

Chemical Analysis Report

SO-DIST-2023-03-03-01

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

Event Description: **2023 SMP: Stadium Arcadia**
Request ID: **RQ-2023-02-27-31**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 314
Fort Myers, FL 33901-3381
Attn: William Mullen

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

Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 23-MAR-2023 11:14

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

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: CharlieCreekUpstrmHWY17

Collection Date/Time: 03/02/2023 09:10

Field ID: G3SD0237

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2391617	EPA 8321B	2,4-D	0.0098		ug/L	P426799	
		Acesulfame K	0.10	U	ug/L	P426535	
		2,4,5-T	0.0040	U	ug/L	P426799	
		AMPA	0.29	I	ug/L	P426535	
		Acetaminophen	0.0080	U	ug/L	P426799	
		Acetamiprid	0.0020	U	ug/L	P426799	
		Endothall	0.25	U	ug/L	P426535	
		Glufosinate	0.10	U	ug/L	P426535	
		Glyphosate	0.21	I	ug/L	P426535	
		Afidopyropen	0.0020	U	ug/L	P426799	
		Bentazon	8.0E-04	U	ug/L	P426799	
		Sucralose	0.12		ug/L	P426535	
		Benzovindiflupyr	0.0020	U	ug/L	P426799	
		Carbamazepine	8.0E-04	U	ug/L	P426799	
		Clothianidin	0.025		ug/L	P426799	
		Dinotefuran	0.0020	U	ug/L	P426799	
		Diuron	0.013		ug/L	P426799	
		Fenuron	0.032	U	ug/L	P426799	
		Fluridone	8.0E-04	U	ug/L	P426799	
		Imazapyr	0.013	I	ug/L	P426799	
		Hydrocodone	0.0020	U	ug/L	P426799	
		Ibuprofen	0.080	U	ug/L	P426799	
		Imidacloprid	0.053		ug/L	P426799	
		Linuron	0.0040	U	ug/L	P426799	
		Mandestrobin	0.0020	U	ug/L	P426799	
		MCPP	0.0020	U	ug/L	P426799	
		Naproxen	0.0080	U	ug/L	P426799	
		Primidone	0.0040	U	ug/L	P426799	
		Pyraclostrobin	0.0020	U	ug/L	P426799	
		Silvex	0.0040	U	ug/L	P426799	
		Thiamethoxam	0.012		ug/L	P426799	
		Tolfenpyrad	0.0020	U	ug/L	P426799	
		Triclopyr	0.0040	U	ug/L	P426799	

Sample Location: HOG BAY @ CR 763

Collection Date/Time: 03/02/2023 10:00

Field ID: G3SD0096

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2391618	EPA 8321B	2,4-D	0.0020	U	ug/L	P426799	
		Acesulfame K	0.10	U	ug/L	P426535	
		2,4,5-T	0.0040	U	ug/L	P426799	
		AMPA	1.9		ug/L	P426535	
		Acetaminophen	0.0080	U	ug/L	P426799	
		Acetamiprid	0.0020	U	ug/L	P426799	
		Endothall	0.25	U	ug/L	P426535	
		Glufosinate	0.10	U	ug/L	P426535	
		Glyphosate	1.3		ug/L	P426535	
		Afidopyropen	0.0020	U	ug/L	P426799	
		Bentazon	8.0E-04	U	ug/L	P426799	
		Sucralose	1.0		ug/L	P426535	
		Benzovindiflupyr	0.0020	U	ug/L	P426799	
		Carbamazepine	0.0074		ug/L	P426799	
		Clothianidin	0.55		ug/L	P426799	
		Dinotefuran	0.0020	U	ug/L	P426799	
		Diuron	0.0020	U	ug/L	P426799	
		Fenuron	0.032	U	ug/L	P426799	
		Fluridone	8.0E-04	U	ug/L	P426799	
		Imazapyr	0.0040	U	ug/L	P426799	
		Hydrocodone	0.0020	U	ug/L	P426799	
		Ibuprofen	0.080	U	ug/L	P426799	
		Imidacloprid	0.41		ug/L	P426799	
		Linuron	0.0040	U	ug/L	P426799	
		Mandestrobin	0.0020	U	ug/L	P426799	
		MCPP	0.0020	U	ug/L	P426799	
		Naproxen	0.0080	U	ug/L	P426799	
		Primidone	0.019		ug/L	P426799	
		Pyraclostrobin	0.0020	U	ug/L	P426799	
		Silvex	0.0040	U	ug/L	P426799	
		Thiamethoxam	0.93		ug/L	P426799	
		Tolfenpyrad	0.0020	U	ug/L	P426799	
		Triclopyr	0.0040	U	ug/L	P426799	

Sample Location: Joshua Creek above Peace River

Collection Date/Time: 03/02/2023 10:25

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2391615	EPA 8270E	Aldrin	0.68	U	ng/L	P426759	
		Alpha-BHC	0.10	U	ng/L	P426759	
		Alpha-Chlordane	0.21	U	ng/L	P426759	
		PCB-1016	2.1	U	ng/L	P426759	
		Beta-BHC	0.10	U	ng/L	P426759	
		PCB-1221	2.1	U	ng/L	P426759	
		Beta-Cyfluthrin	1.3	U	ng/L	P426759	
		PCB-1232	2.1	U	ng/L	P426759	
		Bifenthrin	0.52	U	ng/L	P426759	
		PCB-1242	2.1	U	ng/L	P426759	
		Carbophenothion	0.94	U	ng/L	P426759	
		PCB-1248	2.1	U	ng/L	P426759	
		Chlorothalonil	3.8	U	ng/L	P426759	
		PCB-1254	2.1	U	ng/L	P426759	
		Cis-Nonachlor	0.21	U	ng/L	P426759	
		PCB-1260	2.1	U	ng/L	P426759	
		Cypermethrin	1.6	U	ng/L	P426759	
		Dacthal	0.16	U	ng/L	P426759	
		DDD-p,p'	0.26	UJ	ng/L	P426759	CCV
		DDE-p,p'	0.21	U	ng/L	P426759	
		DDT-p,p'	0.26	U	ng/L	P426759	
		Delta-BHC	0.42	U	ng/L	P426759	
		Deltamethrin	1.3	U	ng/L	P426759	
		Dichlobenil	0.26	U	ng/L	P426759	
		Dicofol	1.3	U	ng/L	P426759	
		Dieldrin	0.42	U	ng/L	P426759	
		Endosulfan I	0.42	U	ng/L	P426759	
		Endosulfan II	0.42	U	ng/L	P426759	RPD
		Endosulfan Sulfate	0.31	U	ng/L	P426759	
		Endrin	0.42	U	ng/L	P426759	
		Endrin Aldehyde	0.78	U	ng/L	P426759	MS
		Endrin Ketone	0.42	U	ng/L	P426759	
		Esfenvalerate	0.78	U	ng/L	P426759	
		Ethalfuralin	0.16	U	ng/L	P426759	
		Fenpropathrin	0.26	U	ng/L	P426759	
		Gamma-BHC	0.13	U	ng/L	P426759	RPD
		Gamma-Chlordane	0.21	U	ng/L	P426759	
		Heptachlor	0.21	U	ng/L	P426759	
		Heptachlor Epoxide	0.26	U	ng/L	P426759	
		Hexachlorobenzene**	1.0	U	ng/L	P426759	
		Kepone	5.2	U	ng/L	P426759	
		Lambda-Cyhalothrin	0.78	U	ng/L	P426759	
		Methoprene	0.78	U	ng/L	P426759	
		Methoxychlor	0.31	U	ng/L	P426759	

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2391615	EPA 8270E	MGK-264	0.21	U	ng/L	P426759	
		Mirex	0.37	U	ng/L	P426759	
		Oxychlordane	0.31	U	ng/L	P426759	
		Permethrin	1.7	U	ng/L	P426759	
		Phenothrin	0.94	U	ng/L	P426759	
		Piperonyl Butoxide	0.42	I	ng/L	P426759	
		Prallethrin	2.1	U	ng/L	P426759	
		Tau-Fluvalinate	0.60	I	ng/L	P426759	
		Tetramethrin	0.78	U	ng/L	P426759	
		Trans-Nonachlor	0.21	U	ng/L	P426759	
		Triclosan Methyl	0.16	U	ng/L	P426759	
		Trifluralin	0.21	U	ng/L	P426759	
		Chlordane	2.1	U	ng/L	P426759	
		Toxaphene	16	U	ng/L	P426759	
2391619	EPA 8321B	2,4-D	0.0065	I	ug/L	P426799	
		Acesulfame K	0.10	U	ug/L	P426712	
		2,4,5-T	0.0040	U	ug/L	P426799	
		AMPA	1.1		ug/L	P426712	
		Acetaminophen	0.0080	U	ug/L	P426799	
		Acetamiprid	0.0020	U	ug/L	P426799	
		Endothall	0.25	U	ug/L	P426712	
		Glufosinate	0.10	U	ug/L	P426712	
		Glyphosate	2.1		ug/L	P426712	
		Afidopyropen	0.0020	U	ug/L	P426799	
		Bentazon	0.015		ug/L	P426799	
		Sucralose	0.19		ug/L	P426712	
		Benzovindiflupyr	0.0020	U	ug/L	P426799	
		Carbamazepine	0.0019	I	ug/L	P426799	
		Clothianidin	0.15		ug/L	P426799	
		Dinotefuran	0.0020	U	ug/L	P426799	
		Diuron	0.0096		ug/L	P426799	
		Fenuron	0.050	I	ug/L	P426799	
		Fluridone	8.0E-04	U	ug/L	P426799	
		Imazapyr	0.017		ug/L	P426799	
		Hydrocodone	0.0020	U	ug/L	P426799	
		Ibuprofen	0.080	U	ug/L	P426799	
		Imidacloprid	0.34		ug/L	P426799	
		Linuron	0.0040	U	ug/L	P426799	
		Mandestrobin	0.0020	U	ug/L	P426799	
		MCP	0.0020	U	ug/L	P426799	
		Naproxen	0.0080	U	ug/L	P426799	
		Primidone	0.0055	I	ug/L	P426799	
		Pyraclostrobin	0.0020	U	ug/L	P426799	
		Silvex	0.0040	U	ug/L	P426799	
		Thiamethoxam	0.23		ug/L	P426799	

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2391619	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P426799	
		Triclopyr	0.0040	U	ug/L	P426799	

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

Sample Location: Hawthorne Creek @ Reynolds St.

Collection Date/Time: 03/02/2023 10:50

Field ID: G3SD0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2391594	DEP SOP: NU-094-1	Color (true)	49		PCU	P426684	
	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P426689	
	EPA 300.0 Rev. 2.1	Chloride	180		mg Cl/L	P427040	
		Sulfate	140		mg SO4/L	P427044	
	SM 2320 B-2011	Total Alkalinity	146		mg CaCO3/L	P427035	
	SM 2540 C-2015	TDS	592		mg/L	P427304	
	SM 2540 D-2015	TSS	3	I	mg/L	P427280	
2391595	SM 4500-F- C-2011	Fluoride	0.59		mg F/L	P427162	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.035		mg N/L	P426795	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.83		mg N/L	P426910	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.26		mg N/L	P426928	
	EPA 365.1 Rev. 2.0	Total-P	0.29		mg P/L	P426917	
2391620	SM 5310 B-2011	Organic Carbon	12		mg C/L	P426936	
	EPA 8321B	2,4-D	0.017		ug/L	P426799	
		Acesulfame K	0.10	U	ug/L	P426712	
		2,4,5-T	0.0040	U	ug/L	P426799	
		AMPA	1.9		ug/L	P426712	
		Acetaminophen	0.011	I	ug/L	P426799	
		Acetamiprid	0.0020	U	ug/L	P426799	
		Endothall	0.25	U	ug/L	P426712	
		Glufosinate	0.10	U	ug/L	P426712	
		Glyphosate	3.5		ug/L	P426712	
		Afidopyropen	0.0020	U	ug/L	P426799	
		Bentazon	0.66		ug/L	P426799	
		Sucralose	0.29		ug/L	P426712	
		Benzovindiflupyr	0.0020	U	ug/L	P426799	
		Carbamazepine	0.0031	I	ug/L	P426799	
		Clothianidin	0.15		ug/L	P426799	
		Dinotefuran	0.0020	U	ug/L	P426799	
		Diuron	0.025		ug/L	P426799	
		Fenuron	0.14		ug/L	P426799	
		Fluridone	8.0E-04	U	ug/L	P426799	
		Imazapyr	0.0065	I	ug/L	P426799	
		Hydrocodone	0.0020	U	ug/L	P426799	
		Ibuprofen	0.080	U	ug/L	P426799	
		Imidacloprid	0.29		ug/L	P426799	
		Linuron	0.0040	U	ug/L	P426799	
		Mandestrobin	0.0020	U	ug/L	P426799	
		MCP	0.0020	U	ug/L	P426799	
		Naproxen	0.0080	U	ug/L	P426799	
		Primidone	0.0052	I	ug/L	P426799	
		Pyraclostrobin	0.0020	U	ug/L	P426799	
		Silvex	0.0040	U	ug/L	P426799	
		Thiamethoxam	0.26		ug/L	P426799	

Field ID: G3SD0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2391620	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P426799	
		Triclopyr	0.0040	U	ug/L	P426799	
2391624	EPA 200.7 Rev. 4.4	Calcium	101		mg/L	P426715	
		Iron	640		ug/L	P426715	
		Magnesium	29.8		mg/L	P426715	
		Potassium	9.8		mg/L	P426715	
		Sodium	73.1		mg/L	P426715	
		Strontium	8.83E+03		ug/L	P426715	
		Tin	15	U	ug/L	P426715	
		Titanium	6.4		ug/L	P426715	
		Vanadium	3.3	I	ug/L	P426715	
		Zinc	7.2	I	ug/L	P426715	
	EPA 200.8 Rev. 5.4	Aluminum	302		ug/L	P426715	
		Antimony	0.54		ug/L	P426715	
		Arsenic	2.04		ug/L	P426715	
		Barium	42.0		ug/L	P426715	
		Beryllium	0.019	I	ug/L	P426715	
		Boron	60.1		ug/L	P426715	
		Cadmium	0.056	I	ug/L	P426715	
		Chromium	0.91	I	ug/L	P426715	
		Cobalt	0.198		ug/L	P426715	
		Copper	1.56		ug/L	P426715	
		Lead	0.23	I	ug/L	P426715	
		Manganese	47.8		ug/L	P426715	
		Molybdenum	2.08		ug/L	P426715	
		Nickel	2.1		ug/L	P426715	
		Selenium	0.22	I	ug/L	P426715	
		Silver	0.010	U	ug/L	P426715	
		Thallium	0.10	U	ug/L	P426715	
	SM 2340 B-2011	Hardness	375		mg/L	P426715	

Ref. Method and Comment:

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

Sample Location: FB

Collection Date/Time: 03/02/2023 11:05

Field ID: FB_03022023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2391596	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P426684	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P426689	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P427040	
		Sulfate	0.20	U	mg SO4/L	P427044	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P427035	
	SM 2540 C-2015	TDS	15	U	mg/L	P427014	
	SM 2540 D-2015	TSS	2	U	mg/L	P427012	
2391597	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P427162	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P426795	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P426910	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P426928	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P426917	
2391621	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P426936	
	EPA 8321B	2,4-D	0.0020	U	ug/L	P426799	
		Acesulfame K	0.10	U	ug/L	P426712	
		2,4,5-T	0.0040	U	ug/L	P426799	
		AMPA	0.10	U	ug/L	P426712	
		Acetaminophen	0.0080	U	ug/L	P426799	
		Acetamiprid	0.0020	U	ug/L	P426799	
		Endothall	0.25	U	ug/L	P426712	
		Glufosinate	0.10	U	ug/L	P426712	
		Glyphosate	0.10	U	ug/L	P426712	
		Afidopyropen	0.0020	U	ug/L	P426799	
		Bentazon	8.0E-04	U	ug/L	P426799	
		Sucralose	0.010	U	ug/L	P426712	
		Benzovindiflupyr	0.0020	U	ug/L	P426799	
		Carbamazepine	8.0E-04	U	ug/L	P426799	
		Clothianidin	0.0020	U	ug/L	P426799	
		Dinotefuran	0.0020	U	ug/L	P426799	
		Diuron	0.0020	U	ug/L	P426799	
		Fenuron	0.032	U	ug/L	P426799	
		Fluridone	8.0E-04	U	ug/L	P426799	
		Imazapyr	0.0040	U	ug/L	P426799	
		Hydrocodone	0.0020	U	ug/L	P426799	
		Ibuprofen	0.080	U	ug/L	P426799	
		Imidacloprid	0.0020	U	ug/L	P426799	
		Linuron	0.0040	U	ug/L	P426799	
		Mandestrobin	0.0020	U	ug/L	P426799	
		MCPP	0.0020	U	ug/L	P426799	
		Naproxen	0.0080	U	ug/L	P426799	
		Primidone	0.0040	U	ug/L	P426799	
		Pyraclostrobin	0.0020	U	ug/L	P426799	
		Silvex	0.0040	U	ug/L	P426799	
		Thiamethoxam	0.0020	U	ug/L	P426799	

Field ID: FB_03022023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2391621	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P426799	
		Triclopyr	0.0040	U	ug/L	P426799	
2391625	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P426715	
		Iron	30	U	ug/L	P426715	
		Magnesium	0.040	U	mg/L	P426715	
		Potassium	0.30	U	mg/L	P426715	
		Sodium	0.50	U	mg/L	P426715	
		Strontium	2.0	U	ug/L	P426715	
		Tin	3.0	U	ug/L	P426715	
		Titanium	0.75	U	ug/L	P426715	
		Vanadium	2.0	U	ug/L	P426715	
		Zinc	5.0	U	ug/L	P426715	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P426715	
		Antimony	0.050	U	ug/L	P426715	
		Arsenic	0.050	U	ug/L	P426715	
		Barium	0.20	U	ug/L	P426715	
		Beryllium	0.010	U	ug/L	P426715	
		Boron	2.0	U	ug/L	P426715	
		Cadmium	0.020	U	ug/L	P426715	
		Chromium	0.40	U	ug/L	P426715	
		Cobalt	0.020	U	ug/L	P426715	
		Copper	0.40	U	ug/L	P426715	
		Lead	0.20	U	ug/L	P426715	
		Manganese	0.10	U	ug/L	P426715	
		Molybdenum	0.15	U	ug/L	P426715	
		Nickel	0.50	U	ug/L	P426715	
		Selenium	0.20	U	ug/L	P426715	
		Silver	0.010	U	ug/L	P426715	
		Thallium	0.10	U	ug/L	P426715	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P426684

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P426689

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P426715

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: P426715

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: P427040

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: P427044

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P426795

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P426910

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P426928

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426917

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

Reference Method: EPA 8270E
Batch ID: P426759

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Carbophenothion	0.90	U	ng/L
Carbophenothion	0.90	U	ng/L
Chlorothalonil	3.6	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P426759

Component	Result	Code	Units
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P426759

Component	Result	Code	Units
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P426759

Component	Result	Code	Units
Chlordane	2.0	U	ng/L
Chlordane	2.0	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B
Batch ID: P426535

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P426535

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: P426712

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: P426799

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P427035

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-2015
Batch ID: P427014

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015
Batch ID: P427304

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P427012

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P427280

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P427162

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P426936

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: P426684

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P426689

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P426715

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	85 - 115
Iron	104		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	102		P	85 - 115
Sodium	103		P	85 - 115
Strontium	103		P	85 - 115
Tin	96.9		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	99.8		P	85 - 115
Zinc	98.6		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P426715

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	104		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	106		P	85 - 115
Barium	105		P	85 - 115
Beryllium	97.8		P	85 - 115
Boron	101		P	85 - 115
Cadmium	104		P	85 - 115
Chromium	99.0		P	85 - 115
Cobalt	104		P	85 - 115
Copper	102		P	85 - 115
Lead	96.7		P	85 - 115
Manganese	101		P	85 - 115
Molybdenum	102		P	85 - 115
Nickel	105		P	85 - 115
Selenium	102		P	85 - 115
Silver	101		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427040

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427044

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P426795

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P426910

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P426928

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426917

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.6		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P426759

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	51.5		P	10 - 92.0
Alpha-BHC	88.4		P	75 - 107
Alpha-Chlordane	63.2		P	50 - 108
Beta-BHC	82.0		P	36 - 138
Beta-Cyfluthrin	52.2		P	20 - 161
Bifenthrin	41.4		P	10 - 119
Carbophenothion	44.4		P	19 - 94.0
Chlorothalonil	83.2		P	26 - 186
Cis-Nonachlor	62.3		P	42 - 119
Cypermethrin	53.7		P	22 - 150
Dacthal	86.6		P	72 - 119
DDD-p,p'	53.9		P	45 - 107
DDE-p,p'	51.2		P	48 - 106
DDT-p,p'	55.6		P	48 - 110
Delta-BHC	103		P	54 - 140
Deltamethrin	58.9		P	22 - 189
Dichlobenil	79.6		P	36 - 117
Dicofol	51.3		P	46 - 155
Dieldrin	58.1		P	54 - 110
Endosulfan I	60.6		P	59 - 105
Endosulfan II	84.6		P	51 - 118
Endosulfan Sulfate	94.4		P	57 - 121

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P426759

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin	66.2		P	10 - 120
Endrin Aldehyde	70.6		P	34 - 118
Endrin Ketone	139		P	69 - 177
Esfenvalerate	57.7		P	23 - 168
Ethalfuralin	68.1		P	49 - 99.0
Fenpropathrin	57.0		P	34 - 117
Gamma-BHC	80.6		P	72 - 117
Gamma-Chlordane	50.9		P	43 - 106
Heptachlor	79.2		P	41 - 98.0
Heptachlor Epoxide	77.4		P	57 - 106
Hexachlorobenzene	52.1		P	36 - 99.0
Kepone	150		P	16 - 215
Lambda-Cyhalothrin	48.0		P	21 - 177
Methoprene	40.2		P	10 - 119
Methoxychlor	63.1		P	60 - 112
MGK-264	75.4		P	26 - 122
Mirex	39.4		P	10 - 169
Oxychlordane	54.4		P	43 - 105
PCB-1016	74.1		P	48 - 112
PCB-1260	72.3		P	44 - 118
Permethrin	51.3		P	24 - 148
Phenothrin	30.0		P	10 - 106
Piperonyl Butoxide	84.2		P	10 - 139
Prallethrin	51.9		P	17 - 109
Tau-Fluvalinate	39.6		P	13 - 131
Tetramethrin	55.3		P	10 - 132
Trans-Nonachlor	49.2		P	44 - 106
Triclosan Methyl	78.1		P	59 - 109
Trifluralin	64.5		P	44 - 101

Reference Method: EPA 8276
Batch ID: P426759

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	98.9		P	61 - 116
Toxaphene	101		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P426535

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	97.8		P	40 - 150
AMPA	106		P	40 - 150
Endothall	96.7		P	40 - 150
Glufosinate	105		P	40 - 150
Glyphosate	95.9		P	40 - 150
Sucralose	98.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P426712

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P426712

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	115		P	40 - 150
AMPA	113		P	40 - 150
Endothall	113		P	40 - 150
Glufosinate	116		P	40 - 150
Glyphosate	101		P	40 - 150
Sucralose	99.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P426799

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	92.1		P	40 - 150
2,4,5-T	91.9		P	40 - 150
Acetaminophen	103		P	30 - 150
Acetamiprid	68.8		P	40 - 150
Afidopyropen	69.4		P	30 - 150
Bentazon	110		P	30 - 150
Benzovindiflupyr	84.7		P	40 - 150
Carbamazepine	82.2		P	40 - 150
Clothianidin	104		P	40 - 150
Dinotefuran	80.1		P	40 - 150
Diuron	78.8		P	40 - 150
Fenuron	99.3		P	40 - 150
Fluridone	84.7		P	40 - 150
Hydrocodone	96.3		P	40 - 150
Ibuprofen	84.1		P	40 - 150
Imazapyr	91.8		P	40 - 150
Imidacloprid	93.3		P	40 - 150
Linuron	75.2		P	40 - 150
Mandestrobin	90.7		P	40 - 150
MCPP	90.5		P	40 - 150
Naproxen	94.5		P	40 - 150
Primidone	94.5		P	40 - 150
Pyraclostrobin	78.8		P	40 - 150
Silvex	92.5		P	40 - 150
Thiamethoxam	92.0		P	40 - 150
Tolfenpyrad	61.4		P	30 - 150
Triclopyr	91.2		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P427035

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.1		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P427014

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2540 C-2015
Batch ID: P427304

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	106		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P427012

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

Reference Method: SM 2540 D-2015
Batch ID: P427280

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

Reference Method: SM 4500-F- C-2011
Batch ID: P427162

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.8		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P426936

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P426715

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391352	Calcium	103		P	80 - 120
2391352	Iron	103	104	P/P	80 - 120
2391352	Magnesium	102		P	80 - 120
2391352	Potassium	102	101	P/P	80 - 120
2391352	Sodium	104	103	P/P	80 - 120
2391352	Strontium	103	102	P/P	80 - 120
2391352	Tin	97.5	98.1	P/P	80 - 120
2391352	Titanium	101	99.6	P/P	80 - 120
2391352	Vanadium	100	98.9	P/P	80 - 120
2391352	Zinc	97.7	97.1	P/P	80 - 120
2391468	Calcium	102		P	80 - 120
2391468	Iron	103		P	80 - 120
2391468	Magnesium	103		P	80 - 120
2391468	Potassium	100		P	80 - 120
2391468	Sodium	99.4		P	80 - 120
2391468	Strontium	102		P	80 - 120
2391468	Tin	99.1		P	80 - 120
2391468	Titanium	99.7		P	80 - 120
2391468	Vanadium	98.8		P	80 - 120
2391468	Zinc	97.3		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P426715

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391352	Aluminum	104	103	P/P	80 - 120
2391352	Antimony	106	106	P/P	80 - 120
2391352	Arsenic	107	104	P/P	80 - 120
2391352	Barium	104	104	P/P	80 - 120
2391352	Beryllium	98.8	96.5	P/P	80 - 120
2391352	Boron	99.8	101	P/P	80 - 120
2391352	Cadmium	104	103	P/P	80 - 120
2391352	Chromium	98.1	98.2	P/P	80 - 120
2391352	Cobalt	101	101	P/P	80 - 120
2391352	Copper	101	100	P/P	80 - 120
2391352	Lead	97.0	96.9	P/P	80 - 120
2391352	Manganese	103	104	P/P	80 - 120
2391352	Molybdenum	103	104	P/P	80 - 120
2391352	Nickel	101	101	P/P	80 - 120
2391352	Selenium	104	102	P/P	80 - 120
2391352	Silver	102	101	P/P	80 - 120
2391352	Thallium	104	105	P/P	80 - 120
2391468	Aluminum	102		P	80 - 120
2391468	Antimony	107		P	80 - 120
2391468	Arsenic	104		P	80 - 120
2391468	Barium	107		P	80 - 120
2391468	Beryllium	102		P	80 - 120
2391468	Boron	101		P	80 - 120
2391468	Cadmium	104		P	80 - 120
2391468	Chromium	99.0		P	80 - 120
2391468	Cobalt	102		P	80 - 120
2391468	Copper	101		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P426715

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391468	Lead	98.4		P	80 - 120
2391468	Manganese	104		P	80 - 120
2391468	Molybdenum	106		P	80 - 120
2391468	Nickel	103		P	80 - 120
2391468	Selenium	101		P	80 - 120
2391468	Silver	103		P	80 - 120
2391468	Thallium	107		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427040

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391601	Chloride	99.6		P	90 - 110
2391854	Chloride	96.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427044

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391601	Sulfate	102		P	90 - 110
2391854	Sulfate	99.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P426795

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391559	Ammonia-N	98.2	98.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P426910

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391580	Kjeldahl Nitrogen	105	98.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P426928

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391557	NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426917

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391635	Total-P	98.0	98.3	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P426759

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391615	PCB-1016	81.3	81.0	P/P	46 - 111
2391615	PCB-1260	71.8	72.7	P/P	45 - 114

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P426759

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391675	Aldrin	62.4	57.3	P/P	20 - 82.0
2391675	Alpha-BHC	86.9	76.6	P/P	71 - 109
2391675	Alpha-Chlordane	67.6	60.9	P/P	42 - 106
2391675	Beta-BHC	83.4	69.2	P/P	69 - 180
2391675	Beta-Cyfluthrin	51.2	54.6	P/P	18 - 175
2391675	Bifenthrin	38.5	42.7	P/P	21 - 128
2391675	Carbophenothion	57.8	57.9	P/P	10 - 126
2391675	Chlorothalonil	90.1	80.0	P/P	10 - 300
2391675	Cis-Nonachlor	58.5	52.5	P/P	34 - 106
2391675	Cypermethrin	50.0	55.1	P/P	22 - 158
2391675	Dacthal	87.3	71.8	P/P	54 - 116
2391675	DDD-p,p'	52.9	49.1	P/P	34 - 107
2391675	DDE-p,p'	53.0	47.5	P/P	33 - 110
2391675	DDT-p,p'	54.5	58.5	P/P	50 - 122
2391675	Delta-BHC	103	84.2	P/P	77 - 193
2391675	Deltamethrin	54.9	63.3	P/P	10 - 195
2391675	Dichlobenil	52.2	46.0	P/P	25 - 113
2391675	Dicofol	49.0	50.8	P/P	38 - 247
2391675	Dieldrin	59.3	51.5	P/P	45 - 118
2391675	Endosulfan I	59.1	56.4	P/P	51 - 106
2391675	Endosulfan II	80.9	57.0	P/P	37 - 122
2391675	Endosulfan Sulfate	90.8	80.6	P/P	43 - 132
2391675	Endrin	63.4	52.4	P/P	29 - 101
2391675	Endrin Aldehyde	12.5	14.4	F/F	19 - 110
2391675	Endrin Ketone	131	114	P/P	60 - 140
2391675	Esfenvalerate	56.3	60.7	P/P	26 - 199
2391675	Ethalfuralin	64.3	64.9	P/P	45 - 99.0
2391675	Fenpropathrin	55.0	53.2	P/P	35 - 120
2391675	Gamma-BHC	125	99.8	P/P	63 - 128
2391675	Gamma-Chlordane	51.7	50.2	P/P	40 - 104
2391675	Heptachlor	73.4	70.6	P/P	36 - 97.0
2391675	Heptachlor Epoxide	80.8	68.1	P/P	49 - 184
2391675	Hexachlorobenzene	39.4	39.5	P/P	39 - 96.0
2391675	Kepone	77.9	81.3	P/P	10 - 217
2391675	Lambda-Cyhalothrin	45.0	48.3	P/P	21 - 193
2391675	Methoprene	38.1	39.5	P/P	20 - 106
2391675	Methoxychlor	56.1	54.7	P/P	53 - 118
2391675	MGK-264	80.9	66.9	P/P	40 - 118
2391675	Mirex	41.8	43.7	P/P	26 - 92.0
2391675	Oxychlordane	57.9	54.7	P/P	44 - 99.0
2391675	Permethrin	51.8	52.2	P/P	33 - 182
2391675	Phenothrin	36.6	39.3	P/P	10 - 129
2391675	Piperonyl Butoxide	79.7	78.9	P/P	10 - 211
2391675	Prallethrin	58.0	50.4	P/P	24 - 113
2391675	Tau-Fluvalinate	40.8	44.7	P/P	14 - 149
2391675	Tetramethrin	57.7	57.4	P/P	17 - 151
2391675	Trans-Nonachlor	51.0	46.7	P/P	42 - 102
2391675	Triclosan Methyl	53.2	52.3	P/P	48 - 108
2391675	Trifluralin	65.4	63.8	P/P	47 - 96.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P426759

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391615	Chlordane	85.8	91.6	P/P	53 - 126
2391615	Toxaphene	88.6	93.8	P/P	56 - 211

Reference Method: EPA 8321B
Batch ID: P426535

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2390312	Acesulfame K	123	126	P/P	40 - 150
2390312	AMPA	88.2	89.8	P/P	40 - 150
2390312	Endothall	106	106	P/P	40 - 150
2390312	Glufosinate	102	100	P/P	40 - 150
2390312	Glyphosate	96.2	111	P/P	40 - 150
2390312	Sucralose	96.8	98.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P426712

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391619	Acesulfame K	84.2	95.0	P/P	40 - 150
2391619	AMPA	64.5	73.0	P/P	40 - 150
2391619	Endothall	128	130	P/P	40 - 150
2391619	Glufosinate	99.8	97.0	P/P	40 - 150
2391619	Glyphosate	78.9	92.0	P/P	40 - 150
2391619	Sucralose	45.3	48.8	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P426799

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391449	2,4-D	92.7	98.6	P/P	40 - 150
2391449	2,4,5-T	102	106	P/P	40 - 150
2391449	Acetaminophen	124	114	P/P	30 - 150
2391449	Acetamiprid	69.8	71.4	P/P	40 - 150
2391449	Afidopyropen	65.0	71.6	P/P	30 - 150
2391449	Bentazon	124	122	P/P	30 - 150
2391449	Benzovindiflupyr	84.7	89.1	P/P	40 - 150
2391449	Carbamazepine	65.5	74.0	P/P	40 - 150
2391449	Clothianidin	118	118	P/P	40 - 150
2391449	Dinotefuran	99.7	109	P/P	40 - 150
2391449	Diuron	68.7	72.7	P/P	40 - 150
2391449	Fenuron	80.5	83.5	P/P	40 - 150
2391449	Fluridone	79.6	83.0	P/P	40 - 150
2391449	Hydrocodone	97.0	94.9	P/P	40 - 150
2391449	Ibuprofen	72.8	89.2	P/P	40 - 150
2391449	Imazapyr	89.0	83.0	P/P	40 - 150
2391449	Imidacloprid	145	144	P/P	40 - 150
2391449	Linuron	69.7	82.7	P/P	40 - 150
2391449	Mandestrobin	88.1	87.8	P/P	40 - 150
2391449	MCPP	96.8	97.3	P/P	40 - 150
2391449	Naproxen	106	90.0	P/P	40 - 150
2391449	Primidone	98.7	98.7	P/P	40 - 150
2391449	Pyraclostrobin	76.8	79.2	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P426799

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391449	Silvex	122	112	P/P	40 - 150
2391449	Thiamethoxam	101	101	P/P	40 - 150
2391449	Tolfenpyrad	54.3	59.1	P/P	30 - 150
2391449	Triclopyr	111	119	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P427162

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2392889	Fluoride	100	101	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P426936

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391558	Organic Carbon	97.5	96.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P426684

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391555	Color (true)	0.322	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P426689

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391441	Turbidity	1.90	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P426715

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391352	Calcium	0.146	Spike	P	0 - 20
2391352	Iron	0.809	Spike	P	0 - 20
2391352	Magnesium	1.24	Spike	P	0 - 20
2391352	Potassium	0.982	Spike	P	0 - 20
2391352	Sodium	0.776	Spike	P	0 - 20
2391352	Strontium	0.551	Spike	P	0 - 20
2391352	Tin	0.576	Spike	P	0 - 20
2391352	Titanium	1.54	Spike	P	0 - 20
2391352	Vanadium	1.36	Spike	P	0 - 20
2391352	Zinc	0.643	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P426715

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391352	Aluminum	0.825	Spike	P	0 - 20
2391352	Antimony	0.278	Spike	P	0 - 20
2391352	Arsenic	2.19	Spike	P	0 - 20
2391352	Barium	0.438	Spike	P	0 - 20
2391352	Beryllium	2.33	Spike	P	0 - 20
2391352	Boron	1.26	Spike	P	0 - 20
2391352	Cadmium	0.904	Spike	P	0 - 20
2391352	Chromium	0.161	Spike	P	0 - 20
2391352	Cobalt	0.0671	Spike	P	0 - 20
2391352	Copper	0.599	Spike	P	0 - 20
2391352	Lead	0.0281	Spike	P	0 - 20
2391352	Manganese	0.931	Spike	P	0 - 20
2391352	Molybdenum	0.321	Spike	P	0 - 20
2391352	Nickel	0.197	Spike	P	0 - 20
2391352	Selenium	2.81	Spike	P	0 - 20
2391352	Silver	0.507	Spike	P	0 - 20
2391352	Thallium	0.951	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427040

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391601	Chloride	0.853	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427044

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391601	Sulfate	0.704	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P426795

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391559	Ammonia-N	0.107	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P426910

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391580	Kjeldahl Nitrogen	3.27	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P426928

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391557	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426917

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391635	Total-P	0.340	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P426759

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391615	PCB-1016	0.404	Spike	P	0 - 32
2391615	PCB-1260	1.24	Spike	P	0 - 31
2391675	Aldrin	8.47	Spike	P	0 - 41
2391675	Alpha-BHC	12.6	Spike	P	0 - 25
2391675	Alpha-Chlordane	10.4	Spike	P	0 - 33
2391675	Beta-BHC	18.7	Spike	P	0 - 36
2391675	Beta-Cyfluthrin	6.38	Spike	P	0 - 42
2391675	Bifenthrin	10.2	Spike	P	0 - 53
2391675	Carbophenothion	0.307	Spike	P	0 - 49

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P426759

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391675	Chlorothalonil	11.9	Spike	P	0 - 71
2391675	Cis-Nonachlor	10.8	Spike	P	0 - 29
2391675	Cypermethrin	9.75	Spike	P	0 - 40
2391675	Dacthal	19.5	Spike	P	0 - 26
2391675	DDD-p,p'	7.33	Spike	P	0 - 39
2391675	DDE-p,p'	10.9	Spike	P	0 - 33
2391675	DDT-p,p'	7.17	Spike	P	0 - 40
2391675	Delta-BHC	20.2	Spike	P	0 - 37
2391675	Deltamethrin	14.1	Spike	P	0 - 100
2391675	Dichlobenil	12.8	Spike	P	0 - 40
2391675	Dicofol	3.64	Spike	P	0 - 31
2391675	Dieldrin	13.0	Spike	P	0 - 27
2391675	Endosulfan I	4.73	Spike	P	0 - 23
2391675	Endosulfan II	34.7	Spike	F	0 - 28
2391675	Endosulfan Sulfate	11.8	Spike	P	0 - 38
2391675	Endrin	19.1	Spike	P	0 - 63
2391675	Endrin Aldehyde	14.0	Spike	P	0 - 60
2391675	Endrin Ketone	14.0	Spike	P	0 - 37
2391675	Esfenvalerate	7.51	Spike	P	0 - 52
2391675	Ethalfuralin	0.941	Spike	P	0 - 23
2391675	Fenpropathrin	3.39	Spike	P	0 - 32
2391675	Gamma-BHC	22.6	Spike	F	0 - 17
2391675	Gamma-Chlordane	2.87	Spike	P	0 - 40
2391675	Heptachlor	3.89	Spike	P	0 - 29
2391675	Heptachlor Epoxide	17.1	Spike	P	0 - 25
2391675	Hexachlorobenzene	0.0733	Spike	P	0 - 36
2391675	Kepone	2.40	Spike	P	0 - 93
2391675	Lambda-Cyhalothrin	7.17	Spike	P	0 - 55
2391675	Methoprene	3.62	Spike	P	0 - 53
2391675	Methoxychlor	2.48	Spike	P	0 - 29
2391675	MGK-264	19.0	Spike	P	0 - 35
2391675	Mirex	4.44	Spike	P	0 - 46
2391675	Oxychlordane	5.63	Spike	P	0 - 29
2391675	Permethrin	0.849	Spike	P	0 - 44
2391675	Phenothrin	7.21	Spike	P	0 - 56
2391675	Piperonyl Butoxide	0.979	Spike	P	0 - 100
2391675	Prallethrin	14.2	Spike	P	0 - 42
2391675	Tau-Fluvalinate	9.19	Spike	P	0 - 54
2391675	Tetramethrin	0.433	Spike	P	0 - 51
2391675	Trans-Nonachlor	8.82	Spike	P	0 - 37
2391675	Triclosan Methyl	1.60	Spike	P	0 - 31
2391675	Trifluralin	2.55	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P426759

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391615	Chlordane	6.56	Spike	P	0 - 25
2391615	Toxaphene	5.74	Spike	P	0 - 26

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P426535

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2390312	Acesulfame K	2.32	Spike	P	0 - 30
2390312	AMPA	1.89	Spike	P	0 - 30
2390312	Endothall	0.705	Spike	P	0 - 30
2390312	Glufosinate	1.67	Spike	P	0 - 30
2390312	Glyphosate	14.3	Spike	P	0 - 30
2390312	Sucralose	1.75	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P426712

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391619	Acesulfame K	12.1	Spike	P	0 - 30
2391619	AMPA	7.72	Spike	P	0 - 30
2391619	Endothall	1.58	Spike	P	0 - 30
2391619	Glufosinate	2.92	Spike	P	0 - 30
2391619	Glyphosate	7.67	Spike	P	0 - 30
2391619	Sucralose	6.33	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P426799

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391449	2,4-D	3.34	Spike	P	0 - 30
2391449	2,4,5-T	4.70	Spike	P	0 - 30
2391449	Acetaminophen	8.43	Spike	P	0 - 30
2391449	Acetamiprid	2.29	Spike	P	0 - 30
2391449	Afidopyropen	9.74	Spike	P	0 - 30
2391449	Bentazon	0.903	Spike	P	0 - 30
2391449	Benzovindiflupyr	5.12	Spike	P	0 - 30
2391449	Carbamazepine	11.1	Spike	P	0 - 30
2391449	Clothianidin	0.294	Spike	P	0 - 30
2391449	Dinotefuran	8.76	Spike	P	0 - 30
2391449	Diuron	5.34	Spike	P	0 - 30
2391449	Fenuron	3.69	Spike	P	0 - 30
2391449	Fluridone	4.23	Spike	P	0 - 30
2391449	Hydrocodone	2.17	Spike	P	0 - 30
2391449	Ibuprofen	20.3	Spike	P	0 - 30
2391449	Imazapyr	5.39	Spike	P	0 - 30
2391449	Imidacloprid	1.07	Spike	P	0 - 30
2391449	Linuron	17.0	Spike	P	0 - 30
2391449	Mandestrobin	0.337	Spike	P	0 - 30
2391449	MCPP	0.464	Spike	P	0 - 30
2391449	Naproxen	16.1	Spike	P	0 - 30
2391449	Primidone	0.000304	Spike	P	0 - 30
2391449	Pyraclostrobin	3.09	Spike	P	0 - 30
2391449	Silvex	8.50	Spike	P	0 - 30
2391449	Thiamethoxam	0.136	Spike	P	0 - 30
2391449	Tolfenpyrad	8.48	Spike	P	0 - 30
2391449	Triclopyr	7.01	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P427035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2392889	Total Alkalinity	0.840	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P427014

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2392063	TDS	0.720	Sample	P	0 - 10

Reference Method: SM 2540 C-2015
Batch ID: P427304

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391578	TDS	5.68	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P427162

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2392889	Fluoride	0.467	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P426936

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391558	Organic Carbon	0.633	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2391615
Field Sample ID: G3SD0159

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	94.7	P	29 - 130
EPA 8270E	Decachlorobiphenyl	77.7	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	65.4	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	66.3	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	64.0	P	30 - 101
EPA 8276	PCNB	85.2	P	48 - 121

Lab Sample ID: 2391617
Field Sample ID: G3SD0237

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	111	P	30 - 160
EPA 8321B	Acetaminophen-d4	113	P	30 - 160
EPA 8321B	Carbamazepine-d10	53.9	P	30 - 160
EPA 8321B	Diuron-d6	51.3	P	30 - 160
EPA 8321B	Endothall-d6	125	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	113	P	30 - 160
EPA 8321B	Ibuprofen-d3	58.2	P	30 - 160
EPA 8321B	Primidone-d5	86.6	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	30 - 160

Lab Sample ID: 2391618
Field Sample ID: G3SD0096

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	112	P	30 - 160
EPA 8321B	Acetaminophen-d4	114	P	30 - 160
EPA 8321B	Carbamazepine-d10	55.8	P	30 - 160
EPA 8321B	Diuron-d6	48.7	P	30 - 160
EPA 8321B	Endothall-d6	120	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	60.2	P	30 - 160
EPA 8321B	Primidone-d5	101	P	30 - 160
EPA 8321B	Sucralose-d6	52.2	P	30 - 160

Lab Sample ID: 2391619
Field Sample ID: G3SD0159

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	108	P	30 - 160
EPA 8321B	Acetaminophen-d4	112	P	30 - 160
EPA 8321B	Carbamazepine-d10	56.4	P	30 - 160
EPA 8321B	Diuron-d6	49.7	P	30 - 160
EPA 8321B	Endothall-d6	126	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	99.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	83.0	P	30 - 160
EPA 8321B	Primidone-d5	98.0	P	30 - 160
EPA 8321B	Sucralose-d6	49.3	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2391620
Field Sample ID: G3SD0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	117	P	30 - 160
EPA 8321B	Acetaminophen-d4	111	P	30 - 160
EPA 8321B	Carbamazepine-d10	58.3	P	30 - 160
EPA 8321B	Diuron-d6	53.1	P	30 - 160
EPA 8321B	Endothall-d6	123	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	87.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	67.1	P	30 - 160
EPA 8321B	Primidone-d5	91.7	P	30 - 160
EPA 8321B	Sucralose-d6	59.4	P	30 - 160

Lab Sample ID: 2391621
Field Sample ID: FB_03022023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	113	P	30 - 160
EPA 8321B	Acetaminophen-d4	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	82.3	P	30 - 160
EPA 8321B	Diuron-d6	83.2	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	118	P	30 - 160
EPA 8321B	Ibuprofen-d3	86.8	P	30 - 160
EPA 8321B	Primidone-d5	102	P	30 - 160
EPA 8321B	Sucralose-d6	103	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A117794

Included Lab Sample IDs: 2391594, 2391596

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.8	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A117797

Included Lab Sample IDs: 2391594, 2391596

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	100	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A117818

Included Lab Sample IDs: 2391617, 2391618

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	103	101	P/P	60 - 160
Sucralose	107	104	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A117822

Included Lab Sample IDs: 2391617, 2391618

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	109	108	P/P	60 - 160
Endothall	105	104	P/P	60 - 160
Glufosinate	108	101	P/P	60 - 160
Glyphosate	101	110	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A117833

Included Lab Sample IDs: 2391594, 2391596

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.6	99.3	P/P	90 - 110
Chloride	99.3	98.6	P/P	90 - 110
Sulfate	102	101	P/P	90 - 110
Sulfate	102	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A117845

Included Lab Sample IDs: 2391595, 2391597

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.1	98.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A117862

Included Lab Sample IDs: 2391624, 2391625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	103	P/P	90 - 110
Aluminum	104	103	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A117862

Included Lab Sample IDs: 2391624, 2391625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	103	105	P/P	90 - 110
Antimony	105	105	P/P	90 - 110
Arsenic	103	105	P/P	90 - 110
Arsenic	105	104	P/P	90 - 110
Barium	100	104	P/P	90 - 110
Barium	104	104	P/P	90 - 110
Beryllium	101	102	P/P	90 - 110
Beryllium	103	104	P/P	90 - 110
Boron	101	96.8	P/P	90 - 110
Boron	94.8	99.3	P/P	90 - 110
Cadmium	101	103	P/P	90 - 110
Cadmium	104	104	P/P	90 - 110
Cobalt	101	102	P/P	90 - 110
Cobalt	102	101	P/P	90 - 110
Copper	100	101	P/P	90 - 110
Copper	101	101	P/P	90 - 110
Lead	94.3	96.5	P/P	90 - 110
Lead	96.2	96.5	P/P	90 - 110
Manganese	104	104	P/P	90 - 110
Manganese	99.1	103	P/P	90 - 110
Molybdenum	101	102	P/P	90 - 110
Molybdenum	103	102	P/P	90 - 110
Nickel	101	102	P/P	90 - 110
Nickel	102	102	P/P	90 - 110
Selenium	104	102	P/P	90 - 110
Selenium	104	105	P/P	90 - 110
Silver	101	101	P/P	90 - 110
Silver	99.0	101	P/P	90 - 110
Thallium	102	105	P/P	90 - 110
Thallium	104	104	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A117880

Included Lab Sample IDs: 2391619, 2391620, 2391621

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	123	103	P/P	60 - 160
Endothall	121	87.1	P/P	60 - 160
Glufosinate	105	95.8	P/P	60 - 160
Glyphosate	112	103	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A117884

Included Lab Sample IDs: 2391624, 2391625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	96.8	98.4	P/P	90 - 110
Chromium	97.8	97.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A117895

Included Lab Sample IDs: 2391595, 2391597

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	103	102	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A117898

Included Lab Sample IDs: 2391595, 2391597

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	99.4	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A117899

Included Lab Sample IDs: 2391617, 2391618, 2391619, 2391620, 2391621

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	95.2	80.2	P/P	50 - 150
2,4,5-T	91.5	101	P/P	50 - 150
Acetaminophen	106	107	P/P	60 - 160
Acetamiprid	103	98.9	P/P	50 - 150
Afidopyropen	73.8	98.0	P/P	50 - 150
Bentazon	134	143	P/P	50 - 160
Bentazon	135	111	P/P	50 - 160
Benzovindiflupyr	101	97.2	P/P	50 - 150
Carbamazepine	102	94.9	P/P	60 - 150
Clothianidin	110	111	P/P	60 - 150
Dinotefuran	100	98.7	P/P	50 - 150
Diuron	108	116	P/P	60 - 160
Fenuron	95.5	107	P/P	60 - 150
Fluridone	103	109	P/P	60 - 160
Hydrocodone	94.4	99.5	P/P	60 - 150
Ibuprofen	116	106	P/P	50 - 160
Imazapyr	97.4	91.5	P/P	50 - 150
Imidacloprid	98.4	101	P/P	60 - 150
Linuron	96.7	106	P/P	60 - 150
Mandestrobin	106	108	P/P	50 - 150
MCPP	101	95.2	P/P	50 - 150
Naproxen	106	95.1	P/P	50 - 160
Primidone	89.1	92.7	P/P	60 - 150
Pyraclostrobin	105	102	P/P	60 - 150
Silvex	96.5	91.7	P/P	50 - 150
Thiamethoxam	91.1	102	P/P	50 - 150
Thiamethoxam	96.2	102	P/P	50 - 150
Tolfenpyrad	94.5	94.3	P/P	60 - 150
Triclopyr	91.4	90.2	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A117915

Included Lab Sample IDs: 2391619, 2391620, 2391621

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	117	116	P/P	60 - 160
Sucralose	98.2	103	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A117927

Included Lab Sample IDs: 2391595

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A117936

Included Lab Sample IDs: 2391597

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.2	98.8	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A117948

Included Lab Sample IDs: 2391594, 2391596

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.8	94.9	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A117959

Included Lab Sample IDs: 2391615

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.7		P	80 - 120
Toxaphene	102		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A117978

Included Lab Sample IDs: 2391595, 2391597

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.5	100	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A117988

Included Lab Sample IDs: 2391594, 2391596

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

Reference Method: EPA 8270E

Run ID: A118028

Included Lab Sample IDs: 2391615

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	95.7		P	80 - 120
PCB-1260	91.6		P	80 - 120

Reference Method: EPA 8270E

Run ID: A118046

Included Lab Sample IDs: 2391615

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A118046
 Included Lab Sample IDs: 2391615

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	100		P	80 - 120
Alpha-BHC	99.3		P	80 - 120
Alpha-Chlordane	102		P	80 - 120
Beta-BHC	105		P	80 - 120
Beta-Cyfluthrin	95.7		P	80 - 120
Bifenthrin	97.1		P	80 - 120
Carbophenothion	101		P	80 - 120
Chlorothalonil	94.2		P	80 - 120
Cis-Nonachlor	91.5		P	80 - 120
Cypermethrin	102		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	169*		F	80 - 120
DDE-p,p'	116		P	80 - 120
DDT-p,p'	116		P	80 - 120
Delta-BHC	107		P	80 - 120
Deltamethrin	86.2		P	80 - 120
Dichlobenil	109		P	80 - 120
Dicofol	97.0		P	80 - 120
Dieldrin	95.2		P	80 - 120
Endosulfan I	90.4		P	80 - 120
Endosulfan II	109		P	80 - 120
Endosulfan Sulfate	94.7		P	80 - 120
Endrin	93.8		P	80 - 120
Endrin Aldehyde	81.2		P	80 - 120
Endrin Ketone	93.5		P	80 - 120
Esfenvalerate	90.6		P	80 - 120
Ethalfuralin	99.0		P	80 - 120
Fenpropathrin	99.8		P	80 - 120
Gamma-BHC	109		P	80 - 120
Gamma-Chlordane	97.6		P	80 - 120
Heptachlor	99.1		P	80 - 120
Heptachlor Epoxide	103		P	80 - 120
Hexachlorobenzene	101		P	80 - 120
Kepone	102		P	80 - 120
Lambda-Cyhalothrin	99.7		P	80 - 120
Methoprene	87.1		P	80 - 120
Methoxychlor	98.7		P	80 - 120
MGK-264	102		P	80 - 120
Mirex	90.4		P	80 - 120
Oxychlordane	94.3		P	80 - 120
Permethrin	96.7		P	80 - 120
Phenothrin	94.4		P	80 - 120
Piperonyl Butoxide	104		P	80 - 120
Prallethrin	91.8		P	80 - 120
Tau-Fluvalinate	96.5		P	80 - 120
Tetramethrin	95.6		P	80 - 120
Trans-Nonachlor	97.5		P	80 - 120
Triclosan Methyl	96.0		P	80 - 120
Trifluralin	100		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A118115

Included Lab Sample IDs: 2391624, 2391625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	100	101	P/P	95 - 105
Calcium	102	102	P/P	90 - 110
Iron	100	102	P/P	90 - 110
Iron	103	101	P/P	95 - 105
Magnesium	102	100	P/P	95 - 105
Magnesium	99.5	102	P/P	90 - 110
Potassium	101	99.6	P/P	95 - 105
Potassium	98.6	100	P/P	90 - 110
Sodium	100	98.7	P/P	90 - 110
Sodium	99.0	101	P/P	95 - 105
Strontium	104	103	P/P	95 - 105
Strontium	105	102	P/P	90 - 110
Tin	100	99.2	P/P	90 - 110
Tin	99.5	101	P/P	95 - 105
Titanium	98.4	98.7	P/P	95 - 105
Titanium	99.7	98.5	P/P	90 - 110
Vanadium	99.2	99.9	P/P	95 - 105
Vanadium	99.8	101	P/P	90 - 110
Zinc	100	102	P/P	95 - 105
Zinc	102	101	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	98.9				0.322	
EPA 180.1 Rev. 2.0	Turbidity	101				1.90	
EPA 200.7 Rev. 4.4	Calcium	102	103	102			0.146
	Iron	104	103	104	103		0.809
	Magnesium	102	102	103			1.24
	Potassium	102	102	101	100		0.982
	Sodium	103	104	103	99.4		0.776
	Strontium	103	103	102	102		0.551
	Tin	96.9	97.5	98.1	99.1		0.576
	Titanium	101	101	99.6	99.7		1.54
	Vanadium	99.8	100	98.9	98.8		1.36
	Zinc	98.6	97.7	97.1	97.3		0.643
EPA 200.8 Rev. 5.4	Aluminum	104	104	103	102		0.825
	Antimony	104	106	106	107		0.278
	Arsenic	106	107	104	104		2.19
	Barium	105	104	104	107		0.438
	Beryllium	97.8	98.8	96.5	102		2.33
	Boron	101	99.8	101	101		1.26
	Cadmium	104	104	103	104		0.904
	Chromium	99.0	98.1	98.2	99.0		0.161
	Cobalt	104	101	101	102		0.0671
	Copper	102	101	100	101		0.599
	Lead	96.7	97.0	96.9	98.4		0.0281
	Manganese	101	103	104	104		0.931
	Molybdenum	102	103	104	106		0.321
	Nickel	105	101	101	103		0.197
	Selenium	102	104	102	101		2.81
	Silver	101	102	101	103		0.507
	Thallium	103	104	105	107		0.951
EPA 300.0 Rev. 2.1	Chloride	100	99.6	96.1		0.853	
	Sulfate	99.8	102	99.7		0.704	
EPA 350.1 Rev. 2.0	Ammonia-N	96.4	98.2	98.4			0.107
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	94.7	105	98.9			3.27
EPA 353.2 Rev. 2.0	NO2NO3-N	97.0	101	101			0.0
EPA 365.1 Rev. 2.0	Total-P	96.6	98.0	98.3			0.340
EPA 8270E	Aldrin	51.5	57.3	62.4			8.47
	Alpha-BHC	88.4	76.6	86.9			12.6
	Alpha-Chlordane	63.2	60.9	67.6			10.4
	Beta-BHC	82.0	69.2	83.4			18.7
	Beta-Cyfluthrin	52.2	54.6	51.2			6.38
	Bifenthrin	41.4	42.7	38.5			10.2
	Carbophenothion	44.4	57.9	57.8			0.307
	Chlorothalonil	83.2	80.0	90.1			11.9
	Cis-Nonachlor	62.3	52.5	58.5			10.8
	Cypermethrin	53.7	55.1	50.0			9.75
	Dacthal	86.6	71.8	87.3			19.5
	DDD-p,p'	53.9	49.1	52.9			7.33
	DDE-p,p'	51.2	47.5	53.0			10.9
	DDT-p,p'	55.6	58.5	54.5			7.17
	Delta-BHC	103	84.2	103			20.2
	Deltamethrin	58.9	63.3	54.9			14.1
	Dichlobenil	79.6	46.0	52.2			12.8
	Dicofol	51.3	50.8	49.0			3.64
	Dieldrin	58.1	51.5	59.3			13.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Endosulfan I	60.6	56.4	59.1		4.73
	Endosulfan II	84.6	57.0	80.9		34.7
	Endosulfan Sulfate	94.4	80.6	90.8		11.8
	Endrin	66.2	52.4	63.4		19.1
	Endrin Aldehyde	70.6	14.4	12.5		14.0
	Endrin Ketone	139	114	131		14.0
	Esfenvalerate	57.7	60.7	56.3		7.51
	Ethalfuralin	68.1	64.9	64.3		0.941
	Fenpropathrin	57.0	53.2	55.0		3.39
	Gamma-BHC	80.6	99.8	125		22.6
	Gamma-Chlordane	50.9	51.7	50.2		2.87
	Heptachlor	79.2	73.4	70.6		3.89
	Heptachlor Epoxide	77.4	80.8	68.1		17.1
	Hexachlorobenzene	52.1	39.4	39.5		0.0733
	Kepone	150	77.9	81.3		2.40
	Lambda-Cyhalothrin	48.0	45.0	48.3		7.17
	Methoprene	40.2	38.1	39.5		3.62
	Methoxychlor	63.1	56.1	54.7		2.48
	MGK-264	75.4	80.9	66.9		19.0
	Mirex	39.4	41.8	43.7		4.44
	Oxychlordane	54.4	57.9	54.7		5.63
	PCB-1016	74.1	81.3	81.0		0.404
	PCB-1260	72.3	71.8	72.7		1.24
	Permethrin	51.3	51.8	52.2		0.849
	Phenothrin	30.0	36.6	39.3		7.21
	Piperonyl Butoxide	84.2	79.7	78.9		0.979
	Prallethrin	51.9	58.0	50.4		14.2
	Tau-Fluvalinate	39.6	40.8	44.7		9.19
	Tetramethrin	55.3	57.7	57.4		0.433
	Trans-Nonachlor	49.2	51.0	46.7		8.82
	Triclosan Methyl	78.1	53.2	52.3		1.60
	Trifluralin	64.5	65.4	63.8		2.55
EPA 8276	Chlordane	98.9	85.8	91.6		6.56
	Toxaphene	101	88.6	93.8		5.74
EPA 8321B	2,4-D	92.1	92.7	98.6		3.34
	2,4,5-T	91.9	102	106		4.70
	Acesulfame K	97.8	123	126		2.32
	Acesulfame K	115	84.2	95.0		12.1
	Acetaminophen	103	114	124		8.43
	Acetamiprid	68.8	71.4	69.8		2.29
	Afidopyropen	69.4	65.0	71.6		9.74
	AMPA	106	88.2	89.8		1.89
	AMPA	113	64.5	73.0		7.72
	Bentazon	110	124	122		0.903
	Benzovindiflupyr	84.7	84.7	89.1		5.12
	Carbamazepine	82.2	74.0	65.5		11.1
	Clothianidin	104	118	118		0.294
	Dinotefuran	80.1	109	99.7		8.76
	Diuron	78.8	68.7	72.7		5.34
	Endothall	96.7	106	106		0.705
	Endothall	113	128	130		1.58
	Fenuron	99.3	83.5	80.5		3.69
	Fluridone	84.7	79.6	83.0		4.23
	Glufosinate	105	102	100		1.67

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Glufosinate	116	99.8	97.0		2.92
	Glyphosate	95.9	96.2	111		14.3
	Glyphosate	101	78.9	92.0		7.67
	Hydrocodone	96.3	94.9	97.0		2.17
	Ibuprofen	84.1	72.8	89.2		20.3
	Imazapyr	91.8	89.0	83.0		5.39
	Imidacloprid	93.3	144	145		1.07
	Linuron	75.2	69.7	82.7		17.0
	Mandestrobin	90.7	88.1	87.8		0.337
	MCPP	90.5	96.8	97.3		0.464
	Naproxen	94.5	106	90.0		16.1
	Primidone	94.5	98.7	98.7		0.0003
	Pyraclostrobin	78.8	76.8	79.2		3.09
	Silvex	92.5	122	112		8.50
	Sucralose	98.4	96.8	98.6		1.75
	Sucralose	99.4	45.3	48.8		6.33
	Thiamethoxam	92.0	101	101		0.136
	Tolfenpyrad	61.4	54.3	59.1		8.48
	Triclopyr	91.2	111	119		7.01
SM 2320 B-2011	Total Alkalinity	95.1			0.840	
SM 2540 C-2015	TDS	101			0.720	
	TDS	106			5.68	
SM 2540 D-2015	TSS	95.3				
	TSS	97.4				
SM 4500-F- C-2011	Fluoride	99.8	100	101		0.467
SM 5310 B-2011	Organic Carbon	96.1	97.5	96.5		0.633

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2391594, 2391596
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2391594, 2391596
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2391624, 2391625
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2391624, 2391625
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2391594, 2391596
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2391594, 2391596
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2391595, 2391597
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2391595, 2391597
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2391595, 2391597
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2391595, 2391597
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2391615
EPA 8270E	PCBs in water matrices by GC/MS/MS	2391615
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2391615
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2391617, 2391618, 2391619, 2391620, 2391621
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2391594, 2391596
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2391624
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2391594, 2391596
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2391594, 2391596
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2391594, 2391596
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2391595, 2391597

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	03/03/2023			03/03/2023 14:42	Anna M. Plaviak	2391594
	03/03/2023			03/03/2023 14:43	Anna M. Plaviak	2391596
EPA 180.1 Rev. 2.0	03/03/2023			03/03/2023 14:34	Khloe J Berg	2391594
	03/03/2023			03/03/2023 14:35	Khloe J Berg	2391596
EPA 200.7 Rev. 4.4	03/03/2023	03/06/2023 12:10	George D Taylor	03/21/2023 15:20	McKinley C Carter	2391625
	03/03/2023	03/06/2023 12:10	George D Taylor	03/21/2023 18:41	McKinley C Carter	2391624
EPA 200.8 Rev. 5.4	03/03/2023	03/06/2023 12:10	George D Taylor	03/21/2023 18:49	McKinley C Carter	2391624
	03/03/2023	03/06/2023 12:10	George D Taylor	03/07/2023 16:39	Emily M Philpot	2391625
	03/03/2023	03/06/2023 12:10	George D Taylor	03/07/2023 20:24	Emily M Philpot	2391624
	03/03/2023	03/06/2023 12:10	George D Taylor	03/08/2023 14:47	Conrad Hartmann	2391625
	03/03/2023	03/06/2023 12:10	George D Taylor	03/08/2023 18:13	Conrad Hartmann	2391624
EPA 300.0 Rev. 2.1	03/03/2023			03/11/2023 05:33	Judith K. Clark	2391594
	03/03/2023			03/11/2023 07:49	Judith K. Clark	2391596
EPA 350.1 Rev. 2.0	03/03/2023			03/07/2023 11:24	Khloe J Berg	2391595
	03/03/2023			03/07/2023 11:26	Khloe J Berg	2391597
EPA 351.2 Rev. 2.0	03/03/2023	03/09/2023 14:00	Simonne.V. Calhoun	03/14/2023 13:21	Samantha L Bates	2391595
	03/03/2023	03/09/2023 14:00	Simonne.V. Calhoun	03/14/2023 13:23	Samantha L Bates	2391597
EPA 353.2 Rev. 2.0	03/03/2023			03/09/2023 10:36	Beverly Y. Sanders	2391595
	03/03/2023			03/09/2023 10:37	Beverly Y. Sanders	2391597
EPA 365.1 Rev. 2.0	03/03/2023	03/09/2023 13:42	Adam P Silver	03/10/2023 09:46	James L Waggeberby	2391595
	03/03/2023	03/09/2023 13:42	Adam P Silver	03/10/2023 13:41	James L Waggeberby	2391597
EPA 8270E	03/03/2023	03/08/2023 08:00	Fe-Val Siddell	03/12/2023 23:30	Julie Wi	2391615
	03/03/2023	03/08/2023 08:00	Fe-Val Siddell	03/13/2023 01:03	Julie Wi	2391615
EPA 8276	03/03/2023	03/08/2023 08:00	Fe-Val Siddell	03/11/2023 02:50	Lipi Saha	2391615
EPA 8321B	03/03/2023	03/03/2023 12:00	Manjita Shrestha	03/03/2023 15:59	Manjita Shrestha	2391617
	03/03/2023	03/03/2023 12:00	Manjita Shrestha	03/03/2023 16:12	Manjita Shrestha	2391618
	03/03/2023	03/03/2023 12:00	Manjita Shrestha	03/04/2023 02:49	Manjita Shrestha	2391617
	03/03/2023	03/03/2023 12:00	Manjita Shrestha	03/04/2023 03:03	Manjita Shrestha	2391618
	03/03/2023	03/07/2023 09:00	Hoor Shaik	03/08/2023 18:45	Juyoung Kim	2391617
	03/03/2023	03/07/2023 09:00	Hoor Shaik	03/08/2023 19:04	Juyoung Kim	2391618
	03/03/2023	03/07/2023 09:00	Hoor Shaik	03/08/2023 19:22	Juyoung Kim	2391619
	03/03/2023	03/07/2023 09:00	Hoor Shaik	03/08/2023 19:41	Juyoung Kim	2391620
	03/03/2023	03/07/2023 09:00	Hoor Shaik	03/08/2023 20:00	Juyoung Kim	2391621
	03/03/2023	03/07/2023 09:00	Hoor Shaik	03/09/2023 12:00	Juyoung Kim	2391618
	03/03/2023	03/07/2023 09:00	Hoor Shaik	03/09/2023 12:19	Juyoung Kim	2391620
	03/03/2023	03/08/2023 09:00	Manjita Shrestha	03/08/2023 15:50	Manjita Shrestha	2391619
	03/03/2023	03/08/2023 09:00	Manjita Shrestha	03/08/2023 16:03	Manjita Shrestha	2391620
	03/03/2023	03/08/2023 09:00	Manjita Shrestha	03/08/2023 16:16	Manjita Shrestha	2391621
	03/03/2023	03/08/2023 09:00	Manjita Shrestha	03/09/2023 06:11	Manjita Shrestha	2391619
	03/03/2023	03/08/2023 09:00	Manjita Shrestha	03/09/2023 06:25	Manjita Shrestha	2391620

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	03/03/2023	03/08/2023 09:00	Manjita Shrestha	03/09/2023 06:39	Manjita Shrestha	2391621
SM 2320 B-2011	03/03/2023			03/11/2023 08:56	Dale L. Simmons	2391596
	03/03/2023			03/11/2023 11:34	Dale L. Simmons	2391594
SM 2340 B-2011	03/03/2023			03/21/2023 18:41	McKinley C Carter	2391624
SM 2540 C-2015	03/03/2023			03/08/2023 14:08	Yijie Li	2391594
	03/03/2023			03/08/2023 16:30	Blanca Fach	2391596
SM 2540 D-2015	03/03/2023			03/08/2023 14:08	Yijie Li	2391594
	03/03/2023			03/08/2023 14:30	Blanca Fach	2391596
SM 4500-F- C-2011	03/03/2023			03/14/2023 23:01	Dale L. Simmons	2391596
	03/03/2023			03/14/2023 23:50	Dale L. Simmons	2391594
SM 5310 B-2011	03/03/2023			03/09/2023 06:29	Khloe J Berg	2391595
	03/03/2023			03/09/2023 06:43	Khloe J Berg	2391597