

Chemical Analysis Report

CEN-DIST-2023-08-16-01

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

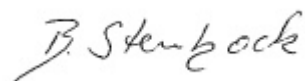
Event Description: **Bear Lake LVI**
Request ID: **RQ-2023-08-14-15**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Matthew Bearden

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

Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 07-SEP-2023 13:19



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: BEAR LAKE AT CENTER

Collection Date/Time: 08/15/2023 11:35

Field ID: G2CE0281

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2431220	DEP SOP: NU-094-1	Color (true)	8.2	A	PCU	P433942	
	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P433949	
	EPA 300.0 Rev. 2.1	Chloride	40		mg Cl/L	P434072	
		Sulfate	17		mg SO4/L	P434075	
	SM 2320 B-2011	Total Alkalinity	33		mg CaCO3/L	P434024	
	SM 2540 C-2015	TDS	134	A	mg/L	P434488	
	SM 2540 D-2015	TSS	2	IA	mg/L	P434268	
	SM 4500-F- C-2011	Fluoride	0.058	I	mg F/L	P434030	
2431221	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P434386	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P434230	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P434565	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P434308	MS
	SM 5310 B-2011	Organic Carbon	6.9		mg C/L	P434147	
2431222	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P433936	
2431234	EPA 8321B	2,4-D	0.026		ug/L	P433848	
		Acesulfame K	0.16	I	ug/L	P433790	
		2,4,5-T	0.0040	U	ug/L	P433848	
		AMPA	0.10	U	ug/L	P433790	
		Acetaminophen	0.0080	U	ug/L	P433848	
		Acetamiprid	0.0020	U	ug/L	P433848	
		Endothall	0.25	U	ug/L	P433790	
		Glufosinate	0.10	U	ug/L	P433790	
		Glyphosate	0.10	U	ug/L	P433790	
		Afidopyropen	0.0020	U	ug/L	P433848	
		Bentazon	0.034		ug/L	P433848	
		Sucralose	1.7		ug/L	P433790	
		Benzovindiflupyr	0.0020	U	ug/L	P433848	
		Carbamazepine	8.0E-04	U	ug/L	P433848	
		Clothianidin	0.0020	U	ug/L	P433848	
		Dinotefuran	0.0020	U	ug/L	P433848	
		Diuron	0.0020	U	ug/L	P433848	
		Fenuron	0.032	U	ug/L	P433848	
		Fluridone	8.0E-04	U	ug/L	P433848	
		Imazapyr	0.0040	U	ug/L	P433848	
		Hydrocodone	0.0020	U	ug/L	P433848	
		Ibuprofen	0.20	U	ug/L	P433848	
		Imidacloprid	0.0020	U	ug/L	P433848	
		Linuron	0.0040	U	ug/L	P433848	
		Mandestrobin	0.0020	U	ug/L	P433848	
		MCP	0.0040	U	ug/L	P433848	
		Naproxen	0.0080	U	ug/L	P433848	
		Primidone	0.0070	I	ug/L	P433848	
		Pyraclostrobin	0.0020	U	ug/L	P433848	

Field ID: G2CE0281

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2431234	EPA 8321B	Silvex	0.0040	U	ug/L	P433848	MS
		Thiamethoxam	0.0020	U	ug/L	P433848	
		Tolfenpyrad	0.0020	U	ug/L	P433848	
		Triclopyr	0.0040	U	ug/L	P433848	
2431235	EPA 200.7 Rev. 4.4	Calcium	15.9		mg/L	P433987	
		Iron	30	U	ug/L	P433987	
		Magnesium	2.50		mg/L	P433987	
		Potassium	3.2		mg/L	P433987	
		Sodium	25.5		mg/L	P433987	
		Strontium	55.4		ug/L	P433987	
		Tin	3.0	U	ug/L	P433987	
		Titanium	0.75	U	ug/L	P433987	
		Vanadium	2.0	U	ug/L	P433987	
		Zinc	5.0	U	ug/L	P433987	
	EPA 200.8 Rev. 5.4	Aluminum	141		ug/L	P433987	
		Antimony	0.21		ug/L	P433987	
		Arsenic	3.09		ug/L	P433987	
		Barium	3.40		ug/L	P433987	
		Beryllium	0.010	U	ug/L	P433987	
		Boron	52.5		ug/L	P433987	
		Cadmium	0.020	U	ug/L	P433987	
		Chromium	0.40	U	ug/L	P433987	
		Cobalt	0.020	U	ug/L	P433987	
		Copper	0.72	I	ug/L	P433987	
		Lead	0.20	U	ug/L	P433987	
		Manganese	4.99		ug/L	P433987	
		Molybdenum	0.32	I	ug/L	P433987	
		Nickel	0.50	U	ug/L	P433987	
		Selenium	0.20	U	ug/L	P433987	
		Silver	0.010	U	ug/L	P433987	
		Thallium	0.10	U	ug/L	P433987	
		Hardness	50.0		mg/L	P433987	
2431236	SM 2340 B-2011	Oxybenzone**	10	U	ng/L	P433851	
	EPA 8270E	Acetochlor	0.20	U	ng/L	P433851	
		Octinoxate**	150	U	ng/L	P433851	
		Alachlor	0.41	U	ng/L	P433851	
		Avobenzone**	100	U	ng/L	P433851	
		Ametryn	3.1	I	ng/L	P433851	
		Atrazine	78		ng/L	P433851	
		PBDE-47**	4.1	U	ng/L	P433851	
		Atrazine Desethyl	17		ng/L	P433851	
		PBDE-99**	5.1	U	ng/L	P433851	
		Azinphos Methyl	3.1	U	ng/L	P433851	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P433851	
		Azoxystrobin	0.41	U	ng/L	P433851	

Field ID: G2CE0281

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2431236	EPA 8270E	Bromacil	0.61	U	ng/L	P433851	
		2-Ethylhexyl	12	U	ng/L	P433851	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.20	U	ng/L	P433851	
		Dechlorane Plus**	31	U	ng/L	P433851	
		Caffeine**	7.7	U	ng/L	P433851	
		Dechlorane 602**	5.1	UJ	ng/L	P433851	LCS
		Carbophenothion	0.51	U	ng/L	P433851	
		Dechlorane 603**	4.1	U	ng/L	P433851	
		Carfentrazone Ethyl	0.15	U	ng/L	P433851	
		Hexabromobenzene**	6.1	U	ng/L	P433851	
		Chlorfenapyr	0.31	U	ng/L	P433851	
		PBB-153**	8.2	U	ng/L	P433851	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P433851	
		Pentabromotoluene**	3.1	U	ng/L	P433851	
		Chlorpyrifos Methyl	0.10	U	ng/L	P433851	
		Tris(2-chloroethyl) phosphate (TCEP)**	71	U	ng/L	P433851	
		Coumaphos	1.1	U	ng/L	P433851	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	29	I	ng/L	P433851	
		Cyanazine	5.1	U	ng/L	P433851	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.6	U	ng/L	P433851	
		Cyprodinil	0.20	U	ng/L	P433851	
		Tetradecachloro-m-terphenyl**	7.7	U	ng/L	P433851	
		Demeton	3.6	U	ng/L	P433851	
		Diazinon	0.13	U	ng/L	P433851	
		Difenoconazole	0.61	U	ng/L	P433851	
		Dimethenamid	0.10	U	ng/L	P433851	
		Dimethomorph	0.31	UJ	ng/L	P433851	LCS, MS
		Disulfoton	0.61	U	ng/L	P433851	
		Dithiopyr	1.0	U	ng/L	P433851	
		EPTC	0.51	U	ng/L	P433851	
		Ethion	0.31	U	ng/L	P433851	
		Ethoprop	0.13	U	ng/L	P433851	
		Etridiazole	0.10	U	ng/L	P433851	
		Fenamiphos	0.46	U	ng/L	P433851	
		Fenbuconazole	0.51	U	ng/L	P433851	
		Fipronil	0.20	U	ng/L	P433851	
		Fipronil Desulfinyl**	0.56		ng/L	P433851	
		Fipronil Sulfide	0.12	I	ng/L	P433851	
		Fipronil Sulfone	0.39	I	ng/L	P433851	
		Fluazifop-P-butyl	0.10	U	ng/L	P433851	
		Fludioxonil	0.10	U	ng/L	P433851	
		Flumioxazin	3.1	U	ng/L	P433851	
		Flutolanil	0.10	U	ng/L	P433851	
		Fluxapyroxad	0.26	U	ng/L	P433851	

Field ID: G2CE0281

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2431236	EPA 8270E	Fonofos	0.15	U	ng/L	P433851	
		Hexazinone	0.51	U	ng/L	P433851	
		Imazalil	0.66	U	ng/L	P433851	
		Iprodione	0.51	U	ng/L	P433851	
		Loratadine**	0.31	U	ng/L	P433851	
		Malathion	0.36	U	ng/L	P433851	MS, RPD
		Metalaxyl	0.51	U	ng/L	P433851	
		Metolachlor	0.77	U	ng/L	P433851	
		Metribuzin	0.41	U	ng/L	P433851	
		Mevinphos	1.0	U	ng/L	P433851	
		Molinate	0.26	U	ng/L	P433851	
		Myclobutanil	0.36	U	ng/L	P433851	
		Naled	2.6	U	ng/L	P433851	
		Napropamide	0.71	U	ng/L	P433851	
		Norflurazon	1.0	U	ng/L	P433851	
		Oxadiazon	0.36	U	ng/L	P433851	
		Oxyfluorfen	0.20	U	ng/L	P433851	
		Parathion Ethyl	0.15	U	ng/L	P433851	
		Parathion Methyl	0.20	U	ng/L	P433851	
		Pendimethalin	0.77	U	ng/L	P433851	
		Phenytol**	5.4	U	ng/L	P433851	
		Phorate	0.26	U	ng/L	P433851	
		Prodiamine	0.20	U	ng/L	P433851	
		Prometon	3.1	U	ng/L	P433851	
		Prometryn	0.36	U	ng/L	P433851	
		Pronamide	0.10	U	ng/L	P433851	
		Propanil	0.10	U	ng/L	P433851	
		Propargite	0.82	U	ng/L	P433851	
		Propiconazole	0.61	U	ng/L	P433851	
		Pyraflufen Ethyl	0.31	U	ng/L	P433851	
		Pyridaben	1.4	U	ng/L	P433851	
		Pyriproxyfen	0.26	U	ng/L	P433851	
		Simazine	0.26	U	ng/L	P433851	
		Stiophos	0.41	U	ng/L	P433851	RPD
		Sulfentrazone	1.4	U	ng/L	P433851	
		Tebuconazole	1.4	U	ng/L	P433851	
		Terbufos	0.20	U	ng/L	P433851	
		Terbuthylazine	0.20	U	ng/L	P433851	
		Thiobencarb	0.51	U	ng/L	P433851	RPD
		Triadimefon	0.15	U	ng/L	P433851	

Ref. Method and Comment:

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

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

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

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

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P433942

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433949

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433987

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: P433987

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: P434072

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: P434075

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434386

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434230

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434565

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434308

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433936

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

Reference Method: EPA 8270E
Batch ID: P433851

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: P433851

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: P433851

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: P433851

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
Phenytol	5.3	U	ng/L
Phenytol	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiatone	0.20	U	ng/L
Prodiatone	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: P433851

Component	Result	Code	Units
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Reference Method: EPA 8321B

Batch ID: P433790

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: P433848

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P433848

Component	Result	Code	Units
Ibuprofen	0.20	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	0.0040	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: P434024

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

Reference Method: SM 2540 C-2015

Batch ID: P434488

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P434268

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P434030

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P434147

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: P433942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.6		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433949

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433987

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	98.2		P	80 - 120
Iron	100		P	80 - 120
Magnesium	97.9		P	80 - 120
Potassium	97.8		P	80 - 120
Sodium	99.2		P	80 - 120
Strontium	103		P	80 - 120
Tin	100		P	80 - 120
Titanium	99.3		P	80 - 120
Vanadium	100		P	80 - 120
Zinc	103		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433987

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.1		P	85 - 115
Antimony	99.2		P	85 - 115
Arsenic	98.3		P	85 - 115
Barium	101		P	85 - 115
Beryllium	97.1		P	85 - 115
Boron	97.2		P	85 - 115
Cadmium	98.2		P	85 - 115
Chromium	95.8		P	85 - 115
Cobalt	96.2		P	85 - 115
Copper	96.8		P	85 - 115
Lead	91.4		P	85 - 115
Manganese	96.6		P	85 - 115
Molybdenum	96.8		P	85 - 115
Nickel	97.2		P	85 - 115
Selenium	98.9		P	85 - 115
Silver	110		P	85 - 115
Thallium	98.6		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434072

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434075

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434386

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434230

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434565

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434308

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433936

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

Reference Method: EPA 8270E
Batch ID: P433851

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	46.5		P	42 - 162
Acetochlor	83.3		P	69 - 123
Alachlor	89.5		P	65 - 118
Ametryn	123		P	58 - 141
Atrazine	86.8		P	73 - 118
Atrazine Desethyl	48.4		P	32 - 125
Avobenzone	134		P	40 - 203
Azinphos Methyl	138		P	36 - 197
Azoxystrobin	113		P	58 - 226
Bromacil	95.0		P	48 - 120
Butylate	55.9		P	27 - 85.0
Caffeine	88.4		P	40 - 137
Carbophenothion	101		P	54 - 132
Carfentrazone Ethyl	105		P	60 - 142
Chlorfenapyr	85.8		P	53 - 117
Chlorpyrifos Ethyl	92.2		P	59 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P433851

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	102		P	66 - 119
Coumaphos	141		P	11 - 234
Cyanazine	117		P	61 - 248
Cyprodinil	99.9		P	50 - 147
Dechlorane 602	44.2		F	50 - 150
Dechlorane 603	113		P	50 - 150
Dechlorane Plus	84.0		P	47 - 182
Demeton	74.8		P	30 - 138
Diazinon	96.1		P	67 - 126
Difenoconazole	106		P	38 - 205
Dimethenamid	84.8		P	57 - 111
Dimethomorph	225		F	16 - 212
Disulfoton	92.5		P	46 - 126
Dithiopyr	87.4		P	62 - 115
EPTC	56.7		P	28 - 80.0
Ethion	42.2		P	24 - 122
Ethoprop	93.1		P	62 - 113
Etridiazole	58.2		P	28 - 92.0
Fenamiphos	83.4		P	57 - 128
Fenbuconazole	99.5		P	52 - 155
Fipronil	93.2		P	63 - 130
Fipronil Desulfinyl	85.2		P	61 - 130
Fipronil Sulfide	94.5		P	56 - 117
Fipronil Sulfone	92.5		P	52 - 118
Fluazifop-P-butyl	107		P	61 - 128
Fludioxonil	78.2		P	59 - 129
Flumioxazin	60.2		P	30 - 250
Flutolanil	83.7		P	53 - 127
Fluxapyroxad	68.6		P	42 - 132
Fonofos	91.3		P	61 - 110
Hexabromobenzene	102		P	50 - 150
Hexazinone	82.1		P	46 - 139
Imazalil	98.2		P	40 - 139
Iprodione	91.8		P	40 - 146
Loratadine	182		P	10 - 224
Malathion	105		P	61 - 135
Metalaxyl	78.7		P	58 - 121
Metolachlor	111		P	64 - 118
Metribuzin	94.5		P	45 - 245
Mevinphos	95.3		P	49 - 118
Molinate	57.1		P	42 - 92.0
Myclobutanil	87.5		P	55 - 127
Naled	54.1		P	10 - 114
Napropamide	75.3		P	39 - 121
Norflurazon	83.8		P	55 - 129
Octinoxate	114		P	26 - 166
Oxadiazon	79.9		P	54 - 115
Oxybenzone	113		P	49 - 135
Oxyfluorfen	107		P	64 - 139
Parathion Ethyl	88.8		P	70 - 111
Parathion Methyl	106		P	76 - 136
PBB-153	78.5		P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P433851

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	76.0		P	41 - 148
PBDE-99	58.3		P	38 - 147
Pendimethalin	106		P	52 - 118
Pentabromotoluene	99.7		P	50 - 150
Phenytoin	55.7		P	10 - 162
Phorate	101		P	40 - 122
Prodiamine	43.2		P	26 - 141
Prometon	104		P	54 - 122
Prometryn	116		P	61 - 128
Pronamide	90.8		P	72 - 121
Propanil	100		P	45 - 144
Propargite	54.2		P	10 - 199
Propiconazole	83.7		P	56 - 127
Pyraflufen Ethyl	107		P	56 - 140
Pyridaben	123		P	26 - 211
Pyriproxyfen	63.6		P	33 - 194
Simazine	91.6		P	67 - 121
Stirophos	46.8		P	20 - 142
Sulfentrazone	80.5		P	21 - 144
Tebuconazole	39.5		P	10 - 122
Terbufos	101		P	60 - 129
Terbutylazine	81.1		P	69 - 113
Tetradecachloro-m-terphenyl	139		P	70 - 200
Thiobencarb	87.0		P	51 - 120
Tri-o-cresyl Phosphate	119		P	49 - 150
Triadimefon	81.7		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	123		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	103		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	105		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P433790

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	105		P	40 - 150
AMPA	117		P	40 - 150
Endothall	109		P	40 - 150
Glufosinate	103		P	40 - 150
Glyphosate	99.6		P	40 - 150
Sucralose	96.4		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P433848

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	98.3		P	30 - 160
2,4,5-T	103		P	30 - 160
Acetaminophen	82.2		P	30 - 160
Acetamiprid	90.5		P	30 - 160
Afidopyropen	30.6		P	30 - 160
Bentazon	115		P	30 - 160
Benzovindiflupyr	93.4		P	30 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P433848

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbamazepine	100		P	30 - 160
Clothianidin	89.0		P	30 - 160
Dinotefuran	107		P	30 - 160
Diuron	92.7		P	30 - 160
Fenuron	87.3		P	30 - 160
Fluridone	95.5		P	30 - 160
Hydrocodone	92.6		P	30 - 160
Ibuprofen	66.5		P	30 - 160
Imazapyr	98.9		P	30 - 160
Imidacloprid	98.0		P	30 - 160
Linuron	82.6		P	30 - 160
Mandestrobin	96.7		P	30 - 160
MCPP	105		P	30 - 160
Naproxen	81.7		P	30 - 160
Primidone	88.0		P	30 - 160
Pyraclostrobin	94.1		P	30 - 160
Silvex	109		P	30 - 160
Thiamethoxam	104		P	30 - 160
Tolfenpyrad	64.2		P	30 - 160
Triclopyr	95.4		P	30 - 160

Reference Method: SM 2320 B-2011
Batch ID: P434024

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.1		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P434488

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

Reference Method: SM 2540 D-2015
Batch ID: P434268

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.3		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P434030

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

Reference Method: SM 5310 B-2011
Batch ID: P434147

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433987

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431032	Calcium	95.8		P	80 - 120
2431032	Iron	101	101	P/P	80 - 120
2431032	Magnesium	95.7		P	80 - 120
2431032	Potassium	96.0	98.1	P/P	80 - 120
2431032	Sodium	99.3		P	80 - 120
2431032	Strontium	103	104	P/P	80 - 120
2431032	Tin	100	101	P/P	80 - 120
2431032	Titanium	99.4	99.4	P/P	80 - 120
2431032	Vanadium	101	101	P/P	80 - 120
2431032	Zinc	101	99.7	P/P	80 - 120
2431167	Calcium	101		P	80 - 120
2431167	Iron	103		P	80 - 120
2431167	Magnesium	103		P	80 - 120
2431167	Potassium	103		P	80 - 120
2431167	Sodium	109		P	80 - 120
2431167	Strontium	108		P	80 - 120
2431167	Tin	99.9		P	80 - 120
2431167	Titanium	101		P	80 - 120
2431167	Vanadium	104		P	80 - 120
2431167	Zinc	105		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433987

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431032	Aluminum	95.6	96.2	P/P	80 - 120
2431032	Antimony	100	102	P/P	80 - 120
2431032	Arsenic	97.1	98.0	P/P	80 - 120
2431032	Barium	99.9	101	P/P	80 - 120
2431032	Beryllium	95.5	93.6	P/P	80 - 120
2431032	Boron	100	104	P/P	80 - 120
2431032	Cadmium	98.0	98.0	P/P	80 - 120
2431032	Chromium	95.1	96.3	P/P	80 - 120
2431032	Cobalt	92.3	93.7	P/P	80 - 120
2431032	Copper	92.9	93.2	P/P	80 - 120
2431032	Lead	92.0	92.8	P/P	80 - 120
2431032	Manganese	94.4	98.8	P/P	80 - 120
2431032	Molybdenum	96.9	99.1	P/P	80 - 120
2431032	Nickel	92.6	93.0	P/P	80 - 120
2431032	Selenium	96.2	97.2	P/P	80 - 120
2431032	Silver	108	110	P/P	80 - 120
2431032	Thallium	102	103	P/P	80 - 120
2431167	Aluminum	97.1		P	80 - 120
2431167	Antimony	97.2		P	80 - 120
2431167	Arsenic	94.8		P	80 - 120
2431167	Barium	100		P	80 - 120
2431167	Beryllium	91.5		P	80 - 120
2431167	Boron	101		P	80 - 120
2431167	Cadmium	99.3		P	80 - 120
2431167	Chromium	98.0		P	80 - 120
2431167	Cobalt	93.6		P	80 - 120
2431167	Copper	96.3		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433987

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431167	Lead	90.1		P	80 - 120
2431167	Manganese	97.0		P	80 - 120
2431167	Molybdenum	95.4		P	80 - 120
2431167	Nickel	97.5		P	80 - 120
2431167	Selenium	95.7		P	80 - 120
2431167	Silver	108		P	80 - 120
2431167	Thallium	99.1		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434072

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431113	Chloride	101		P	90 - 110
2431322	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434075

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431113	Sulfate	98.0		P	90 - 110
2431322	Sulfate	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434386

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431121	Ammonia-N	97.4	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434230

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431882	Kjeldahl Nitrogen	106	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434565

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431202	NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434308

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431327	Total-P	110	111	P/F	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433936

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431157	O-Phosphate-P	97.9	97.8	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P433851

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431068	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.9	71.5	P/P	26 - 165
2431068	Acetochlor	97.6	81.4	P/P	67 - 124
2431068	Alachlor	89.1	76.6	P/P	60 - 120
2431068	Ametryn	139	124	P/P	54 - 216
2431068	Atrazine	91.4	85.9	P/P	66 - 128
2431068	Atrazine Desethyl	72.8	66.1	P/P	15 - 122
2431068	Avobenzone	102	99.8	P/P	37 - 178
2431068	Azinphos Methyl	145	151	P/P	40 - 292
2431068	Azoxystrobin	110	123	P/P	35 - 220
2431068	Butylate	60.4	60.2	P/P	20 - 83.0
2431068	Caffeine	124	101	P/P	10 - 194
2431068	Carbophenothion	93.4	96.4	P/P	57 - 127
2431068	Carfentrazone Ethyl	98.7	98.7	P/P	51 - 141
2431068	Chlorfenapyr	82.4	80.2	P/P	46 - 111
2431068	Chlorpyrifos Ethyl	81.1	78.8	P/P	52 - 120
2431068	Chlorpyrifos Methyl	91.7	99.3	P/P	63 - 119
2431068	Coumaphos	177	148	P/P	10 - 228
2431068	Cyanazine	128	120	P/P	59 - 241
2431068	Cyprodinil	67.8	93.1	P/P	47 - 146
2431068	Dechlorane 602	59.3	53.1	P/P	50 - 150
2431068	Dechlorane 603	114	106	P/P	50 - 150
2431068	Dechlorane Plus	93.7	84.8	P/P	50 - 150
2431068	Demeton	80.7	79.7	P/P	40 - 136
2431068	Diazinon	113	92.3	P/P	69 - 132
2431068	Difenoconazole	129	134	P/P	57 - 258
2431068	Dimethenamid	81.9	86.4	P/P	54 - 110
2431068	Dimethomorph	203	213	P/F	28 - 210
2431068	Disulfoton	111	96.1	P/P	43 - 133
2431068	Dithiopyr	97.7	87.9	P/P	39 - 116
2431068	EPTC	61.0	53.5	P/P	20 - 78.0
2431068	Ethion	72.9	48.7	P/P	17 - 119
2431068	Ethoprop	95.2	91.5	P/P	66 - 120
2431068	Etridiazole	75.5	59.5	P/P	28 - 96.0
2431068	Fenamiphos	110	95.4	P/P	41 - 126
2431068	Fenbuconazole	86.5	95.8	P/P	42 - 169
2431068	Fipronil	100	93.9	P/P	61 - 132
2431068	Fipronil Desulfinyl	85.8	86.9	P/P	56 - 132
2431068	Fipronil Sulfide	98.3	93.0	P/P	48 - 119
2431068	Fipronil Sulfone	98.9	93.3	P/P	42 - 131
2431068	Fluazifop-P-butyl	109	104	P/P	53 - 131
2431068	Fludioxonil	71.0	76.5	P/P	56 - 127
2431068	Flumioxazin	143	123	P/P	19 - 300
2431068	Flutolanil	56.6	52.0	P/P	41 - 127
2431068	Fluxapyroxad	100	84.4	P/P	42 - 172
2431068	Fonofos	90.0	87.5	P/P	59 - 113
2431068	Hexabromobenzene	115	104	P/P	50 - 150
2431068	Hexazinone	83.5	88.3	P/P	66 - 122
2431068	Imazalil	101	89.3	P/P	21 - 283
2431068	Iprodione	73.5	82.9	P/P	43 - 150
2431068	Loratadine	149	160	P/P	23 - 201
2431068	Malathion	22.3	107	F/P	58 - 136
2431068	Metalaxyl	91.3	75.5	P/P	55 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P433851

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431068	Metolachlor	83.9	101	P/P	57 - 121
2431068	Metribuzin	85.9	79.8	P/P	58 - 294
2431068	Mevinphos	99.4	100	P/P	50 - 126
2431068	Molinate	58.1	59.3	P/P	42 - 93.0
2431068	Myclobutanil	91.1	84.2	P/P	55 - 125
2431068	Naled	57.5	57.4	P/P	18 - 200
2431068	Napropamide	76.5	76.5	P/P	39 - 110
2431068	Octinoxate	115	109	P/P	21 - 159
2431068	Oxadiazon	81.3	75.1	P/P	43 - 112
2431068	Oxybenzone	104	107	P/P	41 - 142
2431068	Oxyfluorfen	122	98.0	P/P	64 - 153
2431068	Parathion Ethyl	93.2	96.5	P/P	69 - 114
2431068	Parathion Methyl	97.3	106	P/P	79 - 139
2431068	PBB-153	110	94.7	P/P	50 - 150
2431068	PBDE-47	93.4	80.5	P/P	27 - 144
2431068	PBDE-99	81.7	70.8	P/P	18 - 150
2431068	Pendimethalin	86.7	97.0	P/P	50 - 139
2431068	Pentabromotoluene	101	95.9	P/P	50 - 150
2431068	Phenytoin	52.2	54.5	P/P	10 - 146
2431068	Phorate	97.7	101	P/P	54 - 161
2431068	Prodiamine	30.6	39.1	P/P	30 - 161
2431068	Prometon	80.0	91.7	P/P	45 - 134
2431068	Prometryn	103	111	P/P	45 - 137
2431068	Pronamide	102	100	P/P	65 - 133
2431068	Propanil	118	95.8	P/P	49 - 142
2431068	Propargite	75.4	64.1	P/P	10 - 203
2431068	Propiconazole	72.9	82.4	P/P	38 - 146
2431068	Pyraflufen Ethyl	104	94.4	P/P	34 - 153
2431068	Pyridaben	137	121	P/P	12 - 192
2431068	Pyriproxyfen	102	79.9	P/P	33 - 180
2431068	Simazine	87.2	94.9	P/P	51 - 157
2431068	Stiropfos	25.6	57.0	P/P	10 - 128
2431068	Sulfentrazone	88.1	86.7	P/P	53 - 186
2431068	Tebuconazole	54.4	43.9	P/P	10 - 133
2431068	Terbufos	128	98.1	P/P	65 - 139
2431068	Terbuthylazine	90.0	79.3	P/P	66 - 117
2431068	Tetradecachloro-m-terphenyl	92.9	89.3	P/P	70 - 200
2431068	Thiobencarb	56.2	87.4	P/P	51 - 119
2431068	Tri-o-cresyl Phosphate	116	112	P/P	31 - 144
2431068	Triadimefon	88.5	80.0	P/P	48 - 119
2431068	Tris(1-chloro-2-propyl) phosphate (TCPP)	89.5	89.2	P/P	50 - 150
2431068	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	107	107	P/P	50 - 150
2431068	Tris(2-chloroethyl) phosphate (TCEP)	114	110	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P433790

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430880	Acesulfame K	128	132	P/P	40 - 150
2430880	AMPA	62.5	60.4	P/P	40 - 150
2430880	Endothall	135	138	P/P	40 - 150
2430880	Glufosinate	83.0	84.0	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P433790

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430880	Glyphosate	93.9	101	P/P	40 - 150
2430880	Sucralose	97.4	94.4	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P433848

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430532	2,4,5-T	135	121	P/P	30 - 160
2430532	Acetaminophen	120	102	P/P	30 - 160
2430532	Acetamiprid	60.2	79.6	P/P	30 - 160
2430532	Afidopyropen	36.8	36.2	P/P	30 - 160
2430532	Benzovindiflupyr	84.9	84.4	P/P	30 - 160
2430532	Carbamazepine	72.0	81.9	P/P	30 - 160
2430532	Dinotefuran	92.4	103	P/P	30 - 160
2430532	Diuron	64.1	66.6	P/P	30 - 160
2430532	Fenuron	62.1	68.8	P/P	30 - 160
2430532	Fluridone	79.2	79.6	P/P	30 - 160
2430532	Hydrocodone	69.1	77.2	P/P	30 - 160
2430532	Ibuprofen	41.9	40.4	P/P	30 - 160
2430532	Imidacloprid	129	129	P/P	30 - 160
2430532	Linuron	58.4	60.9	P/P	30 - 160
2430532	Mandestrobin	85.6	85.8	P/P	30 - 160
2430532	MCPP	147	136	P/P	30 - 160
2430532	Naproxen	88.3	97.7	P/P	30 - 160
2430532	Primidone	98.6	96.9	P/P	30 - 160
2430532	Pyraclostrobin	92.4	91.4	P/P	30 - 160
2430532	Silvex	165	135	F/P	30 - 160
2430532	Thiamethoxam	94.8	104	P/P	30 - 160
2430532	Tolfenpyrad	64.3	61.9	P/P	30 - 160
2430532	Triclopyr	126	118	P/P	30 - 160

Reference Method: SM 4500-F- C-2011
Batch ID: P434030

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431115	Fluoride	96.1	95.6	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P434147

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431119	Organic Carbon	93.6	95.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P433942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431220	Color (true)	2.28	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433949

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431113	Turbidity	10.7	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433987

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431032	Calcium	2.95	Spike	P	0 - 20
2431032	Iron	0.437	Spike	P	0 - 20
2431032	Magnesium	0.347	Spike	P	0 - 20
2431032	Potassium	1.74	Spike	P	0 - 20
2431032	Sodium	1.78	Spike	P	0 - 20
2431032	Strontium	1.36	Spike	P	0 - 20
2431032	Tin	0.467	Spike	P	0 - 20
2431032	Titanium	0.0789	Spike	P	0 - 20
2431032	Vanadium	0.464	Spike	P	0 - 20
2431032	Zinc	0.892	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433987

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431032	Aluminum	0.488	Spike	P	0 - 20
2431032	Antimony	2.07	Spike	P	0 - 20
2431032	Arsenic	0.905	Spike	P	0 - 20
2431032	Barium	1.54	Spike	P	0 - 20
2431032	Beryllium	1.84	Spike	P	0 - 20
2431032	Boron	2.66	Spike	P	0 - 20
2431032	Cadmium	0.0324	Spike	P	0 - 20
2431032	Chromium	1.19	Spike	P	0 - 20
2431032	Cobalt	1.50	Spike	P	0 - 20
2431032	Copper	0.319	Spike	P	0 - 20
2431032	Lead	0.854	Spike	P	0 - 20
2431032	Manganese	2.26	Spike	P	0 - 20
2431032	Molybdenum	1.86	Spike	P	0 - 20
2431032	Nickel	0.471	Spike	P	0 - 20
2431032	Selenium	1.06	Spike	P	0 - 20
2431032	Silver	2.18	Spike	P	0 - 20
2431032	Thallium	1.80	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434072

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431113	Chloride	0.276	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434075

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431113	Sulfate	0.113	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434386

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431121	Ammonia-N	1.41	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431882	Kjeldahl Nitrogen	1.47	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431202	NO2NO3-N	0.738	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434308

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431327	Total-P	1.21	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P433936

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431157	O-Phosphate-P	0.0810	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P433851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431068	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	29.2	Spike	P	0 - 37
2431068	Acetochlor	18.1	Spike	P	0 - 28

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P433851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431068	Alachlor	15.1	Spike	P	0 - 30
2431068	Ametryn	11.1	Spike	P	0 - 32
2431068	Atrazine	6.22	Spike	P	0 - 41
2431068	Atrazine Desethyl	8.97	Spike	P	0 - 36
2431068	Avobenzone	1.72	Spike	P	0 - 36
2431068	Azinphos Methyl	3.93	Spike	P	0 - 75
2431068	Azoxystrobin	11.4	Spike	P	0 - 39
2431068	Bromacil	7.97	Spike	P	0 - 33
2431068	Butylate	0.371	Spike	P	0 - 44
2431068	Caffeine	20.3	Spike	P	0 - 74
2431068	Carbophenothion	3.14	Spike	P	0 - 25
2431068	Carfentrazone Ethyl	0.0158	Spike	P	0 - 27
2431068	Chlorfenapyr	2.72	Spike	P	0 - 24
2431068	Chlorpyrifos Ethyl	2.87	Spike	P	0 - 26
2431068	Chlorpyrifos Methyl	7.94	Spike	P	0 - 26
2431068	Coumaphos	17.9	Spike	P	0 - 28
2431068	Cyanazine	6.49	Spike	P	0 - 48
2431068	Cyprodinil	28.2	Spike	P	0 - 29
2431068	Dechlorane 602	11.0	Spike	P	0 - 30
2431068	Dechlorane 603	7.22	Spike	P	0 - 30
2431068	Dechlorane Plus	9.96	Spike	P	0 - 30
2431068	Demeton	1.26	Spike	P	0 - 33
2431068	Diazinon	20.3	Spike	P	0 - 29
2431068	Difenoconazole	3.90	Spike	P	0 - 34
2431068	Dimethenamid	5.38	Spike	P	0 - 39
2431068	Dimethomorph	4.49	Spike	P	0 - 51
2431068	Disulfoton	14.2	Spike	P	0 - 30
2431068	Dithiopyr	10.6	Spike	P	0 - 26
2431068	EPTC	13.2	Spike	P	0 - 43
2431068	Ethion	39.8	Spike	P	0 - 79
2431068	Ethoprop	3.93	Spike	P	0 - 29
2431068	Etridiazole	23.7	Spike	P	0 - 33
2431068	Fenamiphos	14.3	Spike	P	0 - 40
2431068	Fenbuconazole	10.2	Spike	P	0 - 74
2431068	Fipronil	6.70	Spike	P	0 - 29
2431068	Fipronil Desulfinyl	1.29	Spike	P	0 - 32
2431068	Fipronil Sulfide	5.62	Spike	P	0 - 30
2431068	Fipronil Sulfone	5.84	Spike	P	0 - 33
2431068	Fluazifop-P-butyl	4.40	Spike	P	0 - 38
2431068	Fludioxonil	6.35	Spike	P	0 - 29
2431068	Flumioxazin	15.2	Spike	P	0 - 51
2431068	Flutolanil	6.15	Spike	P	0 - 25
2431068	Fluxapyroxad	9.80	Spike	P	0 - 45
2431068	Fonofos	2.80	Spike	P	0 - 27
2431068	Hexabromobenzene	9.45	Spike	P	0 - 30
2431068	Hexazinone	5.63	Spike	P	0 - 30
2431068	Imazalil	12.4	Spike	P	0 - 100
2431068	Iprodione	12.0	Spike	P	0 - 33
2431068	Loratadine	7.16	Spike	P	0 - 56
2431068	Malathion	131	Spike	F	0 - 37
2431068	Metalaxyl	18.9	Spike	P	0 - 40

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P433851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431068	Metolachlor	16.0	Spike	P	0 - 29
2431068	Metribuzin	7.34	Spike	P	0 - 45
2431068	Mevinphos	0.723	Spike	P	0 - 29
2431068	Molinate	2.04	Spike	P	0 - 33
2431068	Myclobutanil	7.79	Spike	P	0 - 26
2431068	Naled	0.299	Spike	P	0 - 37
2431068	Napropamide	0.0317	Spike	P	0 - 44
2431068	Norflurazon	3.25	Spike	P	0 - 30
2431068	Octinoxate	5.52	Spike	P	0 - 45
2431068	Oxadiazon	7.93	Spike	P	0 - 28
2431068	Oxybenzone	3.58	Spike	P	0 - 46
2431068	Oxyfluorfen	21.6	Spike	P	0 - 28
2431068	Parathion Ethyl	3.47	Spike	P	0 - 31
2431068	Parathion Methyl	8.08	Spike	P	0 - 29
2431068	PBB-153	14.9	Spike	P	0 - 30
2431068	PBDE-47	14.9	Spike	P	0 - 36
2431068	PBDE-99	14.4	Spike	P	0 - 40
2431068	Pendimethalin	11.2	Spike	P	0 - 33
2431068	Pentabromotoluene	5.49	Spike	P	0 - 30
2431068	Phenytoin	4.35	Spike	P	0 - 100
2431068	Phorate	3.00	Spike	P	0 - 36
2431068	Prodiamine	24.1	Spike	P	0 - 71
2431068	Prometon	13.7	Spike	P	0 - 36
2431068	Prometryn	7.12	Spike	P	0 - 28
2431068	Pronamide	1.56	Spike	P	0 - 24
2431068	Propanil	20.4	Spike	P	0 - 28
2431068	Propargite	16.1	Spike	P	0 - 43
2431068	Propiconazole	12.3	Spike	P	0 - 33
2431068	Pyraflufen Ethyl	9.58	Spike	P	0 - 29
2431068	Pyridaben	12.9	Spike	P	0 - 30
2431068	Pyriproxyfen	24.3	Spike	P	0 - 79
2431068	Simazine	8.43	Spike	P	0 - 29
2431068	Stirophos	76.2	Spike	F	0 - 61
2431068	Sulfentrazone	1.55	Spike	P	0 - 33
2431068	Tebuconazole	21.4	Spike	P	0 - 69
2431068	Terbufos	26.8	Spike	P	0 - 29
2431068	Terbuthylazine	12.6	Spike	P	0 - 32
2431068	Tetradecachloro-m-terphenyl	3.98	Spike	P	0 - 30
2431068	Thiobencarb	43.4	Spike	F	0 - 26
2431068	Tri-o-cresyl Phosphate	3.77	Spike	P	0 - 33
2431068	Triadimefon	10.1	Spike	P	0 - 28
2431068	Tris(1-chloro-2-propyl) phosphate (TCPP)	0.221	Spike	P	0 - 30
2431068	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	0.241	Spike	P	0 - 30
2431068	Tris(2-chloroethyl) phosphate (TCEP)	3.86	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P433790

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430880	Acesulfame K	3.44	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P433790

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430880	AMPA	2.83	Spike	P	0 - 30
2430880	Endothall	1.84	Spike	P	0 - 30
2430880	Glufosinate	1.22	Spike	P	0 - 30
2430880	Glyphosate	6.56	Spike	P	0 - 30
2430880	Sucralose	3.17	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P433848

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430532	2,4-D	8.27	Spike	P	0 - 30
2430532	2,4,5-T	10.5	Spike	P	0 - 30
2430532	Acetaminophen	15.6	Spike	P	0 - 30
2430532	Acetamiprid	27.8	Spike	P	0 - 30
2430532	Afidopyropen	1.51	Spike	P	0 - 30
2430532	Bentazon	0.617	Spike	P	0 - 30
2430532	Benzovindiflupyr	0.673	Spike	P	0 - 30
2430532	Carbamazepine	11.8	Spike	P	0 - 30
2430532	Clothianidin	4.93	Spike	P	0 - 30
2430532	Dinotefuran	10.6	Spike	P	0 - 30
2430532	Diuron	3.38	Spike	P	0 - 30
2430532	Fenuron	10.2	Spike	P	0 - 30
2430532	Fluridone	0.426	Spike	P	0 - 30
2430532	Hydrocodone	11.0	Spike	P	0 - 30
2430532	Ibuprofen	3.64	Spike	P	0 - 30
2430532	Imazapyr	10.4	Spike	P	0 - 30
2430532	Imidacloprid	0.207	Spike	P	0 - 30
2430532	Linuron	4.26	Spike	P	0 - 30
2430532	Mandestrobin	0.152	Spike	P	0 - 30
2430532	MCP	7.98	Spike	P	0 - 30
2430532	Naproxen	10.1	Spike	P	0 - 30
2430532	Primidone	1.52	Spike	P	0 - 30
2430532	Pyraclostrobin	1.10	Spike	P	0 - 30
2430532	Silvex	19.9	Spike	P	0 - 30
2430532	Thiamethoxam	8.40	Spike	P	0 - 30
2430532	Tolfenpyrad	3.91	Spike	P	0 - 30
2430532	Triclopyr	7.09	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P434024

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431115	Total Alkalinity	0.829	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P434488

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: P434488

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431220	TDS	2.25	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P434030

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431115	Fluoride	0.498	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P434147

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431119	Organic Carbon	1.31	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2431234
Field Sample ID: G2CE0281

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	131	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	80.3	P	30 - 160
EPA 8321B	Diuron-d6	62.9	P	30 - 160
EPA 8321B	Endothall-d6	122	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	81.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.4	P	30 - 160
EPA 8321B	Primidone-d5	84.5	P	30 - 160
EPA 8321B	Sucralose-d6	109	P	30 - 160

Lab Sample ID: 2431236
Field Sample ID: G2CE0281

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	78.4	P	20 - 200
EPA 8270E	Simazine-d10	93.9	P	62 - 142
EPA 8270E	Terbufos-d10	118	P	58 - 132
EPA 8270E	Terphenyl-d14	89.5	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A121057

Included Lab Sample IDs: 2431220

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.3	98.1	P/P	90 - 110
Sulfate	97.8	98.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A121069

Included Lab Sample IDs: 2431222

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.6	97.3	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A121070

Included Lab Sample IDs: 2431220

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A121074

Included Lab Sample IDs: 2431220

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.5	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A121084

Included Lab Sample IDs: 2431234

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	83.6	137	P/P	60 - 160
Endothall	103	105	P/P	60 - 160
Glufosinate	92.0	98.0	P/P	60 - 160
Glyphosate	102	103	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A121114

Included Lab Sample IDs: 2431220

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.8	95.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A121114

Included Lab Sample IDs: 2431220

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121118
Included Lab Sample IDs: 2431236

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	87.6		P	80 - 120
Alachlor	85.6		P	80 - 120
Ametryn	107		P	80 - 120
Atrazine	89.7		P	80 - 120
Atrazine Desethyl	89.8		P	80 - 120
Azinphos Methyl	105		P	80 - 120
Azoxystrobin	102		P	80 - 120
Bromacil	104		P	80 - 120
Butylate	103		P	80 - 120
Caffeine	83.5		P	80 - 120
Carbophenothion	107		P	80 - 120
Carfentrazone Ethyl	103		P	80 - 120
Chlorfenapyr	95.9		P	80 - 120
Chlorpyrifos Ethyl	91.4		P	80 - 120
Chlorpyrifos Methyl	104		P	80 - 120
Coumaphos	104		P	80 - 120
Cyanazine	103		P	80 - 120
Cyprodinil	99.1		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	107		P	80 - 120
Difenoconazole	97.2		P	80 - 120
Dimethenamid	104		P	80 - 120
Dimethomorph	94.1		P	80 - 120
Disulfoton	103		P	80 - 120
Dithiopyr	111		P	80 - 120
EPTC	98.5		P	80 - 120
Ethion	91.6		P	80 - 120
Ethoprop	98.5		P	80 - 120
Etridiazole	97.9		P	80 - 120
Fenamiphos	88.6		P	80 - 120
Fenbuconazole	92.2		P	80 - 120
Fipronil	93.1		P	80 - 120
Fipronil Desulfinyl	108		P	80 - 120
Fipronil Sulfide	105		P	80 - 120
Fipronil Sulfone	100		P	80 - 120
Fluazifop-P-butyl	106		P	80 - 120
Fludioxonil	92.9		P	80 - 120
Flumioxazin	101		P	80 - 120
Flutolanil	104		P	80 - 120
Fluxapyroxad	100		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	99.0		P	80 - 120
Imazalil	96.2		P	80 - 120
Iprodione	91.9		P	80 - 120
Loratadine	101		P	80 - 120
Malathion	92.5		P	80 - 120
Metalaxyl	91.0		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	95.4		P	80 - 120
Mevinphos	97.4		P	80 - 120
Molinate	88.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121118
Included Lab Sample IDs: 2431236

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	86.5		P	80 - 120
Naled	106		P	80 - 120
Napropamide	101		P	80 - 120
Norflurazon	103		P	80 - 120
Oxadiazon	101		P	80 - 120
Oxyfluorfen	104		P	80 - 120
Parathion Ethyl	96.1		P	80 - 120
Parathion Methyl	93.5		P	80 - 120
Pendimethalin	104		P	80 - 120
Phenytoin	98.2		P	80 - 120
Phorate	87.9		P	80 - 120
Prodiamine	113		P	80 - 120
Prometon	91.5		P	80 - 120
Prometryn	97.9		P	80 - 120
Pronamide	105		P	80 - 120
Propanil	111		P	80 - 120
Propargite	100		P	80 - 120
Propiconazole	87.0		P	80 - 120
Pyraflufen Ethyl	112		P	80 - 120
Pyridaben	101		P	80 - 120
Pyriproxyfen	99.9		P	80 - 120
Simazine	102		P	80 - 120
Stiophos	93.3		P	80 - 120
Sulfentrazone	97.6		P	80 - 120
Tebuconazole	99.7		P	80 - 120
Terbufos	99.7		P	80 - 120
Terbuthylazine	92.3		P	80 - 120
Thiobencarb	104		P	80 - 120
Triadimefon	101		P	80 - 120

Reference Method: EPA 8270E
Run ID: A121134
Included Lab Sample IDs: 2431236

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	99.5		P	80 - 120
Avobenzene	99.0		P	80 - 120
Dechlorane 602	101		P	80 - 120
Dechlorane 603	99.8		P	80 - 120
Dechlorane Plus	102		P	80 - 120
Hexabromobenzene	95.4		P	80 - 120
Octinoxate	95.5		P	80 - 120
Oxybenzone	96.8		P	80 - 120
PBB-153	97.7		P	80 - 120
PBDE-47	95.2		P	80 - 120
PBDE-99	99.8		P	80 - 120
Pentabromotoluene	97.9		P	80 - 120
Tetradecachloro-m-terphenyl	92.6		P	80 - 120
Tri-o-cresyl Phosphate	100		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	92.8		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	96.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121134
Included Lab Sample IDs: 2431236

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tris(2-chloroethyl) phosphate (TCEP)	98.1		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A121137
Included Lab Sample IDs: 2431235

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	101	P/P	90 - 110
Iron	99.4	99.7	P/P	90 - 110
Magnesium	98.9	99.5	P/P	90 - 110
Potassium	98.2	97.9	P/P	90 - 110
Sodium	105	105	P/P	90 - 110
Strontium	102	101	P/P	90 - 110
Tin	95.6	95.6	P/P	90 - 110
Titanium	97.4	97.0	P/P	90 - 110
Vanadium	96.6	96.3	P/P	90 - 110
Zinc	96.8	97.7	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A121144
Included Lab Sample IDs: 2431235

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.8	97.0	P/P	90 - 110
Antimony	99.0	98.6	P/P	90 - 110
Arsenic	96.8	97.1	P/P	90 - 110
Barium	99.7	98.3	P/P	90 - 110
Beryllium	96.7	95.4	P/P	90 - 110
Boron	99.3	102	P/P	90 - 110
Cadmium	101	99.8	P/P	90 - 110
Chromium	100	99.7	P/P	90 - 110
Cobalt	95.3	94.7	P/P	90 - 110
Copper	95.0	94.8	P/P	90 - 110
Lead	91.2	90.9	P/P	90 - 110
Manganese	100	100	P/P	90 - 110
Molybdenum	97.9	97.2	P/P	90 - 110
Nickel	95.9	95.3	P/P	90 - 110
Selenium	97.6	98.2	P/P	90 - 110
Silver	96.6	96.3	P/P	90 - 110
Thallium	97.3	96.9	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A121151
Included Lab Sample IDs: 2431234

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	111	104	P/P	50 - 150
2,4,5-T	108	110	P/P	50 - 150
Acetaminophen	89.6	94.0	P/P	60 - 160
Acetamiprid	121	121	P/P	50 - 150
Afidopyropen	94.1	88.0	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A121151
Included Lab Sample IDs: 2431234

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bentazon	131	126	P/P	50 - 160
Benzovindiflupyr	117	116	P/P	50 - 160
Carbamazepine	126	127	P/P	60 - 150
Clothianidin	94.7	98.2	P/P	60 - 150
Dinotefuran	123	124	P/P	50 - 150
Diuron	128	121	P/P	60 - 160
Fenuron	104	104	P/P	60 - 150
Fluridone	116	110	P/P	60 - 160
Hydrocodone	104	109	P/P	60 - 150
Ibuprofen	140	107	P/P	50 - 160
Imazapyr	120	112	P/P	50 - 150
Imidacloprid	107	105	P/P	60 - 150
Linuron	106	111	P/P	60 - 150
Mandestrobin	119	117	P/P	50 - 150
MCPP	112	104	P/P	50 - 150
Naproxen	107	89.5	P/P	50 - 160
Primidone	101	97.8	P/P	60 - 150
Pyraclostrobin	129	127	P/P	60 - 150
Silvex	123	115	P/P	50 - 150
Thiamethoxam	115	111	P/P	50 - 150
Tolfenpyrad	116	115	P/P	60 - 150
Triclopyr	102	99.9	P/P	50 - 150

Reference Method: SM 5310 B-2011
Run ID: A121157
Included Lab Sample IDs: 2431221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.5	95.7	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A121187
Included Lab Sample IDs: 2431234

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	95.4	102	P/P	60 - 160
Sucralose	93.1	93.7	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A121234
Included Lab Sample IDs: 2431221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A121256
Included Lab Sample IDs: 2431221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	99.2	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A121257

Included Lab Sample IDs: 2431221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.0	99.1	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)	99.6					2.28	
EPA 180.1 Rev. 2.0	Turbidity	99.4					10.7	
EPA 200.7 Rev. 4.4	Calcium	98.2	101	95.8				2.95
	Iron	100	101	101	103			0.437
	Magnesium	97.9	95.7	103				0.347
	Potassium	97.8	96.0	98.1	103			1.74
	Sodium	99.2	99.3	109				1.78
	Strontium	103	103	104	108			1.36
	Tin	100	100	101	99.9			0.467
	Titanium	99.3	99.4	99.4	101			0.0789
	Vanadium	100	101	101	104			0.464
	Zinc	103	101	99.7	105			0.892
EPA 200.8 Rev. 5.4	Aluminum	97.1	95.6	96.2	97.1			0.488
	Antimony	99.2	100	102	97.2			2.07
	Arsenic	98.3	97.1	98.0	94.8			0.905
	Barium	101	99.9	101	100			1.54
	Beryllium	97.1	95.5	93.6	91.5			1.84
	Boron	97.2	100	104	101			2.66
	Cadmium	98.2	98.0	98.0	99.3			0.0324
	Chromium	95.8	95.1	96.3	98.0			1.19
	Cobalt	96.2	92.3	93.7	93.6			1.50
	Copper	96.8	92.9	93.2	96.3			0.319
	Lead	91.4	92.0	92.8	90.1			0.854
	Manganese	96.6	94.4	98.8	97.0			2.26
	Molybdenum	96.8	96.9	99.1	95.4			1.86
	Nickel	97.2	92.6	93.0	97.5			0.471
	Selenium	98.9	96.2	97.2	95.7			1.06
	Silver	110	108	110	108			2.18
	Thallium	98.6	102	103	99.1			1.80
EPA 300.0 Rev. 2.1	Chloride	101	101	101			0.276	
	Sulfate	98.9	98.0	98.4			0.113	
EPA 350.1 Rev. 2.0	Ammonia-N	95.4	97.4	99.4				1.41
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	106	104				1.47
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	101	102				0.738
EPA 365.1 Rev. 2.0	Total-P	107	110	111				1.21
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	97.9	97.8				0.0810
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	46.5	95.9	71.5				29.2
	Acetochlor	83.3	97.6	81.4				18.1
	Alachlor	89.5	89.1	76.6				15.1
	Ametryn	123	139	124				11.1
	Atrazine	86.8	91.4	85.9				6.22
	Atrazine Desethyl	48.4	72.8	66.1				8.97
	Avobenzone	134	102	99.8				1.72
	Azinphos Methyl	138	145	151				3.93
	Azoxystrobin	113	110	123				11.4
	Bromacil	95.0						7.97
	Butylate	55.9	60.4	60.2				0.371
	Caffeine	88.4	124	101				20.3
	Carbophenothion	101	93.4	96.4				3.14
	Carfentrazone Ethyl	105	98.7	98.7				0.0158
	Chlorfenapyr	85.8	82.4	80.2				2.72
	Chlorpyrifos Ethyl	92.2	81.1	78.8				2.87

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Chlorpyrifos Methyl	102	91.7	99.3			7.94
	Coumaphos	141	177	148			17.9
	Cyanazine	117	128	120			6.49
	Cyprodinil	99.9	67.8	93.1			28.2
	Dechlorane 602	44.2	59.3	53.1			11.0
	Dechlorane 603	113	114	106			7.22
	Dechlorane Plus	84.0	93.7	84.8			9.96
	Demeton	74.8	80.7	79.7			1.26
	Diazinon	96.1	113	92.3			20.3
	Difenoconazole	106	129	134			3.90
	Dimethenamid	84.8	81.9	86.4			5.38
	Dimethomorph	225	203	213			4.49
	Disulfoton	92.5	111	96.1			14.2
	Dithiopyr	87.4	97.7	87.9			10.6
	EPTC	56.7	61.0	53.5			13.2
	Ethion	42.2	72.9	48.7			39.8
	Ethoprop	93.1	95.2	91.5			3.93
	Etridiazole	58.2	75.5	59.5			23.7
	Fenamiphos	83.4	110	95.4			14.3
	Fenbuconazole	99.5	86.5	95.8			10.2
	Fipronil	93.2	100	93.9			6.70
	Fipronil Desulfinyl	85.2	85.8	86.9			1.29
	Fipronil Sulfide	94.5	98.3	93.0			5.62
	Fipronil Sulfone	92.5	98.9	93.3			5.84
	Fluazifop-P-butyl	107	109	104			4.40
	Fludioxonil	78.2	71.0	76.5			6.35
	Flumioxazin	60.2	143	123			15.2
	Flutolanil	83.7	56.6	52.0			6.15
	Fluxapyroxad	68.6	100	84.4			9.80
	Fonofos	91.3	90.0	87.5			2.80
	Hexabromobenzene	102	115	104			9.45
	Hexazinone	82.1	83.5	88.3			5.63
	Imazalil	98.2	101	89.3			12.4
	Iprodione	91.8	73.5	82.9			12.0
	Loratadine	182	149	160			7.16
	Malathion	105	22.3	107			131
	Metalaxyl	78.7	91.3	75.5			18.9
	Metolachlor	111	83.9	101			16.0
	Metribuzin	94.5	85.9	79.8			7.34
	Mevinphos	95.3	99.4	100			0.723
	Molinate	57.1	58.1	59.3			2.04
	Myclobutanil	87.5	91.1	84.2			7.79
	Naled	54.1	57.5	57.4			0.299
	Napropamide	75.3	76.5	76.5			0.0317
	Norflurazon	83.8					3.25
	Octinoxate	114	115	109			5.52
	Oxadiazon	79.9	81.3	75.1			7.93
	Oxybenzone	113	104	107			3.58
	Oxyfluorfen	107	122	98.0			21.6
	Parathion Ethyl	88.8	93.2	96.5			3.47
	Parathion Methyl	106	97.3	106			8.08
	PBB-153	78.5	110	94.7			14.9
	PBDE-47	76.0	93.4	80.5			14.9
	PBDE-99	58.3	81.7	70.8			14.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8270E	Pendimethalin	106	86.7	97.0			11.2
	Pentabromotoluene	99.7	101	95.9			5.49
	Phenytoln	55.7	52.2	54.5			4.35
	Phorate	101	97.7	101			3.00
	Prodiamine	43.2	30.6	39.1			24.1
	Prometon	104	80.0	91.7			13.7
	Prometryn	116	103	111			7.12
	Pronamide	90.8	102	100			1.56
	Propanil	100	118	95.8			20.4
	Propargite	54.2	75.4	64.1			16.1
	Propiconazole	83.7	72.9	82.4			12.3
	Pyraflufen Ethyl	107	104	94.4			9.58
	Pyridaben	123	137	121			12.9
	Pyriproxyfen	63.6	102	79.9			24.3
	Simazine	91.6	87.2	94.9			8.43
	Stiropfos	46.8	25.6	57.0			76.2
	Sulfentrazone	80.5	88.1	86.7			1.55
	Tebuconazole	39.5	54.4	43.9			21.4
	Terbufos	101	128	98.1			26.8
	Terbutylazine	81.1	90.0	79.3			12.6
	Tetradecachloro-m-terphenyl	139	92.9	89.3			3.98
	Thiobencarb	87.0	56.2	87.4			43.4
	Tri-o-cresyl Phosphate	119	116	112			3.77
	Triadimefon	81.7	88.5	80.0			10.1
	Tris(1-chloro-2-propyl) phosphate (TCPP)	123	89.5	89.2			0.221
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	103	107	107			0.241
	Tris(2-chloroethyl) phosphate (TCEP)	105	114	110			3.86
EPA 8321B	2,4-D	98.3					8.27
	2,4,5-T	103	135	121			10.5
	Acesulfame K	105	128	132			3.44
	Acetaminophen	82.2	120	102			15.6
	Acetamiprid	90.5	60.2	79.6			27.8
	Afidopyropen	30.6	36.8	36.2			1.51
	AMPA	117	62.5	60.4			2.83
	Bentazon	115					0.617
	Benzovindiflupyr	93.4	84.9	84.4			0.673
	Carbamazepine	100	72.0	81.9			11.8
	Clothianidin	89.0					4.93
	Dinotefuran	107	92.4	103			10.6
	Diuron	92.7	64.1	66.6			3.38
	Endothall	109	135	138			1.84
	Fenuron	87.3	62.1	68.8			10.2
	Fluridone	95.5	79.2	79.6			0.426
	Glufosinate	103	83.0	84.0			1.22
	Glyphosate	99.6	93.9	101			6.56
	Hydrocodone	92.6	69.1	77.2			11.0
	Ibuprofen	66.5	41.9	40.4			3.64
	Imazapyr	98.9					10.4
	Imidacloprid	98.0	129	129			0.207
	Linuron	82.6	58.4	60.9			4.26
	Mandestrobin	96.7	85.6	85.8			0.152

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	MCCP	105	147	136		
	Naproxen	81.7	88.3	97.7		
	Primidone	88.0	98.6	96.9		
	Pyraclostrobin	94.1	92.4	91.4		
	Silvex	109	165	135		
	Sucralose	96.4	97.4	94.4		
	Thiamethoxam	104	94.8	104		
	Tolfenpyrad	64.2	64.3	61.9		
	Triclopyr	95.4	126	118		
SM 2320 B-2011	Total Alkalinity	97.1				0.829
SM 2540 C-2015	TDS	101				2.25
SM 2540 D-2015	TSS	95.3				
SM 4500-F- C-2011	Fluoride	98.6	96.1	95.6		
SM 5310 B-2011	Organic Carbon	93.8	93.6	95.0		

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2431220
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2431220
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2431235
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2431235
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2431220
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2431220
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2431221
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2431221
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2431221
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2431221
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2431222
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2431236
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2431236
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2431234
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2431220
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2431235
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2431220
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2431220
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2431220
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2431221

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	08/16/2023			08/16/2023 14:41	Alexis Price	2431220
EPA 180.1 Rev. 2.0	08/16/2023			08/16/2023 15:07	Khloe J Berg	2431220
EPA 200.7 Rev. 4.4	08/16/2023	08/17/2023 13:10	George D Taylor	08/18/2023 18:53	McKinley C Carter	2431235
EPA 200.8 Rev. 5.4	08/16/2023	08/17/2023 13:10	George D Taylor	08/18/2023 19:44	Conrad Hartmann	2431235
EPA 300.0 Rev. 2.1	08/16/2023			08/18/2023 09:14	James L Waggeberby	2431220
EPA 350.1 Rev. 2.0	08/16/2023			08/25/2023 12:01	Khloe J Berg	2431221
EPA 351.2 Rev. 2.0	08/16/2023	08/23/2023 11:43	Dana G. Hughes	08/24/2023 15:56	Samantha L Bates	2431221
EPA 353.2 Rev. 2.0	08/16/2023			09/01/2023 11:39	Anna M. Plaviak	2431221
EPA 365.1 Rev. 2.0	08/16/2023	08/24/2023 14:28	Alexis Price	08/25/2023 12:42	James L Waggeberby	2431221
EPA 365.1 Rev. 2.0 dissolved	08/16/2023			08/16/2023 14:00	Elise M. Gillis	2431222
EPA 8270E	08/16/2023	08/16/2023 12:00	Fe-Val Siddell	08/17/2023 18:12	Vandana T. Nagar	2431236
	08/16/2023	08/16/2023 12:00	Fe-Val Siddell	08/18/2023 22:21	Arthur Maknenko	2431236
EPA 8321B	08/16/2023	08/16/2023 12:30	Tae K Lee	08/16/2023 15:29	Hana Lee	2431234
	08/16/2023	08/16/2023 12:30	Tae K Lee	08/21/2023 13:44	Tae K Lee	2431234
	08/16/2023	08/16/2023 13:00	Hoor Shaik	08/19/2023 01:32	Juyoung Kim	2431234
SM 2320 B-2011	08/16/2023			08/17/2023 23:45	Dale L. Simmons	2431220
SM 2340 B-2011	08/16/2023			08/18/2023 18:53	McKinley C Carter	2431235
SM 2540 C-2015	08/16/2023			08/18/2023 16:04	Yijie Li	2431220
SM 2540 D-2015	08/16/2023			08/18/2023 16:04	Yijie Li	2431220
SM 4500-F- C-2011	08/16/2023			08/17/2023 23:45	Dale L. Simmons	2431220
SM 5310 B-2011	08/16/2023			08/21/2023 20:25	Elise M. Gillis	2431221