Chemical Analysis Report

NW-DIST-2023-08-29-01

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

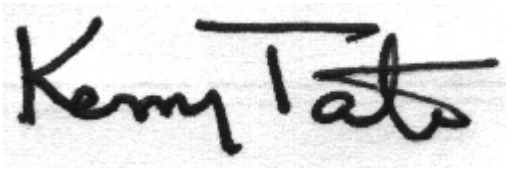
Event Description: **Bioassessment**
Request ID: **RQ-2023-08-28-09**
Customer: **NW-DIST**
Project ID: **SMP**

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: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 25-SEP-2023 08:35



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: Hawkins Creek below Camp Henderson Rd **Collection Date/Time: 08/28/2023 09:45**

Field ID: G4NW0042 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2434026	DEP SOP: NU-094-1	Color (true)	23		PCU	P434491	
	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P434495	
	EPA 300.0 Rev. 2.1	Chloride	2.8		mg Cl/L	P434603	
		Sulfate	0.35	I	mg SO4/L	P434606	
	SM 2320 B-2011	Total Alkalinity	1.2	I	mg CaCO3/L	P434707	
	SM 2540 C-2015	TDS	16	I	mg/L	P434781	
	SM 2540 D-2015	TSS	2	U	mg/L	P434782	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P434710	
2434027	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P434682	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.13	I	mg N/L	P434762	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.016		mg N/L	P434867	
	EPA 365.1 Rev. 2.0	Total-P	0.005	I	mg P/L	P434894	
	SM 5310 B-2011	Organic Carbon	1.8		mg C/L	P434775	
2434028	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.011		mg P/L	P434484	
2434040	EPA 8321B	2,4-D	0.0020	U	ug/L	P434478	
		Acesulfame K	0.10	U	ug/L	P434463	
		2,4,5-T	0.0040	U	ug/L	P434478	
		AMPA	0.10	U	ug/L	P434463	
		Acetaminophen	0.0080	U	ug/L	P434478	
		Acetamiprid	0.0020	U	ug/L	P434478	
		Endothall	0.25	U	ug/L	P434463	
		Glufosinate	0.10	U	ug/L	P434463	
		Glyphosate	0.10	U	ug/L	P434463	
		Afidopyropen	0.0020	U	ug/L	P434478	
		Bentazon	8.0E-04	U	ug/L	P434478	
		Sucralose	0.010	U	ug/L	P434463	
		Benzovindiflupyr	0.0020	U	ug/L	P434478	
		Carbamazepine	8.0E-04	U	ug/L	P434478	
		Clothianidin	0.0020	U	ug/L	P434478	
		Dinotefuran	0.0020	U	ug/L	P434478	
		Diuron	0.0020	U	ug/L	P434478	
		Fenuron	0.032	U	ug/L	P434478	
		Fluridone	8.0E-04	U	ug/L	P434478	
		Imazapyr	0.0040	U	ug/L	P434478	
		Hydrocodone	0.0020	U	ug/L	P434478	
		Ibuprofen	0.080	U	ug/L	P434478	
		Imidacloprid	0.0020	U	ug/L	P434478	
		Linuron	0.0040	U	ug/L	P434478	
		Mandestrobin	0.0020	U	ug/L	P434478	
		MCPP	0.0020	U	ug/L	P434478	
		Naproxen	0.0080	U	ug/L	P434478	
		Primidone	0.0040	U	ug/L	P434478	
		Pyraclostrobin	0.0020	U	ug/L	P434478	

Field ID: G4NW0042 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2434040	EPA 8321B	Silvex	0.0040	U	ug/L	P434478	
		Thiamethoxam	0.0020	U	ug/L	P434478	
		Tolfenpyrad	0.0020	U	ug/L	P434478	
		Triclopyr	0.0040	U	ug/L	P434478	
2434041	EPA 200.7 Rev. 4.4	Calcium	0.40		mg/L	P434562	
		Iron	530		ug/L	P434562	
		Magnesium	0.37		mg/L	P434562	
		Potassium	0.30	U	mg/L	P434562	
		Sodium	1.6	I	mg/L	P434562	
		Strontium	3.6	I	ug/L	P434562	
		Tin	3.0	U	ug/L	P434562	
		Titanium	1.3	I	ug/L	P434562	
		Vanadium	2.0	U	ug/L	P434562	
		Zinc	5.0	U	ug/L	P434562	
	EPA 200.8 Rev. 5.4	Aluminum	81		ug/L	P434562	
		Antimony	0.050	U	ug/L	P434562	
		Arsenic	0.51		ug/L	P434562	
		Barium	12.1		ug/L	P434562	
		Beryllium	0.027	I	ug/L	P434562	
		Boron	8.4		ug/L	P434562	
		Cadmium	0.020	U	ug/L	P434562	
		Chromium	0.40	U	ug/L	P434562	
		Cobalt	0.212		ug/L	P434562	
		Copper	0.40	U	ug/L	P434562	
		Lead	0.20	U	ug/L	P434562	
		Manganese	23.5		ug/L	P434562	
		Molybdenum	0.15	U	ug/L	P434562	
		Nickel	0.50	U	ug/L	P434562	
		Selenium	0.20	U	ug/L	P434562	
		Silver	0.010	U	ug/L	P434562	
		Thallium	0.10	U	ug/L	P434562	
	SM 2340 B-2011	Hardness	2.5		mg/L	P434562	
2434042	EPA 8270E	Oxybenzone**	11	U	ng/L	P434499	
		Acetochlor	0.22	U	ng/L	P434499	
		Octinoxate**	160	U	ng/L	P434499	
		Alachlor	0.43	U	ng/L	P434499	
		Avobenzone**	110	U	ng/L	P434499	
		Ametryn	1.2	U	ng/L	P434499	
		Atrazine	0.22	U	ng/L	P434499	
		PBDE-47**	4.3	U	ng/L	P434499	
		Atrazine Desethyl	1.4	U	ng/L	P434499	
		PBDE-99**	5.4	U	ng/L	P434499	
		Azinphos Methyl	3.2	U	ng/L	P434499	
		Tri-o-cresyl Phosphate**	6.5	U	ng/L	P434499	
		Azoxystrobin	0.43	U	ng/L	P434499	

Field ID: G4NW0042 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2434042	EPA 8270E	Bromacil	0.65	U	ng/L	P434499	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	13	U	ng/L	P434499	
		Butylate	0.22	U	ng/L	P434499	RPD
		Dechlorane Plus**	32	U	ng/L	P434499	
		Caffeine**	8.8	I	ng/L	P434499	
		Dechlorane 602**	5.4	U	ng/L	P434499	
		Carbophenothion	0.54	U	ng/L	P434499	
		Dechlorane 603**	4.3	U	ng/L	P434499	
		Carfentrazone Ethyl	0.16	U	ng/L	P434499	
		Hexabromobenzene**	6.5	U	ng/L	P434499	
		Chlorfenapyr	0.32	U	ng/L	P434499	
		PBB-153**	8.6	U	ng/L	P434499	RPD
		Chlorpyrifos Ethyl	0.32	U	ng/L	P434499	
		Pentabromotoluene**	3.2	U	ng/L	P434499	
		Chlorpyrifos Methyl	0.11	U	ng/L	P434499	MS
		Tris(2-chloroethyl) phosphate (TCEP)**	75	U	ng/L	P434499	
		Coumaphos	1.1	U	ng/L	P434499	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	16	U	ng/L	P434499	
		Cyanazine	5.4	U	ng/L	P434499	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.7	U	ng/L	P434499	
		Cyprodinil	0.22	U	ng/L	P434499	
		Tetradecachloro-m-terphenyl**	8.1	U	ng/L	P434499	
		Demeton	3.8	U	ng/L	P434499	
		Diazinon	0.13	U	ng/L	P434499	
		Difenoconazole	0.65	U	ng/L	P434499	
		Dimethenamid	0.11	U	ng/L	P434499	
		Dimethomorph	0.32	U	ng/L	P434499	
		Disulfoton	0.65	U	ng/L	P434499	
		Dithiopyr	1.1	U	ng/L	P434499	
		EPTC	0.54	U	ng/L	P434499	RPD
		Ethion	0.32	U	ng/L	P434499	
		Ethoprop	0.13	U	ng/L	P434499	
		Etridiazole	0.11	U	ng/L	P434499	
		Fenamiphos	0.48	U	ng/L	P434499	
		Fenbuconazole	0.54	U	ng/L	P434499	
		Fipronil	0.22	U	ng/L	P434499	
		Fipronil Desulfinyl**	0.11	U	ng/L	P434499	
		Fipronil Sulfide	0.11	U	ng/L	P434499	
		Fipronil Sulfone	0.11	U	ng/L	P434499	
		Fluazifop-P-butyl	0.11	U	ng/L	P434499	
		Fludioxonil	0.11	U	ng/L	P434499	
		Flumioxazin	3.2	U	ng/L	P434499	
		Flutolanil	0.11	U	ng/L	P434499	
		Fluxapyroxad	0.27	U	ng/L	P434499	RPD

Field ID: G4NW0042 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2434042	EPA 8270E	Fonofos	0.16	U	ng/L	P434499	
		Hexazinone	3.3		ng/L	P434499	
		Imazalil	0.70	U	ng/L	P434499	
		Iprodione	0.54	UJ	ng/L	P434499	CCV, RPD
		Loratadine**	0.32	U	ng/L	P434499	
		Malathion	0.38	U	ng/L	P434499	
		Metalaxyl	0.54	U	ng/L	P434499	
		Metolachlor	0.81	U	ng/L	P434499	
		Metribuzin	0.43	U	ng/L	P434499	
		Mevinphos	1.1	U	ng/L	P434499	
		Molinate	0.27	U	ng/L	P434499	RPD
		Myclobutanil	0.38	U	ng/L	P434499	
		Naled	2.7	U	ng/L	P434499	
		Napropamide	0.75	U	ng/L	P434499	
		Norflurazon	1.1	U	ng/L	P434499	
		Oxadiazon	0.38	U	ng/L	P434499	
		Oxyfluorfen	0.22	U	ng/L	P434499	
		Parathion Ethyl	0.16	U	ng/L	P434499	
		Parathion Methyl	0.22	U	ng/L	P434499	
		Pendimethalin	0.81	U	ng/L	P434499	
		Phenytoin**	5.7	U	ng/L	P434499	
		Phorate	0.27	U	ng/L	P434499	
		Prodiamine	0.22	U	ng/L	P434499	
		Prometon	3.2	U	ng/L	P434499	
		Prometryn	0.38	U	ng/L	P434499	
		Pronamide	0.11	U	ng/L	P434499	
		Propanil	0.11	U	ng/L	P434499	
		Propargite	0.86	U	ng/L	P434499	
		Propiconazole	0.65	U	ng/L	P434499	
		Pyraflufen Ethyl	0.32	U	ng/L	P434499	
		Pyridaben	1.5	U	ng/L	P434499	
		Pyriproxyfen	0.27	U	ng/L	P434499	
		Simazine	0.27	U	ng/L	P434499	
		Stirophos	0.43	U	ng/L	P434499	
		Sulfentrazone	1.5	U	ng/L	P434499	RPD
		Tebuconazole	1.5	U	ng/L	P434499	
		Terbufos	0.22	U	ng/L	P434499	
		Terbuthylazine	0.22	U	ng/L	P434499	
		Thiobencarb	0.54	U	ng/L	P434499	
		Triadimefon	0.16	U	ng/L	P434499	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 365.1 Rev. 2.0: Total-P: The result was confirmed on 09/20/2023.
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: The sample was reanalyzed on 09/12/2023. The result was 0.004 UQ mg P/L.
EPA 8321B: MS accuracy for imazapyr could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: MS accuracy for atrazine and prometon 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: P434491

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434495

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434562

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: P434562

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: P434603

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: P434606

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434682

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434762

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434867

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434894

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P434484

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

Reference Method: EPA 8270E
Batch ID: P434499

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: P434499

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: P434499

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: P434499

Component	Result	Code	Units
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P434499

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
Terbuthylazine	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Reference Method: EPA 8321B
Batch ID: P434463

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: P434478

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P434478

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: P434707

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

Reference Method: SM 2540 C-2015
Batch ID: P434781

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P434782

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P434710

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P434775

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: P434491

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434495

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.5		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434562

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	105		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	101		P	85 - 115
Sodium	105		P	85 - 115
Strontium	104		P	85 - 115
Tin	107		P	85 - 115
Titanium	103		P	85 - 115
Vanadium	104		P	85 - 115
Zinc	106		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434562

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	99.6		P	85 - 115
Arsenic	97.7		P	85 - 115
Barium	102		P	85 - 115
Beryllium	91.6		P	85 - 115
Boron	103		P	85 - 115
Cadmium	97.9		P	85 - 115
Chromium	96.1		P	85 - 115
Cobalt	99.0		P	85 - 115
Copper	97.3		P	85 - 115
Lead	100		P	85 - 115
Manganese	96.9		P	85 - 115
Molybdenum	97.1		P	85 - 115
Nickel	96.8		P	85 - 115
Selenium	96.6		P	85 - 115
Silver	112		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434603

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434606

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434682

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434762

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434867

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434894

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P434484

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

Reference Method: EPA 8270E
Batch ID: P434499

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.6		P	42 - 162
Acetochlor	75.8		P	69 - 123
Alachlor	79.3		P	65 - 118
Ametryn	93.5		P	58 - 141
Atrazine	83.5		P	73 - 118
Atrazine Desethyl	67.8		P	32 - 125
Avobenzone	117		P	40 - 203
Azinphos Methyl	80.1		P	36 - 197
Azoxystrobin	90.7		P	58 - 226
Bromacil	100		P	48 - 120
Butylate	74.3		P	27 - 85.0
Caffeine	108		P	40 - 137
Carbophenothion	87.6		P	54 - 132
Carfentrazone Ethyl	91.4		P	60 - 142
Chlorfenapyr	77.4		P	53 - 117
Chlorpyrifos Ethyl	72.0		P	59 - 116

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P434499

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	75.7		P	66 - 119
Coumaphos	98.7		P	11 - 234
Cyanazine	91.6		P	61 - 248
Cyprodinil	109		P	50 - 147
Dechlorane 602	97.3		P	50 - 150
Dechlorane 603	106		P	50 - 150
Dechlorane Plus	112		P	47 - 182
Demeton	61.7		P	30 - 138
Diazinon	88.9		P	67 - 126
Difenoconazole	90.0		P	38 - 205
Dimethenamid	96.2		P	57 - 111
Dimethomorph	77.7		P	16 - 212
Disulfoton	77.4		P	46 - 126
Dithiopyr	89.2		P	62 - 115
EPTC	70.2		P	28 - 80.0
Ethion	77.2		P	24 - 122
Ethoprop	94.6		P	62 - 113
Etridiazole	66.7		P	28 - 92.0
Fenamiphos	81.1		P	57 - 128
Fenbuconazole	90.4		P	52 - 155
Fipronil	81.8		P	63 - 130
Fipronil Desulfinyl	98.4		P	61 - 130
Fipronil Sulfide	90.8		P	56 - 117
Fipronil Sulfone	94.9		P	52 - 118
Fluazifop-P-butyl	84.1		P	61 - 128
Fludioxonil	88.2		P	59 - 129
Flumioxazin	90.8		P	30 - 250
Flutolanil	79.2		P	53 - 127
Fluxapyroxad	78.7		P	42 - 132
Fonofos	70.6		P	61 - 110
Hexabromobenzene	94.1		P	50 - 150
Hexazinone	88.6		P	46 - 139
Imazalil	65.9		P	40 - 139
Iprodione	68.7		P	40 - 146
Loratadine	74.6		P	10 - 224
Malathion	77.0		P	61 - 135
Metalaxyl	86.5		P	58 - 121
Metolachlor	93.5		P	64 - 118
Metribuzin	102		P	45 - 245
Mevinphos	110		P	49 - 118
Molinate	64.4		P	42 - 92.0
Myclobutanil	84.1		P	55 - 127
Naled	64.2		P	10 - 114
Napropamide	83.4		P	39 - 121
Norflurazon	92.3		P	55 - 129
Octinoxate	110		P	26 - 166
Oxadiazon	87.3		P	54 - 115
Oxybenzone	106		P	49 - 135
Oxyfluorfen	95.4		P	64 - 139
Parathion Ethyl	88.8		P	70 - 111
Parathion Methyl	76.5		P	76 - 136
PBB-153	106		P	50 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P434499

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	91.9		P	41 - 148
PBDE-99	103		P	38 - 147
Pendimethalin	80.6		P	52 - 118
Pentabromotoluene	92.4		P	50 - 150
Phenytoin	82.7		P	10 - 162
Phorate	65.0		P	40 - 122
Prodiamine	82.7		P	26 - 141
Prometon	95.6		P	54 - 122
Prometryn	90.6		P	61 - 128
Pronamide	87.4		P	72 - 121
Propanil	97.3		P	45 - 144
Propargite	85.6		P	10 - 199
Propiconazole	73.4		P	56 - 127
Pyraflufen Ethyl	86.2		P	56 - 140
Pyridaben	87.1		P	26 - 211
Pyriproxyfen	94.0		P	33 - 194
Simazine	84.3		P	67 - 121
Stirophos	74.2		P	20 - 142
Sulfentrazone	107		P	21 - 144
Tebuconazole	88.5		P	10 - 122
Terbufos	77.3		P	60 - 129
Terbuthylazine	79.8		P	69 - 113
Tetradecachloro-m-terphenyl	113		P	70 - 200
Thiobencarb	86.2		P	51 - 120
Tri-o-cresyl Phosphate	106		P	49 - 150
Triadimefon	92.4		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	111		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	110		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	118		P	70 - 180

Reference Method: EPA 8321B
Batch ID: P434463

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	144		P	40 - 150
AMPA	78.0		P	40 - 150
Endothall	106		P	40 - 150
Glufosinate	86.1		P	40 - 150
Glyphosate	105		P	40 - 150
Sucralose	96.1		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P434478

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	81.4		P	40 - 150
2,4,5-T	77.4		P	40 - 150
Acetaminophen	86.6		P	30 - 150
Acetamiprid	103		P	40 - 150
Afidopyropen	85.7		P	30 - 150
Bentazon	119		P	30 - 150
Benzovindiflupyr	93.2		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P434478

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbamazepine	92.8		P	40 - 150
Clothianidin	99.4		P	40 - 150
Dinotefuran	90.0		P	40 - 150
Diuron	82.9		P	40 - 150
Fenuron	120		P	40 - 150
Fluridone	84.0		P	40 - 150
Hydrocodone	109		P	40 - 150
Ibuprofen	83.8		P	40 - 150
Imazapyr	76.3		P	40 - 150
Imidacloprid	87.2		P	40 - 150
Linuron	76.4		P	40 - 150
Mandestrobin	101		P	40 - 150
MCPP	85.1		P	40 - 150
Naproxen	78.3		P	40 - 150
Primidone	88.5		P	40 - 150
Pyraclostrobin	83.8		P	40 - 150
Silvex	83.2		P	40 - 150
Thiamethoxam	101		P	40 - 150
Tolfenpyrad	46.3		P	30 - 150
Triclopyr	84.3		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P434707

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.8		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P434781

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	97.6		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P434782

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	93.1		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P434710

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

Reference Method: SM 5310 B-2011
Batch ID: P434775

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434562

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2433808	Calcium	102		P	80 - 120
2433808	Iron	105	105	P/P	80 - 120
2433808	Magnesium	102	103	P/P	80 - 120
2433808	Potassium	104	104	P/P	80 - 120
2433808	Sodium	104	104	P/P	80 - 120
2433808	Strontium	103	103	P/P	80 - 120
2433808	Tin	102	101	P/P	80 - 120
2433808	Titanium	103	103	P/P	80 - 120
2433808	Vanadium	104	104	P/P	80 - 120
2433808	Zinc	104	104	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434562

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2433808	Aluminum	101	101	P/P	80 - 120
2433808	Antimony	99.4	101	P/P	80 - 120
2433808	Arsenic	97.9	97.9	P/P	80 - 120
2433808	Barium	101	102	P/P	80 - 120
2433808	Beryllium	93.2	96.1	P/P	80 - 120
2433808	Boron	101	100	P/P	80 - 120
2433808	Cadmium	98.7	98.5	P/P	80 - 120
2433808	Chromium	100	99.8	P/P	80 - 120
2433808	Cobalt	102	103	P/P	80 - 120
2433808	Copper	100	99.2	P/P	80 - 120
2433808	Lead	99.8	100	P/P	80 - 120
2433808	Manganese	98.5	99.1	P/P	80 - 120
2433808	Molybdenum	97.9	99.5	P/P	80 - 120
2433808	Nickel	101	100	P/P	80 - 120
2433808	Selenium	98.4	98.1	P/P	80 - 120
2433808	Silver	112	114	P/P	80 - 120
2433808	Thallium	102	104	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434603

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2433817	Chloride	99.4		P	90 - 110
2433896	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434606

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2433817	Sulfate	97.0		P	90 - 110
2433896	Sulfate	98.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434682

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434027	Ammonia-N	98.4	101	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434762

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434014	Kjeldahl Nitrogen	102	91.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434867

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2433855	NO2NO3-N	98.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434894

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434517	Total-P	108	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P434484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2433835	O-Phosphate-P	99.9	100	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P434499

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434084	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	87.8	113	P/P	26 - 165
2434084	Acetochlor	84.1	67.2	P/P	67 - 124
2434084	Alachlor	85.9	99.8	P/P	60 - 120
2434084	Ametryn	124	105	P/P	54 - 216
2434084	Atrazine Desethyl	85.1	94.1	P/P	15 - 122
2434084	Avobenzone	129	116	P/P	37 - 178
2434084	Azinphos Methyl	132	111	P/P	40 - 292
2434084	Azoxystrobin	108	94.5	P/P	35 - 220
2434084	Bromacil	104	90.2	P/P	45 - 127
2434084	Butylate	37.1	61.9	P/P	20 - 83.0
2434084	Caffeine	145	119	P/P	10 - 194
2434084	Carbophenothion	109	102	P/P	57 - 127
2434084	Carfentrazone Ethyl	90.6	70.7	P/P	51 - 141
2434084	Chlorfenapyr	63.6	54.0	P/P	46 - 111
2434084	Chlorpyrifos Ethyl	67.6	65.8	P/P	52 - 120
2434084	Chlorpyrifos Methyl	114	124	P/F	63 - 119
2434084	Coumaphos	140	145	P/P	10 - 228
2434084	Cyanazine	110	89.8	P/P	59 - 241
2434084	Cyprodinil	128	121	P/P	47 - 146
2434084	Dechlorane 602	65.9	77.4	P/P	50 - 150
2434084	Dechlorane 603	88.6	106	P/P	50 - 150
2434084	Dechlorane Plus	75.0	85.5	P/P	50 - 150
2434084	Demeton	73.2	83.5	P/P	40 - 136
2434084	Diazinon	98.8	83.3	P/P	69 - 132
2434084	Difenoconazole	129	125	P/P	57 - 258
2434084	Dimethenamid	100	108	P/P	54 - 110
2434084	Dimethomorph	189	149	P/P	28 - 210
2434084	Disulfoton	104	81.4	P/P	43 - 133

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P434499

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434084	Dithiopyr	80.2	64.7	P/P	39 - 116
2434084	EPTC	29.5	53.6	P/P	20 - 78.0
2434084	Ethion	40.4	53.3	P/P	17 - 119
2434084	Ethoprop	91.4	96.4	P/P	66 - 120
2434084	Etridiazole	45.1	44.9	P/P	28 - 96.0
2434084	Fenamiphos	81.2	89.4	P/P	41 - 126
2434084	Fenbuconazole	92.7	89.2	P/P	42 - 169
2434084	Fipronil	95.3	88.0	P/P	61 - 132
2434084	Fipronil Desulfinyl	94.1	91.0	P/P	56 - 132
2434084	Fipronil Sulfide	93.7	83.6	P/P	48 - 119
2434084	Fipronil Sulfone	104	84.3	P/P	42 - 131
2434084	Fluazifop-P-butyl	82.5	59.3	P/P	53 - 131
2434084	Fludioxonil	89.3	93.4	P/P	56 - 127
2434084	Flumioxazin	166	141	P/P	19 - 300
2434084	Flutolanil	57.6	54.4	P/P	41 - 127
2434084	Fluxapyroxad	57.2	105	P/P	42 - 172
2434084	Fonofos	90.6	69.2	P/P	59 - 113
2434084	Hexabromobenzene	99.7	116	P/P	50 - 150
2434084	Hexazinone	95.4	105	P/P	66 - 122
2434084	Imazalil	83.2	82.4	P/P	21 - 283
2434084	Iprodione	87.3	144	P/P	43 - 150
2434084	Loratadine	154	106	P/P	23 - 201
2434084	Malathion	86.4	82.2	P/P	58 - 136
2434084	Metalaxyl	85.2	76.1	P/P	55 - 120
2434084	Metolachlor	69.0	92.6	P/P	57 - 121
2434084	Metribuzin	110	101	P/P	58 - 294
2434084	Mevinphos	98.5	86.8	P/P	50 - 126
2434084	Molinate	46.5	70.5	P/P	42 - 93.0
2434084	Myclobutanil	86.5	71.4	P/P	55 - 125
2434084	Naled	34.0	35.0	P/P	18 - 200
2434084	Napropamide	60.6	60.9	P/P	39 - 110
2434084	Norflurazon	75.3	65.5	P/P	48 - 128
2434084	Octinoxate	114	118	P/P	21 - 159
2434084	Oxadiazon	69.7	56.6	P/P	43 - 112
2434084	Oxybenzone	113	119	P/P	41 - 142
2434084	Oxyfluorfen	107	85.4	P/P	64 - 153
2434084	Parathion Ethyl	81.2	91.2	P/P	69 - 114
2434084	Parathion Methyl	115	87.1	P/P	79 - 139
2434084	PBB-153	92.2	126	P/P	50 - 150
2434084	PBDE-47	90.9	103	P/P	27 - 144
2434084	PBDE-99	83.6	102	P/P	18 - 150
2434084	Pendimethalin	83.2	86.0	P/P	50 - 139
2434084	Pentabromotoluene	102	108	P/P	50 - 150
2434084	Phenytoin	62.4	69.9	P/P	10 - 146
2434084	Phorate	96.3	93.2	P/P	54 - 161
2434084	Prodiamine	37.6	46.5	P/P	30 - 161
2434084	Prometryn	125	135	P/P	45 - 137
2434084	Pronamide	99.3	84.6	P/P	65 - 133
2434084	Propanil	114	98.6	P/P	49 - 142
2434084	Propargite	56.1	57.0	P/P	10 - 203
2434084	Propiconazole	59.4	47.9	P/P	38 - 146
2434084	Pyraflufen Ethyl	87.3	73.3	P/P	34 - 153

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P434499

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434084	Pyridaben	127	95.1	P/P	12 - 192
2434084	Pyriproxyfen	88.1	83.3	P/P	33 - 180
2434084	Simazine	100	96.2	P/P	51 - 157
2434084	Stirophos	29.2	42.7	P/P	10 - 128
2434084	Sulfentrazone	82.5	166	P/P	53 - 186
2434084	Tebuconazole	44.3	65.4	P/P	10 - 133
2434084	Terbufos	123	109	P/P	65 - 139
2434084	Terbuthylazine	74.0	68.4	P/P	66 - 117
2434084	Tetradecachloro-m-terphenyl	81.0	79.9	P/P	70 - 200
2434084	Thiobencarb	80.0	70.3	P/P	51 - 119
2434084	Tri-o-cresyl Phosphate	96.6	109	P/P	31 - 144
2434084	Triadimefon	76.2	65.2	P/P	48 - 119
2434084	Tris(1-chloro-2-propyl) phosphate (TCPP)	111	102	P/P	50 - 150
2434084	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	96.8	101	P/P	50 - 150
2434084	Tris(2-chloroethyl) phosphate (TCEP)	113	108	P/P	70 - 180

Reference Method: EPA 8321B
Batch ID: P434463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2433993	Acesulfame K	136	136	P/P	40 - 150
2433993	AMPA	60.3	63.5	P/P	40 - 150
2433993	Endothall	116	118	P/P	40 - 150
2433993	Glufosinate	68.1	71.5	P/P	40 - 150
2433993	Glyphosate	88.0	96.3	P/P	40 - 150
2433993	Sucralose	112	104	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P434478

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434080	2,4-D	102	115	P/P	40 - 150
2434080	2,4,5-T	111	128	P/P	40 - 150
2434080	Acetaminophen	109	124	P/P	30 - 150
2434080	Acetamiprid	81.0	86.6	P/P	40 - 150
2434080	Afidopyropen	75.4	78.5	P/P	30 - 150
2434080	Bentazon	62.4	71.0	P/P	30 - 150
2434080	Benzovindiflupyr	94.8	106	P/P	40 - 150
2434080	Carbamazepine	68.8	72.7	P/P	40 - 150
2434080	Clothianidin	112	119	P/P	40 - 150
2434080	Dinotefuran	71.8	77.8	P/P	40 - 150
2434080	Diuron	58.9	61.6	P/P	40 - 150
2434080	Fenuron	64.8	73.1	P/P	40 - 150
2434080	Fluridone	61.7	73.4	P/P	40 - 150
2434080	Hydrocodone	78.8	79.8	P/P	40 - 150
2434080	Ibuprofen	73.7	69.4	P/P	40 - 150
2434080	Imidacloprid	124	132	P/P	40 - 150
2434080	Linuron	60.9	61.9	P/P	40 - 150
2434080	Mandestrobin	93.8	101	P/P	40 - 150
2434080	MCPP	116	133	P/P	40 - 150
2434080	Naproxen	56.1	66.3	P/P	40 - 150
2434080	Primidone	87.2	95.6	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P434478

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434080	Pyraclostrobin	89.9	103	P/P	40 - 150
2434080	Silvex	119	136	P/P	40 - 150
2434080	Thiamethoxam	97.7	99.9	P/P	40 - 150
2434080	Tolfenpyrad	58.5	66.8	P/P	30 - 150
2434080	Triclopyr	121	123	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P434710

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434064	Fluoride	99.2	99.8	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P434775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434444	Organic Carbon	93.5	96.1	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P434491

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434022	Color (true)	1.54	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434495

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433788	Turbidity	0.341	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P434562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433808	Calcium	0.484	Spike	P	0 - 20
2433808	Iron	0.207	Spike	P	0 - 20
2433808	Magnesium	0.0859	Spike	P	0 - 20
2433808	Potassium	0.197	Spike	P	0 - 20
2433808	Sodium	0.0328	Spike	P	0 - 20
2433808	Strontium	0.121	Spike	P	0 - 20
2433808	Tin	0.466	Spike	P	0 - 20
2433808	Titanium	0.229	Spike	P	0 - 20
2433808	Vanadium	0.0454	Spike	P	0 - 20
2433808	Zinc	0.0805	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433808	Aluminum	0.109	Spike	P	0 - 20
2433808	Antimony	1.74	Spike	P	0 - 20
2433808	Arsenic	0.00346	Spike	P	0 - 20
2433808	Barium	0.701	Spike	P	0 - 20
2433808	Beryllium	3.11	Spike	P	0 - 20
2433808	Boron	1.30	Spike	P	0 - 20
2433808	Cadmium	0.171	Spike	P	0 - 20
2433808	Chromium	0.460	Spike	P	0 - 20
2433808	Cobalt	0.440	Spike	P	0 - 20
2433808	Copper	0.754	Spike	P	0 - 20
2433808	Lead	0.729	Spike	P	0 - 20
2433808	Manganese	0.530	Spike	P	0 - 20
2433808	Molybdenum	1.55	Spike	P	0 - 20
2433808	Nickel	0.632	Spike	P	0 - 20
2433808	Selenium	0.337	Spike	P	0 - 20
2433808	Silver	1.62	Spike	P	0 - 20
2433808	Thallium	1.99	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434603

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433817	Chloride	0.838	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434606

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433817	Sulfate	0.118	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434682

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434027	Ammonia-N	1.78	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434762

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434014	Kjeldahl Nitrogen	8.68	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434867

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433855	NO2NO3-N	0.686	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434894

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434517	Total-P	0.360	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P434484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433835	O-Phosphate-P	0.200	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P434499

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434084	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	24.7	Spike	P	0 - 37
2434084	Acetochlor	22.3	Spike	P	0 - 28

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P434499

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434084	Alachlor	14.9	Spike	P	0 - 30
2434084	Ametryn	16.4	Spike	P	0 - 32
2434084	Atrazine	4.97	Spike	P	0 - 41
2434084	Atrazine Desethyl	8.36	Spike	P	0 - 36
2434084	Avobenzone	10.2	Spike	P	0 - 36
2434084	Azinphos Methyl	18.0	Spike	P	0 - 75
2434084	Azoxystrobin	12.4	Spike	P	0 - 39
2434084	Bromacil	13.1	Spike	P	0 - 33
2434084	Butylate	50.1	Spike	F	0 - 44
2434084	Caffeine	15.4	Spike	P	0 - 74
2434084	Carbophenothion	6.26	Spike	P	0 - 25
2434084	Carfentrazone Ethyl	24.6	Spike	P	0 - 27
2434084	Chlorfenapyr	16.2	Spike	P	0 - 24
2434084	Chlorpyrifos Ethyl	2.69	Spike	P	0 - 26
2434084	Chlorpyrifos Methyl	8.35	Spike	P	0 - 26
2434084	Coumaphos	3.46	Spike	P	0 - 28
2434084	Cyanazine	20.2	Spike	P	0 - 48
2434084	Cyprodinil	5.94	Spike	P	0 - 29
2434084	Dechlorane 602	16.1	Spike	P	0 - 30
2434084	Dechlorane 603	17.8	Spike	P	0 - 30
2434084	Dechlorane Plus	13.1	Spike	P	0 - 30
2434084	Demeton	13.2	Spike	P	0 - 33
2434084	Diazinon	17.0	Spike	P	0 - 29
2434084	Difenoconazole	2.96	Spike	P	0 - 34
2434084	Dimethenamid	7.84	Spike	P	0 - 39
2434084	Dimethomorph	23.7	Spike	P	0 - 51
2434084	Disulfoton	24.1	Spike	P	0 - 30
2434084	Dithiopyr	21.3	Spike	P	0 - 26
2434084	EPTC	58.0	Spike	F	0 - 43
2434084	Ethion	27.5	Spike	P	0 - 79
2434084	Ethoprop	5.34	Spike	P	0 - 29
2434084	Etridiazole	0.580	Spike	P	0 - 33
2434084	Fenamiphos	9.57	Spike	P	0 - 40
2434084	Fenbuconazole	3.81	Spike	P	0 - 74
2434084	Fipronil	6.07	Spike	P	0 - 29
2434084	Fipronil Desulfinyl	2.54	Spike	P	0 - 32
2434084	Fipronil Sulfide	8.61	Spike	P	0 - 30
2434084	Fipronil Sulfone	13.5	Spike	P	0 - 33
2434084	Fluazifop-P-butyl	32.7	Spike	P	0 - 38
2434084	Fludioxonil	3.82	Spike	P	0 - 29
2434084	Flumioxazin	16.3	Spike	P	0 - 51
2434084	Flutolanil	5.79	Spike	P	0 - 25
2434084	Fluxapyroxad	58.8	Spike	F	0 - 45
2434084	Fonofos	26.8	Spike	P	0 - 27
2434084	Hexabromobenzene	15.2	Spike	P	0 - 30
2434084	Hexazinone	9.99	Spike	P	0 - 30
2434084	Imazalil	0.949	Spike	P	0 - 100
2434084	Iprodione	49.3	Spike	F	0 - 33
2434084	Loratadine	36.3	Spike	P	0 - 56
2434084	Malathion	5.02	Spike	P	0 - 37
2434084	Metalaxyl	11.3	Spike	P	0 - 40

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P434499

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434084	Metolachlor	14.1	Spike	P	0 - 29
2434084	Metribuzin	5.48	Spike	P	0 - 45
2434084	Mevinphos	12.7	Spike	P	0 - 29
2434084	Molinate	41.1	Spike	F	0 - 33
2434084	Myclobutanil	17.5	Spike	P	0 - 26
2434084	Naled	2.95	Spike	P	0 - 37
2434084	Napropamide	0.496	Spike	P	0 - 44
2434084	Norflurazon	13.8	Spike	P	0 - 30
2434084	Octinoxate	3.69	Spike	P	0 - 45
2434084	Oxadiazon	14.8	Spike	P	0 - 28
2434084	Oxybenzone	4.53	Spike	P	0 - 46
2434084	Oxyfluorfen	22.8	Spike	P	0 - 28
2434084	Parathion Ethyl	11.6	Spike	P	0 - 31
2434084	Parathion Methyl	27.8	Spike	P	0 - 29
2434084	PBB-153	31.1	Spike	F	0 - 30
2434084	PBDE-47	12.2	Spike	P	0 - 36
2434084	PBDE-99	19.4	Spike	P	0 - 40
2434084	Pendimethalin	3.27	Spike	P	0 - 33
2434084	Pentabromotoluene	5.05	Spike	P	0 - 30
2434084	Phenytoin	11.3	Spike	P	0 - 100
2434084	Phorate	3.24	Spike	P	0 - 36
2434084	Prodiamine	21.2	Spike	P	0 - 71
2434084	Prometon	24.8	Spike	P	0 - 36
2434084	Prometryn	7.26	Spike	P	0 - 28
2434084	Pronamide	16.0	Spike	P	0 - 24
2434084	Propanil	14.2	Spike	P	0 - 28
2434084	Propargite	1.56	Spike	P	0 - 43
2434084	Propiconazole	15.7	Spike	P	0 - 33
2434084	Pyraflufen Ethyl	17.4	Spike	P	0 - 29
2434084	Pyridaben	28.9	Spike	P	0 - 30
2434084	Pyriproxyfen	5.57	Spike	P	0 - 79
2434084	Simazine	2.21	Spike	P	0 - 29
2434084	Stirophos	37.8	Spike	P	0 - 61
2434084	Sulfentrazone	57.8	Spike	F	0 - 33
2434084	Tebuconazole	28.4	Spike	P	0 - 69
2434084	Terbufos	12.5	Spike	P	0 - 29
2434084	Terbuthylazine	7.85	Spike	P	0 - 32
2434084	Tetradecachloro-m-terphenyl	1.48	Spike	P	0 - 30
2434084	Thiobencarb	12.9	Spike	P	0 - 26
2434084	Tri-o-cresyl Phosphate	12.5	Spike	P	0 - 33
2434084	Triadimefon	15.5	Spike	P	0 - 28
2434084	Tris(1-chloro-2-propyl) phosphate (TCPP)	5.98	Spike	P	0 - 30
2434084	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	4.03	Spike	P	0 - 30
2434084	Tris(2-chloroethyl) phosphate (TCEP)	4.75	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P434463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433993	Acesulfame K	0.192	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P434463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433993	AMPA	5.24	Spike	P	0 - 30
2433993	Endothall	2.05	Spike	P	0 - 30
2433993	Glufosinate	4.86	Spike	P	0 - 30
2433993	Glyphosate	8.99	Spike	P	0 - 30
2433993	Sucralose	6.86	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P434478

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434080	2,4-D	11.5	Spike	P	0 - 30
2434080	2,4,5-T	14.0	Spike	P	0 - 30
2434080	Acetaminophen	12.8	Spike	P	0 - 30
2434080	Acetamiprid	6.63	Spike	P	0 - 30
2434080	Afidopyropen	3.97	Spike	P	0 - 30
2434080	Bentazon	5.76	Spike	P	0 - 30
2434080	Benzovindiflupyr	11.4	Spike	P	0 - 30
2434080	Carbamazepine	4.71	Spike	P	0 - 30
2434080	Clothianidin	5.61	Spike	P	0 - 30
2434080	Dinotefuran	8.00	Spike	P	0 - 30
2434080	Diuron	4.17	Spike	P	0 - 30
2434080	Fenuron	12.0	Spike	P	0 - 30
2434080	Fluridone	11.6	Spike	P	0 - 30
2434080	Hydrocodone	1.14	Spike	P	0 - 30
2434080	Ibuprofen	6.02	Spike	P	0 - 30
2434080	Imazapyr	8.74	Spike	P	0 - 30
2434080	Imidacloprid	5.81	Spike	P	0 - 30
2434080	Linuron	1.60	Spike	P	0 - 30
2434080	Mandestrobin	7.27	Spike	P	0 - 30
2434080	MCPP	13.5	Spike	P	0 - 30
2434080	Naproxen	11.5	Spike	P	0 - 30
2434080	Primidone	9.18	Spike	P	0 - 30
2434080	Pyraclostrobin	13.4	Spike	P	0 - 30
2434080	Silvex	13.1	Spike	P	0 - 30
2434080	Thiamethoxam	2.17	Spike	P	0 - 30
2434080	Tolfenpyrad	13.3	Spike	P	0 - 30
2434080	Triclopyr	1.53	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P434707

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434064	Total Alkalinity	1.79	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P434781

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: P434781

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2433788	TDS	4.65	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P434710

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434064	Fluoride	0.480	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P434775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434444	Organic Carbon	1.47	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2434040
Field Sample ID: G4NW0042

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	95.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	97.7	P	30 - 160
EPA 8321B	Diuron-d6	70.4	P	30 - 160
EPA 8321B	Endothall-d6	94.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	67.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.4	P	30 - 160
EPA 8321B	Primidone-d5	92.3	P	30 - 160
EPA 8321B	Sucralose-d6	116	P	30 - 160

Lab Sample ID: 2434042
Field Sample ID: G4NW0042

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	79.6	P	20 - 200
EPA 8270E	Simazine-d10	86.3	P	62 - 142
EPA 8270E	Terbufos-d10	88.1	P	58 - 132
EPA 8270E	Terphenyl-d14	108	P	52 - 137

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A121310
Included Lab Sample IDs: 2434028

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.5	98.3	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1
Run ID: A121314
Included Lab Sample IDs: 2434026

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A121317
Included Lab Sample IDs: 2434026

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	97.0	97.5	P/P	95 - 105

Reference Method: EPA 8321B
Run ID: A121325
Included Lab Sample IDs: 2434040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	154	153	P/P	60 - 160
Sucralose	106	113	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A121329
Included Lab Sample IDs: 2434040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	79.7	86.2	P/P	60 - 160
Endothall	95.0	93.3	P/P	60 - 160
Glufosinate	95.9	96.0	P/P	60 - 160
Glyphosate	116	104	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A121350
Included Lab Sample IDs: 2434040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.0	95.8	P/P	50 - 150
2,4,5-T	97.3	95.4	P/P	50 - 150
Acetaminophen	108	107	P/P	60 - 160
Acetamiprid	127	129	P/P	50 - 150
Afidopyropen	107	117	P/P	50 - 150
Bentazon	135	140	P/P	50 - 160
Benzovindiflupyr	119	117	P/P	50 - 150
Carbamazepine	118	125	P/P	60 - 150
Clothianidin	116	118	P/P	60 - 150
Dinotefuran	110	116	P/P	50 - 150
Diuron	114	113	P/P	60 - 160
Fenuron	125	122	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A121350
Included Lab Sample IDs: 2434040

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluridone	110	110	P/P	60 - 160
Hydrocodone	141	140	P/P	60 - 150
Ibuprofen	129	102	P/P	50 - 160
Imazapyr	95.8	91.3	P/P	50 - 150
Imidacloprid	108	105	P/P	60 - 150
Linuron	111	103	P/P	60 - 150
Mandestrobin	122	124	P/P	50 - 150
MCPP	84.7	91.7	P/P	50 - 150
Naproxen	125	104	P/P	50 - 160
Primidone	113	114	P/P	60 - 150
Pyraclostrobin	125	120	P/P	60 - 150
Silvex	91.1	89.4	P/P	50 - 150
Thiamethoxam	130	127	P/P	50 - 150
Tolfenpyrad	110	113	P/P	60 - 150
Triclopyr	94.1	93.2	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A121365
Included Lab Sample IDs: 2434042

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	91.6		P	80 - 120
Avobenzone	99.1		P	80 - 120
Dechlorane 602	95.5		P	80 - 120
Dechlorane 603	100		P	80 - 120
Dechlorane Plus	101		P	80 - 120
Hexabromobenzene	91.0		P	80 - 120
Octinoxate	97.4		P	80 - 120
Oxybenzone	93.4		P	80 - 120
PBB-153	96.7		P	80 - 120
PBDE-47	91.1		P	80 - 120
PBDE-99	94.5		P	80 - 120
Pentabromotoluene	98.1		P	80 - 120
Tetradecachloro-m-terphenyl	102		P	80 - 120
Tri-o-cresyl Phosphate	97.0		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	96.6		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	98.8		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	103		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A121370
Included Lab Sample IDs: 2434026

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.5	99.4	P/P	90 - 110
Sulfate	98.5	98.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A121385
Included Lab Sample IDs: 2434041

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.3	97.1	P/P	90 - 110
Antimony	94.4	94.4	P/P	90 - 110
Arsenic	96.4	93.5	P/P	90 - 110
Barium	96.5	93.7	P/P	90 - 110
Beryllium	93.6	90.5	P/P	90 - 110
Boron	96.7	100	P/P	90 - 110
Cadmium	95.8	95.7	P/P	90 - 110
Chromium	94.9	93.8	P/P	90 - 110
Cobalt	99.1	95.7	P/P	90 - 110
Copper	96.6	93.3	P/P	90 - 110
Lead	97.2	95.7	P/P	90 - 110
Manganese	95.6	94.6	P/P	90 - 110
Molybdenum	95.0	94.0	P/P	90 - 110
Nickel	97.3	93.3	P/P	90 - 110
Selenium	98.0	94.9	P/P	90 - 110
Silver	98.4	96.6	P/P	90 - 110
Thallium	95.9	95.1	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A121392
Included Lab Sample IDs: 2434041

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	102	P/P	90 - 110
Iron	104	104	P/P	90 - 110
Magnesium	103	103	P/P	90 - 110
Potassium	98.1	98.8	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Strontium	98.5		P	90 - 110
Tin	99.6		P	90 - 110
Titanium	98.3		P	90 - 110
Vanadium	98.6		P	90 - 110
Zinc	99.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A121407
Included Lab Sample IDs: 2434027

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.0	100	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A121417
Included Lab Sample IDs: 2434026

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.5	94.9	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 4500-F- C-2011
Run ID: A121417
Included Lab Sample IDs: 2434026

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

Reference Method: SM 5310 B-2011
Run ID: A121443
Included Lab Sample IDs: 2434027

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.1	95.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A121481
Included Lab Sample IDs: 2434027

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	96.5	97.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A121484
Included Lab Sample IDs: 2434027

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.0	105	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A121514
Included Lab Sample IDs: 2434042

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	86.6		P	80 - 120
Alachlor	87.2		P	80 - 120
Ametryn	93.1		P	80 - 120
Atrazine	91.2		P	80 - 120
Atrazine Desethyl	95.3		P	80 - 120
Azinphos Methyl	89.3		P	80 - 120
Azoxystrobin	98.9		P	80 - 120
Bromacil	105		P	80 - 120
Butylate	100		P	80 - 120
Caffeine	99.2		P	80 - 120
Carbophenothion	95.9		P	80 - 120
Carfentrazone Ethyl	95.4		P	80 - 120
Chlorfenapyr	87.9		P	80 - 120
Chlorpyrifos Ethyl	87.6		P	80 - 120
Chlorpyrifos Methyl	95.4		P	80 - 120
Coumaphos	99.9		P	80 - 120
Cyanazine	95.8		P	80 - 120
Cyprodinil	105		P	80 - 120
Demeton	93.7		P	80 - 120
Diazinon	99.2		P	80 - 120
Difenoconazole	98.7		P	80 - 120
Dimethenamid	101		P	80 - 120
Dimethomorph	87.9		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A121514
Included Lab Sample IDs: 2434042

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Disulfoton	99.3		P	80 - 120
Dithiopyr	97.0		P	80 - 120
EPTC	99.0		P	80 - 120
Ethion	90.5		P	80 - 120
Ethoprop	97.2		P	80 - 120
Etridiazole	103		P	80 - 120
Fenamiphos	99.1		P	80 - 120
Fenbuconazole	85.1		P	80 - 120
Fipronil	87.3		P	80 - 120
Fipronil Desulfinyl	97.6		P	80 - 120
Fipronil Sulfide	97.5		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fluazifop-P-butyl	94.4		P	80 - 120
Fludioxonil	108		P	80 - 120
Flumioxazin	86.9		P	80 - 120
Flutolanil	94.0		P	80 - 120
Fluxapyroxad	89.2		P	80 - 120
Fonofos	93.3		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	90.1		P	80 - 120
Iprodione	78.6*		F	80 - 120
Loratadine	86.6		P	80 - 120
Malathion	87.4		P	80 - 120
Metalaxyl	93.2		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	112		P	80 - 120
Mevinphos	111		P	80 - 120
Molinate	85.9		P	80 - 120
Myclobutanil	88.5		P	80 - 120
Naled	93.5		P	80 - 120
Napropamide	96.8		P	80 - 120
Norflurazon	83.9		P	80 - 120
Oxadiazon	96.1		P	80 - 120
Oxyfluorfen	98.8		P	80 - 120
Parathion Ethyl	102		P	80 - 120
Parathion Methyl	83.8		P	80 - 120
Pendimethalin	105		P	80 - 120
Phenytoin	93.6		P	80 - 120
Phorate	108		P	80 - 120
Prodiamine	82.2		P	80 - 120
Prometon	110		P	80 - 120
Prometryn	98.9		P	80 - 120
Pronamide	99.4		P	80 - 120
Propanil	111		P	80 - 120
Propargite	97.7		P	80 - 120
Propiconazole	89.3		P	80 - 120
Pyraflufen Ethyl	95.8		P	80 - 120
Pyridaben	96.7		P	80 - 120
Pyriproxyfen	109		P	80 - 120
Simazine	94.7		P	80 - 120
Stirophos	88.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A121514
Included Lab Sample IDs: 2434042

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfentrazone	93.4		P	80 - 120
Tebuconazole	98.2		P	80 - 120
Terbufos	106		P	80 - 120
Terbuthylazine	87.4		P	80 - 120
Thiobencarb	96.9		P	80 - 120
Triadimefon	91.0		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A121536
Included Lab Sample IDs: 2434027

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	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		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	101				1.54	
EPA 180.1 Rev. 2.0	Turbidity	97.5				0.341	
EPA 200.7 Rev. 4.4	Calcium	105	102				0.484
	Iron	105	105	105			0.207
	Magnesium	105	102	103			0.0859
	Potassium	101	104	104			0.197
	Sodium	105	104	104			0.0328
	Strontium	104	103	103			0.121
	Tin	107	102	101			0.466
	Titanium	103	103	103			0.229
	Vanadium	104	104	104			0.0454
	Zinc	106	104	104			0.0805
EPA 200.8 Rev. 5.4	Aluminum	101	101	101			0.109
	Antimony	99.6	99.4	101			1.74
	Arsenic	97.7	97.9	97.9			0.0034
	Barium	102	101	102			0.701
	Beryllium	91.6	93.2	96.1			3.11
	Boron	103	101	100			1.30
	Cadmium	97.9	98.7	98.5			0.171
	Chromium	96.1	100	99.8			0.460
	Cobalt	99.0	102	103			0.440
	Copper	97.3	100	99.2			0.754
	Lead	100	99.8	100			0.729
	Manganese	96.9	98.5	99.1			0.530
	Molybdenum	97.1	97.9	99.5			1.55
	Nickel	96.8	101	100			0.632
	Selenium	96.6	98.4	98.1			0.337
	Silver	112	112	114			1.62
	Thallium	101	102	104			1.99
EPA 300.0 Rev. 2.1	Chloride	102	99.4	100		0.838	
	Sulfate	99.4	97.0	98.7		0.118	
EPA 350.1 Rev. 2.0	Ammonia-N	97.6	98.4	101			1.78
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.9	102	91.7			8.68
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5	98.0				0.686
EPA 365.1 Rev. 2.0	Total-P	105	108	108			0.360
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	99.9	100			0.200
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.6	87.8	113			24.7
	Acetochlor	75.8	84.1	67.2			22.3
	Alachlor	79.3	85.9	99.8			14.9
	Ametryn	93.5	124	105			16.4
	Atrazine	83.5					4.97
	Atrazine Desethyl	67.8	85.1	94.1			8.36
	Avobenzone	117	129	116			10.2
	Azinphos Methyl	80.1	132	111			18.0
	Azoxystrobin	90.7	108	94.5			12.4
	Bromacil	100	104	90.2			13.1
	Butylate	74.3	37.1	61.9			50.1
	Caffeine	108	145	119			15.4
	Carbophenothion	87.6	109	102			6.26
	Carfentrazone Ethyl	91.4	90.6	70.7			24.6
	Chlorfenapyr	77.4	63.6	54.0			16.2
	Chlorpyrifos Ethyl	72.0	67.6	65.8			2.69

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Chlorpyrifos Methyl	75.7	114	124			8.35
	Coumaphos	98.7	140	145			3.46
	Cyanazine	91.6	110	89.8			20.2
	Cyprodinil	109	128	121			5.94
	Dechlorane 602	97.3	65.9	77.4			16.1
	Dechlorane 603	106	88.6	106			17.8
	Dechlorane Plus	112	75.0	85.5			13.1
	Demeton	61.7	73.2	83.5			13.2
	Diazinon	88.9	98.8	83.3			17.0
	Difenoconazole	90.0	129	125			2.96
	Dimethenamid	96.2	100	108			7.84
	Dimethomorph	77.7	189	149			23.7
	Disulfoton	77.4	104	81.4			24.1
	Dithiopyr	89.2	80.2	64.7			21.3
	EPTC	70.2	29.5	53.6			58.0
	Ethion	77.2	40.4	53.3			27.5
	Ethoprop	94.6	91.4	96.4			5.34
	Etridiazole	66.7	45.1	44.9			0.580
	Fenamiphos	81.1	81.2	89.4			9.57
	Fenbuconazole	90.4	92.7	89.2			3.81
	Fipronil	81.8	95.3	88.0			6.07
	Fipronil Desulfinyl	98.4	94.1	91.0			2.54
	Fipronil Sulfide	90.8	93.7	83.6			8.61
	Fipronil Sulfone	94.9	104	84.3			13.5
	Fluazifop-P-butyl	84.1	82.5	59.3			32.7
	Fludioxonil	88.2	89.3	93.4			3.82
	Flumioxazin	90.8	166	141			16.3
	Flutolanil	79.2	57.6	54.4			5.79
	Fluxapyroxad	78.7	57.2	105			58.8
	Fonofos	70.6	90.6	69.2			26.8
	Hexabromobenzene	94.1	99.7	116			15.2
	Hexazinone	88.6	95.4	105			9.99
	Imazalil	65.9	83.2	82.4			0.949
	Iprodione	68.7	87.3	144			49.3
	Loratadine	74.6	154	106			36.3
	Malathion	77.0	86.4	82.2			5.02
	Metalaxyl	86.5	85.2	76.1			11.3
	Metolachlor	93.5	69.0	92.6			14.1
	Metribuzin	102	110	101			5.48
	Mevinphos	110	98.5	86.8			12.7
	Molinate	64.4	46.5	70.5			41.1
	Myclobutanil	84.1	86.5	71.4			17.5
	Naled	64.2	34.0	35.0			2.95
	Napropamide	83.4	60.6	60.9			0.496
	Norflurazon	92.3	75.3	65.5			13.8
	Octinoxate	110	114	118			3.69
	Oxadiazon	87.3	69.7	56.6			14.8
	Oxybenzone	106	113	119			4.53
	Oxyfluorfen	95.4	107	85.4			22.8
	Parathion Ethyl	88.8	81.2	91.2			11.6
	Parathion Methyl	76.5	115	87.1			27.8
	PBB-153	106	92.2	126			31.1
	PBDE-47	91.9	90.9	103			12.2
	PBDE-99	103	83.6	102			19.4

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Pendimethalin	80.6	83.2	86.0			3.27
	Pentabromotoluene	92.4	102	108			5.05
	Phenytoin	82.7	62.4	69.9			11.3
	Phorate	65.0	96.3	93.2			3.24
	Prodiamine	82.7	37.6	46.5			21.2
	Prometon	95.6					24.8
	Prometryn	90.6	125	135			7.26
	Pronamide	87.4	99.3	84.6			16.0
	Propanil	97.3	114	98.6			14.2
	Propargite	85.6	56.1	57.0			1.56
	Propiconazole	73.4	59.4	47.9			15.7
	Pyraflufen Ethyl	86.2	87.3	73.3			17.4
	Pyridaben	87.1	127	95.1			28.9
	Pyriproxyfen	94.0	88.1	83.3			5.57
	Simazine	84.3	100	96.2			2.21
	Stirophos	74.2	29.2	42.7			37.8
	Sulfentrazone	107	82.5	166			57.8
	Tebuconazole	88.5	44.3	65.4			28.4
	Terbufos	77.3	123	109			12.5
	Terbuthylazine	79.8	74.0	68.4			7.85
	Tetradecachloro-m-terphenyl	113	81.0	79.9			1.48
	Thiobencarb	86.2	80.0	70.3			12.9
	Tri-o-cresyl Phosphate	106	96.6	109			12.5
	Triadimefon	92.4	76.2	65.2			15.5
	Tris(1-chloro-2-propyl) phosphate (TCPP)	111	111	102			5.98
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	110	96.8	101			4.03
	Tris(2-chloroethyl) phosphate (TCEP)	118	113	108			4.75
EPA 8321B	2,4-D	81.4	102	115			11.5
	2,4,5-T	77.4	111	128			14.0
	Acesulfame K	144	136	136			0.192
	Acetaminophen	86.6	109	124			12.8
	Acetamiprid	103	81.0	86.6			6.63
	Afidopyropen	85.7	75.4	78.5			3.97
	AMPA	78.0	60.3	63.5			5.24
	Bentazon	119	62.4	71.0			5.76
	Benzovindiflupyr	93.2	94.8	106			11.4
	Carbamazepine	92.8	68.8	72.7			4.71
	Clothianidin	99.4	112	119			5.61
	Dinotefuran	90.0	71.8	77.8			8.00
	Diuron	82.9	58.9	61.6			4.17
	Endothall	106	116	118			2.05
	Fenuron	120	64.8	73.1			12.0
	Fluridone	84.0	61.7	73.4			11.6
	Glufosinate	86.1	68.1	71.5			4.86
	Glyphosate	105	88.0	96.3			8.99
	Hydrocodone	109	78.8	79.8			1.14
	Ibuprofen	83.8	73.7	69.4			6.02
	Imazapyr	76.3					8.74
	Imidacloprid	87.2	124	132			5.81
	Linuron	76.4	60.9	61.9			1.60
	Mandestrobin	101	93.8	101			7.27

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	MCPP	85.1	116	133			13.5
	Naproxen	78.3	56.1	66.3			11.5
	Primidone	88.5	87.2	95.6			9.18
	Pyraclostrobin	83.8	89.9	103			13.4
	Silvex	83.2	119	136			13.1
	Sucralose	96.1	112	104			6.86
	Thiamethoxam	101	97.7	99.9			2.17
	Tolfenpyrad	46.3	58.5	66.8			13.3
	Triclopyr	84.3	121	123			1.53
SM 2320 B-2011	Total Alkalinity	95.8				1.79	
SM 2540 C-2015	TDS	97.6				4.65	
SM 2540 D-2015	TSS	93.1					
SM 4500-F- C-2011	Fluoride	98.3	99.2	99.8			0.480
SM 5310 B-2011	Organic Carbon	93.6	93.5	96.1			1.47

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2434026
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2434026
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2434041
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2434041
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2434026
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2434026
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2434027
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2434027
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2434027
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2434027
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2434028
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2434042
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2434042
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2434040
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2434026
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2434041
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2434026
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2434026
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2434026
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2434027

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	08/29/2023			08/29/2023 14:36	Alexis Price	2434026
EPA 180.1 Rev. 2.0	08/29/2023			08/29/2023 14:21	Anna M. Plaviak	2434026
EPA 200.7 Rev. 4.4	08/29/2023	09/05/2023 12:20	George D Taylor	09/06/2023 15:15	McKinley C Carter	2434041
EPA 200.8 Rev. 5.4	08/29/2023	09/05/2023 12:20	George D Taylor	09/06/2023 18:36	Conrad Hartmann	2434041
EPA 300.0 Rev. 2.1	08/29/2023			09/06/2023 05:20	James L Waggerby	2434026
EPA 350.1 Rev. 2.0	08/29/2023			09/07/2023 11:49	Khloe J Berg	2434027
EPA 351.2 Rev. 2.0	08/29/2023	09/11/2023 14:51	Simonne.V. Calhoun	09/12/2023 13:55	Samantha L Bates	2434027
EPA 353.2 Rev. 2.0	08/29/2023			09/12/2023 10:52	Anna M. Plaviak	2434027
EPA 365.1 Rev. 2.0	08/29/2023	09/13/2023 18:31	Adam P Silver	09/14/2023 13:48	James L Waggerby	2434027
EPA 365.1 Rev. 2.0 dissolved	08/29/2023			08/29/2023 13:11	Elise M. Gillis	2434028
EPA 8270E	08/29/2023	09/01/2023 08:30	Rasheda Ghaffari	09/06/2023 01:24	Arthur Maknenko	2434042
	08/29/2023	09/01/2023 08:30	Rasheda Ghaffari	09/08/2023 17:45	Vandana T. Nagar	2434042
EPA 8321B	08/29/2023	08/29/2023 15:00	Tae K Lee	08/29/2023 21:42	Hana Lee	2434040
	08/29/2023	08/29/2023 15:00	Tae K Lee	08/30/2023 17:40	Hana Lee	2434040
	08/29/2023	09/01/2023 09:00	Hoor Shaik	09/02/2023 22:54	Juyoung Kim	2434040
SM 2320 B-2011	08/29/2023			09/07/2023 20:16	Dale L. Simmons	2434026
SM 2340 B-2011	08/29/2023			09/06/2023 15:15	McKinley C Carter	2434041
SM 2540 C-2015	08/29/2023			09/01/2023 14:12	Yijie Li	2434026
SM 2540 D-2015	08/29/2023			09/01/2023 14:12	Yijie Li	2434026
SM 4500-F- C-2011	08/29/2023			09/07/2023 20:16	Dale L. Simmons	2434026
SM 5310 B-2011	08/29/2023			09/07/2023 17:04	Elise M. Gillis	2434027