

Chemical Analysis Report

SO-DIST-2023-05-03-01

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

Event Description: **2023 SMP: Stadium Arcadia**
Request ID: **RQ-2023-04-24-70**
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

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Certified by: Colin Wright, Program Administrator

Date Certified: 23-MAY-2023 11:01

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light pink rectangular background.

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: HAWTHORNE CREEK AT REYNOLDS ST

Collection Date/Time: 05/02/2023 11:10

Field ID: G3SD0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405222	DEP SOP: NU-094-1	Color (true)	68		PCU	P429362	
	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P429347	
	EPA 300.0 Rev. 2.1	Chloride	210		mg Cl/L	P429564	
		Sulfate	160		mg SO4/L	P429567	
	SM 2320 B-2011	Total Alkalinity	117		mg CaCO3/L	P429832	
	SM 2540 C-2015	TDS	682		mg/L	P429834	
	SM 2540 D-2015	TSS	3	I	mg/L	P429764	
	SM 4500-F- C-2011	Fluoride	0.47		mg F/L	P429696	
2405223	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P429476	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P429520	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P429639	
	EPA 365.1 Rev. 2.0	Total-P	0.32		mg P/L	P429464	
	SM 5310 B-2011	Organic Carbon	15		mg C/L	P429582	
2405265	EPA 8321B	2,4-D	0.025		ug/L	P429412	
		Acesulfame K	0.10	U	ug/L	P429244	
		2,4,5-T	0.0040	U	ug/L	P429412	
		AMPA	2.8		ug/L	P429244	
		Acetaminophen	0.0080	U	ug/L	P429412	
		Acetamiprid	0.0020	U	ug/L	P429412	
		Endothall	0.25	U	ug/L	P429244	
		Glufosinate	0.10	U	ug/L	P429244	
		Glyphosate	1.3		ug/L	P429244	
		Afidopyropen	0.0020	U	ug/L	P429412	
		Sucralose	2.0		ug/L	P429244	
		Bentazon	0.011		ug/L	P429412	MS
		Benzovindiflupyr	0.0020	U	ug/L	P429412	
		Carbamazepine	0.0060		ug/L	P429412	
		Clothianidin	0.29		ug/L	P429412	
		Dinotefuran	0.0020	U	ug/L	P429412	
		Diuron	0.27		ug/L	P429412	
		Fenuron	0.17		ug/L	P429412	
		Fluridone	8.0E-04	U	ug/L	P429412	
		Imazapyr	0.0040	U	ug/L	P429412	
		Hydrocodone	0.0020	U	ug/L	P429412	
		Ibuprofen	0.080	U	ug/L	P429412	
		Imidacloprid	0.71		ug/L	P429412	
		Linuron	0.0040	U	ug/L	P429412	
		Mandestrobin	0.0020	U	ug/L	P429412	
		MCPP	0.0020	U	ug/L	P429412	
		Naproxen	0.0080	U	ug/L	P429412	
		Primidone	0.015	I	ug/L	P429412	
		Pyraclostrobin	0.0020	U	ug/L	P429412	
		Silvex	0.0040	U	ug/L	P429412	
		Thiamethoxam	0.48		ug/L	P429412	

Field ID: G3SD0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405265	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P429412	
		Triclopyr	0.0040	U	ug/L	P429412	
2405267	EPA 200.7 Rev. 4.4	Calcium	90.9		mg/L	P429542	
		Iron	100	I	ug/L	P429542	
		Magnesium	30.8		mg/L	P429542	
		Potassium	12.8		mg/L	P429542	
		Sodium	86.2		mg/L	P429542	
		Strontium	1.12E+04		ug/L	P429542	
		Tin	3.0	U	ug/L	P429542	
		Titanium	0.75	U	ug/L	P429542	
		Vanadium	3.0	I	ug/L	P429542	
		Zinc	6.8	I	ug/L	P429542	
	EPA 200.8 Rev. 5.4	Aluminum	41		ug/L	P429542	
		Antimony	0.72		ug/L	P429542	
		Arsenic	1.65		ug/L	P429542	
		Barium	40.7		ug/L	P429542	
		Beryllium	0.011	I	ug/L	P429542	
		Boron	76.1		ug/L	P429542	
		Cadmium	0.020	U	ug/L	P429542	
		Chromium	0.43	I	ug/L	P429542	
		Cobalt	0.136		ug/L	P429542	
		Copper	1.29		ug/L	P429542	
		Lead	0.20	U	ug/L	P429542	
		Manganese	13.3		ug/L	P429542	
		Molybdenum	3.86		ug/L	P429542	
		Nickel	2.0	I	ug/L	P429542	
		Selenium	0.41	I	ug/L	P429542	
		Silver	0.010	U	ug/L	P429542	
		Thallium	0.10	U	ug/L	P429542	
	SM 2340 B-2011	Hardness	354		mg/L	P429542	

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: 05/02/2023 11:30

Field ID: FB_05022023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405224	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P429362	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P429347	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P429564	
		Sulfate	0.20	U	mg SO4/L	P429567	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P429832	
	SM 2540 C-2015	TDS	15	U	mg/L	P429834	
	SM 2540 D-2015	TSS	2	U	mg/L	P429764	
2405225	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P429696	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P429476	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P429521	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P429639	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P429464	
2405266	SM 5310 B-2011	Organic Carbon	0.79	I	mg C/L	P429582	
	EPA 8321B	2,4-D	0.0020	U	ug/L	P429412	
		Acesulfame K	0.10	U	ug/L	P429244	
		2,4,5-T	0.0040	U	ug/L	P429412	
		AMPA	0.10	U	ug/L	P429244	
		Acetaminophen	0.0080	U	ug/L	P429412	
		Acetamiprid	0.0020	U	ug/L	P429412	
		Endothall	0.25	U	ug/L	P429244	
		Glufosinate	0.10	U	ug/L	P429244	
		Glyphosate	0.10	U	ug/L	P429244	
		Afidopyropen	0.0020	U	ug/L	P429412	
		Sucralose	0.010	U	ug/L	P429244	
		Bentazon	8.0E-04	U	ug/L	P429412	MS
		Benzovindiflupyr	0.0020	U	ug/L	P429412	
		Carbamazepine	8.0E-04	U	ug/L	P429412	
		Clothianidin	0.0020	U	ug/L	P429412	
		Dinotefuran	0.0020	U	ug/L	P429412	
		Diuron	0.0020	U	ug/L	P429412	
		Fenuron	0.032	U	ug/L	P429412	
		Fluridone	8.0E-04	U	ug/L	P429412	
		Imazapyr	0.0040	U	ug/L	P429412	
		Hydrocodone	0.0020	U	ug/L	P429412	
		Ibuprofen	0.080	U	ug/L	P429412	
		Imidacloprid	0.0020	U	ug/L	P429412	
		Linuron	0.0040	U	ug/L	P429412	
		Mandestrobin	0.0020	U	ug/L	P429412	
		MCPP	0.0020	U	ug/L	P429412	
		Naproxen	0.0080	U	ug/L	P429412	
		Primidone	0.0040	U	ug/L	P429412	
		Pyraclostrobin	0.0020	U	ug/L	P429412	
		Silvex	0.0040	U	ug/L	P429412	
		Thiamethoxam	0.0020	U	ug/L	P429412	

Field ID: FB_05022023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405266	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P429412	
		Triclopyr	0.0040	U	ug/L	P429412	
2405268	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P429542	
		Iron	30	U	ug/L	P429542	
		Magnesium	0.040	U	mg/L	P429542	
		Potassium	0.30	U	mg/L	P429542	
		Sodium	0.50	U	mg/L	P429542	
		Strontium	2.0	U	ug/L	P429542	
		Tin	3.0	U	ug/L	P429542	
		Titanium	0.75	U	ug/L	P429542	
		Vanadium	2.0	U	ug/L	P429542	
		Zinc	5.0	U	ug/L	P429542	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P429542	
		Antimony	0.050	U	ug/L	P429542	
		Arsenic	0.050	U	ug/L	P429542	
		Barium	0.20	U	ug/L	P429542	
		Beryllium	0.010	U	ug/L	P429542	
		Boron	2.0	U	ug/L	P429542	
		Cadmium	0.020	U	ug/L	P429542	
		Chromium	0.40	U	ug/L	P429542	
		Cobalt	0.020	U	ug/L	P429542	
		Copper	0.40	U	ug/L	P429542	
		Lead	0.20	U	ug/L	P429542	
		Manganese	0.10	U	ug/L	P429542	
		Molybdenum	0.15	U	ug/L	P429542	
		Nickel	0.50	U	ug/L	P429542	
		Selenium	0.20	U	ug/L	P429542	
		Silver	0.010	U	ug/L	P429542	
		Thallium	0.10	U	ug/L	P429542	

Ref. Method and Comment:

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

SM 5310 B-2011: The result was confirmed on 05/10/2023.

Sample Location: JOSHUA CREEK ABOVE PEACE RIVER

Collection Date/Time: 05/02/2023 11:47

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405262	EPA 8270E	Aldrin	0.67	U	ng/L	P429278	
		Alpha-BHC	0.10	U	ng/L	P429278	
		Alpha-Chlordane	0.21	U	ng/L	P429278	
		PCB-1016	2.1	U	ng/L	P429278	
		Beta-BHC	0.10	U	ng/L	P429278	
		PCB-1221	2.1	U	ng/L	P429278	
		Beta-Cyfluthrin	1.3	U	ng/L	P429278	
		PCB-1232	2.1	U	ng/L	P429278	
		Bifenthrin	0.52	U	ng/L	P429278	
		PCB-1242	2.1	U	ng/L	P429278	
		Carbophenothion	0.93	U	ng/L	P429278	
		PCB-1248	2.1	U	ng/L	P429278	
		Chlorothalonil	3.7	U	ng/L	P429278	
		PCB-1254	2.1	U	ng/L	P429278	
		Cis-Nonachlor	0.21	UJ	ng/L	P429278	CCV
		PCB-1260	2.1	U	ng/L	P429278	
		Cypermethrin	1.5	U	ng/L	P429278	
		Dacthal	0.15	UJ	ng/L	P429278	LCS, MS, RPD
		DDD-p,p'	0.26	U	ng/L	P429278	
		DDE-p,p'	0.21	U	ng/L	P429278	
		DDT-p,p'	0.52	I	ng/L	P429278	
		Delta-BHC	0.41	U	ng/L	P429278	
		Deltamethrin	1.3	U	ng/L	P429278	
		Dichlobenil	0.26	U	ng/L	P429278	
		Dicofol	1.3	U	ng/L	P429278	
		Dieldrin	0.41	U	ng/L	P429278	
		Endosulfan I	0.41	U	ng/L	P429278	
		Endosulfan II	0.41	U	ng/L	P429278	
		Endosulfan Sulfate	0.31	U	ng/L	P429278	
		Endrin	0.41	U	ng/L	P429278	
		Endrin Aldehyde	0.77	U	ng/L	P429278	
		Endrin Ketone	0.41	U	ng/L	P429278	
		Esfenvalerate	0.77	U	ng/L	P429278	
		Ethalfuralin	0.15	U	ng/L	P429278	
		Fenpropathrin	0.26	U	ng/L	P429278	RPD
		Gamma-BHC	0.13	U	ng/L	P429278	
		Gamma-Chlordane	0.25	I	ng/L	P429278	
		Heptachlor	0.21	U	ng/L	P429278	
		Heptachlor Epoxide	0.26	U	ng/L	P429278	RPD
		Hexachlorobenzene**	1.0	U	ng/L	P429278	
		Kepone	5.2	UJ	ng/L	P429278	CCV
		Lambda-Cyhalothrin	0.77	U	ng/L	P429278	
		Methoprene	0.77	U	ng/L	P429278	

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405262	EPA 8270E	Methoxychlor	0.31	U	ng/L	P429278	
		MGK-264	0.21	U	ng/L	P429278	
		Mirex	0.36	U	ng/L	P429278	
		Oxychlordane	0.31	U	ng/L	P429278	
		Permethrin	1.7	U	ng/L	P429278	
		Phenothrin	0.93	U	ng/L	P429278	
		Piperonyl Butoxide	0.16	I	ng/L	P429278	
		Prallethrin	2.1	U	ng/L	P429278	
		Tau-Fluvalinate	0.26	U	ng/L	P429278	
		Tetramethrin	0.77	U	ng/L	P429278	
		Trans-Nonachlor	0.21	U	ng/L	P429278	
		Triclosan Methyl	0.15	U	ng/L	P429278	
		Trifluralin	0.21	U	ng/L	P429278	
		Chlordane	2.1	U	ng/L	P429278	
2405264	EPA 8321B	Toxaphene	15	U	ng/L	P429278	
		2,4-D	0.32		ug/L	P429258	
		Acesulfame K	0.10	U	ug/L	P429244	
		2,4,5-T	0.0040	U	ug/L	P429258	
		AMPA	2.1		ug/L	P429244	
		Acetaminophen	0.011	I	ug/L	P429258	
		Acetamiprid	0.0020	U	ug/L	P429258	
		Endothall	0.25	U	ug/L	P429244	
		Glufosinate	0.10	U	ug/L	P429244	
		Glyphosate	1.2		ug/L	P429244	
		Afidopyropen	0.0020	U	ug/L	P429258	
		Bentazon	0.0055		ug/L	P429258	
		Sucralose	1.2		ug/L	P429244	
		Benzovindiflupyr	0.0020	U	ug/L	P429258	
		Carbamazepine	0.0023	I	ug/L	P429258	
		Clothianidin	0.17		ug/L	P429258	
		Dinotefuran	0.0020	U	ug/L	P429258	
		Diuron	0.17		ug/L	P429258	
		Fenuron	0.063	I	ug/L	P429258	
		Fluridone	8.0E-04	U	ug/L	P429258	
		Imazapyr	0.0054	I	ug/L	P429258	
		Hydrocodone	0.0020	U	ug/L	P429258	
		Ibuprofen	0.080	U	ug/L	P429258	
		Imidacloprid	0.44		ug/L	P429258	
		Linuron	0.0040	U	ug/L	P429258	
		Mandestrobin	0.0020	U	ug/L	P429258	
		MCPP	0.0020	U	ug/L	P429258	
		Naproxen	0.0080	U	ug/L	P429258	
		Primidone	0.0062	I	ug/L	P429258	
		Pyraclostrobin	0.0020	U	ug/L	P429258	
		Silvex	0.0040	U	ug/L	P429258	

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405264	EPA 8321B	Thiamethoxam	0.29		ug/L	P429258	
		Tolfenpyrad	0.0020	U	ug/L	P429258	
		Triclopyr	0.0040	U	ug/L	P429258	

Ref. Method and Comment:

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

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

Sample Location: HOG BAY AT CR 763

Collection Date/Time: 05/02/2023 12:20

Field ID: G3SD0096

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405263	EPA 8321B	2,4-D	0.023		ug/L	P429258	
		Acesulfame K	0.10	U	ug/L	P429244	
		2,4,5-T	0.0040	U	ug/L	P429258	
		AMPA	4.3		ug/L	P429244	
		Acetaminophen	0.0080	U	ug/L	P429258	
		Acetamiprid	0.0020	U	ug/L	P429258	
		Endothall	0.25	U	ug/L	P429244	
		Glufosinate	0.10	U	ug/L	P429244	
		Glyphosate	1.9		ug/L	P429244	
		Afidopyropen	0.0020	U	ug/L	P429258	
		Bentazon	8.0E-04	U	ug/L	P429258	
		Sucralose	2.1		ug/L	P429244	
		Benzovindiflupyr	0.0020	U	ug/L	P429258	
		Carbamazepine	0.0085		ug/L	P429258	
		Clothianidin	0.46		ug/L	P429258	
		Dinotefuran	0.0020	U	ug/L	P429258	
		Diuron	0.0027	I	ug/L	P429258	
		Fenuron	0.032	U	ug/L	P429258	
		Fluridone	8.0E-04	U	ug/L	P429258	
		Imazapyr	0.0060	I	ug/L	P429258	
		Hydrocodone	0.0020	U	ug/L	P429258	
		Ibuprofen	0.080	U	ug/L	P429258	
		Imidacloprid	0.99		ug/L	P429258	
		Linuron	0.0040	U	ug/L	P429258	
		Mandestrobin	0.0020	U	ug/L	P429258	
		MCPP	0.0020	U	ug/L	P429258	
		Naproxen	0.0080	U	ug/L	P429258	
		Primidone	0.019		ug/L	P429258	
		Pyraclostrobin	0.0020	U	ug/L	P429258	
		Silvex	0.0040	U	ug/L	P429258	
		Thiamethoxam	0.79		ug/L	P429258	
		Tolfenpyrad	0.0020	U	ug/L	P429258	
		Triclopyr	0.0040	U	ug/L	P429258	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P429362

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429347

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429542

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: P429542

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: P429564

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: P429567

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429476

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429520

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429521

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429639

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429464

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

Reference Method: EPA 8270E
Batch ID: P429278

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429278

Component	Result	Code	Units
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429278

Component	Result	Code	Units
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
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: P429278

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8276
Batch ID: P429278

Component	Result	Code	Units
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B
Batch ID: P429244

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: P429258

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: EPA 8321B
Batch ID: P429412

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

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Method Blank Results

Reference Method: EPA 8321B

Batch ID: P429412

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

Reference Method: SM 2320 B-2011

Batch ID: P429832

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

Reference Method: SM 2540 C-2015

Batch ID: P429834

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P429764

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P429696

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P429582

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: P429362

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429347

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.1		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429542

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	100		P	80 - 120
Iron	100		P	80 - 120
Magnesium	101		P	80 - 120
Potassium	100		P	80 - 120
Sodium	99.5		P	80 - 120
Strontium	102		P	80 - 120
Tin	102		P	80 - 120
Titanium	100		P	80 - 120
Vanadium	99.7		P	80 - 120
Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P429542

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	108		P	85 - 115
Arsenic	102		P	85 - 115
Barium	105		P	85 - 115
Beryllium	98.9		P	85 - 115
Boron	103		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	98.6		P	85 - 115
Cobalt	103		P	85 - 115
Copper	98.5		P	85 - 115
Lead	105		P	85 - 115
Manganese	99.7		P	85 - 115
Molybdenum	101		P	85 - 115
Nickel	98.0		P	85 - 115
Selenium	102		P	85 - 115
Silver	106		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429564

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429567

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429476

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429520

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429521

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429639

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429464

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.7		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P429278

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	37.1		P	10 - 92.0
Alpha-BHC	98.5		P	75 - 107
Alpha-Chlordane	59.6		P	50 - 108
Beta-BHC	83.5		P	36 - 138
Beta-Cyfluthrin	55.6		P	20 - 161
Bifenthrin	48.6		P	10 - 119
Carbophenothion	26.1		P	19 - 94.0
Chlorothalonil	61.5		P	26 - 186
Cis-Nonachlor	69.3		P	42 - 119
Cypermethrin	129		P	22 - 150
Dacthal	66.8		F	72 - 119
DDD-p,p'	78.9		P	45 - 107
DDE-p,p'	68.2		P	48 - 106
DDT-p,p'	68.2		P	48 - 110
Delta-BHC	100		P	54 - 140
Deltamethrin	64.1		P	22 - 189

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P429278

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dichlobenil	116		P	36 - 117
Dicofol	56.1		P	46 - 155
Dieldrin	84.9		P	54 - 110
Endosulfan I	80.4		P	59 - 105
Endosulfan II	75.0		P	51 - 118
Endosulfan Sulfate	61.5		P	57 - 121
Endrin	82.5		P	10 - 120
Endrin Aldehyde	48.2		P	34 - 118
Endrin Ketone	87.8		P	69 - 177
Esfenvalerate	61.6		P	23 - 168
Ethalfuralin	70.0		P	49 - 99.0
Fenpropathrin	48.8		P	34 - 117
Gamma-BHC	114		P	72 - 117
Gamma-Chlordane	52.0		P	43 - 106
Heptachlor	78.8		P	41 - 98.0
Heptachlor Epoxide	69.4		P	57 - 106
Hexachlorobenzene	77.1		P	36 - 99.0
Kepone	126		P	16 - 215
Lambda-Cyhalothrin	65.1		P	21 - 177
Methoprene	45.3		P	10 - 119
Methoxychlor	79.5		P	60 - 112
MGK-264	92.2		P	26 - 122
Mirex	60.6		P	10 - 169
Oxychlordane	71.2		P	43 - 105
PCB-1016	79.5		P	48 - 112
PCB-1260	114		P	44 - 118
Permethrin	67.9		P	24 - 148
Phenothrin	50.3		P	10 - 106
Piperonyl Butoxide	87.3		P	10 - 139
Prallethrin	57.1		P	17 - 109
Tau-Fluvalinate	53.8		P	13 - 131
Tetramethrin	74.2		P	10 - 132
Trans-Nonachlor	46.1		P	44 - 106
Triclosan Methyl	73.5		P	59 - 109
Trifluralin	69.4		P	44 - 101

Reference Method: EPA 8276
Batch ID: P429278

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	78.7		P	61 - 116
Toxaphene	90.8		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P429244

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	107		P	40 - 150
AMPA	97.1		P	40 - 150
Endothall	81.3		P	40 - 150
Glufosinate	81.9		P	40 - 150
Glyphosate	97.4		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P429244

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	96.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429258

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	85.2		P	40 - 150
2,4,5-T	83.2		P	40 - 150
Acetaminophen	78.2		P	30 - 150
Acetamiprid	79.9		P	40 - 150
Afidopyropen	49.8		P	30 - 150
Bentazon	141		P	30 - 150
Benzovindiflupyr	81.6		P	40 - 150
Carbamazepine	83.9		P	40 - 150
Clothianidin	86.8		P	40 - 150
Dinotefuran	105		P	40 - 150
Diuron	77.1		P	40 - 150
Fenuron	87.0		P	40 - 150
Fluridone	77.1		P	40 - 150
Hydrocodone	86.5		P	40 - 150
Ibuprofen	91.0		P	40 - 150
Imazapyr	84.2		P	40 - 150
Imidacloprid	83.9		P	40 - 150
Linuron	81.2		P	40 - 150
Mandestrobin	86.4		P	40 - 150
MCPP	87.7		P	40 - 150
Naproxen	77.0		P	40 - 150
Primidone	85.2		P	40 - 150
Pyraclostrobin	85.6		P	40 - 150
Silvex	81.7		P	40 - 150
Thiamethoxam	88.4		P	40 - 150
Tolfenpyrad	55.3		P	30 - 150
Triclopyr	85.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429412

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	94.0		P	40 - 150
2,4,5-T	91.9		P	40 - 150
Acetaminophen	74.1		P	30 - 150
Acetamiprid	82.4		P	40 - 150
Afidopyropen	68.1		P	30 - 150
Bentazon	139		P	30 - 150
Benzovindiflupyr	79.3		P	40 - 150
Carbamazepine	72.2		P	40 - 150
Clothianidin	84.7		P	40 - 150
Dinotefuran	94.6		P	40 - 150
Diuron	70.0		P	40 - 150
Fenuron	81.9		P	40 - 150
Fluridone	73.3		P	40 - 150
Hydrocodone	78.2		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P429412

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ibuprofen	73.6		P	40 - 150
Imazapyr	88.6		P	40 - 150
Imidacloprid	83.3		P	40 - 150
Linuron	68.3		P	40 - 150
Mandestrobin	82.6		P	40 - 150
MCPP	98.2		P	40 - 150
Naproxen	75.7		P	40 - 150
Primidone	84.1		P	40 - 150
Pyraclostrobin	77.6		P	40 - 150
Silvex	87.8		P	40 - 150
Thiamethoxam	79.7		P	40 - 150
Tolfenpyrad	51.9		P	30 - 150
Triclopyr	91.7		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P429832

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

Reference Method: SM 2540 C-2015
Batch ID: P429834

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	96.5		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P429764

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

Reference Method: SM 4500-F- C-2011
Batch ID: P429696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.0		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P429582

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P429542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405704	Calcium	99.2		P	80 - 120
2405704	Iron	105	103	P/P	80 - 120
2405704	Magnesium	104	102	P/P	80 - 120
2405704	Potassium	104	103	P/P	80 - 120
2405704	Sodium	98.9		P	80 - 120
2405704	Strontium	104	103	P/P	80 - 120
2405704	Tin	101	99.4	P/P	80 - 120
2405704	Titanium	101	102	P/P	80 - 120
2405704	Vanadium	101	102	P/P	80 - 120
2405704	Zinc	104	103	P/P	80 - 120
2406025	Calcium	99.2		P	80 - 120
2406025	Iron	102		P	80 - 120
2406025	Magnesium	100		P	80 - 120
2406025	Potassium	100		P	80 - 120
2406025	Sodium	98.9		P	80 - 120
2406025	Strontium	101		P	80 - 120
2406025	Tin	97.8		P	80 - 120
2406025	Titanium	101		P	80 - 120
2406025	Vanadium	100		P	80 - 120
2406025	Zinc	98.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P429542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405704	Aluminum	98.9	100	P/P	80 - 120
2405704	Antimony	107	107	P/P	80 - 120
2405704	Arsenic	102	101	P/P	80 - 120
2405704	Barium	103	104	P/P	80 - 120
2405704	Beryllium	99.1	98.6	P/P	80 - 120
2405704	Boron	100	102	P/P	80 - 120
2405704	Cadmium	103	103	P/P	80 - 120
2405704	Chromium	97.5	97.4	P/P	80 - 120
2405704	Cobalt	101	101	P/P	80 - 120
2405704	Copper	96.8	96.6	P/P	80 - 120
2405704	Lead	104	104	P/P	80 - 120
2405704	Manganese	97.9	97.1	P/P	80 - 120
2405704	Molybdenum	103	101	P/P	80 - 120
2405704	Nickel	97.5	96.8	P/P	80 - 120
2405704	Selenium	102	101	P/P	80 - 120
2405704	Silver	103	102	P/P	80 - 120
2405704	Thallium	103	103	P/P	80 - 120
2406025	Aluminum	98.8		P	80 - 120
2406025	Antimony	107		P	80 - 120
2406025	Arsenic	100		P	80 - 120
2406025	Barium	103		P	80 - 120
2406025	Beryllium	96.8		P	80 - 120
2406025	Boron	103		P	80 - 120
2406025	Cadmium	101		P	80 - 120
2406025	Chromium	96.8		P	80 - 120
2406025	Cobalt	101		P	80 - 120
2406025	Copper	96.2		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P429542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2406025	Lead	105		P	80 - 120
2406025	Manganese	98.0		P	80 - 120
2406025	Molybdenum	100		P	80 - 120
2406025	Nickel	96.5		P	80 - 120
2406025	Selenium	101		P	80 - 120
2406025	Silver	104		P	80 - 120
2406025	Thallium	104		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404879	Chloride	101		P	90 - 110
2405038	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429567

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404879	Sulfate	101		P	90 - 110
2405038	Sulfate	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429476

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405197	Ammonia-N	97.4	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429520

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405055	Kjeldahl Nitrogen	90.3	89.3	P/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429521

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405414	Kjeldahl Nitrogen	107	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429639

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405223	NO2NO3-N	104	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429464

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405298	Total-P	99.8	100	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P429278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404645	Aldrin	47.8	50.2	P/P	20 - 82.0
2404645	Alpha-BHC	94.3	95.7	P/P	71 - 109
2404645	Alpha-Chlordane	73.2	71.5	P/P	42 - 106
2404645	Beta-BHC	141	102	P/P	69 - 180
2404645	Beta-Cyfluthrin	113	85.6	P/P	18 - 175
2404645	Bifenthrin	72.8	53.5	P/P	21 - 128
2404645	Carbophenothion	42.0	35.4	P/P	10 - 126
2404645	Chlorothalonil	32.6	65.1	P/P	10 - 300
2404645	Cis-Nonachlor	51.3	52.7	P/P	34 - 106
2404645	Cypermethrin	93.4	120	P/P	22 - 158
2404645	Dacthal	146	107	F/P	54 - 116
2404645	DDD-p,p'	79.0	75.3	P/P	34 - 107
2404645	DDE-p,p'	53.8	39.6	P/P	33 - 110
2404645	DDT-p,p'	68.5	60.2	P/P	50 - 122
2404645	Delta-BHC	95.1	106	P/P	77 - 193
2404645	Deltamethrin	58.7	43.7	P/P	10 - 195
2404645	Dichlobenil	96.7	80.3	P/P	25 - 113
2404645	Dicofol	71.8	67.3	P/P	38 - 247
2404645	Dieldrin	65.5	62.9	P/P	45 - 118
2404645	Endosulfan I	66.9	65.2	P/P	51 - 106
2404645	Endosulfan II	69.1	69.5	P/P	37 - 122
2404645	Endosulfan Sulfate	125	87.8	P/P	43 - 132
2404645	Endrin	93.1	71.3	P/P	29 - 101
2404645	Endrin Aldehyde	68.9	78.2	P/P	19 - 110
2404645	Endrin Ketone	80.1	70.5	P/P	60 - 140
2404645	Esfenvalerate	50.8	49.1	P/P	26 - 199
2404645	Ethalfuralin	66.9	71.9	P/P	45 - 99.0
2404645	Fenpropathrin	95.4	66.5	P/P	35 - 120
2404645	Gamma-BHC	111	95.7	P/P	63 - 128
2404645	Gamma-Chlordane	69.8	70.8	P/P	40 - 104
2404645	Heptachlor	69.6	61.1	P/P	36 - 97.0
2404645	Heptachlor Epoxide	108	74.2	P/P	49 - 184
2404645	Hexachlorobenzene	85.6	70.6	P/P	39 - 96.0
2404645	Kepone	111	54.4	P/P	10 - 217
2404645	Lambda-Cyhalothrin	94.3	75.8	P/P	21 - 193
2404645	Methoprene	62.0	56.4	P/P	20 - 106
2404645	Methoxychlor	53.7	60.8	P/P	53 - 118
2404645	MGK-264	53.3	49.7	P/P	40 - 118
2404645	Mirex	48.4	39.2	P/P	26 - 92.0
2404645	Oxychlordane	61.7	75.4	P/P	44 - 99.0
2404645	Permethrin	53.1	75.4	P/P	33 - 182
2404645	Phenothrin	74.8	77.7	P/P	10 - 129
2404645	Piperonyl Butoxide	61.6	86.1	P/P	10 - 211
2404645	Prallethrin	73.3	73.2	P/P	24 - 113
2404645	Tau-Fluvalinate	50.0	39.3	P/P	14 - 149
2404645	Tetramethrin	117	87.8	P/P	17 - 151
2404645	Trans-Nonachlor	72.4	64.7	P/P	42 - 102
2404645	Triclosan Methyl	65.4	84.4	P/P	48 - 108
2404645	Trifluralin	61.5	66.2	P/P	47 - 96.0
2405764	PCB-1016	64.4	79.8	P/P	46 - 111
2405764	PCB-1260	73.4	87.4	P/P	45 - 114

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P429278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405764	Chlordane	76.6	83.0	P/P	53 - 126
2405764	Toxaphene	93.8	96.0	P/P	56 - 211

Reference Method: EPA 8321B
Batch ID: P429244

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404443	Acesulfame K	129	130	P/P	40 - 150
2404443	AMPA	87.0	94.2	P/P	40 - 150
2404443	Endothall	85.3	83.2	P/P	40 - 150
2404443	Glufosinate	84.9	85.0	P/P	40 - 150
2404443	Glyphosate	97.6	92.2	P/P	40 - 150
2404443	Sucralose	107	101	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2403675	2,4-D	104	111	P/P	40 - 150
2403675	2,4,5-T	108	105	P/P	40 - 150
2403675	Acetaminophen	84.2	87.7	P/P	30 - 150
2403675	Acetamiprid	84.2	78.9	P/P	40 - 150
2403675	Afidopyropen	92.3	88.5	P/P	30 - 150
2403675	Benzovindiflupyr	80.6	80.2	P/P	40 - 150
2403675	Carbamazepine	71.6	67.3	P/P	40 - 150
2403675	Clothianidin	105	104	P/P	40 - 150
2403675	Dinotefuran	104	102	P/P	40 - 150
2403675	Diuron	65.6	62.4	P/P	40 - 150
2403675	Fenuron	63.5	63.4	P/P	40 - 150
2403675	Fluridone	61.3	62.1	P/P	40 - 150
2403675	Hydrocodone	71.9	69.9	P/P	40 - 150
2403675	Ibuprofen	60.5	52.8	P/P	40 - 150
2403675	Imazapyr	105	108	P/P	40 - 150
2403675	Imidacloprid	115	116	P/P	40 - 150
2403675	Linuron	70.3	67.5	P/P	40 - 150
2403675	Mandestrobin	77.7	79.5	P/P	40 - 150
2403675	MCPP	121	106	P/P	40 - 150
2403675	Naproxen	57.1	56.0	P/P	40 - 150
2403675	Primidone	96.7	97.0	P/P	40 - 150
2403675	Pyraclostrobin	81.5	76.8	P/P	40 - 150
2403675	Silvex	114	118	P/P	40 - 150
2403675	Thiamethoxam	101	99.4	P/P	40 - 150
2403675	Tolfenpyrad	54.5	49.3	P/P	30 - 150
2403675	Triclopyr	101	105	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429412

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405330	2,4-D	113	110	P/P	40 - 150
2405330	2,4,5-T	115	109	P/P	40 - 150
2405330	Acetaminophen	85.7	84.1	P/P	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P429412

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405330	Acetamiprid	98.6	96.6	P/P	40 - 150
2405330	Afidopyropen	99.1	95.3	P/P	30 - 150
2405330	Bentazon	164	174	F/F	30 - 150
2405330	Benzovindiflupyr	81.9	87.3	P/P	40 - 150
2405330	Carbamazepine	82.6	84.1	P/P	40 - 150
2405330	Clothianidin	99.7	99.2	P/P	40 - 150
2405330	Dinotefuran	112	116	P/P	40 - 150
2405330	Diuron	72.5	73.5	P/P	40 - 150
2405330	Fenuron	77.3	84.5	P/P	40 - 150
2405330	Fluridone	81.8	96.1	P/P	40 - 150
2405330	Hydrocodone	80.7	85.4	P/P	40 - 150
2405330	Ibuprofen	86.5	78.2	P/P	40 - 150
2405330	Imazapyr	143	114	P/P	40 - 150
2405330	Imidacloprid	104	102	P/P	40 - 150
2405330	Linuron	74.5	74.5	P/P	40 - 150
2405330	Mandestrobin	94.1	90.4	P/P	40 - 150
2405330	MCPP	126	110	P/P	40 - 150
2405330	Naproxen	93.3	73.3	P/P	40 - 150
2405330	Primidone	98.8	95.8	P/P	40 - 150
2405330	Pyraclostrobin	85.1	85.7	P/P	40 - 150
2405330	Silvex	112	117	P/P	40 - 150
2405330	Thiamethoxam	98.5	95.4	P/P	40 - 150
2405330	Tolfenpyrad	51.2	49.7	P/P	30 - 150
2405330	Triclopyr	105	103	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P429696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405446	Fluoride	102	103	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P429582

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405451	Organic Carbon	96.9	98.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P429362

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405195	Color (true)	2.69	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429347

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404872	Turbidity	0.397	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405704	Calcium	1.17	Spike	P	0 - 20
2405704	Iron	1.58	Spike	P	0 - 20
2405704	Magnesium	1.48	Spike	P	0 - 20
2405704	Potassium	0.505	Spike	P	0 - 20
2405704	Sodium	0.341	Spike	P	0 - 20
2405704	Strontium	1.30	Spike	P	0 - 20
2405704	Tin	1.73	Spike	P	0 - 20
2405704	Titanium	0.741	Spike	P	0 - 20
2405704	Vanadium	0.432	Spike	P	0 - 20
2405704	Zinc	0.175	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P429542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405704	Aluminum	1.15	Spike	P	0 - 20
2405704	Antimony	0.0221	Spike	P	0 - 20
2405704	Arsenic	0.678	Spike	P	0 - 20
2405704	Barium	0.369	Spike	P	0 - 20
2405704	Beryllium	0.549	Spike	P	0 - 20
2405704	Boron	0.948	Spike	P	0 - 20
2405704	Cadmium	0.285	Spike	P	0 - 20
2405704	Chromium	0.202	Spike	P	0 - 20
2405704	Cobalt	0.0975	Spike	P	0 - 20
2405704	Copper	0.165	Spike	P	0 - 20
2405704	Lead	0.260	Spike	P	0 - 20
2405704	Manganese	0.716	Spike	P	0 - 20
2405704	Molybdenum	1.46	Spike	P	0 - 20
2405704	Nickel	0.800	Spike	P	0 - 20
2405704	Selenium	1.12	Spike	P	0 - 20
2405704	Silver	0.598	Spike	P	0 - 20
2405704	Thallium	0.226	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404879	Chloride	0.298	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429567

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404879	Sulfate	0.772	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429476

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405197	Ammonia-N	0.844	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429520

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405055	Kjeldahl Nitrogen	0.543	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405414	Kjeldahl Nitrogen	1.14	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429639

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405223	NO2NO3-N	0.541	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429464

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405298	Total-P	0.557	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P429278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404645	Aldrin	4.87	Spike	P	0 - 41
2404645	Alpha-BHC	1.51	Spike	P	0 - 25

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P429278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404645	Alpha-Chlordane	2.34	Spike	P	0 - 33
2404645	Beta-BHC	32.1	Spike	P	0 - 36
2404645	Beta-Cyfluthrin	27.3	Spike	P	0 - 42
2404645	Bifenthrin	30.7	Spike	P	0 - 53
2404645	Carbophenothion	16.9	Spike	P	0 - 49
2404645	Chlorothalonil	66.5	Spike	P	0 - 71
2404645	Cis-Nonachlor	2.74	Spike	P	0 - 29
2404645	Cypermethrin	25.2	Spike	P	0 - 40
2404645	Dacthal	30.6	Spike	F	0 - 26
2404645	DDD-p,p'	4.80	Spike	P	0 - 39
2404645	DDE-p,p'	30.5	Spike	P	0 - 33
2404645	DDT-p,p'	12.9	Spike	P	0 - 40
2404645	Delta-BHC	10.8	Spike	P	0 - 37
2404645	Deltamethrin	29.4	Spike	P	0 - 100
2404645	Dichlobenil	18.5	Spike	P	0 - 40
2404645	Dicofol	6.41	Spike	P	0 - 31
2404645	Dieldrin	3.62	Spike	P	0 - 27
2404645	Endosulfan I	2.64	Spike	P	0 - 23
2404645	Endosulfan II	0.599	Spike	P	0 - 28
2404645	Endosulfan Sulfate	34.9	Spike	P	0 - 38
2404645	Endrin	26.6	Spike	P	0 - 63
2404645	Endrin Aldehyde	12.6	Spike	P	0 - 60
2404645	Endrin Ketone	12.8	Spike	P	0 - 37
2404645	Esfenvalerate	3.41	Spike	P	0 - 52
2404645	Ethalfuralin	7.17	Spike	P	0 - 23
2404645	Fenpropathrin	35.7	Spike	F	0 - 32
2404645	Gamma-BHC	14.4	Spike	P	0 - 17
2404645	Gamma-Chlordane	1.51	Spike	P	0 - 40
2404645	Heptachlor	12.9	Spike	P	0 - 29
2404645	Heptachlor Epoxide	32.8	Spike	F	0 - 25
2404645	Hexachlorobenzene	19.2	Spike	P	0 - 36
2404645	Kepone	68.4	Spike	P	0 - 93
2404645	Lambda-Cyhalothrin	21.7	Spike	P	0 - 55
2404645	Methoprene	9.48	Spike	P	0 - 53
2404645	Methoxychlor	12.4	Spike	P	0 - 29
2404645	MGK-264	6.94	Spike	P	0 - 35
2404645	Mirex	21.0	Spike	P	0 - 46
2404645	Oxychlordane	20.0	Spike	P	0 - 29
2404645	Permethrin	34.6	Spike	P	0 - 44
2404645	Phenothrin	3.80	Spike	P	0 - 56
2404645	Piperonyl Butoxide	33.1	Spike	P	0 - 100
2404645	Prallethrin	0.176	Spike	P	0 - 42
2404645	Tau-Fluvalinate	23.8	Spike	P	0 - 54
2404645	Tetramethrin	28.8	Spike	P	0 - 51
2404645	Trans-Nonachlor	11.3	Spike	P	0 - 37
2404645	Triclosan Methyl	25.3	Spike	P	0 - 31
2404645	Trifluralin	7.37	Spike	P	0 - 30
2405764	PCB-1016	21.4	Spike	P	0 - 32
2405764	PCB-1260	17.4	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P429278

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405764	Chlordane	7.50	Spike	P	0 - 25
2405764	Toxaphene	2.38	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P429244

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404443	Acesulfame K	0.713	Spike	P	0 - 30
2404443	AMPA	7.95	Spike	P	0 - 30
2404443	Endothall	2.43	Spike	P	0 - 30
2404443	Glufosinate	0.0367	Spike	P	0 - 30
2404443	Glyphosate	5.66	Spike	P	0 - 30
2404443	Sucralose	5.67	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P429258

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2403675	2,4-D	6.31	Spike	P	0 - 30
2403675	2,4,5-T	3.12	Spike	P	0 - 30
2403675	Acetaminophen	4.06	Spike	P	0 - 30
2403675	Acetamiprid	6.41	Spike	P	0 - 30
2403675	Afidopyropen	4.21	Spike	P	0 - 30
2403675	Bentazon	10.9	Spike	P	0 - 30
2403675	Benzovindiflupyr	0.506	Spike	P	0 - 30
2403675	Carbamazepine	5.81	Spike	P	0 - 30
2403675	Clothianidin	1.03	Spike	P	0 - 30
2403675	Dinotefuran	2.22	Spike	P	0 - 30
2403675	Diuron	4.96	Spike	P	0 - 30
2403675	Fenuron	0.219	Spike	P	0 - 30
2403675	Fluridone	1.19	Spike	P	0 - 30
2403675	Hydrocodone	2.95	Spike	P	0 - 30
2403675	Ibuprofen	13.7	Spike	P	0 - 30
2403675	Imazapyr	2.30	Spike	P	0 - 30
2403675	Imidacloprid	0.536	Spike	P	0 - 30
2403675	Linuron	4.04	Spike	P	0 - 30
2403675	Mandestrobin	2.35	Spike	P	0 - 30
2403675	MCPP	12.5	Spike	P	0 - 30
2403675	Naproxen	1.85	Spike	P	0 - 30
2403675	Primidone	0.400	Spike	P	0 - 30
2403675	Pyraclostrobin	6.03	Spike	P	0 - 30
2403675	Silvex	3.21	Spike	P	0 - 30
2403675	Thiamethoxam	1.96	Spike	P	0 - 30
2403675	Tolfenpyrad	10.0	Spike	P	0 - 30
2403675	Triclopyr	4.08	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P429412

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405330	2,4-D	2.74	Spike	P	0 - 30
2405330	2,4,5-T	5.85	Spike	P	0 - 30
2405330	Acetaminophen	1.85	Spike	P	0 - 30
2405330	Acetamiprid	2.02	Spike	P	0 - 30
2405330	Afidopyropen	3.85	Spike	P	0 - 30
2405330	Bentazon	5.03	Spike	P	0 - 30
2405330	Benzovindiflupyr	6.39	Spike	P	0 - 30
2405330	Carbamazepine	1.79	Spike	P	0 - 30
2405330	Clothianidin	0.475	Spike	P	0 - 30
2405330	Dinotefuran	3.54	Spike	P	0 - 30
2405330	Diuron	1.32	Spike	P	0 - 30
2405330	Fenuron	8.83	Spike	P	0 - 30
2405330	Fluridone	16.1	Spike	P	0 - 30
2405330	Hydrocodone	5.60	Spike	P	0 - 30
2405330	Ibuprofen	9.98	Spike	P	0 - 30
2405330	Imazapyr	20.0	Spike	P	0 - 30
2405330	Imidacloprid	2.17	Spike	P	0 - 30
2405330	Linuron	0.0137	Spike	P	0 - 30
2405330	Mandestrobin	3.98	Spike	P	0 - 30
2405330	MCPP	13.5	Spike	P	0 - 30
2405330	Naproxen	23.9	Spike	P	0 - 30
2405330	Primidone	3.10	Spike	P	0 - 30
2405330	Pyraclostrobin	0.684	Spike	P	0 - 30
2405330	Silvex	3.93	Spike	P	0 - 30
2405330	Thiamethoxam	3.27	Spike	P	0 - 30
2405330	Tolfenpyrad	2.86	Spike	P	0 - 30
2405330	Triclopyr	2.18	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P429832

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406052	Total Alkalinity	0.346	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P429834

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404876	TDS	2.69	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P429696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405446	Fluoride	0.480	Spike	P	0 - 1.6

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P429582

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405451	Organic Carbon	0.917	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2405262
Field Sample ID: G3SD0159

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	91.1	P	29 - 130
EPA 8270E	Decachlorobiphenyl	58.3	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	65.5	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	66.8	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	58.2	P	30 - 101
EPA 8276	PCNB	104	P	48 - 121

Lab Sample ID: 2405263
Field Sample ID: G3SD0096

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	121	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.3	P	30 - 160
EPA 8321B	Diuron-d6	55.3	P	30 - 160
EPA 8321B	Endothall-d6	94.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	86.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	77.2	P	30 - 160
EPA 8321B	Primidone-d5	88.8	P	30 - 160
EPA 8321B	Sucralose-d6	98.7	P	30 - 160

Lab Sample ID: 2405264
Field Sample ID: G3SD0159

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	84.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	64.5	P	30 - 160
EPA 8321B	Diuron-d6	52.3	P	30 - 160
EPA 8321B	Endothall-d6	97.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	82.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	63.3	P	30 - 160
EPA 8321B	Primidone-d5	77.5	P	30 - 160
EPA 8321B	Sucralose-d6	138	P	30 - 160

Lab Sample ID: 2405265
Field Sample ID: G3SD0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	120	P	30 - 160
EPA 8321B	Acetaminophen-d4	95.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	79.3	P	30 - 160
EPA 8321B	Diuron-d6	61.7	P	30 - 160
EPA 8321B	Endothall-d6	97.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	61.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	78.5	P	30 - 160
EPA 8321B	Primidone-d5	90.5	P	30 - 160
EPA 8321B	Sucralose-d6	114	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2405266

Field Sample ID: FB_05022023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	80.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	71.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	84.0	P	30 - 160
EPA 8321B	Diuron-d6	76.6	P	30 - 160
EPA 8321B	Endothall-d6	99.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	109	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.1	P	30 - 160
EPA 8321B	Primidone-d5	81.6	P	30 - 160
EPA 8321B	Sucralose-d6	113	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118937

Included Lab Sample IDs: 2405222, 2405224

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

Reference Method: DEP SOP: NU-094-1

Run ID: A118941

Included Lab Sample IDs: 2405222, 2405224

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118977

Included Lab Sample IDs: 2405223, 2405225

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

Reference Method: EPA 8321B

Run ID: A118978

Included Lab Sample IDs: 2405263, 2405264

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	93.7	91.7	P/P	50 - 150
2,4,5-T	95.7	108	P/P	50 - 150
Acetaminophen	84.3	84.3	P/P	60 - 160
Acetamiprid	107	108	P/P	50 - 150
Afidopyropen	120	108	P/P	50 - 150
Bentazon	124	124	P/P	50 - 160
Benzovindiflupyr	101	100	P/P	50 - 150
Carbamazepine	102	97.3	P/P	60 - 150
Clothianidin	104	99.3	P/P	60 - 150
Dinotefuran	121	119	P/P	50 - 150
Diuron	103	106	P/P	60 - 160
Fenuron	99.1	99.4	P/P	60 - 150
Fluridone	102	107	P/P	60 - 160
Hydrocodone	109	112	P/P	60 - 150
Ibuprofen	78.4	91.3	P/P	50 - 160
Imazapyr	97.5	94.4	P/P	50 - 150
Imidacloprid	86.3	98.9	P/P	60 - 150
Imidacloprid	95.9	92.0	P/P	60 - 150
Linuron	109	100	P/P	60 - 150
Mandestrobin	98.2	101	P/P	50 - 150
MCPP	97.7	88.4	P/P	50 - 150
Naproxen	127	61.5	P/P	50 - 160
Primidone	90.5	92.5	P/P	60 - 150
Pyraclostrobin	105	105	P/P	60 - 150
Silvex	92.1	83.8	P/P	50 - 150
Thiamethoxam	93.2	102	P/P	50 - 150
Tolfenpyrad	101	102	P/P	60 - 150
Triclopyr	105	90.3	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A118997

Included Lab Sample IDs: 2405263, 2405264, 2405265, 2405266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	131	153	P/P	60 - 160
Sucralose	103	114	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A118999

Included Lab Sample IDs: 2405265, 2405266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.8	92.2	P/P	50 - 150
2,4,5-T	86.0	85.6	P/P	50 - 150
Acetaminophen	84.6	86.4	P/P	60 - 160
Acetamiprid	107	106	P/P	50 - 150
Afidopyropen	96.7	96.4	P/P	50 - 150
Bentazon	121	127	P/P	50 - 160
Benzovindiflupyr	99.5	106	P/P	50 - 150
Carbamazepine	101	97.7	P/P	60 - 150
Clothianidin	105	106	P/P	60 - 150
Dinotefuran	112	113	P/P	50 - 150
Diuron	114	102	P/P	60 - 160
Fenuron	104	101	P/P	60 - 150
Fluridone	104	118	P/P	60 - 160
Hydrocodone	102	104	P/P	60 - 150
Ibuprofen	78.9	86.9	P/P	50 - 160
Imazapyr	95.4	91.0	P/P	50 - 150
Imidacloprid	96.3	96.9	P/P	60 - 150
Linuron	101	110	P/P	60 - 150
Mandestrobin	106	111	P/P	50 - 150
MCPP	90.7	91.4	P/P	50 - 150
Naproxen	91.9	120	P/P	50 - 160
Primidone	89.9	101	P/P	60 - 150
Pyraclostrobin	102	101	P/P	60 - 150
Silvex	87.3	101	P/P	50 - 150
Thiamethoxam	98.9	92.3	P/P	50 - 150
Tolfenpyrad	95.3	95.3	P/P	60 - 150
Triclopyr	80.7	87.5	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A119007

Included Lab Sample IDs: 2405223

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A119009

Included Lab Sample IDs: 2405263, 2405264, 2405265, 2405266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	99.4	94.2	P/P	60 - 160
Endothall	85.1	81.9	P/P	60 - 160
Glufosinate	81.5	83.1	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A119009

Included Lab Sample IDs: 2405263, 2405264, 2405265, 2405266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	103	97.2	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A119016

Included Lab Sample IDs: 2405225

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	99.2	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A119022

Included Lab Sample IDs: 2405222, 2405224

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

Reference Method: SM 5310 B-2011

Run ID: A119029

Included Lab Sample IDs: 2405223, 2405225

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.6	97.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A119040

Included Lab Sample IDs: 2405223, 2405225

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119052

Included Lab Sample IDs: 2405223, 2405225

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	106	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119053

Included Lab Sample IDs: 2405267, 2405268

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	100	P/P	90 - 110
Aluminum	101	101	P/P	90 - 110
Antimony	105	106	P/P	90 - 110
Antimony	106	105	P/P	90 - 110
Arsenic	101	100	P/P	90 - 110
Arsenic	101	101	P/P	90 - 110
Barium	100	102	P/P	90 - 110
Barium	101	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119053

Included Lab Sample IDs: 2405267, 2405268

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	97.1	98.3	P/P	90 - 110
Beryllium	98.3	97.1	P/P	90 - 110
Boron	97.2	98.3	P/P	90 - 110
Boron	98.3	98.9	P/P	90 - 110
Cadmium	101	102	P/P	90 - 110
Cadmium	102	102	P/P	90 - 110
Chromium	97.9	99.6	P/P	90 - 110
Chromium	99.6	97.3	P/P	90 - 110
Cobalt	102	103	P/P	90 - 110
Cobalt	103	102	P/P	90 - 110
Copper	96.1	96.8	P/P	90 - 110
Copper	96.9	96.1	P/P	90 - 110
Lead	103	103	P/P	90 - 110
Lead	103	103	P/P	90 - 110
Manganese	101	99.0	P/P	90 - 110
Manganese	97.7	101	P/P	90 - 110
Molybdenum	100	101	P/P	90 - 110
Molybdenum	99.9	100	P/P	90 - 110
Nickel	98.0	97.1	P/P	90 - 110
Nickel	98.3	98.0	P/P	90 - 110
Selenium	102	103	P/P	90 - 110
Selenium	103	103	P/P	90 - 110
Silver	103	104	P/P	90 - 110
Silver	104	105	P/P	90 - 110
Thallium	101	102	P/P	90 - 110
Thallium	102	101	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A119080

Included Lab Sample IDs: 2405222, 2405224

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	102	P/P	90 - 110
Fluoride	102	101	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A119089

Included Lab Sample IDs: 2405262

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	97.5		P	80 - 120
PCB-1260	108		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A119091

Included Lab Sample IDs: 2405267, 2405268

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	98.9	99.2	P/P	90 - 110
Calcium	99.2	98.9	P/P	90 - 110
Iron	101	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A119091

Included Lab Sample IDs: 2405267, 2405268

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	101	101	P/P	90 - 110
Magnesium	100	102	P/P	90 - 110
Magnesium	100	100	P/P	90 - 110
Potassium	99.9	99.9	P/P	90 - 110
Potassium	99.9	102	P/P	90 - 110
Sodium	98.3	99.1	P/P	90 - 110
Sodium	99.1	99.5	P/P	90 - 110
Strontium	101	102	P/P	90 - 110
Strontium	101	101	P/P	90 - 110
Tin	98.5	98.8	P/P	90 - 110
Tin	98.8	98.1	P/P	90 - 110
Titanium	98.7	99.2	P/P	90 - 110
Titanium	99.2	99.5	P/P	90 - 110
Vanadium	98.5	98.9	P/P	90 - 110
Vanadium	98.9	98.7	P/P	90 - 110
Zinc	97.8	99.3	P/P	90 - 110
Zinc	99.3	96.2	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A119118

Included Lab Sample IDs: 2405262

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.4		P	80 - 120
Toxaphene	91.1		P	80 - 120

Reference Method: SM 2320 B-2011

Run ID: A119143

Included Lab Sample IDs: 2405222, 2405224

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.2	99.4	P/P	90 - 110
Total Alkalinity	99.4	96.4	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A119165

Included Lab Sample IDs: 2405262

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	108		P	80 - 120
Alpha-BHC	99.1		P	80 - 120
Alpha-Chlordane	94.5		P	80 - 120
Beta-BHC	95.0		P	80 - 120
Beta-Cyfluthrin	97.0		P	80 - 120
Bifenthrin	104		P	80 - 120
Carbophenothion	88.7		P	80 - 120
Chlorothalonil	94.1		P	80 - 120
Cis-Nonachlor	74.1*		F	80 - 120
Cypermethrin	103		P	80 - 120
Dacthal	81.4		P	80 - 120
DDD-p,p'	80.6		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119165
Included Lab Sample IDs: 2405262

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDE-p,p'	103		P	80 - 120
DDT-p,p'	99.9		P	80 - 120
Delta-BHC	83.7		P	80 - 120
Deltamethrin	93.8		P	80 - 120
Dichlobenil	81.6		P	80 - 120
Dicofol	94.9		P	80 - 120
Dieldrin	114		P	80 - 120
Endosulfan I	96.8		P	80 - 120
Endosulfan II	103		P	80 - 120
Endosulfan Sulfate	89.7		P	80 - 120
Endrin	82.1		P	80 - 120
Endrin Aldehyde	110		P	80 - 120
Endrin Ketone	109		P	80 - 120
Esfenvalerate	97.7		P	80 - 120
Ethalfuralin	83.5		P	80 - 120
Fenpropathrin	86.9		P	80 - 120
Gamma-BHC	92.7		P	80 - 120
Gamma-Chlordane	97.2		P	80 - 120
Heptachlor	81.9		P	80 - 120
Heptachlor Epoxide	109		P	80 - 120
Hexachlorobenzene	108		P	80 - 120
Kepone	57.1*		F	80 - 120
Lambda-Cyhalothrin	90.5		P	80 - 120
Methoprene	95.8		P	80 - 120
Methoxychlor	101		P	80 - 120
MGK-264	86.2		P	80 - 120
Mirex	102		P	80 - 120
Oxychlordane	114		P	80 - 120
Permethrin	105		P	80 - 120
Phenothrin	94.3		P	80 - 120
Piperonyl Butoxide	101		P	80 - 120
Prallethrin	118		P	80 - 120
Tau-Fluvalinate	98.8		P	80 - 120
Tetramethrin	113		P	80 - 120
Trans-Nonachlor	104		P	80 - 120
Triclosan Methyl	119		P	80 - 120
Trifluralin	92.5		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)	101					2.69	
EPA 180.1 Rev. 2.0	Turbidity	97.1					0.397	
EPA 200.7 Rev. 4.4	Calcium	100	99.2	99.2				1.17
	Iron	100	105	103	102			1.58
	Magnesium	101	104	102	100			1.48
	Potassium	100	104	103	100			0.505
	Sodium	99.5	98.9	98.9				0.341
	Strontium	102	104	103	101			1.30
	Tin	102	101	99.4	97.8			1.73
	Titanium	100	101	102	101			0.741
	Vanadium	99.7	101	102	100			0.432
	Zinc	102	104	103	98.7			0.175
EPA 200.8 Rev. 5.4	Aluminum	102	98.9	100	98.8			1.15
	Antimony	108	107	107	107			0.0221
	Arsenic	102	102	101	100			0.678
	Barium	105	103	104	103			0.369
	Beryllium	98.9	99.1	98.6	96.8			0.549
	Boron	103	100	102	103			0.948
	Cadmium	102	103	103	101			0.285
	Chromium	98.6	97.5	97.4	96.8			0.202
	Cobalt	103	101	101	101			0.0975
	Copper	98.5	96.8	96.6	96.2			0.165
	Lead	105	104	104	105			0.260
	Manganese	99.7	97.9	97.1	98.0			0.716
	Molybdenum	101	103	101	100			1.46
	Nickel	98.0	97.5	96.8	96.5			0.800
	Selenium	102	102	101	101			1.12
	Silver	106	103	102	104			0.598
	Thallium	101	103	103	104			0.226
EPA 300.0 Rev. 2.1	Chloride	101	101	101			0.298	
	Sulfate	101	101	104			0.772	
EPA 350.1 Rev. 2.0	Ammonia-N	97.2	97.4	99.0				0.844
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	90.3	89.3				0.543
	Kjeldahl Nitrogen	104	107	106				1.14
EPA 353.2 Rev. 2.0	NO2NO3-N	106	104	103				0.541
EPA 365.1 Rev. 2.0	Total-P	99.7	99.8	100				0.557
EPA 8270E	Aldrin	37.1	47.8	50.2				4.87
	Alpha-BHC	98.5	94.3	95.7				1.51
	Alpha-Chlordane	59.6	73.2	71.5				2.34
	Beta-BHC	83.5	141	102				32.1
	Beta-Cyfluthrin	55.6	113	85.6				27.3
	Bifenthrin	48.6	72.8	53.5				30.7
	Carbophenothion	26.1	42.0	35.4				16.9
	Chlorothalonil	61.5	32.6	65.1				66.5
	Cis-Nonachlor	69.3	51.3	52.7				2.74
	Cypermethrin	129	93.4	120				25.2
	Dacthal	66.8	146	107				30.6
	DDD-p,p'	78.9	79.0	75.3				4.80
	DDE-p,p'	68.2	53.8	39.6				30.5
	DDT-p,p'	68.2	68.5	60.2				12.9
	Delta-BHC	100	95.1	106				10.8
	Deltamethrin	64.1	58.7	43.7				29.4
	Dichlobenil	116	96.7	80.3				18.5
	Dicofol	56.1	71.8	67.3				6.41

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Dieldrin	84.9	65.5	62.9		3.62
	Endosulfan I	80.4	66.9	65.2		2.64
	Endosulfan II	75.0	69.1	69.5		0.599
	Endosulfan Sulfate	61.5	125	87.8		34.9
	Endrin	82.5	93.1	71.3		26.6
	Endrin Aldehyde	48.2	68.9	78.2		12.6
	Endrin Ketone	87.8	80.1	70.5		12.8
	Esfenvalerate	61.6	50.8	49.1		3.41
	Ethalfuralin	70.0	66.9	71.9		7.17
	Fenpropathrin	48.8	95.4	66.5		35.7
	Gamma-BHC	114	111	95.7		14.4
	Gamma-Chlordane	52.0	69.8	70.8		1.51
	Heptachlor	78.8	69.6	61.1		12.9
	Heptachlor Epoxide	69.4	108	74.2		32.8
	Hexachlorobenzene	77.1	85.6	70.6		19.2
	Kepone	126	111	54.4		68.4
	Lambda-Cyhalothrin	65.1	94.3	75.8		21.7
	Methoprene	45.3	62.0	56.4		9.48
	Methoxychlor	79.5	53.7	60.8		12.4
	MGK-264	92.2	53.3	49.7		6.94
	Mirex	60.6	48.4	39.2		21.0
	Oxychlordane	71.2	61.7	75.4		20.0
	PCB-1016	79.5	64.4	79.8		21.4
	PCB-1260	114	73.4	87.4		17.4
	Permethrin	67.9	53.1	75.4		34.6
	Phenothrin	50.3	74.8	77.7		3.80
	Piperonyl Butoxide	87.3	61.6	86.1		33.1
	Prallethrin	57.1	73.3	73.2		0.176
	Tau-Fluvalinate	53.8	50.0	39.3		23.8
	Tetramethrin	74.2	117	87.8		28.8
	Trans-Nonachlor	46.1	72.4	64.7		11.3
	Triclosan Methyl	73.5	65.4	84.4		25.3
	Trifluralin	69.4	61.5	66.2		7.37
EPA 8276	Chlordane	78.7	76.6	83.0		7.50
	Toxaphene	90.8	93.8	96.0		2.38
EPA 8321B	2,4-D	85.2	104	111		6.31
	2,4-D	94.0	113	110		2.74
	2,4,5-T	83.2	108	105		3.12
	2,4,5-T	91.9	115	109		5.85
	Acesulfame K	107	129	130		0.713
	Acetaminophen	78.2	84.2	87.7		4.06
	Acetaminophen	74.1	85.7	84.1		1.85
	Acetamiprid	79.9	84.2	78.9		6.41
	Acetamiprid	82.4	98.6	96.6		2.02
	Afidopyropen	49.8	92.3	88.5		4.21
	Afidopyropen	68.1	99.1	95.3		3.85
	AMPA	97.1	87.0	94.2		7.95
	Bentazon	141				10.9
	Bentazon	139	164	174		5.03
	Benzovindiflupyr	81.6	80.6	80.2		0.506
	Benzovindiflupyr	79.3	81.9	87.3		6.39
	Carbamazepine	83.9	71.6	67.3		5.81
	Carbamazepine	72.2	82.6	84.1		1.79
	Clothianidin	86.8	105	104		1.03

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Clothianidin	84.7	99.7	99.2			0.475
	Dinotefuran	105	104	102			2.22
	Dinotefuran	94.6	112	116			3.54
	Diuron	77.1	65.6	62.4			4.96
	Diuron	70.0	72.5	73.5			1.32
	Endothall	81.3	85.3	83.2			2.43
	Fenuron	87.0	63.5	63.4			0.219
	Fenuron	81.9	77.3	84.5			8.83
	Fluridone	77.1	61.3	62.1			1.19
	Fluridone	73.3	81.8	96.1			16.1
	Glufosinate	81.9	84.9	85.0			0.0367
	Glyphosate	97.4	97.6	92.2			5.66
	Hydrocodone	86.5	71.9	69.9			2.95
	Hydrocodone	78.2	80.7	85.4			5.60
	Ibuprofen	91.0	60.5	52.8			13.7
	Ibuprofen	73.6	86.5	78.2			9.98
	Imazapyr	84.2	105	108			2.30
	Imazapyr	88.6	143	114			20.0
	Imidacloprid	83.9	115	116			0.536
	Imidacloprid	83.3	104	102			2.17
	Linuron	81.2	70.3	67.5			4.04
	Linuron	68.3	74.5	74.5			0.0137
	Mandestrobin	86.4	77.7	79.5			2.35
	Mandestrobin	82.6	94.1	90.4			3.98
	MCPP	87.7	121	106			12.5
	MCPP	98.2	126	110			13.5
	Naproxen	77.0	57.1	56.0			1.85
	Naproxen	75.7	93.3	73.3			23.9
	Primidone	85.2	96.7	97.0			0.400
	Primidone	84.1	98.8	95.8			3.10
	Pyraclostrobin	85.6	81.5	76.8			6.03
	Pyraclostrobin	77.6	85.1	85.7			0.684
	Silvex	81.7	114	118			3.21
	Silvex	87.8	112	117			3.93
	Sucralose	96.6	107	101			5.67
	Thiamethoxam	88.4	101	99.4			1.96
	Thiamethoxam	79.7	98.5	95.4			3.27
	Tolfenpyrad	55.3	54.5	49.3			10.0
	Tolfenpyrad	51.9	51.2	49.7			2.86
	Triclopyr	85.9	101	105			4.08
	Triclopyr	91.7	105	103			2.18
SM 2320 B-2011	Total Alkalinity	98.6				0.346	
SM 2540 C-2015	TDS	96.5				2.69	
SM 2540 D-2015	TSS	95.3					
SM 4500-F- C-2011	Fluoride	99.0	102	103			0.480
SM 5310 B-2011	Organic Carbon	96.3	96.9	98.0			0.917

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2405222, 2405224
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2405222, 2405224

Reference Method Descriptions

Method	Description	Associated Samples
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2405267, 2405268
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2405267, 2405268
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2405222, 2405224
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2405222, 2405224
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2405223, 2405225
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2405223, 2405225
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2405223, 2405225
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2405223, 2405225
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2405262
EPA 8270E	PCBs in water matrices by GC/MS/MS	2405262
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2405262
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2405263, 2405264, 2405265, 2405266
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2405222, 2405224
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2405267
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2405222, 2405224
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2405222, 2405224
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2405222, 2405224
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2405223, 2405225

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	05/03/2023			05/03/2023 14:50	Alexis Price	2405222
	05/03/2023			05/03/2023 14:51	Alexis Price	2405224
EPA 180.1 Rev. 2.0	05/03/2023			05/03/2023 13:00	Alexis Price	2405222
	05/03/2023			05/03/2023 13:02	Alexis Price	2405224
EPA 200.7 Rev. 4.4	05/03/2023	05/08/2023 12:00	George D Taylor	05/10/2023 18:48	McKinley C Carter	2405268
	05/03/2023	05/08/2023 12:00	George D Taylor	05/10/2023 20:11	McKinley C Carter	2405267
	05/03/2023	05/08/2023 12:00	George D Taylor	05/10/2023 20:18	McKinley C Carter	2405267
EPA 200.8 Rev. 5.4	05/03/2023	05/08/2023 12:00	George D Taylor	05/09/2023 13:19	Emily M Philpot	2405268
	05/03/2023	05/08/2023 12:00	George D Taylor	05/09/2023 15:15	Emily M Philpot	2405267
EPA 300.0 Rev. 2.1	05/03/2023			05/06/2023 05:48	Anna M. Plaviak	2405222
	05/03/2023			05/06/2023 06:03	Anna M. Plaviak	2405224
EPA 350.1 Rev. 2.0	05/03/2023			05/05/2023 11:59	Khloe J Berg	2405223
	05/03/2023			05/05/2023 12:00	Khloe J Berg	2405225
EPA 351.2 Rev. 2.0	05/03/2023	05/08/2023 14:20	Simonne.V. Calhoun	05/09/2023 15:54	Ping Hua	2405223
	05/03/2023	05/08/2023 14:20	Simonne.V. Calhoun	05/09/2023 15:59	Ping Hua	2405225
EPA 353.2 Rev. 2.0	05/03/2023			05/09/2023 11:30	Beverly Y. Sanders	2405223
	05/03/2023			05/09/2023 11:36	Beverly Y. Sanders	2405225
EPA 365.1 Rev. 2.0	05/03/2023	05/05/2023 14:00	Alexis Price	05/08/2023 09:10	James L Waggeberby	2405223
	05/03/2023	05/05/2023 14:00	Alexis Price	05/08/2023 14:17	James L Waggeberby	2405225
EPA 8270E	05/03/2023	05/08/2023 09:00	Fe-Val Siddell	05/11/2023 02:35	Julie Wi	2405262
	05/03/2023	05/08/2023 09:00	Fe-Val Siddell	05/13/2023 00:36	Michael Poppell	2405262
EPA 8276	05/03/2023	05/08/2023 09:00	Fe-Val Siddell	05/11/2023 12:04	Arthur Maknenko	2405262
EPA 8321B	05/03/2023	05/03/2023 14:00	Hoor Shaik	05/05/2023 01:02	Juyoung Kim	2405263
	05/03/2023	05/03/2023 14:00	Hoor Shaik	05/05/2023 01:21	Juyoung Kim	2405264
	05/03/2023	05/03/2023 14:00	Hoor Shaik	05/05/2023 11:40	Juyoung Kim	2405263
	05/03/2023	05/05/2023 09:00	Hoor Shaik	05/05/2023 17:55	Juyoung Kim	2405265
	05/03/2023	05/05/2023 09:00	Hoor Shaik	05/05/2023 18:14	Juyoung Kim	2405266
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/05/2023 15:34	Manjita Shrestha	2405263
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/05/2023 15:47	Manjita Shrestha	2405264
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/05/2023 16:00	Manjita Shrestha	2405265
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/05/2023 16:14	Manjita Shrestha	2405266
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/06/2023 15:10	Manjita Shrestha	2405263
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/06/2023 15:24	Manjita Shrestha	2405264
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/06/2023 15:38	Manjita Shrestha	2405265
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/06/2023 15:52	Manjita Shrestha	2405266
	05/03/2023			05/11/2023 16:09	Dale L. Simmons	2405224
	05/03/2023			05/11/2023 19:10	Dale L. Simmons	2405222
SM 2320 B-2011	05/03/2023			05/10/2023 20:11	McKinley C Carter	2405267
SM 2340 B-2011	05/03/2023			05/05/2023 16:02	Yijie Li	2405222, 2405224
SM 2540 C-2015	05/03/2023			05/05/2023 16:02	Yijie Li	2405222, 2405224

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500-F- C-2011	05/03/2023			05/10/2023 00:34	Dale L. Simmons	2405224
	05/03/2023			05/10/2023 01:16	Dale L. Simmons	2405222
SM 5310 B-2011	05/03/2023			05/08/2023 19:46	Elise M. Gillis	2405223
	05/03/2023			05/08/2023 20:00	Elise M. Gillis	2405225