

Chemical Analysis Report

SO-DIST-2023-11-08-01

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

Event Description: **2023 SMP: Stadium Arcadia**
Request ID: **RQ-2023-11-06-61**
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: Nicole Reistad

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: 12-DEC-2023 10:39



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: CHARLIE CREEK UP STRM HWY 17

Collection Date/Time: 11/07/2023 09:55

Field ID: G3SD0237

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449881	EPA 8321B	2,4-D	0.010		ug/L	P437576	
		Acesulfame K	0.10	U	ug/L	P437555	
		2,4,5-T	0.0040	U	ug/L	P437576	
		AMPA	0.16	I	ug/L	P437555	
		Acetaminophen	0.0080	U	ug/L	P437576	
		Acetamiprid	0.0020	U	ug/L	P437576	
		Endothall	0.25	U	ug/L	P437555	
		Glufosinate	0.10	U	ug/L	P437555	
		Glyphosate	0.11	I	ug/L	P437555	
		Afidopyropen	0.0020	U	ug/L	P437576	
		Bentazon	8.0E-04	U	ug/L	P437576	
		Sucralose	0.030	I	ug/L	P437555	
		Benzovindiflupyr	0.0020	U	ug/L	P437576	
		Carbamazepine	8.0E-04	U	ug/L	P437576	
		Clothianidin	0.0028	I	ug/L	P437576	
		Dinotefuran	0.0020	U	ug/L	P437576	
		Diuron	0.0054	I	ug/L	P437576	
		Fenuron	0.032	U	ug/L	P437576	
		Fluridone	8.0E-04	U	ug/L	P437576	
		Imazapyr	0.028		ug/L	P437576	
		Hydrocodone	0.0020	U	ug/L	P437576	
		Ibuprofen	0.080	U	ug/L	P437576	
		Imidacloprid	0.017		ug/L	P437576	
		Linuron	0.0040	U	ug/L	P437576	
		Mandestrobin	0.0020	U	ug/L	P437576	
		MCPP	0.0020	U	ug/L	P437576	
		Naproxen	0.0080	U	ug/L	P437576	
		Primidone	0.0040	U	ug/L	P437576	
		Pyraclostrobin	0.0020	U	ug/L	P437576	
		Silvex	0.0040	U	ug/L	P437576	
		Thiamethoxam	0.0020	U	ug/L	P437576	
		Tolfenpyrad	0.0020	U	ug/L	P437576	
		Triclopyr	0.0040	U	ug/L	P437576	

Ref. Method and Comment:

EPA 8321B: MS accuracy for imazapyr could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: HOG BAY AT CR 763

Collection Date/Time: 11/07/2023 10:40

Field ID: G3SD0096

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449882	EPA 8321B	2,4-D	0.017		ug/L	P437576	
		Acesulfame K	0.10	U	ug/L	P437555	
		2,4,5-T	0.0040	U	ug/L	P437576	
		AMPA	2.2		ug/L	P437555	
		Acetaminophen	0.0080	U	ug/L	P437576	
		Acetamiprid	0.0020	U	ug/L	P437576	
		Endothall	0.25	U	ug/L	P437555	
		Glufosinate	0.10	U	ug/L	P437555	
		Glyphosate	0.78		ug/L	P437555	
		Afidopyropen	0.0020	U	ug/L	P437576	
		Bentazon	8.0E-04	U	ug/L	P437576	
		Sucralose	1.7		ug/L	P437555	
		Benzovindiflupyr	0.0020	U	ug/L	P437576	
		Carbamazepine	0.0046		ug/L	P437576	
		Clothianidin	0.26		ug/L	P437576	
		Dinotefuran	0.0020	U	ug/L	P437576	
		Diuron	0.018		ug/L	P437576	
		Fenuron	0.032	U	ug/L	P437576	
		Fluridone	8.0E-04	U	ug/L	P437576	
		Imazapyr	0.0040	U	ug/L	P437576	
		Hydrocodone	0.0020	U	ug/L	P437576	
		Ibuprofen	0.080	U	ug/L	P437576	
		Imidacloprid	0.49		ug/L	P437576	
		Linuron	0.0040	U	ug/L	P437576	
		Mandestrobin	0.0020	U	ug/L	P437576	
		MCPP	0.0020	U	ug/L	P437576	
		Naproxen	0.0080	U	ug/L	P437576	
		Primidone	0.0051	I	ug/L	P437576	
		Pyraclostrobin	0.0020	U	ug/L	P437576	
		Silvex	0.0040	U	ug/L	P437576	
		Thiamethoxam	0.34		ug/L	P437576	
		Tolfenpyrad	0.0020	U	ug/L	P437576	
		Triclopyr	0.0040	U	ug/L	P437576	

Ref. Method and Comment:

EPA 8321B: MS accuracy for imazapyr could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: JOSHUA CREEK ABOVE PEACE RIVER

Collection Date/Time: 11/07/2023 11:05

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449880	EPA 8270E	Aldrin	0.67	U	ng/L	P437705	
		Alpha-BHC	0.10	U	ng/L	P437705	
		Alpha-Chlordane	0.21	U	ng/L	P437705	
		PCB-1016	2.1	U	ng/L	P437705	
		Beta-BHC	0.10	U	ng/L	P437705	
		PCB-1221	2.1	U	ng/L	P437705	
		Beta-Cyfluthrin	1.3	U	ng/L	P437705	
		PCB-1232	2.1	U	ng/L	P437705	
		Bifenthrin	0.51	U	ng/L	P437705	
		PCB-1242	2.1	U	ng/L	P437705	
		Carbophenothion	0.92	U	ng/L	P437705	MS
		PCB-1248	2.1	U	ng/L	P437705	
		Chlorothalonil	3.7	U	ng/L	P437705	
		PCB-1254	2.1	U	ng/L	P437705	
		Cis-Nonachlor	0.21	U	ng/L	P437705	
		PCB-1260	2.1	UJ	ng/L	P437705	MS
		Cypermethrin	1.5	U	ng/L	P437705	
		Dacthal	0.15	U	ng/L	P437705	
		DDD-p,p'	0.26	U	ng/L	P437705	
		DDE-p,p'	0.21	U	ng/L	P437705	
		DDT-p,p'	0.82	U	ng/L	P437705	
		Delta-BHC	0.41	U	ng/L	P437705	
		Deltamethrin	1.3	U	ng/L	P437705	
		Dichlobenil	0.26	U	ng/L	P437705	RPD
		Dicofol	1.3	U	ng/L	P437705	
		Dieldrin	0.41	U	ng/L	P437705	
		Endosulfan I	0.41	U	ng/L	P437705	
		Endosulfan II	0.92	U	ng/L	P437705	
		Endosulfan Sulfate	0.31	U	ng/L	P437705	
		Endrin	0.92	U	ng/L	P437705	
		Endrin Aldehyde	0.77	U	ng/L	P437705	MS
		Endrin Ketone	0.41	U	ng/L	P437705	
		Esfenvalerate	0.77	U	ng/L	P437705	
		Ethalfuralin	0.15	U	ng/L	P437705	
		Fenpropathrin	0.26	U	ng/L	P437705	
		Gamma-BHC	0.13	U	ng/L	P437705	
		Gamma-Chlordane	0.21	U	ng/L	P437705	
		Heptachlor	0.21	U	ng/L	P437705	MS
		Heptachlor Epoxide	0.26	U	ng/L	P437705	
		Hexachlorobenzene**	1.0	U	ng/L	P437705	
		Kepone	14	U	ng/L	P437705	
		Lambda-Cyhalothrin	0.77	U	ng/L	P437705	
		Methoprene	0.77	U	ng/L	P437705	
		Methoxychlor	0.31	U	ng/L	P437705	

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449880	EPA 8270E	MGK-264	0.21	U	ng/L	P437705	
		Mirex	0.36	U	ng/L	P437705	
		Oxychlordane	0.31	U	ng/L	P437705	
		Permethrin	1.6	U	ng/L	P437705	
		Phenothrin	0.92	U	ng/L	P437705	
		Piperonyl Butoxide	0.15	U	ng/L	P437705	
		Prallethrin	2.1	U	ng/L	P437705	
		Tau-Fluvalinate	0.26	U	ng/L	P437705	
		Tetramethrin	0.77	U	ng/L	P437705	
		Trans-Nonachlor	0.21	U	ng/L	P437705	
		Triclosan Methyl	0.15	U	ng/L	P437705	
		Trifluralin	0.21	U	ng/L	P437705	
		Chlordane	2.1	U	ng/L	P437705	
		Toxaphene	15	U	ng/L	P437705	
2449883	EPA 8321B						
		2,4-D	0.32		ug/L	P437576	
		Acesulfame K	0.10	U	ug/L	P437555	
		2,4,5-T	0.0040	U	ug/L	P437576	
		AMPA	1.3		ug/L	P437555	
		Acetaminophen	0.0080	U	ug/L	P437576	
		Acetamiprid	0.0020	U	ug/L	P437576	
		Endothall	0.25	U	ug/L	P437555	
		Glufosinate	0.10	U	ug/L	P437555	
		Glyphosate	1.3		ug/L	P437555	
		Afidopyropen	0.0020	U	ug/L	P437576	
		Bentazon	0.0056		ug/L	P437576	
		Sucralose	0.54		ug/L	P437555	
		Benzovindiflupyr	0.0020	U	ug/L	P437576	
		Carbamazepine	0.0013	I	ug/L	P437576	
		Clothianidin	0.073		ug/L	P437576	
		Dinotefuran	0.0020	U	ug/L	P437576	
		Diuron	0.14		ug/L	P437576	
		Fenuron	0.032	U	ug/L	P437576	
		Fluridone	8.0E-04	U	ug/L	P437576	
		Imazapyr	0.025		ug/L	P437576	
		Hydrocodone	0.0020	U	ug/L	P437576	
		Ibuprofen	0.080	U	ug/L	P437576	
		Imidacloprid	0.22		ug/L	P437576	
		Linuron	0.0040	U	ug/L	P437576	
		Mandestrobin	0.0020	U	ug/L	P437576	
		MCP	0.0020	U	ug/L	P437576	
		Naproxen	0.0080	U	ug/L	P437576	
		Primidone	0.0040	U	ug/L	P437576	
		Pyraclostrobin	0.0020	U	ug/L	P437576	
		Silvex	0.0040	U	ug/L	P437576	
		Thiamethoxam	0.11		ug/L	P437576	

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449883	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P437576	
		Triclopyr	0.0040	U	ug/L	P437576	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8321B: MS accuracy for imazapyr could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: HAWTHORNE CREEK AT REYNOLDS ST

Collection Date/Time: 11/07/2023 11:35

Field ID: G3SD0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449845	DEP SOP: NU-094-1	Color (true)	57		PCU	P437592	
	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P437588	
	EPA 300.0 Rev. 2.1	Chloride	160		mg Cl/L	P437937	
		Sulfate	150		mg SO4/L	P437941	
	SM 2320 B-2011	Total Alkalinity	129		mg CaCO3/L	P437915	
	SM 2540 C-2015	TDS	572		mg/L	P438106	
	SM 2540 D-2015	TSS	2	I	mg/L	P437819	
2449846	SM 4500-F- C-2011	Fluoride	0.55		mg F/L	P437918	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P438234	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82	J	mg N/L	P437563	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.44		mg N/L	P437975	
	EPA 365.1 Rev. 2.0	Total-P	0.19		mg P/L	P437713	
2449884	SM 5310 B-2011	Organic Carbon	13		mg C/L	P437785	
	EPA 8321B	2,4-D	0.81		ug/L	P437576	
		Acesulfame K	0.10	U	ug/L	P437555	
		2,4,5-T	0.0040	U	ug/L	P437576	
		AMPA	1.9		ug/L	P437555	
		Acetaminophen	0.0080	U	ug/L	P437576	
		Acetamiprid	0.0020	U	ug/L	P437576	
		Endothall	0.25	U	ug/L	P437555	
		Glufosinate	0.10	U	ug/L	P437555	
		Glyphosate	2.5		ug/L	P437555	
		Afidopyropen	0.0020	U	ug/L	P437576	
		Bentazon	0.014		ug/L	P437576	
		Sucralose	0.71		ug/L	P437555	
		Benzovindiflupyr	0.0020	U	ug/L	P437576	
		Carbamazepine	0.0017	I	ug/L	P437576	
		Clothianidin	0.12		ug/L	P437576	
		Dinotefuran	0.0020	U	ug/L	P437576	
		Diuron	0.43		ug/L	P437576	
		Fenuron	0.056	I	ug/L	P437576	
		Fluridone	8.0E-04	U	ug/L	P437576	
		Imazapyr	0.0086	I	ug/L	P437576	
		Hydrocodone	0.0020	U	ug/L	P437576	
		Ibuprofen	0.080	U	ug/L	P437576	
		Imidacloprid	0.27		ug/L	P437576	
		Linuron	0.0040	U	ug/L	P437576	
		Mandestrobin	0.0020	U	ug/L	P437576	
		MCPP	0.0020	U	ug/L	P437576	
		Naproxen	0.0080	U	ug/L	P437576	
		Primidone	0.0040	U	ug/L	P437576	
		Pyraclostrobin	0.0020	U	ug/L	P437576	
		Silvex	0.0040	U	ug/L	P437576	
		Thiamethoxam	0.16		ug/L	P437576	

Field ID: G3SD0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449884	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P437576	
		Triclopyr	0.0040	U	ug/L	P437576	
2449886	EPA 200.7 Rev. 4.4	Calcium	94.3		mg/L	P437629	
		Iron	170		ug/L	P437629	
		Magnesium	26.9		mg/L	P437629	
		Potassium	8.6		mg/L	P437629	
		Sodium	65.6		mg/L	P437629	
		Strontium	7.02E+03		ug/L	P437629	
		Tin	3.0	U	ug/L	P437629	
		Titanium	0.98	I	ug/L	P437629	
		Vanadium	2.9	I	ug/L	P437629	
		Zinc	5.0	U	ug/L	P437629	
	EPA 200.8 Rev. 5.4	Aluminum	39		ug/L	P437629	
		Antimony	0.66		ug/L	P437629	
		Arsenic	1.26		ug/L	P437629	
		Barium	36.2		ug/L	P437629	
		Beryllium	0.012	I	ug/L	P437629	
		Boron	64.8		ug/L	P437629	
		Cadmium	0.075	I	ug/L	P437629	
		Chromium	0.42	I	ug/L	P437629	
		Cobalt	0.117		ug/L	P437629	
		Copper	0.87		ug/L	P437629	
		Lead	0.20	U	ug/L	P437629	
		Manganese	25.1		ug/L	P437629	
		Molybdenum	2.49		ug/L	P437629	
		Nickel	1.6	I	ug/L	P437629	
		Selenium	0.25	I	ug/L	P437629	
		Silver	0.010	U	ug/L	P437629	
		Thallium	0.10	U	ug/L	P437629	
	SM 2340 B-2011	Hardness	346		mg/L	P437629	

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 351.2 Rev. 2.0: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8321B: MS accuracy for imazapyr 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 titanium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for aluminum are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: FB

Collection Date/Time: 11/07/2023 11:50

Field ID: FB_11072023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449847	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P437592	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P437588	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P437937	
		Sulfate	0.20	U	mg SO4/L	P437941	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P437916	
	SM 2540 C-2015	TDS	15	U	mg/L	P438106	
	SM 2540 D-2015	TSS	2	U	mg/L	P437819	
2449848	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P437919	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P437984	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P437563	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P437975	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P437713	
2449885	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P437785	
	EPA 8321B	2,4-D	0.0020	U	ug/L	P437576	
		Acesulfame K	0.10	U	ug/L	P437555	
		2,4,5-T	0.0040	U	ug/L	P437576	
		AMPA	0.10	U	ug/L	P437555	
		Acetaminophen	0.0080	U	ug/L	P437576	
		Acetamiprid	0.0020	U	ug/L	P437576	
		Endothall	0.25	U	ug/L	P437555	
		Glufosinate	0.10	U	ug/L	P437555	
		Glyphosate	0.10	U	ug/L	P437555	
		Afidopyropen	0.0020	U	ug/L	P437576	
		Bentazon	8.0E-04	U	ug/L	P437576	
		Sucralose	0.010	U	ug/L	P437555	
		Benzovindiflupyr	0.0020	U	ug/L	P437576	
		Carbamazepine	8.0E-04	U	ug/L	P437576	
		Clothianidin	0.0020	U	ug/L	P437576	
		Dinotefuran	0.0020	U	ug/L	P437576	
		Diuron	0.0020	U	ug/L	P437576	
		Fenuron	0.032	U	ug/L	P437576	
		Fluridone	8.0E-04	U	ug/L	P437576	
		Imazapyr	0.0040	U	ug/L	P437576	
		Hydrocodone	0.0020	U	ug/L	P437576	
		Ibuprofen	0.080	U	ug/L	P437576	
		Imidacloprid	0.0020	U	ug/L	P437576	
		Linuron	0.0040	U	ug/L	P437576	
		Mandestrobin	0.0020	U	ug/L	P437576	
		MCP	0.0020	U	ug/L	P437576	
		Naproxen	0.0080	U	ug/L	P437576	
		Primidone	0.0040	U	ug/L	P437576	
		Pyraclostrobin	0.0020	U	ug/L	P437576	
		Silvex	0.0040	U	ug/L	P437576	
		Thiamethoxam	0.0020	U	ug/L	P437576	

Field ID: FB_11072023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449885	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P437576	
		Triclopyr	0.0040	U	ug/L	P437576	
2449887	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P437629	
		Iron	30	U	ug/L	P437629	
		Magnesium	0.040	U	mg/L	P437629	
		Potassium	0.30	U	mg/L	P437629	
		Sodium	0.50	U	mg/L	P437629	
		Strontium	2.0	U	ug/L	P437629	
		Tin	3.0	U	ug/L	P437629	
		Titanium	0.75	U	ug/L	P437629	
		Vanadium	2.0	U	ug/L	P437629	
		Zinc	5.0	U	ug/L	P437629	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P437629	
		Antimony	0.050	U	ug/L	P437629	
		Arsenic	0.050	U	ug/L	P437629	
		Barium	0.20	U	ug/L	P437629	
		Beryllium	0.010	U	ug/L	P437629	
		Boron	2.0	U	ug/L	P437629	
		Cadmium	0.020	U	ug/L	P437629	
		Chromium	0.40	U	ug/L	P437629	
		Cobalt	0.020	U	ug/L	P437629	
		Copper	0.40	U	ug/L	P437629	
		Lead	0.20	U	ug/L	P437629	
		Manganese	0.10	U	ug/L	P437629	
		Molybdenum	0.15	U	ug/L	P437629	
		Nickel	0.50	U	ug/L	P437629	
		Selenium	0.20	U	ug/L	P437629	
		Silver	0.010	U	ug/L	P437629	
		Thallium	0.10	U	ug/L	P437629	

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 imazapyr 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 titanium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for aluminum are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P437592

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437588

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437629

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: P437629

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: P437937

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: P437941

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437984

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438234

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437563

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437975

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437713

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

Reference Method: EPA 8270E
Batch ID: P437705

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Carbophenothion	0.90	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P437705

Component	Result	Code	Units
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P437705

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

Reference Method: EPA 8321B

Batch ID: P437555

Component	Result	Code	Units
-----------	--------	------	-------

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P437555

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: P437576

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

Reference Method: SM 2320 B-2011

Batch ID: P437915

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

Reference Method: SM 2320 B-2011

Batch ID: P437916

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-2015
Batch ID: P438106

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P437819

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P437918

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P437919

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P437785

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: P437592

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.4		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437588

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437629

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	111		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	102		P	85 - 115
Sodium	107		P	85 - 115
Strontium	99.2		P	85 - 115
Tin	97.9		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	99.4		P	85 - 115
Zinc	98.1		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437629

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	99.9		P	85 - 115
Arsenic	100		P	85 - 115
Barium	104		P	85 - 115
Beryllium	97.4		P	85 - 115
Boron	102		P	85 - 115
Cadmium	100		P	85 - 115
Chromium	96.3		P	85 - 115
Cobalt	99.3		P	85 - 115
Copper	101		P	85 - 115
Lead	97.4		P	85 - 115
Manganese	106		P	85 - 115
Molybdenum	92.1		P	85 - 115
Nickel	99.5		P	85 - 115
Selenium	101		P	85 - 115
Silver	101		P	85 - 115
Thallium	99.6		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437937

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	108		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	108		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437984

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438234

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437563

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437975

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437713

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

Reference Method: EPA 8270E
Batch ID: P437705

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	65.5		P	30 - 96.0
Alpha-BHC	93.3		P	70 - 109
Alpha-Chlordane	77.2		P	45 - 107
Beta-BHC	82.7		P	64 - 138
Beta-Cyfluthrin	80.5		P	17 - 141
Bifenthrin	64.6		P	10 - 113
Carbophenothion	52.7		P	24 - 91.0
Chlorothalonil	81.8		P	26 - 180
Cis-Nonachlor	73.7		P	37 - 102
Cypermethrin	88.0		P	20 - 133
Dacthal	86.4		P	69 - 114
DDD-p,p'	79.9		P	42 - 105
DDE-p,p'	67.9		P	42 - 106
DDT-p,p'	84.2		P	42 - 107
Delta-BHC	94.8		P	67 - 144
Deltamethrin	107		P	15 - 149

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P437705

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dichlobenil	83.9		P	46 - 117
Dicofol	83.6		P	34 - 114
Dieldrin	78.9		P	50 - 108
Endosulfan I	86.8		P	55 - 104
Endosulfan II	74.9		P	51 - 111
Endosulfan Sulfate	87.5		P	56 - 121
Endrin	74.1		P	10 - 106
Endrin Aldehyde	70.1		P	34 - 114
Endrin Ketone	107		P	63 - 177
Esfenvalerate	84.1		P	29 - 143
Ethalfuralin	82.4		P	46 - 96.0
Fenpropathrin	85.7		P	28 - 115
Gamma-BHC	93.3		P	65 - 121
Gamma-Chlordane	68.1		P	39 - 103
Heptachlor	82.6		P	39 - 94.0
Heptachlor Epoxide	79.3		P	54 - 104
Hexachlorobenzene	61.8		P	36 - 100
Kepone	106		P	10 - 225
Lambda-Cyhalothrin	70.8		P	10 - 135
Methoprene	64.3		P	10 - 109
Methoxychlor	85.2		P	52 - 112
MGK-264	84.2		P	44 - 117
Mirex	65.9		P	20 - 90.0
Oxychlordane	69.5		P	44 - 102
PCB-1016	101		P	45 - 107
PCB-1260	104		P	40 - 118
Permethrin	80.1		P	18 - 135
Phenothrin	61.9		P	10 - 102
Piperonyl Butoxide	102		P	28 - 156
Prallethrin	67.2		P	28 - 113
Tau-Fluvalinate	75.9		P	10 - 123
Tetramethrin	95.9		P	18 - 158
Trans-Nonachlor	77.8		P	39 - 104
Triclosan Methyl	92.1		P	54 - 108
Trifluralin	89.0		P	46 - 97.0

Reference Method: EPA 8276
Batch ID: P437705

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	75.4		P	52 - 117
Toxaphene	86.4		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P437555

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	103		P	40 - 150
AMPA	68.3		P	40 - 160
Endothall	90.8		P	40 - 160
Glufosinate	89.3		P	40 - 160
Glyphosate	95.5		P	40 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P437555

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	100		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437576

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	95.5		P	40 - 150
2,4,5-T	82.6		P	40 - 150
Acetaminophen	86.9		P	30 - 150
Acetamiprid	84.9		P	40 - 150
Afidopyropen	36.6		P	30 - 150
Bentazon	69.4		P	30 - 150
Benzovindiflupyr	82.8		P	40 - 150
Carbamazepine	70.1		P	40 - 150
Clothianidin	90.9		P	40 - 150
Dinotefuran	100		P	40 - 150
Diuron	68.6		P	40 - 150
Fenuron	92.0		P	40 - 150
Fluridone	87.1		P	40 - 150
Hydrocodone	94.5		P	40 - 150
Ibuprofen	64.6		P	40 - 150
Imazapyr	88.2		P	40 - 150
Imidacloprid	89.8		P	40 - 150
Linuron	75.6		P	40 - 150
Mandestrobin	90.7		P	40 - 150
MCPP	81.9		P	40 - 150
Naproxen	60.5		P	40 - 150
Primidone	84.4		P	40 - 150
Pyraclostrobin	82.3		P	40 - 150
Silvex	81.9		P	40 - 150
Thiamethoxam	89.4		P	40 - 150
Tolfenpyrad	51.7		P	30 - 150
Triclopyr	75.4		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P437915

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P437916

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P438106

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	94.0		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2540 D-2015
Batch ID: P437819

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

Reference Method: SM 4500-F- C-2011
Batch ID: P437918

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	104		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P437919

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

Reference Method: SM 5310 B-2011
Batch ID: P437785

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P437629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449630	Calcium	101		P	80 - 120
2449630	Iron	107	106	P/P	80 - 120
2449630	Magnesium	100		P	80 - 120
2449630	Potassium	106	105	P/P	80 - 120
2449630	Sodium	106	103	P/P	80 - 120
2449630	Strontium	96.5	95.5	P/P	80 - 120
2449630	Tin	93.3	92.5	P/P	80 - 120
2449630	Vanadium	96.9	96.5	P/P	80 - 120
2449630	Zinc	94.5	95.0	P/P	80 - 120
2449954	Calcium	102		P	80 - 120
2449954	Iron	109		P	80 - 120
2449954	Magnesium	108		P	80 - 120
2449954	Potassium	100		P	80 - 120
2449954	Sodium	101		P	80 - 120
2449954	Strontium	97.0		P	80 - 120
2449954	Tin	93.3		P	80 - 120
2449954	Titanium	99.1		P	80 - 120
2449954	Vanadium	98.7		P	80 - 120
2449954	Zinc	97.8		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449630	Antimony	95.5	94.9	P/P	80 - 120
2449630	Arsenic	100	101	P/P	80 - 120
2449630	Barium	104	103	P/P	80 - 120
2449630	Beryllium	97.6	96.1	P/P	80 - 120
2449630	Boron	102	105	P/P	80 - 120
2449630	Cadmium	99.8	102	P/P	80 - 120
2449630	Chromium	99.7	94.7	P/P	80 - 120
2449630	Cobalt	97.6	98.7	P/P	80 - 120
2449630	Copper	98.6	99.1	P/P	80 - 120
2449630	Lead	100	100	P/P	80 - 120
2449630	Manganese	109	110	P/P	80 - 120
2449630	Molybdenum	93.0	93.6	P/P	80 - 120
2449630	Nickel	96.5	96.8	P/P	80 - 120
2449630	Selenium	98.2	101	P/P	80 - 120
2449630	Silver	102	103	P/P	80 - 120
2449630	Thallium	103	103	P/P	80 - 120
2449954	Aluminum	101		P	80 - 120
2449954	Antimony	102		P	80 - 120
2449954	Arsenic	101		P	80 - 120
2449954	Barium	103		P	80 - 120
2449954	Beryllium	99.4		P	80 - 120
2449954	Boron	102		P	80 - 120
2449954	Cadmium	103		P	80 - 120
2449954	Chromium	95.1		P	80 - 120
2449954	Cobalt	96.9		P	80 - 120
2449954	Copper	98.9		P	80 - 120
2449954	Lead	99.5		P	80 - 120
2449954	Manganese	108		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449954	Molybdenum	96.0		P	80 - 120
2449954	Nickel	96.9		P	80 - 120
2449954	Selenium	96.6		P	80 - 120
2449954	Silver	99.7		P	80 - 120
2449954	Thallium	102		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437937

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449657	Chloride	106		P	90 - 110
2449944	Chloride	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449657	Sulfate	107		P	90 - 110
2449944	Sulfate	107		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437984

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449890	Ammonia-N	97.6	98.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438234

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449691	Ammonia-N	98.6	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437563

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449846	Kjeldahl Nitrogen	114	99.8	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437975

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449493	NO2NO3-N	100		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437713

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449709	Total-P	104	106	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P437705

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449880	PCB-1016	101	90.7	P/P	45 - 107
2449880	PCB-1260	121	96.7	F/P	40 - 112
2449981	Aldrin	58.2	58.6	P/P	24 - 81.0
2449981	Alpha-BHC	86.7	84.4	P/P	65 - 110
2449981	Alpha-Chlordane	47.3	45.9	P/P	43 - 119
2449981	Beta-BHC	80.0	86.2	P/P	54 - 165
2449981	Beta-Cyfluthrin	82.9	80.5	P/P	27 - 165
2449981	Bifenthrin	67.2	73.6	P/P	17 - 117
2449981	Carbophenothion	27.2	20.4	P/F	21 - 108
2449981	Chlorothalonil	75.9	58.5	P/P	10 - 255
2449981	Cis-Nonachlor	43.6	38.2	P/P	34 - 98.0
2449981	Cypermethrin	94.9	94.5	P/P	25 - 143
2449981	Dacthal	64.4	62.7	P/P	55 - 139
2449981	DDD-p,p'	55.0	45.1	P/P	30 - 109
2449981	DDE-p,p'	46.7	40.9	P/P	35 - 106
2449981	DDT-p,p'	72.0	71.4	P/P	41 - 101
2449981	Delta-BHC	122	121	P/P	58 - 165
2449981	Deltamethrin	118	125	P/P	10 - 194
2449981	Dichlobenil	46.9	29.4	P/P	22 - 114
2449981	Dicofol	74.2	74.2	P/P	17 - 133
2449981	Dieldrin	75.4	74.9	P/P	45 - 129
2449981	Endosulfan I	93.5	96.4	P/P	49 - 104
2449981	Endosulfan II	49.7	41.1	P/P	37 - 117
2449981	Endosulfan Sulfate	52.6	43.5	P/P	38 - 128
2449981	Endrin	52.2	45.8	P/P	35 - 116
2449981	Endrin Aldehyde	29.3	16.3	P/F	19 - 108
2449981	Endrin Ketone	116	116	P/P	44 - 134
2449981	Esfenvalerate	92.9	96.6	P/P	27 - 176
2449981	Ethalfuralin	74.7	69.2	P/P	49 - 100
2449981	Fenpropathrin	74.0	75.4	P/P	34 - 117
2449981	Gamma-BHC	97.4	88.4	P/P	59 - 129
2449981	Gamma-Chlordane	73.5	62.7	P/P	33 - 107
2449981	Heptachlor	87.7	110	P/F	37 - 94.0
2449981	Heptachlor Epoxide	80.4	87.5	P/P	38 - 118
2449981	Hexachlorobenzene	56.9	65.1	P/P	35 - 97.0
2449981	Kepone	81.0	75.1	P/P	10 - 221
2449981	Lambda-Cyhalothrin	82.5	83.8	P/P	23 - 190
2449981	Methoprene	45.3	38.6	P/P	21 - 109
2449981	Methoxychlor	82.8	88.8	P/P	46 - 118
2449981	MGK-264	61.9	56.1	P/P	39 - 122
2449981	Mirex	57.2	59.0	P/P	25 - 90.0
2449981	Oxychlordane	55.0	61.3	P/P	42 - 100
2449981	Permethrin	87.2	93.5	P/P	33 - 181
2449981	Phenothrin	47.8	43.9	P/P	12 - 125
2449981	Piperonyl Butoxide	69.7	69.1	P/P	10 - 178
2449981	Prallethrin	46.4	44.3	P/P	24 - 122
2449981	Tau-Fluvalinate	84.8	91.9	P/P	13 - 151
2449981	Tetramethrin	109	108	P/P	16 - 172
2449981	Trans-Nonachlor	49.3	50.7	P/P	39 - 100
2449981	Triclosan Methyl	90.3	88.8	P/P	43 - 110
2449981	Trifluralin	71.7	70.3	P/P	45 - 94.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P437705

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449880	Chlordane	53.5	56.7	P/P	43 - 123
2449880	Toxaphene	60.7	65.6	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P437555

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449881	Acesulfame K	118	119	P/P	40 - 150
2449881	AMPA	68.2	75.0	P/P	40 - 160
2449881	Endothall	84.0	98.6	P/P	40 - 160
2449881	Glufosinate	88.2	87.5	P/P	40 - 160
2449881	Glyphosate	88.6	96.5	P/P	40 - 160
2449881	Sucralose	106	114	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437576

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449966	2,4-D	105	117	P/P	40 - 150
2449966	2,4,5-T	80.7	90.1	P/P	40 - 150
2449966	Acetaminophen	110	112	P/P	30 - 150
2449966	Acetamiprid	81.4	91.8	P/P	40 - 150
2449966	Afidopyropen	68.3	79.2	P/P	30 - 150
2449966	Bentazon	40.9	40.2	P/P	30 - 150
2449966	Benzovindiflupyr	86.2	88.7	P/P	40 - 150
2449966	Carbamazepine	64.0	65.5	P/P	40 - 150
2449966	Clothianidin	105	109	P/P	40 - 150
2449966	Dinotefuran	107	112	P/P	40 - 150
2449966	Diuron	61.0	65.3	P/P	40 - 150
2449966	Fenuron	74.6	77.4	P/P	40 - 150
2449966	Fluridone	85.5	88.2	P/P	40 - 150
2449966	Hydrocodone	84.6	88.4	P/P	40 - 150
2449966	Ibuprofen	66.4	72.3	P/P	40 - 150
2449966	Imidacloprid	123	134	P/P	40 - 150
2449966	Linuron	69.8	73.9	P/P	40 - 150
2449966	Mandestrobin	93.1	99.6	P/P	40 - 150
2449966	MCPP	88.6	94.9	P/P	40 - 150
2449966	Naproxen	71.8	73.4	P/P	40 - 150
2449966	Primidone	92.4	94.7	P/P	40 - 150
2449966	Pyraclostrobin	84.7	87.2	P/P	40 - 150
2449966	Silvex	93.1	96.0	P/P	40 - 150
2449966	Thiamethoxam	102	105	P/P	40 - 150
2449966	Tolfenpyrad	57.7	61.1	P/P	30 - 150
2449966	Triclopyr	87.7	91.7	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P437918

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449708	Fluoride	102	103	P/P	94 - 106

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P437919

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449973	Fluoride	102	101	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P437785

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449462	Organic Carbon	98.1	98.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P437588

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449762	Turbidity	3.62	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P437629

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449630	Calcium	2.60	Spike	P	0 - 20
2449630	Iron	0.489	Spike	P	0 - 20
2449630	Magnesium	1.89	Spike	P	0 - 20
2449630	Potassium	0.905	Spike	P	0 - 20
2449630	Sodium	2.11	Spike	P	0 - 20
2449630	Strontium	1.03	Spike	P	0 - 20
2449630	Tin	0.816	Spike	P	0 - 20
2449630	Titanium	4.50	Spike	P	0 - 20
2449630	Vanadium	0.415	Spike	P	0 - 20
2449630	Zinc	0.466	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437629

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449630	Aluminum	4.67	Spike	P	0 - 20
2449630	Antimony	0.648	Spike	P	0 - 20
2449630	Arsenic	1.02	Spike	P	0 - 20
2449630	Barium	0.800	Spike	P	0 - 20
2449630	Beryllium	1.23	Spike	P	0 - 20
2449630	Boron	1.89	Spike	P	0 - 20
2449630	Cadmium	1.99	Spike	P	0 - 20
2449630	Chromium	3.76	Spike	P	0 - 20
2449630	Cobalt	1.03	Spike	P	0 - 20
2449630	Copper	0.426	Spike	P	0 - 20
2449630	Lead	0.180	Spike	P	0 - 20
2449630	Manganese	0.766	Spike	P	0 - 20
2449630	Molybdenum	0.528	Spike	P	0 - 20
2449630	Nickel	0.243	Spike	P	0 - 20
2449630	Selenium	3.19	Spike	P	0 - 20
2449630	Silver	0.760	Spike	P	0 - 20
2449630	Thallium	0.00546	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P437937

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449657	Chloride	1.55	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449657	Sulfate	1.86	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437984

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449890	Ammonia-N	0.798	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438234

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449691	Ammonia-N	1.38	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437563

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449846	Kjeldahl Nitrogen	9.07	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437975

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449493	NO2NO3-N	3.11	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437713

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449709	Total-P	1.67	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P437705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449880	PCB-1016	10.8	Spike	P	0 - 25
2449880	PCB-1260	22.0	Spike	P	0 - 30
2449981	Aldrin	0.649	Spike	P	0 - 41
2449981	Alpha-BHC	2.73	Spike	P	0 - 25
2449981	Alpha-Chlordane	2.71	Spike	P	0 - 32
2449981	Beta-BHC	5.87	Spike	P	0 - 33
2449981	Beta-Cyfluthrin	2.96	Spike	P	0 - 43
2449981	Bifenthrin	9.09	Spike	P	0 - 52
2449981	Carbophenothion	28.5	Spike	P	0 - 49

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P437705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449981	Chlorothalonil	25.9	Spike	P	0 - 82
2449981	Cis-Nonachlor	13.2	Spike	P	0 - 33
2449981	Cypermethrin	0.416	Spike	P	0 - 51
2449981	Dacthal	2.60	Spike	P	0 - 27
2449981	DDD-p,p'	19.9	Spike	P	0 - 39
2449981	DDE-p,p'	13.0	Spike	P	0 - 31
2449981	DDT-p,p'	0.819	Spike	P	0 - 29
2449981	Delta-BHC	0.654	Spike	P	0 - 35
2449981	Deltamethrin	5.17	Spike	P	0 - 100
2449981	Dichlobenil	46.1	Spike	F	0 - 40
2449981	Dicofol	0.0374	Spike	P	0 - 37
2449981	Dieldrin	0.498	Spike	P	0 - 27
2449981	Endosulfan I	3.05	Spike	P	0 - 23
2449981	Endosulfan II	18.9	Spike	P	0 - 34
2449981	Endosulfan Sulfate	19.0	Spike	P	0 - 36
2449981	Endrin	13.1	Spike	P	0 - 45
2449981	Endrin Aldehyde	57.1	Spike	P	0 - 76
2449981	Endrin Ketone	0.570	Spike	P	0 - 43
2449981	Esfenvalerate	3.95	Spike	P	0 - 51
2449981	Ethalfuralin	7.74	Spike	P	0 - 22
2449981	Fenpropathrin	1.86	Spike	P	0 - 49
2449981	Gamma-BHC	9.68	Spike	P	0 - 28
2449981	Gamma-Chlordane	15.9	Spike	P	0 - 40
2449981	Heptachlor	23.0	Spike	P	0 - 29
2449981	Heptachlor Epoxide	4.65	Spike	P	0 - 33
2449981	Hexachlorobenzene	13.4	Spike	P	0 - 36
2449981	Kepone	7.50	Spike	P	0 - 85
2449981	Lambda-Cyhalothrin	1.62	Spike	P	0 - 55
2449981	Methoprene	16.0	Spike	P	0 - 53
2449981	Methoxychlor	6.95	Spike	P	0 - 50
2449981	MGK-264	9.84	Spike	P	0 - 43
2449981	Mirex	3.15	Spike	P	0 - 40
2449981	Oxychlordane	10.8	Spike	P	0 - 31
2449981	Permethrin	6.97	Spike	P	0 - 50
2449981	Phenothrin	8.43	Spike	P	0 - 58
2449981	Piperonyl Butoxide	0.592	Spike	P	0 - 100
2449981	Prallethrin	4.75	Spike	P	0 - 39
2449981	Tau-Fluvalinate	8.05	Spike	P	0 - 54
2449981	Tetramethrin	0.389	Spike	P	0 - 51
2449981	Trans-Nonachlor	2.84	Spike	P	0 - 39
2449981	Triclosan Methyl	1.64	Spike	P	0 - 31
2449981	Trifluralin	1.93	Spike	P	0 - 22

Reference Method: EPA 8276
Batch ID: P437705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449880	Chlordane	5.69	Spike	P	0 - 28
2449880	Toxaphene	7.76	Spike	P	0 - 27

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P437555

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449881	Acesulfame K	0.668	Spike	P	0 - 30
2449881	AMPA	8.78	Spike	P	0 - 30
2449881	Endothall	16.0	Spike	P	0 - 30
2449881	Glufosinate	0.823	Spike	P	0 - 30
2449881	Glyphosate	8.19	Spike	P	0 - 30
2449881	Sucralose	7.76	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P437576

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449966	2,4-D	10.7	Spike	P	0 - 30
2449966	2,4,5-T	11.0	Spike	P	0 - 30
2449966	Acetaminophen	2.15	Spike	P	0 - 30
2449966	Acetamiprid	12.0	Spike	P	0 - 30
2449966	Afidopyropen	14.8	Spike	P	0 - 30
2449966	Bentazon	1.79	Spike	P	0 - 30
2449966	Benzovindiflupyr	2.95	Spike	P	0 - 30
2449966	Carbamazepine	2.42	Spike	P	0 - 30
2449966	Clothianidin	3.46	Spike	P	0 - 30
2449966	Dinotefuran	4.98	Spike	P	0 - 30
2449966	Diuron	6.74	Spike	P	0 - 30
2449966	Fenuron	3.71	Spike	P	0 - 30
2449966	Fluridone	3.06	Spike	P	0 - 30
2449966	Hydrocodone	4.31	Spike	P	0 - 30
2449966	Ibuprofen	8.52	Spike	P	0 - 30
2449966	Imazapyr	0.603	Spike	P	0 - 30
2449966	Imidacloprid	8.58	Spike	P	0 - 30
2449966	Linuron	5.62	Spike	P	0 - 30
2449966	Mandestrobin	6.65	Spike	P	0 - 30
2449966	MCPP	6.81	Spike	P	0 - 30
2449966	Naproxen	2.13	Spike	P	0 - 30
2449966	Primidone	2.52	Spike	P	0 - 30
2449966	Pyraclostrobin	2.97	Spike	P	0 - 30
2449966	Silvex	3.13	Spike	P	0 - 30
2449966	Thiamethoxam	2.97	Spike	P	0 - 30
2449966	Tolfenpyrad	5.64	Spike	P	0 - 30
2449966	Triclopyr	4.40	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P437915

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449708	Total Alkalinity	0.371	Sample	P	0 - 3.9

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P437916

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449973	Total Alkalinity	0.00966	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P438106

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449420	TDS	6.99	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P437918

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449708	Fluoride	0.467	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P437919

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449973	Fluoride	0.467	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P437785

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449462	Organic Carbon	0.168	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2449880
Field Sample ID: G3SD0159

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	109	P	37 - 129
EPA 8270E	Decachlorobiphenyl	78.5	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	63.6	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	48.8	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	61.9	P	28 - 102
EPA 8276	PCNB	86.8	P	49 - 115

Lab Sample ID: 2449881
Field Sample ID: G3SD0237

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	79.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	62.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	46.8	P	30 - 160
EPA 8321B	Diuron-d6	44.4	P	30 - 160
EPA 8321B	Endothall-d6	91.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	68.6	P	30 - 160
EPA 8321B	Primidone-d5	43.9	P	30 - 160
EPA 8321B	Sucralose-d6	122	P	30 - 160

Lab Sample ID: 2449882
Field Sample ID: G3SD0096

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	91.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	69.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	53.3	P	30 - 160
EPA 8321B	Diuron-d6	47.7	P	30 - 160
EPA 8321B	Endothall-d6	104	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.9	P	30 - 160
EPA 8321B	Primidone-d5	50.7	P	30 - 160
EPA 8321B	Sucralose-d6	99.8	P	30 - 160

Lab Sample ID: 2449883
Field Sample ID: G3SD0159

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	94.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	82.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	54.3	P	30 - 160
EPA 8321B	Diuron-d6	51.9	P	30 - 160
EPA 8321B	Endothall-d6	92.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	92.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	78.1	P	30 - 160
EPA 8321B	Primidone-d5	61.2	P	30 - 160
EPA 8321B	Sucralose-d6	90.0	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2449884
Field Sample ID: G3SD0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	93.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	77.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	53.5	P	30 - 160
EPA 8321B	Diuron-d6	51.4	P	30 - 160
EPA 8321B	Endothall-d6	101	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	65.8	P	30 - 160
EPA 8321B	Primidone-d5	59.1	P	30 - 160
EPA 8321B	Sucralose-d6	91.6	P	30 - 160

Lab Sample ID: 2449885
Field Sample ID: FB_11072023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	84.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	84.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	81.4	P	30 - 160
EPA 8321B	Diuron-d6	79.7	P	30 - 160
EPA 8321B	Endothall-d6	96.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	69.8	P	30 - 160
EPA 8321B	Primidone-d5	82.2	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A122607

Included Lab Sample IDs: 2449881, 2449882, 2449883, 2449884, 2449885

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	62.2	72.4	P/P	60 - 160
AMPA	72.4	80.1	P/P	60 - 160
Endothall	90.0	91.2	P/P	60 - 160
Endothall	91.7	90.0	P/P	60 - 160
Glufosinate	82.3	88.9	P/P	60 - 160
Glufosinate	88.9	83.3	P/P	60 - 160
Glyphosate	85.6	85.1	P/P	60 - 160
Glyphosate	91.2	85.6	P/P	60 - 160

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A122634

Included Lab Sample IDs: 2449845, 2449847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	100	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1

Run ID: A122635

Included Lab Sample IDs: 2449845, 2449847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.4	99.1	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122684

Included Lab Sample IDs: 2449881, 2449882, 2449883, 2449884, 2449885

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	115	127	P/P	60 - 160
Acesulfame K	119	127	P/P	60 - 160
Sucralose	105	114	P/P	60 - 160
Sucralose	112	121	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122697

Included Lab Sample IDs: 2449846, 2449848

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.6	98.6	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A122698

Included Lab Sample IDs: 2449886, 2449887

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	100	102	P/P	90 - 110
Calcium	102	102	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Iron	99.5	101	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Magnesium	99.6	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A122698

Included Lab Sample IDs: 2449886, 2449887

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Potassium	100	100	P/P	90 - 110
Potassium	98.7	100	P/P	90 - 110
Sodium	98.7	99.7	P/P	90 - 110
Sodium	99.7	100	P/P	90 - 110
Strontium	99.0	99.5	P/P	90 - 110
Strontium	99.5	97.9	P/P	90 - 110
Tin	99.3	99.7	P/P	90 - 110
Tin	99.7	98.7	P/P	90 - 110
Titanium	101	101	P/P	90 - 110
Titanium	101	100	P/P	90 - 110
Vanadium	99.3	98.8	P/P	90 - 110
Vanadium	99.4	99.3	P/P	90 - 110
Zinc	100	99.8	P/P	90 - 110
Zinc	99.8	99.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122699

Included Lab Sample IDs: 2449886, 2449887

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	102	P/P	90 - 110
Aluminum	102	103	P/P	90 - 110
Arsenic	101	101	P/P	90 - 110
Arsenic	98.6	100	P/P	90 - 110
Barium	100	101	P/P	90 - 110
Barium	101	100	P/P	90 - 110
Beryllium	101	100	P/P	90 - 110
Beryllium	103	101	P/P	90 - 110
Boron	103	102	P/P	90 - 110
Boron	98.8	98.6	P/P	90 - 110
Cadmium	101	101	P/P	90 - 110
Cadmium	99.6	100	P/P	90 - 110
Chromium	95.8	98.4	P/P	90 - 110
Chromium	98.1	97.8	P/P	90 - 110
Cobalt	95.3	94.2	P/P	90 - 110
Cobalt	97.3	97.9	P/P	90 - 110
Copper	100	101	P/P	90 - 110
Copper	96.8	96.3	P/P	90 - 110
Lead	98.7	100	P/P	90 - 110
Lead	99.4	100	P/P	90 - 110
Manganese	104	108	P/P	90 - 110
Manganese	107	105	P/P	90 - 110
Molybdenum	93.1	93.5	P/P	90 - 110
Molybdenum	94.0	93.4	P/P	90 - 110
Nickel	100	102	P/P	90 - 110
Nickel	99.1	101	P/P	90 - 110
Selenium	101	102	P/P	90 - 110
Selenium	101	101	P/P	90 - 110
Silver	95.5	95.5	P/P	90 - 110
Silver	95.9	95.9	P/P	90 - 110
Thallium	96.5	97.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122699

Included Lab Sample IDs: 2449886, 2449887

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Thallium	96.9	97.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122714

Included Lab Sample IDs: 2449846

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.4	98.9	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122718

Included Lab Sample IDs: 2449886, 2449887

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	97.5	98.1	P/P	90 - 110
Antimony	98.1	98.8	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A122724

Included Lab Sample IDs: 2449846, 2449848

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	96.5	P/P	90 - 110
Organic Carbon	96.5	96.4	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122727

Included Lab Sample IDs: 2449881, 2449882, 2449883, 2449884, 2449885

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	102	93.2	P/P	50 - 150
2,4,5-T	108	93.4	P/P	50 - 150
Acetaminophen	111	107	P/P	60 - 160
Acetamiprid	108	109	P/P	50 - 150
Afidopyropen	97.1	98.6	P/P	50 - 150
Bentazon	88.5	94.0	P/P	50 - 160
Benzovindiflupyr	105	105	P/P	50 - 150
Carbamazepine	104	104	P/P	60 - 150
Clothianidin	106	109	P/P	60 - 150
Dinotefuran	110	110	P/P	50 - 150
Diuron	107	107	P/P	60 - 160
Fenuron	106	106	P/P	60 - 150
Fluridone	109	110	P/P	60 - 160
Hydrocodone	111	112	P/P	60 - 150
Ibuprofen	88.6	99.5	P/P	50 - 160
Imazapyr	92.7	89.5	P/P	50 - 150
Imidacloprid	102	102	P/P	60 - 150
Linuron	96.7	90.8	P/P	60 - 150
Mandestrobin	108	110	P/P	50 - 150
MCPP	99.0	94.2	P/P	50 - 150
Naproxen	74.3	95.9	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A122727

Included Lab Sample IDs: 2449881, 2449882, 2449883, 2449884, 2449885

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Primidone	99.6	99.8	P/P	60 - 150
Pyraclostrobin	105	105	P/P	60 - 150
Silvex	102	91.2	P/P	50 - 150
Thiamethoxam	115	111	P/P	50 - 150
Tolfenpyrad	97.3	97.7	P/P	60 - 150
Triclopyr	96.4	93.3	P/P	50 - 150

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A122736

Included Lab Sample IDs: 2449845, 2449847

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122742

Included Lab Sample IDs: 2449848

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

Reference Method: SM 2320 B-2011

Run ID: A122774

Included Lab Sample IDs: 2449845, 2449847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.8	102	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A122774

Included Lab Sample IDs: 2449845, 2449847

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122800

Included Lab Sample IDs: 2449846, 2449848

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A122806

Included Lab Sample IDs: 2449848

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.0	99.4	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E
 Run ID: A122903
 Included Lab Sample IDs: 2449880

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	92.6		P	80 - 120
Alpha-BHC	98.9		P	80 - 120
Alpha-Chlordane	102		P	80 - 120
Beta-BHC	103		P	80 - 120
Beta-Cyfluthrin	97.9		P	80 - 120
Bifenthrin	103		P	80 - 120
Carbophenothion	95.7		P	80 - 120
Chlorothalonil	107		P	80 - 120
Cis-Nonachlor	100		P	80 - 120
Cypermethrin	99.9		P	80 - 120
Dacthal	97.9		P	80 - 120
DDD-p,p'	103		P	80 - 120
DDE-p,p'	98.1		P	80 - 120
DDT-p,p'	103		P	80 - 120
Delta-BHC	104		P	80 - 120
Deltamethrin	102		P	80 - 120
Dichlobenil	96.7		P	80 - 120
Dicofol	92.8		P	80 - 120
Dieldrin	102		P	80 - 120
Endosulfan I	109		P	80 - 120
Endosulfan II	99.8		P	80 - 120
Endosulfan Sulfate	94.2		P	80 - 120
Endrin	95.1		P	80 - 120
Endrin Aldehyde	93.8		P	80 - 120
Endrin Ketone	106		P	80 - 120
Esfenvalerate	102		P	80 - 120
Ethalfuralin	98.1		P	80 - 120
Fenpropathrin	101		P	80 - 120
Gamma-BHC	105		P	80 - 120
Gamma-Chlordane	97.1		P	80 - 120
Heptachlor	92.9		P	80 - 120
Heptachlor Epoxide	105		P	80 - 120
Hexachlorobenzene	104		P	80 - 120
Kepone	83.3		P	80 - 120
Lambda-Cyhalothrin	102		P	80 - 120
Methoprene	94.4		P	80 - 120
Methoxychlor	97.4		P	80 - 120
MGK-264	91.5		P	80 - 120
Mirex	106		P	80 - 120
Oxychlordane	93.9		P	80 - 120
Permethrin	103		P	80 - 120
Phenothrin	94.5		P	80 - 120
Piperonyl Butoxide	85.7		P	80 - 120
Prallethrin	95.1		P	80 - 120
Tau-Fluvalinate	99.6		P	80 - 120
Tetramethrin	92.6		P	80 - 120
Trans-Nonachlor	102		P	80 - 120
Triclosan Methyl	112		P	80 - 120
Trifluralin	104		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122905
Included Lab Sample IDs: 2449880

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	103		P	80 - 120
PCB-1260	85.3		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A122914
Included Lab Sample IDs: 2449846

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.2	100	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A123106
Included Lab Sample IDs: 2449880

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	103		P	80 - 120
Toxaphene	107		P	80 - 120

* 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)	98.4						
EPA 180.1 Rev. 2.0	Turbidity	104					3.62	
EPA 200.7 Rev. 4.4	Calcium	105	101	102				2.60
	Iron	111	107	106	109			0.489
	Magnesium	105	100	108				1.89
	Potassium	102	106	105	100			0.905
	Sodium	107	106	103	101			2.11
	Strontium	99.2	96.5	95.5	97.0			1.03
	Tin	97.9	93.3	92.5	93.3			0.816
	Titanium	101	99.1					4.50
	Vanadium	99.4	96.9	96.5	98.7			0.415
	Zinc	98.1	94.5	95.0	97.8			0.466
EPA 200.8 Rev. 5.4	Aluminum	102	101					4.67
	Antimony	99.9	95.5	94.9	102			0.648
	Arsenic	100	100	101	101			1.02
	Barium	104	104	103	103			0.800
	Beryllium	97.4	97.6	96.1	99.4			1.23
	Boron	102	102	105	102			1.89
	Cadmium	100	99.8	102	103			1.99
	Chromium	96.3	99.7	94.7	95.1			3.76
	Cobalt	99.3	97.6	98.7	96.9			1.03
	Copper	101	98.9	98.6	99.1			0.426
	Lead	97.4	100	100	99.5			0.180
	Manganese	106	109	110	108			0.766
	Molybdenum	92.1	93.0	93.6	96.0			0.528
	Nickel	99.5	96.5	96.8	96.9			0.243
	Selenium	101	98.2	101	96.6			3.19
	Silver	101	102	103	99.7			0.760
	Thallium	99.6	103	103	102			0.0054
EPA 300.0 Rev. 2.1	Chloride	108	106	106			1.55	
	Sulfate	108	107	107			1.86	
EPA 350.1 Rev. 2.0	Ammonia-N	99.6	97.6	98.8				0.798
	Ammonia-N	94.2	98.6	101				1.38
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.6	114	99.8				9.07
EPA 353.2 Rev. 2.0	NO2NO3-N	102	100					3.11
EPA 365.1 Rev. 2.0	Total-P	100	104	106				1.67
EPA 8270E	Aldrin	65.5	58.2	58.6				0.649
	Alpha-BHC	93.3	86.7	84.4				2.73
	Alpha-Chlordane	77.2	47.3	45.9				2.71
	Beta-BHC	82.7	80.0	86.2				5.87
	Beta-Cyfluthrin	80.5	82.9	80.5				2.96
	Bifenthrin	64.6	67.2	73.6				9.09
	Carbophenothion	52.7	27.2	20.4				28.5
	Chlorothalonil	81.8	75.9	58.5				25.9
	Cis-Nonachlor	73.7	43.6	38.2				13.2
	Cypermethrin	88.0	94.9	94.5				0.416
	Dacthal	86.4	64.4	62.7				2.60
	DDD-p,p'	79.9	55.0	45.1				19.9
	DDE-p,p'	67.9	46.7	40.9				13.0
	DDT-p,p'	84.2	72.0	71.4				0.819
	Delta-BHC	94.8	122	121				0.654
	Deltamethrin	107	118	125				5.17
	Dichlobenil	83.9	46.9	29.4				46.1
	Dicofol	83.6	74.2	74.2				0.0374

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Dieldrin	78.9	75.4	74.9			0.498
	Endosulfan I	86.8	93.5	96.4			3.05
	Endosulfan II	74.9	49.7	41.1			18.9
	Endosulfan Sulfate	87.5	52.6	43.5			19.0
	Endrin	74.1	45.8	52.2			13.1
	Endrin Aldehyde	70.1	16.3	29.3			57.1
	Endrin Ketone	107	116	116			0.570
	Esfenvalerate	84.1	96.6	92.9			3.95
	Ethalfuralin	82.4	69.2	74.7			7.74
	Fenpropathrin	85.7	75.4	74.0			1.86
	Gamma-BHC	93.3	88.4	97.4			9.68
	Gamma-Chlordane	68.1	62.7	73.5			15.9
	Heptachlor	82.6	110	87.7			23.0
	Heptachlor Epoxide	79.3	87.5	80.4			4.65
	Hexachlorobenzene	61.8	65.1	56.9			13.4
	Kepone	106	75.1	81.0			7.50
	Lambda-Cyhalothrin	70.8	83.8	82.5			1.62
	Methoprene	64.3	38.6	45.3			16.0
	Methoxychlor	85.2	88.8	82.8			6.95
	MGK-264	84.2	56.1	61.9			9.84
	Mirex	65.9	59.0	57.2			3.15
	Oxychlordane	69.5	61.3	55.0			10.8
	PCB-1016	101	101	90.7			10.8
	PCB-1260	104	121	96.7			22.0
	Permethrin	80.1	93.5	87.2			6.97
	Phenothrin	61.9	43.9	47.8			8.43
	Piperonyl Butoxide	102	69.1	69.7			0.592
	Prallethrin	67.2	44.3	46.4			4.75
	Tau-Fluvalinate	75.9	91.9	84.8			8.05
	Tetramethrin	95.9	108	109			0.389
	Trans-Nonachlor	77.8	50.7	49.3			2.84
	Triclosan Methyl	92.1	88.8	90.3			1.64
	Trifluralin	89.0	70.3	71.7			1.93
EPA 8276	Chlordane	75.4	53.5	56.7			5.69
	Toxaphene	86.4	60.7	65.6			7.76
EPA 8321B	2,4-D	95.5	105	117			10.7
	2,4,5-T	82.6	80.7	90.1			11.0
	Acesulfame K	103	118	119			0.668
	Acetaminophen	86.9	110	112			2.15
	Acetamiprid	84.9	81.4	91.8			12.0
	Afidopyropen	36.6	68.3	79.2			14.8
	AMPA	68.3	68.2	75.0			8.78
	Bentazon	69.4	40.9	40.2			1.79
	Benzovindiflupyr	82.8	86.2	88.7			2.95
	Carbamazepine	70.1	64.0	65.5			2.42
	Clothianidin	90.9	105	109			3.46
	Dinotefuran	100	107	112			4.98
	Diuron	68.6	61.0	65.3			6.74
	Endothall	90.8	84.0	98.6			16.0
	Fenuron	92.0	74.6	77.4			3.71
	Fluridone	87.1	85.5	88.2			3.06
	Glufosinate	89.3	88.2	87.5			0.823
	Glyphosate	95.5	88.6	96.5			8.19
	Hydrocodone	94.5	84.6	88.4			4.31

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Ibuprofen	64.6	66.4	72.3		8.52
	Imazapyr	88.2				0.603
	Imidacloprid	89.8	123	134		8.58
	Linuron	75.6	69.8	73.9		5.62
	Mandestrobin	90.7	93.1	99.6		6.65
	MCPP	81.9	88.6	94.9		6.81
	Naproxen	60.5	71.8	73.4		2.13
	Primidone	84.4	92.4	94.7		2.52
	Pyraclostrobin	82.3	84.7	87.2		2.97
	Silvex	81.9	93.1	96.0		3.13
	Sucralose	100	106	114		7.76
	Thiamethoxam	89.4	102	105		2.97
	Tolfenpyrad	51.7	57.7	61.1		5.64
	Triclopyr	75.4	87.7	91.7		4.40
SM 2320 B-2011	Total Alkalinity	101			0.371	
	Total Alkalinity	101			0.0096	
SM 2540 C-2015	TDS	94.0			6.99	
SM 2540 D-2015	TSS	102				
SM 4500-F- C-2011	Fluoride	104	102	103		0.467
	Fluoride	103	102	101		0.467
SM 5310 B-2011	Organic Carbon	95.6	98.1	98.4		0.168

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2449845, 2449847
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2449845, 2449847
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2449886, 2449887
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2449886, 2449887
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2449845, 2449847
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2449845, 2449847
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2449846, 2449848
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2449846, 2449848
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2449846, 2449848
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2449846, 2449848
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2449880
EPA 8270E	PCBs in water matrices by GC/MS/MS	2449880
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2449880
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2449881, 2449882, 2449883, 2449884, 2449885
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2449845, 2449847
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2449886
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2449845, 2449847
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2449845, 2449847
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2449845, 2449847
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2449846, 2449848

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	11/08/2023			11/08/2023 15:31	Anna M. Plaviak	2449845
	11/08/2023			11/08/2023 15:32	Anna M. Plaviak	2449847
EPA 180.1 Rev. 2.0	11/08/2023			11/08/2023 14:09	Samantha L Bates	2449845
	11/08/2023			11/08/2023 14:12	Samantha L Bates	2449847
EPA 200.7 Rev. 4.4	11/08/2023	11/09/2023 13:40	George D Taylor	11/13/2023 17:21	Chase Roberts	2449887
	11/08/2023	11/09/2023 13:40	George D Taylor	11/13/2023 19:43	Chase Roberts	2449886
EPA 200.8 Rev. 5.4	11/08/2023	11/09/2023 13:40	George D Taylor	11/13/2023 18:11	Emily M Philpot	2449887
	11/08/2023	11/09/2023 13:40	George D Taylor	11/13/2023 21:44	Emily M Philpot	2449886
	11/08/2023	11/09/2023 13:40	George D Taylor	11/14/2023 15:39	Emily M Philpot	2449887
	11/08/2023	11/09/2023 13:40	George D Taylor	11/14/2023 17:24	Emily M Philpot	2449886
	11/08/2023			11/16/2023 08:47	James L Waggeberby	2449845
EPA 300.0 Rev. 2.1	11/08/2023			11/16/2023 09:02	James L Waggeberby	2449847
	11/08/2023			11/17/2023 15:02	Khloe J Berg	2449848
EPA 350.1 Rev. 2.0	11/08/2023			11/28/2023 11:47	Khloe J Berg	2449846
	11/08/2023	11/09/2023 11:24	Simonne.V. Calhoun	11/13/2023 15:14	Samantha L Bates	2449846
EPA 351.2 Rev. 2.0	11/08/2023	11/09/2023 11:24	Simonne.V. Calhoun	11/13/2023 15:19	Samantha L Bates	2449848
	11/08/2023			11/17/2023 12:08	Fadila Guebre	2449846
EPA 353.2 Rev. 2.0	11/08/2023			11/17/2023 12:09	Fadila Guebre	2449848
	11/08/2023	11/14/2023 15:38	Adam P Silver	11/14/2023 19:19	James L Waggeberby	2449846
EPA 365.1 Rev. 2.0	11/08/2023	11/14/2023 15:38	Adam P Silver	11/15/2023 12:15	James L Waggeberby	2449848
	11/08/2023	11/13/2023 08:00	Fe-Val Siddell	11/28/2023 00:13	Vandana T. Nagar	2449880
EPA 8270E	11/08/2023	11/13/2023 08:00	Fe-Val Siddell	11/28/2023 00:28	Lipi Saha	2449880
EPA 8276	11/08/2023	11/13/2023 08:00	Fe-Val Siddell	12/08/2023 03:25	Arthur Maknenko	2449880
EPA 8321B	11/08/2023	11/08/2023 16:00	Hana Lee	11/08/2023 21:26	Tae K Lee	2449881
	11/08/2023	11/08/2023 16:00	Hana Lee	11/08/2023 22:08	Tae K Lee	2449882
	11/08/2023	11/08/2023 16:00	Hana Lee	11/08/2023 22:21	Tae K Lee	2449883
	11/08/2023	11/08/2023 16:00	Hana Lee	11/08/2023 22:35	Tae K Lee	2449884
	11/08/2023	11/08/2023 16:00	Hana Lee	11/08/2023 22:49	Tae K Lee	2449885
	11/08/2023	11/08/2023 16:00	Hana Lee	11/09/2023 18:16	Tae K Lee	2449882
	11/08/2023	11/08/2023 16:00	Hana Lee	11/09/2023 18:44	Tae K Lee	2449884
	11/08/2023	11/08/2023 16:00	Hana Lee	11/09/2023 18:58	Tae K Lee	2449885
	11/08/2023	11/08/2023 16:00	Hana Lee	11/09/2023 23:53	Tae K Lee	2449881
	11/08/2023	11/08/2023 16:00	Hana Lee	11/10/2023 00:07	Tae K Lee	2449883
	11/08/2023	11/13/2023 09:00	Hoor Shaik	11/14/2023 20:06	Juyoung Kim	2449881
	11/08/2023	11/13/2023 09:00	Hoor Shaik	11/14/2023 20:24	Juyoung Kim	2449882
	11/08/2023	11/13/2023 09:00	Hoor Shaik	11/14/2023 20:42	Juyoung Kim	2449883
	11/08/2023	11/13/2023 09:00	Hoor Shaik	11/14/2023 21:00	Juyoung Kim	2449884
	11/08/2023	11/13/2023 09:00	Hoor Shaik	11/14/2023 21:18	Juyoung Kim	2449885
SM 2320 B-2011	11/08/2023			11/15/2023 22:15	Dale L. Simmons	2449845
	11/08/2023			11/15/2023 23:31	Dale L. Simmons	2449847

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2340 B-2011	11/08/2023			11/13/2023 19:43	Chase Roberts	2449886
SM 2540 C-2015	11/08/2023			11/09/2023 13:42	Yijie Li	2449845, 2449847
SM 2540 D-2015	11/08/2023			11/09/2023 13:42	Yijie Li	2449845, 2449847
SM 4500-F- C-2011	11/08/2023			11/15/2023 22:15	Dale L. Simmons	2449845
	11/08/2023			11/15/2023 23:31	Dale L. Simmons	2449847
SM 5310 B-2011	11/08/2023			11/13/2023 20:12	Khloe J Berg	2449846
	11/08/2023			11/13/2023 20:54	Khloe J Berg	2449848