

Chemical Analysis Report

NW-DIST-2023-03-23-01

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

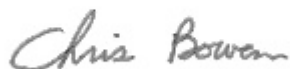
Event Description: **SCI**
Request ID: **RQ-2023-03-20-19**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
Attn: Myranda Butler

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: Chris Bowen, Environmental Administrator

Date Certified: 11-APR-2023 10:51



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: Mill Creek Upstream of Bayshore Drive

Collection Date/Time: 03/22/2023 11:30

Field ID: G3NW0141

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2395934	DEP SOP: NU-094-1	Color (true)	19		PCU	P427580	
	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P427583	
	EPA 300.0 Rev. 2.1	Chloride	5.3		mg Cl/L	P427892	
		Sulfate	5.1		mg SO4/L	P427894	
	SM 2320 B-2011	Total Alkalinity	14		mg CaCO3/L	P427850	
	SM 2540 C-2015	TDS	36		mg/L	P428163	
	SM 2540 D-2015	TSS	4	I	mg/L	P427912	
	SM 4500-F- C-2011	Fluoride	0.026	I	mg F/L	P427668	
2395935	EPA 350.1 Rev. 2.0	Ammonia-N	0.023		mg N/L	P427759	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.26		mg N/L	P427739	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P427866	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P427687	
	SM 5310 B-2011	Organic Carbon	3.3		mg C/L	P427906	
2395936	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P427577	
2395943	EPA 8321B	2,4-D	0.0020	U	ug/L	P427647	
		Acesulfame K	0.10	U	ug/L	P427546	
		2,4,5-T	0.0040	U	ug/L	P427647	
		AMPA	0.10	U	ug/L	P427546	
		Acetaminophen	0.0080	U	ug/L	P427647	
		Acetamiprid	0.0020	U	ug/L	P427647	
		Endothall	0.25	U	ug/L	P427546	
		Glufosinate	0.10	U	ug/L	P427546	
		Glyphosate	0.10	U	ug/L	P427546	
		Afidopyropen	0.0020	U	ug/L	P427647	
		Bentazon	8.0E-04	U	ug/L	P427647	
		Sucralose	0.13		ug/L	P427546	
		Benzovindiflupyr	0.0020	U	ug/L	P427647	
		Carbamazepine	8.0E-04	U	ug/L	P427647	
		Clothianidin	0.0020	U	ug/L	P427647	
		Dinotefuran	0.0020	U	ug/L	P427647	
		Diuron	0.0020	U	ug/L	P427647	
		Fenuron	0.032	U	ug/L	P427647	
		Fluridone	8.0E-04	U	ug/L	P427647	
		Imazapyr	0.0040	U	ug/L	P427647	
		Hydrocodone	0.0020	U	ug/L	P427647	
		Ibuprofen	0.080	U	ug/L	P427647	
		Imidacloprid	0.0078	I	ug/L	P427647	
		Linuron	0.0040	U	ug/L	P427647	
		Mandestrobin	0.0020	U	ug/L	P427647	
		MCP	0.0020	U	ug/L	P427647	
		Naproxen	0.0080	U	ug/L	P427647	
		Primidone	0.0040	U	ug/L	P427647	
		Pyraclostrobin	0.0020	U	ug/L	P427647	

Field ID: G3NW0141

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2395943	EPA 8321B	Silvex	0.0040	U	ug/L	P427647	
		Thiamethoxam	0.0020	U	ug/L	P427647	
		Tolfenpyrad	0.0020	U	ug/L	P427647	
		Triclopyr	0.0040	U	ug/L	P427647	
2395945	EPA 200.7 Rev. 4.4	Calcium	5.92		mg/L	P427613	
		Iron	260		ug/L	P427613	
		Magnesium	1.28		mg/L	P427613	
		Potassium	0.97	I	mg/L	P427613	
		Sodium	3.1		mg/L	P427613	
		Strontium	20.9		ug/L	P427613	
		Tin	3.0	U	ug/L	P427613	
		Titanium	1.2	I	ug/L	P427613	
		Vanadium	2.0	U	ug/L	P427613	
		Zinc	5.0	U	ug/L	P427613	
	EPA 200.8 Rev. 5.4	Aluminum	70		ug/L	P427613	
		Antimony	0.050	U	ug/L	P427613	
		Arsenic	0.45		ug/L	P427791	
		Barium	15.7		ug/L	P427613	
		Beryllium	0.013	I	ug/L	P427613	
		Boron	17.0		ug/L	P427613	
		Cadmium	0.020	U	ug/L	P427613	
		Chromium	0.40	U	ug/L	P427613	
		Cobalt	0.065	I	ug/L	P427791	
		Copper	0.40	U	ug/L	P427613	
		Lead	0.74		ug/L	P427613	
		Manganese	15.7		ug/L	P427613	
		Molybdenum	0.15	U	ug/L	P427613	
		Nickel	0.50	U	ug/L	P427613	
		Selenium	0.20	U	ug/L	P427613	
		Silver	0.010	U	ug/L	P427613	
		Thallium	0.10	U	ug/L	P427613	
		Hardness	20.1		mg/L	P427613	
2395946	SM 2340 B-2011	Oxybenzone**	11	U	ng/L	P427449	
	EPA 8270E	Acetochlor	0.23	U	ng/L	P427449	
		Octinoxate**	23	U	ng/L	P427449	
		Alachlor	0.45	U	ng/L	P427449	
		Avobenzone**	110	U	ng/L	P427449	
		Ametryn	1.2	U	ng/L	P427449	
		Atrazine	1.5		ng/L	P427449	
		PBDE-47**	4.5	U	ng/L	P427449	
		Atrazine Desethyl	1.5	U	ng/L	P427449	
		PBDE-99**	5.7	U	ng/L	P427449	
		Azinphos Methyl	3.4	U	ng/L	P427449	
		Tri-o-cresyl Phosphate**	6.8	U	ng/L	P427449	
		Azoxystrobin	0.45	U	ng/L	P427449	

Field ID: G3NW0141

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2395946	EPA 8270E	Bromacil	4.1		ng/L	P427449	
		2-Ethylhexyl	14	U	ng/L	P427449	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.23	U	ng/L	P427449	
		Dechlorane Plus**	34	U	ng/L	P427449	RPD
		Caffeine**	12	I	ng/L	P427449	
		Dechlorane 602**	5.7	U	ng/L	P427449	
		Carbophenothion	0.57	U	ng/L	P427449	
		Dechlorane 603**	4.5	U	ng/L	P427449	
		Carfentrazone Ethyl	0.17	U	ng/L	P427449	
		Hexabromobenzene**	6.8	U	ng/L	P427449	
		Chlorfenapyr	0.34	U	ng/L	P427449	
		PBB-153**	9.0	U	ng/L	P427449	
		Chlorpyrifos Ethyl	0.34	U	ng/L	P427449	
		Pentabromotoluene**	3.4	U	ng/L	P427449	
		Chlorpyrifos Methyl	0.11	U	ng/L	P427449	
		Tris(2-chloroethyl) phosphate (TCEP)**	79	U	ng/L	P427449	
		Coumaphos	1.2	U	ng/L	P427449	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	17	U	ng/L	P427449	
		Cyanazine	5.7	U	ng/L	P427449	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.8	U	ng/L	P427449	
		Cyprodinil	0.23	U	ng/L	P427449	
		Tetradecachloro-m-terphenyl**	8.5	U	ng/L	P427449	RPD
		Demeton	4.0	U	ng/L	P427449	
		Diazinon	0.14	U	ng/L	P427449	
		Difenoconazole	0.68	U	ng/L	P427449	
		Dimethenamid	0.11	U	ng/L	P427449	
		Dimethomorph	0.34	U	ng/L	P427449	
		Disulfoton	0.68	U	ng/L	P427449	
		Dithiopyr	1.1	U	ng/L	P427449	
		EPTC	0.57	U	ng/L	P427449	
		Ethion	0.34	U	ng/L	P427449	
		Ethoprop	0.14	U	ng/L	P427449	
		Etridiazole	0.11	U	ng/L	P427449	
		Fenamiphos	0.51	U	ng/L	P427449	
		Fenbuconazole	0.57	U	ng/L	P427449	
		Fipronil	0.23	U	ng/L	P427449	
		Fipronil Desulfinyl**	0.17	I	ng/L	P427449	
		Fipronil Sulfide	0.54	I	ng/L	P427449	
		Fipronil Sulfone	2.0		ng/L	P427449	
		Fluazifop-P-butyl	0.11	U	ng/L	P427449	
		Fludioxonil	0.11	U	ng/L	P427449	
		Flumioxazin	3.4	U	ng/L	P427449	
		Flutolanil	0.11	U	ng/L	P427449	
		Fluxapyroxad	0.28	U	ng/L	P427449	

Field ID: G3NW0141

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2395946	EPA 8270E	Fonofos	0.17	U	ng/L	P427449	MS, RPD
		Hexazinone	0.57	U	ng/L	P427449	
		Imazalil	0.74	U	ng/L	P427449	
		Iprodione	0.57	U	ng/L	P427449	
		Loratadine**	0.34	U	ng/L	P427449	
		Malathion	0.40	U	ng/L	P427449	
		Metalaxyl	0.57	U	ng/L	P427449	
		Metolachlor	0.85	U	ng/L	P427449	
		Metribuzin	6.7		ng/L	P427449	
		Mevinphos	1.1	U	ng/L	P427449	
		Molinate	0.28	U	ng/L	P427449	
		Myclobutanil	0.40	U	ng/L	P427449	
		Naled	2.8	U	ng/L	P427449	
		Napropamide	0.79	U	ng/L	P427449	
		Norflurazon	1.1	U	ng/L	P427449	
		Oxadiazon	0.65	I	ng/L	P427449	
		Oxyfluorfen	0.23	U	ng/L	P427449	
		Parathion Ethyl	0.17	U	ng/L	P427449	
		Parathion Methyl	0.23	U	ng/L	P427449	
		Pendimethalin	0.85	U	ng/L	P427449	
		Phenytol**	6.0	U	ng/L	P427449	
		Phorate	0.28	U	ng/L	P427449	
		Prodiamine	0.23	U	ng/L	P427449	
		Prometon	3.4	U	ng/L	P427449	
		Prometryn	0.40	U	ng/L	P427449	
		Pronamide	19		ng/L	P427449	
		Propanil	0.11	U	ng/L	P427449	
		Propargite	0.90	U	ng/L	P427449	
		Propiconazole	0.68	U	ng/L	P427449	
		Pyraflufen Ethyl	0.34	U	ng/L	P427449	
		Pyridaben	1.6	U	ng/L	P427449	
		Pyriproxyfen	0.28	U	ng/L	P427449	
		Simazine	0.28	U	ng/L	P427449	
		Stiophos	0.45	U	ng/L	P427449	RPD
		Sulfentrazone	10		ng/L	P427449	
		Tebuconazole	1.6	U	ng/L	P427449	
		Terbufos	0.23	U	ng/L	P427449	
		Terbuthylazine	0.23	U	ng/L	P427449	RPD
		Thiobencarb	0.57	U	ng/L	P427449	
		Triadimefon	0.17	U	ng/L	P427449	

Ref. Method and Comment:

SM 2540 C-2015: The reported result is consistent with the conductivity measured in the laboratory, 64 umhos/cm.

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

EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 03/28/2023.

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

Sample Location: FB

Collection Date/Time: 03/22/2023 11:00

Field ID: FB_03222023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2395937	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P427580	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P427583	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P427892	
		Sulfate	0.20	U	mg SO4/L	P427894	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P427850	
	SM 2540 C-2015	TDS	15	U	mg/L	P428162	
	SM 2540 D-2015	TSS	2	U	mg/L	P427911	
2395938	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P427668	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P427759	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P427739	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P427866	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P427687	
2395939	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P427906	
2395939	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P427577	
2395944	EPA 8321B	2,4-D	0.0020	U	ug/L	P427647	
		Acesulfame K	0.10	U	ug/L	P427546	
		2,4,5-T	0.0040	U	ug/L	P427647	
		AMPA	0.10	U	ug/L	P427546	
		Acetaminophen	0.0080	U	ug/L	P427647	
		Acetamiprid	0.0020	U	ug/L	P427647	
		Endothall	0.25	U	ug/L	P427546	
		Glufosinate	0.10	U	ug/L	P427546	
		Glyphosate	0.10	U	ug/L	P427546	
		Afidopyrophen	0.0020	U	ug/L	P427647	
		Bentazon	8.0E-04	U	ug/L	P427647	
		Sucralose	0.010	U	ug/L	P427546	
		Benzovindiflupyr	0.0020	U	ug/L	P427647	
		Carbamazepine	8.0E-04	U	ug/L	P427647	
		Clothianidin	0.0020	U	ug/L	P427647	
		Dinotefuran	0.0020	U	ug/L	P427647	
		Diuron	0.0020	U	ug/L	P427647	
		Fenuron	0.032	U	ug/L	P427647	
		Fluridone	8.0E-04	U	ug/L	P427647	
		Imazapyr	0.0040	U	ug/L	P427647	
		Hydrocodone	0.0020	U	ug/L	P427647	
		Ibuprofen	0.080	U	ug/L	P427647	
		Imidacloprid	0.0020	U	ug/L	P427647	
		Linuron	0.0040	U	ug/L	P427647	
		Mandestrobin	0.0020	U	ug/L	P427647	
		MCPD	0.0020	U	ug/L	P427647	
		Naproxen	0.0080	U	ug/L	P427647	
		Primidone	0.0040	U	ug/L	P427647	
		Pyraclostrobin	0.0020	U	ug/L	P427647	

Field ID: FB_03222023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2395944	EPA 8321B	Silvex	0.0040	U	ug/L	P427647	
		Thiamethoxam	0.0020	U	ug/L	P427647	
		Tolfenpyrad	0.0020	U	ug/L	P427647	
		Triclopyr	0.0040	U	ug/L	P427647	

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

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P427580

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427583

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P427613

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: P427613

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	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
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 200.8 Rev. 5.4
Batch ID: P427791

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cobalt	0.020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427892

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427894

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427759

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427739

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427866

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427687

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P427577

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

Reference Method: EPA 8270E
Batch ID: P427449

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P427449

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P427449

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P427449

Component	Result	Code	Units
Myclobutanil	0.35	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	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	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P427449

Component	Result	Code	Units
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	I	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	16	I	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: P427546

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: P427647

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P427647

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

Reference Method: SM 2320 B-2011

Batch ID: P427850

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

Reference Method: SM 2540 C-2015

Batch ID: P428162

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015

Batch ID: P428163

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P427911

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P427912

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P427668

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P427906

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: P427580

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	96.5		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427583

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P427613

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	98.5		P	85 - 115
Iron	106		P	85 - 115
Magnesium	98.0		P	85 - 115
Potassium	95.2		P	85 - 115
Sodium	96.9		P	85 - 115
Strontium	105		P	85 - 115
Tin	103		P	85 - 115
Titanium	105		P	85 - 115
Vanadium	103		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P427613

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	106		P	85 - 115
Barium	104		P	85 - 115
Beryllium	100		P	85 - 115
Boron	102		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	101		P	85 - 115
Copper	102		P	85 - 115
Lead	104		P	85 - 115
Manganese	101		P	85 - 115
Molybdenum	103		P	85 - 115
Nickel	103		P	85 - 115
Selenium	99.6		P	85 - 115
Silver	104		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P427791

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	102		P	85 - 115
Cobalt	104		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427892

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427894

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427759

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427739

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427866

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: P427687

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.9		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P427577

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

Reference Method: EPA 8270E
Batch ID: P427449

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	80.8		P	42 - 162
Acetochlor	87.5		P	69 - 123
Alachlor	82.9		P	65 - 118
Ametryn	125		P	58 - 141
Atrazine	95.7		P	73 - 118
Atrazine Desethyl	111		P	32 - 125
Avobenzone	106		P	40 - 203
Azinphos Methyl	96.1		P	36 - 197
Azoxystrobin	78.7		P	58 - 226
Bromacil	92.0		P	48 - 120

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P427449

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Butylate	69.6		P	27 - 85.0
Caffeine	109		P	40 - 137
Carbophenothion	81.9		P	54 - 132
Carfentrazone Ethyl	93.2		P	60 - 142
Chlorfenapyr	78.2		P	53 - 117
Chlorpyrifos Ethyl	108		P	59 - 116
Chlorpyrifos Methyl	96.2		P	66 - 119
Coumaphos	70.8		P	11 - 234
Cyanazine	195		P	61 - 248
Cyprodinil	93.9		P	50 - 147
Dechlorane 602	86.7		P	50 - 150
Dechlorane 603	93.6		P	50 - 150
Dechlorane Plus	79.5		P	47 - 182
Demeton	83.6		P	30 - 138
Diazinon	102		P	67 - 126
Difenoconazole	147		P	38 - 205
Dimethenamid	77.2		P	57 - 111
Dimethomorph	93.9		P	16 - 212
Disulfoton	101		P	46 - 126
Dithiopyr	78.0		P	62 - 115
EPTC	59.9		P	28 - 80.0
Ethion	32.9		P	24 - 122
Ethoprop	94.7		P	62 - 113
Etridiazole	67.1		P	28 - 92.0
Fenamiphos	79.2		P	57 - 128
Fenbuconazole	123		P	52 - 155
Fipronil	93.9		P	63 - 130
Fipronil Desulfinyl	71.8		P	61 - 130
Fipronil Sulfide	83.7		P	56 - 117
Fipronil Sulfone	74.8		P	52 - 118
Fluazifop-P-butyl	97.5		P	61 - 128
Fludioxonil	74.6		P	59 - 129
Flumioxazin	53.7		P	30 - 250
Flutolanil	92.9		P	53 - 127
Fluxapyroxad	60.4		P	42 - 132
Fonofos	101		P	61 - 110
Hexabromobenzene	102		P	50 - 150
Hexazinone	93.6		P	46 - 139
Imazalil	87.7		P	40 - 139
Iprodione	75.8		P	40 - 146
Loratadine	92.3		P	10 - 224
Malathion	85.8		P	61 - 135
Metalaxyl	79.3		P	58 - 121
Metolachlor	90.8		P	64 - 118
Metribuzin	116		P	45 - 245
Mevinphos	98.1		P	49 - 118
Molinate	74.5		P	42 - 92.0
Myclobutanil	88.4		P	55 - 127
Naled	77.3		P	10 - 114
Napropamide	60.8		P	39 - 121
Norflurazon	61.0		P	55 - 129
Octinoxate	109		P	26 - 166

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P427449

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxadiazon	71.0		P	54 - 115
Oxybenzone	113		P	49 - 135
Oxyfluorfen	92.0		P	64 - 139
Parathion Ethyl	107		P	70 - 111
Parathion Methyl	102		P	76 - 136
PBB-153	93.7		P	50 - 150
PBDE-47	108		P	41 - 148
PBDE-99	95.7		P	38 - 147
Pendimethalin	107		P	52 - 118
Pentabromotoluene	99.0		P	50 - 150
Phenytoin	15.6		P	10 - 162
Phorate	84.6		P	40 - 122
Prodiamine	42.0		P	26 - 141
Prometon	88.7		P	54 - 122
Prometryn	95.5		P	61 - 128
Pronamide	103		P	72 - 121
Propanil	102		P	45 - 144
Propargite	42.2		P	10 - 199
Propiconazole	66.7		P	56 - 127
Pyraflufen Ethyl	58.7		P	56 - 140
Pyridaben	109		P	26 - 211
Pyriproxyfen	159		P	33 - 194
Simazine	92.4		P	67 - 121
Stiophos	46.9		P	20 - 142
Sulfentrazone	65.6		P	21 - 144
Tebuconazole	38.1		P	10 - 122
Terbufos	103		P	60 - 129
Terbutylazine	93.3		P	69 - 113
Tetradecachloro-m-terphenyl	107		P	70 - 200
Thiobencarb	81.1		P	51 - 120
Tri-o-cresyl Phosphate	116		P	49 - 150
Triadimefon	84.1		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	118		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	102		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	121		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P427546

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	88.7		P	40 - 150
AMPA	104		P	40 - 150
Endothall	103		P	40 - 150
Glufosinate	92.3		P	40 - 150
Glyphosate	101		P	40 - 150
Sucralose	86.8		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P427647

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	106		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P427647

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4,5-T	107		P	40 - 150
Acetaminophen	92.7		P	30 - 150
Acetamiprid	85.4		P	40 - 150
Afidopyropen	71.5		P	30 - 150
Bentazon	91.6		P	30 - 150
Benzovindiflupyr	95.2		P	40 - 150
Carbamazepine	95.2		P	40 - 150
Clothianidin	115		P	40 - 150
Dinotefuran	118		P	40 - 150
Diuron	89.1		P	40 - 150
Fenuron	109		P	40 - 150
Fluridone	76.7		P	40 - 150
Hydrocodone	126		P	40 - 150
Ibuprofen	66.0		P	40 - 150
Imazapyr	123		P	40 - 150
Imidacloprid	98.0		P	40 - 150
Linuron	89.6		P	40 - 150
Mandestrobin	87.5		P	40 - 150
MCPP	101		P	40 - 150
Naproxen	95.7		P	40 - 150
Primidone	103		P	40 - 150
Pyraclostrobin	79.6		P	40 - 150
Silvex	107		P	40 - 150
Thiamethoxam	117		P	40 - 150
Tolfenpyrad	54.8		P	30 - 150
Triclopyr	98.0		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P427850

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.9		P	94 - 106

Reference Method: SM 2540 C-2015

Batch ID: P428162

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	98.6		P	90 - 110

Reference Method: SM 2540 C-2015

Batch ID: P428163

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	97.1		P	90 - 110

Reference Method: SM 2540 D-2015

Batch ID: P427911

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.9		P	85 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2540 D-2015
Batch ID: P427912

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	102		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P427668

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P427906

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P427613

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395000	Calcium	105		P	80 - 120
2395000	Iron	102	102	P/P	80 - 120
2395000	Magnesium	107		P	80 - 120
2395000	Potassium	90.9	92.0	P/P	80 - 120
2395000	Sodium	104		P	80 - 120
2395000	Strontium	99.9	101	P/P	80 - 120
2395000	Tin	93.5	94.6	P/P	80 - 120
2395000	Titanium	100	83.0	P/P	80 - 120
2395000	Vanadium	99.8	99.8	P/P	80 - 120
2395000	Zinc	96.8	96.4	P/P	80 - 120
2395927	Calcium	96.9		P	80 - 120
2395927	Iron	107		P	80 - 120
2395927	Magnesium	97.8		P	80 - 120
2395927	Potassium	97.6		P	80 - 120
2395927	Sodium	96.5		P	80 - 120
2395927	Strontium	104		P	80 - 120
2395927	Tin	105		P	80 - 120
2395927	Titanium	109		P	80 - 120
2395927	Vanadium	107		P	80 - 120
2395927	Zinc	104		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P427613

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395000	Aluminum	92.6	118	P/P	80 - 120
2395000	Antimony	96.4	97.7	P/P	80 - 120
2395000	Barium	94.2	96.2	P/P	80 - 120
2395000	Beryllium	91.9	91.9	P/P	80 - 120
2395000	Boron	103	102	P/P	80 - 120
2395000	Cadmium	100	101	P/P	80 - 120
2395000	Chromium	95.2	97.3	P/P	80 - 120
2395000	Copper	94.6	95.4	P/P	80 - 120
2395000	Lead	102	102	P/P	80 - 120
2395000	Manganese	97.2	98.8	P/P	80 - 120
2395000	Molybdenum	100	101	P/P	80 - 120
2395000	Nickel	95.1	95.9	P/P	80 - 120
2395000	Selenium	95.6	96.2	P/P	80 - 120
2395000	Silver	101	102	P/P	80 - 120
2395000	Thallium	104	106	P/P	80 - 120
2395927	Aluminum	97.9		P	80 - 120
2395927	Antimony	103		P	80 - 120
2395927	Barium	99.9		P	80 - 120
2395927	Beryllium	94.2		P	80 - 120
2395927	Boron	103		P	80 - 120
2395927	Cadmium	101		P	80 - 120
2395927	Chromium	96.1		P	80 - 120
2395927	Copper	94.2		P	80 - 120
2395927	Lead	101		P	80 - 120
2395927	Manganese	97.5		P	80 - 120
2395927	Molybdenum	102		P	80 - 120
2395927	Nickel	95.2		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P427613

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395927	Selenium	95.2		P	80 - 120
2395927	Silver	101		P	80 - 120
2395927	Thallium	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P427791

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2396455	Arsenic	101	100	P/P	80 - 120
2396455	Cobalt	100	98.3	P/P	80 - 120
2396470	Arsenic	99.8		P	80 - 120
2396470	Cobalt	97.8		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427892

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395895	Chloride	101		P	90 - 110
2396077	Chloride	94.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427894

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395895	Sulfate	99.0		P	90 - 110
2396077	Sulfate	96.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427759

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395935	Ammonia-N	102	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427739

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2396051	Kjeldahl Nitrogen	104	98.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427866

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395896	NO2NO3-N	105	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427687

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2396049	Total-P	100	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P427577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395936	O-Phosphate-P	99.6	100	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P427449

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395032	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	85.8	90.2	P/P	26 - 165
2395032	Acetochlor	107	103	P/P	67 - 124
2395032	Alachlor	99.9	95.0	P/P	60 - 120
2395032	Ametryn	129	104	P/P	54 - 216
2395032	Atrazine Desethyl	117	97.0	P/P	15 - 122
2395032	Avobenzone	108	120	P/P	37 - 178
2395032	Azinphos Methyl	120	119	P/P	40 - 292
2395032	Azoxystrobin	104	114	P/P	35 - 220
2395032	Butylate	70.5	67.1	P/P	20 - 83.0
2395032	Caffeine	117	111	P/P	10 - 194
2395032	Carbophenothion	89.3	79.3	P/P	57 - 127
2395032	Carfentrazone Ethyl	113	109	P/P	51 - 141
2395032	Chlorfenapyr	80.9	82.4	P/P	46 - 111
2395032	Chlorpyrifos Ethyl	96.0	101	P/P	52 - 120
2395032	Chlorpyrifos Methyl	106	104	P/P	63 - 119
2395032	Coumaphos	82.6	88.1	P/P	10 - 228
2395032	Cyanazine	187	210	P/P	59 - 241
2395032	Cyprodinil	113	94.2	P/P	47 - 146
2395032	Dechlorane 602	72.8	78.0	P/P	50 - 150
2395032	Dechlorane 603	81.0	89.9	P/P	50 - 150
2395032	Dechlorane Plus	52.5	82.7	P/P	50 - 150
2395032	Demeton	82.6	89.8	P/P	40 - 136
2395032	Diazinon	116	114	P/P	69 - 132
2395032	Difenoconazole	113	115	P/P	57 - 258
2395032	Dimethenamid	105	94.6	P/P	54 - 110
2395032	Dimethomorph	153	185	P/P	28 - 210
2395032	Disulfoton	97.8	108	P/P	43 - 133
2395032	Dithiopyr	105	98.2	P/P	39 - 116
2395032	EPTC	65.0	62.3	P/P	20 - 78.0
2395032	Ethion	65.4	67.2	P/P	17 - 119
2395032	Ethoprop	89.2	91.4	P/P	66 - 120
2395032	Etridiazole	73.6	70.3	P/P	28 - 96.0
2395032	Fenamiphos	72.1	68.2	P/P	41 - 126
2395032	Fenbuconazole	90.0	93.7	P/P	42 - 169
2395032	Fipronil	111	111	P/P	61 - 132
2395032	Fipronil Desulfinyl	100	92.9	P/P	56 - 132
2395032	Fipronil Sulfide	92.3	83.5	P/P	48 - 119
2395032	Fipronil Sulfone	81.6	71.3	P/P	42 - 131
2395032	Fluazifop-P-butyl	115	98.6	P/P	53 - 131
2395032	Fludioxonil	100	90.6	P/P	56 - 127
2395032	Flumioxazin	104	110	P/P	19 - 300
2395032	Flutolanil	108	89.0	P/P	41 - 127
2395032	Fluxapyroxad	91.6	85.0	P/P	42 - 172
2395032	Fonofos	95.2	95.8	P/P	59 - 113
2395032	Hexabromobenzene	95.2	101	P/P	50 - 150
2395032	Hexazinone	91.6	93.1	P/P	66 - 122

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P427449

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395032	Imazalil	77.9	81.3	P/P	21 - 283
2395032	Iprodione	113	97.3	P/P	43 - 150
2395032	Loratadine	144	165	P/P	23 - 201
2395032	Malathion	90.0	37.6	P/F	58 - 136
2395032	Metribuzin	93.4	95.1	P/P	58 - 294
2395032	Mevinphos	89.2	88.5	P/P	50 - 126
2395032	Molinate	70.9	72.7	P/P	42 - 93.0
2395032	Myclobutanil	104	100	P/P	55 - 125
2395032	Naled	80.1	72.4	P/P	18 - 200
2395032	Napropamide	96.8	82.4	P/P	39 - 110
2395032	Octinoxate	81.8	83.4	P/P	21 - 159
2395032	Oxadiazon	89.5	87.5	P/P	43 - 112
2395032	Oxybenzone	104	111	P/P	41 - 142
2395032	Oxyfluorfen	119	115	P/P	64 - 153
2395032	Parathion Ethyl	91.3	101	P/P	69 - 114
2395032	Parathion Methyl	96.0	105	P/P	79 - 139
2395032	PBB-153	95.9	99.0	P/P	50 - 150
2395032	PBDE-47	106	114	P/P	27 - 144
2395032	PBDE-99	109	118	P/P	18 - 150
2395032	Pendimethalin	115	112	P/P	50 - 139
2395032	Pentabromotoluene	81.1	82.9	P/P	50 - 150
2395032	Phenytoin	39.3	47.4	P/P	10 - 146
2395032	Phorate	85.5	86.8	P/P	54 - 161
2395032	Prodiamine	55.2	55.2	P/P	30 - 161
2395032	Prometon	95.6	116	P/P	45 - 134
2395032	Prometryn	120	111	P/P	45 - 137
2395032	Pronamide	110	110	P/P	65 - 133
2395032	Propanil	121	124	P/P	49 - 142
2395032	Propargite	79.1	65.7	P/P	10 - 203
2395032	Propiconazole	115	99.0	P/P	38 - 146
2395032	Pyraflufen Ethyl	96.6	82.6	P/P	34 - 153
2395032	Pyridaben	112	143	P/P	12 - 192
2395032	Pyriproxyfen	100	92.9	P/P	33 - 180
2395032	Simazine	95.2	82.1	P/P	51 - 157
2395032	Stirophos	77.7	22.1	P/P	10 - 128
2395032	Sulfentrazone	107	105	P/P	53 - 186
2395032	Tebuconazole	66.1	64.8	P/P	10 - 133
2395032	Terbufos	101	98.9	P/P	65 - 139
2395032	Terbutylazine	102	103	P/P	66 - 117
2395032	Tetradecachloro-m-terphenyl	96.8	155	P/P	70 - 200
2395032	Thiobencarb	94.5	57.3	P/P	51 - 119
2395032	Tri-o-cresyl Phosphate	106	107	P/P	31 - 144
2395032	Triadimefon	102	93.6	P/P	48 - 119
2395032	Tris(1-chloro-2-propyl) phosphate (TCPP)	109	116	P/P	50 - 150
2395032	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	95.2	104	P/P	50 - 150
2395032	Tris(2-chloroethyl) phosphate (TCEP)	104	113	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P427546

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395861	Acesulfame K	95.5	95.8	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P427546

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395861	AMPA	114	111	P/P	40 - 150
2395861	Endothall	99.9	107	P/P	40 - 150
2395861	Glufosinate	88.5	87.3	P/P	40 - 150
2395861	Glyphosate	92.7	88.0	P/P	40 - 150
2395861	Sucralose	87.3	87.5	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P427647

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395840	2,4-D	105	98.5	P/P	40 - 150
2395840	2,4,5-T	100	96.1	P/P	40 - 150
2395840	Acetaminophen	87.8	88.4	P/P	30 - 150
2395840	Acetamiprid	90.7	95.7	P/P	40 - 150
2395840	Afidopyropen	74.2	61.6	P/P	30 - 150
2395840	Bentazon	93.6	99.4	P/P	30 - 150
2395840	Benzovindiflupyr	88.7	83.8	P/P	40 - 150
2395840	Carbamazepine	95.1	97.0	P/P	40 - 150
2395840	Clothianidin	118	102	P/P	40 - 150
2395840	Dinotefuran	126	135	P/P	40 - 150
2395840	Diuron	90.9	76.6	P/P	40 - 150
2395840	Fenuron	101	89.4	P/P	40 - 150
2395840	Fluridone	83.0	78.8	P/P	40 - 150
2395840	Hydrocodone	137	131	P/P	40 - 150
2395840	Ibuprofen	72.8	74.6	P/P	40 - 150
2395840	Imazapyr	142	129	P/P	40 - 150
2395840	Imidacloprid	107	92.5	P/P	40 - 150
2395840	Linuron	79.9	90.8	P/P	40 - 150
2395840	Mandestrobin	86.3	81.7	P/P	40 - 150
2395840	MCPP	101	101	P/P	40 - 150
2395840	Naproxen	82.9	107	P/P	40 - 150
2395840	Primidone	101	106	P/P	40 - 150
2395840	Pyraclostrobin	70.2	68.7	P/P	40 - 150
2395840	Silvex	99.6	104	P/P	40 - 150
2395840	Thiamethoxam	128	110	P/P	40 - 150
2395840	Tolfenpyrad	44.9	46.2	P/P	30 - 150
2395840	Triclopyr	96.8	92.9	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P427668

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395918	Fluoride	102	99.4	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P427906

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2395708	Organic Carbon	97.4	96.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P427580

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395918	Color (true)	7.70	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427583

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395895	Turbidity	8.14	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P427613

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395000	Calcium	0.986	Spike	P	0 - 20
2395000	Iron	0.0222	Spike	P	0 - 20
2395000	Magnesium	0.604	Spike	P	0 - 20
2395000	Potassium	0.679	Spike	P	0 - 20
2395000	Sodium	0.582	Spike	P	0 - 20
2395000	Strontium	1.30	Spike	P	0 - 20
2395000	Tin	1.15	Spike	P	0 - 20
2395000	Titanium	9.71	Spike	P	0 - 20
2395000	Vanadium	0.0172	Spike	P	0 - 20
2395000	Zinc	0.288	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P427613

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395000	Aluminum	10.3	Spike	P	0 - 20
2395000	Antimony	1.27	Spike	P	0 - 20
2395000	Barium	0.686	Spike	P	0 - 20
2395000	Beryllium	0.0552	Spike	P	0 - 20
2395000	Boron	0.502	Spike	P	0 - 20
2395000	Cadmium	1.20	Spike	P	0 - 20
2395000	Chromium	1.95	Spike	P	0 - 20
2395000	Copper	0.838	Spike	P	0 - 20
2395000	Lead	0.440	Spike	P	0 - 20
2395000	Manganese	1.47	Spike	P	0 - 20
2395000	Molybdenum	0.966	Spike	P	0 - 20
2395000	Nickel	0.805	Spike	P	0 - 20
2395000	Selenium	0.701	Spike	P	0 - 20
2395000	Silver	0.748	Spike	P	0 - 20
2395000	Thallium	0.989	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P427791

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

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P427791

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2396455	Arsenic	0.995	Spike	P	0 - 20
2396455	Cobalt	2.02	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P427892

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395895	Chloride	0.546	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P427894

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395895	Sulfate	1.52	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P427759

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395935	Ammonia-N	0.539	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P427739

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2396051	Kjeldahl Nitrogen	3.62	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P427866

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395896	NO2NO3-N	0.957	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P427687

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2396049	Total-P	0.577	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P427577

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395936	O-Phosphate-P	0.800	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P427449

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395032	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	4.95	Spike	P	0 - 37
2395032	Acetochlor	4.37	Spike	P	0 - 28
2395032	Alachlor	4.95	Spike	P	0 - 30
2395032	Ametryn	14.4	Spike	P	0 - 32
2395032	Atrazine	4.09	Spike	P	0 - 41
2395032	Atrazine Desethyl	18.4	Spike	P	0 - 36
2395032	Avobenzone	10.8	Spike	P	0 - 36
2395032	Azinphos Methyl	0.795	Spike	P	0 - 75
2395032	Azoxystrobin	8.21	Spike	P	0 - 39
2395032	Bromacil	1.64	Spike	P	0 - 33
2395032	Butylate	4.88	Spike	P	0 - 44
2395032	Caffeine	5.08	Spike	P	0 - 74
2395032	Carbophenothion	11.8	Spike	P	0 - 25
2395032	Carfentrazone Ethyl	3.99	Spike	P	0 - 27
2395032	Chlorfenapyr	1.86	Spike	P	0 - 24
2395032	Chlorpyrifos Ethyl	5.43	Spike	P	0 - 26
2395032	Chlorpyrifos Methyl	2.29	Spike	P	0 - 26
2395032	Coumaphos	6.39	Spike	P	0 - 28
2395032	Cyanazine	11.8	Spike	P	0 - 48
2395032	Cyprodinil	17.8	Spike	P	0 - 29
2395032	Dechlorane 602	6.80	Spike	P	0 - 30
2395032	Dechlorane 603	10.4	Spike	P	0 - 30
2395032	Dechlorane Plus	44.6	Spike	F	0 - 30
2395032	Demeton	8.36	Spike	P	0 - 33
2395032	Diazinon	1.28	Spike	P	0 - 29
2395032	Difenoconazole	1.45	Spike	P	0 - 34
2395032	Dimethenamid	10.6	Spike	P	0 - 39
2395032	Dimethomorph	19.1	Spike	P	0 - 51
2395032	Disulfoton	10.0	Spike	P	0 - 30
2395032	Dithiopyr	6.32	Spike	P	0 - 26
2395032	EPTC	4.10	Spike	P	0 - 43
2395032	Ethion	2.74	Spike	P	0 - 79
2395032	Ethoprop	2.46	Spike	P	0 - 29
2395032	Etridiazole	4.64	Spike	P	0 - 33
2395032	Fenamiphos	5.49	Spike	P	0 - 40
2395032	Fenbuconazole	4.05	Spike	P	0 - 74
2395032	Fipronil	0.186	Spike	P	0 - 29
2395032	Fipronil Desulfinyl	7.38	Spike	P	0 - 32
2395032	Fipronil Sulfide	9.96	Spike	P	0 - 30
2395032	Fipronil Sulfone	13.5	Spike	P	0 - 33
2395032	Fluazifop-P-butyl	15.1	Spike	P	0 - 38
2395032	Fludioxonil	10.3	Spike	P	0 - 29
2395032	Flumioxazin	5.42	Spike	P	0 - 51
2395032	Flutolanil	19.5	Spike	P	0 - 25
2395032	Fluxapyroxad	7.46	Spike	P	0 - 45
2395032	Fonofos	0.628	Spike	P	0 - 27
2395032	Hexabromobenzene	5.45	Spike	P	0 - 30
2395032	Hexazinone	1.12	Spike	P	0 - 30
2395032	Imazalil	4.21	Spike	P	0 - 100
2395032	Iprodione	15.3	Spike	P	0 - 33
2395032	Loratadine	13.8	Spike	P	0 - 56

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P427449

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395032	Malathion	82.2	Spike	F	0 - 37
2395032	Metalaxyl	2.20	Spike	P	0 - 40
2395032	Metolachlor	8.04	Spike	P	0 - 29
2395032	Metribuzin	1.83	Spike	P	0 - 45
2395032	Mevinphos	0.776	Spike	P	0 - 29
2395032	Molinate	2.54	Spike	P	0 - 33
2395032	Myclobutanil	3.68	Spike	P	0 - 26
2395032	Naled	10.2	Spike	P	0 - 37
2395032	Napropamide	16.0	Spike	P	0 - 44
2395032	Norflurazon	15.3	Spike	P	0 - 30
2395032	Octinoxate	1.91	Spike	P	0 - 45
2395032	Oxadiazon	2.19	Spike	P	0 - 28
2395032	Oxybenzone	6.63	Spike	P	0 - 46
2395032	Oxyfluorfen	2.89	Spike	P	0 - 28
2395032	Parathion Ethyl	10.3	Spike	P	0 - 31
2395032	Parathion Methyl	9.12	Spike	P	0 - 29
2395032	PBB-153	3.12	Spike	P	0 - 30
2395032	PBDE-47	7.20	Spike	P	0 - 36
2395032	PBDE-99	7.49	Spike	P	0 - 40
2395032	Pendimethalin	2.48	Spike	P	0 - 33
2395032	Pentabromotoluene	2.25	Spike	P	0 - 30
2395032	Phenytol	18.6	Spike	P	0 - 100
2395032	Phorate	1.45	Spike	P	0 - 36
2395032	Prodiamine	0.122	Spike	P	0 - 71
2395032	Prometon	19.0	Spike	P	0 - 36
2395032	Prometryn	7.69	Spike	P	0 - 28
2395032	Pronamide	0.542	Spike	P	0 - 24
2395032	Propanil	2.98	Spike	P	0 - 28
2395032	Propargite	18.4	Spike	P	0 - 43
2395032	Propiconazole	15.2	Spike	P	0 - 33
2395032	Pyraflufen Ethyl	15.7	Spike	P	0 - 29
2395032	Pyridaben	24.3	Spike	P	0 - 30
2395032	Pyriproxyfen	7.61	Spike	P	0 - 79
2395032	Simazine	14.8	Spike	P	0 - 29
2395032	Stirophos	111	Spike	F	0 - 61
2395032	Sulfentrazone	1.20	Spike	P	0 - 33
2395032	Tebuconazole	1.98	Spike	P	0 - 69
2395032	Terbufos	2.05	Spike	P	0 - 29
2395032	Terbuthylazine	1.11	Spike	P	0 - 32
2395032	Tetradecachloro-m-terphenyl	46.4	Spike	F	0 - 30
2395032	Thiobencarb	49.0	Spike	F	0 - 26
2395032	Tri-o-cresyl Phosphate	0.546	Spike	P	0 - 33
2395032	Triadimefon	8.44	Spike	P	0 - 28
2395032	Tris(1-chloro-2-propyl) phosphate (TCPP)	6.16	Spike	P	0 - 30
2395032	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	8.81	Spike	P	0 - 30
2395032	Tris(2-chloroethyl) phosphate (TCEP)	8.95	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P427546

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395861	Acesulfame K	0.404	Spike	P	0 - 30
2395861	AMPA	2.09	Spike	P	0 - 30
2395861	Endothall	6.67	Spike	P	0 - 30
2395861	Glufosinate	1.38	Spike	P	0 - 30
2395861	Glyphosate	5.22	Spike	P	0 - 30
2395861	Sucralose	0.184	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P427647

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395840	2,4-D	6.46	Spike	P	0 - 30
2395840	2,4,5-T	4.13	Spike	P	0 - 30
2395840	Acetaminophen	0.713	Spike	P	0 - 30
2395840	Acetamiprid	5.39	Spike	P	0 - 30
2395840	Afidopyropen	18.6	Spike	P	0 - 30
2395840	Bentazon	6.03	Spike	P	0 - 30
2395840	Benzovindiflupyr	5.76	Spike	P	0 - 30
2395840	Carbamazepine	1.94	Spike	P	0 - 30
2395840	Clothianidin	14.6	Spike	P	0 - 30
2395840	Dinotefuran	6.91	Spike	P	0 - 30
2395840	Diuron	17.1	Spike	P	0 - 30
2395840	Fenuron	12.6	Spike	P	0 - 30
2395840	Fluridone	5.13	Spike	P	0 - 30
2395840	Hydrocodone	4.58	Spike	P	0 - 30
2395840	Ibuprofen	2.47	Spike	P	0 - 30
2395840	Imazapyr	9.58	Spike	P	0 - 30
2395840	Imidacloprid	14.2	Spike	P	0 - 30
2395840	Linuron	12.8	Spike	P	0 - 30
2395840	Mandestrobin	5.53	Spike	P	0 - 30
2395840	MCPP	0.560	Spike	P	0 - 30
2395840	Naproxen	25.4	Spike	P	0 - 30
2395840	Primidone	4.16	Spike	P	0 - 30
2395840	Pyraclostrobin	2.26	Spike	P	0 - 30
2395840	Silvex	4.74	Spike	P	0 - 30
2395840	Thiamethoxam	14.9	Spike	P	0 - 30
2395840	Tolfenpyrad	2.88	Spike	P	0 - 30
2395840	Triclopyr	4.07	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P427850

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2396122	Total Alkalinity	0.125	Sample	P	0 - 3.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-2015
Batch ID: P428162

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395010	TDS	5.68	Sample	P	0 - 10

Reference Method: SM 2540 C-2015
Batch ID: P428163

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395677	TDS	1.72	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P427668

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395918	Fluoride	1.48	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P427906

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2395708	Organic Carbon	0.722	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2395943

Field Sample ID: G3NW0141

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	112	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	98.7	P	30 - 160
EPA 8321B	Diuron-d6	71.0	P	30 - 160
EPA 8321B	Endothall-d6	88.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	93.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	74.5	P	30 - 160
EPA 8321B	Primidone-d5	104	P	30 - 160
EPA 8321B	Sucralose-d6	87.8	P	30 - 160

Lab Sample ID: 2395944

Field Sample ID: FB_03222023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	109	P	30 - 160
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	113	P	30 - 160
EPA 8321B	Diuron-d6	97.4	P	30 - 160
EPA 8321B	Endothall-d6	86.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	82.5	P	30 - 160
EPA 8321B	Primidone-d5	113	P	30 - 160
EPA 8321B	Sucralose-d6	89.0	P	30 - 160

Lab Sample ID: 2395946

Field Sample ID: G3NW0141

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	93.9	P	20 - 200
EPA 8270E	Simazine-d10	104	P	62 - 142
EPA 8270E	Terbufos-d10	107	P	58 - 132
EPA 8270E	Terphenyl-d14	101	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A118164

Included Lab Sample IDs: 2395936, 2395939

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.8	98.3	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A118165

Included Lab Sample IDs: 2395934, 2395937

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.9	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118166

Included Lab Sample IDs: 2395934, 2395937

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

Reference Method: SM 4500-F- C-2011

Run ID: A118194

Included Lab Sample IDs: 2395934, 2395937

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

Reference Method: EPA 8270E

Run ID: A118219

Included Lab Sample IDs: 2395946

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	86.3		P	80 - 120
Avobenzone	91.7		P	80 - 120
Dechlorane 602	85.3		P	80 - 120
Dechlorane 603	86.8		P	80 - 120
Dechlorane Plus	91.7		P	80 - 120
Hexabromobenzene	87.0		P	80 - 120
Octinoxate	82.0		P	80 - 120
Oxybenzone	94.0		P	80 - 120
PBB-153	88.7		P	80 - 120
PBDE-47	92.6		P	80 - 120
PBDE-99	99.7		P	80 - 120
Pentabromotoluene	82.1		P	80 - 120
Tetradecachloro-m-terphenyl	103		P	80 - 120
Tri-o-cresyl Phosphate	93.6		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	91.2		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	93.9		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	94.1		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A118222

Included Lab Sample IDs: 2395945

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
-----------	---------	---------	------------	----------------

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A118222

Included Lab Sample IDs: 2395945

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.6	98.4	P/P	90 - 110
Antimony	104	101	P/P	90 - 110
Barium	99.9	96.8	P/P	90 - 110
Beryllium	95.6	95.0	P/P	90 - 110
Boron	101	104	P/P	90 - 110
Cadmium	101	98.4	P/P	90 - 110
Chromium	97.1	94.6	P/P	90 - 110
Copper	97.2	94.8	P/P	90 - 110
Lead	102	101	P/P	90 - 110
Manganese	98.6	97.1	P/P	90 - 110
Molybdenum	97.7	96.6	P/P	90 - 110
Nickel	97.8	94.7	P/P	90 - 110
Selenium	99.9	98.3	P/P	90 - 110
Silver	103	101	P/P	90 - 110
Thallium	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118235

Included Lab Sample IDs: 2395935, 2395938

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	98.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118236

Included Lab Sample IDs: 2395935, 2395938

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A118247

Included Lab Sample IDs: 2395934, 2395937

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.7	98.7	P/P	90 - 110
Sulfate	96.6	97.7	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A118252

Included Lab Sample IDs: 2395943, 2395944

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	101	101	P/P	60 - 160
Endothall	116	104	P/P	60 - 160
Glufosinate	102	103	P/P	60 - 160
Glyphosate	117	105	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A118253

Included Lab Sample IDs: 2395943, 2395944

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	91.3	92.1	P/P	60 - 160
Sucralose	106	92.5	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A118258

Included Lab Sample IDs: 2395935, 2395938

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.4	96.6	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A118280

Included Lab Sample IDs: 2395934, 2395937

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	94.7	96.7	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A118288

Included Lab Sample IDs: 2395946

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	105		P	80 - 120
Alachlor	105		P	80 - 120
Ametryn	107		P	80 - 120
Atrazine	106		P	80 - 120
Atrazine Desethyl	107		P	80 - 120
Azinphos Methyl	95.5		P	80 - 120
Azoxystrobin	101		P	80 - 120
Bromacil	108		P	80 - 120
Butylate	99.8		P	80 - 120
Caffeine	100		P	80 - 120
Carbophenothion	95.3		P	80 - 120
Carfentrazone Ethyl	109		P	80 - 120
Chlorfenapyr	102		P	80 - 120
Chlorpyrifos Ethyl	97.4		P	80 - 120
Chlorpyrifos Methyl	95.8		P	80 - 120
Coumaphos	96.6		P	80 - 120
Cyanazine	92.8		P	80 - 120
Cyprodinil	103		P	80 - 120
Demeton	99.9		P	80 - 120
Diazinon	104		P	80 - 120
Difenoconazole	108		P	80 - 120
Dimethenamid	106		P	80 - 120
Dimethomorph	103		P	80 - 120
Disulfoton	100		P	80 - 120
Dithiopyr	110		P	80 - 120
EPTC	102		P	80 - 120
Ethion	98.0		P	80 - 120
Ethoprop	97.6		P	80 - 120
Etridiazole	104		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A118288
 Included Lab Sample IDs: 2395946

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenamiphos	98.3		P	80 - 120
Fenbuconazole	108		P	80 - 120
Fipronil	102		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	100		P	80 - 120
Fipronil Sulfone	96.3		P	80 - 120
Fluazifop-P-butyl	112		P	80 - 120
Fludioxonil	106		P	80 - 120
Flumioxazin	101		P	80 - 120
Flutolanil	104		P	80 - 120
Fluxapyroxad	102		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	106		P	80 - 120
Imazalil	107		P	80 - 120
Iprodione	97.5		P	80 - 120
Loratadine	102		P	80 - 120
Malathion	94.5		P	80 - 120
Metalaxyl	101		P	80 - 120
Metolachlor	106		P	80 - 120
Metribuzin	102		P	80 - 120
Mevinphos	97.7		P	80 - 120
Molinate	101		P	80 - 120
Myclobutanil	102		P	80 - 120
Naled	115		P	80 - 120
Napropamide	104		P	80 - 120
Norflurazon	97.6		P	80 - 120
Oxadiazon	106		P	80 - 120
Oxyfluorfen	102		P	80 - 120
Parathion Ethyl	99.4		P	80 - 120
Parathion Methyl	99.2		P	80 - 120
Pendimethalin	99.9		P	80 - 120
Phenytoin	101		P	80 - 120
Phorate	101		P	80 - 120
Prodiamine	108		P	80 - 120
Prometon	107		P	80 - 120
Prometryn	106		P	80 - 120
Pronamide	109		P	80 - 120
Propanil	104		P	80 - 120
Propargite	101		P	80 - 120
Propiconazole	110		P	80 - 120
Pyraflufen Ethyl	96.4		P	80 - 120
Pyridaben	108		P	80 - 120
Pyriproxyfen	109		P	80 - 120
Simazine	102		P	80 - 120
Stirophos	94.5		P	80 - 120
Sulfentrazone	85.6		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	103		P	80 - 120
Terbuthylazine	104		P	80 - 120
Thiobencarb	108		P	80 - 120
Triadimefon	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A118290

Included Lab Sample IDs: 2395935, 2395938

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A118307

Included Lab Sample IDs: 2395945

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	101	99.9	P/P	90 - 110
Cobalt	101	99.2	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A118309

Included Lab Sample IDs: 2395943, 2395944

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	92.6	95.2	P/P	50 - 150
2,4,5-T	97.6	93.7	P/P	50 - 150
Acetaminophen	104	105	P/P	60 - 160
Acetamiprid	117	119	P/P	50 - 150
Afidopyropen	93.8	124	P/P	50 - 150
Bentazon	117	128	P/P	50 - 160
Benzovindiflupyr	103	110	P/P	50 - 150
Carbamazepine	114	122	P/P	60 - 150
Clothianidin	131	131	P/P	60 - 150
Dinotefuran	134	149	P/P	50 - 150
Diuron	123	116	P/P	60 - 160
Fenuron	123	123	P/P	60 - 150
Fluridone	106	101	P/P	60 - 160
Hydrocodone	145	145	P/P	60 - 150
Ibuprofen	105	86.8	P/P	50 - 160
Imazapyr	135	134	P/P	50 - 150
Imidacloprid	104	107	P/P	60 - 150
Linuron	107	112	P/P	60 - 150
Mandestrobin	103	112	P/P	50 - 150
MCPP	95.8	87.7	P/P	50 - 150
Naproxen	101	131	P/P	50 - 160
Primidone	112	113	P/P	60 - 150
Pyraclostrobin	102	101	P/P	60 - 150
Silvex	93.1	104	P/P	50 - 150
Thiamethoxam	138	134	P/P	50 - 150
Tolfenpyrad	97.5	98.4	P/P	60 - 150
Triclopyr	107	105	P/P	50 - 150

Reference Method: SM 5310 B-2011

Run ID: A118311

Included Lab Sample IDs: 2395935, 2395938

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.8	99.0	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A118384

Included Lab Sample IDs: 2395945

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	90 - 110
Iron	103	106	P/P	90 - 110
Magnesium	101	103	P/P	90 - 110
Potassium	97.0	99.1	P/P	90 - 110
Sodium	98.8	101	P/P	90 - 110
Strontium	102	100	P/P	90 - 110
Tin	103	103	P/P	90 - 110
Titanium	102	102	P/P	90 - 110
Vanadium	101	101	P/P	90 - 110
Zinc	102	101	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)	96.5					7.70	
EPA 180.1 Rev. 2.0	Turbidity	100					8.14	
EPA 200.7 Rev. 4.4	Calcium	98.5	105	96.9				0.986
	Iron	106	102	102	107			0.0222
	Magnesium	98.0	107	97.8				0.604
	Potassium	95.2	90.9	92.0	97.6			0.679
	Sodium	96.9	104	96.5				0.582
	Strontium	105	99.9	101	104			1.30
	Tin	103	93.5	94.6	105			1.15
	Titanium	105	100	83.0	109			9.71
	Vanadium	103	99.8	99.8	107			0.0172
	Zinc	102	96.8	96.4	104			0.288
EPA 200.8 Rev. 5.4	Aluminum	101	92.6	118	97.9			10.3
	Antimony	106	96.4	97.7	103			1.27
	Arsenic	102	101	100	99.8			0.995
	Barium	104	94.2	96.2	99.9			0.686
	Beryllium	100	91.9	91.9	94.2			0.0552
	Boron	102	103	103	102			0.502
	Cadmium	103	100	101	101			1.20
	Chromium	101	95.2	97.3	96.1			1.95
	Cobalt	104	100	98.3	97.8			2.02
	Copper	102	94.6	95.4	94.2			0.838
	Lead	104	102	102	101			0.440
	Manganese	101	97.2	98.8	97.5			1.47
	Molybdenum	103	100	101	102			0.966
	Nickel	103	95.1	95.9	95.2			0.805
	Selenium	99.6	95.6	96.2	95.2			0.701
	Silver	104	101	102	101			0.748
	Thallium	103	104	106	101			0.989
EPA 300.0 Rev. 2.1	Chloride	98.7	101	94.8			0.546	
	Sulfate	96.7	99.0	96.4			1.52	
EPA 350.1 Rev. 2.0	Ammonia-N	99.2	102	103				0.539
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	94.7	104	98.3				3.62
EPA 353.2 Rev. 2.0	NO2NO3-N	104	105	104				0.957
EPA 365.1 Rev. 2.0	Total-P	98.9	100	101				0.577
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.9	99.6	100				0.800
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	80.8	85.8	90.2				4.95
	Acetochlor	87.5	107	103				4.37
	Alachlor	82.9	99.9	95.0				4.95
	Ametryn	125	129	104				14.4
	Atrazine	95.7						4.09
	Atrazine Desethyl	111	117	97.0				18.4
	Avobenzone	106	108	120				10.8
	Azinphos Methyl	96.1	119	120				0.795
	Azoxystrobin	78.7	104	114				8.21
	Bromacil	92.0						1.64
	Butylate	69.6	70.5	67.1				4.88
	Caffeine	109	117	111				5.08
	Carbophenothion	81.9	89.3	79.3				11.8
	Carfentrazone Ethyl	93.2	113	109				3.99
	Chlorfenapyr	78.2	80.9	82.4				1.86
	Chlorpyrifos Ethyl	108	96.0	101				5.43

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Chlorpyrifos Methyl	96.2	106	104		2.29
	Coumaphos	70.8	82.6	88.1		6.39
	Cyanazine	195	210	187		11.8
	Cyprodinil	93.9	113	94.2		17.8
	Dechlorane 602	86.7	72.8	78.0		6.80
	Dechlorane 603	93.6	81.0	89.9		10.4
	Dechlorane Plus	79.5	52.5	82.7		44.6
	Demeton	83.6	82.6	89.8		8.36
	Diazinon	102	116	114		1.28
	Difenoconazole	147	113	115		1.45
	Dimethenamid	77.2	105	94.6		10.6
	Dimethomorph	93.9	153	185		19.1
	Disulfoton	101	97.8	108		10.0
	Dithiopyr	78.0	105	98.2		6.32
	EPTC	59.9	65.0	62.3		4.10
	Ethion	32.9	65.4	67.2		2.74
	Ethoprop	94.7	89.2	91.4		2.46
	Etridiazole	67.1	73.6	70.3		4.64
	Fenamiphos	79.2	72.1	68.2		5.49
	Fenbuconazole	123	90.0	93.7		4.05
	Fipronil	93.9	111	111		0.186
	Fipronil Desulfinyl	71.8	100	92.9		7.38
	Fipronil Sulfide	83.7	92.3	83.5		9.96
	Fipronil Sulfone	74.8	81.6	71.3		13.5
	Fluazifop-P-butyl	97.5	115	98.6		15.1
	Fludioxonil	74.6	100	90.6		10.3
	Flumioxazin	53.7	104	110		5.42
	Flutolanil	92.9	108	89.0		19.5
	Fluxapyroxad	60.4	91.6	85.0		7.46
	Fonofos	101	95.2	95.8		0.628
	Hexabromobenzene	102	95.2	101		5.45
	Hexazinone	93.6	91.6	93.1		1.12
	Imazalil	87.7	77.9	81.3		4.21
	Iprodione	75.8	113	97.3		15.3
	Loratadine	92.3	144	165		13.8
	Malathion	85.8	90.0	37.6		82.2
	Metalaxyl	79.3				2.20
	Metolachlor	90.8				8.04
	Metribuzin	116	93.4	95.1		1.83
	Mevinphos	98.1	89.2	88.5		0.776
	Molinate	74.5	70.9	72.7		2.54
	Myclobutanil	88.4	104	100		3.68
	Naled	77.3	80.1	72.4		10.2
	Napropamide	60.8	96.8	82.4		16.0
	Norflurazon	61.0				15.3
	Octinoxate	109	81.8	83.4		1.91
	Oxadiazon	71.0	89.5	87.5		2.19
	Oxybenzone	113	104	111		6.63
	Oxyfluorfen	92.0	119	115		2.89
	Parathion Ethyl	107	91.3	101		10.3
	Parathion Methyl	102	96.0	105		9.12
	PBB-153	93.7	95.9	99.0		3.12
	PBDE-47	108	106	114		7.20
	PBDE-99	95.7	109	118		7.49

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Pendimethalin	107	115	112			2.48
	Pentabromotoluene	99.0	81.1	82.9			2.25
	Phenytoin	15.6	39.3	47.4			18.6
	Phorate	84.6	85.5	86.8			1.45
	Prodiamine	42.0	55.2	55.2			0.122
	Prometon	88.7	95.6	116			19.0
	Prometryn	95.5	120	111			7.69
	Pronamide	103	110	110			0.542
	Propanil	102	121	124			2.98
	Propargite	42.2	79.1	65.7			18.4
	Propiconazole	66.7	115	99.0			15.2
	Pyraflufen Ethyl	58.7	96.6	82.6			15.7
	Pyridaben	109	112	143			24.3
	Pyriproxyfen	159	100	92.9			7.61
	Simazine	92.4	95.2	82.1			14.8
	Stiropfos	46.9	77.7	22.1			111
	Sulfentrazone	65.6	107	105			1.20
	Tebuconazole	38.1	66.1	64.8			1.98
	Terbufos	103	101	98.9			2.05
	Terbutylazine	93.3	102	103			1.11
	Tetradecachloro-m-terphenyl	107	96.8	155			46.4
	Thiobencarb	81.1	94.5	57.3			49.0
	Tri-o-cresyl Phosphate	116	106	107			0.546
	Triadimefon	84.1	102	93.6			8.44
	Tris(1-chloro-2-propyl) phosphate (TCPP)	118	109	116			6.16
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	102	95.2	104			8.81
	Tris(2-chloroethyl) phosphate (TCEP)	121	104	113			8.95
EPA 8321B	2,4-D	106	105	98.5			6.46
	2,4,5-T	107	100	96.1			4.13
	Acesulfame K	88.7	95.5	95.8			0.404
	Acetaminophen	92.7	87.8	88.4			0.713
	Acetamiprid	85.4	90.7	95.7			5.39
	Afidopyropen	71.5	74.2	61.6			18.6
	AMPA	104	114	111			2.09
	Bentazon	91.6	93.6	99.4			6.03
	Benzovindiflupyr	95.2	88.7	83.8			5.76
	Carbamazepine	95.2	95.1	97.0			1.94
	Clothianidin	115	118	102			14.6
	Dinotefuran	118	126	135			6.91
	Diuron	89.1	90.9	76.6			17.1
	Endothall	103	99.9	107			6.67
	Fenuron	109	101	89.4			12.6
	Fluridone	76.7	83.0	78.8			5.13
	Glufosinate	92.3	88.5	87.3			1.38
	Glyphosate	101	92.7	88.0			5.22
	Hydrocodone	126	137	131			4.58
	Ibuprofen	66.0	72.8	74.6			2.47
	Imazapyr	123	142	129			9.58
	Imidacloprid	98.0	107	92.5			14.2
	Linuron	89.6	79.9	90.8			12.8
	Mandestrobin	87.5	86.3	81.7			5.53

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	MCPP	101	101	101			0.560
	Naproxen	95.7	82.9	107			25.4
	Primidone	103	101	106			4.16
	Pyraclostrobin	79.6	70.2	68.7			2.26
	Silvex	107	99.6	104			4.74
	Sucralose	86.8	87.3	87.5			0.184
	Thiamethoxam	117	128	110			14.9
	Tolfenpyrad	54.8	44.9	46.2			2.88
	Triclopyr	98.0	96.8	92.9			4.07
SM 2320 B-2011	Total Alkalinity	96.9				0.125	
SM 2540 C-2015	TDS	98.6				5.68	
	TDS	97.1				1.72	
SM 2540 D-2015	TSS	95.9					
	TSS	102					
SM 4500-F- C-2011	Fluoride	101	102	99.4			1.48
SM 5310 B-2011	Organic Carbon	95.8	97.4	96.6			0.722

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2395934, 2395937
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2395934, 2395937
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2395945
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2395945
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2395934, 2395937
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2395934, 2395937
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2395935, 2395938
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2395935, 2395938
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2395935, 2395938
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2395935, 2395938
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2395936, 2395939
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2395946
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2395946
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2395943, 2395944
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2395934, 2395937
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2395945
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2395934, 2395937
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2395934, 2395937
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2395934, 2395937
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2395935, 2395938

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	03/23/2023			03/23/2023 14:07	Alexis Price	2395934, 2395937
EPA 180.1 Rev. 2.0	03/23/2023			03/23/2023 13:41	Anna M. Plaviak	2395934
	03/23/2023			03/23/2023 13:42	Anna M. Plaviak	2395937
EPA 200.7 Rev. 4.4	03/23/2023	03/24/2023 09:44	Vijayalakshmi Reddy	04/04/2023 16:33	Chase Roberts	2395945
EPA 200.8 Rev. 5.4	03/23/2023	03/24/2023 09:44	Vijayalakshmi Reddy	03/27/2023 17:09	Conrad Hartmann	2395945
	03/23/2023	03/29/2023 10:50	Vijayalakshmi Reddy	03/30/2023 16:32	Conrad Hartmann	2395945
EPA 300.0 Rev. 2.1	03/23/2023			03/30/2023 13:16	James L Waggeberby	2395934
	03/23/2023			03/30/2023 13:32	James L Waggeberby	2395937
EPA 350.1 Rev. 2.0	03/23/2023			03/28/2023 12:08	Khloe J Berg	2395935
	03/23/2023			03/28/2023 12:16	Khloe J Berg	2395938
EPA 351.2 Rev. 2.0	03/23/2023	03/28/2023 11:05	Simonne.V. Calhoun	03/29/2023 11:07	Judith K. Clark	2395935
	03/23/2023	03/28/2023 11:05	Simonne.V. Calhoun	03/29/2023 11:09	Judith K. Clark	2395938
EPA 353.2 Rev. 2.0	03/23/2023			03/30/2023 10:23	Beverly Y. Sanders	2395935
	03/23/2023			03/30/2023 10:25	Beverly Y. Sanders	2395938
EPA 365.1 Rev. 2.0	03/23/2023	03/27/2023 13:30	Alexis Price	03/28/2023 13:29	James L Waggeberby	2395938
	03/23/2023	03/27/2023 13:30	Alexis Price	03/28/2023 13:34	James L Waggeberby	2395935
EPA 365.1 Rev. 2.0 dissolved	03/23/2023			03/23/2023 14:20	Elise M. Gillis	2395936
	03/23/2023			03/23/2023 14:23	Elise M. Gillis	2395939
EPA 8270E	03/23/2023	03/24/2023 08:00	Fe-Val Siddell	03/27/2023 19:10	Arthur Maknenko	2395946
	03/23/2023	03/24/2023 08:00	Fe-Val Siddell	03/29/2023 20:56	Michael Poppell	2395946
EPA 8321B	03/23/2023	03/24/2023 13:00	Manjita Shrestha	03/24/2023 22:49	Manjita Shrestha	2395943
	03/23/2023	03/24/2023 13:00	Manjita Shrestha	03/24/2023 23:03	Manjita Shrestha	2395944
	03/23/2023	03/24/2023 13:00	Manjita Shrestha	03/25/2023 07:02	Manjita Shrestha	2395943
	03/23/2023	03/24/2023 13:00	Manjita Shrestha	03/25/2023 07:15	Manjita Shrestha	2395944
	03/23/2023	03/28/2023 09:00	Hoor Shaik	03/31/2023 00:24	Juyoung Kim	2395943
	03/23/2023	03/28/2023 09:00	Hoor Shaik	03/31/2023 00:42	Juyoung Kim	2395944
SM 2320 B-2011	03/23/2023			03/30/2023 00:45	Dale L. Simmons	2395934
	03/23/2023			03/30/2023 00:54	Dale L. Simmons	2395937
SM 2340 B-2011	03/23/2023			04/04/2023 16:33	Chase Roberts	2395945
SM 2540 C-2015	03/23/2023			03/24/2023 15:34	Yijie Li	2395934, 2395937
SM 2540 D-2015	03/23/2023			03/24/2023 15:34	Yijie Li	2395934, 2395937
SM 4500-F- C-2011	03/23/2023			03/24/2023 20:13	Chandler E Cox	2395934
	03/23/2023			03/24/2023 20:22	Chandler E Cox	2395937
SM 5310 B-2011	03/23/2023			03/30/2023 20:24	Elise M. Gillis	2395935
	03/23/2023			03/30/2023 20:43	Elise M. Gillis	2395938