

Chemical Analysis Report

CEN-DIST-2023-05-05-02

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

Event Description: **Henderson Lake LVI**
Request ID: **RQ-2023-05-01-24**
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: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 30-MAY-2023 14:01



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 CONWAY CENTER OF LAKE

Collection Date/Time: 05/04/2023 12:37

Field ID: G4CE0221

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2406067	DEP SOP: NU-094-1	Color (true)	4.7	I	PCU	P429504	
	EPA 180.1 Rev. 2.0	Turbidity	0.60	I	NTU	P429492	
	EPA 300.0 Rev. 2.1	Chloride	31	A	mg Cl/L	P429957	
		Sulfate	23	A	mg SO4/L	P429959	
	SM 2320 B-2011	Total Alkalinity	31		mg CaCO3/L	P429832	
	SM 2540 C-2015	TDS	115		mg/L	P430021	
	SM 2540 D-2015	TSS	2	U	mg/L	P429891	
2406068	SM 4500-F- C-2011	Fluoride	0.056	I	mg F/L	P429884	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P429613	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.48		mg N/L	P429629	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P429815	
	EPA 365.1 Rev. 2.0	Total-P	0.01		mg P/L	P429540	
2406069	SM 5310 B-2011	Organic Carbon	4.9		mg C/L	P429758	
2406071	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P429498	
	EPA 8321B	2,4-D	0.12		ug/L	P429588	
		Acesulfame K	0.10	U	ug/L	P429323	
		2,4,5-T	0.0040	U	ug/L	P429588	
		AMPA	0.10	U	ug/L	P429323	
		Acetaminophen	0.0080	U	ug/L	P429588	
		Acetamiprid	0.0020	U	ug/L	P429588	
		Endothall	0.25	U	ug/L	P429323	
		Glufosinate	0.10	U	ug/L	P429323	
		Glyphosate	0.10	U	ug/L	P429323	
		Afidopyropen	0.0020	U	ug/L	P429588	
		Sucralose	0.64		ug/L	P429323	
		Bentazon	0.012		ug/L	P429588	
		Benzovindiflupyr	0.0020	U	ug/L	P429588	
		Carbamazepine	8.0E-04	U	ug/L	P429588	
		Clothianidin	0.0020	U	ug/L	P429588	
		Dinotefuran	0.0020	U	ug/L	P429588	
		Diuron	0.0024	I	ug/L	P429588	
		Fenuron	0.032	U	ug/L	P429588	
		Fluridone	0.0013	I	ug/L	P429588	
		Imazapyr	0.0040	U	ug/L	P429588	
		Hydrocodone	0.0020	U	ug/L	P429588	
		Ibuprofen	0.080	U	ug/L	P429588	
		Imidacloprid	0.0020	U	ug/L	P429588	
		Linuron	0.0040	U	ug/L	P429588	
		Mandestrobin	0.0020	U	ug/L	P429588	
		MCPP	0.0020	U	ug/L	P429588	
		Naproxen	0.0080	U	ug/L	P429588	
		Primidone	0.0040	U	ug/L	P429588	
		Pyraclostrobin	0.0020	U	ug/L	P429588	
							MS

Field ID: G4CE0221

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2406071	EPA 8321B	Silvex	0.0040	U	ug/L	P429588	
		Thiamethoxam	0.0020	U	ug/L	P429588	
		Tolfenpyrad	0.0020	U	ug/L	P429588	
		Triclopyr	0.0040	U	ug/L	P429588	
2406072	EPA 200.7 Rev. 4.4	Calcium	15.9		mg/L	P429542	
		Iron	30	U	ug/L	P429542	
		Magnesium	3.84		mg/L	P429542	
		Potassium	3.5		mg/L	P429542	
		Sodium	18.5		mg/L	P429542	
		Strontium	45.4		ug/L	P429542	
		Tin	3.0	U	ug/L	P429542	
		Titanium	0.75	U	ug/L	P429542	
		Vanadium	2.0	U	ug/L	P429542	
		Zinc	5.0	U	ug/L	P429542	
	EPA 200.8 Rev. 5.4	Aluminum	24		ug/L	P429542	
		Antimony	0.21		ug/L	P429542	
		Arsenic	3.03		ug/L	P429542	
		Barium	10.1		ug/L	P429542	
		Beryllium	0.010	U	ug/L	P429542	
		Boron	59.0		ug/L	P429542	
		Cadmium	0.020	U	ug/L	P429542	
		Chromium	0.40	U	ug/L	P429542	
		Cobalt	0.020	U	ug/L	P429542	
		Copper	0.61	I	ug/L	P429542	
		Lead	0.20	U	ug/L	P429542	
		Manganese	5.07		ug/L	P429542	
2406073	SM 2340 B-2011	Molybdenum	0.37	I	ug/L	P429542	
		Nickel	0.50	U	ug/L	P429542	
	EPA 8270E	Selenium	0.20	U	ug/L	P429542	
		Silver	0.010	U	ug/L	P429542	
		Thallium	0.10	U	ug/L	P429542	
		Hardness	55.6		mg/L	P429542	
		Oxybenzone**	10	U	ng/L	P429507	
		Acetochlor	0.21	U	ng/L	P429507	
		Octinoxate**	32	V	ng/L	P429507	MS
		Alachlor	0.42	U	ng/L	P429507	
		Avobenzone**	100	U	ng/L	P429507	
		Ametryn	1.1	U	ng/L	P429507	
		Atrazine	38		ng/L	P429507	
		PBDE-47**	4.2	U	ng/L	P429507	
		Atrazine Desethyl	11		ng/L	P429507	
		PBDE-99**	5.2	U	ng/L	P429507	
		Azinphos Methyl	3.1	U	ng/L	P429507	
		Tri-o-cresyl Phosphate**	6.3	U	ng/L	P429507	
		Azoxystrobin	0.42	U	ng/L	P429507	

Field ID: G4CE0221

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2406073	EPA 8270E	Bromacil	1.7	I	ng/L	P429507	LCS, MS
		2-Ethylhexyl	13	U	ng/L	P429507	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.21	U	ng/L	P429507	
		Dechlorane Plus**	31	U	ng/L	P429507	
		Caffeine**	10	I	ng/L	P429507	
		Dechlorane 602**	5.2	U	ng/L	P429507	
		Carbophenothion	0.52	U	ng/L	P429507	
		Dechlorane 603**	4.2	U	ng/L	P429507	
		Carfentrazone Ethyl	0.16	U	ng/L	P429507	
		Hexabromobenzene**	6.3	U	ng/L	P429507	
		Chlorfenapyr	0.31	U	ng/L	P429507	
		PBB-153**	8.4	U	ng/L	P429507	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P429507	
		Pentabromotoluene**	3.1	U	ng/L	P429507	
		Chlorpyrifos Methyl	0.10	U	ng/L	P429507	
		Tris(2-chloroethyl) phosphate (TCEP)**	73	U	ng/L	P429507	
		Coumaphos	1.1	U	ng/L	P429507	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	16	U	ng/L	P429507	
		Cyanazine	5.2	U	ng/L	P429507	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.6	U	ng/L	P429507	
		Cyprodinil	0.21	U	ng/L	P429507	
		Tetradecachloro-m-terphenyl**	7.8	UJ	ng/L	P429507	
		Demeton	3.7	U	ng/L	P429507	
		Diazinon	0.13	U	ng/L	P429507	
		Difenoconazole	0.63	U	ng/L	P429507	
		Dimethenamid	0.10	U	ng/L	P429507	
		Dimethomorph	0.31	U	ng/L	P429507	
		Disulfoton	0.63	U	ng/L	P429507	
		Dithiopyr	1.0	U	ng/L	P429507	
		EPTC	0.52	U	ng/L	P429507	
		Ethion	0.31	U	ng/L	P429507	
		Ethoprop	0.13	U	ng/L	P429507	
		Etridiazole	0.10	U	ng/L	P429507	
		Fenamiphos	0.47	U	ng/L	P429507	
		Fenbuconazole	0.52	U	ng/L	P429507	
		Fipronil	0.21	U	ng/L	P429507	
		Fipronil Desulfinyl**	0.56		ng/L	P429507	
		Fipronil Sulfide	0.10	U	ng/L	P429507	
		Fipronil Sulfone	0.38	I	ng/L	P429507	
		Fluazifop-P-butyl	0.10	U	ng/L	P429507	
		Fludioxonil	0.10	U	ng/L	P429507	
		Flumioxazin	3.1	U	ng/L	P429507	
		Flutolanil	0.10	U	ng/L	P429507	
		Fluxapyroxad	0.26	U	ng/L	P429507	

Field ID: G4CE0221

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2406073	EPA 8270E	Fonofos	0.16	U	ng/L	P429507	LCS, MS
		Hexazinone	0.52	U	ng/L	P429507	
		Imazalil	0.68	U	ng/L	P429507	
		Iprodione	0.52	UJ	ng/L	P429507	
		Loratadine**	0.31	U	ng/L	P429507	
		Malathion	0.37	U	ng/L	P429507	
		Metalaxyl	0.52	U	ng/L	P429507	
		Metolachlor	0.78	U	ng/L	P429507	
		Metribuzin	0.42	U	ng/L	P429507	
		Mevinphos	1.0	U	ng/L	P429507	
		Molinate	0.26	U	ng/L	P429507	
		Myclobutanil	0.47	I	ng/L	P429507	
		Naled	2.6	U	ng/L	P429507	
		Napropamide	0.73	U	ng/L	P429507	
		Norflurazon	1.0	U	ng/L	P429507	
		Oxadiazon	0.56	I	ng/L	P429507	
		Oxyfluorfen	0.21	U	ng/L	P429507	
		Parathion Ethyl	0.16	U	ng/L	P429507	
		Parathion Methyl	0.21	U	ng/L	P429507	
		Pendimethalin	0.78	U	ng/L	P429507	
		Phenytol**	5.5	U	ng/L	P429507	MS
		Phorate	0.26	U	ng/L	P429507	
		Prodiamine	0.21	U	ng/L	P429507	
		Prometon	37		ng/L	P429507	
		Prometryn	0.37	U	ng/L	P429507	
		Pronamide	0.10	U	ng/L	P429507	
		Propanil	0.10	U	ng/L	P429507	
		Propargite	0.84	U	ng/L	P429507	
		Propiconazole	1.9	I	ng/L	P429507	
		Pyraflufen Ethyl	0.31	U	ng/L	P429507	
		Pyridaben	12		ng/L	P429507	LCS
		Pyriproxyfen	0.26	UJ	ng/L	P429507	
		Simazine	0.26	U	ng/L	P429507	
		Stirophos	0.42	U	ng/L	P429507	
		Sulfentrazone	1.5	U	ng/L	P429507	
		Tebuconazole	2.5	I	ng/L	P429507	
		Terbufos	0.21	U	ng/L	P429507	
		Terbuthylazine	0.21	U	ng/L	P429507	
		Thiobencarb	0.52	U	ng/L	P429507	
		Triadimefon	0.16	U	ng/L	P429507	

Ref. Method and Comment:

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

EPA 8270E: V - Due to the presence of octinoxate in both the Method Blank and the sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: MS accuracy for bromacil and norflurazon not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P429504

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429492

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429542

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: P429542

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: P429957

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: P429959

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429613

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429629

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429815

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429540

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P429498

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

Reference Method: EPA 8270E
Batch ID: P429507

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: P429507

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: P429507

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: P429507

Component	Result	Code	Units
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	92		ng/L
Octinoxate	42	I	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: P429507

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: P429323

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: P429588

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: P429588

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: P429832

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

Reference Method: SM 2540 C-2015

Batch ID: P430021

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P429891

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P429884

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P429758

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: P429504

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429492

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.4		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429542

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	100		P	80 - 120
Iron	100		P	80 - 120
Magnesium	101		P	80 - 120
Potassium	100		P	80 - 120
Sodium	99.5		P	80 - 120
Strontium	102		P	80 - 120
Tin	102		P	80 - 120
Titanium	100		P	80 - 120
Vanadium	99.7		P	80 - 120
Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P429542

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	108		P	85 - 115
Arsenic	102		P	85 - 115
Barium	105		P	85 - 115
Beryllium	98.9		P	85 - 115
Boron	103		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	98.6		P	85 - 115
Cobalt	103		P	85 - 115
Copper	98.5		P	85 - 115
Lead	105		P	85 - 115
Manganese	99.7		P	85 - 115
Molybdenum	101		P	85 - 115
Nickel	98.0		P	85 - 115
Selenium	102		P	85 - 115
Silver	106		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429957

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: P429959

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429613

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429629

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: P429815

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: P429540

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P429498

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

Reference Method: EPA 8270E
Batch ID: P429507

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	123		P	42 - 162
Acetochlor	71.8		P	69 - 123
Alachlor	100		P	65 - 118
Ametryn	135		P	58 - 141
Atrazine	94.6		P	73 - 118
Atrazine Desethyl	109		P	32 - 125
Avobenzone	170		P	40 - 203
Azinphos Methyl	193		P	36 - 197
Azoxystrobin	98.7		P	58 - 226
Bromacil	94.8		P	48 - 120
Butylate	57.6		P	27 - 85.0
Caffeine	104		P	40 - 137
Carbophenothion	110		P	54 - 132
Carfentrazone Ethyl	103		P	60 - 142
Chlorfenapyr	71.6		P	53 - 117
Chlorpyrifos Ethyl	73.2		P	59 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P429507

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	82.0		P	66 - 119
Coumaphos	99.4		P	11 - 234
Cyanazine	210		P	61 - 248
Cyprodinil	101		P	50 - 147
Dechlorane 602	94.0		P	50 - 150
Dechlorane 603	138		P	50 - 150
Dechlorane Plus	95.2		P	47 - 182
Demeton	81.6		P	30 - 138
Diazinon	111		P	67 - 126
Difenoconazole	86.3		P	38 - 205
Dimethenamid	103		P	57 - 111
Dimethomorph	152		P	16 - 212
Disulfoton	98.2		P	46 - 126
Dithiopyr	106		P	62 - 115
EPTC	46.5		P	28 - 80.0
Ethion	81.4		P	24 - 122
Ethoprop	82.2		P	62 - 113
Etridiazole	60.6		P	28 - 92.0
Fenamiphos	68.3		P	57 - 128
Fenbuconazole	67.7		P	52 - 155
Fipronil	76.6		P	63 - 130
Fipronil Desulfinyl	87.3		P	61 - 130
Fipronil Sulfide	91.0		P	56 - 117
Fipronil Sulfone	82.4		P	52 - 118
Fluazifop-P-butyl	104		P	61 - 128
Fludioxonil	82.5		P	59 - 129
Flumioxazin	137		P	30 - 250
Flutolanil	102		P	53 - 127
Fluxapyroxad	81.5		P	42 - 132
Fonofos	109		P	61 - 110
Hexabromobenzene	128		P	50 - 150
Hexazinone	87.3		P	46 - 139
Imazalil	86.0		P	40 - 139
Iprodione	31.2		F	40 - 146
Loratadine	168		P	10 - 224
Malathion	80.7		P	61 - 135
Metaxyl	91.3		P	58 - 121
Metolachlor	77.2		P	64 - 118
Metribuzin	109		P	45 - 245
Mevinphos	63.1		P	49 - 118
Molinate	58.1		P	42 - 92.0
Myclobutanil	99.8		P	55 - 127
Naled	35.0		P	10 - 114
Napropamide	82.8		P	39 - 121
Norflurazon	96.9		P	55 - 129
Octinoxate	166		P	26 - 166
Oxadiazon	88.9		P	54 - 115
Oxybenzone	118		P	49 - 135
Oxyfluorfen	79.7		P	64 - 139
Parathion Ethyl	90.3		P	70 - 111
Parathion Methyl	89.5		P	76 - 136
PBB-153	145		P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P429507

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	116		P	41 - 148
PBDE-99	114		P	38 - 147
Pendimethalin	85.9		P	52 - 118
Pentabromotoluene	126		P	50 - 150
Phenytoin	136		P	10 - 162
Phorate	99.9		P	40 - 122
Prodiamine	55.9		P	26 - 141
Prometon	105		P	54 - 122
Prometryn	124		P	61 - 128
Pronamide	110		P	72 - 121
Propanil	106		P	45 - 144
Propargite	66.0		P	10 - 199
Propiconazole	75.9		P	56 - 127
Pyraflufen Ethyl	98.0		P	56 - 140
Pyridaben	77.6		P	26 - 211
Pyriproxyfen	221		F	33 - 194
Simazine	82.6		P	67 - 121
Stiropfos	58.9		P	20 - 142
Sulfentrazone	62.2		P	21 - 144
Tebuconazole	68.2		P	10 - 122
Terbufos	119		P	60 - 129
Terbutylazine	85.3		P	69 - 113
Tetradecachloro-m-terphenyl	233		F	70 - 200
Thiobencarb	105		P	51 - 120
Tri-o-cresyl Phosphate	118		P	49 - 150
Triadimefon	94.9		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	98.5		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	113		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	119		P	70 - 180

Reference Method: EPA 8321B
Batch ID: P429323

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	144		P	40 - 150
AMPA	97.2		P	40 - 150
Endothall	77.8		P	40 - 150
Glufosinate	79.1		P	40 - 150
Glyphosate	96.7		P	40 - 150
Sucralose	118		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429588

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	87.9		P	40 - 150
2,4,5-T	94.3		P	40 - 150
Acetaminophen	95.9		P	30 - 150
Acetamiprid	81.4		P	40 - 150
Afidopyropen	64.9		P	30 - 150
Bentazon	149		P	30 - 150
Benzovindiflupyr	89.5		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P429588

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbamazepine	92.5		P	40 - 150
Clothianidin	88.4		P	40 - 150
Dinotefuran	107		P	40 - 150
Diuron	89.3		P	40 - 150
Fenuron	93.2		P	40 - 150
Fluridone	86.4		P	40 - 150
Hydrocodone	93.3		P	40 - 150
Ibuprofen	99.5		P	40 - 150
Imazapyr	87.5		P	40 - 150
Imidacloprid	97.2		P	40 - 150
Linuron	89.7		P	40 - 150
Mandestrobin	87.5		P	40 - 150
MCPP	92.8		P	40 - 150
Naproxen	101		P	40 - 150
Primidone	89.2		P	40 - 150
Pyraclostrobin	86.6		P	40 - 150
Silvex	96.2		P	40 - 150
Thiamethoxam	83.8		P	40 - 150
Tolfenpyrad	54.8		P	30 - 150
Triclopyr	85.6		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P429832

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.6		P	94 - 106

Reference Method: SM 2540 C-2015

Batch ID: P430021

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

Reference Method: SM 2540 D-2015

Batch ID: P429891

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

Reference Method: SM 4500-F- C-2011

Batch ID: P429884

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.5		P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P429758

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.1		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P429542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405704	Calcium	99.2		P	80 - 120
2405704	Iron	105	103	P/P	80 - 120
2405704	Magnesium	104	102	P/P	80 - 120
2405704	Potassium	104	103	P/P	80 - 120
2405704	Sodium	98.9		P	80 - 120
2405704	Strontium	104	103	P/P	80 - 120
2405704	Tin	101	99.4	P/P	80 - 120
2405704	Titanium	101	102	P/P	80 - 120
2405704	Vanadium	101	102	P/P	80 - 120
2405704	Zinc	104	103	P/P	80 - 120
2406025	Calcium	99.2		P	80 - 120
2406025	Iron	102		P	80 - 120
2406025	Magnesium	100		P	80 - 120
2406025	Potassium	100		P	80 - 120
2406025	Sodium	98.9		P	80 - 120
2406025	Strontium	101		P	80 - 120
2406025	Tin	97.8		P	80 - 120
2406025	Titanium	101		P	80 - 120
2406025	Vanadium	100		P	80 - 120
2406025	Zinc	98.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P429542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405704	Aluminum	98.9	100	P/P	80 - 120
2405704	Antimony	107	107	P/P	80 - 120
2405704	Arsenic	102	101	P/P	80 - 120
2405704	Barium	103	104	P/P	80 - 120
2405704	Beryllium	99.1	98.6	P/P	80 - 120
2405704	Boron	100	102	P/P	80 - 120
2405704	Cadmium	103	103	P/P	80 - 120
2405704	Chromium	97.5	97.4	P/P	80 - 120
2405704	Cobalt	101	101	P/P	80 - 120
2405704	Copper	96.8	96.6	P/P	80 - 120
2405704	Lead	104	104	P/P	80 - 120
2405704	Manganese	97.9	97.1	P/P	80 - 120
2405704	Molybdenum	103	101	P/P	80 - 120
2405704	Nickel	97.5	96.8	P/P	80 - 120
2405704	Selenium	102	101	P/P	80 - 120
2405704	Silver	103	102	P/P	80 - 120
2405704	Thallium	103	103	P/P	80 - 120
2406025	Aluminum	98.8		P	80 - 120
2406025	Antimony	107		P	80 - 120
2406025	Arsenic	100		P	80 - 120
2406025	Barium	103		P	80 - 120
2406025	Beryllium	96.8		P	80 - 120
2406025	Boron	103		P	80 - 120
2406025	Cadmium	101		P	80 - 120
2406025	Chromium	96.8		P	80 - 120
2406025	Cobalt	101		P	80 - 120
2406025	Copper	96.2		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P429542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2406025	Lead	105		P	80 - 120
2406025	Manganese	98.0		P	80 - 120
2406025	Molybdenum	100		P	80 - 120
2406025	Nickel	96.5		P	80 - 120
2406025	Selenium	101		P	80 - 120
2406025	Silver	104		P	80 - 120
2406025	Thallium	104		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429957

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2406067	Chloride	101		P	90 - 110
2407422	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429959

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2406067	Sulfate	98.4		P	90 - 110
2407422	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429613

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2406055	Ammonia-N	98.6	99.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2406057	Kjeldahl Nitrogen	98.8	95.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429815

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2406068	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P429498

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405953	O-Phosphate-P	96.7	95.6	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P429507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405052	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	110	119	P/P	26 - 165
2405052	Acetochlor	70.2	72.8	P/P	67 - 124

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P429507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405052	Alachlor	82.7	81.1	P/P	60 - 120
2405052	Ametryn	136	137	P/P	54 - 216
2405052	Atrazine	86.2	103	P/P	66 - 128
2405052	Atrazine Desethyl	109	99.7	P/P	15 - 122
2405052	Avobenzone	149	163	P/P	37 - 178
2405052	Azinphos Methyl	162	163	P/P	40 - 292
2405052	Azoxystrobin	106	122	P/P	35 - 220
2405052	Butylate	57.3	59.0	P/P	20 - 83.0
2405052	Caffeine	99.5	95.8	P/P	10 - 194
2405052	Carbophenothion	92.7	98.7	P/P	57 - 127
2405052	Carfentrazone Ethyl	92.7	94.9	P/P	51 - 141
2405052	Chlorfenapyr	62.5	67.9	P/P	46 - 111
2405052	Chlorpyrifos Ethyl	61.8	60.7	P/P	52 - 120
2405052	Chlorpyrifos Methyl	81.9	89.1	P/P	63 - 119
2405052	Coumaphos	80.9	84.9	P/P	10 - 228
2405052	Cyanazine	234	235	P/P	59 - 241
2405052	Cyprodinil	97.6	107	P/P	47 - 146
2405052	Dechlorane 602	79.1	82.3	P/P	50 - 150
2405052	Dechlorane 603	118	128	P/P	50 - 150
2405052	Dechlorane Plus	82.0	81.2	P/P	50 - 150
2405052	Demeton	83.4	86.4	P/P	40 - 136
2405052	Diazinon	112	113	P/P	69 - 132
2405052	Difenoconazole	68.4	75.9	P/P	57 - 258
2405052	Dimethenamid	91.6	95.9	P/P	54 - 110
2405052	Dimethomorph	166	171	P/P	28 - 210
2405052	Disulfoton	96.7	93.9	P/P	43 - 133
2405052	Dithiopyr	85.4	90.2	P/P	39 - 116
2405052	EPTC	44.9	46.4	P/P	20 - 78.0
2405052	Ethion	92.1	102	P/P	17 - 119
2405052	Ethoprop	89.9	96.6	P/P	66 - 120
2405052	Etridiazole	56.8	57.2	P/P	28 - 96.0
2405052	Fenamiphos	69.8	69.4	P/P	41 - 126
2405052	Fenbuconazole	54.4	57.0	P/P	42 - 169
2405052	Fipronil	65.7	68.9	P/P	61 - 132
2405052	Fipronil Desulfinyl	78.4	77.4	P/P	56 - 132
2405052	Fipronil Sulfide	71.8	69.9	P/P	48 - 119
2405052	Fipronil Sulfone	72.8	76.4	P/P	42 - 131
2405052	Fluazifop-P-butyl	103	105	P/P	53 - 131
2405052	Fludioxonil	80.7	79.2	P/P	56 - 127
2405052	Flumioxazin	116	127	P/P	19 - 300
2405052	Flutolanil	93.8	102	P/P	41 - 127
2405052	Fluxapyroxad	71.0	74.8	P/P	42 - 172
2405052	Fonofos	110	110	P/P	59 - 113
2405052	Hexabromobenzene	120	121	P/P	50 - 150
2405052	Hexazinone	94.9	92.6	P/P	66 - 122
2405052	Imazalil	59.5	58.2	P/P	21 - 283
2405052	Iprodione	34.0	42.2	F/F	43 - 150
2405052	Loratadine	148	146	P/P	23 - 201
2405052	Malathion	75.2	77.7	P/P	58 - 136
2405052	Metalaxyl	80.0	73.5	P/P	55 - 120
2405052	Metolachlor	76.8	76.4	P/P	57 - 121
2405052	Metribuzin	107	108	P/P	58 - 294

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P429507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405052	Mevinphos	67.3	71.4	P/P	50 - 126
2405052	Molinate	59.9	61.6	P/P	42 - 93.0
2405052	Myclobutanil	96.0	95.7	P/P	55 - 125
2405052	Naled	41.0	50.6	P/P	18 - 200
2405052	Napropamide	72.7	79.1	P/P	39 - 110
2405052	Octinoxate	161	177	F/F	21 - 159
2405052	Oxadiazon	83.4	82.8	P/P	43 - 112
2405052	Oxybenzone	107	111	P/P	41 - 142
2405052	Oxyfluorfen	89.0	84.4	P/P	64 - 153
2405052	Parathion Ethyl	93.6	90.8	P/P	69 - 114
2405052	Parathion Methyl	90.8	101	P/P	79 - 139
2405052	PBB-153	126	140	P/P	50 - 150
2405052	PBDE-47	103	110	P/P	27 - 144
2405052	PBDE-99	95.1	101	P/P	18 - 150
2405052	Pendimethalin	85.9	95.6	P/P	50 - 139
2405052	Pentabromotoluene	116	124	P/P	50 - 150
2405052	Phenytoin	156	162	F/F	10 - 146
2405052	Phorate	107	121	P/P	54 - 161
2405052	Prodiamine	61.2	61.7	P/P	30 - 161
2405052	Prometon	94.9	96.1	P/P	45 - 134
2405052	Prometryn	112	110	P/P	45 - 137
2405052	Pronamide	101	107	P/P	65 - 133
2405052	Propanil	114	112	P/P	49 - 142
2405052	Propargite	59.8	60.3	P/P	10 - 203
2405052	Propiconazole	70.7	73.3	P/P	38 - 146
2405052	Pyraflufen Ethyl	83.6	77.2	P/P	34 - 153
2405052	Pyridaben	47.7	55.5	P/P	12 - 192
2405052	Pyriproxyfen	128	171	P/P	33 - 180
2405052	Simazine	56.6	66.9	P/P	51 - 157
2405052	Stiropfos	40.1	42.0	P/P	10 - 128
2405052	Sulfentrazone	73.4	59.3	P/P	53 - 186
2405052	Tebuconazole	63.7	63.2	P/P	10 - 133
2405052	Terbufos	115	120	P/P	65 - 139
2405052	Terbutylazine	81.3	85.4	P/P	66 - 117
2405052	Tetradecachloro-m-terphenyl	227	251	F/F	70 - 200
2405052	Thiobencarb	92.0	95.8	P/P	51 - 119
2405052	Tri-o-cresyl Phosphate	102	109	P/P	31 - 144
2405052	Triadimefon	86.2	90.0	P/P	48 - 119
2405052	Tris(1-chloro-2-propyl) phosphate (TCPP)	100	102	P/P	50 - 150
2405052	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	103	109	P/P	50 - 150
2405052	Tris(2-chloroethyl) phosphate (TCEP)	106	108	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P429323

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405697	Acesulfame K	133	135	P/P	40 - 150
2405697	AMPA	91.2	90.8	P/P	40 - 150
2405697	Endothall	77.2	76.0	P/P	40 - 150
2405697	Glufosinate	67.6	69.6	P/P	40 - 150
2405697	Glyphosate	82.8	91.7	P/P	40 - 150
2405697	Sucralose	109	136	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P429588

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405849	2,4-D	87.0	93.4	P/P	40 - 150
2405849	2,4,5-T	87.1	89.0	P/P	40 - 150
2405849	Acetaminophen	90.9	93.3	P/P	30 - 150
2405849	Acetamiprid	91.0	92.7	P/P	40 - 150
2405849	Afidopyropen	86.1	100	P/P	30 - 150
2405849	Bentazon	162	156	F/F	30 - 150
2405849	Benzovindiflupyr	77.8	79.6	P/P	40 - 150
2405849	Carbamazepine	87.4	93.2	P/P	40 - 150
2405849	Clothianidin	84.4	89.7	P/P	40 - 150
2405849	Dinotefuran	96.1	96.2	P/P	40 - 150
2405849	Diuron	67.8	77.3	P/P	40 - 150
2405849	Fenuron	72.2	75.2	P/P	40 - 150
2405849	Fluridone	84.2	83.9	P/P	40 - 150
2405849	Hydrocodone	75.3	78.8	P/P	40 - 150
2405849	Ibuprofen	68.9	83.6	P/P	40 - 150
2405849	Imazapyr	107	108	P/P	40 - 150
2405849	Imidacloprid	101	105	P/P	40 - 150
2405849	Linuron	78.5	82.6	P/P	40 - 150
2405849	Mandestrobin	82.1	81.5	P/P	40 - 150
2405849	MCCP	90.4	99.1	P/P	40 - 150
2405849	Naproxen	98.8	85.3	P/P	40 - 150
2405849	Primidone	77.6	82.1	P/P	40 - 150
2405849	Pyraclostrobin	78.0	81.8	P/P	40 - 150
2405849	Silvex	101	100	P/P	40 - 150
2405849	Thiamethoxam	84.1	85.1	P/P	40 - 150
2405849	Tolfenpyrad	47.2	49.0	P/P	30 - 150
2405849	Triclopyr	87.0	96.1	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P429884

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2406054	Fluoride	97.8	98.3	P/P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P429758

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2406058	Organic Carbon	96.0	97.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P429504

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406051	Color (true)	0.426	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429492

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405919	Turbidity	15.9	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405704	Calcium	1.17	Spike	P	0 - 20
2405704	Iron	1.58	Spike	P	0 - 20
2405704	Magnesium	1.48	Spike	P	0 - 20
2405704	Potassium	0.505	Spike	P	0 - 20
2405704	Sodium	0.341	Spike	P	0 - 20
2405704	Strontium	1.30	Spike	P	0 - 20
2405704	Tin	1.73	Spike	P	0 - 20
2405704	Titanium	0.741	Spike	P	0 - 20
2405704	Vanadium	0.432	Spike	P	0 - 20
2405704	Zinc	0.175	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P429542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405704	Aluminum	1.15	Spike	P	0 - 20
2405704	Antimony	0.0221	Spike	P	0 - 20
2405704	Arsenic	0.678	Spike	P	0 - 20
2405704	Barium	0.369	Spike	P	0 - 20
2405704	Beryllium	0.549	Spike	P	0 - 20
2405704	Boron	0.948	Spike	P	0 - 20
2405704	Cadmium	0.285	Spike	P	0 - 20
2405704	Chromium	0.202	Spike	P	0 - 20
2405704	Cobalt	0.0975	Spike	P	0 - 20
2405704	Copper	0.165	Spike	P	0 - 20
2405704	Lead	0.260	Spike	P	0 - 20
2405704	Manganese	0.716	Spike	P	0 - 20
2405704	Molybdenum	1.46	Spike	P	0 - 20
2405704	Nickel	0.800	Spike	P	0 - 20
2405704	Selenium	1.12	Spike	P	0 - 20
2405704	Silver	0.598	Spike	P	0 - 20
2405704	Thallium	0.226	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429957

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406067	Chloride	1.92	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429959

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406067	Sulfate	1.50	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429613

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406055	Ammonia-N	0.900	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429629

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406057	Kjeldahl Nitrogen	3.97	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429815

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406068	NO2NO3-N	0.473	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429540

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406031	Total-P	0.240	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P429498

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405953	O-Phosphate-P	1.14	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P429507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405052	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	7.35	Spike	P	0 - 37
2405052	Acetochlor	3.60	Spike	P	0 - 28

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P429507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405052	Alachlor	1.98	Spike	P	0 - 30
2405052	Ametryn	0.661	Spike	P	0 - 32
2405052	Atrazine	8.90	Spike	P	0 - 41
2405052	Atrazine Desethyl	7.87	Spike	P	0 - 36
2405052	Avobenzone	9.11	Spike	P	0 - 36
2405052	Azinphos Methyl	0.0844	Spike	P	0 - 75
2405052	Azoxystrobin	13.2	Spike	P	0 - 39
2405052	Bromacil	0.648	Spike	P	0 - 33
2405052	Butylate	2.81	Spike	P	0 - 44
2405052	Caffeine	3.26	Spike	P	0 - 74
2405052	Carbophenothion	6.29	Spike	P	0 - 25
2405052	Carfentrazone Ethyl	2.31	Spike	P	0 - 27
2405052	Chlorfenapyr	8.39	Spike	P	0 - 24
2405052	Chlorpyrifos Ethyl	1.69	Spike	P	0 - 26
2405052	Chlorpyrifos Methyl	8.35	Spike	P	0 - 26
2405052	Coumaphos	4.82	Spike	P	0 - 28
2405052	Cyanazine	0.632	Spike	P	0 - 48
2405052	Cyprodinil	9.56	Spike	P	0 - 29
2405052	Dechlorane 602	4.00	Spike	P	0 - 30
2405052	Dechlorane 603	8.10	Spike	P	0 - 30
2405052	Dechlorane Plus	0.976	Spike	P	0 - 30
2405052	Demeton	3.54	Spike	P	0 - 33
2405052	Diazinon	0.719	Spike	P	0 - 29
2405052	Difenoconazole	10.4	Spike	P	0 - 34
2405052	Dimethenamid	4.57	Spike	P	0 - 39
2405052	Dimethomorph	2.72	Spike	P	0 - 51
2405052	Disulfoton	2.96	Spike	P	0 - 30
2405052	Dithiopyr	5.39	Spike	P	0 - 26
2405052	EPTC	3.37	Spike	P	0 - 43
2405052	Ethion	10.7	Spike	P	0 - 79
2405052	Ethoprop	7.12	Spike	P	0 - 29
2405052	Etridiazole	0.606	Spike	P	0 - 33
2405052	Fenamiphos	0.499	Spike	P	0 - 40
2405052	Fenbuconazole	4.16	Spike	P	0 - 74
2405052	Fipronil	4.82	Spike	P	0 - 29
2405052	Fipronil Desulfinyl	1.15	Spike	P	0 - 32
2405052	Fipronil Sulfide	2.73	Spike	P	0 - 30
2405052	Fipronil Sulfone	4.79	Spike	P	0 - 33
2405052	Fluazifop-P-butyl	2.08	Spike	P	0 - 38
2405052	Fludioxonil	1.84	Spike	P	0 - 29
2405052	Flumioxazin	9.05	Spike	P	0 - 51
2405052	Flutolanil	8.36	Spike	P	0 - 25
2405052	Fluxapyroxad	5.17	Spike	P	0 - 45
2405052	Fonofos	0.467	Spike	P	0 - 27
2405052	Hexabromobenzene	0.424	Spike	P	0 - 30
2405052	Hexazinone	1.67	Spike	P	0 - 30
2405052	Imazalil	2.21	Spike	P	0 - 100
2405052	Iprodione	21.6	Spike	P	0 - 33
2405052	Loratadine	1.03	Spike	P	0 - 56
2405052	Malathion	3.26	Spike	P	0 - 37
2405052	Metalaxyl	1.94	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P429507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405052	Metolachlor	0.492	Spike	P	0 - 29
2405052	Metribuzin	0.842	Spike	P	0 - 45
2405052	Mevinphos	5.89	Spike	P	0 - 29
2405052	Molinate	2.79	Spike	P	0 - 33
2405052	Myclobutanil	0.312	Spike	P	0 - 26
2405052	Naled	21.0	Spike	P	0 - 37
2405052	Napropamide	8.36	Spike	P	0 - 44
2405052	Norflurazon	0.371	Spike	P	0 - 30
2405052	Octinoxate	9.10	Spike	P	0 - 45
2405052	Oxadiazon	0.712	Spike	P	0 - 28
2405052	Oxybenzone	3.89	Spike	P	0 - 46
2405052	Oxyfluorfen	5.35	Spike	P	0 - 28
2405052	Parathion Ethyl	3.04	Spike	P	0 - 31
2405052	Parathion Methyl	10.4	Spike	P	0 - 29
2405052	PBB-153	10.1	Spike	P	0 - 30
2405052	PBDE-47	6.55	Spike	P	0 - 36
2405052	PBDE-99	6.06	Spike	P	0 - 40
2405052	Pendimethalin	10.7	Spike	P	0 - 33
2405052	Pentabromotoluene	7.15	Spike	P	0 - 30
2405052	Phenytoin	3.48	Spike	P	0 - 100
2405052	Phorate	11.7	Spike	P	0 - 36
2405052	Prodiamine	0.880	Spike	P	0 - 71
2405052	Prometon	1.35	Spike	P	0 - 36
2405052	Prometryn	1.38	Spike	P	0 - 28
2405052	Pronamide	5.59	Spike	P	0 - 24
2405052	Propanil	2.46	Spike	P	0 - 28
2405052	Propargite	0.974	Spike	P	0 - 43
2405052	Propiconazole	3.50	Spike	P	0 - 33
2405052	Pyraflufen Ethyl	7.95	Spike	P	0 - 29
2405052	Pyridaben	8.96	Spike	P	0 - 30
2405052	Pyriproxyfen	29.1	Spike	P	0 - 79
2405052	Simazine	5.80	Spike	P	0 - 29
2405052	Stirophos	4.53	Spike	P	0 - 61
2405052	Sulfentrazone	21.3	Spike	P	0 - 33
2405052	Tebuconazole	0.696	Spike	P	0 - 69
2405052	Terbufos	4.50	Spike	P	0 - 29
2405052	Terbuthylazine	4.89	Spike	P	0 - 32
2405052	Tetradecachloro-m-terphenyl	10.0	Spike	P	0 - 30
2405052	Thiobencarb	4.02	Spike	P	0 - 26
2405052	Tri-o-cresyl Phosphate	7.00	Spike	P	0 - 33
2405052	Triadimefon	4.30	Spike	P	0 - 28
2405052	Tris(1-chloro-2-propyl) phosphate (TCPP)	1.59	Spike	P	0 - 30
2405052	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	6.05	Spike	P	0 - 30
2405052	Tris(2-chloroethyl) phosphate (TCEP)	2.22	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P429323

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405697	Acesulfame K	1.22	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P429323

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405697	AMPA	0.419	Spike	P	0 - 30
2405697	Endothall	1.55	Spike	P	0 - 30
2405697	Glufosinate	3.03	Spike	P	0 - 30
2405697	Glyphosate	10.1	Spike	P	0 - 30
2405697	Sucralose	19.1	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P429588

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405849	2,4-D	6.87	Spike	P	0 - 30
2405849	2,4,5-T	2.12	Spike	P	0 - 30
2405849	Acetaminophen	2.57	Spike	P	0 - 30
2405849	Acetamiprid	1.85	Spike	P	0 - 30
2405849	Afidopyropen	15.2	Spike	P	0 - 30
2405849	Bentazon	2.87	Spike	P	0 - 30
2405849	Benzovindiflupyr	2.18	Spike	P	0 - 30
2405849	Carbamazepine	6.11	Spike	P	0 - 30
2405849	Clothianidin	6.06	Spike	P	0 - 30
2405849	Dinotefuran	0.105	Spike	P	0 - 30
2405849	Diuron	11.5	Spike	P	0 - 30
2405849	Fenuron	4.10	Spike	P	0 - 30
2405849	Fluridone	0.407	Spike	P	0 - 30
2405849	Hydrocodone	4.60	Spike	P	0 - 30
2405849	Ibuprofen	19.2	Spike	P	0 - 30
2405849	Imazapyr	0.875	Spike	P	0 - 30
2405849	Imidacloprid	3.35	Spike	P	0 - 30
2405849	Linuron	5.09	Spike	P	0 - 30
2405849	Mandestrobin	0.769	Spike	P	0 - 30
2405849	MCP	9.22	Spike	P	0 - 30
2405849	Naproxen	14.6	Spike	P	0 - 30
2405849	Primidone	5.58	Spike	P	0 - 30
2405849	Pyraclostrobin	4.78	Spike	P	0 - 30
2405849	Silvex	0.907	Spike	P	0 - 30
2405849	Thiamethoxam	1.21	Spike	P	0 - 30
2405849	Tolfenpyrad	3.59	Spike	P	0 - 30
2405849	Triclopyr	9.91	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P429832

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406052	Total Alkalinity	0.346	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015

Batch ID: P430021

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: P430021

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405966	TDS	2.66	Sample	P	0 - 10

Reference Method: SM 2540 D-2015
Batch ID: P429891

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405966	TSS	8.45	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P429884

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406054	Fluoride	0.498	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P429758

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406058	Organic Carbon	1.51	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2406071
Field Sample ID: G4CE0221

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	106	P	30 - 160
EPA 8321B	Acetaminophen-d4	95.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	84.9	P	30 - 160
EPA 8321B	Diuron-d6	59.5	P	30 - 160
EPA 8321B	Endothall-d6	92.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	61.3	P	30 - 160
EPA 8321B	Primidone-d5	74.7	P	30 - 160
EPA 8321B	Sucralose-d6	103	P	30 - 160

Lab Sample ID: 2406073
Field Sample ID: G4CE0221

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	98.7	P	20 - 200
EPA 8270E	Simazine-d10	100	P	62 - 142
EPA 8270E	Terbufos-d10	95.7	P	58 - 132
EPA 8270E	Terphenyl-d14	98.4	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118980

Included Lab Sample IDs: 2406067

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.0	98.0	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A118988

Included Lab Sample IDs: 2406069

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.4	98.7	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A118991

Included Lab Sample IDs: 2406067

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	98.9	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A118997

Included Lab Sample IDs: 2406071

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	151	150	P/P	60 - 160
Sucralose	109	123	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A119009

Included Lab Sample IDs: 2406071

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	90.2	97.5	P/P	60 - 160
Endothall	82.0	78.9	P/P	60 - 160
Glufosinate	79.5	79.6	P/P	60 - 160
Glyphosate	98.9	94.2	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A119045

Included Lab Sample IDs: 2406068

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.6	98.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A119048

Included Lab Sample IDs: 2406068

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119053

Included Lab Sample IDs: 2406072

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	99.8	P/P	90 - 110
Antimony	106	107	P/P	90 - 110
Arsenic	100	101	P/P	90 - 110
Barium	102	102	P/P	90 - 110
Beryllium	97.1	96.8	P/P	90 - 110
Boron	98.9	105	P/P	90 - 110
Cadmium	102	102	P/P	90 - 110
Chromium	97.3	96.2	P/P	90 - 110
Cobalt	102	100	P/P	90 - 110
Copper	96.8	95.8	P/P	90 - 110
Lead	103	102	P/P	90 - 110
Manganese	99.0	96.9	P/P	90 - 110
Molybdenum	101	100	P/P	90 - 110
Nickel	97.1	96.5	P/P	90 - 110
Selenium	103	102	P/P	90 - 110
Silver	105	104	P/P	90 - 110
Thallium	101	100	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A119083

Included Lab Sample IDs: 2406073

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	101		P	80 - 120
Avobenzene	105		P	80 - 120
Dechlorane 602	103		P	80 - 120
Dechlorane 603	105		P	80 - 120
Dechlorane Plus	89.6		P	80 - 120
Hexabromobenzene	102		P	80 - 120
Octinoxate	97.5		P	80 - 120
Oxybenzone	95.5		P	80 - 120
PBB-153	103		P	80 - 120
PBDE-47	96.9		P	80 - 120
PBDE-99	104		P	80 - 120
Pentabromotoluene	102		P	80 - 120
Tetradecachloro-m-terphenyl	105		P	80 - 120
Tri-o-cresyl Phosphate	97.6		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	81.1		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	96.9		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	97.9		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A119091

Included Lab Sample IDs: 2406072

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	99.2	97.9	P/P	90 - 110
Iron	102	101	P/P	90 - 110
Magnesium	102	99.5	P/P	90 - 110
Potassium	102	101	P/P	90 - 110
Sodium	99.5	99.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A119091

Included Lab Sample IDs: 2406072

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Strontium	102	103	P/P	90 - 110
Tin	98.1	97.6	P/P	90 - 110
Titanium	99.5	99.6	P/P	90 - 110
Vanadium	98.7	98.3	P/P	90 - 110
Zinc	96.2	95.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119098

Included Lab Sample IDs: 2406068

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

Reference Method: SM 5310 B-2011

Run ID: A119108

Included Lab Sample IDs: 2406068

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.0	99.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A119129

Included Lab Sample IDs: 2406068

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

Reference Method: SM 2320 B-2011

Run ID: A119143

Included Lab Sample IDs: 2406067

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.4	96.4	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A119170

Included Lab Sample IDs: 2406071

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	88.3	85.1	P/P	50 - 150
2,4,5-T	92.5	97.8	P/P	50 - 150
Acetaminophen	104	103	P/P	60 - 160
Acetamiprid	109	107	P/P	50 - 150
Afidopyropen	117	90.5	P/P	50 - 150
Bentazon	143	126	P/P	50 - 160
Benzovindiflupyr	103	106	P/P	50 - 150
Carbamazepine	113	116	P/P	60 - 150
Clothianidin	89.1	89.1	P/P	60 - 150
Dinotefuran	114	114	P/P	50 - 150
Diuron	105	102	P/P	60 - 160
Fenuron	95.2	95.1	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A119170
Included Lab Sample IDs: 2406071

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluridone	116	108	P/P	60 - 160
Hydrocodone	97.7	97.0	P/P	60 - 150
Ibuprofen	93.2	97.3	P/P	50 - 160
Imazapyr	84.4	90.8	P/P	50 - 150
Imidacloprid	104	105	P/P	60 - 150
Linuron	108	115	P/P	60 - 150
Mandestrobin	106	105	P/P	50 - 150
MCPP	104	93.5	P/P	50 - 150
Naproxen	67.4	84.4	P/P	50 - 160
Primidone	93.3	91.3	P/P	60 - 150
Pyraclostrobin	106	108	P/P	60 - 150
Silvex	96.9	87.3	P/P	50 - 150
Thiamethoxam	91.0	88.9	P/P	50 - 150
Tolfenpyrad	95.8	95.5	P/P	60 - 150
Triclopyr	88.6	103	P/P	50 - 150

Reference Method: SM 4500-F- C-2011
Run ID: A119179
Included Lab Sample IDs: 2406067

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	102	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A119206
Included Lab Sample IDs: 2406073

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	87.5		P	80 - 120
Alachlor	85.5		P	80 - 120
Ametryn	96.1		P	80 - 120
Atrazine	90.9		P	80 - 120
Atrazine Desethyl	87.0		P	80 - 120
Azinphos Methyl	111		P	80 - 120
Azoxystrobin	101		P	80 - 120
Bromacil	92.7		P	80 - 120
Butylate	98.2		P	80 - 120
Caffeine	102		P	80 - 120
Carbophenothion	98.5		P	80 - 120
Carfentrazone Ethyl	95.2		P	80 - 120
Chlorfenapyr	84.5		P	80 - 120
Chlorpyrifos Ethyl	86.1		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	98.8		P	80 - 120
Cyanazine	103		P	80 - 120
Cyprodinil	99.7		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	90.4		P	80 - 120
Difenoconazole	104		P	80 - 120
Dimethenamid	97.4		P	80 - 120
Dimethomorph	94.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119206
Included Lab Sample IDs: 2406073

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Disulfoton	94.2		P	80 - 120
Dithiopyr	97.2		P	80 - 120
EPTC	97.1		P	80 - 120
Ethion	91.9		P	80 - 120
Ethoprop	101		P	80 - 120
Etridiazole	94.2		P	80 - 120
Fenamiphos	90.2		P	80 - 120
Fenbuconazole	88.6		P	80 - 120
Fipronil	86.7		P	80 - 120
Fipronil Desulfinyl	102		P	80 - 120
Fipronil Sulfide	98.9		P	80 - 120
Fipronil Sulfone	99.9		P	80 - 120
Fluazifop-P-butyl	99.8		P	80 - 120
Fludioxonil	103		P	80 - 120
Flumioxazin	103		P	80 - 120
Flutolanil	105		P	80 - 120
Fluxapyroxad	98.5		P	80 - 120
Fonofos	94.7		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	96.5		P	80 - 120
Iprodione	89.3		P	80 - 120
Loratadine	87.7		P	80 - 120
Malathion	89.0		P	80 - 120
Metalaxyl	86.3		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	98.6		P	80 - 120
Mevinphos	103		P	80 - 120
Molinate	88.5		P	80 - 120
Myclobutanil	90.5		P	80 - 120
Naled	95.2		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	95.7		P	80 - 120
Oxadiazon	97.0		P	80 - 120
Oxyfluorfen	103		P	80 - 120
Parathion Ethyl	98.0		P	80 - 120
Parathion Methyl	88.4		P	80 - 120
Pendimethalin	112		P	80 - 120
Phenytol	98.4		P	80 - 120
Phorate	98.8		P	80 - 120
Prodiamine	105		P	80 - 120
Prometon	99.9		P	80 - 120
Prometryn	101		P	80 - 120
Pronamide	97.3		P	80 - 120
Propanil	99.9		P	80 - 120
Propargite	98.6		P	80 - 120
Propiconazole	87.3		P	80 - 120
Pyraflufen Ethyl	90.3		P	80 - 120
Pyridaben	95.3		P	80 - 120
Pyriproxyfen	98.3		P	80 - 120
Simazine	80.9		P	80 - 120
Stirophos	88.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119206
Included Lab Sample IDs: 2406073

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfentrazone	97.1		P	80 - 120
Tebuconazole	97.6		P	80 - 120
Terbufos	96.2		P	80 - 120
Terbuthylazine	87.7		P	80 - 120
Thiobencarb	96.1		P	80 - 120
Triadimefon	99.9		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A119211
Included Lab Sample IDs: 2406067

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	99.7	P/P	90 - 110
Sulfate	101	100	P/P	90 - 110

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	100					0.426	
EPA 180.1 Rev. 2.0	Turbidity	97.4					15.9	
EPA 200.7 Rev. 4.4	Calcium	100	99.2	99.2				1.17
	Iron	100	105	103	102			1.58
	Magnesium	101	104	102	100			1.48
	Potassium	100	104	103	100			0.505
	Sodium	99.5	98.9	98.9				0.341
	Strontium	102	104	103	101			1.30
	Tin	102	101	99.4	97.8			1.73
	Titanium	100	101	102	101			0.741
	Vanadium	99.7	101	102	100			0.432
	Zinc	102	104	103	98.7			0.175
EPA 200.8 Rev. 5.4	Aluminum	102	98.9	100	98.8			1.15
	Antimony	108	107	107	107			0.0221
	Arsenic	102	102	101	100			0.678
	Barium	105	103	104	103			0.369
	Beryllium	98.9	99.1	98.6	96.8			0.549
	Boron	103	100	102	103			0.948
	Cadmium	102	103	103	101			0.285
	Chromium	98.6	97.5	97.4	96.8			0.202
	Cobalt	103	101	101	101			0.0975
	Copper	98.5	96.8	96.6	96.2			0.165
	Lead	105	104	104	105			0.260
	Manganese	99.7	97.9	97.1	98.0			0.716
	Molybdenum	101	103	101	100			1.46
	Nickel	98.0	97.5	96.8	96.5			0.800
	Selenium	102	102	101	101			1.12
	Silver	106	103	102	104			0.598
	Thallium	101	103	103	104			0.226
EPA 300.0 Rev. 2.1	Chloride	103	101	103			1.92	
	Sulfate	103	98.4	102			1.50	
EPA 350.1 Rev. 2.0	Ammonia-N	96.2	98.6	99.6				0.900
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	98.8	95.0				3.97
EPA 353.2 Rev. 2.0	NO2NO3-N	104	106	106				0.473
EPA 365.1 Rev. 2.0	Total-P	103						0.240
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	96.7	95.6				1.14
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	123	110	119				7.35
	Acetochlor	71.8	70.2	72.8				3.60
	Alachlor	100	82.7	81.1				1.98
	Ametryn	135	136	137				0.661
	Atrazine	94.6	86.2	103				8.90
	Atrazine Desethyl	109	109	99.7				7.87
	Avobenzone	170	149	163				9.11
	Azinphos Methyl	193	162	163				0.0844
	Azoxystrobin	98.7	106	122				13.2
	Bromacil	94.8						0.648
	Butylate	57.6	57.3	59.0				2.81
	Caffeine	104	99.5	95.8				3.26
	Carbophenothion	110	92.7	98.7				6.29
	Carfentrazone Ethyl	103	92.7	94.9				2.31
	Chlorfenapyr	71.6	62.5	67.9				8.39
	Chlorpyrifos Ethyl	73.2	61.8	60.7				1.69

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Chlorpyrifos Methyl	82.0	81.9	89.1			8.35
	Coumaphos	99.4	80.9	84.9			4.82
	Cyanazine	210	234	235			0.632
	Cyprodinil	101	97.6	107			9.56
	Dechlorane 602	94.0	79.1	82.3			4.00
	Dechlorane 603	138	118	128			8.10
	Dechlorane Plus	95.2	82.0	81.2			0.976
	Demeton	81.6	83.4	86.4			3.54
	Diazinon	111	112	113			0.719
	Difenoconazole	86.3	68.4	75.9			10.4
	Dimethenamid	103	91.6	95.9			4.57
	Dimethomorph	152	166	171			2.72
	Disulfoton	98.2	96.7	93.9			2.96
	Dithiopyr	106	85.4	90.2			5.39
	EPTC	46.5	44.9	46.4			3.37
	Ethion	81.4	92.1	102			10.7
	Ethoprop	82.2	89.9	96.6			7.12
	Etridiazole	60.6	56.8	57.2			0.606
	Fenamiphos	68.3	69.8	69.4			0.499
	Fenbuconazole	67.7	54.4	57.0			4.16
	Fipronil	76.6	65.7	68.9			4.82
	Fipronil Desulfinyl	87.3	78.4	77.4			1.15
	Fipronil Sulfide	91.0	71.8	69.9			2.73
	Fipronil Sulfone	82.4	72.8	76.4			4.79
	Fluazifop-P-butyl	104	103	105			2.08
	Fludioxonil	82.5	80.7	79.2			1.84
	Flumioxazin	137	116	127			9.05
	Flutolanil	102	93.8	102			8.36
	Fluxapyroxad	81.5	71.0	74.8			5.17
	Fonofos	109	110	110			0.467
	Hexabromobenzene	128	120	121			0.424
	Hexazinone	87.3	94.9	92.6			1.67
	Imazalil	86.0	59.5	58.2			2.21
	Iprodione	31.2	34.0	42.2			21.6
	Loratadine	168	148	146			1.03
	Malathion	80.7	75.2	77.7			3.26
	Metalaxyl	91.3	80.0	73.5			1.94
	Metolachlor	77.2	76.8	76.4			0.492
	Metribuzin	109	107	108			0.842
	Mevinphos	63.1	67.3	71.4			5.89
	Molinate	58.1	59.9	61.6			2.79
	Myclobutanil	99.8	96.0	95.7			0.312
	Naled	35.0	41.0	50.6			21.0
	Napropamide	82.8	72.7	79.1			8.36
	Norflurazon	96.9					0.371
	Octinoxate	166	161	177			9.10
	Oxadiazon	88.9	83.4	82.8			0.712
	Oxybenzone	118	107	111			3.89
	Oxyfluorfen	79.7	89.0	84.4			5.35
	Parathion Ethyl	90.3	93.6	90.8			3.04
	Parathion Methyl	89.5	90.8	101			10.4
	PBB-153	145	126	140			10.1
	PBDE-47	116	103	110			6.55
	PBDE-99	114	95.1	101			6.06

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Pendimethalin	85.9	85.9	95.6			10.7
	Pentabromotoluene	126	116	124			7.15
	Phenytoin	136	156	162			3.48
	Phorate	99.9	107	121			11.7
	Prodiamine	55.9	61.2	61.7			0.880
	Prometon	105	94.9	96.1			1.35
	Prometryn	124	112	110			1.38
	Pronamide	110	101	107			5.59
	Propanil	106	114	112			2.46
	Propargite	66.0	59.8	60.3			0.974
	Propiconazole	75.9	70.7	73.3			3.50
	Pyraflufen Ethyl	98.0	83.6	77.2			7.95
	Pyridaben	77.6	47.7	55.5			8.96
	Pyriproxyfen	221	128	171			29.1
	Simazine	82.6	56.6	66.9			5.80
	Stiophos	58.9	40.1	42.0			4.53
	Sulfentrazone	62.2	73.4	59.3			21.3
	Tebuconazole	68.2	63.7	63.2			0.696
	Terbufos	119	115	120			4.50
	Terbutylazine	85.3	81.3	85.4			4.89
	Tetradecachloro-m-terphenyl	233	227	251			10.0
	Thiobencarb	105	92.0	95.8			4.02
	Tri-o-cresyl Phosphate	118	102	109			7.00
	Triadimefon	94.9	86.2	90.0			4.30
	Tris(1-chloro-2-propyl) phosphate (TCPP)	98.5	100	102			1.59
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	113	103	109			6.05
	Tris(2-chloroethyl) phosphate (TCEP)	119	106	108			2.22
EPA 8321B	2,4-D	87.9	87.0	93.4			6.87
	2,4,5-T	94.3	87.1	89.0			2.12
	Acesulfame K	144	133	135			1.22
	Acetaminophen	95.9	90.9	93.3			2.57
	Acetamiprid	81.4	91.0	92.7			1.85
	Afidopyropen	64.9	86.1	100			15.2
	AMPA	97.2	91.2	90.8			0.419
	Bentazon	149	162	156			2.87
	Benzovindiflupyr	89.5	77.8	79.6			2.18
	Carbamazepine	92.5	87.4	93.2			6.11
	Clothianidin	88.4	84.4	89.7			6.06
	Dinotefuran	107	96.1	96.2			0.105
	Diuron	89.3	67.8	77.3			11.5
	Endothall	77.8	77.2	76.0			1.55
	Fenuron	93.2	72.2	75.2			4.10
	Fluridone	86.4	84.2	83.9			0.407
	Glufosinate	79.1	67.6	69.6			3.03
	Glyphosate	96.7	82.8	91.7			10.1
	Hydrocodone	93.3	75.3	78.8			4.60
	Ibuprofen	99.5	68.9	83.6			19.2
	Imazapyr	87.5	107	108			0.875
	Imidacloprid	97.2	101	105			3.35
	Linuron	89.7	78.5	82.6			5.09
	Mandestrobin	87.5	82.1	81.5			0.769

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	MCCP	92.8	90.4	99.1		
	Naproxen	101	98.8	85.3		
	Primidone	89.2	77.6	82.1		
	Pyraclostrobin	86.6	78.0	81.8		
	Silvex	96.2	101	100		
	Sucralose	118	109	136		
	Thiamethoxam	83.8	84.1	85.1		
	Tolfenpyrad	54.8	47.2	49.0		
	Triclopyr	85.6	87.0	96.1		
SM 2320 B-2011	Total Alkalinity	98.6				0.346
SM 2540 C-2015	TDS	103				2.66
SM 2540 D-2015	TSS	97.4				8.45
SM 4500-F- C-2011	Fluoride	97.5	97.8	98.3		
SM 5310 B-2011	Organic Carbon	97.1	96.0	97.6		

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2406067
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2406067
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2406072
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2406072
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2406067
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2406067
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2406068
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2406068
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2406068
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2406068
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2406069
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2406073
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2406073
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2406071
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2406067
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2406072
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2406067
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2406067
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2406067
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2406068

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	05/05/2023			05/05/2023 15:33	Anna M. Plaviak	2406067
EPA 180.1 Rev. 2.0	05/05/2023			05/05/2023 14:10	Alexis Price	2406067
EPA 200.7 Rev. 4.4	05/05/2023	05/08/2023 12:00	George D Taylor	05/10/2023 22:56	McKinley C Carter	2406072
EPA 200.8 Rev. 5.4	05/05/2023	05/08/2023 12:00	George D Taylor	05/09/2023 17:20	Emily M Philpot	2406072
EPA 300.0 Rev. 2.1	05/05/2023			05/16/2023 02:33	Anna M. Plaviak	2406067
EPA 350.1 Rev. 2.0	05/05/2023			05/09/2023 12:27	Khloe J Berg	2406068
EPA 351.2 Rev. 2.0	05/05/2023	05/10/2023 12:02	Dana G. Hughes	05/11/2023 11:02	Ping Hua	2406068
EPA 353.2 Rev. 2.0	05/05/2023			05/12/2023 10:47	Beverly Y. Sanders	2406068
EPA 365.1 Rev. 2.0	05/05/2023	05/08/2023 13:00	Alexis Price	05/09/2023 15:09	Simonne.V. Calhoun	2406068
EPA 365.1 Rev. 2.0 dissolved	05/05/2023			05/05/2023 15:37	Chandler E Cox	2406069
EPA 8270E	05/05/2023	05/08/2023 08:00	Rasheda Ghaffari	05/10/2023 19:50	Arthur Maknenko	2406073
	05/05/2023	05/08/2023 08:00	Rasheda Ghaffari	05/12/2023 19:09	Vandana T. Nagar	2406073
EPA 8321B	05/05/2023	05/05/2023 13:00	Manjita Shrestha	05/05/2023 22:47	Manjita Shrestha	2406071
	05/05/2023	05/05/2023 13:00	Manjita Shrestha	05/06/2023 22:52	Manjita Shrestha	2406071
	05/05/2023	05/10/2023 09:00	Hoor Shaik	05/11/2023 23:30	Juyoung Kim	2406071
SM 2320 B-2011	05/05/2023			05/11/2023 18:14	Dale L. Simmons	2406067
SM 2340 B-2011	05/05/2023			05/10/2023 22:56	McKinley C Carter	2406072
SM 2540 C-2015	05/05/2023			05/10/2023 15:30	Yijie Li	2406067
SM 2540 D-2015	05/05/2023			05/10/2023 15:30	Yijie Li	2406067
SM 4500-F- C-2011	05/05/2023			05/15/2023 16:08	Dale L. Simmons	2406067
SM 5310 B-2011	05/05/2023			05/11/2023 05:21	Elise M. Gillis	2406068