

Chemical Analysis Report

SO-DIST-2024-03-27-02

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

Event Description: **2024 SMP: Later Gator**
Request ID: **RQ-2024-03-25-14**
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.
Marek Topolski, 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: 15-APR-2024 14:52



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: WINEGOURD CRK TRIB HERITAGE

Collection Date/Time: 03/26/2024 12:05

Field ID: G2SD0060				Matrix: W-SURF-FRH			
Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2477825	DEP SOP: NU-094-1	Color (true)	48		PCU	P443405	
	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P443392	
	EPA 300.0 Rev. 2.1	Chloride	490		mg Cl/L	P443664	
		Sulfate	58		mg SO4/L	P443667	
	SM 2320 B-2011	Total Alkalinity	398		mg CaCO3/L	P443496	
	SM 2540 C-2015	TDS	1.42E+03		mg/L	P443897	
	SM 2540 D-2015	TSS	7	I	mg/L	P443729	
	SM 4500-F- C-2011	Fluoride	0.28		mg F/L	P443499	
2477826	EPA 350.1 Rev. 2.0	Ammonia-N	1.2		mg N/L	P443574	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.3		mg N/L	P443425	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.056		mg N/L	P443467	
	EPA 365.1 Rev. 2.0	Total-P	0.15		mg P/L	P443443	
	SM 5310 B-2014	Organic Carbon	13		mg C/L	P443681	

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: YUCCAFLATWOODS MID

Collection Date/Time: 03/26/2024 12:25

Field ID: G2SD0052

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2477821	DEP SOP: NU-094-1	Color (true)	47		PCU	P443405	
	EPA 180.1 Rev. 2.0	Turbidity	4.8		NTU	P443392	
	EPA 300.0 Rev. 2.1	Chloride	1.4E+04		mg Cl/L	P443664	
		Sulfate	2.0E+03		mg SO4/L	P443667	
	SM 2320 B-2011	Total Alkalinity	133		mg CaCO3/L	P443659	
	SM 2540 C-2015	TDS	2.46E+04		mg/L	P443898	
	SM 2540 D-2015	TSS	14		mg/L	P443731	
2477822	SM 4500-F- C-2011	Fluoride	0.89		mg F/L	P444102	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.051		mg N/L	P443573	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.90		mg N/L	P443513	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.012		mg N/L	P443591	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P443441	
2477841	EPA 8321B	SM 5310 B-2014	Organic Carbon	10	mg C/L	P443564	
		Acesulfame K	0.10	U	ug/L	P443330	
		2,4-D	0.0022	I	ug/L	P443301	
		AMPA	1.0	U	ug/L	P443330	
		2,4,5-T	0.0040	U	ug/L	P443301	
		Acetaminophen	0.0080	U	ug/L	P443301	
		Endothall	0.25	U	ug/L	P443330	
		Acetamiprid	0.0020	U	ug/L	P443301	
		Glufosinate	1.0	U	ug/L	P443330	
		Glyphosate	1.0	U	ug/L	P443330	
		Afidopyropen	0.0020	U	ug/L	P443301	RPD
		Sucralose	0.046		ug/L	P443330	
		Bentazon	0.0037		ug/L	P443301	
		Benzovindiflupyr	0.0020	U	ug/L	P443301	
		Carbamazepine	8.0E-04	U	ug/L	P443301	
		Clothianidin	0.0020	U	ug/L	P443301	
		Dinotefuran	0.0020	U	ug/L	P443301	
		Diuron	0.0020	U	ug/L	P443301	
		Fenuron	0.032	U	ug/L	P443301	
		Fluridone	0.0010	I	ug/L	P443301	
		Imazapyr	0.015	I	ug/L	P443301	
		Hydrocodone	0.0020	U	ug/L	P443301	
		Ibuprofen	0.080	U	ug/L	P443301	
		Imidacloprid	0.0020	U	ug/L	P443301	
		Linuron	0.0040	U	ug/L	P443301	
		Mandestrobin	0.0020	U	ug/L	P443301	
		MCPP	0.0020	U	ug/L	P443301	
		Naproxen	0.0080	U	ug/L	P443301	
		Primidone	0.0040	U	ug/L	P443301	
		Pyraclostrobin	0.0020	U	ug/L	P443301	
		Silvex	0.0040	U	ug/L	P443301	
		Thiamethoxam	0.0020	U	ug/L	P443301	

Field ID: G2SD0052

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2477841	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P443301	
		Triclopyr	0.0040	U	ug/L	P443301	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.

Sample Location: YUCCA PEN MARINE AT N OF OLD
BURNTSTORE

Collection Date/Time: 03/26/2024 12:45

Field ID: G2SD0015				Matrix: W-SURF-SLT			
Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2477823	DEP SOP: NU-094-1	Color (true)	71		PCU	P443405	
	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P443392	
	EPA 300.0 Rev. 2.1	Chloride	1.0E+03		mg Cl/L	P443664	
		Sulfate	140		mg SO4/L	P443667	
	SM 2320 B-2011	Total Alkalinity	154		mg CaCO3/L	P443496	
	SM 2540 C-2015	TDS	2.02E+03		mg/L	P443897	
	SM 2540 D-2015	TSS	6	I	mg/L	P443729	
2477824	SM 4500-F- C-2011	Fluoride	0.14		mg F/L	P443499	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P443573	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P443513	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P444106	
	EPA 365.1 Rev. 2.0	Total-P	0.032		mg P/L	P443441	
2477842	SM 5310 B-2014	Organic Carbon	15		mg C/L	P443681	
	EPA 8321B	2,4-D	0.0020	U	ug/L	P443301	
		Acesulfame K	0.10	U	ug/L	P443330	
		2,4,5-T	0.0040	U	ug/L	P443301	
		AMPA	0.10	U	ug/L	P443330	
		Acetaminophen	0.0080	U	ug/L	P443301	
		Acetamiprid	0.0020	U	ug/L	P443301	
		Endothall	0.25	U	ug/L	P443330	
		Glufosinate	0.10	U	ug/L	P443330	
		Glyphosate	0.10	U	ug/L	P443330	
		Afidopyropen	0.0020	U	ug/L	P443301	RPD
		Bentazon	0.0017	I	ug/L	P443301	
		Sucralose	0.035	I	ug/L	P443330	
		Benzovindiflupyr	0.0020	U	ug/L	P443301	
		Carbamazepine	8.0E-04	U	ug/L	P443301	
		Clothianidin	0.0020	U	ug/L	P443301	
		Dinotefuran	0.0020	U	ug/L	P443301	
		Diuron	0.0020	U	ug/L	P443301	
		Fenuron	0.032	U	ug/L	P443301	
		Fluridone	8.0E-04	U	ug/L	P443301	
		Imazapyr	0.66		ug/L	P443301	
		Hydrocodone	0.0020	U	ug/L	P443301	
		Ibuprofen	0.080	U	ug/L	P443301	
		Imidacloprid	0.0020	U	ug/L	P443301	
		Linuron	0.0040	U	ug/L	P443301	
		Mandestrobin	0.0020	U	ug/L	P443301	
		MCP	0.0020	U	ug/L	P443301	
		Naproxen	0.0080	U	ug/L	P443301	
		Primidone	0.0040	U	ug/L	P443301	
		Pyraclostrobin	0.0020	U	ug/L	P443301	
		Silvex	0.0040	U	ug/L	P443301	

Field ID: G2SD0015

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2477842	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P443301	
		Tolfenpyrad	0.0020	U	ug/L	P443301	
		Triclopyr	0.0040	U	ug/L	P443301	

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: EMERALD POINTE CANAL

Collection Date/Time: 03/26/2024 14:20

Field ID: G3SD0216

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2477873	DEP SOP: NU-094-1	Color (true)	53	A	PCU	P443406	
	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P443393	
	EPA 300.0 Rev. 2.1	Chloride	7.0E+03		mg Cl/L	P443664	
		Sulfate	1.0E+03		mg SO4/L	P443667	
	SM 2320 B-2011	Total Alkalinity	95	IA	mg CaCO3/L	P443659	
	SM 2540 C-2015	TDS	1.26E+04		mg/L	P443898	
	SM 2540 D-2015	TSS	5		mg/L	P443731	
	SM 4500-F- C-2011	Fluoride	0.71		mg F/L	P444102	
2477874	EPA 350.1 Rev. 2.0	Ammonia-N	0.027		mg N/L	P443573	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P443513	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.048		mg N/L	P443591	
	EPA 365.1 Rev. 2.0	Total-P	0.29		mg P/L	P443441	
	SM 5310 B-2014	Organic Carbon	12		mg C/L	P443564	

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: ALLIGATOR CREEK TAYLOR RD

Collection Date/Time: 03/26/2024 13:20

Field ID: G2SD0059

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2477897	EPA 8270E	Aldrin	0.67	U	ng/L	P443543	CCV
		Alpha-BHC	0.10	UJ	ng/L	P443543	
		Alpha-Chlordane	0.20	U	ng/L	P443543	
		PCB-1016	2.0	U	ng/L	P443543	
		Beta-BHC	0.10	U	ng/L	P443543	
		PCB-1221	2.0	U	ng/L	P443543	
		Beta-Cyfluthrin	1.3	U	ng/L	P443543	
		PCB-1232	2.0	U	ng/L	P443543	
		Bifenthrin	0.51	U	ng/L	P443543	
		PCB-1242	2.0	U	ng/L	P443543	
		PCB-1248	2.0	U	ng/L	P443543	
		Chlorothalonil	3.7	U	ng/L	P443543	
		PCB-1254	2.0	U	ng/L	P443543	
		Cis-Nonachlor	0.20	U	ng/L	P443543	
		PCB-1260	2.0	U	ng/L	P443543	
		Cypermethrin	1.5	U	ng/L	P443543	
		Dacthal	0.15	U	ng/L	P443543	
		DDD-p,p'	0.26	U	ng/L	P443543	
		DDE-p,p'	0.20	U	ng/L	P443543	
		DDT-p,p'	1.1	I	ng/L	P443543	
		Delta-BHC	0.41	U	ng/L	P443543	
		Deltamethrin	1.3	U	ng/L	P443543	
		Dichlobenil	0.26	U	ng/L	P443543	
		Dicofol	1.3	U	ng/L	P443543	
		Dieldrin	0.41	U	ng/L	P443543	
		Endosulfan I	0.41	U	ng/L	P443543	
		Endosulfan II	0.92	U	ng/L	P443543	
		Endosulfan Sulfate	0.31	U	ng/L	P443543	
		Endrin	0.92	U	ng/L	P443543	
		Endrin Aldehyde	0.77	U	ng/L	P443543	
		Endrin Ketone	0.41	U	ng/L	P443543	
		Esfenvalerate	0.77	U	ng/L	P443543	
		Ethalfuralin	0.15	U	ng/L	P443543	
		Fenpropathrin	0.26	U	ng/L	P443543	
		Gamma-BHC	0.13	U	ng/L	P443543	
		Gamma-Chlordane	0.20	U	ng/L	P443543	
		Heptachlor	0.20	U	ng/L	P443543	
		Heptachlor Epoxide	0.26	U	ng/L	P443543	
		Hexachlorobenzene**	1.0	U	ng/L	P443543	
		Kepone	14	U	ng/L	P443543	
		Lambda-Cyhalothrin	0.77	U	ng/L	P443543	
		Methoprene	0.77	U	ng/L	P443543	
		Methoxychlor	0.31	U	ng/L	P443543	
		MGK-264	0.20	U	ng/L	P443543	

Field ID: G2SD0059

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2477897	EPA 8270E	Mirex	0.36	U	ng/L	P443543	
		Oxychlordane	0.31	U	ng/L	P443543	
		Permethrin	1.6	U	ng/L	P443543	
		Phenothrin	0.92	U	ng/L	P443543	
		Piperonyl Butoxide	0.15	U	ng/L	P443543	
		Prallethrin	2.0	U	ng/L	P443543	
		Tau-Fluvalinate	0.26	U	ng/L	P443543	
		Tetramethrin	0.77	U	ng/L	P443543	
		Trans-Nonachlor	0.20	U	ng/L	P443543	
		Triclosan Methyl	0.15	U	ng/L	P443543	
		Trifluralin	0.20	U	ng/L	P443543	
	EPA 8276	Chlordane	2.0	U	ng/L	P443543	
		Toxaphene	15	U	ng/L	P443543	

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

Sample Location: FB_03262024

Collection Date/Time: 03/26/2024 13:55

Field ID: FB

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2477898	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P443435	
		Iron	30	U	ug/L	P443435	
		Magnesium	0.040	U	mg/L	P443435	
		Potassium	0.30	U	mg/L	P443435	
		Sodium	0.50	U	mg/L	P443435	
		Strontium	2.0	U	ug/L	P443435	
		Tin	3.0	U	ug/L	P443435	
		Titanium	0.75	U	ug/L	P443435	
		Vanadium	2.0	U	ug/L	P443435	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P443435	
		Aluminum	5.0	U	ug/L	P443435	
		Antimony	0.050	U	ug/L	P443435	
		Arsenic	0.050	U	ug/L	P443435	
		Barium	0.20	U	ug/L	P443435	
		Beryllium	0.010	U	ug/L	P443435	
		Boron	3.0	I	ug/L	P443435	
		Cadmium	0.020	U	ug/L	P443435	
		Chromium	1.3	I	ug/L	P443582	
		Cobalt	0.020	U	ug/L	P443435	
		Copper	0.40	U	ug/L	P443435	
		Lead	0.20	U	ug/L	P443435	
		Manganese	0.18	I	ug/L	P443435	
		Molybdenum	0.15	U	ug/L	P443435	
		Nickel	0.54	I	ug/L	P443435	
		Selenium	0.20	U	ug/L	P443435	
		Silver	0.010	U	ug/L	P443435	
		Thallium	0.10	U	ug/L	P443435	

Ref. Method and Comment:
 EPA 200.8 Rev. 5.4: The boron, manganese and nickel result was confirmed in the undigested sample on 03/28/2024. The chromium result was confirmed in the undigested sample on 04/02/2024. Batch matrix spike recoveries for chromium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: ALLIGATOR NORTH AT JONES LOOP RD Collection Date/Time: 03/26/2024 13:50

Field ID: G2SD0032 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2477954	EPA 200.7 Rev. 4.4	Calcium	105		mg/L	P443435	
		Iron	500		ug/L	P443435	
		Magnesium	7.17		mg/L	P443435	
		Potassium	0.87	I	mg/L	P443435	
		Sodium	34.7		mg/L	P443435	
		Strontium	650		ug/L	P443435	
		Tin	3.0	U	ug/L	P443435	
		Titanium	0.75	U	ug/L	P443435	
		Vanadium	2.0	U	ug/L	P443435	
		Zinc	5.0	U	ug/L	P443435	
	EPA 200.8 Rev. 5.4	Aluminum	13	I	ug/L	P443435	
		Antimony	0.060	I	ug/L	P443435	
		Arsenic	0.76		ug/L	P443435	
		Barium	29.4		ug/L	P443435	
		Beryllium	0.010	U	ug/L	P443435	
		Boron	46.8		ug/L	P443435	
		Cadmium	0.020	U	ug/L	P443435	
		Chromium	0.40	U	ug/L	P443435	
		Cobalt	0.067	I	ug/L	P443435	
		Copper	0.40	U	ug/L	P443435	
		Lead	0.20	U	ug/L	P443435	
		Manganese	12.4		ug/L	P443435	
		Molybdenum	4.90		ug/L	P443435	
		Nickel	0.50	U	ug/L	P443435	
		Selenium	0.20	U	ug/L	P443435	
		Silver	0.010	U	ug/L	P443435	
		Thallium	0.10	U	ug/L	P443435	
	SM 2340 B-2011	Hardness	292		mg/L	P443435	

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P443405

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P443406

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P443392

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P443393

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P443435

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: P443435

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443435

Component	Result	Code	Units
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 200.8 Rev. 5.4
Batch ID: P443582

Component	Result	Code	Units
Chromium	0.40	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443664

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443667

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443573

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443574

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443425

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443513

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443467

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443591

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444106

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443441

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443443

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

Reference Method: EPA 8270E
Batch ID: P443543

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
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P443543

Component	Result	Code	Units
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: P443543

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

Reference Method: EPA 8321B

Batch ID: P443301

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P443301

Component	Result	Code	Units
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: P443330

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: SM 2320 B-2011

Batch ID: P443496

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

Reference Method: SM 2320 B-2011

Batch ID: P443659

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

Reference Method: SM 2540 C-2015

Batch ID: P443897

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015

Batch ID: P443898

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 D-2015
Batch ID: P443729

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P443731

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P443499

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P444102

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2014
Batch ID: P443564

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Reference Method: SM 5310 B-2014
Batch ID: P443681

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: P443405

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.4		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P443406

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.5		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P443392

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P443393

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P443435

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	85 - 115
Iron	111		P	85 - 115
Magnesium	113		P	85 - 115
Potassium	104		P	85 - 115
Sodium	104		P	85 - 115
Strontium	96.4		P	85 - 115
Tin	101		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	99.0		P	85 - 115
Zinc	96.5		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443435

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.6		P	85 - 115
Antimony	102		P	85 - 115
Arsenic	98.0		P	85 - 115
Barium	102		P	85 - 115
Beryllium	98.6		P	85 - 115
Boron	99.6		P	85 - 115
Cadmium	99.6		P	85 - 115
Chromium	104		P	85 - 115
Cobalt	101		P	85 - 115
Copper	96.9		P	85 - 115
Lead	93.7		P	85 - 115
Manganese	103		P	85 - 115
Molybdenum	97.1		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443435

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Nickel	98.6		P	85 - 115
Selenium	98.4		P	85 - 115
Silver	99.9		P	85 - 115
Thallium	94.1		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443582

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chromium	105		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443664

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443667

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443573

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443574

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443425

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443513

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443467

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443591

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444106

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443441

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443443

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

Reference Method: EPA 8270E
Batch ID: P443543

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	63.5		P	30 - 96.0
Alpha-BHC	82.0		P	70 - 109
Alpha-Chlordane	75.0		P	45 - 107
Beta-BHC	119		P	64 - 138
Beta-Cyfluthrin	72.7		P	17 - 141
Bifenthrin	63.8		P	10 - 113
Chlorothalonil	102		P	26 - 180
Cis-Nonachlor	89.3		P	37 - 102
Cypermethrin	84.8		P	20 - 133
Dacthal	103		P	69 - 114
DDD-p,p'	89.3		P	42 - 105
DDE-p,p'	87.7		P	42 - 106
DDT-p,p'	99.2		P	42 - 107
Delta-BHC	123		P	67 - 144
Deltamethrin	79.3		P	15 - 149
Dichlobenil	75.8		P	46 - 117
Dicofol	82.0		P	34 - 114
Dieldrin	89.6		P	50 - 108
Endosulfan I	81.2		P	55 - 104
Endosulfan II	85.3		P	51 - 111
Endosulfan Sulfate	97.9		P	56 - 121
Endrin	89.0		P	10 - 106
Endrin Aldehyde	89.6		P	34 - 114
Endrin Ketone	109		P	63 - 177
Esfenvalerate	74.7		P	29 - 143
Ethalfuralin	83.8		P	46 - 96.0
Fenpropathrin	86.5		P	28 - 115
Gamma-BHC	120		P	65 - 121

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P443543

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Gamma-Chlordane	86.6		P	39 - 103
Heptachlor	75.1		P	39 - 94.0
Heptachlor Epoxide	83.6		P	54 - 104
Hexachlorobenzene	61.7		P	36 - 100
Kepone	137		P	10 - 225
Lambda-Cyhalothrin	71.3		P	10 - 135
Methoprene	62.5		P	10 - 109
Methoxychlor	109		P	52 - 112
MGK-264	77.5		P	44 - 117
Mirex	62.0		P	20 - 90.0
Oxychlordane	86.2		P	44 - 102
PCB-1016	86.1		P	45 - 107
PCB-1260	82.2		P	40 - 118
Permethrin	69.0		P	18 - 135
Phenothrin	49.6		P	10 - 102
Piperonyl Butoxide	106		P	28 - 156
Prallethrin	64.1		P	28 - 113
Tau-Fluvalinate	58.4		P	10 - 123
Tetramethrin	89.1		P	18 - 158
Trans-Nonachlor	95.8		P	39 - 104
Triclosan Methyl	89.6		P	54 - 108
Trifluralin	85.5		P	46 - 97.0

Reference Method: EPA 8276
Batch ID: P443543

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	90.7		P	52 - 117
Toxaphene	89.9		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P443301

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	108		P	40 - 150
2,4,5-T	107		P	40 - 150
Acetaminophen	92.5		P	30 - 150
Acetamiprid	87.8		P	40 - 150
Afidopyropen	67.5		P	30 - 150
Bentazon	100		P	30 - 150
Benzovindiflupyr	86.0		P	40 - 150
Carbamazepine	86.7		P	40 - 150
Clothianidin	98.7		P	40 - 150
Dinotefuran	102		P	40 - 150
Diuron	94.1		P	40 - 150
Fenuron	93.1		P	40 - 150
Fluridone	93.5		P	40 - 150
Hydrocodone	99.6		P	40 - 150
Ibuprofen	83.0		P	40 - 150
Imazapyr	93.1		P	40 - 150
Imidacloprid	91.1		P	40 - 150
Linuron	92.2		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P443301

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mandestrobin	96.3		P	40 - 150
MCPPP	108		P	40 - 150
Naproxen	77.4		P	40 - 150
Primidone	81.9		P	40 - 150
Pyraclostrobin	80.2		P	40 - 150
Silvex	92.2		P	40 - 150
Thiamethoxam	98.4		P	40 - 150
Tolfenpyrad	51.6		P	30 - 150
Triclopyr	116		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P443330

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	105		P	40 - 150
AMPA	118		P	40 - 160
Endothall	104		P	40 - 160
Glufosinate	122		P	40 - 160
Glyphosate	122		P	40 - 160
Sucralose	101		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P443496

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P443659

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.8		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P443897

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	95.2		P	85 - 115

Reference Method: SM 2540 C-2015
Batch ID: P443898

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	95.2		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P443729

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2540 D-2015
Batch ID: P443731

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	91.2		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P443499

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

Reference Method: SM 4500-F- C-2011
Batch ID: P444102

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.3		P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P443564

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.6		P	85 - 115

Reference Method: SM 5310 B-2014
Batch ID: P443681

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P443435

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477640	Calcium	99.5		P	80 - 120
2477640	Iron	108	106	P/P	80 - 120
2477640	Magnesium	107	104	P/P	80 - 120
2477640	Potassium	103	101	P/P	80 - 120
2477640	Sodium	102	98.4	P/P	80 - 120
2477640	Strontium	95.9	94.1	P/P	80 - 120
2477640	Tin	98.1	98.4	P/P	80 - 120
2477640	Titanium	102	101	P/P	80 - 120
2477640	Vanadium	98.0	98.1	P/P	80 - 120
2477640	Zinc	93.8	93.2	P/P	80 - 120
2477657	Calcium	114		P	80 - 120
2477657	Iron	112		P	80 - 120
2477657	Magnesium	114		P	80 - 120
2477657	Potassium	108		P	80 - 120
2477657	Sodium	103		P	80 - 120
2477657	Strontium	99.9		P	80 - 120
2477657	Tin	101		P	80 - 120
2477657	Titanium	94.2		P	80 - 120
2477657	Vanadium	99.9		P	80 - 120
2477657	Zinc	96.5		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443435

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477640	Aluminum	96.9	97.8	P/P	80 - 120
2477640	Antimony	103	104	P/P	80 - 120
2477640	Arsenic	98.5	99.2	P/P	80 - 120
2477640	Barium	101	102	P/P	80 - 120
2477640	Beryllium	99.1	100	P/P	80 - 120
2477640	Boron	101	101	P/P	80 - 120
2477640	Cadmium	103	104	P/P	80 - 120
2477640	Chromium	106	107	P/P	80 - 120
2477640	Cobalt	101	101	P/P	80 - 120
2477640	Copper	93.5	93.8	P/P	80 - 120
2477640	Lead	93.8	94.5	P/P	80 - 120
2477640	Manganese	104	105	P/P	80 - 120
2477640	Molybdenum	98.7	101	P/P	80 - 120
2477640	Nickel	98.4	97.8	P/P	80 - 120
2477640	Selenium	99.2	99.8	P/P	80 - 120
2477640	Silver	100	101	P/P	80 - 120
2477640	Thallium	95.6	97.0	P/P	80 - 120
2477657	Aluminum	94.4		P	80 - 120
2477657	Antimony	102		P	80 - 120
2477657	Arsenic	98.6		P	80 - 120
2477657	Barium	103		P	80 - 120
2477657	Beryllium	100		P	80 - 120
2477657	Boron	97.8		P	80 - 120
2477657	Cadmium	100		P	80 - 120
2477657	Chromium	104		P	80 - 120
2477657	Cobalt	100		P	80 - 120
2477657	Copper	96.1		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443435

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477657	Lead	94.6		P	80 - 120
2477657	Manganese	104		P	80 - 120
2477657	Molybdenum	98.4		P	80 - 120
2477657	Nickel	97.8		P	80 - 120
2477657	Selenium	98.5		P	80 - 120
2477657	Silver	99.7		P	80 - 120
2477657	Thallium	95.9		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443582

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2478238	Chromium	110	105	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443664

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477794	Chloride	101		P	90 - 110
2477797	Chloride	99.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443667

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477794	Sulfate	102		P	90 - 110
2477797	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443573

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476854	Ammonia-N	98.6	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443574

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477809	Ammonia-N	99.2	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443425

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477777	Kjeldahl Nitrogen	93.3	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443513

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477874	Kjeldahl Nitrogen	90.9	95.4	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443467

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477773	NO2NO3-N	92.3	94.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443591

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2478182	NO2NO3-N	98.5	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444106

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2479945	NO2NO3-N	96.5	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443441

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477824	Total-P	102	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443443

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477857	Total-P	105	110	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P443543

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477927	Aldrin	79.4	75.3	P/P	24 - 81.0
2477927	Alpha-BHC	72.9	77.6	P/P	65 - 110
2477927	Alpha-Chlordane	91.9	78.7	P/P	43 - 119
2477927	Beta-BHC	129	103	P/P	54 - 165
2477927	Beta-Cyfluthrin	107	111	P/P	27 - 165
2477927	Bifenthrin	97.4	108	P/P	17 - 117
2477927	Chlorothalonil	135	127	P/P	10 - 255
2477927	Cis-Nonachlor	74.0	82.1	P/P	34 - 98.0
2477927	Cypermethrin	109	117	P/P	25 - 143
2477927	Dacthal	103	93.6	P/P	55 - 139
2477927	DDD-p,p'	83.1	88.2	P/P	30 - 109
2477927	DDE-p,p'	87.8	74.6	P/P	35 - 106
2477927	DDT-p,p'	90.4	81.2	P/P	41 - 101
2477927	Delta-BHC	144	112	P/P	58 - 165
2477927	Deltamethrin	133	130	P/P	10 - 194
2477927	Dichlobenil	72.4	78.3	P/P	22 - 114
2477927	Dicofol	82.7	77.9	P/P	17 - 133
2477927	Dieldrin	93.6	80.8	P/P	45 - 129
2477927	Endosulfan I	101	82.4	P/P	49 - 104
2477927	Endosulfan II	103	81.9	P/P	37 - 117
2477927	Endosulfan Sulfate	102	95.4	P/P	38 - 128
2477927	Endrin	94.6	81.9	P/P	35 - 116

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P443543

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477927	Endrin Aldehyde	60.9	70.3	P/P	19 - 108
2477927	Endrin Ketone	111	95.9	P/P	44 - 134
2477927	Esfenvalerate	112	125	P/P	27 - 176
2477927	Ethalfuralin	86.4	92.9	P/P	49 - 100
2477927	Fenpropathrin	98.0	95.2	P/P	34 - 117
2477927	Gamma-BHC	111	97.5	P/P	59 - 129
2477927	Gamma-Chlordane	92.5	82.9	P/P	33 - 107
2477927	Heptachlor	79.1	74.2	P/P	37 - 94.0
2477927	Heptachlor Epoxide	98.6	78.0	P/P	38 - 118
2477927	Hexachlorobenzene	73.0	67.5	P/P	35 - 97.0
2477927	Kepone	135	133	P/P	10 - 221
2477927	Lambda-Cyhalothrin	96.5	105	P/P	23 - 190
2477927	Methoprene	84.5	69.6	P/P	21 - 109
2477927	Methoxychlor	105	98.3	P/P	46 - 118
2477927	MGK-264	102	84.5	P/P	39 - 122
2477927	Mirex	76.6	65.0	P/P	25 - 90.0
2477927	Oxychlordane	98.0	80.5	P/P	42 - 100
2477927	Permethrin	102	111	P/P	33 - 181
2477927	Phenothrin	92.1	99.7	P/P	12 - 125
2477927	Piperonyl Butoxide	112	107	P/P	10 - 178
2477927	Prallethrin	94.1	78.2	P/P	24 - 122
2477927	Tau-Fluvalinate	106	109	P/P	13 - 151
2477927	Tetramethrin	108	114	P/P	16 - 172
2477927	Trans-Nonachlor	94.4	85.3	P/P	39 - 100
2477927	Triclosan Methyl	89.6	77.9	P/P	43 - 110
2477927	Trifluralin	83.2	79.8	P/P	45 - 94.0
2478407	PCB-1016	81.6	74.8	P/P	45 - 107
2478407	PCB-1260	77.9	64.6	P/P	40 - 112

Reference Method: EPA 8276
Batch ID: P443543

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2478407	Chlordane	77.1	69.0	P/P	43 - 123
2478407	Toxaphene	77.9	66.6	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P443301

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477584	2,4-D	87.0	97.8	P/P	40 - 150
2477584	2,4,5-T	90.4	91.9	P/P	40 - 150
2477584	Acetaminophen	98.2	98.3	P/P	30 - 150
2477584	Acetamiprid	61.8	58.5	P/P	40 - 150
2477584	Afidopyropen	56.0	38.9	P/P	30 - 150
2477584	Bentazon	44.1	50.4	P/P	30 - 150
2477584	Benzovindiflupyr	77.4	83.4	P/P	40 - 150
2477584	Carbamazepine	63.4	62.6	P/P	40 - 150
2477584	Clothianidin	89.9	93.3	P/P	40 - 150
2477584	Dinotefuran	82.5	86.5	P/P	40 - 150
2477584	Diuron	67.5	64.6	P/P	40 - 150
2477584	Fenuron	61.6	63.8	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P443301

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477584	Fluridone	74.7	74.1	P/P	40 - 150
2477584	Hydrocodone	73.7	77.7	P/P	40 - 150
2477584	Ibuprofen	81.3	71.6	P/P	40 - 150
2477584	Imazapyr	102	109	P/P	40 - 150
2477584	Imidacloprid	108	113	P/P	40 - 150
2477584	Linuron	69.3	72.7	P/P	40 - 150
2477584	Mandestrobin	85.6	88.9	P/P	40 - 150
2477584	MCCP	90.4	97.0	P/P	40 - 150
2477584	Naproxen	84.0	75.8	P/P	40 - 150
2477584	Primidone	79.0	84.2	P/P	40 - 150
2477584	Pyraclostrobin	76.1	83.0	P/P	40 - 150
2477584	Silvex	76.2	86.2	P/P	40 - 150
2477584	Thiamethoxam	88.7	90.9	P/P	40 - 150
2477584	Tolfenpyrad	49.4	55.6	P/P	30 - 150
2477584	Triclopyr	80.5	93.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P443330

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477584	Acesulfame K	122	131	P/P	40 - 150
2477584	AMPA	101	99.3	P/P	40 - 160
2477584	Endothall	102	105	P/P	40 - 160
2477584	Glufosinate	110	114	P/P	40 - 160
2477584	Glyphosate	110	108	P/P	40 - 160
2477584	Sucralose	103	103	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P443499

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477856	Fluoride	102	102	P/P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P444102

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2478055	Fluoride	101	103	P/P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P443564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477263	Organic Carbon	95.4	94.0	P/P	85 - 115

Reference Method: SM 5310 B-2014
Batch ID: P443681

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2477773	Organic Carbon	101	102	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P443405

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477794	Color (true)	11.2	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P443406

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477873	Color (true)	2.84	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P443392

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477618	Turbidity	4.77	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P443393

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477881	Turbidity	8.26	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P443435

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477640	Calcium	2.03	Spike	P	0 - 20
2477640	Iron	1.83	Spike	P	0 - 20
2477640	Magnesium	2.15	Spike	P	0 - 20
2477640	Potassium	1.76	Spike	P	0 - 20
2477640	Sodium	2.06	Spike	P	0 - 20
2477640	Strontium	1.84	Spike	P	0 - 20
2477640	Tin	0.232	Spike	P	0 - 20
2477640	Titanium	0.603	Spike	P	0 - 20
2477640	Vanadium	0.0606	Spike	P	0 - 20
2477640	Zinc	0.446	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443435

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477640	Aluminum	0.869	Spike	P	0 - 20
2477640	Antimony	1.45	Spike	P	0 - 20
2477640	Arsenic	0.703	Spike	P	0 - 20
2477640	Barium	1.53	Spike	P	0 - 20
2477640	Beryllium	1.02	Spike	P	0 - 20
2477640	Boron	0.319	Spike	P	0 - 20
2477640	Cadmium	0.438	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443435

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477640	Chromium	0.488	Spike	P	0 - 20
2477640	Cobalt	0.0672	Spike	P	0 - 20
2477640	Copper	0.267	Spike	P	0 - 20
2477640	Lead	0.785	Spike	P	0 - 20
2477640	Manganese	1.14	Spike	P	0 - 20
2477640	Molybdenum	1.63	Spike	P	0 - 20
2477640	Nickel	0.683	Spike	P	0 - 20
2477640	Selenium	0.600	Spike	P	0 - 20
2477640	Silver	0.615	Spike	P	0 - 20
2477640	Thallium	1.38	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443582

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2478238	Chromium	4.13	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443664

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477794	Chloride	0.478	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443667

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477794	Sulfate	0.720	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443573

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476854	Ammonia-N	1.39	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443574

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477809	Ammonia-N	0.551	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443425

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443425

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477777	Kjeldahl Nitrogen	8.11	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443513

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477874	Kjeldahl Nitrogen	3.87	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443467

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477773	NO2NO3-N	2.57	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443591

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2478182	NO2NO3-N	1.01	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444106

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2479945	NO2NO3-N	3.06	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443441

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477824	Total-P	1.21	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443443

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477857	Total-P	3.42	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P443543

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477927	Aldrin	5.32	Spike	P	0 - 41
2477927	Alpha-BHC	6.22	Spike	P	0 - 25

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P443543

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477927	Alpha-Chlordane	15.5	Spike	P	0 - 32
2477927	Beta-BHC	22.6	Spike	P	0 - 33
2477927	Beta-Cyfluthrin	3.56	Spike	P	0 - 43
2477927	Bifenthrin	10.3	Spike	P	0 - 52
2477927	Chlorothalonil	5.80	Spike	P	0 - 82
2477927	Cis-Nonachlor	10.4	Spike	P	0 - 33
2477927	Cypermethrin	7.02	Spike	P	0 - 51
2477927	Dacthal	9.20	Spike	P	0 - 27
2477927	DDD-p,p'	5.94	Spike	P	0 - 39
2477927	DDE-p,p'	16.3	Spike	P	0 - 31
2477927	DDT-p,p'	8.45	Spike	P	0 - 29
2477927	Delta-BHC	24.8	Spike	P	0 - 35
2477927	Deltamethrin	2.56	Spike	P	0 - 100
2477927	Dichlobenil	7.89	Spike	P	0 - 40
2477927	Dicofol	6.01	Spike	P	0 - 37
2477927	Dieldrin	14.6	Spike	P	0 - 27
2477927	Endosulfan I	20.1	Spike	P	0 - 23
2477927	Endosulfan II	23.1	Spike	P	0 - 34
2477927	Endosulfan Sulfate	7.16	Spike	P	0 - 36
2477927	Endrin	14.4	Spike	P	0 - 45
2477927	Endrin Aldehyde	14.4	Spike	P	0 - 76
2477927	Endrin Ketone	15.0	Spike	P	0 - 43
2477927	Esfenvalerate	10.9	Spike	P	0 - 51
2477927	Ethalfuralin	7.26	Spike	P	0 - 22
2477927	Fenpropathrin	2.86	Spike	P	0 - 49
2477927	Gamma-BHC	13.0	Spike	P	0 - 28
2477927	Gamma-Chlordane	10.9	Spike	P	0 - 40
2477927	Heptachlor	6.38	Spike	P	0 - 29
2477927	Heptachlor Epoxide	23.4	Spike	P	0 - 33
2477927	Hexachlorobenzene	7.82	Spike	P	0 - 36
2477927	Kepone	1.24	Spike	P	0 - 85
2477927	Lambda-Cyhalothrin	7.98	Spike	P	0 - 55
2477927	Methoprene	19.4	Spike	P	0 - 53
2477927	Methoxychlor	6.51	Spike	P	0 - 50
2477927	MGK-264	18.3	Spike	P	0 - 43
2477927	Mirex	16.4	Spike	P	0 - 40
2477927	Oxychlordane	19.6	Spike	P	0 - 31
2477927	Permethrin	8.09	Spike	P	0 - 50
2477927	Phenothrin	7.91	Spike	P	0 - 58
2477927	Piperonyl Butoxide	4.40	Spike	P	0 - 100
2477927	Prallethrin	18.4	Spike	P	0 - 39
2477927	Tau-Fluvalinate	2.47	Spike	P	0 - 54
2477927	Tetramethrin	5.58	Spike	P	0 - 51
2477927	Trans-Nonachlor	10.2	Spike	P	0 - 39
2477927	Triclosan Methyl	13.9	Spike	P	0 - 31
2477927	Trifluralin	4.12	Spike	P	0 - 22
2478407	PCB-1016	8.65	Spike	P	0 - 25
2478407	PCB-1260	18.8	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P443543

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2478407	Chlordane	11.1	Spike	P	0 - 28
2478407	Toxaphene	15.6	Spike	P	0 - 27

Reference Method: EPA 8321B
Batch ID: P443301

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477584	2,4-D	11.1	Spike	P	0 - 30
2477584	2,4,5-T	1.58	Spike	P	0 - 30
2477584	Acetaminophen	0.0602	Spike	P	0 - 30
2477584	Acetamiprid	5.42	Spike	P	0 - 30
2477584	Afidopyropen	35.9	Spike	F	0 - 30
2477584	Bentazon	6.24	Spike	P	0 - 30
2477584	Benzovindiflupyr	7.49	Spike	P	0 - 30
2477584	Carbamazepine	1.28	Spike	P	0 - 30
2477584	Clothianidin	3.69	Spike	P	0 - 30
2477584	Dinotefuran	4.67	Spike	P	0 - 30
2477584	Diuron	4.37	Spike	P	0 - 30
2477584	Fenuron	3.50	Spike	P	0 - 30
2477584	Fluridone	0.646	Spike	P	0 - 30
2477584	Hydrocodone	5.20	Spike	P	0 - 30
2477584	Ibuprofen	12.7	Spike	P	0 - 30
2477584	Imazapyr	4.81	Spike	P	0 - 30
2477584	Imidacloprid	4.65	Spike	P	0 - 30
2477584	Linuron	4.78	Spike	P	0 - 30
2477584	Mandestrobin	3.83	Spike	P	0 - 30
2477584	MCP	7.00	Spike	P	0 - 30
2477584	Naproxen	10.2	Spike	P	0 - 30
2477584	Primidone	6.38	Spike	P	0 - 30
2477584	Pyraclostrobin	8.65	Spike	P	0 - 30
2477584	Silvex	12.4	Spike	P	0 - 30
2477584	Thiamethoxam	2.52	Spike	P	0 - 30
2477584	Tolfenpyrad	11.8	Spike	P	0 - 30
2477584	Triclopyr	14.3	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P443330

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477584	Acesulfame K	7.18	Spike	P	0 - 30
2477584	AMPA	1.28	Spike	P	0 - 30
2477584	Endothall	3.03	Spike	P	0 - 30
2477584	Glufosinate	3.34	Spike	P	0 - 30
2477584	Glyphosate	1.60	Spike	P	0 - 30
2477584	Sucralose	0.182	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P443496

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477856	Total Alkalinity	1.33	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P443659

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2478057	Total Alkalinity	1.40	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P443897

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477569	TDS	7.46	Sample	P	0 - 10

Reference Method: SM 2540 C-2015
Batch ID: P443898

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477937	TDS	3.21	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P443499

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477856	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P444102

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2478055	Fluoride	0.967	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2014
Batch ID: P443564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477263	Organic Carbon	1.10	Spike	P	0 - 15

Reference Method: SM 5310 B-2014
Batch ID: P443681

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2477773	Organic Carbon	0.652	Spike	P	0 - 15

Quality Assurance Report Precision

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

Quality Assurance Report

Surrogates

Lab Sample ID: 2477841

Field Sample ID: G2SD0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	107	P	30 - 160
EPA 8321B	Acetaminophen-d4	113	P	30 - 160
EPA 8321B	Carbamazepine-d10	83.8	P	30 - 160
EPA 8321B	Diuron-d6	83.7	P	30 - 160
EPA 8321B	Endothall-d6	125	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	92.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	87.8	P	30 - 160
EPA 8321B	Primidone-d5	101	P	30 - 160
EPA 8321B	Sucralose-d6	39.1	P	30 - 160

Lab Sample ID: 2477842

Field Sample ID: G2SD0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	83.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	109	P	30 - 160
EPA 8321B	Carbamazepine-d10	65.1	P	30 - 160
EPA 8321B	Diuron-d6	64.1	P	30 - 160
EPA 8321B	Endothall-d6	108	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	79.5	P	30 - 160
EPA 8321B	Primidone-d5	80.6	P	30 - 160
EPA 8321B	Sucralose-d6	50.1	P	30 - 160

Lab Sample ID: 2477897

Field Sample ID: G2SD0059

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	70.5	P	37 - 129
EPA 8270E	Decachlorobiphenyl	89.2	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	48.6	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	78.1	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	59.5	P	23 - 110
EPA 8276	PCNB	94.6	P	51 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A125024

Included Lab Sample IDs: 2477821, 2477823, 2477825, 2477873

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

Reference Method: DEP SOP: NU-094-1

Run ID: A125030

Included Lab Sample IDs: 2477821, 2477823, 2477825, 2477873

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.3	98.1	P/P	90 - 110
Color (true)	99.4	97.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A125052

Included Lab Sample IDs: 2477826

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	98.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A125055

Included Lab Sample IDs: 2477841, 2477842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	112	117	P/P	60 - 160
AMPA	117	119	P/P	60 - 160
Endothall	102	99.3	P/P	60 - 160
Endothall	99.3	101	P/P	60 - 160
Glufosinate	117	118	P/P	60 - 160
Glufosinate	118	123	P/P	60 - 160
Glyphosate	122	125	P/P	60 - 160
Glyphosate	125	126	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A125058

Included Lab Sample IDs: 2477898, 2477954

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.6	98.1	P/P	90 - 110
Aluminum	98.1	95.8	P/P	90 - 110
Antimony	97.4	98.3	P/P	90 - 110
Antimony	98.8	97.4	P/P	90 - 110
Arsenic	95.6	96.3	P/P	90 - 110
Arsenic	96.3	95.2	P/P	90 - 110
Barium	97.1	98.0	P/P	90 - 110
Barium	97.6	97.1	P/P	90 - 110
Beryllium	98.0	98.6	P/P	90 - 110
Beryllium	98.6	98.0	P/P	90 - 110
Boron	97.2	96.9	P/P	90 - 110
Boron	98.4	97.2	P/P	90 - 110
Cadmium	97.5	98.1	P/P	90 - 110
Cadmium	98.6	97.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A125058

Included Lab Sample IDs: 2477898, 2477954

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	97.0	97.1	P/P	90 - 110
Cobalt	95.2	96.6	P/P	90 - 110
Cobalt	96.6	96.3	P/P	90 - 110
Copper	92.5	94.2	P/P	90 - 110
Copper	94.2	93.5	P/P	90 - 110
Lead	92.7	91.9	P/P	90 - 110
Lead	93.3	92.7	P/P	90 - 110
Manganese	96.8	98.5	P/P	90 - 110
Manganese	97.5	96.8	P/P	90 - 110
Molybdenum	96.3	96.3	P/P	90 - 110
Molybdenum	96.5	96.3	P/P	90 - 110
Nickel	92.5	94.6	P/P	90 - 110
Nickel	94.6	93.5	P/P	90 - 110
Selenium	97.7	97.9	P/P	90 - 110
Selenium	98.6	97.7	P/P	90 - 110
Silver	96.1	96.2	P/P	90 - 110
Silver	96.2	96.1	P/P	90 - 110
Thallium	97.1	96.8	P/P	90 - 110
Thallium	98.0	97.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A125059

Included Lab Sample IDs: 2477822, 2477826, 2477874

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	102	P/P	90 - 110
Total-P	103	101	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A125060

Included Lab Sample IDs: 2477898, 2477954

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	101	P/P	90 - 110
Calcium	103	101	P/P	90 - 110
Iron	102	100	P/P	90 - 110
Iron	102	100	P/P	90 - 110
Magnesium	103	101	P/P	90 - 110
Magnesium	103	101	P/P	90 - 110
Potassium	102	101	P/P	90 - 110
Potassium	103	102	P/P	90 - 110
Sodium	97.9	97.2	P/P	90 - 110
Sodium	98.3	96.4	P/P	90 - 110
Strontium	96.7	97.2	P/P	90 - 110
Strontium	97.3	98.0	P/P	90 - 110
Tin	103	103	P/P	90 - 110
Tin	103	103	P/P	90 - 110
Titanium	101	101	P/P	90 - 110
Titanium	101	102	P/P	90 - 110
Vanadium	99.0	98.7	P/P	90 - 110
Vanadium	99.5	99.6	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A125060
Included Lab Sample IDs: 2477898, 2477954

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Zinc	98.1	98.3	P/P	90 - 110
Zinc	98.8	98.5	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A125062
Included Lab Sample IDs: 2477823, 2477825

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	96.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A125062
Included Lab Sample IDs: 2477823, 2477825

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	103	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A125065
Included Lab Sample IDs: 2477824

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

Reference Method: EPA 8321B
Run ID: A125080
Included Lab Sample IDs: 2477841, 2477842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	102	126	P/P	60 - 160
Acesulfame K	126	133	P/P	60 - 160
Sucralose	101	104	P/P	60 - 160
Sucralose	104	100	P/P	60 - 160

Reference Method: SM 5310 B-2014
Run ID: A125084
Included Lab Sample IDs: 2477822, 2477874

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	124	100	P/P	70 - 130

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A125089
Included Lab Sample IDs: 2477826

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	98.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A125090

Included Lab Sample IDs: 2477822, 2477824, 2477826, 2477874

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	98.9	P/P	90 - 110
Ammonia-N	98.6	98.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A125096

Included Lab Sample IDs: 2477822, 2477874

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A125107

Included Lab Sample IDs: 2477822, 2477824, 2477874

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	103	P/P	90 - 110
Kjeldahl Nitrogen	99.6	105	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A125121

Included Lab Sample IDs: 2477898

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	97.3	98.5	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A125126

Included Lab Sample IDs: 2477821, 2477873

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.0	98.9	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A125129

Included Lab Sample IDs: 2477821, 2477823, 2477825, 2477873

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	97.4	P/P	90 - 110
Sulfate	101	98.8	P/P	90 - 110

Reference Method: SM 5310 B-2014

Run ID: A125132

Included Lab Sample IDs: 2477824, 2477826

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	116	P/P	85 - 115

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A125202
Included Lab Sample IDs: 2477897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	109		P	80 - 120
PCB-1260	96.5		P	80 - 120

Reference Method: EPA 8276
Run ID: A125204
Included Lab Sample IDs: 2477897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.3		P	80 - 120
Toxaphene	98.8		P	80 - 120

Reference Method: EPA 8270E
Run ID: A125205
Included Lab Sample IDs: 2477897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Alpha-BHC	79.0*		F	80 - 120
Alpha-Chlordane	101		P	80 - 120
Beta-BHC	101		P	80 - 120
Beta-Cyfluthrin	95.1		P	80 - 120
Bifenthrin	102		P	80 - 120
Chlorothalonil	112		P	80 - 120
Cis-Nonachlor	105		P	80 - 120
Cypermethrin	98.2		P	80 - 120
Dacthal	102		P	80 - 120
DDD-p,p'	105		P	80 - 120
DDE-p,p'	106		P	80 - 120
DDT-p,p'	105		P	80 - 120
Delta-BHC	103		P	80 - 120
Deltamethrin	93.5		P	80 - 120
Dichlobenil	97.7		P	80 - 120
Dicofol	101		P	80 - 120
Dieldrin	106		P	80 - 120
Endosulfan I	101		P	80 - 120
Endosulfan II	99.6		P	80 - 120
Endosulfan Sulfate	101		P	80 - 120
Endrin	106		P	80 - 120
Endrin Aldehyde	99.1		P	80 - 120
Endrin Ketone	103		P	80 - 120
Esfenvalerate	92.9		P	80 - 120
Ethalfuralin	105		P	80 - 120
Fenpropathrin	106		P	80 - 120
Gamma-BHC	111		P	80 - 120
Gamma-Chlordane	99.5		P	80 - 120
Heptachlor	106		P	80 - 120
Heptachlor Epoxide	105		P	80 - 120
Hexachlorobenzene	95.5		P	80 - 120
Kepone	88.5		P	80 - 120
Lambda-Cyhalothrin	96.5		P	80 - 120
Methoprene	104		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A125205
Included Lab Sample IDs: 2477897

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Methoxychlor	107		P	80 - 120
MGK-264	101		P	80 - 120
Mirex	95.9		P	80 - 120
Oxychlordane	103		P	80 - 120
Permethrin	95.3		P	80 - 120
Phenothrin	91.3		P	80 - 120
Piperonyl Butoxide	104		P	80 - 120
Prallethrin	98.3		P	80 - 120
Tau-Fluvalinate	92.4		P	80 - 120
Tetramethrin	97.2		P	80 - 120
Trans-Nonachlor	102		P	80 - 120
Triclosan Methyl	103		P	80 - 120
Trifluralin	101		P	80 - 120

Reference Method: EPA 8321B
Run ID: A125230
Included Lab Sample IDs: 2477841, 2477842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	107	110	P/P	50 - 150
2,4-D	110	107	P/P	50 - 150
2,4,5-T	108	110	P/P	50 - 150
2,4,5-T	121	108	P/P	50 - 150
Acetaminophen	110	108	P/P	60 - 160
Acetaminophen	112	110	P/P	60 - 160
Acetamiprid	110	111	P/P	50 - 150
Acetamiprid	111	110	P/P	50 - 150
Afidopyropen	102	96.7	P/P	50 - 150
Afidopyropen	99.1	102	P/P	50 - 150
Bentazon	104	103	P/P	50 - 160
Bentazon	105	104	P/P	50 - 160
Benzovindiflupyr	103	104	P/P	50 - 150
Benzovindiflupyr	106	103	P/P	50 - 150
Carbamazepine	103	102	P/P	60 - 150
Carbamazepine	104	103	P/P	60 - 150
Clothianidin	107	111	P/P	60 - 150
Clothianidin	108	107	P/P	60 - 150
Dinotefuran	106	114	P/P	50 - 150
Dinotefuran	114	112	P/P	50 - 150
Diuron	110	118	P/P	60 - 160
Diuron	118	109	P/P	60 - 160
Fenuron	102	104	P/P	60 - 150
Fenuron	104	105	P/P	60 - 150
Fluridone	106	107	P/P	60 - 160
Fluridone	107	108	P/P	60 - 160
Hydrocodone	110	113	P/P	60 - 150
Hydrocodone	111	110	P/P	60 - 150
Ibuprofen	68.6	75.6	P/P	50 - 160
Ibuprofen	75.6	73.6	P/P	50 - 160
Imazapyr	93.9	97.6	P/P	50 - 150
Imazapyr	97.6	93.9	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A125230

Included Lab Sample IDs: 2477841, 2477842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imidacloprid	101	96.7	P/P	60 - 150
Imidacloprid	102	101	P/P	60 - 150
Linuron	104	97.4	P/P	60 - 150
Linuron	92.6	104	P/P	60 - 150
Mandestrobin	107	108	P/P	50 - 150
Mandestrobin	108	109	P/P	50 - 150
MCP	109	120	P/P	50 - 150
MCP	116	109	P/P	50 - 150
Naproxen	104	111	P/P	50 - 160
Naproxen	139	104	P/P	50 - 160
Primidone	97.1	95.6	P/P	60 - 150
Primidone	98.4	97.1	P/P	60 - 150
Pyraclostrobin	102	101	P/P	60 - 150
Pyraclostrobin	105	102	P/P	60 - 150
Silvex	105	110	P/P	50 - 150
Silvex	96.4	105	P/P	50 - 150
Thiamethoxam	106	109	P/P	50 - 150
Thiamethoxam	109	106	P/P	50 - 150
Tolfenpyrad	104	101	P/P	60 - 150
Tolfenpyrad	95.6	104	P/P	60 - 150
Triclopyr	102	105	P/P	50 - 150
Triclopyr	105	110	P/P	50 - 150

Reference Method: SM 4500-F- C-2011

Run ID: A125278

Included Lab Sample IDs: 2477821, 2477873

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	97.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A125279

Included Lab Sample IDs: 2477824

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	100	P/P	90 - 110

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

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision	MS
			LCS	SMP	MS		
DEP SOP: NU-094-1	Color (true)	97.4				11.2	
	Color (true)	97.5				2.84	
EPA 180.1 Rev. 2.0	Turbidity	104				4.77	
	Turbidity	104				8.26	
EPA 200.7 Rev. 4.4	Calcium	102	99.5	114			2.03
	Iron	111	108	106	112		1.83
	Magnesium	113	107	104	114		2.15
	Potassium	104	103	101	108		1.76
	Sodium	104	102	98.4	103		2.06
	Strontium	96.4	95.9	94.1	99.9		1.84
	Tin	101	98.1	98.4	101		0.232
	Titanium	102	102	101	94.2		0.603
	Vanadium	99.0	98.0	98.1	99.9		0.0606
	Zinc	96.5	93.8	93.2	96.5		0.446
EPA 200.8 Rev. 5.4	Aluminum	98.6	96.9	97.8	94.4		0.869
	Antimony	102	103	104	102		1.45
	Arsenic	98.0	98.5	99.2	98.6		0.703
	Barium	102	101	102	103		1.53
	Beryllium	98.6	99.1	100	100		1.02
	Boron	99.6	101	101	97.8		0.319
	Cadmium	99.6	103	104	100		0.438
	Chromium	104	106	107	104		0.488
	Chromium	105	110	105			4.13
	Cobalt	101	101	101	100		0.0672
	Copper	96.9	93.5	93.8	96.1		0.267
	Lead	93.7	93.8	94.5	94.6		0.785
	Manganese	103	104	105	104		1.14
	Molybdenum	97.1	98.7	101	98.4		1.63
	Nickel	98.6	98.4	97.8	97.8		0.683
	Selenium	98.4	99.2	99.8	98.5		0.600
	Silver	99.9	100	101	99.7		0.615
	Thallium	94.1	95.6	97.0	95.9		1.38
EPA 300.0 Rev. 2.1	Chloride	104	101	99.5		0.478	
	Sulfate	106	102	101		0.720	
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	98.6	101			1.39
	Ammonia-N	97.0	99.2	99.8			0.551
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.2	93.3	104			8.11
	Kjeldahl Nitrogen	103	90.9	95.4			3.87
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	92.3	94.8			2.57
	NO2NO3-N	100	98.5	99.5			1.01
	NO2NO3-N	98.0	96.5	99.5			3.06
EPA 365.1 Rev. 2.0	Total-P	104	102	104			1.21
	Total-P	105	105	110			3.42
EPA 8270E	Aldrin	63.5	79.4	75.3			5.32
	Alpha-BHC	82.0	72.9	77.6			6.22
	Alpha-Chlordane	75.0	91.9	78.7			15.5
	Beta-BHC	119	129	103			22.6
	Beta-Cyfluthrin	72.7	107	111			3.56
	Bifenthrin	63.8	97.4	108			10.3
	Chlorothalonil	102	135	127			5.80
	Cis-Nonachlor	89.3	74.0	82.1			10.4
	Cypermethrin	84.8	109	117			7.02
	Dacthal	103	103	93.6			9.20
	DDD-p,p'	89.3	83.1	88.2			5.94

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	DDE-p,p'	87.7	87.8	74.6			16.3
	DDT-p,p'	99.2	90.4	81.2			8.45
	Delta-BHC	123	144	112			24.8
	Deltamethrin	79.3	133	130			2.56
	Dichlobenil	75.8	72.4	78.3			7.89
	Dicofol	82.0	82.7	77.9			6.01
	Dieldrin	89.6	93.6	80.8			14.6
	Endosulfan I	81.2	101	82.4			20.1
	Endosulfan II	85.3	103	81.9			23.1
	Endosulfan Sulfate	97.9	102	95.4			7.16
	Endrin	89.0	94.6	81.9			14.4
	Endrin Aldehyde	89.6	60.9	70.3			14.4
	Endrin Ketone	109	111	95.9			15.0
	Esfenvalerate	74.7	112	125			10.9
	Ethalfuralin	83.8	86.4	92.9			7.26
	Fenpropathrin	86.5	98.0	95.2			2.86
	Gamma-BHC	120	111	97.5			13.0
	Gamma-Chlordane	86.6	92.5	82.9			10.9
	Heptachlor	75.1	79.1	74.2			6.38
	Heptachlor Epoxide	83.6	98.6	78.0			23.4
	Hexachlorobenzene	61.7	73.0	67.5			7.82
	Kepone	137	135	133			1.24
	Lambda-Cyhalothrin	71.3	96.5	105			7.98
	Methoprene	62.5	84.5	69.6			19.4
	Methoxychlor	109	105	98.3			6.51
	MGK-264	77.5	102	84.5			18.3
	Mirex	62.0	76.6	65.0			16.4
	Oxychlordane	86.2	98.0	80.5			19.6
	PCB-1016	86.1	81.6	74.8			8.65
	PCB-1260	82.2	77.9	64.6			18.8
	Permethrin	69.0	102	111			8.09
	Phenothrin	49.6	92.1	99.7			7.91
	Piperonyl Butoxide	106	112	107			4.40
	Prallethrin	64.1	94.1	78.2			18.4
	Tau-Fluvalinate	58.4	106	109			2.47
	Tetramethrin	89.1	108	114			5.58
	Trans-Nonachlor	95.8	94.4	85.3			10.2
	Triclosan Methyl	89.6	89.6	77.9			13.9
	Trifluralin	85.5	83.2	79.8			4.12
EPA 8276	Chlordane	90.7	77.1	69.0			11.1
	Toxaphene	89.9	77.9	66.6			15.6
EPA 8321B	2,4-D	108	87.0	97.8			11.1
	2,4,5-T	107	90.4	91.9			1.58
	Acesulfame K	105	122	131			7.18
	Acetaminophen	92.5	98.3	98.2			0.0602
	Acetamiprid	87.8	58.5	61.8			5.42
	Afidopyrophen	67.5	56.0	38.9			35.9
	AMPA	118	101	99.3			1.28
	Bentazon	100	44.1	50.4			6.24
	Benzovindiflupyr	86.0	77.4	83.4			7.49
	Carbamazepine	86.7	63.4	62.6			1.28
	Clothianidin	98.7	93.3	89.9			3.69
	Dinotefuran	102	86.5	82.5			4.67
	Diuron	94.1	67.5	64.6			4.37

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	Endothall	104	102	105			3.03
	Fenuron	93.1	63.8	61.6			3.50
	Fluridone	93.5	74.7	74.1			0.646
	Glufosinate	122	110	114			3.34
	Glyphosate	122	110	108			1.60
	Hydrocodone	99.6	77.7	73.7			5.20
	Ibuprofen	83.0	81.3	71.6			12.7
	Imazapyr	93.1	102	109			4.81
	Imidacloprid	91.1	113	108			4.65
	Linuron	92.2	69.3	72.7			4.78
	Mandestrobin	96.3	85.6	88.9			3.83
	MCPP	108	90.4	97.0			7.00
	Naproxen	77.4	84.0	75.8			10.2
	Primidone	81.9	84.2	79.0			6.38
	Pyraclostrobin	80.2	76.1	83.0			8.65
	Silvex	92.2	76.2	86.2			12.4
	Sucralose	101	103	103			0.182
	Thiamethoxam	98.4	90.9	88.7			2.52
	Tolfenpyrad	51.6	49.4	55.6			11.8
	Triclopyr	116	80.5	93.0			14.3
SM 2320 B-2011	Total Alkalinity	103				1.33	
	Total Alkalinity	99.8				1.40	
SM 2540 C-2015	TDS	95.2				7.46	
	TDS	95.2				3.21	
SM 2540 D-2015	TSS	96.8					
	TSS	91.2					
SM 4500-F- C-2011	Fluoride	101	102	102			0.0
	Fluoride	97.3	101	103			0.967
SM 5310 B-2014	Organic Carbon	96.6	95.4	94.0			1.10
	Organic Carbon	99.3	101	102			0.652

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2477821, 2477823, 2477825, 2477873
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2477821, 2477823, 2477825, 2477873
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2477898, 2477954
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2477898, 2477954
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2477821, 2477823, 2477825, 2477873
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2477821, 2477823, 2477825, 2477873
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2477822, 2477824, 2477826, 2477874
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2477822, 2477824, 2477826, 2477874
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2477822, 2477824, 2477826, 2477874
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2477822, 2477824, 2477826, 2477874
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2477897
EPA 8270E	PCBs in water matrices by GC/MS/MS	2477897
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2477897
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2477841, 2477842
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2477821, 2477823, 2477825, 2477873
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2477954

Reference Method Descriptions

Method	Description	Associated Samples
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2477821, 2477823, 2477825, 2477873
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2477821, 2477823, 2477825, 2477873
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2477821, 2477823, 2477825, 2477873
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2477822, 2477824, 2477826, 2477874

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	03/27/2024			03/27/2024 14:43	Jessica K Wilks	2477821
	03/27/2024			03/27/2024 14:44	Jessica K Wilks	2477823
	03/27/2024			03/27/2024 14:45	Jessica K Wilks	2477825
	03/27/2024			03/27/2024 14:49	Jessica K Wilks	2477873
EPA 180.1 Rev. 2.0	03/27/2024			03/27/2024 13:19	Chandler E Cox	2477821, 2477823
	03/27/2024			03/27/2024 13:20	Chandler E Cox	2477825
	03/27/2024			03/27/2024 13:26	Chandler E Cox	2477873
EPA 200.7 Rev. 4.4	03/27/2024	03/28/2024 11:25	George D Taylor	03/28/2024 17:57	Conrad Hartmann	2477898
	03/27/2024	03/28/2024 11:25	George D Taylor	03/28/2024 20:55	Conrad Hartmann	2477954
EPA 200.8 Rev. 5.4	03/27/2024	03/28/2024 11:25	George D Taylor	03/28/2024 18:50	Emily M Philpot	2477954
	03/27/2024	03/28/2024 11:25	George D Taylor	03/28/2024 19:56	Emily M Philpot	2477898
	03/27/2024	04/01/2024 12:40	George D Taylor	04/02/2024 21:47	Emily M Philpot	2477898
EPA 300.0 Rev. 2.1	03/27/2024			04/01/2024 21:32	Samantha L Bates	2477821
	03/27/2024			04/01/2024 21:47	Samantha L Bates	2477823
	03/27/2024			04/01/2024 22:02	Samantha L Bates	2477825
	03/27/2024			04/01/2024 23:18	Samantha L Bates	2477873
EPA 350.1 Rev. 2.0	03/27/2024			04/01/2024 11:33	Khloe J Berg	2477822
	03/27/2024			04/01/2024 11:34	Khloe J Berg	2477824
	03/27/2024			04/01/2024 11:35	Khloe J Berg	2477874
	03/27/2024			04/01/2024 13:09	Khloe J Berg	2477826
EPA 351.2 Rev. 2.0	03/27/2024	03/28/2024 14:46	Simonne.V. Calhoun	04/02/2024 11:13	Robyn Blevins	2477822
	03/27/2024	03/28/2024 14:46	Simonne.V. Calhoun	04/02/2024 11:18	Robyn Blevins	2477824
	03/27/2024	03/28/2024 14:46	Simonne.V. Calhoun	04/02/2024 11:20	Robyn Blevins	2477874
	03/27/2024	03/29/2024 12:42	Simonne.V. Calhoun	04/01/2024 11:49	Robyn Blevins	2477826
EPA 353.2 Rev. 2.0	03/27/2024			03/28/2024 13:17	Fadila Guebre	2477826
	03/27/2024			04/01/2024 15:08	Fadila Guebre	2477822
	03/27/2024			04/01/2024 15:14	Fadila Guebre	2477874
	03/27/2024			04/08/2024 16:11	Fadila Guebre	2477824
EPA 365.1 Rev. 2.0	03/27/2024	03/28/2024 13:40	Josephine W Gitau	03/29/2024 08:54	Elise M. Gillis	2477822
	03/27/2024	03/28/2024 13:40	Josephine W Gitau	03/29/2024 08:55	Elise M. Gillis	2477874
	03/27/2024	03/28/2024 13:40	Josephine W Gitau	03/29/2024 09:20	Elise M. Gillis	2477826
	03/27/2024	03/28/2024 13:40	Josephine W Gitau	03/29/2024 10:32	Elise M. Gillis	2477824
EPA 8270E	03/27/2024	04/02/2024 08:10	Rasheda Ghaffari	04/03/2024 20:27	Kenedi Mills	2477897
	03/27/2024	04/02/2024 08:10	Rasheda Ghaffari	04/04/2024 01:04	Kenedi Mills	2477897
EPA 8276	03/27/2024	04/02/2024 08:10	Rasheda Ghaffari	04/05/2024 07:22	Arthur Maknenko	2477897
EPA 8321B	03/27/2024	03/28/2024 09:00	Hoor Shaik	04/08/2024 23:07	Juyoung Kim	2477841
	03/27/2024	03/28/2024 09:00	Hoor Shaik	04/09/2024 00:00	Juyoung Kim	2477842
	03/27/2024	03/28/2024 13:30	Samatha Luckman	03/28/2024 18:46	Samatha Luckman	2477841
	03/27/2024	03/28/2024 13:30	Samatha Luckman	03/28/2024 19:13	Samatha Luckman	2477842
	03/27/2024	03/28/2024 13:30	Samatha Luckman	03/28/2024 22:40	Samatha Luckman	2477841

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	03/27/2024	03/28/2024 13:30	Samatha Luckman	03/29/2024 15:16	Samatha Luckman	2477841
	03/27/2024	03/28/2024 13:30	Samatha Luckman	03/29/2024 15:44	Samatha Luckman	2477842
SM 2320 B-2011	03/27/2024			03/29/2024 07:59	Dale L. Simmons	2477825
	03/27/2024			03/29/2024 08:11	Dale L. Simmons	2477823
	03/27/2024			04/02/2024 13:49	Dale L. Simmons	2477821
	03/27/2024			04/02/2024 14:01	Dale L. Simmons	2477873
SM 2340 B-2011	03/27/2024			03/28/2024 20:55	Conrad Hartmann	2477954
SM 2540 C-2015	03/27/2024			03/29/2024 15:27	Yijie Li	2477821, 2477823, 2477825, 2477873
SM 2540 D-2015	03/27/2024			03/29/2024 15:27	Yijie Li	2477821, 2477823, 2477825, 2477873
SM 4500-F- C-2011	03/27/2024			03/29/2024 07:59	Dale L. Simmons	2477825
	03/27/2024			03/29/2024 08:11	Dale L. Simmons	2477823
	03/27/2024			04/10/2024 23:07	Dale L. Simmons	2477821
	03/27/2024			04/10/2024 23:13	Dale L. Simmons	2477873
SM 5310 B-2014	03/27/2024			03/30/2024 09:09	Jessica K Wilks	2477822
	03/27/2024			03/30/2024 09:25	Jessica K Wilks	2477874
	03/27/2024			04/02/2024 09:18	Jessica K Wilks	2477824
	03/27/2024			04/02/2024 09:33	Jessica K Wilks	2477826