
2419423	Benzovindiflupyr	80.3	81.6	P/P	40 - 150
2419423	Carbamazepine	71.4	77.9	P/P	40 - 150
2419423	Clothianidin	93.5	109	P/P	40 - 150
2419423	Dinotefuran	79.1	91.0	P/P	40 - 150
2419423	Diuron	30.0	32.2	F/F	40 - 150
2419423	Fenuron	74.3	78.1	P/P	40 - 150
2419423	Fluridone	84.4	93.5	P/P	40 - 150
2419423	Hydrocodone	75.6	79.3	P/P	40 - 150
2419423	Ibuprofen	58.1	56.4	P/P	40 - 150
2419423	Imazapyr	80.0	92.9	P/P	40 - 150
2419423	Imidacloprid	113	126	P/P	40 - 150
2419423	Linuron	58.4	67.4	P/P	40 - 150
2419423	Mandestrobin	83.4	85.8	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P431822

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419423	MCP	110	126	P/P	40 - 150
2419423	Naproxen	74.3	81.7	P/P	40 - 150
2419423	Primidone	79.2	95.3	P/P	40 - 150
2419423	Pyraclostrobin	80.5	84.2	P/P	40 - 150
2419423	Silvex	92.3	103	P/P	40 - 150
2419423	Thiamethoxam	87.6	88.9	P/P	40 - 150
2419423	Tolfenpyrad	55.3	64.9	P/P	30 - 150
2419423	Triclopyr	101	110	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P431808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419627	Fluoride	99.0	99.0	P/P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P431960

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2419434	Organic Carbon	94.4	95.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P431728

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419563	Color (true)	0.868	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P431737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419601	Turbidity	3.69	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431837

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419552	Calcium	1.78	Spike	P	0 - 20
2419552	Iron	1.52	Spike	P	0 - 20
2419552	Magnesium	1.60	Spike	P	0 - 20
2419552	Potassium	1.33	Spike	P	0 - 20
2419552	Sodium	1.31	Spike	P	0 - 20
2419552	Strontium	0.956	Spike	P	0 - 20
2419552	Tin	0.884	Spike	P	0 - 20
2419552	Titanium	0.193	Spike	P	0 - 20
2419552	Vanadium	0.304	Spike	P	0 - 20
2419552	Zinc	0.737	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431837

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419552	Aluminum	0.394	Spike	P	0 - 20
2419552	Antimony	0.527	Spike	P	0 - 20
2419552	Arsenic	0.255	Spike	P	0 - 20
2419552	Barium	1.11	Spike	P	0 - 20
2419552	Beryllium	0.529	Spike	P	0 - 20
2419552	Boron	0.854	Spike	P	0 - 20
2419552	Cadmium	1.82	Spike	P	0 - 20
2419552	Chromium	1.30	Spike	P	0 - 20
2419552	Cobalt	0.353	Spike	P	0 - 20
2419552	Copper	0.674	Spike	P	0 - 20
2419552	Lead	0.0433	Spike	P	0 - 20
2419552	Manganese	0.0229	Spike	P	0 - 20
2419552	Molybdenum	1.35	Spike	P	0 - 20
2419552	Nickel	0.0965	Spike	P	0 - 20
2419552	Selenium	0.441	Spike	P	0 - 20
2419552	Silver	1.52	Spike	P	0 - 20
2419552	Thallium	0.403	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431831

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419489	Chloride	0.264	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431807

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419546	Ammonia-N	2.72	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431803

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419564	Kjeldahl Nitrogen	0.870	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431999

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419438	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431781

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419511	Total-P	1.14	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P431727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419547	O-Phosphate-P	0.102	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P431793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419558	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	16.2	Spike	P	0 - 37
2419558	Acetochlor	7.61	Spike	P	0 - 28
2419558	Alachlor	2.99	Spike	P	0 - 30
2419558	Ametryn	12.6	Spike	P	0 - 32
2419558	Atrazine	2.62	Spike	P	0 - 41
2419558	Atrazine Desethyl	20.6	Spike	P	0 - 36
2419558	Avobenzene	10.1	Spike	P	0 - 36
2419558	Azinphos Methyl	9.33	Spike	P	0 - 75
2419558	Azoxystrobin	6.36	Spike	P	0 - 39

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P431793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419558	Bromacil	3.15	Spike	P	0 - 33
2419558	Butylate	10.4	Spike	P	0 - 44
2419558	Caffeine	90.8	Spike	F	0 - 74
2419558	Carbophenothion	3.27	Spike	P	0 - 25
2419558	Carfentrazone Ethyl	3.76	Spike	P	0 - 27
2419558	Chlorfenapyr	6.29	Spike	P	0 - 24
2419558	Chlorpyrifos Ethyl	6.38	Spike	P	0 - 26
2419558	Chlorpyrifos Methyl	1.33	Spike	P	0 - 26
2419558	Coumaphos	9.75	Spike	P	0 - 28
2419558	Cyanazine	6.28	Spike	P	0 - 48
2419558	Cyprodinil	3.84	Spike	P	0 - 29
2419558	Dechlorane 602	47.6	Spike	F	0 - 30
2419558	Dechlorane 603	6.09	Spike	P	0 - 30
2419558	Dechlorane Plus	15.5	Spike	P	0 - 30
2419558	Demeton	13.6	Spike	P	0 - 33
2419558	Diazinon	1.90	Spike	P	0 - 29
2419558	Difenoconazole	12.9	Spike	P	0 - 34
2419558	Dimethenamid	7.44	Spike	P	0 - 39
2419558	Dimethomorph	50.0	Spike	P	0 - 51
2419558	Disulfoton	12.3	Spike	P	0 - 30
2419558	Dithiopyr	14.0	Spike	P	0 - 26
2419558	EPTC	10.9	Spike	P	0 - 43
2419558	Ethion	59.9	Spike	P	0 - 79
2419558	Ethoprop	3.55	Spike	P	0 - 29
2419558	Etridiazole	5.93	Spike	P	0 - 33
2419558	Fenamiphos	6.70	Spike	P	0 - 40
2419558	Fenbuconazole	60.9	Spike	P	0 - 74
2419558	Fipronil	8.70	Spike	P	0 - 29
2419558	Fipronil Desulfinyl	0.749	Spike	P	0 - 32
2419558	Fipronil Sulfide	1.80	Spike	P	0 - 30
2419558	Fipronil Sulfone	4.78	Spike	P	0 - 33
2419558	Fluazifop-P-butyl	11.3	Spike	P	0 - 38
2419558	Fludioxonil	3.22	Spike	P	0 - 29
2419558	Flumioxazin	13.2	Spike	P	0 - 51
2419558	Flutolanil	5.73	Spike	P	0 - 25
2419558	Fluxapyroxad	41.2	Spike	P	0 - 45
2419558	Fonofos	10.6	Spike	P	0 - 27
2419558	Hexabromobenzene	4.02	Spike	P	0 - 30
2419558	Hexazinone	3.60	Spike	P	0 - 30
2419558	Imazalil	1.20	Spike	P	0 - 100
2419558	Iprodione	22.7	Spike	P	0 - 33
2419558	Loratadine	18.8	Spike	P	0 - 56
2419558	Malathion	7.92	Spike	P	0 - 37
2419558	Metalaxyl	11.6	Spike	P	0 - 40
2419558	Metolachlor	10.8	Spike	P	0 - 29
2419558	Metribuzin	6.05	Spike	P	0 - 45
2419558	Mevinphos	11.8	Spike	P	0 - 29
2419558	Molinate	0.970	Spike	P	0 - 33
2419558	Myclobutanil	6.45	Spike	P	0 - 26
2419558	Naled	4.79	Spike	P	0 - 37
2419558	Napropamide	44.4	Spike	F	0 - 44

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P431793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419558	Norflurazon	9.63	Spike	P	0 - 30
2419558	Octinoxate	0.843	Spike	P	0 - 45
2419558	Oxadiazon	10.8	Spike	P	0 - 28
2419558	Oxybenzone	3.02	Spike	P	0 - 46
2419558	Oxyfluorfen	11.0	Spike	P	0 - 28
2419558	Parathion Ethyl	12.7	Spike	P	0 - 31
2419558	Parathion Methyl	5.76	Spike	P	0 - 29
2419558	PBB-153	5.26	Spike	P	0 - 30
2419558	PBDE-47	25.8	Spike	P	0 - 36
2419558	PBDE-99	25.4	Spike	P	0 - 40
2419558	Pendimethalin	8.13	Spike	P	0 - 33
2419558	Pentabromotoluene	1.14	Spike	P	0 - 30
2419558	Phenytoin	22.3	Spike	P	0 - 100
2419558	Phorate	10.2	Spike	P	0 - 36
2419558	Prodiamine	13.1	Spike	P	0 - 71
2419558	Prometon	12.7	Spike	P	0 - 36
2419558	Prometryn	6.33	Spike	P	0 - 28
2419558	Pronamide	4.63	Spike	P	0 - 24
2419558	Propanil	4.67	Spike	P	0 - 28
2419558	Propargite	35.9	Spike	P	0 - 43
2419558	Propiconazole	11.6	Spike	P	0 - 33
2419558	Pyraflufen Ethyl	15.4	Spike	P	0 - 29
2419558	Pyridaben	15.3	Spike	P	0 - 30
2419558	Pyriproxyfen	70.0	Spike	P	0 - 79
2419558	Simazine	15.9	Spike	P	0 - 29
2419558	Stirophos	10.5	Spike	P	0 - 61
2419558	Sulfentrazone	13.4	Spike	P	0 - 33
2419558	Tebuconazole	61.0	Spike	P	0 - 69
2419558	Terbufos	6.46	Spike	P	0 - 29
2419558	Terbutylazine	3.99	Spike	P	0 - 32
2419558	Tetradecachloro-m-terphenyl	7.22	Spike	P	0 - 30
2419558	Thiobencarb	5.32	Spike	P	0 - 26
2419558	Tri-o-cresyl Phosphate	1.52	Spike	P	0 - 33
2419558	Triadimefon	2.26	Spike	P	0 - 28
2419558	Tris(1-chloro-2-propyl) phosphate (TCPP)	3.73	Spike	P	0 - 30
2419558	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	3.00	Spike	P	0 - 30
2419558	Tris(2-chloroethyl) phosphate (TCEP)	2.79	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P431715

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419423	Acesulfame K	0.529	Spike	P	0 - 30
2419423	AMPA	5.77	Spike	P	0 - 30
2419423	Endothall	4.41	Spike	P	0 - 30
2419423	Glufosinate	8.08	Spike	P	0 - 30
2419423	Glyphosate	5.92	Spike	P	0 - 30
2419423	Sucralose	4.67	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P431822

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419423	2,4-D	3.67	Spike	P	0 - 30
2419423	2,4,5-T	2.94	Spike	P	0 - 30
2419423	Acetaminophen	18.0	Spike	P	0 - 30
2419423	Acetamiprid	6.32	Spike	P	0 - 30
2419423	Afidopyropen	8.40	Spike	P	0 - 30
2419423	Bentazon	15.8	Spike	P	0 - 30
2419423	Benzovindiflupyr	1.67	Spike	P	0 - 30
2419423	Carbamazepine	8.79	Spike	P	0 - 30
2419423	Clothianidin	15.1	Spike	P	0 - 30
2419423	Dinotefuran	14.0	Spike	P	0 - 30
2419423	Diuron	7.21	Spike	P	0 - 30
2419423	Fenuron	4.99	Spike	P	0 - 30
2419423	Fluridone	8.93	Spike	P	0 - 30
2419423	Hydrocodone	4.83	Spike	P	0 - 30
2419423	Ibuprofen	2.93	Spike	P	0 - 30
2419423	Imazapyr	14.9	Spike	P	0 - 30
2419423	Imidacloprid	11.0	Spike	P	0 - 30
2419423	Linuron	14.4	Spike	P	0 - 30
2419423	Mandestrobin	2.83	Spike	P	0 - 30
2419423	MCP	13.5	Spike	P	0 - 30
2419423	Naproxen	9.51	Spike	P	0 - 30
2419423	Primidone	18.5	Spike	P	0 - 30
2419423	Pyraclostrobin	4.48	Spike	P	0 - 30
2419423	Silvex	10.9	Spike	P	0 - 30
2419423	Thiamethoxam	1.43	Spike	P	0 - 30
2419423	Tolfenpyrad	16.0	Spike	P	0 - 30
2419423	Triclopyr	8.50	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P431796

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419627	Total Alkalinity	0.138	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015

Batch ID: P432257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419627	TDS	1.75	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011

Batch ID: P431808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419627	Fluoride	0.0	Spike	P	0 - 1.9

Quality Assurance Report

Precision

Reference Method: SM 5310 B-2011
Batch ID: P431960

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419434	Organic Carbon	0.780	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2419551
Field Sample ID: G1CE0128

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	116	P	30 - 160
EPA 8321B	Acetaminophen-d4	67.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	56.4	P	30 - 160
EPA 8321B	Diuron-d6	40.7	P	30 - 160
EPA 8321B	Endothall-d6	121	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	79.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	60.9	P	30 - 160
EPA 8321B	Primidone-d5	69.8	P	30 - 160
EPA 8321B	Sucralose-d6	87.6	P	30 - 160

Lab Sample ID: 2419558
Field Sample ID: G1CE0128

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	89.0	P	20 - 200
EPA 8270E	Simazine-d10	91.3	P	62 - 142
EPA 8270E	Terbufos-d10	84.8	P	58 - 132
EPA 8270E	Terphenyl-d14	84.0	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A120001

Included Lab Sample IDs: 2419547

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.8	98.7	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A120002

Included Lab Sample IDs: 2419545

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A120006

Included Lab Sample IDs: 2419545

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	102	P/P	95 - 105

Reference Method: SM 2320 B-2011

Run ID: A120040

Included Lab Sample IDs: 2419545

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.3	92.1	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A120040

Included Lab Sample IDs: 2419545

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A120041

Included Lab Sample IDs: 2419546

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	99.1	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A120044

Included Lab Sample IDs: 2419551

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	128	119	P/P	60 - 160
Sucralose	91.6	85.9	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A120048

Included Lab Sample IDs: 2419551

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	87.8	85.4	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A120048
Included Lab Sample IDs: 2419551

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endothall	84.4	80.6	P/P	60 - 160
Glufosinate	93.2	90.5	P/P	60 - 160
Glyphosate	102	89.0	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A120051
Included Lab Sample IDs: 2419545

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	104	102	P/P	90 - 110
Sulfate	105	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A120073
Included Lab Sample IDs: 2419546

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.7	95.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A120078
Included Lab Sample IDs: 2419546

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.2	101	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A120085
Included Lab Sample IDs: 2419552

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	99.8	99.7	P/P	90 - 110
Arsenic	101	100	P/P	90 - 110
Beryllium	99.2	98.0	P/P	90 - 110
Boron	94.3	99.8	P/P	90 - 110
Cadmium	101	99.7	P/P	90 - 110
Chromium	99.7	98.9	P/P	90 - 110
Copper	99.1	98.0	P/P	90 - 110
Lead	106	105	P/P	90 - 110
Molybdenum	101	99.9	P/P	90 - 110
Nickel	101	98.9	P/P	90 - 110
Selenium	100	99.1	P/P	90 - 110
Silver	107	106	P/P	90 - 110
Thallium	102	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A120095
Included Lab Sample IDs: 2419546

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A120108
Included Lab Sample IDs: 2419551

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	85.9	103	P/P	50 - 150
2,4,5-T	85.0	94.1	P/P	50 - 150
Acetaminophen	97.0	120	P/P	60 - 160
Acetamiprid	111	107	P/P	50 - 150
Afidopyropen	97.4	98.0	P/P	50 - 150
Bentazon	132	123	P/P	50 - 160
Benzovindiflupyr	105	105	P/P	50 - 150
Carbamazepine	113	119	P/P	60 - 150
Clothianidin	99.6	101	P/P	60 - 150
Dinotefuran	98.8	110	P/P	50 - 150
Diuron	124	121	P/P	60 - 160
Fenuron	106	109	P/P	60 - 150
Fluridone	107	112	P/P	60 - 160
Hydrocodone	107	112	P/P	60 - 150
Ibuprofen	82.3	87.3	P/P	50 - 160
Imazapyr	86.9	90.5	P/P	50 - 150
Imidacloprid	97.7	98.9	P/P	60 - 150
Linuron	104	103	P/P	60 - 150
Mandestrobin	111	109	P/P	50 - 150
MCPP	86.7	84.4	P/P	50 - 150
Naproxen	137	127	P/P	50 - 160
Primidone	93.3	99.2	P/P	60 - 150
Pyraclostrobin	110	110	P/P	60 - 150
Silvex	86.8	89.9	P/P	50 - 150
Thiamethoxam	118	110	P/P	50 - 150
Tolfenpyrad	108	107	P/P	60 - 150
Triclopyr	103	104	P/P	50 - 150

Reference Method: SM 5310 B-2011
Run ID: A120112
Included Lab Sample IDs: 2419546

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A120113
Included Lab Sample IDs: 2419552

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	98.8	98.8	P/P	95 - 105
Iron	102	101	P/P	95 - 105
Magnesium	101	99.8	P/P	95 - 105
Potassium	102	100	P/P	95 - 105
Sodium	97.9	95.5	P/P	95 - 105
Strontium	99.5	98.2	P/P	95 - 105
Tin	99.0	99.1	P/P	95 - 105
Titanium	99.4	99.6	P/P	95 - 105
Vanadium	98.8	99.3	P/P	95 - 105
Zinc	98.4	99.7	P/P	95 - 105

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A120115

Included Lab Sample IDs: 2419552

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.6	98.6	P/P	90 - 110
Barium	101	99.3	P/P	90 - 110
Cobalt	102	100	P/P	90 - 110
Manganese	97.1	96.3	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A120166

Included Lab Sample IDs: 2419558

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	84.4		P	80 - 120
Alachlor	82.8		P	80 - 120
Ametryn	106		P	80 - 120
Atrazine	97.7		P	80 - 120
Atrazine Desethyl	91.5		P	80 - 120
Azinphos Methyl	90.7		P	80 - 120
Azoxystrobin	97.4		P	80 - 120
Bromacil	98.2		P	80 - 120
Butylate	102		P	80 - 120
Caffeine	100		P	80 - 120
Carbophenothion	99.4		P	80 - 120
Carfentrazone Ethyl	95.5		P	80 - 120
Chlorfenapyr	92.2		P	80 - 120
Chlorpyrifos Ethyl	93.2		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	103		P	80 - 120
Cyanazine	101		P	80 - 120
Cyprodinil	100		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	102		P	80 - 120
Difenoconazole	95.8		P	80 - 120
Dimethenamid	101		P	80 - 120
Dimethomorph	85.8		P	80 - 120
Disulfoton	97.7		P	80 - 120
Dithiopyr	102		P	80 - 120
EPTC	99.2		P	80 - 120
Ethion	88.6		P	80 - 120
Ethoprop	99.2		P	80 - 120
Etridiazole	101		P	80 - 120
Fenamiphos	84.0		P	80 - 120
Fenbuconazole	108		P	80 - 120
Fipronil	91.3		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	98.5		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fluazifop-P-butyl	106		P	80 - 120
Fludioxonil	98.6		P	80 - 120
Flumioxazin	96.3		P	80 - 120
Flutolanil	101		P	80 - 120
Fluxapyroxad	98.8		P	80 - 120
Fonofos	98.6		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120166
Included Lab Sample IDs: 2419558

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Hexazinone	106		P	80 - 120
Imazalil	90.2		P	80 - 120
Iprodione	93.4		P	80 - 120
Loratadine	79.4*		F	80 - 120
Malathion	87.6		P	80 - 120
Metalaxyl	87.1		P	80 - 120
Metolachlor	92.6		P	80 - 120
Metribuzin	109		P	80 - 120
Mevinphos	99.5		P	80 - 120
Molinate	86.3		P	80 - 120
Myclobutanil	90.6		P	80 - 120
Naled	101		P	80 - 120
Napropamide	102		P	80 - 120
Norflurazon	96.5		P	80 - 120
Oxadiazon	102		P	80 - 120
Oxyfluorfen	96.5		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	94.9		P	80 - 120
Pendimethalin	98.0		P	80 - 120
Phenytoin	105		P	80 - 120
Phorate	104		P	80 - 120
Prodiamine	109		P	80 - 120
Prometon	108		P	80 - 120
Prometryn	100		P	80 - 120
Pronamide	96.4		P	80 - 120
Propanil	90.5		P	80 - 120
Propargite	96.2		P	80 - 120
Propiconazole	83.2		P	80 - 120
Pyraflufen Ethyl	95.9		P	80 - 120
Pyridaben	97.6		P	80 - 120
Pyriproxyfen	95.1		P	80 - 120
Simazine	92.9		P	80 - 120
Stirophos	93.0		P	80 - 120
Sulfentrazone	101		P	80 - 120
Tebuconazole	93.4		P	80 - 120
Terbufos	102		P	80 - 120
Terbuthylazine	91.3		P	80 - 120
Thiobencarb	105		P	80 - 120
Triadimefon	97.0		P	80 - 120

Reference Method: EPA 8270E
Run ID: A120170
Included Lab Sample IDs: 2419558

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.9		P	80 - 120
Avobenzone	106		P	80 - 120
Dechlorane 602	96.3		P	80 - 120
Dechlorane 603	97.2		P	80 - 120
Dechlorane Plus	94.7		P	80 - 120
Hexabromobenzene	94.6		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120170
Included Lab Sample IDs: 2419558

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Octinoxate	94.2		P	80 - 120
Oxybenzone	97.8		P	80 - 120
PBB-153	96.0		P	80 - 120
PBDE-47	93.7		P	80 - 120
PBDE-99	95.5		P	80 - 120
Pentabromotoluene	95.2		P	80 - 120
Tetradecachloro-m-terphenyl	94.6		P	80 - 120
Tri-o-cresyl Phosphate	97.0		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	90.1		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	95.6		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	97.9		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)	101				0.868	
EPA 180.1 Rev. 2.0	Turbidity	101				3.69	
EPA 200.7 Rev. 4.4	Calcium	100	99.7				1.78
	Iron	104	104	106			1.52
	Magnesium	101	101				1.60
	Potassium	99.9	97.9	100			1.33
	Sodium	98.4	96.8				1.31
	Strontium	98.5	98.3	99.3			0.956
	Tin	98.5	100	99.4			0.884
	Titanium	98.9	100	99.9			0.193
	Vanadium	98.5	99.8	99.5			0.304
	Zinc	97.3	99.7	99.0			0.737
EPA 200.8 Rev. 5.4	Aluminum	106	104	104			0.394
	Antimony	101	103	103			0.527
	Arsenic	99.7	102	102			0.255
	Barium	106	105	106			1.11
	Beryllium	97.2	99.9	100			0.529
	Boron	103	103	102			0.854
	Cadmium	101	102	104			1.82
	Chromium	98.2	99.3	98.1			1.30
	Cobalt	107	104	104			0.353
	Copper	98.8	102	101			0.674
	Lead	105	107	107			0.0433
	Manganese	102	98.9	98.9			0.0229
	Molybdenum	99.0	103	102			1.35
	Nickel	99.7	99.6	99.7			0.0965
	Selenium	99.2	101	100			0.441
	Silver	109	109	107			1.52
	Thallium	99.5	104	104			0.403
EPA 300.0 Rev. 2.1	Chloride	105	108			0.264	
	Sulfate	105	106				
EPA 350.1 Rev. 2.0	Ammonia-N	95.6	93.0	95.8			2.72
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	107	106			0.870
EPA 353.2 Rev. 2.0	NO2NO3-N	104	104	104			0.0
EPA 365.1 Rev. 2.0	Total-P	96.1	97.9	96.7			1.14
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	105	98.1	98.2			0.102
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	134	141	120			16.2
	Acetochlor	85.9	80.7	87.0			7.61
	Alachlor	82.8	85.5	88.1			2.99
	Ametryn	123	146	128			12.6
	Atrazine	102	96.7	101			2.62
	Atrazine Desethyl	101	85.1	105			20.6
	Avobenzone	161	168	152			10.1
	Azinphos Methyl	123	113	102			9.33
	Azoxystrobin	115	105	112			6.36
	Bromacil	110	116	112			3.15
	Butylate	61.6	58.6	65.0			10.4
	Caffeine	99.7	690	259			90.8
	Carbophenothion	116	113	117			3.27
	Carfentrazone Ethyl	126	128	124			3.76
	Chlorfenapyr	96.4	90.9	85.4			6.29
	Chlorpyrifos Ethyl	79.2	68.9	64.6			6.38

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Chlorpyrifos Methyl	110	110	112		1.33
	Coumaphos	154	145	131		9.75
	Cyanazine	165	169	159		6.28
	Cyprodinil	104	100	104		3.84
	Dechlorane 602	123	120	73.5		47.6
	Dechlorane 603	159	180	170		6.09
	Dechlorane Plus	105	113	97.0		15.5
	Demeton	89.0	89.2	102		13.6
	Diazinon	115	114	116		1.90
	Difenoconazole	153	164	144		12.9
	Dimethenamid	98.2	91.4	81.0		7.44
	Dimethomorph	124	125	209		50.0
	Disulfoton	103	96.3	85.1		12.3
	Dithiopyr	113	112	97.0		14.0
	EPTC	53.3	53.5	59.6		10.9
	Ethion	103	116	62.4		59.9
	Ethoprop	112	103	107		3.55
	Etridiazole	61.2	63.2	67.1		5.93
	Fenamiphos	100	71.5	66.9		6.70
	Fenbuconazole	98.2	101	189		60.9
	Fipronil	75.9	84.7	77.6		8.70
	Fipronil Desulfinyl	107	94.9	95.6		0.749
	Fipronil Sulfide	79.8	72.0	73.3		1.80
	Fipronil Sulfone	86.7	80.6	76.8		4.78
	Fluazifop-P-butyl	74.3	88.4	78.9		11.3
	Fludioxonil	86.9	82.9	80.3		3.22
	Flumioxazin	171	164	143		13.2
	Flutolanil	96.6	83.2	78.5		5.73
	Fluxapyroxad	94.4	109	71.6		41.2
	Fonofos	97.1	91.4	102		10.6
	Hexabromobenzene	144	151	145		4.02
	Hexazinone	104	110	106		3.60
	Imazalil	78.1	70.1	70.9		1.20
	Iprodione	111	123	97.9		22.7
	Loratadine	188	161	194		18.8
	Malathion	124	110	119		7.92
	Metalaxyl	88.0	97.8	87.1		11.6
	Metolachlor	89.3	92.5	83.0		10.8
	Metribuzin	111	96.1	102		6.05
	Mevinphos	102	111	125		11.8
	Molinate	60.4	63.5	62.9		0.970
	Myclobutanil	98.0	107	100		6.45
	Naled	41.8	47.8	45.6		4.79
	Napropamide	87.4	74.5	47.4		44.4
	Norflurazon	114	117	106		9.63
	Octinoxate	178	160	158		0.843
	Oxadiazon	84.6	86.8	75.5		10.8
	Oxybenzone	133	145	150		3.02
	Oxyfluorfen	111	115	103		11.0
	Parathion Ethyl	107	85.0	96.5		12.7
	Parathion Methyl	107	107	113		5.76
	PBB-153	144	159	150		5.26
	PBDE-47	118	121	93.0		25.8
	PBDE-99	119	119	92.4		25.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Pendimethalin	110	103	94.7		8.13
	Pentabromotoluene	130	133	132		1.14
	Phenytoin	151	117	93.2		22.3
	Phorate	102	111	123		10.2
	Prodiamine	58.8	55.9	49.1		13.1
	Prometon	105	105	119		12.7
	Prometryn	110	101	107		6.33
	Pronamide	118	121	116		4.63
	Propanil	120	140	133		4.67
	Propargite	122	128	89.3		35.9
	Propiconazole	104	115	103		11.6
	Pyraflufen Ethyl	123	131	112		15.4
	Pyridaben	131	120	103		15.3
	Pyriproxyfen	101	104	50.0		70.0
	Simazine	92.2	78.7	92.3		15.9
	Stirophos	119	65.9	73.3		10.5
	Sulfentrazone	98.0	95.9	83.9		13.4
	Tebuconazole	95.2	104	55.4		61.0
	Terbufos	117	128	120		6.46
	Terbutylazine	94.8	89.8	93.5		3.99
	Tetradecachloro-m-terphenyl	124	162	151		7.22
	Thiobencarb	103	95.9	91.0		5.32
	Tri-o-cresyl Phosphate	134	136	134		1.52
	Triadimefon	106	89.9	87.9		2.26
	Tris(1-chloro-2-propyl) phosphate (TCPP)	126	119	115		3.73
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	128	144	140		3.00
	Tris(2-chloroethyl) phosphate (TCEP)	131	134	138		2.79
EPA 8321B	2,4-D	110	107	111		3.67
	2,4,5-T	97.6	115	111		2.94
	Acesulfame K	112	128	129		0.529
	Acetaminophen	72.8	66.5	79.7		18.0
	Acetamiprid	72.9	73.4	78.2		6.32
	Afidopyropen	51.2	52.8	57.4		8.40
	AMPA	95.4	72.9	77.2		5.77
	Bentazon	117	78.5	91.9		15.8
	Benzovindiflupyr	86.3	80.3	81.6		1.67
	Carbamazepine	85.7	71.4	77.9		8.79
	Clothianidin	89.9	93.5	109		15.1
	Dinotefuran	85.1	79.1	91.0		14.0
	Diuron	85.2	30.0	32.2		7.21
	Endothall	92.3	106	110		4.41
	Fenuron	88.9	74.3	78.1		4.99
	Fluridone	95.5	84.4	93.5		8.93
	Glufosinate	99.5	70.5	76.4		8.08
	Glyphosate	103	109	115		5.92
	Hydrocodone	87.7	75.6	79.3		4.83
	Ibuprofen	76.4	58.1	56.4		2.93
	Imazapyr	79.6	80.0	92.9		14.9
	Imidacloprid	86.6	113	126		11.0
	Linuron	87.3	58.4	67.4		14.4
	Mandestrobin	84.3	83.4	85.8		2.83

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	MCCP	91.7	110	126		
	Naproxen	82.9	74.3	81.7		
	Primidone	74.9	79.2	95.3		
	Pyraclostrobin	76.0	80.5	84.2		
	Silvex	84.2	92.3	103		
	Sucralose	99.0	105	99.9		
	Thiamethoxam	86.4	87.6	88.9		
	Tolfenpyrad	53.7	55.3	64.9		
	Triclopyr	88.4	101	110		
SM 2320 B-2011	Total Alkalinity	95.9				0.138
SM 2540 C-2015	TDS	96.8				1.75
SM 2540 D-2015	TSS	97.4				
SM 4500-F- C-2011	Fluoride	100	99.0	99.0		
SM 5310 B-2011	Organic Carbon	95.8	94.4	95.4		

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2419545
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2419545
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2419552
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2419552
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2419545
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2419545
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2419546
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2419546
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2419546
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2419546
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2419547
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2419558
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2419558
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2419551
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2419545
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2419552
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2419545
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2419545
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2419545
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2419546

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	06/23/2023			06/23/2023 13:33	Samantha L Bates	2419545
EPA 180.1 Rev. 2.0	06/23/2023			06/23/2023 12:20	Alexis Price	2419545
EPA 200.7 Rev. 4.4	06/23/2023	06/27/2023 11:45	George D Taylor	06/29/2023 13:27	Samatha Luckman	2419552
EPA 200.8 Rev. 5.4	06/23/2023	06/27/2023 11:45	George D Taylor	06/28/2023 20:14	Emily M Philpot	2419552
	06/23/2023	06/27/2023 11:45	George D Taylor	06/29/2023 14:49	Emily M Philpot	2419552
EPA 300.0 Rev. 2.1	06/23/2023			06/27/2023 11:32	James L Waggeberby	2419545
EPA 350.1 Rev. 2.0	06/23/2023			06/26/2023 13:32	Khloe J Berg	2419546
EPA 351.2 Rev. 2.0	06/23/2023	06/27/2023 10:05	Dana G. Hughes	06/28/2023 14:46	Ping Hua	2419546
EPA 353.2 Rev. 2.0	06/23/2023			06/29/2023 11:48	Beverly Y. Sanders	2419546
EPA 365.1 Rev. 2.0	06/23/2023	06/27/2023 13:15	Simonne.V. Calhoun	06/28/2023 15:29	Simonne.V. Calhoun	2419546
EPA 365.1 Rev. 2.0 dissolved	06/23/2023			06/23/2023 13:54	Elise M. Gillis	2419547
EPA 8270E	06/23/2023	06/26/2023 08:00	Rasheda Ghaffari	06/28/2023 15:18	Vandana T. Nagar	2419558
	06/23/2023	06/26/2023 08:00	Rasheda Ghaffari	07/06/2023 00:08	Arthur Maknenko	2419558
EPA 8321B	06/23/2023	06/23/2023 16:00	Hana Lee	06/24/2023 08:44	Tae K Lee	2419551
	06/23/2023	06/23/2023 16:00	Hana Lee	06/24/2023 20:36	Tae K Lee	2419551
	06/23/2023	06/28/2023 08:30	Hoor Shaik	06/28/2023 23:12	Juyoung Kim	2419551
SM 2320 B-2011	06/23/2023			06/26/2023 20:04	Adam P Silver	2419545
SM 2340 B-2011	06/23/2023			06/29/2023 13:27	Samatha Luckman	2419552
SM 2540 C-2015	06/23/2023			06/28/2023 14:17	Yijie Li	2419545
SM 2540 D-2015	06/23/2023			06/28/2023 14:17	Yijie Li	2419545
SM 4500-F- C-2011	06/23/2023			06/26/2023 20:04	Adam P Silver	2419545
SM 5310 B-2011	06/23/2023			06/29/2023 01:43	Elise M. Gillis	2419546