

Chemical Analysis Report

CEN-DIST-2023-06-20-01

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

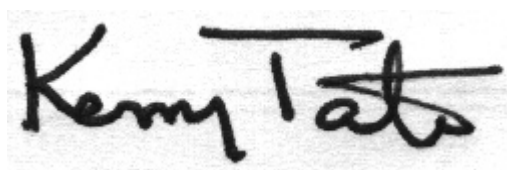
Event Description: **Lake Howell LVI**
Request ID: **RQ-2023-06-19-21**
Customer: **CEN-DIST**
Project ID: **SMP**

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

For additional information please contact
Colin Wright, Ph.D.
Chris Bowen, B.S.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 12-JUL-2023 13:58

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: LAKE HOWELL CENTER OF LAKE

Collection Date/Time: 06/19/2023 11:35

Field ID: G2CE0256

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2418343	DEP SOP: NU-094-1	Color (true)	22	A	PCU	P431507	
	EPA 180.1 Rev. 2.0	Turbidity	6.2		NTU	P431510	
	EPA 300.0 Rev. 2.1	Chloride	24		mg Cl/L	P431684	
		Sulfate	10		mg SO4/L	P431687	
	SM 2320 B-2011	Total Alkalinity	47		mg CaCO3/L	P431770	
	SM 2540 C-2015	TDS	103		mg/L	P431841	
	SM 2540 D-2015	TSS	11	I	mg/L	P431775	
	SM 4500-F- C-2011	Fluoride	0.078	I	mg F/L	P431773	MS
2418344	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P431817	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P431651	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P431626	
	EPA 365.1 Rev. 2.0	Total-P	0.073		mg P/L	P431597	
	SM 5310 B-2011	Organic Carbon	7.0		mg C/L	P431610	
2418345	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P431524	
2418355	EPA 8321B	2,4-D	0.080		ug/L	P431550	
		Acesulfame K	0.10	U	ug/L	P431641	
		2,4,5-T	0.0040	U	ug/L	P431550	
		AMPA	0.10	U	ug/L	P431641	
		Acetaminophen	0.0080	U	ug/L	P431550	
		Acetamiprid	0.0020	U	ug/L	P431550	
		Endothall	0.25	U	ug/L	P431641	
		Glufosinate	0.10	U	ug/L	P431641	
		Glyphosate	0.23	I	ug/L	P431641	
		Afidopyropen	0.0020	U	ug/L	P431550	
		Bentazon	0.065		ug/L	P431550	
		Sucralose	0.34		ug/L	P431641	
		Benzovindiflupyr	0.0020	U	ug/L	P431550	
		Carbamazepine	8.0E-04	U	ug/L	P431550	
		Clothianidin	0.0020	U	ug/L	P431550	
		Dinotefuran	0.0020	U	ug/L	P431550	
		Diuron	0.0020	U	ug/L	P431550	MS
		Fenuron	0.032	U	ug/L	P431550	
		Fluridone	0.043		ug/L	P431550	
		Imazapyr	0.015	I	ug/L	P431550	
		Hydrocodone	0.0020	U	ug/L	P431550	
		Ibuprofen	0.080	U	ug/L	P431550	
		Imidacloprid	0.0025	I	ug/L	P431550	
		Linuron	0.0040	U	ug/L	P431550	
		Mandestrobin	0.0020	U	ug/L	P431550	
		MCPP	0.0020	U	ug/L	P431550	
		Naproxen	0.0080	U	ug/L	P431550	
		Primidone	0.0040	U	ug/L	P431550	
		Pyraclostrobin	0.0020	U	ug/L	P431550	

Field ID: G2CE0256

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2418355	EPA 8321B	Silvex	0.0040	U	ug/L	P431550	
		Thiamethoxam	0.0020	U	ug/L	P431550	
		Tolfenpyrad	0.0020	U	ug/L	P431550	
		Triclopyr	0.0040	U	ug/L	P431550	
2418356	EPA 200.7 Rev. 4.4	Calcium	21.6		mg/L	P431578	
		Iron	52	I	ug/L	P431578	
		Magnesium	2.80		mg/L	P431578	
		Potassium	2.0		mg/L	P431578	
		Sodium	12.7		mg/L	P431578	
		Strontium	50.5		ug/L	P431578	
		Tin	3.0	U	ug/L	P431578	
		Titanium	0.75	U	ug/L	P431578	
		Vanadium	2.0	U	ug/L	P431578	
		Zinc	5.0	U	ug/L	P431578	
	EPA 200.8 Rev. 5.4	Aluminum	89		ug/L	P431578	
		Antimony	0.16	I	ug/L	P431578	
		Arsenic	1.46		ug/L	P431578	
		Barium	10.7		ug/L	P431578	
		Beryllium	0.010	U	ug/L	P431578	
		Boron	33.4		ug/L	P431578	
		Cadmium	0.020	U	ug/L	P431578	
		Chromium	0.40	U	ug/L	P431578	
		Cobalt	0.035	I	ug/L	P431578	
		Copper	0.61	I	ug/L	P431578	
		Lead	0.26	I	ug/L	P431578	
		Manganese	9.33		ug/L	P431578	
		Molybdenum	0.75		ug/L	P431578	
		Nickel	0.50	U	ug/L	P431578	
		Selenium	0.20	U	ug/L	P431578	
		Silver	0.010	U	ug/L	P431578	
		Thallium	0.10	U	ug/L	P431578	
		Hardness	65.6		mg/L	P431578	
2418357	SM 2340 B-2011	Oxybenzone**	10	U	ng/L	P431467	
	EPA 8270E	Acetochlor	0.21	U	ng/L	P431467	
		Octinoxate**	21	U	ng/L	P431467	
		Alachlor	0.41	U	ng/L	P431467	
		Avobenzone**	100	U	ng/L	P431467	
		Ametryn	1.1	U	ng/L	P431467	
		Atrazine	52		ng/L	P431467	
		PBDE-47**	4.1	U	ng/L	P431467	
		Atrazine Desethyl	14		ng/L	P431467	
		PBDE-99**	5.2	U	ng/L	P431467	
		Azinphos Methyl	3.1	U	ng/L	P431467	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P431467	
		Azoxystrobin	0.41	U	ng/L	P431467	

Field ID: G2CE0256

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2418357	EPA 8270E	Bromacil	0.62	U	ng/L	P431467	
		2-Ethylhexyl	12	U	ng/L	P431467	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.21	U	ng/L	P431467	
		Dechlorane Plus**	31	U	ng/L	P431467	
		Caffeine**	9.7	I	ng/L	P431467	
		Dechlorane 602**	5.2	U	ng/L	P431467	
		Carbophenothion	0.52	U	ng/L	P431467	
		Dechlorane 603**	4.1	U	ng/L	P431467	MS
		Carfentrazone Ethyl	0.16	U	ng/L	P431467	
		Hexabromobenzene**	6.2	U	ng/L	P431467	
		Chlorfenapyr	0.31	U	ng/L	P431467	
		PBB-153**	8.3	U	ng/L	P431467	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P431467	
		Pentabromotoluene**	3.1	U	ng/L	P431467	
		Chlorpyrifos Methyl	0.10	U	ng/L	P431467	
		Tris(2-chloroethyl) phosphate (TCEP)**	72	U	ng/L	P431467	
		Coumaphos	1.1	U	ng/L	P431467	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	51		ng/L	P431467	
		Cyanazine	5.2	U	ng/L	P431467	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	4.5	I	ng/L	P431467	
		Cyprodinil	0.21	U	ng/L	P431467	
		Tetradecachloro-m-terphenyl**	7.8	U	ng/L	P431467	
		Demeton	3.6	U	ng/L	P431467	
		Diazinon	0.13	U	ng/L	P431467	
		Difenoconazole	0.62	U	ng/L	P431467	
		Dimethenamid	0.10	U	ng/L	P431467	
		Dimethomorph	0.31	U	ng/L	P431467	
		Disulfoton	0.62	U	ng/L	P431467	
		Dithiopyr	1.0	U	ng/L	P431467	
		EPTC	0.52	U	ng/L	P431467	
		Ethion	0.31	U	ng/L	P431467	
		Ethoprop	0.13	U	ng/L	P431467	
		Etridiazole	0.10	U	ng/L	P431467	
		Fenamiphos	0.47	U	ng/L	P431467	
		Fenbuconazole	0.52	U	ng/L	P431467	
		Fipronil	0.21	U	ng/L	P431467	
		Fipronil Desulfinyl**	0.60		ng/L	P431467	
		Fipronil Sulfide	0.37	I	ng/L	P431467	
		Fipronil Sulfone	0.56		ng/L	P431467	
		Fluazifop-P-butyl	0.10	U	ng/L	P431467	
		Fludioxonil	0.10	U	ng/L	P431467	
		Flumioxazin	3.1	U	ng/L	P431467	
		Flutolanil	0.10	U	ng/L	P431467	
		Fluxapyroxad	0.26	U	ng/L	P431467	

Field ID: G2CE0256

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2418357	EPA 8270E	Fonofos	0.16	U	ng/L	P431467	CCV, MS, RPD
		Hexazinone	0.52	U	ng/L	P431467	
		Imazalil	0.67	U	ng/L	P431467	
		Iprodione	0.52	UJ	ng/L	P431467	
		Loratadine**	0.31	U	ng/L	P431467	
		Malathion	0.36	U	ng/L	P431467	
		Metaxyl	0.52	U	ng/L	P431467	
		Metolachlor	0.78	U	ng/L	P431467	
		Metribuzin	0.41	U	ng/L	P431467	
		Mevinphos	1.0	U	ng/L	P431467	MS
		Molinate	0.26	U	ng/L	P431467	
		Myclobutanil	3.5		ng/L	P431467	
		Naled	2.6	U	ng/L	P431467	
		Napropamide	0.72	U	ng/L	P431467	
		Norflurazon	1.0	U	ng/L	P431467	
		Oxadiazon	0.36	U	ng/L	P431467	
		Oxyfluorfen	0.21	U	ng/L	P431467	
		Parathion Ethyl	0.16	U	ng/L	P431467	
		Parathion Methyl	0.21	U	ng/L	P431467	
		Pendimethalin	0.78	U	ng/L	P431467	
		Phenytol**	5.5	U	ng/L	P431467	
		Phorate	0.26	U	ng/L	P431467	
		Prodiamine	0.21	U	ng/L	P431467	
		Prometon	3.1	U	ng/L	P431467	
		Prometryn	0.36	U	ng/L	P431467	
		Pronamide	0.10	U	ng/L	P431467	
		Propanil	0.10	U	ng/L	P431467	
		Propargite	0.83	U	ng/L	P431467	
		Propiconazole	0.62	U	ng/L	P431467	
		Pyraflufen Ethyl	0.31	U	ng/L	P431467	
		Pyridaben	1.4	U	ng/L	P431467	
		Pyriproxyfen	0.26	U	ng/L	P431467	
		Simazine	0.26	U	ng/L	P431467	
		Stiophos	0.41	U	ng/L	P431467	
		Sulfentrazone	1.4	U	ng/L	P431467	
		Tebuconazole	1.4	U	ng/L	P431467	
		Terbufos	0.21	U	ng/L	P431467	
		Terbuthylazine	0.21	U	ng/L	P431467	
		Thiobencarb	0.52	U	ng/L	P431467	
		Triadimefon	0.16	U	ng/L	P431467	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The PQL was elevated because of sample matrix interference.

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

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

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P431507

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P431510

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431578

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: P431578

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431684

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: P431687

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431817

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431651

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431626

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431597

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P431524

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

Reference Method: EPA 8270E
Batch ID: P431467

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: P431467

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: P431467

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: P431467

Component	Result	Code	Units
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	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	6.4	I	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: P431467

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: P431550

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P431550

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

Reference Method: EPA 8321B
Batch ID: P431641

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: P431770

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

Reference Method: SM 2540 C-2015
Batch ID: P431841

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P431775

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P431773

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P431610

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: P431507

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: P431510

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	99.3		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431578

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	100		P	85 - 115
Iron	104		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	99.5		P	85 - 115
Sodium	99.0		P	85 - 115
Strontium	97.8		P	85 - 115
Tin	99.7		P	85 - 115
Titanium	99.6		P	85 - 115
Vanadium	98.9		P	85 - 115
Zinc	98.8		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431578

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	104		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	101		P	85 - 115
Barium	104		P	85 - 115
Beryllium	99.5		P	85 - 115
Boron	107		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	99.9		P	85 - 115
Cobalt	99.3		P	85 - 115
Copper	99.1		P	85 - 115
Lead	94.4		P	85 - 115
Manganese	98.9		P	85 - 115
Molybdenum	99.4		P	85 - 115
Nickel	99.6		P	85 - 115
Selenium	103		P	85 - 115
Silver	103		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431684

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431687

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431817

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431651

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431626

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431597

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P431524

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

Reference Method: EPA 8270E
Batch ID: P431467

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	107		P	42 - 162
Acetochlor	80.6		P	69 - 123
Alachlor	88.2		P	65 - 118
Ametryn	107		P	58 - 141
Atrazine	96.1		P	73 - 118
Atrazine Desethyl	88.1		P	32 - 125
Avobenzone	121		P	40 - 203
Azinphos Methyl	107		P	36 - 197
Azoxystrobin	103		P	58 - 226
Bromacil	104		P	48 - 120
Butylate	55.5		P	27 - 85.0
Caffeine	100		P	40 - 137
Carbophenothion	102		P	54 - 132
Carfentrazone Ethyl	115		P	60 - 142
Chlorfenapyr	88.4		P	53 - 117
Chlorpyrifos Ethyl	96.4		P	59 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P431467

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	94.6		P	66 - 119
Coumaphos	71.4		P	11 - 234
Cyanazine	193		P	61 - 248
Cyprodinil	107		P	50 - 147
Dechlorane 602	98.0		P	50 - 150
Dechlorane 603	134		P	50 - 150
Dechlorane Plus	99.8		P	47 - 182
Demeton	88.1		P	30 - 138
Diazinon	110		P	67 - 126
Difenoconazole	129		P	38 - 205
Dimethenamid	91.5		P	57 - 111
Dimethomorph	191		P	16 - 212
Disulfoton	101		P	46 - 126
Dithiopyr	103		P	62 - 115
EPTC	51.5		P	28 - 80.0
Ethion	83.4		P	24 - 122
Ethoprop	95.6		P	62 - 113
Etridiazole	70.0		P	28 - 92.0
Fenamiphos	92.8		P	57 - 128
Fenbuconazole	70.7		P	52 - 155
Fipronil	106		P	63 - 130
Fipronil Desulfinyl	100		P	61 - 130
Fipronil Sulfide	93.5		P	56 - 117
Fipronil Sulfone	83.8		P	52 - 118
Fluazifop-P-butyl	96.3		P	61 - 128
Fludioxonil	89.7		P	59 - 129
Flumioxazin	114		P	30 - 250
Flutolanil	93.6		P	53 - 127
Fluxapyroxad	103		P	42 - 132
Fonofos	93.8		P	61 - 110
Hexabromobenzene	133		P	50 - 150
Hexazinone	98.8		P	46 - 139
Imazalil	101		P	40 - 139
Iprodione	118		P	40 - 146
Loratadine	181		P	10 - 224
Malathion	101		P	61 - 135
Metaxyl	97.4		P	58 - 121
Metolachlor	101		P	64 - 118
Metribuzin	95.8		P	45 - 245
Mevinphos	97.1		P	49 - 118
Molinate	57.3		P	42 - 92.0
Myclobutanil	98.0		P	55 - 127
Naled	48.5		P	10 - 114
Napropamide	85.0		P	39 - 121
Norflurazon	62.3		P	55 - 129
Octinoxate	123		P	26 - 166
Oxadiazon	94.6		P	54 - 115
Oxybenzone	128		P	49 - 135
Oxyfluorfen	112		P	64 - 139
Parathion Ethyl	103		P	70 - 111
Parathion Methyl	104		P	76 - 136
PBB-153	130		P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P431467

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	112		P	41 - 148
PBDE-99	96.6		P	38 - 147
Pendimethalin	112		P	52 - 118
Pentabromotoluene	123		P	50 - 150
Phenytoin	22.8		P	10 - 162
Phorate	87.6		P	40 - 122
Prodiamine	48.2		P	26 - 141
Prometon	98.7		P	54 - 122
Prometryn	118		P	61 - 128
Pronamide	114		P	72 - 121
Propanil	119		P	45 - 144
Propargite	65.7		P	10 - 199
Propiconazole	89.1		P	56 - 127
Pyraflufen Ethyl	97.7		P	56 - 140
Pyridaben	125		P	26 - 211
Pyriproxyfen	85.5		P	33 - 194
Simazine	91.1		P	67 - 121
Stirophos	69.2		P	20 - 142
Sulfentrazone	77.2		P	21 - 144
Tebuconazole	70.0		P	10 - 122
Terbufos	109		P	60 - 129
Terbutylazine	86.5		P	69 - 113
Tetradecachloro-m-terphenyl	141		P	70 - 200
Thiobencarb	93.6		P	51 - 120
Tri-o-cresyl Phosphate	123		P	49 - 150
Triadimefon	96.6		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	121		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	111		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	117		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P431550

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	105		P	40 - 150
2,4,5-T	86.1		P	40 - 150
Acetaminophen	95.0		P	30 - 150
Acetamiprid	84.4		P	40 - 150
Afidopyropen	64.2		P	30 - 150
Bentazon	114		P	30 - 150
Benzovindiflupyr	93.4		P	40 - 150
Carbamazepine	77.8		P	40 - 150
Clothianidin	97.9		P	40 - 150
Dinotefuran	102		P	40 - 150
Diuron	82.4		P	40 - 150
Fenuron	95.0		P	40 - 150
Fluridone	94.0		P	40 - 150
Hydrocodone	86.9		P	40 - 150
Ibuprofen	82.3		P	40 - 150
Imazapyr	95.4		P	40 - 150
Imidacloprid	74.0		P	40 - 150
Linuron	82.7		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P431550

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mandestrobin	98.7		P	40 - 150
MCPPE	101		P	40 - 150
Naproxen	68.7		P	40 - 150
Primidone	75.6		P	40 - 150
Pyraclostrobin	88.1		P	40 - 150
Silvex	78.9		P	40 - 150
Thiamethoxam	78.7		P	40 - 150
Tolfenpyrad	53.0		P	30 - 150
Triclopyr	93.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P431641

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	79.4		P	40 - 150
AMPA	95.6		P	40 - 150
Endothall	97.5		P	40 - 150
Glufosinate	100		P	40 - 150
Glyphosate	95.9		P	40 - 150
Sucralose	112		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P431770

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.1		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P431841

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	93.7		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P431775

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	94.8		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P431773

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	105		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P431610

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P431578

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418286	Calcium	102		P	80 - 120
2418286	Iron	103	106	P/P	80 - 120
2418286	Magnesium	102	106	P/P	80 - 120
2418286	Potassium	98.6	103	P/P	80 - 120
2418286	Sodium	99.4	103	P/P	80 - 120
2418286	Strontium	98.2	101	P/P	80 - 120
2418286	Tin	93.1	104	P/P	80 - 120
2418286	Titanium	83.7	82.2	P/P	80 - 120
2418286	Vanadium	96.0	106	P/P	80 - 120
2418286	Zinc	95.5	104	P/P	80 - 120
2418356	Calcium	97.9		P	80 - 120
2418356	Iron	104		P	80 - 120
2418356	Magnesium	101		P	80 - 120
2418356	Potassium	97.5		P	80 - 120
2418356	Sodium	94.3		P	80 - 120
2418356	Strontium	99.3		P	80 - 120
2418356	Tin	99.7		P	80 - 120
2418356	Titanium	101		P	80 - 120
2418356	Vanadium	101		P	80 - 120
2418356	Zinc	99.4		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P431578

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418286	Aluminum	104	106	P/P	80 - 120
2418286	Antimony	99.6	100	P/P	80 - 120
2418286	Arsenic	98.6	99.1	P/P	80 - 120
2418286	Barium	105	106	P/P	80 - 120
2418286	Beryllium	97.6	99.1	P/P	80 - 120
2418286	Boron	105	107	P/P	80 - 120
2418286	Cadmium	100	102	P/P	80 - 120
2418286	Chromium	97.2	100	P/P	80 - 120
2418286	Cobalt	96.7	98.7	P/P	80 - 120
2418286	Copper	97.0	97.4	P/P	80 - 120
2418286	Lead	93.4	95.1	P/P	80 - 120
2418286	Manganese	105	110	P/P	80 - 120
2418286	Molybdenum	98.2	99.0	P/P	80 - 120
2418286	Nickel	98.7	99.3	P/P	80 - 120
2418286	Selenium	98.2	97.5	P/P	80 - 120
2418286	Silver	101	102	P/P	80 - 120
2418286	Thallium	104	106	P/P	80 - 120
2418356	Aluminum	100		P	80 - 120
2418356	Antimony	103		P	80 - 120
2418356	Arsenic	102		P	80 - 120
2418356	Barium	103		P	80 - 120
2418356	Beryllium	100		P	80 - 120
2418356	Boron	104		P	80 - 120
2418356	Cadmium	100		P	80 - 120
2418356	Chromium	97.4		P	80 - 120
2418356	Cobalt	96.1		P	80 - 120
2418356	Copper	97.0		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431578

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418356	Lead	95.0		P	80 - 120
2418356	Manganese	97.3		P	80 - 120
2418356	Molybdenum	99.9		P	80 - 120
2418356	Nickel	96.2		P	80 - 120
2418356	Selenium	98.7		P	80 - 120
2418356	Silver	102		P	80 - 120
2418356	Thallium	105		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418168	Chloride	103		P	90 - 110
2418343	Chloride	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431687

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418168	Sulfate	101		P	90 - 110
2418343	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431817

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418259	Ammonia-N	100	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431651

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418394	Kjeldahl Nitrogen	110	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431626

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418259	NO2NO3-N	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431597

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418366	Total-P	100	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P431524

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418319	O-Phosphate-P	97.3	97.0	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P431467

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417501	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	130	113	P/P	26 - 165
2417501	Acetochlor	70.3	103	P/P	67 - 124
2417501	Alachlor	80.8	78.5	P/P	60 - 120
2417501	Ametryn	150	143	P/P	54 - 216
2417501	Atrazine Desethyl	115	111	P/P	15 - 122
2417501	Avobenzone	132	121	P/P	37 - 178
2417501	Azinphos Methyl	153	122	P/P	40 - 292
2417501	Azoxystrobin	132	126	P/P	35 - 220
2417501	Bromacil	108	114	P/P	45 - 127
2417501	Butylate	58.2	55.0	P/P	20 - 83.0
2417501	Caffeine	108	107	P/P	10 - 194
2417501	Carbophenothion	125	106	P/P	57 - 127
2417501	Carfentrazone Ethyl	138	126	P/P	51 - 141
2417501	Chlorfenapyr	99.6	93.5	P/P	46 - 111
2417501	Chlorpyrifos Ethyl	93.8	101	P/P	52 - 120
2417501	Chlorpyrifos Methyl	87.8	90.0	P/P	63 - 119
2417501	Coumaphos	179	145	P/P	10 - 228
2417501	Cyanazine	213	180	P/P	59 - 241
2417501	Cyprodinil	103	78.3	P/P	47 - 146
2417501	Dechlorane 602	121	113	P/P	50 - 150
2417501	Dechlorane 603	160	156	F/F	50 - 150
2417501	Dechlorane Plus	97.6	98.0	P/P	50 - 150
2417501	Demeton	98.1	93.3	P/P	40 - 136
2417501	Diazinon	110	114	P/P	69 - 132
2417501	Difenoconazole	229	200	P/P	57 - 258
2417501	Dimethenamid	89.4	96.3	P/P	54 - 110
2417501	Dimethomorph	165	184	P/P	28 - 210
2417501	Disulfoton	111	107	P/P	43 - 133
2417501	Dithiopyr	111	110	P/P	39 - 116
2417501	EPTC	49.4	44.8	P/P	20 - 78.0
2417501	Ethion	93.8	81.4	P/P	17 - 119
2417501	Ethoprop	101	100	P/P	66 - 120
2417501	Etridiazole	83.4	66.1	P/P	28 - 96.0
2417501	Fenamiphos	82.4	91.8	P/P	41 - 126
2417501	Fenbuconazole	108	95.7	P/P	42 - 169
2417501	Fipronil	118	106	P/P	61 - 132
2417501	Fipronil Desulfinyl	111	99.5	P/P	56 - 132
2417501	Fipronil Sulfide	94.9	95.4	P/P	48 - 119
2417501	Fipronil Sulfone	95.7	101	P/P	42 - 131
2417501	Fluazifop-P-butyl	80.5	94.7	P/P	53 - 131
2417501	Fludioxonil	91.7	105	P/P	56 - 127
2417501	Flumioxazin	214	194	P/P	19 - 300
2417501	Flutolanil	96.1	99.9	P/P	41 - 127
2417501	Fluxapyroxad	123	112	P/P	42 - 172
2417501	Fonofos	90.1	87.3	P/P	59 - 113
2417501	Hexabromobenzene	145	139	P/P	50 - 150
2417501	Hexazinone	108	109	P/P	66 - 122
2417501	Imazalil	107	94.7	P/P	21 - 283
2417501	Iprodione	94.9	190	P/F	43 - 150
2417501	Loratadine	137	154	P/P	23 - 201
2417501	Malathion	115	105	P/P	58 - 136
2417501	Metalaxyl	111	89.2	P/P	55 - 120

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P431467

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417501	Metolachlor	80.0	98.7	P/P	57 - 121
2417501	Metribuzin	104	105	P/P	58 - 294
2417501	Mevinphos	143	110	F/P	50 - 126
2417501	Molinate	54.2	60.1	P/P	42 - 93.0
2417501	Myclobutanil	118	102	P/P	55 - 125
2417501	Naled	44.9	46.4	P/P	18 - 200
2417501	Napropamide	78.1	103	P/P	39 - 110
2417501	Norflurazon	120	104	P/P	48 - 128
2417501	Octinoxate	128	126	P/P	21 - 159
2417501	Oxadiazon	106	95.2	P/P	43 - 112
2417501	Oxybenzone	141	136	P/P	41 - 142
2417501	Oxyfluorfen	118	121	P/P	64 - 153
2417501	Parathion Ethyl	106	96.7	P/P	69 - 114
2417501	Parathion Methyl	96.6	82.6	P/P	79 - 139
2417501	PBB-153	149	144	P/P	50 - 150
2417501	PBDE-47	121	118	P/P	27 - 144
2417501	PBDE-99	117	109	P/P	18 - 150
2417501	Pendimethalin	123	105	P/P	50 - 139
2417501	Pentabromotoluene	132	123	P/P	50 - 150
2417501	Phenytoin	41.7	36.9	P/P	10 - 146
2417501	Phorate	127	112	P/P	54 - 161
2417501	Prodiamine	55.7	53.0	P/P	30 - 161
2417501	Prometon	102	99.2	P/P	45 - 134
2417501	Prometryn	111	116	P/P	45 - 137
2417501	Pronamide	131	117	P/P	65 - 133
2417501	Propanil	138	122	P/P	49 - 142
2417501	Propargite	92.3	80.8	P/P	10 - 203
2417501	Propiconazole	124	105	P/P	38 - 146
2417501	Pyraflufen Ethyl	126	111	P/P	34 - 153
2417501	Pyridaben	171	137	P/P	12 - 192
2417501	Pyriproxyfen	134	108	P/P	33 - 180
2417501	Simazine	96.2	95.6	P/P	51 - 157
2417501	Stiropfos	53.1	83.0	P/P	10 - 128
2417501	Sulfentrazone	119	87.3	P/P	53 - 186
2417501	Tebuconazole	98.0	91.2	P/P	10 - 133
2417501	Terbufos	121	116	P/P	65 - 139
2417501	Terbuthylazine	90.5	91.7	P/P	66 - 117
2417501	Tetradecachloro-m-terphenyl	126	135	P/P	70 - 200
2417501	Thiobencarb	97.1	91.4	P/P	51 - 119
2417501	Tri-o-cresyl Phosphate	129	129	P/P	31 - 144
2417501	Triadimefon	114	90.4	P/P	48 - 119
2417501	Tris(1-chloro-2-propyl) phosphate (TCPP)	108	104	P/P	50 - 150
2417501	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	120	121	P/P	50 - 150
2417501	Tris(2-chloroethyl) phosphate (TCEP)	120	121	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P431550

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418216	2,4,5-T	100	101	P/P	40 - 150
2418216	Acetaminophen	93.1	85.4	P/P	30 - 150
2418216	Acetamiprid	72.7	72.9	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P431550

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418216	Afidopyropen	51.3	64.4	P/P	30 - 150
2418216	Benzovindiflupyr	89.4	97.9	P/P	40 - 150
2418216	Carbamazepine	65.7	68.5	P/P	40 - 150
2418216	Clothianidin	98.8	89.3	P/P	40 - 150
2418216	Dinotefuran	75.0	82.9	P/P	40 - 150
2418216	Diuron	54.1	37.6	P/F	40 - 150
2418216	Fenuron	75.3	77.8	P/P	40 - 150
2418216	Fluridone	86.7	96.4	P/P	40 - 150
2418216	Hydrocodone	63.6	62.1	P/P	40 - 150
2418216	Ibuprofen	66.0	58.3	P/P	40 - 150
2418216	Linuron	76.6	71.6	P/P	40 - 150
2418216	Mandestrobin	93.2	97.1	P/P	40 - 150
2418216	MCPP	115	109	P/P	40 - 150
2418216	Naproxen	64.9	86.9	P/P	40 - 150
2418216	Primidone	75.8	82.8	P/P	40 - 150
2418216	Pyraclostrobin	95.6	97.5	P/P	40 - 150
2418216	Silvex	78.9	83.6	P/P	40 - 150
2418216	Thiamethoxam	63.5	68.7	P/P	40 - 150
2418216	Tolfenpyrad	57.0	56.3	P/P	30 - 150
2418216	Triclopyr	101	104	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P431641

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418283	Acesulfame K	92.4	94.6	P/P	40 - 150
2418283	AMPA	81.3	75.7	P/P	40 - 150
2418283	Endothall	117	122	P/P	40 - 150
2418283	Glufosinate	86.7	82.7	P/P	40 - 150
2418283	Glyphosate	96.1	99.6	P/P	40 - 150
2418283	Sucralose	95.7	89.2	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P431773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418428	Fluoride	105	107	P/F	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P431610

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418093	Organic Carbon	93.6	95.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P431507

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418343	Color (true)	8.57	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P431510

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418251	Turbidity	0.957	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431578

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418286	Calcium	2.97	Spike	P	0 - 20
2418286	Iron	2.31	Spike	P	0 - 20
2418286	Magnesium	2.57	Spike	P	0 - 20
2418286	Potassium	2.80	Spike	P	0 - 20
2418286	Sodium	2.28	Spike	P	0 - 20
2418286	Strontium	3.12	Spike	P	0 - 20
2418286	Tin	11.4	Spike	P	0 - 20
2418286	Titanium	1.27	Spike	P	0 - 20
2418286	Vanadium	9.48	Spike	P	0 - 20
2418286	Zinc	8.70	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431578

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418286	Aluminum	1.11	Spike	P	0 - 20
2418286	Antimony	0.838	Spike	P	0 - 20
2418286	Arsenic	0.539	Spike	P	0 - 20
2418286	Barium	1.01	Spike	P	0 - 20
2418286	Beryllium	1.42	Spike	P	0 - 20
2418286	Boron	1.49	Spike	P	0 - 20
2418286	Cadmium	1.53	Spike	P	0 - 20
2418286	Chromium	3.17	Spike	P	0 - 20
2418286	Cobalt	1.94	Spike	P	0 - 20
2418286	Copper	0.381	Spike	P	0 - 20
2418286	Lead	1.77	Spike	P	0 - 20
2418286	Manganese	1.24	Spike	P	0 - 20
2418286	Molybdenum	0.757	Spike	P	0 - 20
2418286	Nickel	0.584	Spike	P	0 - 20
2418286	Selenium	0.678	Spike	P	0 - 20
2418286	Silver	1.15	Spike	P	0 - 20
2418286	Thallium	2.22	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418168	Chloride	1.35	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431687

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418168	Sulfate	1.30	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431817

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418259	Ammonia-N	1.28	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431651

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418394	Kjeldahl Nitrogen	2.53	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431626

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418259	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431597

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418366	Total-P	1.93	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P431524

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418319	O-Phosphate-P	0.280	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P431467

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417501	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	13.8	Spike	P	0 - 37
2417501	Acetochlor	19.0	Spike	P	0 - 28

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P431467

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417501	Alachlor	2.84	Spike	P	0 - 30
2417501	Ametryn	4.65	Spike	P	0 - 32
2417501	Atrazine	10.6	Spike	P	0 - 41
2417501	Atrazine Desethyl	2.28	Spike	P	0 - 36
2417501	Avobenzone	8.68	Spike	P	0 - 36
2417501	Azinphos Methyl	22.5	Spike	P	0 - 75
2417501	Azoxystrobin	4.97	Spike	P	0 - 39
2417501	Bromacil	5.35	Spike	P	0 - 33
2417501	Butylate	5.78	Spike	P	0 - 44
2417501	Caffeine	0.565	Spike	P	0 - 74
2417501	Carbophenothion	16.3	Spike	P	0 - 25
2417501	Carfentrazone Ethyl	9.06	Spike	P	0 - 27
2417501	Chlorfenapyr	6.32	Spike	P	0 - 24
2417501	Chlorpyrifos Ethyl	7.31	Spike	P	0 - 26
2417501	Chlorpyrifos Methyl	2.55	Spike	P	0 - 26
2417501	Coumaphos	21.0	Spike	P	0 - 28
2417501	Cyanazine	16.8	Spike	P	0 - 48
2417501	Cyprodinil	26.9	Spike	P	0 - 29
2417501	Dechlorane 602	6.80	Spike	P	0 - 30
2417501	Dechlorane 603	2.43	Spike	P	0 - 30
2417501	Dechlorane Plus	0.446	Spike	P	0 - 30
2417501	Demeton	5.03	Spike	P	0 - 33
2417501	Diazinon	3.94	Spike	P	0 - 29
2417501	Difenoconazole	13.9	Spike	P	0 - 34
2417501	Dimethenamid	7.49	Spike	P	0 - 39
2417501	Dimethomorph	10.4	Spike	P	0 - 51
2417501	Disulfoton	4.41	Spike	P	0 - 30
2417501	Dithiopyr	1.73	Spike	P	0 - 26
2417501	EPTC	9.68	Spike	P	0 - 43
2417501	Ethion	14.1	Spike	P	0 - 79
2417501	Ethoprop	0.229	Spike	P	0 - 29
2417501	Etridiazole	23.1	Spike	P	0 - 33
2417501	Fenamiphos	10.8	Spike	P	0 - 40
2417501	Fenbuconazole	11.7	Spike	P	0 - 74
2417501	Fipronil	10.6	Spike	P	0 - 29
2417501	Fipronil Desulfinyl	10.7	Spike	P	0 - 32
2417501	Fipronil Sulfide	0.573	Spike	P	0 - 30
2417501	Fipronil Sulfone	5.81	Spike	P	0 - 33
2417501	Fluazifop-P-butyl	16.3	Spike	P	0 - 38
2417501	Fludioxonil	13.5	Spike	P	0 - 29
2417501	Flumioxazin	9.81	Spike	P	0 - 51
2417501	Flutolanil	3.88	Spike	P	0 - 25
2417501	Fluxapyroxad	8.32	Spike	P	0 - 45
2417501	Fonofos	3.09	Spike	P	0 - 27
2417501	Hexabromobenzene	4.15	Spike	P	0 - 30
2417501	Hexazinone	1.22	Spike	P	0 - 30
2417501	Imazalil	12.1	Spike	P	0 - 100
2417501	Iprodione	66.9	Spike	F	0 - 33
2417501	Loratadine	11.1	Spike	P	0 - 56
2417501	Malathion	8.67	Spike	P	0 - 37
2417501	Metalaxyl	21.5	Spike	P	0 - 40

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P431467

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417501	Metolachlor	8.37	Spike	P	0 - 29
2417501	Metribuzin	0.823	Spike	P	0 - 45
2417501	Mevinphos	26.5	Spike	P	0 - 29
2417501	Molinate	10.3	Spike	P	0 - 33
2417501	Myclobutanil	14.5	Spike	P	0 - 26
2417501	Naled	3.26	Spike	P	0 - 37
2417501	Napropamide	27.1	Spike	P	0 - 44
2417501	Norflurazon	14.2	Spike	P	0 - 30
2417501	Octinoxate	1.36	Spike	P	0 - 45
2417501	Oxadiazon	10.7	Spike	P	0 - 28
2417501	Oxybenzone	3.25	Spike	P	0 - 46
2417501	Oxyfluorfen	2.79	Spike	P	0 - 28
2417501	Parathion Ethyl	9.05	Spike	P	0 - 31
2417501	Parathion Methyl	15.6	Spike	P	0 - 29
2417501	PBB-153	3.48	Spike	P	0 - 30
2417501	PBDE-47	2.65	Spike	P	0 - 36
2417501	PBDE-99	6.90	Spike	P	0 - 40
2417501	Pendimethalin	16.2	Spike	P	0 - 33
2417501	Pentabromotoluene	7.27	Spike	P	0 - 30
2417501	Phenytoin	12.1	Spike	P	0 - 100
2417501	Phorate	12.7	Spike	P	0 - 36
2417501	Prodiamine	4.96	Spike	P	0 - 71
2417501	Prometon	2.66	Spike	P	0 - 36
2417501	Prometryn	4.96	Spike	P	0 - 28
2417501	Pronamide	11.8	Spike	P	0 - 24
2417501	Propanil	12.4	Spike	P	0 - 28
2417501	Propargite	13.3	Spike	P	0 - 43
2417501	Propiconazole	17.2	Spike	P	0 - 33
2417501	Pyraflufen Ethyl	12.9	Spike	P	0 - 29
2417501	Pyridaben	21.8	Spike	P	0 - 30
2417501	Pyriproxyfen	20.8	Spike	P	0 - 79
2417501	Simazine	0.694	Spike	P	0 - 29
2417501	Stirophos	44.0	Spike	P	0 - 61
2417501	Sulfentrazone	30.4	Spike	P	0 - 33
2417501	Tebuconazole	7.20	Spike	P	0 - 69
2417501	Terbufos	3.50	Spike	P	0 - 29
2417501	Terbuthylazine	1.32	Spike	P	0 - 32
2417501	Tetradecachloro-m-terphenyl	6.71	Spike	P	0 - 30
2417501	Thiobencarb	5.54	Spike	P	0 - 26
2417501	Tri-o-cresyl Phosphate	0.0811	Spike	P	0 - 33
2417501	Triadimefon	23.2	Spike	P	0 - 28
2417501	Tris(1-chloro-2-propyl) phosphate (TCPP)	4.34	Spike	P	0 - 30
2417501	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	1.26	Spike	P	0 - 30
2417501	Tris(2-chloroethyl) phosphate (TCEP)	0.582	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P431550

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418216	2,4-D	0.743	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P431550

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418216	2,4,5-T	0.391	Spike	P	0 - 30
2418216	Acetaminophen	8.58	Spike	P	0 - 30
2418216	Acetamiprid	0.230	Spike	P	0 - 30
2418216	Afidopyropen	22.6	Spike	P	0 - 30
2418216	Bentazon	1.12	Spike	P	0 - 30
2418216	Benzovindiflupyr	9.04	Spike	P	0 - 30
2418216	Carbamazepine	4.24	Spike	P	0 - 30
2418216	Clothianidin	10.1	Spike	P	0 - 30
2418216	Dinotefuran	10.0	Spike	P	0 - 30
2418216	Diuron	28.5	Spike	P	0 - 30
2418216	Fenuron	3.25	Spike	P	0 - 30
2418216	Fluridone	7.68	Spike	P	0 - 30
2418216	Hydrocodone	2.40	Spike	P	0 - 30
2418216	Ibuprofen	12.4	Spike	P	0 - 30
2418216	Imazapyr	2.11	Spike	P	0 - 30
2418216	Imidacloprid	1.56	Spike	P	0 - 30
2418216	Linuron	6.73	Spike	P	0 - 30
2418216	Mandestrobin	4.08	Spike	P	0 - 30
2418216	MCPP	4.84	Spike	P	0 - 30
2418216	Naproxen	29.0	Spike	P	0 - 30
2418216	Primidone	8.84	Spike	P	0 - 30
2418216	Pyraclostrobin	2.04	Spike	P	0 - 30
2418216	Silvex	5.76	Spike	P	0 - 30
2418216	Thiamethoxam	7.92	Spike	P	0 - 30
2418216	Tolfenpyrad	1.28	Spike	P	0 - 30
2418216	Triclopyr	2.66	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P431641

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418283	Acesulfame K	2.35	Spike	P	0 - 30
2418283	AMPA	7.09	Spike	P	0 - 30
2418283	Endothall	4.22	Spike	P	0 - 30
2418283	Glufosinate	4.79	Spike	P	0 - 30
2418283	Glyphosate	3.60	Spike	P	0 - 30
2418283	Sucralose	2.90	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P431770

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418428	Total Alkalinity	1.03	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P431841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
--------------------------	-----------	-----------	-------------------	-----------	----------------

Quality Assurance Report Precision

Reference Method: SM 2540 C-2015
Batch ID: P431841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418168	TDS	8.07	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P431773

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418428	Fluoride	0.979	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P431610

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418093	Organic Carbon	1.34	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2418355
Field Sample ID: G2CE0256

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	114	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	58.5	P	30 - 160
EPA 8321B	Diuron-d6	45.6	P	30 - 160
EPA 8321B	Endothall-d6	115	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	72.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	65.8	P	30 - 160
EPA 8321B	Primidone-d5	83.1	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160

Lab Sample ID: 2418357
Field Sample ID: G2CE0256

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	99.1	P	20 - 200
EPA 8270E	Simazine-d10	91.1	P	62 - 142
EPA 8270E	Terbufos-d10	78.7	P	58 - 132
EPA 8270E	Terphenyl-d14	72.3	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A119911

Included Lab Sample IDs: 2418343

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.3	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A119913

Included Lab Sample IDs: 2418343

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A119924

Included Lab Sample IDs: 2418345

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.6	99.1	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A119927

Included Lab Sample IDs: 2418343

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	101	P/P	90 - 110
Sulfate	99.6	101	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A119953

Included Lab Sample IDs: 2418344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.8	98.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A119959

Included Lab Sample IDs: 2418344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A119966

Included Lab Sample IDs: 2418344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	102	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119986

Included Lab Sample IDs: 2418356

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	103	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119986

Included Lab Sample IDs: 2418356

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	101	99.9	P/P	90 - 110
Arsenic	100	100	P/P	90 - 110
Barium	102	101	P/P	90 - 110
Beryllium	101	100	P/P	90 - 110
Boron	101	99.7	P/P	90 - 110
Cadmium	101	102	P/P	90 - 110
Chromium	102	101	P/P	90 - 110
Cobalt	99.2	97.9	P/P	90 - 110
Copper	97.5	97.6	P/P	90 - 110
Lead	94.0	93.0	P/P	90 - 110
Manganese	102	99.3	P/P	90 - 110
Molybdenum	100	99.2	P/P	90 - 110
Nickel	100	98.7	P/P	90 - 110
Selenium	102	99.7	P/P	90 - 110
Silver	102	101	P/P	90 - 110
Thallium	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119997

Included Lab Sample IDs: 2418344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.1	100	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A120027

Included Lab Sample IDs: 2418357

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	96.2		P	80 - 120
Avobenzone	96.1		P	80 - 120
Dechlorane 602	103		P	80 - 120
Dechlorane 603	101		P	80 - 120
Dechlorane Plus	93.6		P	80 - 120
Hexabromobenzene	97.2		P	80 - 120
Octinoxate	92.7		P	80 - 120
Oxybenzone	96.5		P	80 - 120
PBB-153	97.3		P	80 - 120
PBDE-47	94.3		P	80 - 120
PBDE-99	97.4		P	80 - 120
Pentabromotoluene	95.9		P	80 - 120
Tetradecachloro-m-terphenyl	85.0		P	80 - 120
Tri-o-cresyl Phosphate	95.7		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	87.2		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	91.3		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	91.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011
Run ID: A120036
Included Lab Sample IDs: 2418343

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	93.5	96.6	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A120036
Included Lab Sample IDs: 2418343

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

Reference Method: EPA 8321B
Run ID: A120044
Included Lab Sample IDs: 2418355

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	71.9	92.4	P/P	60 - 160
Sucralose	98.1	97.3	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A120045
Included Lab Sample IDs: 2418344

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

Reference Method: EPA 8321B
Run ID: A120048
Included Lab Sample IDs: 2418355

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	90.6	88.6	P/P	60 - 160
Endothall	84.5	85.0	P/P	60 - 160
Glufosinate	86.0	89.4	P/P	60 - 160
Glyphosate	89.0	92.9	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A120107
Included Lab Sample IDs: 2418355

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	89.3	77.1	P/P	50 - 150
2,4,5-T	87.7	86.2	P/P	50 - 150
Acetaminophen	107	92.9	P/P	60 - 160
Acetamiprid	120	115	P/P	50 - 150
Afidopyropen	92.8	95.0	P/P	50 - 150
Benzovindiflupyr	121	124	P/P	50 - 150
Carbamazepine	119	117	P/P	60 - 150
Clothianidin	122	112	P/P	60 - 150
Dinotefuran	106	101	P/P	50 - 150
Diuron	123	119	P/P	60 - 160
Fenuron	120	117	P/P	60 - 150
Fluridone	116	115	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A120107
Included Lab Sample IDs: 2418355

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Hydrocodone	109	108	P/P	60 - 150
Ibuprofen	78.5	94.6	P/P	50 - 160
Imazapyr	111	108	P/P	50 - 150
Imidacloprid	83.4	74.7	P/P	60 - 150
Linuron	118	143	P/P	60 - 150
Mandestrobin	120	117	P/P	50 - 150
MCPP	79.1	80.0	P/P	50 - 150
Naproxen	73.7	99.1	P/P	50 - 160
Primidone	92.4	96.6	P/P	60 - 150
Pyraclostrobin	125	125	P/P	60 - 150
Silvex	80.1	63.8	P/P	50 - 150
Thiamethoxam	94.2	92.5	P/P	50 - 150
Tolfenpyrad	91.0	107	P/P	60 - 150
Triclopyr	86.8	80.9	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A120108
Included Lab Sample IDs: 2418355

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bentazon	123	127	P/P	50 - 160

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A120113
Included Lab Sample IDs: 2418356

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	96.9	97.0	P/P	90 - 110
Iron	97.3	98.8	P/P	90 - 110
Magnesium	96.4	98.0	P/P	90 - 110
Potassium	96.5	97.9	P/P	90 - 110
Sodium	93.0	93.0	P/P	90 - 110
Strontium	100	97.8	P/P	90 - 110
Tin	99.8	99.3	P/P	90 - 110
Titanium	100	99.8	P/P	90 - 110
Vanadium	99.5	99.3	P/P	90 - 110
Zinc	100	99.7	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A120155
Included Lab Sample IDs: 2418357

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	86.3		P	80 - 120
Alachlor	84.8		P	80 - 120
Ametryn	105		P	80 - 120
Atrazine	90.2		P	80 - 120
Atrazine Desethyl	102		P	80 - 120
Azinphos Methyl	103		P	80 - 120
Azoxystrobin	107		P	80 - 120
Bromacil	99.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120155
Included Lab Sample IDs: 2418357

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Butylate	95.1		P	80 - 120
Caffeine	108		P	80 - 120
Carbophenothion	96.3		P	80 - 120
Carfentrazone Ethyl	100		P	80 - 120
Chlorfenapyr	82.8		P	80 - 120
Chlorpyrifos Ethyl	84.6		P	80 - 120
Chlorpyrifos Methyl	96.3		P	80 - 120
Coumaphos	99.1		P	80 - 120
Cyanazine	102		P	80 - 120
Cyprodinil	95.8		P	80 - 120
Demeton	104		P	80 - 120
Diazinon	98.5		P	80 - 120
Difenoconazole	116		P	80 - 120
Dimethenamid	103		P	80 - 120
Dimethomorph	84.8		P	80 - 120
Disulfoton	105		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	98.3		P	80 - 120
Ethion	83.7		P	80 - 120
Ethoprop	99.1		P	80 - 120
Etridiazole	101		P	80 - 120
Fenamiphos	90.5		P	80 - 120
Fenbuconazole	91.0		P	80 - 120
Fipronil	90.3		P	80 - 120
Fipronil Desulfinyl	99.2		P	80 - 120
Fipronil Sulfide	98.6		P	80 - 120
Fipronil Sulfone	96.9		P	80 - 120
Fluazifop-P-butyl	98.1		P	80 - 120
Fludioxonil	101		P	80 - 120
Flumioxazin	112		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	104		P	80 - 120
Fonofos	91.1		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	97.6		P	80 - 120
Iprodione	55.3*		F	80 - 120
Loratadine	95.3		P	80 - 120
Malathion	82.0		P	80 - 120
Metalaxyl	83.6		P	80 - 120
Metolachlor	98.8		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	100		P	80 - 120
Molinate	86.6		P	80 - 120
Myclobutanil	87.0		P	80 - 120
Naled	96.4		P	80 - 120
Napropamide	106		P	80 - 120
Norflurazon	90.7		P	80 - 120
Oxadiazon	99.5		P	80 - 120
Oxyfluorfen	99.2		P	80 - 120
Parathion Ethyl	98.6		P	80 - 120
Parathion Methyl	87.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120155
Included Lab Sample IDs: 2418357

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pendimethalin	102		P	80 - 120
Phenytoin	94.7		P	80 - 120
Phorate	92.7		P	80 - 120
Prodiamine	106		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	105		P	80 - 120
Pronamide	100		P	80 - 120
Propanil	99.1		P	80 - 120
Propargite	97.6		P	80 - 120
Propiconazole	83.2		P	80 - 120
Pyraflufen Ethyl	99.1		P	80 - 120
Pyridaben	100		P	80 - 120
Pyriproxyfen	104		P	80 - 120
Simazine	84.5		P	80 - 120
Stirophos	83.3		P	80 - 120
Sulfentrazone	102		P	80 - 120
Tebuconazole	97.9		P	80 - 120
Terbufos	101		P	80 - 120
Terbutylazine	83.9		P	80 - 120
Thiobencarb	102		P	80 - 120
Triadimefon	101		P	80 - 120

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	101					8.57	
EPA 180.1 Rev. 2.0	Turbidity	99.3					0.957	
EPA 200.7 Rev. 4.4	Calcium	100	102	97.9				2.97
	Iron	104	103	106	104			2.31
	Magnesium	104	102	106	101			2.57
	Potassium	99.5	98.6	103	97.5			2.80
	Sodium	99.0	99.4	103	94.3			2.28
	Strontium	97.8	98.2	101	99.3			3.12
	Tin	99.7	93.1	104	99.7			11.4
	Titanium	99.6	83.7	82.2	101			1.27
	Vanadium	98.9	96.0	106	101			9.48
	Zinc	98.8	95.5	104	99.4			8.70
EPA 200.8 Rev. 5.4	Aluminum	104	104	106	100			1.11
	Antimony	101	99.6	100	103			0.838
	Arsenic	101	98.6	99.1	102			0.539
	Barium	104	105	106	103			1.01
	Beryllium	99.5	97.6	99.1	100			1.42
	Boron	107	105	107	104			1.49
	Cadmium	101	100	102	100			1.53
	Chromium	99.9	97.2	100	97.4			3.17
	Cobalt	99.3	96.7	98.7	96.1			1.94
	Copper	99.1	97.0	97.4	97.0			0.381
	Lead	94.4	93.4	95.1	95.0			1.77
	Manganese	98.9	105	110	97.3			1.24
	Molybdenum	99.4	98.2	99.0	99.9			0.757
	Nickel	99.6	98.7	99.3	96.2			0.584
	Selenium	103	98.2	97.5	98.7			0.678
	Silver	103	101	102	102			1.15
	Thallium	102	104	106	105			2.22
EPA 300.0 Rev. 2.1	Chloride	103	103	105			1.35	
	Sulfate	101	101	100			1.30	
EPA 350.1 Rev. 2.0	Ammonia-N	98.8	100	102				1.28
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	110	107				2.53
EPA 353.2 Rev. 2.0	NO2NO3-N	105	103	103				0.0
EPA 365.1 Rev. 2.0	Total-P	102	100	98.0				1.93
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.3	97.3	97.0				0.280
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	107	130	113				13.8
	Acetochlor	80.6	70.3	103				19.0
	Alachlor	88.2	80.8	78.5				2.84
	Ametryn	107	150	143				4.65
	Atrazine	96.1						10.6
	Atrazine Desethyl	88.1	115	111				2.28
	Avobenzone	121	132	121				8.68
	Azinphos Methyl	107	153	122				22.5
	Azoxystrobin	103	132	126				4.97
	Bromacil	104	108	114				5.35
	Butylate	55.5	58.2	55.0				5.78
	Caffeine	100	108	107				0.565
	Carbophenothion	102	125	106				16.3
	Carfentrazone Ethyl	115	138	126				9.06
	Chlorfenapyr	88.4	99.6	93.5				6.32
	Chlorpyrifos Ethyl	96.4	93.8	101				7.31

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Chlorpyrifos Methyl	94.6	87.8	90.0		2.55
	Coumaphos	71.4	179	145		21.0
	Cyanazine	193	213	180		16.8
	Cyprodinil	107	103	78.3		26.9
	Dechlorane 602	98.0	121	113		6.80
	Dechlorane 603	134	160	156		2.43
	Dechlorane Plus	99.8	97.6	98.0		0.446
	Demeton	88.1	98.1	93.3		5.03
	Diazinon	110	110	114		3.94
	Difenoconazole	129	229	200		13.9
	Dimethenamid	91.5	89.4	96.3		7.49
	Dimethomorph	191	165	184		10.4
	Disulfoton	101	111	107		4.41
	Dithiopyr	103	111	110		1.73
	EPTC	51.5	49.4	44.8		9.68
	Ethion	83.4	93.8	81.4		14.1
	Ethoprop	95.6	101	100		0.229
	Etridiazole	70.0	83.4	66.1		23.1
	Fenamiphos	92.8	82.4	91.8		10.8
	Fenbuconazole	70.7	108	95.7		11.7
	Fipronil	106	118	106		10.6
	Fipronil Desulfinyl	100	111	99.5		10.7
	Fipronil Sulfide	93.5	94.9	95.4		0.573
	Fipronil Sulfone	83.8	95.7	101		5.81
	Fluazifop-P-butyl	96.3	80.5	94.7		16.3
	Fludioxonil	89.7	91.7	105		13.5
	Flumioxazin	114	214	194		9.81
	Flutolanil	93.6	96.1	99.9		3.88
	Fluxapyroxad	103	123	112		8.32
	Fonofos	93.8	90.1	87.3		3.09
	Hexabromobenzene	133	145	139		4.15
	Hexazinone	98.8	108	109		1.22
	Imazalil	101	107	94.7		12.1
	Iprodione	118	94.9	190		66.9
	Loratadine	181	137	154		11.1
	Malathion	101	115	105		8.67
	Metalaxyl	97.4	111	89.2		21.5
	Metolachlor	101	80.0	98.7		8.37
	Metribuzin	95.8	104	105		0.823
	Mevinphos	97.1	143	110		26.5
	Molinate	57.3	54.2	60.1		10.3
	Myclobutanil	98.0	118	102		14.5
	Naled	48.5	44.9	46.4		3.26
	Napropamide	85.0	78.1	103		27.1
	Norflurazon	62.3	120	104		14.2
	Octinoxate	123	128	126		1.36
	Oxadiazon	94.6	106	95.2		10.7
	Oxybenzone	128	141	136		3.25
	Oxyfluorfen	112	118	121		2.79
	Parathion Ethyl	103	106	96.7		9.05
	Parathion Methyl	104	96.6	82.6		15.6
	PBB-153	130	149	144		3.48
	PBDE-47	112	121	118		2.65
	PBDE-99	96.6	117	109		6.90

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Pendimethalin	112	123	105		16.2
	Pentabromotoluene	123	132	123		7.27
	Phenytoin	22.8	41.7	36.9		12.1
	Phorate	87.6	127	112		12.7
	Prodiamine	48.2	55.7	53.0		4.96
	Prometon	98.7	102	99.2		2.66
	Prometryn	118	111	116		4.96
	Pronamide	114	131	117		11.8
	Propanil	119	138	122		12.4
	Propargite	65.7	92.3	80.8		13.3
	Propiconazole	89.1	124	105		17.2
	Pyraflufen Ethyl	97.7	126	111		12.9
	Pyridaben	125	171	137		21.8
	Pyriproxyfen	85.5	134	108		20.8
	Simazine	91.1	96.2	95.6		0.694
	Stirophos	69.2	53.1	83.0		44.0
	Sulfentrazone	77.2	119	87.3		30.4
	Tebuconazole	70.0	98.0	91.2		7.20
	Terbufos	109	121	116		3.50
	Terbutylazine	86.5	90.5	91.7		1.32
	Tetradecachloro-m-terphenyl	141	126	135		6.71
	Thiobencarb	93.6	97.1	91.4		5.54
	Tri-o-cresyl Phosphate	123	129	129		0.0811
	Triadimefon	96.6	114	90.4		23.2
	Tris(1-chloro-2-propyl) phosphate (TCPP)	121	108	104		4.34
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	111	120	121		1.26
	Tris(2-chloroethyl) phosphate (TCEP)	117	120	121		0.582
EPA 8321B	2,4-D	105				0.743
	2,4,5-T	86.1	100	101		0.391
	Acesulfame K	79.4	92.4	94.6		2.35
	Acetaminophen	95.0	93.1	85.4		8.58
	Acetamiprid	84.4	72.7	72.9		0.230
	Afidopyropen	64.2	51.3	64.4		22.6
	AMPA	95.6	81.3	75.7		7.09
	Bentazon	114				1.12
	Benzovindiflupyr	93.4	89.4	97.9		9.04
	Carbamazepine	77.8	65.7	68.5		4.24
	Clothianidin	97.9	98.8	89.3		10.1
	Dinotefuran	102	75.0	82.9		10.0
	Diuron	82.4	54.1	37.6		28.5
	Endothall	97.5	117	122		4.22
	Fenuron	95.0	75.3	77.8		3.25
	Fluridone	94.0	86.7	96.4		7.68
	Glufosinate	100	86.7	82.7		4.79
	Glyphosate	95.9	96.1	99.6		3.60
	Hydrocodone	86.9	63.6	62.1		2.40
	Ibuprofen	82.3	66.0	58.3		12.4
	Imazapyr	95.4				2.11
	Imidacloprid	74.0				1.56
	Linuron	82.7	76.6	71.6		6.73
	Mandestrobin	98.7	93.2	97.1		4.08

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
EPA 8321B	MCCP	101	115	109			4.84
	Naproxen	68.7	64.9	86.9			29.0
	Primidone	75.6	75.8	82.8			8.84
	Pyraclostrobin	88.1	95.6	97.5			2.04
	Silvex	78.9	78.9	83.6			5.76
	Sucralose	112	95.7	89.2			2.90
	Thiamethoxam	78.7	63.5	68.7			7.92
	Tolfenpyrad	53.0	57.0	56.3			1.28
	Triclopyr	93.6	101	104			2.66
SM 2320 B-2011	Total Alkalinity	95.1				1.03	
SM 2540 C-2015	TDS	93.7				8.07	
SM 2540 D-2015	TSS	94.8					
SM 4500-F- C-2011	Fluoride	105	105	107			0.979
SM 5310 B-2011	Organic Carbon	94.8	93.6	95.7			1.34

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2418343
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2418343
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2418356
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2418356
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2418343
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2418343
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2418344
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2418344
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2418344
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2418344
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2418345
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2418357
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2418357
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2418355
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2418343
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2418356
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2418343
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2418343
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2418343
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2418344

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	06/20/2023			06/20/2023 13:14	Chandler E Cox	2418343
EPA 180.1 Rev. 2.0	06/20/2023			06/20/2023 12:38	Alexis Price	2418343
EPA 200.7 Rev. 4.4	06/20/2023	06/21/2023 12:20	George D Taylor	06/29/2023 18:50	Samatha Luckman	2418356
EPA 200.8 Rev. 5.4	06/20/2023	06/21/2023 12:20	George D Taylor	06/22/2023 17:07	Emily M Philpot	2418356
EPA 300.0 Rev. 2.1	06/20/2023			06/22/2023 03:49	James L Waggeberby	2418343
EPA 350.1 Rev. 2.0	06/20/2023			06/27/2023 11:08	Khloe J Berg	2418344
EPA 351.2 Rev. 2.0	06/20/2023	06/22/2023 12:16	Dana G. Hughes	06/23/2023 12:14	Ping Hua	2418344
EPA 353.2 Rev. 2.0	06/20/2023			06/22/2023 11:30	Beverly Y. Sanders	2418344
EPA 365.1 Rev. 2.0	06/20/2023	06/21/2023 14:57	Adam P Silver	06/22/2023 12:34	Simonne.V. Calhoun	2418344
EPA 365.1 Rev. 2.0 dissolved	06/20/2023			06/20/2023 15:23	Adam P Silver	2418345
EPA 8270E	06/20/2023	06/21/2023 08:00	Fe-Val Siddell	06/24/2023 00:26	Arthur Maknenko	2418357
	06/20/2023	06/21/2023 08:00	Fe-Val Siddell	06/29/2023 20:31	Vandana T. Nagar	2418357
EPA 8321B	06/20/2023	06/22/2023 09:00	Hoor Shaik	06/26/2023 17:20	Juyoung Kim	2418355
	06/20/2023	06/22/2023 09:00	Hoor Shaik	06/28/2023 19:08	Juyoung Kim	2418355
	06/20/2023	06/23/2023 16:00	Hana Lee	06/24/2023 02:11	Tae K Lee	2418355
	06/20/2023	06/23/2023 16:00	Hana Lee	06/24/2023 14:29	Tae K Lee	2418355
SM 2320 B-2011	06/20/2023			06/24/2023 01:04	Dale L. Simmons	2418343
SM 2340 B-2011	06/20/2023			06/29/2023 18:50	Samatha Luckman	2418356
SM 2540 C-2015	06/20/2023			06/21/2023 15:02	Yijie Li	2418343
SM 2540 D-2015	06/20/2023			06/21/2023 15:02	Yijie Li	2418343
SM 4500-F- C-2011	06/20/2023			06/24/2023 01:04	Dale L. Simmons	2418343
SM 5310 B-2011	06/20/2023			06/21/2023 21:08	Elise M. Gillis	2418344