

Chemical Analysis Report

CEN-DIST-2023-05-24-02

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

Event Description: **Lake Aurora LVI**
Request ID: **RQ-2023-05-22-10**
Customer: **CEN-DIST**
Project ID: **SMP**

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

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

Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 14-JUN-2023 11:49



Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Lake Aurora at Center

Collection Date/Time: 05/23/2023 12:10

Field ID: G4CE0234

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2412322	DEP SOP: NU-094-1	Color (true)	4.7	I A	PCU	P430344	
	EPA 180.1 Rev. 2.0	Turbidity	0.90	I	NTU	P430334	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P430755	
		Sulfate	32		mg SO4/L	P430761	
	SM 2320 B-2011	Total Alkalinity	30		mg CaCO3/L	P430654	
	SM 2540 C-2015	TDS	129		mg/L	P430791	
	SM 2540 D-2015	TSS	2	U	mg/L	P430858	
	SM 4500-F- C-2011	Fluoride	0.044	I	mg F/L	P430664	
2412323	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P430691	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.52		mg N/L	P430395	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.26		mg N/L	P430985	
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P430419	
	SM 5310 B-2011	Organic Carbon	5.2		mg C/L	P430577	
2412324	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P430346	
2412326	EPA 8321B	2,4-D	0.21		ug/L	P430400	
		Acesulfame K	0.10	U	ug/L	P430190	
		2,4,5-T	0.0040	U	ug/L	P430400	
		AMPA	0.10	U	ug/L	P430190	
		Acetaminophen	0.0080	U	ug/L	P430400	
		Acetamiprid	0.0020	U	ug/L	P430400	
		Endothall	0.25	U	ug/L	P430190	
		Glufosinate	0.10	U	ug/L	P430190	
		Glyphosate	0.10	U	ug/L	P430190	
		Afidopyrophen	0.0020	U	ug/L	P430400	
		Bentazon	8.0E-04	U	ug/L	P430400	
		Sucralose	0.36		ug/L	P430190	
		Benzovindiflupyr	0.0020	U	ug/L	P430400	
		Carbamazepine	8.0E-04	U	ug/L	P430400	
		Clothianidin	0.0020	U	ug/L	P430400	
		Dinotefuran	0.0020	U	ug/L	P430400	
		Diuron	0.0024	I	ug/L	P430400	
		Fenuron	0.032	U	ug/L	P430400	
		Fluridone	8.0E-04	U	ug/L	P430400	
		Imazapyr	0.0040	U	ug/L	P430400	
		Hydrocodone	0.0020	U	ug/L	P430400	
		Ibuprofen	0.080	U	ug/L	P430400	
		Imidacloprid	0.0082		ug/L	P430400	
		Linuron	0.0040	U	ug/L	P430400	
		Mandestrobin	0.0020	U	ug/L	P430400	
		MCP	0.0020	U	ug/L	P430400	
		Naproxen	0.0080	U	ug/L	P430400	MS
		Primidone	0.0040	U	ug/L	P430400	
		Pyraclostrobin	0.0020	U	ug/L	P430400	

Field ID: G4CE0234

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2412326	EPA 8321B	Silvex	0.0040	U	ug/L	P430400	
		Thiamethoxam	0.0020	U	ug/L	P430400	
		Tolfenpyrad	0.0020	U	ug/L	P430400	
		Triclopyr	0.0040	U	ug/L	P430400	
2412328	EPA 200.7 Rev. 4.4	Calcium	16.7		mg/L	P430463	
		Iron	30	U	ug/L	P430463	
		Magnesium	6.13		mg/L	P430463	
		Potassium	11.1		mg/L	P430463	
		Sodium	4.7		mg/L	P430463	
		Strontium	102		ug/L	P430463	
		Tin	3.0	U	ug/L	P430463	
		Titanium	0.75	U	ug/L	P430463	
		Vanadium	2.0	U	ug/L	P430463	
		Zinc	5.0	U	ug/L	P430463	
	EPA 200.8 Rev. 5.4	Aluminum	72		ug/L	P430463	
		Antimony	0.20		ug/L	P430463	
		Arsenic	1.09		ug/L	P430463	
		Barium	19.8		ug/L	P430463	
		Beryllium	0.010	U	ug/L	P430463	
		Boron	40.7		ug/L	P430463	
		Cadmium	0.020	U	ug/L	P430463	
		Chromium	0.40	U	ug/L	P430463	
		Cobalt	0.032	I	ug/L	P430463	
		Copper	1.04		ug/L	P430463	
		Lead	0.20	U	ug/L	P430463	
		Manganese	8.21		ug/L	P430463	
		Molybdenum	0.91		ug/L	P430463	
		Nickel	0.50	U	ug/L	P430463	
		Selenium	0.20	U	ug/L	P430463	
		Silver	0.010	U	ug/L	P430463	
		Thallium	0.10	U	ug/L	P430463	
		Hardness	66.8		mg/L	P430463	
2412329	SM 2340 B-2011						
	EPA 8270E	Oxybenzone**	10	U	ng/L	P430421	
		Acetochlor	0.20	U	ng/L	P430421	
		Octinoxate**	20	U	ng/L	P430421	
		Alachlor	0.41	U	ng/L	P430421	
		Avobenzone**	100	U	ng/L	P430421	
		Ametryn	1.1	U	ng/L	P430421	
		Atrazine	4.5		ng/L	P430421	
		PBDE-47**	4.1	U	ng/L	P430421	
		Atrazine Desethyl	3.1	I	ng/L	P430421	
		PBDE-99**	5.1	U	ng/L	P430421	
		Azinphos Methyl	3.1	U	ng/L	P430421	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P430421	
		Azoxystrobin	0.41	U	ng/L	P430421	

Field ID: G4CE0234

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2412329	EPA 8270E	Bromacil	16		ng/L	P430421	
		2-Ethylhexyl	12	U	ng/L	P430421	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.20	U	ng/L	P430421	
		Dechlorane Plus**	31	U	ng/L	P430421	
		Caffeine**	36	I	ng/L	P430421	RPD
		Dechlorane 602**	5.1	U	ng/L	P430421	
		Carbophenothion	0.51	U	ng/L	P430421	
		Dechlorane 603**	4.1	U	ng/L	P430421	
		Carfentrazone Ethyl	0.15	U	ng/L	P430421	
		Hexabromobenzene**	6.1	U	ng/L	P430421	
		Chlorfenapyr	0.31	U	ng/L	P430421	
		PBB-153**	8.1	UJ	ng/L	P430421	LCS, MS
		Chlorpyrifos Ethyl	0.31	U	ng/L	P430421	
		Pentabromotoluene**	3.1	U	ng/L	P430421	
		Chlorpyrifos Methyl	0.10	U	ng/L	P430421	
		Tris(2-chloroethyl) phosphate (TCEP)**	71	U	ng/L	P430421	
		Coumaphos	1.1	U	ng/L	P430421	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	15	U	ng/L	P430421	
		Cyanazine	5.1	U	ng/L	P430421	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.9	I	ng/L	P430421	
		Cyprodinil	0.20	U	ng/L	P430421	
		Tetradecachloro-m-terphenyl**	7.6	U	ng/L	P430421	
		Demeton	3.6	U	ng/L	P430421	
		Diazinon	0.13	U	ng/L	P430421	
		Difenoconazole	0.61	U	ng/L	P430421	
		Dimethenamid	0.10	U	ng/L	P430421	
		Dimethomorph	0.31	U	ng/L	P430421	
		Disulfoton	0.61	U	ng/L	P430421	
		Dithiopyr	1.0	U	ng/L	P430421	
		EPTC	0.51	U	ng/L	P430421	
		Ethion	0.31	U	ng/L	P430421	
		Ethoprop	0.13	U	ng/L	P430421	
		Etridiazole	0.10	U	ng/L	P430421	
		Fenamiphos	0.46	U	ng/L	P430421	
		Fenbuconazole	0.60	I	ng/L	P430421	
		Fipronil	0.20	U	ng/L	P430421	
		Fipronil Desulfinyl**	0.10	U	ng/L	P430421	
		Fipronil Sulfide	0.10	U	ng/L	P430421	
		Fipronil Sulfone	0.10	U	ng/L	P430421	
		Fluazifop-P-butyl	0.10	U	ng/L	P430421	
		Fludioxonil	0.10	U	ng/L	P430421	
		Flumioxazin	3.1	U	ng/L	P430421	
		Flutolanil	0.10	U	ng/L	P430421	
		Fluxapyroxad	0.25	U	ng/L	P430421	

Field ID: G4CE0234

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2412329	EPA 8270E	Fonofos	0.15	U	ng/L	P430421	
		Hexazinone	0.51	U	ng/L	P430421	
		Imazalil	0.66	U	ng/L	P430421	
		Iprodione	0.51	U	ng/L	P430421	
		Loratadine**	0.31	U	ng/L	P430421	
		Malathion	0.36	U	ng/L	P430421	
		Metalaxyl	8.7		ng/L	P430421	
		Metolachlor	0.76	U	ng/L	P430421	
		Metribuzin	0.41	U	ng/L	P430421	
		Mevinphos	1.0	U	ng/L	P430421	
		Molinate	0.25	U	ng/L	P430421	
		Myclobutanil	0.36	U	ng/L	P430421	
		Naled	2.5	U	ng/L	P430421	
		Napropamide	0.71	U	ng/L	P430421	
		Norflurazon	36		ng/L	P430421	
		Oxadiazon	0.36	U	ng/L	P430421	
		Oxyfluorfen	0.20	U	ng/L	P430421	
		Parathion Ethyl	0.15	U	ng/L	P430421	
		Parathion Methyl	0.20	U	ng/L	P430421	
		Pendimethalin	0.76	UJ	ng/L	P430421	LCS
		Phenytoin**	5.4	U	ng/L	P430421	
		Phorate	0.25	U	ng/L	P430421	
		Prodiamine	0.20	U	ng/L	P430421	
		Prometon	3.1	U	ng/L	P430421	
		Prometryn	0.36	U	ng/L	P430421	
		Pronamide	0.10	U	ng/L	P430421	
		Propanil	0.10	U	ng/L	P430421	
		Propargite	0.81	U	ng/L	P430421	
		Propiconazole	0.61	U	ng/L	P430421	
		Pyraflufen Ethyl	0.31	U	ng/L	P430421	
		Pyridaben	1.4	U	ng/L	P430421	
		Pyriproxyfen	0.25	U	ng/L	P430421	
		Simazine	2.8		ng/L	P430421	
		Stirophos	0.41	U	ng/L	P430421	
		Sulfentrazone	1.4	U	ng/L	P430421	
		Tebuconazole	1.4	U	ng/L	P430421	
		Terbufos	0.20	U	ng/L	P430421	
		Terbuthylazine	0.20	U	ng/L	P430421	
		Thiobencarb	0.51	U	ng/L	P430421	
		Triadimefon	0.15	U	ng/L	P430421	

Field ID: G4CE0234

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
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 high concentration of parameter in the spiked sample.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for potassium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for some parameters 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.

Sample Location: FB

Collection Date/Time: 05/23/2023 12:40

Field ID: FB_05232023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2412327	EPA 8321B	2,4-D	0.0020	U	ug/L	P430400	
		Acesulfame K	0.10	U	ug/L	P430301	
		2,4,5-T	0.0040	U	ug/L	P430400	
		AMPA	0.10	U	ug/L	P430301	
		Acetaminophen	0.0080	U	ug/L	P430400	
		Acetamiprid	0.0020	U	ug/L	P430400	
		Endothall	0.25	U	ug/L	P430301	
		Glufosinate	0.10	U	ug/L	P430301	
		Glyphosate	0.10	U	ug/L	P430301	
		Afidopyropen	0.0020	U	ug/L	P430400	
		Bentazon	8.0E-04	U	ug/L	P430400	
		Sucralose	0.010	U	ug/L	P430301	
		Benzovindiflupyr	0.0020	U	ug/L	P430400	
		Carbamazepine	8.0E-04	U	ug/L	P430400	
		Clothianidin	0.0020	U	ug/L	P430400	
		Dinotefuran	0.0020	U	ug/L	P430400	
		Diuron	0.0020	U	ug/L	P430400	
		Fenuron	0.032	U	ug/L	P430400	
		Fluridone	8.0E-04	U	ug/L	P430400	
		Imazapyr	0.0040	U	ug/L	P430400	
		Hydrocodone	0.0020	U	ug/L	P430400	
		Ibuprofen	0.080	U	ug/L	P430400	
		Imidacloprid	0.0020	U	ug/L	P430400	
		Linuron	0.0040	U	ug/L	P430400	
		Mandestrobin	0.0020	U	ug/L	P430400	
		MCPP	0.0020	U	ug/L	P430400	
		Naproxen	0.0080	U	ug/L	P430400	MS
		Primidone	0.0040	U	ug/L	P430400	
		Pyraclostrobin	0.0020	U	ug/L	P430400	
		Silvex	0.0040	U	ug/L	P430400	
		Thiamethoxam	0.0020	U	ug/L	P430400	
		Tolfenpyrad	0.0020	U	ug/L	P430400	
		Triclopyr	0.0040	U	ug/L	P430400	
2412330	EPA 8270E	Oxybenzone**	10	U	ng/L	P430421	
		Acetochlor	0.20	U	ng/L	P430421	
		Octinoxate**	20	U	ng/L	P430421	
		Alachlor	0.41	U	ng/L	P430421	
		Avobenzone**	100	U	ng/L	P430421	
		Ametryn	1.1	U	ng/L	P430421	
		Atrazine	0.20	U	ng/L	P430421	
		PBDE-47**	4.1	U	ng/L	P430421	
		Atrazine Desethyl	1.3	U	ng/L	P430421	
		PBDE-99**	5.1	U	ng/L	P430421	
		Azinphos Methyl	3.1	U	ng/L	P430421	

Field ID: FB_05232023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2412330	EPA 8270E	Tri-o-cresyl Phosphate**	6.1	U	ng/L	P430421	RPD
		Azoxystrobin	0.41	U	ng/L	P430421	
		Bromacil	0.61	U	ng/L	P430421	
		2-Ethylhexyl	12	U	ng/L	P430421	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.20	U	ng/L	P430421	
		Dechlorane Plus**	31	U	ng/L	P430421	
		Caffeine**	7.7	U	ng/L	P430421	
		Dechlorane 602**	5.1	U	ng/L	P430421	
		Carbophenothion	0.51	U	ng/L	P430421	
		Dechlorane 603**	4.1	U	ng/L	P430421	
		Carfentrazone Ethyl	0.15	U	ng/L	P430421	
		Hexabromobenzene**	6.1	U	ng/L	P430421	
		Chlorfenapyr	0.31	U	ng/L	P430421	
		PBB-153**	8.2	UJ	ng/L	P430421	LCS, MS
		Chlorpyrifos Ethyl	0.31	U	ng/L	P430421	
		Pentabromotoluene**	3.1	U	ng/L	P430421	
		Chlorpyrifos Methyl	0.10	U	ng/L	P430421	
		Tris(2-chloroethyl) phosphate (TCEP)**	72	U	ng/L	P430421	
		Coumaphos	1.1	U	ng/L	P430421	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	15	U	ng/L	P430421	
		Cyanazine	5.1	U	ng/L	P430421	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.6	U	ng/L	P430421	
		Cyprodinil	0.20	U	ng/L	P430421	
		Tetradecachloro-m-terphenyl**	7.7	U	ng/L	P430421	
		Demeton	3.6	U	ng/L	P430421	
		Diazinon	0.13	U	ng/L	P430421	
		Difenoconazole	0.61	U	ng/L	P430421	
		Dimethenamid	0.10	U	ng/L	P430421	
		Dimethomorph	0.31	U	ng/L	P430421	
		Disulfoton	0.61	U	ng/L	P430421	
		Dithiopyr	1.0	U	ng/L	P430421	
		EPTC	0.51	U	ng/L	P430421	
		Ethion	0.31	U	ng/L	P430421	
		Ethoprop	0.13	U	ng/L	P430421	
		Etridiazole	0.10	U	ng/L	P430421	
		Fenamiphos	0.46	U	ng/L	P430421	
		Fenbuconazole	0.51	U	ng/L	P430421	
		Fipronil	0.20	U	ng/L	P430421	
		Fipronil Desulfinyl**	0.10	U	ng/L	P430421	
		Fipronil Sulfide	0.10	U	ng/L	P430421	
		Fipronil Sulfone	0.10	U	ng/L	P430421	
		Fluazifop-P-butyl	0.10	U	ng/L	P430421	
		Fludioxonil	0.10	U	ng/L	P430421	
		Flumioxazin	3.1	U	ng/L	P430421	

Field ID: FB_05232023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2412330	EPA 8270E	Flutolanil	0.10	U	ng/L	P430421	
		Fluxapyroxad	0.26	U	ng/L	P430421	
		Fonofos	0.15	U	ng/L	P430421	
		Hexazinone	0.51	U	ng/L	P430421	
		Imazalil	0.66	U	ng/L	P430421	
		Iprodione	0.51	U	ng/L	P430421	
		Loratadine**	0.31	U	ng/L	P430421	
		Malathion	0.36	U	ng/L	P430421	
		Metalaxyl	0.51	U	ng/L	P430421	
		Metolachlor	0.77	U	ng/L	P430421	
		Metribuzin	0.41	U	ng/L	P430421	
		Mevinphos	1.0	U	ng/L	P430421	
		Molinate	0.26	U	ng/L	P430421	
		Myclobutanil	0.36	U	ng/L	P430421	
		Naled	2.6	U	ng/L	P430421	
		Napropamide	0.72	U	ng/L	P430421	
		Norflurazon	1.0	U	ng/L	P430421	
		Oxadiazon	0.36	U	ng/L	P430421	
		Oxyfluorfen	0.20	U	ng/L	P430421	
		Parathion Ethyl	0.15	U	ng/L	P430421	
		Parathion Methyl	0.20	U	ng/L	P430421	
		Pendimethalin	0.77	UJ	ng/L	P430421	LCS
		Phenytain**	5.4	U	ng/L	P430421	
		Phorate	0.26	U	ng/L	P430421	
		Prodiamine	0.20	U	ng/L	P430421	
		Prometon	3.1	U	ng/L	P430421	
		Prometryn	0.36	U	ng/L	P430421	
		Pronamide	0.10	U	ng/L	P430421	
		Propanil	0.10	U	ng/L	P430421	
		Propargite	0.82	U	ng/L	P430421	
		Propiconazole	0.61	U	ng/L	P430421	
		Pyraflufen Ethyl	0.31	U	ng/L	P430421	
		Pyridaben	1.4	U	ng/L	P430421	
		Pyriproxyfen	0.26	U	ng/L	P430421	
		Simazine	0.26	U	ng/L	P430421	
		Stirophos	0.41	U	ng/L	P430421	
		Sulfentrazone	1.4	U	ng/L	P430421	
		Tebuconazole	1.4	U	ng/L	P430421	
		Terbufos	0.20	U	ng/L	P430421	
		Terbuthylazine	0.20	U	ng/L	P430421	
		Thiobencarb	0.51	U	ng/L	P430421	
		Triadimefon	0.15	U	ng/L	P430421	

Field ID: FB_05232023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for some parameters 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: P430344

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P430334

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P430463

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: P430463

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: P430755

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: P430761

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430691

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430395

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430985

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430419

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P430346

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

Reference Method: EPA 8270E
Batch ID: P430421

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: P430421

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: P430421

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: P430421

Component	Result	Code	Units
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	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: P430421

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: P430190

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: P430301

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: P430400

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P430400

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

Reference Method: SM 2320 B-2011

Batch ID: P430654

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

Reference Method: SM 2540 C-2015

Batch ID: P430791

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P430858

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P430664

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P430577

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: P430344

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P430334

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.2		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P430463

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	100		P	85 - 115
Iron	100		P	85 - 115
Magnesium	100		P	85 - 115
Potassium	102		P	85 - 115
Sodium	101		P	85 - 115
Strontium	103		P	85 - 115
Tin	105		P	85 - 115
Titanium	99.6		P	85 - 115
Vanadium	99.1		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P430463

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	102		P	85 - 115
Barium	104		P	85 - 115
Beryllium	95.6		P	85 - 115
Boron	102		P	85 - 115
Cadmium	99.7		P	85 - 115
Chromium	97.4		P	85 - 115
Cobalt	101		P	85 - 115
Copper	99.1		P	85 - 115
Lead	101		P	85 - 115
Manganese	98.0		P	85 - 115
Molybdenum	98.9		P	85 - 115
Nickel	100		P	85 - 115
Selenium	103		P	85 - 115
Silver	102		P	85 - 115
Thallium	100		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430755

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430761

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430691

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430395

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: P430985

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430419

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P430346

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

Reference Method: EPA 8270E
Batch ID: P430421

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	131		P	42 - 162
Acetochlor	77.3		P	69 - 123
Alachlor	86.5		P	65 - 118
Ametryn	106		P	58 - 141
Atrazine	89.8		P	73 - 118
Atrazine Desethyl	91.8		P	32 - 125
Avobenzone	193		P	40 - 203
Azinphos Methyl	130		P	36 - 197
Azoxystrobin	106		P	58 - 226
Bromacil	92.5		P	48 - 120
Butylate	73.1		P	27 - 85.0
Caffeine	101		P	40 - 137
Carbophenothion	113		P	54 - 132
Carfentrazone Ethyl	113		P	60 - 142
Chlorfenapyr	78.7		P	53 - 117
Chlorpyrifos Ethyl	86.1		P	59 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P430421

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	93.2		P	66 - 119
Coumaphos	130		P	11 - 234
Cyanazine	123		P	61 - 248
Cyprodinil	82.6		P	50 - 147
Dechlorane 602	115		P	50 - 150
Dechlorane 603	144		P	50 - 150
Dechlorane Plus	117		P	47 - 182
Demeton	66.4		P	30 - 138
Diazinon	105		P	67 - 126
Difenoconazole	113		P	38 - 205
Dimethenamid	103		P	57 - 111
Dimethomorph	99.1		P	16 - 212
Disulfoton	95.8		P	46 - 126
Dithiopyr	98.1		P	62 - 115
EPTC	71.1		P	28 - 80.0
Ethion	91.6		P	24 - 122
Ethoprop	90.8		P	62 - 113
Etridiazole	74.2		P	28 - 92.0
Fenamiphos	83.9		P	57 - 128
Fenbuconazole	83.8		P	52 - 155
Fipronil	88.3		P	63 - 130
Fipronil Desulfinyl	97.8		P	61 - 130
Fipronil Sulfide	97.5		P	56 - 117
Fipronil Sulfone	95.5		P	52 - 118
Fluazifop-P-butyl	71.3		P	61 - 128
Fludioxonil	92.6		P	59 - 129
Flumioxazin	110		P	30 - 250
Flutolanil	87.2		P	53 - 127
Fluxapyroxad	99.0		P	42 - 132
Fonofos	105		P	61 - 110
Hexabromobenzene	132		P	50 - 150
Hexazinone	95.7		P	46 - 139
Imazalil	60.2		P	40 - 139
Iprodione	84.8		P	40 - 146
Loratadine	143		P	10 - 224
Malathion	98.4		P	61 - 135
Metaxyl	76.3		P	58 - 121
Metolachlor	104		P	64 - 118
Metribuzin	84.5		P	45 - 245
Mevinphos	90.6		P	49 - 118
Molinate	67.9		P	42 - 92.0
Myclobutanil	100		P	55 - 127
Naled	25.2		P	10 - 114
Napropamide	78.5		P	39 - 121
Norflurazon	97.2		P	55 - 129
Octinoxate	121		P	26 - 166
Oxadiazon	91.8		P	54 - 115
Oxybenzone	120		P	49 - 135
Oxyfluorfen	105		P	64 - 139
Parathion Ethyl	96.1		P	70 - 111
Parathion Methyl	109		P	76 - 136
PBB-153	153		F	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P430421

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	120		P	41 - 148
PBDE-99	122		P	38 - 147
Pendimethalin	124		F	52 - 118
Pentabromotoluene	116		P	50 - 150
Phenytoin	64.4		P	10 - 162
Phorate	96.8		P	40 - 122
Prodiamine	52.5		P	26 - 141
Prometon	76.5		P	54 - 122
Prometryn	118		P	61 - 128
Pronamide	110		P	72 - 121
Propanil	107		P	45 - 144
Propargite	94.9		P	10 - 199
Propiconazole	80.5		P	56 - 127
Pyraflufen Ethyl	72.5		P	56 - 140
Pyridaben	100		P	26 - 211
Pyriproxyfen	105		P	33 - 194
Simazine	94.8		P	67 - 121
Stirophos	84.6		P	20 - 142
Sulfentrazone	99.9		P	21 - 144
Tebuconazole	73.2		P	10 - 122
Terbufos	97.3		P	60 - 129
Terbutylazine	81.5		P	69 - 113
Tetradecachloro-m-terphenyl	184		P	70 - 200
Thiobencarb	104		P	51 - 120
Tri-o-cresyl Phosphate	123		P	49 - 150
Triadimefon	93.2		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	98.6		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	112		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	121		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P430190

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	116		P	40 - 150
AMPA	103		P	40 - 150
Endothall	146		P	40 - 150
Glufosinate	104		P	40 - 150
Glyphosate	101		P	40 - 150
Sucralose	114		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P430301

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	144		P	40 - 150
AMPA	99.1		P	40 - 150
Endothall	141		P	40 - 150
Glufosinate	90.5		P	40 - 150
Glyphosate	102		P	40 - 150
Sucralose	115		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P430400

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	109		P	40 - 150
2,4,5-T	94.2		P	40 - 150
Acetaminophen	86.3		P	30 - 150
Acetamiprid	72.5		P	40 - 150
Afidopyropen	68.0		P	30 - 150
Bentazon	122		P	30 - 150
Benzovindiflupyr	78.2		P	40 - 150
Carbamazepine	85.7		P	40 - 150
Clothianidin	87.2		P	40 - 150
Dinotefuran	91.1		P	40 - 150
Diuron	97.4		P	40 - 150
Fenuron	82.8		P	40 - 150
Fluridone	84.8		P	40 - 150
Hydrocodone	86.1		P	40 - 150
Ibuprofen	77.4		P	40 - 150
Imazapyr	90.4		P	40 - 150
Imidacloprid	80.1		P	40 - 150
Linuron	75.9		P	40 - 150
Mandestrobin	83.3		P	40 - 150
MCPP	96.3		P	40 - 150
Naproxen	57.7		P	40 - 150
Primidone	75.4		P	40 - 150
Pyraclostrobin	70.0		P	40 - 150
Silvex	89.4		P	40 - 150
Thiamethoxam	85.7		P	40 - 150
Tolfenpyrad	51.9		P	30 - 150
Triclopyr	89.0		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P430654

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

Reference Method: SM 2540 C-2015

Batch ID: P430791

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

Reference Method: SM 2540 D-2015

Batch ID: P430858

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	88.1		P	85 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P430664

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	94 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P430577

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P430463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412328	Calcium	101		P	80 - 120
2412328	Iron	103	102	P/P	80 - 120
2412328	Magnesium	102		P	80 - 120
2412328	Sodium	104		P	80 - 120
2412328	Strontium	105	103	P/P	80 - 120
2412328	Tin	108	105	P/P	80 - 120
2412328	Titanium	103	102	P/P	80 - 120
2412328	Vanadium	105	103	P/P	80 - 120
2412328	Zinc	107	105	P/P	80 - 120
2412685	Calcium	100		P	80 - 120
2412685	Iron	102		P	80 - 120
2412685	Magnesium	100		P	80 - 120
2412685	Potassium	103		P	80 - 120
2412685	Sodium	104		P	80 - 120
2412685	Strontium	104		P	80 - 120
2412685	Tin	105		P	80 - 120
2412685	Titanium	100		P	80 - 120
2412685	Vanadium	101		P	80 - 120
2412685	Zinc	104		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P430463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412328	Aluminum	99.0	98.1	P/P	80 - 120
2412328	Antimony	105	105	P/P	80 - 120
2412328	Arsenic	102	102	P/P	80 - 120
2412328	Barium	104	104	P/P	80 - 120
2412328	Beryllium	96.2	94.9	P/P	80 - 120
2412328	Boron	101	98.4	P/P	80 - 120
2412328	Cadmium	101	99.7	P/P	80 - 120
2412328	Chromium	95.7	95.7	P/P	80 - 120
2412328	Cobalt	99.1	98.6	P/P	80 - 120
2412328	Copper	96.7	95.5	P/P	80 - 120
2412328	Lead	102	101	P/P	80 - 120
2412328	Manganese	96.3	95.1	P/P	80 - 120
2412328	Molybdenum	101	101	P/P	80 - 120
2412328	Nickel	98.5	97.4	P/P	80 - 120
2412328	Selenium	101	101	P/P	80 - 120
2412328	Silver	102	101	P/P	80 - 120
2412328	Thallium	103	103	P/P	80 - 120
2412685	Aluminum	96.8		P	80 - 120
2412685	Antimony	103		P	80 - 120
2412685	Arsenic	99.3		P	80 - 120
2412685	Barium	101		P	80 - 120
2412685	Beryllium	95.8		P	80 - 120
2412685	Boron	99.2		P	80 - 120
2412685	Cadmium	97.7		P	80 - 120
2412685	Chromium	94.2		P	80 - 120
2412685	Cobalt	97.9		P	80 - 120
2412685	Copper	95.9		P	80 - 120
2412685	Lead	100		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P430463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412685	Manganese	96.7		P	80 - 120
2412685	Molybdenum	98.5		P	80 - 120
2412685	Nickel	96.2		P	80 - 120
2412685	Selenium	100		P	80 - 120
2412685	Silver	99.3		P	80 - 120
2412685	Thallium	99.8		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430755

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412215	Chloride	94.8		P	90 - 110
2412322	Chloride	94.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430761

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412215	Sulfate	97.4		P	90 - 110
2412322	Sulfate	95.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430691

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411110	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430395

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412323	Kjeldahl Nitrogen	103	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430985

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412299	NO2NO3-N	97.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430419

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412323	Total-P	105	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P430346

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412324	O-Phosphate-P	99.0	98.9	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P430421

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411888	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	134	134	P/P	26 - 165
2411888	Acetochlor	84.1	69.9	P/P	67 - 124
2411888	Alachlor	82.5	78.9	P/P	60 - 120
2411888	Ametryn	116	102	P/P	54 - 216
2411888	Atrazine Desethyl	76.6	73.3	P/P	15 - 122
2411888	Avobenzone	176	173	P/P	37 - 178
2411888	Azinphos Methyl	119	94.8	P/P	40 - 292
2411888	Azoxystrobin	101	84.0	P/P	35 - 220
2411888	Bromacil	87.9	76.7	P/P	45 - 127
2411888	Butylate	51.1	54.1	P/P	20 - 83.0
2411888	Carbophenothion	114	99.9	P/P	57 - 127
2411888	Carfentrazone Ethyl	115	97.1	P/P	51 - 141
2411888	Chlorfenapyr	77.1	69.6	P/P	46 - 111
2411888	Chlorpyrifos Ethyl	76.8	71.7	P/P	52 - 120
2411888	Chlorpyrifos Methyl	97.8	87.3	P/P	63 - 119
2411888	Coumaphos	71.4	76.3	P/P	10 - 228
2411888	Cyanazine	115	86.0	P/P	59 - 241
2411888	Cyprodinil	85.1	72.4	P/P	47 - 146
2411888	Dechlorane 602	114	117	P/P	50 - 150
2411888	Dechlorane 603	133	134	P/P	50 - 150
2411888	Dechlorane Plus	96.4	89.8	P/P	50 - 150
2411888	Demeton	64.2	56.8	P/P	40 - 136
2411888	Diazinon	107	103	P/P	69 - 132
2411888	Difenoconazole	129	110	P/P	57 - 258
2411888	Dimethenamid	109	95.8	P/P	54 - 110
2411888	Dimethomorph	99.8	69.1	P/P	28 - 210
2411888	Disulfoton	101	84.3	P/P	43 - 133
2411888	Dithiopyr	102	90.2	P/P	39 - 116
2411888	EPTC	50.1	55.8	P/P	20 - 78.0
2411888	Ethion	97.8	92.1	P/P	17 - 119
2411888	Ethoprop	89.9	77.8	P/P	66 - 120
2411888	Etridiazole	62.3	59.5	P/P	28 - 96.0
2411888	Fenamiphos	85.6	73.2	P/P	41 - 126
2411888	Fenbuconazole	86.7	75.0	P/P	42 - 169
2411888	Fipronil	95.3	82.8	P/P	61 - 132
2411888	Fipronil Desulfinyl	105	93.3	P/P	56 - 132
2411888	Fipronil Sulfide	108	87.0	P/P	48 - 119
2411888	Fipronil Sulfone	102	94.9	P/P	42 - 131
2411888	Fluazifop-P-butyl	69.3	61.1	P/P	53 - 131
2411888	Fludioxonil	88.1	71.5	P/P	56 - 127
2411888	Flumioxazin	152	121	P/P	19 - 300
2411888	Flutolanil	82.9	73.1	P/P	41 - 127
2411888	Fluxapyroxad	108	94.2	P/P	42 - 172
2411888	Fonofos	105	96.8	P/P	59 - 113
2411888	Hexabromobenzene	134	133	P/P	50 - 150
2411888	Hexazinone	96.7	86.8	P/P	66 - 122
2411888	Imazalil	72.0	60.0	P/P	21 - 283
2411888	Iprodione	91.3	82.2	P/P	43 - 150
2411888	Loratadine	153	125	P/P	23 - 201
2411888	Malathion	101	89.5	P/P	58 - 136
2411888	Metalaxyl	87.5	80.6	P/P	55 - 120
2411888	Metolachlor	101	90.3	P/P	57 - 121

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P430421

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411888	Metribuzin	92.0	81.1	P/P	58 - 294
2411888	Mevinphos	79.9	71.7	P/P	50 - 126
2411888	Molinate	52.2	54.0	P/P	42 - 93.0
2411888	Myclobutanil	98.1	81.9	P/P	55 - 125
2411888	Naled	22.5	22.8	P/P	18 - 200
2411888	Napropamide	85.8	73.8	P/P	39 - 110
2411888	Norflurazon	100	94.0	P/P	48 - 128
2411888	Octinoxate	118	116	P/P	21 - 159
2411888	Oxadiazon	91.1	74.5	P/P	43 - 112
2411888	Oxybenzone	122	120	P/P	41 - 142
2411888	Oxyfluorfen	104	81.7	P/P	64 - 153
2411888	Parathion Ethyl	99.4	86.9	P/P	69 - 114
2411888	Parathion Methyl	101	99.6	P/P	79 - 139
2411888	PBB-153	151	150	F/F	50 - 150
2411888	PBDE-47	125	117	P/P	27 - 144
2411888	PBDE-99	127	122	P/P	18 - 150
2411888	Pendimethalin	138	117	P/P	50 - 139
2411888	Pentabromotoluene	116	115	P/P	50 - 150
2411888	Phenytoin	76.5	78.0	P/P	10 - 146
2411888	Phorate	91.1	83.2	P/P	54 - 161
2411888	Prodiamine	62.2	56.4	P/P	30 - 161
2411888	Prometon	53.0	58.5	P/P	45 - 134
2411888	Prometryn	121	107	P/P	45 - 137
2411888	Pronamide	119	105	P/P	65 - 133
2411888	Propanil	105	92.8	P/P	49 - 142
2411888	Propargite	97.7	95.4	P/P	10 - 203
2411888	Propiconazole	85.5	73.6	P/P	38 - 146
2411888	Pyraflufen Ethyl	62.6	58.9	P/P	34 - 153
2411888	Pyriproxyfen	110	95.0	P/P	33 - 180
2411888	Simazine	99.9	82.0	P/P	51 - 157
2411888	Stiropfos	89.2	86.7	P/P	10 - 128
2411888	Sulfentrazone	92.8	86.3	P/P	53 - 186
2411888	Tebuconazole	87.6	84.9	P/P	10 - 133
2411888	Terbufos	102	94.1	P/P	65 - 139
2411888	Terbuthylazine	84.0	77.2	P/P	66 - 117
2411888	Tetradecachloro-m-terphenyl	153	140	P/P	70 - 200
2411888	Thiobencarb	108	93.4	P/P	51 - 119
2411888	Tri-o-cresyl Phosphate	117	114	P/P	31 - 144
2411888	Triadimefon	91.7	80.7	P/P	48 - 119
2411888	Tris(1-chloro-2-propyl) phosphate (TCPP)	82.6	76.3	P/P	50 - 150
2411888	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	112	109	P/P	50 - 150
2411888	Tris(2-chloroethyl) phosphate (TCEP)	118	114	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P430190

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411694	Acesulfame K	102	101	P/P	40 - 150
2411694	AMPA	75.9	75.3	P/P	40 - 150
2411694	Endothall	146	149	P/P	40 - 150
2411694	Glufosinate	60.2	65.4	P/P	40 - 150
2411694	Glyphosate	66.9	64.4	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P430190

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411694	Sucralose	117	111	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P430301

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412367	Acesulfame K	108	109	P/P	40 - 150
2412367	AMPA	72.0	74.0	P/P	40 - 150
2412367	Endothall	135	140	P/P	40 - 150
2412367	Glufosinate	78.0	77.1	P/P	40 - 150
2412367	Glyphosate	76.9	83.2	P/P	40 - 150
2412367	Sucralose	108	135	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P430400

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412140	2,4-D	97.6	90.3	P/P	40 - 150
2412140	2,4,5-T	92.6	85.8	P/P	40 - 150
2412140	Acetaminophen	91.5	82.6	P/P	30 - 150
2412140	Afidopyropen	42.8	51.2	P/P	30 - 150
2412140	Carbamazepine	77.8	71.7	P/P	40 - 150
2412140	Clothianidin	100	92.8	P/P	40 - 150
2412140	Diuron	78.3	79.3	P/P	40 - 150
2412140	Fenuron	64.6	58.8	P/P	40 - 150
2412140	Fluridone	75.5	71.6	P/P	40 - 150
2412140	Hydrocodone	74.9	70.5	P/P	40 - 150
2412140	Ibuprofen	71.9	59.0	P/P	40 - 150
2412140	Imazapyr	92.5	88.9	P/P	40 - 150
2412140	Imidacloprid	121	106	P/P	40 - 150
2412140	Linuron	75.6	63.6	P/P	40 - 150
2412140	Mandestrobin	74.0	69.0	P/P	40 - 150
2412140	MCCP	89.9	83.6	P/P	40 - 150
2412140	Naproxen	37.4	34.5	F/F	40 - 150
2412140	Primidone	78.9	70.9	P/P	40 - 150
2412140	Silvex	71.1	63.5	P/P	40 - 150
2412140	Thiamethoxam	94.0	86.7	P/P	40 - 150
2412140	Tolfenpyrad	45.4	42.4	P/P	30 - 150
2412140	Triclopyr	95.0	89.6	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P430664

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412791	Fluoride	103	101	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P430577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2412515	Organic Carbon	94.6	97.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P430334

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412357	Turbidity	3.70	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P430463

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412328	Calcium	0.135	Spike	P	0 - 20
2412328	Iron	0.723	Spike	P	0 - 20
2412328	Magnesium	1.12	Spike	P	0 - 20
2412328	Potassium	0.0372	Spike	P	0 - 20
2412328	Sodium	0.0518	Spike	P	0 - 20
2412328	Strontium	2.01	Spike	P	0 - 20
2412328	Tin	2.67	Spike	P	0 - 20
2412328	Titanium	1.45	Spike	P	0 - 20
2412328	Vanadium	1.83	Spike	P	0 - 20
2412328	Zinc	1.91	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P430463

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412328	Aluminum	0.882	Spike	P	0 - 20
2412328	Antimony	0.0366	Spike	P	0 - 20
2412328	Arsenic	0.157	Spike	P	0 - 20
2412328	Barium	0.0651	Spike	P	0 - 20
2412328	Beryllium	1.40	Spike	P	0 - 20
2412328	Boron	1.47	Spike	P	0 - 20
2412328	Cadmium	1.63	Spike	P	0 - 20
2412328	Chromium	0.0396	Spike	P	0 - 20
2412328	Cobalt	0.469	Spike	P	0 - 20
2412328	Copper	1.13	Spike	P	0 - 20
2412328	Lead	0.755	Spike	P	0 - 20
2412328	Manganese	0.984	Spike	P	0 - 20
2412328	Molybdenum	0.432	Spike	P	0 - 20
2412328	Nickel	1.07	Spike	P	0 - 20
2412328	Selenium	0.551	Spike	P	0 - 20
2412328	Silver	1.17	Spike	P	0 - 20
2412328	Thallium	0.0552	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P430755

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412215	Chloride	0.265	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430761

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412215	Sulfate	0.961	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430691

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411110	Ammonia-N	0.392	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430395

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412323	Kjeldahl Nitrogen	1.00	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430985

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412299	NO2NO3-N	0.202	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430419

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412323	Total-P	0.834	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P430346

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412324	O-Phosphate-P	0.101	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P430421

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411888	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	0.127	Spike	P	0 - 37
2411888	Acetochlor	18.5	Spike	P	0 - 28
2411888	Alachlor	4.47	Spike	P	0 - 30
2411888	Ametryn	12.7	Spike	P	0 - 32
2411888	Atrazine	8.02	Spike	P	0 - 41
2411888	Atrazine Desethyl	3.43	Spike	P	0 - 36
2411888	Avobenzene	1.86	Spike	P	0 - 36
2411888	Azinphos Methyl	22.6	Spike	P	0 - 75
2411888	Azoxystrobin	18.8	Spike	P	0 - 39

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P430421

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411888	Bromacil	10.6	Spike	P	0 - 33
2411888	Butylate	5.74	Spike	P	0 - 44
2411888	Caffeine	100	Spike	F	0 - 74
2411888	Carbophenothion	13.5	Spike	P	0 - 25
2411888	Carfentrazone Ethyl	17.1	Spike	P	0 - 27
2411888	Chlorfenapyr	10.2	Spike	P	0 - 24
2411888	Chlorpyrifos Ethyl	6.81	Spike	P	0 - 26
2411888	Chlorpyrifos Methyl	11.4	Spike	P	0 - 26
2411888	Coumaphos	6.66	Spike	P	0 - 28
2411888	Cyanazine	28.7	Spike	P	0 - 48
2411888	Cyprodinil	16.1	Spike	P	0 - 29
2411888	Dechlorane 602	3.13	Spike	P	0 - 30
2411888	Dechlorane 603	0.733	Spike	P	0 - 30
2411888	Dechlorane Plus	7.07	Spike	P	0 - 30
2411888	Demeton	12.2	Spike	P	0 - 33
2411888	Diazinon	3.01	Spike	P	0 - 29
2411888	Difenoconazole	15.7	Spike	P	0 - 34
2411888	Dimethenamid	12.6	Spike	P	0 - 39
2411888	Dimethomorph	36.4	Spike	P	0 - 51
2411888	Disulfoton	17.7	Spike	P	0 - 30
2411888	Dithiopyr	12.1	Spike	P	0 - 26
2411888	EPTC	10.7	Spike	P	0 - 43
2411888	Ethion	6.07	Spike	P	0 - 79
2411888	Ethoprop	14.5	Spike	P	0 - 29
2411888	Etridiazole	4.66	Spike	P	0 - 33
2411888	Fenamiphos	15.6	Spike	P	0 - 40
2411888	Fenbuconazole	14.4	Spike	P	0 - 74
2411888	Fipronil	13.9	Spike	P	0 - 29
2411888	Fipronil Desulfinyl	10.5	Spike	P	0 - 32
2411888	Fipronil Sulfide	21.9	Spike	P	0 - 30
2411888	Fipronil Sulfone	6.72	Spike	P	0 - 33
2411888	Fluazifop-P-butyl	12.7	Spike	P	0 - 38
2411888	Fludioxonil	20.8	Spike	P	0 - 29
2411888	Flumioxazin	22.8	Spike	P	0 - 51
2411888	Flutolanil	12.5	Spike	P	0 - 25
2411888	Fluxapyroxad	13.4	Spike	P	0 - 45
2411888	Fonofos	8.46	Spike	P	0 - 27
2411888	Hexabromobenzene	0.385	Spike	P	0 - 30
2411888	Hexazinone	10.8	Spike	P	0 - 30
2411888	Imazalil	18.2	Spike	P	0 - 100
2411888	Iprodione	10.5	Spike	P	0 - 33
2411888	Loratadine	20.5	Spike	P	0 - 56
2411888	Malathion	12.0	Spike	P	0 - 37
2411888	Metalaxyl	8.29	Spike	P	0 - 40
2411888	Metolachlor	11.0	Spike	P	0 - 29
2411888	Metribuzin	12.6	Spike	P	0 - 45
2411888	Mevinphos	10.8	Spike	P	0 - 29
2411888	Molinate	3.32	Spike	P	0 - 33
2411888	Myclobutanil	18.0	Spike	P	0 - 26
2411888	Naled	1.44	Spike	P	0 - 37
2411888	Napropamide	15.1	Spike	P	0 - 44

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P430421

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411888	Norflurazon	6.48	Spike	P	0 - 30
2411888	Octinoxate	1.44	Spike	P	0 - 45
2411888	Oxadiazon	8.42	Spike	P	0 - 28
2411888	Oxybenzone	1.81	Spike	P	0 - 46
2411888	Oxyfluorfen	23.7	Spike	P	0 - 28
2411888	Parathion Ethyl	13.3	Spike	P	0 - 31
2411888	Parathion Methyl	1.86	Spike	P	0 - 29
2411888	PBB-153	0.649	Spike	P	0 - 30
2411888	PBDE-47	6.25	Spike	P	0 - 36
2411888	PBDE-99	3.75	Spike	P	0 - 40
2411888	Pendimethalin	16.8	Spike	P	0 - 33
2411888	Pentabromotoluene	0.677	Spike	P	0 - 30
2411888	Phenytoin	1.98	Spike	P	0 - 100
2411888	Phorate	9.03	Spike	P	0 - 36
2411888	Prodiamine	9.80	Spike	P	0 - 71
2411888	Prometon	9.84	Spike	P	0 - 36
2411888	Prometryn	11.8	Spike	P	0 - 28
2411888	Pronamide	12.7	Spike	P	0 - 24
2411888	Propanil	12.7	Spike	P	0 - 28
2411888	Propargite	2.35	Spike	P	0 - 43
2411888	Propiconazole	14.9	Spike	P	0 - 33
2411888	Pyraflufen Ethyl	6.23	Spike	P	0 - 29
2411888	Pyridaben	12.7	Spike	P	0 - 30
2411888	Pyriproxyfen	14.3	Spike	P	0 - 79
2411888	Simazine	9.92	Spike	P	0 - 29
2411888	Stirophos	2.87	Spike	P	0 - 61
2411888	Sulfentrazone	7.24	Spike	P	0 - 33
2411888	Tebuconazole	3.05	Spike	P	0 - 69
2411888	Terbufos	8.19	Spike	P	0 - 29
2411888	Terbutylazine	8.41	Spike	P	0 - 32
2411888	Tetradecachloro-m-terphenyl	8.67	Spike	P	0 - 30
2411888	Thiobencarb	14.6	Spike	P	0 - 26
2411888	Tri-o-cresyl Phosphate	2.56	Spike	P	0 - 33
2411888	Triadimefon	12.7	Spike	P	0 - 28
2411888	Tris(1-chloro-2-propyl) phosphate (TCPP)	7.01	Spike	P	0 - 30
2411888	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.41	Spike	P	0 - 30
2411888	Tris(2-chloroethyl) phosphate (TCEP)	3.75	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P430190

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411694	Acesulfame K	0.681	Spike	P	0 - 30
2411694	AMPA	0.788	Spike	P	0 - 30
2411694	Endothall	2.18	Spike	P	0 - 30
2411694	Glufosinate	8.27	Spike	P	0 - 30
2411694	Glyphosate	3.86	Spike	P	0 - 30
2411694	Sucralose	4.39	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P430301

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412367	Acesulfame K	1.11	Spike	P	0 - 30
2412367	AMPA	2.09	Spike	P	0 - 30
2412367	Endothall	4.24	Spike	P	0 - 30
2412367	Glufosinate	1.17	Spike	P	0 - 30
2412367	Glyphosate	4.53	Spike	P	0 - 30
2412367	Sucralose	22.4	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P430400

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412140	2,4-D	7.84	Spike	P	0 - 30
2412140	2,4,5-T	7.64	Spike	P	0 - 30
2412140	Acetaminophen	10.2	Spike	P	0 - 30
2412140	Acetamiprid	12.7	Spike	P	0 - 30
2412140	Afidopyropen	17.9	Spike	P	0 - 30
2412140	Bentazon	1.81	Spike	P	0 - 30
2412140	Benzovindiflupyr	8.94	Spike	P	0 - 30
2412140	Carbamazepine	8.11	Spike	P	0 - 30
2412140	Clothianidin	6.79	Spike	P	0 - 30
2412140	Dinotefuran	0.636	Spike	P	0 - 30
2412140	Diuron	0.915	Spike	P	0 - 30
2412140	Fenuron	9.41	Spike	P	0 - 30
2412140	Fluridone	5.10	Spike	P	0 - 30
2412140	Hydrocodone	6.09	Spike	P	0 - 30
2412140	Ibuprofen	19.8	Spike	P	0 - 30
2412140	Imazapyr	3.96	Spike	P	0 - 30
2412140	Imidacloprid	7.29	Spike	P	0 - 30
2412140	Linuron	17.3	Spike	P	0 - 30
2412140	Mandestrobin	7.01	Spike	P	0 - 30
2412140	MCPP	7.31	Spike	P	0 - 30
2412140	Naproxen	8.02	Spike	P	0 - 30
2412140	Primidone	10.6	Spike	P	0 - 30
2412140	Pyraclostrobin	6.90	Spike	P	0 - 30
2412140	Silvex	11.4	Spike	P	0 - 30
2412140	Thiamethoxam	5.24	Spike	P	0 - 30
2412140	Tolfenpyrad	6.83	Spike	P	0 - 30
2412140	Triclopyr	5.93	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P430654

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412791	Total Alkalinity	2.29	Sample	P	0 - 3.9

Quality Assurance Report Precision

Reference Method: SM 2540 C-2015
Batch ID: P430791

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412215	TDS	3.28	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P430664

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412791	Fluoride	1.52	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P430577

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2412515	Organic Carbon	2.39	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2412326
Field Sample ID: G4CE0234

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	110	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	90.2	P	30 - 160
EPA 8321B	Diuron-d6	84.2	P	30 - 160
EPA 8321B	Endothall-d6	138	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.5	P	30 - 160
EPA 8321B	Primidone-d5	88.0	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160

Lab Sample ID: 2412327
Field Sample ID: FB_05232023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	93.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	89.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	93.0	P	30 - 160
EPA 8321B	Diuron-d6	90.3	P	30 - 160
EPA 8321B	Endothall-d6	145	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	116	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.3	P	30 - 160
EPA 8321B	Primidone-d5	85.0	P	30 - 160
EPA 8321B	Sucralose-d6	99.2	P	30 - 160

Lab Sample ID: 2412329
Field Sample ID: G4CE0234

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	75.8	P	20 - 200
EPA 8270E	Simazine-d10	74.2	P	62 - 142
EPA 8270E	Terbufos-d10	71.3	P	58 - 132
EPA 8270E	Terphenyl-d14	72.3	P	52 - 137

Lab Sample ID: 2412330
Field Sample ID: FB_05232023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	63.1	P	20 - 200
EPA 8270E	Simazine-d10	72.7	P	62 - 142
EPA 8270E	Terbufos-d10	69.4	P	58 - 132
EPA 8270E	Terphenyl-d14	79.8	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A119380

Included Lab Sample IDs: 2412322

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

Reference Method: DEP SOP: NU-094-1

Run ID: A119382

Included Lab Sample IDs: 2412322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.7	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A119384

Included Lab Sample IDs: 2412324

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.0	97.8	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A119443

Included Lab Sample IDs: 2412326, 2412327

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	99.2	105	P/P	60 - 160
Endothall	148	150	P/P	60 - 160
Glufosinate	91.3	105	P/P	60 - 160
Glyphosate	87.2	91.2	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A119444

Included Lab Sample IDs: 2412326, 2412327

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	145	147	P/P	60 - 160
Sucralose	111	108	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119470

Included Lab Sample IDs: 2412323

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.0	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A119471

Included Lab Sample IDs: 2412323

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119478

Included Lab Sample IDs: 2412328

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	98.3	P/P	90 - 110
Antimony	102	103	P/P	90 - 110
Arsenic	101	100	P/P	90 - 110
Barium	100	100	P/P	90 - 110
Beryllium	97.3	96.7	P/P	90 - 110
Boron	97.4	96.9	P/P	90 - 110
Cadmium	99.1	99.5	P/P	90 - 110
Chromium	98.5	97.1	P/P	90 - 110
Cobalt	101	99.7	P/P	90 - 110
Copper	97.7	96.6	P/P	90 - 110
Lead	99.1	99.7	P/P	90 - 110
Manganese	98.6	97.3	P/P	90 - 110
Molybdenum	98.9	99.0	P/P	90 - 110
Nickel	99.8	97.7	P/P	90 - 110
Selenium	100	100	P/P	90 - 110
Silver	100	101	P/P	90 - 110
Thallium	98.0	99.2	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A119479

Included Lab Sample IDs: 2412323

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.9	97.8	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A119496

Included Lab Sample IDs: 2412322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.8	98.6	P/P	90 - 110
Sulfate	96.8	97.7	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A119510

Included Lab Sample IDs: 2412322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.3	95.2	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A119510

Included Lab Sample IDs: 2412322

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A119520

Included Lab Sample IDs: 2412323

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	99.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A119557

Included Lab Sample IDs: 2412328

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	101	P/P	90 - 110
Iron	103	101	P/P	90 - 110
Magnesium	102	100	P/P	90 - 110
Potassium	102	100	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Strontium	102	102	P/P	90 - 110
Tin	101	101	P/P	90 - 110
Titanium	99.9	100	P/P	90 - 110
Vanadium	100	101	P/P	90 - 110
Zinc	102	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A119586

Included Lab Sample IDs: 2412326, 2412327

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	97.6	94.1	P/P	50 - 150
2,4,5-T	101	117	P/P	50 - 150
Acetaminophen	104	104	P/P	60 - 160
Acetamiprid	98.3	103	P/P	50 - 150
Afidopyropen	122	101	P/P	50 - 150
Bentazon	137	138	P/P	50 - 160
Benzovindiflupyr	103	99.2	P/P	50 - 150
Carbamazepine	106	109	P/P	60 - 150
Clothianidin	103	104	P/P	60 - 150
Dinotefuran	116	111	P/P	50 - 150
Diuron	117	124	P/P	60 - 160
Fenuron	99.8	103	P/P	60 - 150
Fluridone	113	104	P/P	60 - 160
Hydrocodone	106	108	P/P	60 - 150
Ibuprofen	69.0	97.1	P/P	50 - 160
Imazapyr	107	116	P/P	50 - 150
Imidacloprid	99.0	101	P/P	60 - 150
Linuron	116	105	P/P	60 - 150
Mandestrobin	108	106	P/P	50 - 150
MCPP	103	105	P/P	50 - 150
Naproxen	68.5	106	P/P	50 - 160
Primidone	93.6	101	P/P	60 - 150
Pyraclostrobin	102	103	P/P	60 - 150
Silvex	109	105	P/P	50 - 150
Thiamethoxam	101	106	P/P	50 - 150
Tolfenpyrad	95.6	99.0	P/P	60 - 150
Triclopyr	94.4	82.7	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A119597

Included Lab Sample IDs: 2412329, 2412330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	99.3		P	80 - 120
Avobenzene	95.2		P	80 - 120
Dechlorane 602	102		P	80 - 120
Dechlorane 603	109		P	80 - 120
Dechlorane Plus	100		P	80 - 120
Hexabromobenzene	98.9		P	80 - 120
Octinoxate	95.4		P	80 - 120
Oxybenzone	94.9		P	80 - 120
PBB-153	101		P	80 - 120
PBDE-47	97.0		P	80 - 120
PBDE-99	101		P	80 - 120
Pentabromotoluene	98.9		P	80 - 120
Tetradecachloro-m-terphenyl	93.8		P	80 - 120
Tri-o-cresyl Phosphate	101		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	86.3		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	97.9		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	94.4		P	80 - 120

Reference Method: EPA 8270E

Run ID: A119646

Included Lab Sample IDs: 2412329, 2412330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	91.7		P	80 - 120
Alachlor	90.5		P	80 - 120
Ametryn	105		P	80 - 120
Atrazine	92.0		P	80 - 120
Atrazine Desethyl	108		P	80 - 120
Azinphos Methyl	80.3		P	80 - 120
Azoxystrobin	94.4		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	98.2		P	80 - 120
Caffeine	95.1		P	80 - 120
Carbophenothion	99.0		P	80 - 120
Carfentrazone Ethyl	101		P	80 - 120
Chlorfenapyr	82.9		P	80 - 120
Chlorpyrifos Ethyl	89.4		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Coumaphos	95.4		P	80 - 120
Cyanazine	108		P	80 - 120
Cyprodinil	87.5		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	103		P	80 - 120
Difenoconazole	94.9		P	80 - 120
Dimethenamid	105		P	80 - 120
Dimethomorph	87.6		P	80 - 120
Disulfoton	102		P	80 - 120
Dithiopyr	107		P	80 - 120
EPTC	99.7		P	80 - 120
Ethion	87.9		P	80 - 120
Ethoprop	99.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A119646

Included Lab Sample IDs: 2412329, 2412330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Etridiazole	101		P	80 - 120
Fenamiphos	92.3		P	80 - 120
Fenbuconazole	87.6		P	80 - 120
Fipronil	87.5		P	80 - 120
Fipronil Desulfinyl	105		P	80 - 120
Fipronil Sulfide	100		P	80 - 120
Fipronil Sulfone	105		P	80 - 120
Fluazifop-P-butyl	105		P	80 - 120
Fludioxonil	102		P	80 - 120
Flumioxazin	94.7		P	80 - 120
Flutolanil	103		P	80 - 120
Fluxapyroxad	102		P	80 - 120
Fonofos	106		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	96.3		P	80 - 120
Iprodione	86.6		P	80 - 120
Loratadine	95.7		P	80 - 120
Malathion	86.3		P	80 - 120
Metalaxyl	86.0		P	80 - 120
Metolachlor	99.3		P	80 - 120
Metribuzin	109		P	80 - 120
Mevinphos	87.1		P	80 - 120
Molinate	87.2		P	80 - 120
Myclobutanil	97.4		P	80 - 120
Naled	94.9		P	80 - 120
Napropamide	105		P	80 - 120
Norflurazon	107		P	80 - 120
Oxadiazon	111		P	80 - 120
Oxyfluorfen	96.8		P	80 - 120
Parathion Ethyl	102		P	80 - 120
Parathion Methyl	90.7		P	80 - 120
Pendimethalin	97.8		P	80 - 120
Phenytoin	99.9		P	80 - 120
Phorate	108		P	80 - 120
Prodiamine	98.3		P	80 - 120
Prometon	96.1		P	80 - 120
Prometryn	103		P	80 - 120
Pronamide	104		P	80 - 120
Propanil	94.5		P	80 - 120
Propargite	99.1		P	80 - 120
Propiconazole	88.3		P	80 - 120
Pyraflufen Ethyl	105		P	80 - 120
Pyridaben	102		P	80 - 120
Pyriproxyfen	103		P	80 - 120
Simazine	98.6		P	80 - 120
Stirophos	86.2		P	80 - 120
Sulfentrazone	101		P	80 - 120
Tebuconazole	102		P	80 - 120
Terbufos	104		P	80 - 120
Terbuthylazine	88.9		P	80 - 120
Thiobencarb	107		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A119646

Included Lab Sample IDs: 2412329, 2412330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triadimefon	106		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A119661

Included Lab Sample IDs: 2412323

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

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	100						
EPA 180.1 Rev. 2.0	Turbidity	97.2					3.70	
EPA 200.7 Rev. 4.4	Calcium	100	100	101				0.135
	Iron	100	103	102	102			0.723
	Magnesium	100	102	100				1.12
	Potassium	102	103					0.0372
	Sodium	101	104	104				0.0518
	Strontium	103	105	103	104			2.01
	Tin	105	108	105	105			2.67
	Titanium	99.6	103	102	100			1.45
	Vanadium	99.1	105	103	101			1.83
	Zinc	102	107	105	104			1.91
EPA 200.8 Rev. 5.4	Aluminum	101	99.0	98.1	96.8			0.882
	Antimony	104	105	105	103			0.0366
	Arsenic	102	102	102	99.3			0.157
	Barium	104	104	104	101			0.0651
	Beryllium	95.6	96.2	94.9	95.8			1.40
	Boron	102	101	98.4	99.2			1.47
	Cadmium	99.7	101	99.7	97.7			1.63
	Chromium	97.4	95.7	95.7	94.2			0.0396
	Cobalt	101	99.1	98.6	97.9			0.469
	Copper	99.1	96.7	95.5	95.9			1.13
	Lead	101	102	101	100			0.755
	Manganese	98.0	96.3	95.1	96.7			0.984
	Molybdenum	98.9	101	101	98.5			0.432
	Nickel	100	98.5	97.4	96.2			1.07
	Selenium	103	101	101	100			0.551
	Silver	102	102	101	99.3			1.17
	Thallium	100	103	103	99.8			0.0552
EPA 300.0 Rev. 2.1	Chloride	99.2	94.8	94.7			0.265	
	Sulfate	97.8	97.4	95.6			0.961	
EPA 350.1 Rev. 2.0	Ammonia-N	97.4	102	102				0.392
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	103	102				1.00
EPA 353.2 Rev. 2.0	NO2NO3-N	104	97.2					0.202
EPA 365.1 Rev. 2.0	Total-P	104	105	104				0.834
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.5	99.0	98.9				0.101
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	131	134	134				0.127
	Acetochlor	77.3	84.1	69.9				18.5
	Alachlor	86.5	82.5	78.9				4.47
	Ametryn	106	116	102				12.7
	Atrazine	89.8						8.02
	Atrazine Desethyl	91.8	76.6	73.3				3.43
	Avobenzone	193	176	173				1.86
	Azinphos Methyl	130	119	94.8				22.6
	Azoxystrobin	106	101	84.0				18.8
	Bromacil	92.5	87.9	76.7				10.6
	Butylate	73.1	51.1	54.1				5.74
	Caffeine	101						100
	Carbophenothion	113	114	99.9				13.5
	Carfentrazone Ethyl	113	115	97.1				17.1
	Chlorfenapyr	78.7	77.1	69.6				10.2
	Chlorpyrifos Ethyl	86.1	76.8	71.7				6.81

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Chlorpyrifos Methyl	93.2	97.8	87.3			11.4
	Coumaphos	130	71.4	76.3			6.66
	Cyanazine	123	115	86.0			28.7
	Cyprodinil	82.6	85.1	72.4			16.1
	Dechlorane 602	115	114	117			3.13
	Dechlorane 603	144	133	134			0.733
	Dechlorane Plus	117	96.4	89.8			7.07
	Demeton	66.4	64.2	56.8			12.2
	Diazinon	105	107	103			3.01
	Difenoconazole	113	129	110			15.7
	Dimethenamid	103	109	95.8			12.6
	Dimethomorph	99.1	99.8	69.1			36.4
	Disulfoton	95.8	101	84.3			17.7
	Dithiopyr	98.1	102	90.2			12.1
	EPTC	71.1	50.1	55.8			10.7
	Ethion	91.6	97.8	92.1			6.07
	Ethoprop	90.8	89.9	77.8			14.5
	Etridiazole	74.2	62.3	59.5			4.66
	Fenamiphos	83.9	85.6	73.2			15.6
	Fenbuconazole	83.8	86.7	75.0			14.4
	Fipronil	88.3	95.3	82.8			13.9
	Fipronil Desulfinyl	97.8	105	93.3			10.5
	Fipronil Sulfide	97.5	108	87.0			21.9
	Fipronil Sulfone	95.5	102	94.9			6.72
	Fluazifop-P-butyl	71.3	69.3	61.1			12.7
	Fludioxonil	92.6	71.5	88.1			20.8
	Flumioxazin	110	121	152			22.8
	Flutolanil	87.2	73.1	82.9			12.5
	Fluxapyroxad	99.0	94.2	108			13.4
	Fonofos	105	96.8	105			8.46
	Hexabromobenzene	132	134	133			0.385
	Hexazinone	95.7	86.8	96.7			10.8
	Imazalil	60.2	60.0	72.0			18.2
	Iprodione	84.8	82.2	91.3			10.5
	Loratadine	143	125	153			20.5
	Malathion	98.4	89.5	101			12.0
	Metalaxyl	76.3	80.6	87.5			8.29
	Metolachlor	104	90.3	101			11.0
	Metribuzin	84.5	81.1	92.0			12.6
	Mevinphos	90.6	71.7	79.9			10.8
	Molinate	67.9	54.0	52.2			3.32
	Myclobutanil	100	81.9	98.1			18.0
	Naled	25.2	22.8	22.5			1.44
	Napropamide	78.5	73.8	85.8			15.1
	Norflurazon	97.2	94.0	100			6.48
	Octinoxate	121	118	116			1.44
	Oxadiazon	91.8	74.5	91.1			8.42
	Oxybenzone	120	122	120			1.81
	Oxyfluorfen	105	81.7	104			23.7
	Parathion Ethyl	96.1	86.9	99.4			13.3
	Parathion Methyl	109	99.6	101			1.86
	PBB-153	153	151	150			0.649
	PBDE-47	120	125	117			6.25
	PBDE-99	122	127	122			3.75

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	LCS	Precision SMP	MS
EPA 8270E	Pendimethalin	124	117 138			16.8
	Pentabromotoluene	116	116 115			0.677
	Phenytain	64.4	78.0 76.5			1.98
	Phorate	96.8	83.2 91.1			9.03
	Prodiamine	52.5	56.4 62.2			9.80
	Prometon	76.5	58.5 53.0			9.84
	Prometryn	118	107 121			11.8
	Pronamide	110	105 119			12.7
	Propanil	107	92.8 105			12.7
	Propargite	94.9	95.4 97.7			2.35
	Propiconazole	80.5	73.6 85.5			14.9
	Pyraflufen Ethyl	72.5	58.9 62.6			6.23
	Pyridaben	100				12.7
	Pyriproxyfen	105	95.0 110			14.3
	Simazine	94.8	82.0 99.9			9.92
	Stiophos	84.6	86.7 89.2			2.87
	Sulfentrazone	99.9	86.3 92.8			7.24
	Tebuconazole	73.2	84.9 87.6			3.05
	Terbufos	97.3	94.1 102			8.19
	Terbutylazine	81.5	77.2 84.0			8.41
	Tetradecachloro-m-terphenyl	184	153 140			8.67
	Thiobencarb	104	93.4 108			14.6
	Tri-o-cresyl Phosphate	123	117 114			2.56
	Triadimefon	93.2	80.7 91.7			12.7
	Tris(1-chloro-2-propyl) phosphate (TCPP)	98.6	82.6 76.3			7.01
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	112	112 109			2.41
	Tris(2-chloroethyl) phosphate (TCEP)	121	118 114			3.75
EPA 8321B	2,4-D	109	97.6 90.3			7.84
	2,4,5-T	94.2	92.6 85.8			7.64
	Acesulfame K	116	102 101			0.681
	Acesulfame K	144	108 109			1.11
	Acetaminophen	86.3	91.5 82.6			10.2
	Acetamiprid	72.5				12.7
	Afidopyropen	68.0	42.8 51.2			17.9
	AMPA	103	75.9 75.3			0.788
	AMPA	99.1	72.0 74.0			2.09
	Bentazon	122				1.81
	Benzovindiflupyr	78.2				8.94
	Carbamazepine	85.7	77.8 71.7			8.11
	Clothianidin	87.2	100 92.8			6.79
	Dinotefuran	91.1				0.636
	Diuron	97.4	78.3 79.3			0.915
	Endothall	146	146 149			2.18
	Endothall	141	135 140			4.24
	Fenuron	82.8	64.6 58.8			9.41
	Fluridone	84.8	75.5 71.6			5.10
	Glufosinate	104	60.2 65.4			8.27
	Glufosinate	90.5	78.0 77.1			1.17
	Glyphosate	101	66.9 64.4			3.86
	Glyphosate	102	76.9 83.2			4.53
	Hydrocodone	86.1	74.9 70.5			6.09

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Ibuprofen	77.4	71.9	59.0		19.8
	Imazapyr	90.4	92.5	88.9		3.96
	Imidacloprid	80.1	121	106		7.29
	Linuron	75.9	75.6	63.6		17.3
	Mandestrobin	83.3	74.0	69.0		7.01
	MCPP	96.3	89.9	83.6		7.31
	Naproxen	57.7	37.4	34.5		8.02
	Primidone	75.4	78.9	70.9		10.6
	Pyraclostrobin	70.0				6.90
	Silvex	89.4	71.1	63.5		11.4
	Sucralose	114	117	111		4.39
	Sucralose	115	108	135		22.4
	Thiamethoxam	85.7	94.0	86.7		5.24
	Tolfenpyrad	51.9	45.4	42.4		6.83
	Triclopyr	89.0	95.0	89.6		5.93
SM 2320 B-2011	Total Alkalinity	95.1			2.29	
SM 2540 C-2015	TDS	104			3.28	
SM 2540 D-2015	TSS	88.1				
SM 4500-F- C-2011	Fluoride	102	103	101		1.52
SM 5310 B-2011	Organic Carbon	96.8	94.6	97.3		2.39

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2412322
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2412322
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2412328
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2412328
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2412322
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2412322
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2412323
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2412323
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2412323
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2412323
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2412324
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2412329, 2412330
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2412329, 2412330
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2412326, 2412327
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2412322
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2412328
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2412322
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2412322
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2412322
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2412323

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	05/24/2023			05/24/2023 15:07	Anna M. Plaviak	2412322
EPA 180.1 Rev. 2.0	05/24/2023			05/24/2023 14:27	Alexis Price	2412322
EPA 200.7 Rev. 4.4	05/24/2023	05/26/2023 11:20	George D Taylor	06/02/2023 17:46	McKinley C Carter	2412328
EPA 200.8 Rev. 5.4	05/24/2023	05/26/2023 11:20	George D Taylor	05/30/2023 16:18	Conrad Hartmann	2412328
EPA 300.0 Rev. 2.1	05/24/2023			06/01/2023 14:02	James L Waggeberby	2412322
EPA 350.1 Rev. 2.0	05/24/2023			06/01/2023 12:36	Khloe J Berg	2412323
EPA 351.2 Rev. 2.0	05/24/2023	05/25/2023 11:58	Dana G. Hughes	05/30/2023 12:27	Ping Hua	2412323
EPA 353.2 Rev. 2.0	05/24/2023			06/08/2023 10:20	Beverly Y. Sanders	2412323
EPA 365.1 Rev. 2.0	05/24/2023	05/25/2023 14:40	Adam P Silver	05/30/2023 13:45	Chandler E Cox	2412323
EPA 365.1 Rev. 2.0 dissolved	05/24/2023			05/24/2023 15:36	Adam P Silver	2412324
EPA 8270E	05/24/2023	05/25/2023 08:30	Rasheda Ghaffari	06/01/2023 23:58	Arthur Maknenko	2412329
	05/24/2023	05/25/2023 08:30	Rasheda Ghaffari	06/02/2023 00:24	Arthur Maknenko	2412330
	05/24/2023	05/25/2023 08:30	Rasheda Ghaffari	06/02/2023 18:22	Vandana T. Nagar	2412329
	05/24/2023	05/25/2023 08:30	Rasheda Ghaffari	06/02/2023 18:49	Vandana T. Nagar	2412330
EPA 8321B	05/24/2023	05/24/2023 12:00	Touraj Touran	05/24/2023 17:20	Touraj Touran	2412326
	05/24/2023	05/24/2023 12:00	Touraj Touran	05/25/2023 05:16	Touraj Touran	2412326
	05/24/2023	05/24/2023 17:00	Touraj Touran	05/24/2023 18:39	Touraj Touran	2412327
	05/24/2023	05/24/2023 17:00	Touraj Touran	05/25/2023 06:40	Touraj Touran	2412327
	05/24/2023	05/30/2023 09:00	Hoor Shaik	06/05/2023 19:57	Juyoung Kim	2412326
	05/24/2023	05/30/2023 09:00	Hoor Shaik	06/05/2023 20:16	Juyoung Kim	2412327
SM 2320 B-2011	05/24/2023			06/01/2023 03:22	Dale L. Simmons	2412322
SM 2340 B-2011	05/24/2023			06/02/2023 17:46	McKinley C Carter	2412328
SM 2540 C-2015	05/24/2023			05/26/2023 16:01	Yijie Li	2412322
SM 2540 D-2015	05/24/2023			05/26/2023 16:01	Yijie Li	2412322
SM 4500-F- C-2011	05/24/2023			06/01/2023 03:22	Dale L. Simmons	2412322
SM 5310 B-2011	05/24/2023			05/30/2023 20:27	Elise M. Gillis	2412323