Chemical Analysis Report

SO-DIST-2024-03-05-01

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

Event Description: **2024 SMP: Desoto Branches**
Request ID: **RQ-2024-03-04-65**
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: Colin Wright, Program Administrator

Date Certified: 28-MAR-2024 08:53

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: 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: bRANDY BRANCH AT SR 70 **Collection Date/Time: 03/04/2024 09:20**

Field ID: G3SD0083 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2473070	DEP SOP: NU-094-1	Color (true)	96		PCU	P442325	
	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P442333	
	EPA 300.0 Rev. 2.1	Chloride	22		mg Cl/L	P442617	
		Sulfate	370		mg SO4/L	P442761	
	SM 2320 B-2011	Total Alkalinity	31		mg CaCO3/L	P442482	
	SM 2540 C-2015	TDS	562		mg/L	P442810	
	SM 2540 D-2015	TSS	3	I	mg/L	P442612	
	SM 4500-F- C-2011	Fluoride	0.42		mg F/L	P442484	
2473071	EPA 350.1 Rev. 2.0	Ammonia-N	0.030		mg N/L	P442454	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.78		mg N/L	P442340	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.46		mg N/L	P442554	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P443042	
	SM 5310 B-2014	Organic Carbon	16		mg C/L	P442420	
2473090	EPA 8270E	Aldrin	0.68	U	ng/L	P442724	
		Alpha-BHC	0.10	U	ng/L	P442724	
		Alpha-Chlordane	0.21	U	ng/L	P442724	
		PCB-1016	2.1	U	ng/L	P442724	
		Beta-BHC	0.13	I	ng/L	P442724	
		PCB-1221	2.1	U	ng/L	P442724	
		Beta-Cyfluthrin	1.3	U	ng/L	P442724	
		PCB-1232	2.1	U	ng/L	P442724	
		Bifenthrin	0.52	U	ng/L	P442724	
		PCB-1242	2.1	U	ng/L	P442724	
		PCB-1248	2.1	U	ng/L	P442724	
		Chlorothalonil	3.8	U	ng/L	P442724	
		PCB-1254	2.1	U	ng/L	P442724	
		Cis-Nonachlor	0.21	U	ng/L	P442724	
		PCB-1260	2.1	U	ng/L	P442724	
		Cypermethrin	1.6	U	ng/L	P442724	
		Dacthal	0.16	U	ng/L	P442724	
		DDD-p,p'	0.26	U	ng/L	P442724	
		DDE-p,p'	0.21	U	ng/L	P442724	
		DDT-p,p'	0.98	I	ng/L	P442724	
		Delta-BHC	0.42	U	ng/L	P442724	
		Deltamethrin	1.3	U	ng/L	P442724	
		Dichlobenil	0.26	U	ng/L	P442724	
		Dicofol	1.3	U	ng/L	P442724	
		Dieldrin	0.42	U	ng/L	P442724	
		Endosulfan I	0.42	U	ng/L	P442724	
		Endosulfan II	0.94	U	ng/L	P442724	
		Endosulfan Sulfate	0.31	U	ng/L	P442724	
		Endrin	0.94	U	ng/L	P442724	
		Endrin Aldehyde	0.78	U	ng/L	P442724	
		Endrin Ketone	0.42	U	ng/L	P442724	

Field ID: G3SD0083 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2473090	EPA 8270E	Esfenvalerate	0.78	U	ng/L	P442724	
		Ethalfluralin	0.16	U	ng/L	P442724	
		Fenpropathrin	0.26	U	ng/L	P442724	
		Gamma-BHC	0.13	U	ng/L	P442724	
		Gamma-Chlordane	0.21	U	ng/L	P442724	
		Heptachlor	0.21	U	ng/L	P442724	
		Heptachlor Epoxide	0.26	U	ng/L	P442724	
		Hexachlorobenzene**	1.0	U	ng/L	P442724	
		Kepone	14	UJ	ng/L	P442724	CCV
		Lambda-Cyhalothrin	0.78	U	ng/L	P442724	
		Methoprene	0.78	U	ng/L	P442724	
		Methoxychlor	0.31	U	ng/L	P442724	
		MGK-264	0.21	U	ng/L	P442724	
		Mirex	0.37	U	ng/L	P442724	
		Oxychlordane	0.31	U	ng/L	P442724	
		Permethrin	1.7	U	ng/L	P442724	
		Phenothrin	0.94	U	ng/L	P442724	
		Piperonyl Butoxide	0.16	U	ng/L	P442724	
		Prallethrin	2.1	U	ng/L	P442724	
		Tau-Fluvalinate	0.26	U	ng/L	P442724	
		Tetramethrin	0.78	U	ng/L	P442724	
		Trans-Nonachlor	0.21	U	ng/L	P442724	
		Triclosan Methyl	0.16	U	ng/L	P442724	
		Trifluralin	0.21	U	ng/L	P442724	
	EPA 8276	Chlordane	2.1	U	ng/L	P442724	
		Toxaphene	16	U	ng/L	P442724	
2473091	EPA 8321B	2,4-D	0.0020	U	ug/L	P442283	
		Acesulfame K	0.10	U	ug/L	P442305	
		2,4,5-T	0.0040	U	ug/L	P442283	
		AMPA	0.10	U	ug/L	P442305	
		Acetaminophen	0.0080	U	ug/L	P442283	
		Endothall	0.25	U	ug/L	P442305	
		Acetamiprid	0.0020	U	ug/L	P442283	MS, RPD
		Glufosinate	0.10	U	ug/L	P442305	
		Glyphosate	0.10	U	ug/L	P442305	
		Afidopyropen	0.0020	U	ug/L	P442283	
		Bentazon	0.17		ug/L	P442283	
		Sucralose	0.010	U	ug/L	P442305	
		Benzovindiflupyr	0.0020	U	ug/L	P442283	
		Carbamazepine	8.0E-04	U	ug/L	P442283	
		Clothianidin	0.0072	I	ug/L	P442283	
		Dinotefuran	0.0020	U	ug/L	P442283	
		Diuron	0.0020	U	ug/L	P442283	
		Fenuron	0.032	U	ug/L	P442283	
		Fluridone	8.0E-04	U	ug/L	P442283	

Field ID: G3SD0083 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2473091	EPA 8321B	Imazapyr	0.0054	I	ug/L	P442283	
		Hydrocodone	0.0020	U	ug/L	P442283	
		Ibuprofen	0.080	U	ug/L	P442283	
		Imidacloprid	0.023		ug/L	P442283	
		Linuron	0.0040	U	ug/L	P442283	
		Mandestrobin	0.0020	U	ug/L	P442283	
		MCPP	0.0020	U	ug/L	P442283	
		Naproxen	0.0080	U	ug/L	P442283	
		Primidone	0.0040	U	ug/L	P442283	
		Pyraclostrobin	0.0020	U	ug/L	P442283	
		Silvex	0.0040	U	ug/L	P442283	
		Thiamethoxam	0.026		ug/L	P442283	
		Tolfenpyrad	0.0020	U	ug/L	P442283	
		Triclopyr	0.0040	U	ug/L	P442283	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 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: FB **Collection Date/Time: 03/04/2024 09:45**

Field ID: FB_03042024 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2473078	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P442325	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P442333	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P442617	
		Sulfate	0.20	U	mg SO4/L	P443173	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P442491	RPD
	SM 2540 C-2015	TDS	15	U	mg/L	P442810	
	SM 2540 D-2015	TSS	2	U	mg/L	P442612	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P442494	
2473079	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P442455	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P442340	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P442554	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P442370	
	SM 5310 B-2014	Organic Carbon	0.50	U	mg C/L	P442421	

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: BUZZARD ROOST BRANCH AT SR70 **Collection Date/Time: 03/04/2024 09:55**

Field ID: G3SD0173 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2473072	DEP SOP: NU-094-1	Color (true)	130		PCU	P442325	
	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P442333	
	EPA 300.0 Rev. 2.1	Chloride	22		mg Cl/L	P442617	
		Sulfate	230		mg SO4/L	P442761	
	SM 2320 B-2011	Total Alkalinity	25		mg CaCO3/L	P442490	
	SM 2540 C-2015	TDS	438		mg/L	P442810	
	SM 2540 D-2015	TSS	2	I	mg/L	P442612	
	SM 4500-F- C-2011	Fluoride	0.40		mg F/L	P442493	
2473075	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P442455	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.97		mg N/L	P442340	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.030		mg N/L	P442554	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P442370	
	SM 5310 B-2014	Organic Carbon	21		mg C/L	P442421	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: BUD SLOUGH SUGAR BOWL RD **Collection Date/Time: 03/04/2024 10:30**

Field ID: G3SD0244 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2473073	DEP SOP: NU-094-1	Color (true)	79	A	PCU	P442325	
	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P442333	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P442617	
		Sulfate	260		mg SO4/L	P442761	
	SM 2320 B-2011	Total Alkalinity	28		mg CaCO3/L	P442490	
	SM 2540 C-2015	TDS	415		mg/L	P442810	
	SM 2540 D-2015	TSS	3	I	mg/L	P442612	
	SM 4500-F- C-2011	Fluoride	0.39		mg F/L	P442493	
2473076	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P442455	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P442340	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.017		mg N/L	P442554	
	EPA 365.1 Rev. 2.0	Total-P	0.20		mg P/L	P442370	
	SM 5310 B-2014	Organic Carbon	19		mg C/L	P442421	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: LAKE MYAKKA (LOWER) AT MIDDLE **Collection Date/Time: 03/04/2024 11:40**

Field ID: G3SD0107 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2473074	DEP SOP: NU-094-1	Color (true)	100		PCU	P442325	
	EPA 180.1 Rev. 2.0	Turbidity	2.8		NTU	P442333	
	EPA 300.0 Rev. 2.1	Chloride	27		mg Cl/L	P442617	
		Sulfate	200		mg SO4/L	P442761	
	SM 2320 B-2011	Total Alkalinity	29	AJ	mg CaCO3/L	P442491	RPD
	SM 2540 C-2015	TDS	389		mg/L	P442810	
	SM 2540 D-2015	TSS	5	I	mg/L	P442612	
	SM 4500-F- C-2011	Fluoride	0.21		mg F/L	P442494	
2473077	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P442455	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.95		mg N/L	P442340	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P442554	
	EPA 365.1 Rev. 2.0	Total-P	0.15		mg P/L	P442370	
	SM 5310 B-2014	Organic Carbon	19		mg C/L	P442421	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2320 B-2011: Refer to the Lab Analysis Report for an explanation of QC Codes.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P442325

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P442333

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442617

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442761

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443173

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442454

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442455

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P442340

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P442554

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P442370

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443042

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

Reference Method: EPA 8270E
Batch ID: P442724

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
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P442724

Component	Result	Code	Units
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: P442724

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

Reference Method: EPA 8321B
Batch ID: P442283

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P442283

Component	Result	Code	Units
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P442305

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: P442482

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

Reference Method: SM 2320 B-2011
Batch ID: P442490

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

Reference Method: SM 2320 B-2011
Batch ID: P442491

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

Reference Method: SM 2540 C-2015
Batch ID: P442810

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P442612

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P442484

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P442493

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P442494

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2014
Batch ID: P442420

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

Reference Method: SM 5310 B-2014
Batch ID: P442421

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: P442325

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P442333

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442617

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442761

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443173

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442454

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442455

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: P442340

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: P442554

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 365.1 Rev. 2.0
Batch ID: P442370

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443042

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

Reference Method: EPA 8270E
Batch ID: P442724

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	32.8		P	30 - 96.0
Alpha-BHC	73.4		P	70 - 109
Alpha-Chlordane	48.0		P	45 - 107
Beta-BHC	81.5		P	64 - 138
Beta-Cyfluthrin	29.7		P	17 - 141
Bifenthrin	41.6		P	10 - 113
Chlorothalonil	36.6		P	26 - 180
Cis-Nonachlor	39.4		P	37 - 102
Cypermethrin	44.5		P	20 - 133
Dacthal	70.2		P	69 - 114
DDD-p,p'	92.5		P	42 - 105
DDE-p,p'	60.7		P	42 - 106
DDT-p,p'	58.7		P	42 - 107
Delta-BHC	71.1		P	67 - 144
Deltamethrin	62.1		P	15 - 149
Dichlobenil	58.1		P	46 - 117
Dicofol	42.9		P	34 - 114
Dieldrin	56.3		P	50 - 108
Endosulfan I	58.0		P	55 - 104
Endosulfan II	54.5		P	51 - 111
Endosulfan Sulfate	69.8		P	56 - 121
Endrin	49.1		P	10 - 106
Endrin Aldehyde	52.5		P	34 - 114
Endrin Ketone	78.5		P	63 - 177
Esfenvalerate	48.5		P	29 - 143
Ethalfluralin	51.4		P	46 - 96.0
Fenpropathrin	45.8		P	28 - 115
Gamma-BHC	73.7		P	65 - 121
Gamma-Chlordane	51.2		P	39 - 103
Heptachlor	43.9		P	39 - 94.0
Heptachlor Epoxide	60.4		P	54 - 104
Hexachlorobenzene	49.1		P	36 - 100
Kepone	62.4		P	10 - 225
Lambda-Cyhalothrin	43.9		P	10 - 135
Methoprene	31.8		P	10 - 109
Methoxychlor	56.5		P	52 - 112
MGK-264	57.4		P	44 - 117
Mirex	28.1		P	20 - 90.0
Oxychlordane	47.9		P	44 - 102
PCB-1016	56.9		P	45 - 107

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P442724

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PCB-1260	50.3		P	40 - 118
Permethrin	58.4		P	18 - 135
Phenothrin	23.3		P	10 - 102
Piperonyl Butoxide	63.7		P	28 - 156
Prallethrin	50.5		P	28 - 113
Tau-Fluvalinate	32.8		P	10 - 123
Tetramethrin	52.9		P	18 - 158
Trans-Nonachlor	49.8		P	39 - 104
Triclosan Methyl	69.6		P	54 - 108
Trifluralin	47.3		P	46 - 97.0

Reference Method: EPA 8276
Batch ID: P442724

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	62.6		P	52 - 117
Toxaphene	69.9		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P442283

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	105		P	40 - 150
2,4,5-T	122		P	40 - 150
Acetaminophen	83.8		P	30 - 150
Acetamiprid	75.7		P	40 - 150
Afidopyropen	70.1		P	30 - 150
Bentazon	99.1		P	30 - 150
Benzovindiflupyr	86.8		P	40 - 150
Carbamazepine	87.8		P	40 - 150
Clothianidin	87.6		P	40 - 150
Dinotefuran	96.7		P	40 - 150
Diuron	85.7		P	40 - 150
Fenuron	90.1		P	40 - 150
Fluridone	98.8		P	40 - 150
Hydrocodone	92.5		P	40 - 150
Ibuprofen	80.9		P	40 - 150
Imazapyr	99.4		P	40 - 150
Imidacloprid	90.3		P	40 - 150
Linuron	81.0		P	40 - 150
Mandestrobin	91.4		P	40 - 150
MCPP	110		P	40 - 150
Naproxen	74.9		P	40 - 150
Primidone	88.7		P	40 - 150
Pyraclostrobin	78.8		P	40 - 150
Silvex	106		P	40 - 150
Thiamethoxam	95.9		P	40 - 150
Tolfenpyrad	55.4		P	30 - 150
Triclopyr	121		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P442305

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	98.7		P	40 - 150
AMPA	102		P	40 - 160
Endothall	93.0		P	40 - 160
Glufosinate	108		P	40 - 160
Glyphosate	98.7		P	40 - 160
Sucralose	93.5		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P442482

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

Reference Method: SM 2320 B-2011
Batch ID: P442490

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P442491

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P442810

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	92.8		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P442612

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	106		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P442484

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

Reference Method: SM 4500-F- C-2011
Batch ID: P442493

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.6		P	94 - 106

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P442494

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.6		P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P442420

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.6		P	85 - 115

Reference Method: SM 5310 B-2014
Batch ID: P442421

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.6		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442617

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473049	Chloride	93.9		P	90 - 110
2473124	Chloride	91.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442761

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473846	Sulfate	92.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443173

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2474912	Sulfate	100		P	90 - 110
2474913	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442454

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2472982	Ammonia-N	102	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442455

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473077	Ammonia-N	98.2	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P442340

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473023	Kjeldahl Nitrogen	97.2	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P442554

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473075	NO2NO3-N	97.8	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P442370

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473050	Total-P	105	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443042

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473744	Total-P	103	102	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P442724

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473967	Aldrin	34.0	35.9	P/P	24 - 81.0
2473967	Alpha-BHC	76.7	73.2	P/P	65 - 110
2473967	Alpha-Chlordane	54.0	53.0	P/P	43 - 119
2473967	Beta-BHC	79.7	77.8	P/P	54 - 165
2473967	Beta-Cyfluthrin	29.2	34.4	P/P	27 - 165
2473967	Bifenthrin	41.2	53.7	P/P	17 - 117
2473967	Chlorothalonil	34.3	30.7	P/P	10 - 255
2473967	Cis-Nonachlor	38.9	40.1	P/P	34 - 98.0
2473967	Cypermethrin	42.7	50.5	P/P	25 - 143
2473967	Dacthal	71.9	70.1	P/P	55 - 139
2473967	DDD-p,p'	36.2	43.4	P/P	30 - 109
2473967	DDE-p,p'	65.4	67.3	P/P	35 - 106
2473967	DDT-p,p'	42.3	42.2	P/P	41 - 101
2473967	Delta-BHC	78.8	75.5	P/P	58 - 165
2473967	Deltamethrin	55.3	60.9	P/P	10 - 194
2473967	Dichlobenil	54.9	51.3	P/P	22 - 114
2473967	Dicofol	44.2	41.7	P/P	17 - 133
2473967	Dieldrin	62.7	61.3	P/P	45 - 129
2473967	Endosulfan I	65.2	61.9	P/P	49 - 104
2473967	Endosulfan II	52.8	50.2	P/P	37 - 117
2473967	Endosulfan Sulfate	71.3	67.3	P/P	38 - 128
2473967	Endrin	49.1	50.3	P/P	35 - 116
2473967	Endrin Aldehyde	52.0	30.3	P/P	19 - 108
2473967	Endrin Ketone	81.2	77.8	P/P	44 - 134
2473967	Esfenvalerate	50.5	58.9	P/P	27 - 176
2473967	Ethalfluralin	59.7	54.9	P/P	49 - 100
2473967	Fenpropathrin	45.0	46.3	P/P	34 - 117
2473967	Gamma-BHC	70.7	72.7	P/P	59 - 129
2473967	Gamma-Chlordane	57.6	54.4	P/P	33 - 107
2473967	Heptachlor	49.6	52.7	P/P	37 - 94.0
2473967	Heptachlor Epoxide	65.7	64.4	P/P	38 - 118
2473967	Hexachlorobenzene	50.0	53.4	P/P	35 - 97.0
2473967	Kepone	75.6	48.0	P/P	10 - 221
2473967	Lambda-Cyhalothrin	42.6	50.3	P/P	23 - 190
2473967	Methoprene	36.6	41.5	P/P	21 - 109
2473967	Methoxychlor	59.4	57.5	P/P	46 - 118
2473967	MGK-264	60.0	61.1	P/P	39 - 122
2473967	Mirex	30.3	34.4	P/P	25 - 90.0
2473967	Oxychlordane	54.5	53.8	P/P	42 - 100
2473967	Permethrin	64.0	72.8	P/P	33 - 181
2473967	Phenothrin	30.3	32.9	P/P	12 - 125
2473967	Piperonyl Butoxide	72.3	79.1	P/P	10 - 178
2473967	Prallethrin	51.8	57.0	P/P	24 - 122
2473967	Tau-Fluvalinate	30.7	41.4	P/P	13 - 151
2473967	Tetramethrin	59.4	59.9	P/P	16 - 172
2473967	Trans-Nonachlor	55.6	56.3	P/P	39 - 100
2473967	Triclosan Methyl	73.0	68.3	P/P	43 - 110
2473967	Trifluralin	52.5	51.7	P/P	45 - 94.0
2474007	PCB-1016	53.0	55.7	P/P	45 - 107
2474007	PCB-1260	48.8	49.3	P/P	40 - 112

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P442724

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2474007	Chlordane	63.8	66.2	P/P	43 - 123
2474007	Toxaphene	99.5	89.8	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P442283

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2472399	2,4-D	75.3	83.6	P/P	40 - 150
2472399	2,4,5-T	84.1	90.0	P/P	40 - 150
2472399	Acetaminophen	67.2	77.8	P/P	30 - 150
2472399	Acetamiprid	34.3	54.7	F/P	40 - 150
2472399	Afidopyropen	58.0	67.7	P/P	30 - 150
2472399	Benzovindiflupyr	82.8	85.0	P/P	40 - 150
2472399	Carbamazepine	65.8	71.3	P/P	40 - 150
2472399	Clothianidin	60.4	68.2	P/P	40 - 150
2472399	Dinotefuran	57.4	69.8	P/P	40 - 150
2472399	Diuron	67.7	70.8	P/P	40 - 150
2472399	Fenuron	55.5	63.4	P/P	40 - 150
2472399	Fluridone	80.2	80.5	P/P	40 - 150
2472399	Hydrocodone	56.5	63.4	P/P	40 - 150
2472399	Ibuprofen	85.4	65.3	P/P	40 - 150
2472399	Imazapyr	97.4	86.8	P/P	40 - 150
2472399	Imidacloprid	69.4	76.9	P/P	40 - 150
2472399	Linuron	78.1	72.0	P/P	40 - 150
2472399	Mandestrobin	84.4	89.2	P/P	40 - 150
2472399	MCPP	90.5	88.3	P/P	40 - 150
2472399	Naproxen	69.6	86.0	P/P	40 - 150
2472399	Primidone	75.5	80.1	P/P	40 - 150
2472399	Pyraclostrobin	74.1	77.3	P/P	40 - 150
2472399	Silvex	107	102	P/P	40 - 150
2472399	Thiamethoxam	57.5	68.8	P/P	40 - 150
2472399	Tolfenpyrad	57.6	51.0	P/P	30 - 150
2472399	Triclopyr	89.0	90.3	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P442305

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473091	Acesulfame K	127	128	P/P	40 - 150
2473091	AMPA	94.4	90.4	P/P	40 - 160
2473091	Endothall	111	112	P/P	40 - 160
2473091	Glufosinate	101	100	P/P	40 - 160
2473091	Glyphosate	101	108	P/P	40 - 160
2473091	Sucralose	96.3	99.4	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P442484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2472768	Fluoride	103	104	P/P	94 - 106

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P442493

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473612	Fluoride	100	99.8	P/P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P442494

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473074	Fluoride	101	101	P/P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P442420

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473021	Organic Carbon	101	102	P/P	85 - 115

Reference Method: SM 5310 B-2014
Batch ID: P442421

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2473075	Organic Carbon	98.0	100	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P442325

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473073	Color (true)	5.68	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P442333

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2472873	Turbidity	4.49	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442617

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473049	Chloride	1.27	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442761

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473846	Sulfate	1.16	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443173

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2474912	Sulfate	3.48	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442454

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2472982	Ammonia-N	0.368	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P442455

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473077	Ammonia-N	0.551	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P442340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473023	Kjeldahl Nitrogen	3.68	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P442554

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473075	NO2NO3-N	0.885	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P442370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473050	Total-P	1.59	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443042

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473744	Total-P	1.07	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P442724

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473967	Aldrin	5.23	Spike	P	0 - 41
2473967	Alpha-BHC	4.79	Spike	P	0 - 25
2473967	Alpha-Chlordane	1.89	Spike	P	0 - 32
2473967	Beta-BHC	2.28	Spike	P	0 - 33
2473967	Beta-Cyfluthrin	16.4	Spike	P	0 - 43
2473967	Bifenthrin	26.4	Spike	P	0 - 52
2473967	Chlorothalonil	11.2	Spike	P	0 - 82
2473967	Cis-Nonachlor	2.93	Spike	P	0 - 33
2473967	Cypermethrin	16.7	Spike	P	0 - 51
2473967	Dacthal	2.56	Spike	P	0 - 27
2473967	DDD-p,p'	14.9	Spike	P	0 - 39
2473967	DDE-p,p'	2.91	Spike	P	0 - 31
2473967	DDT-p,p'	0.145	Spike	P	0 - 29
2473967	Delta-BHC	4.26	Spike	P	0 - 35
2473967	Deltamethrin	9.71	Spike	P	0 - 100
2473967	Dichlobenil	6.68	Spike	P	0 - 40
2473967	Dicofol	5.69	Spike	P	0 - 37
2473967	Dieldrin	2.13	Spike	P	0 - 27
2473967	Endosulfan I	5.15	Spike	P	0 - 23
2473967	Endosulfan II	5.02	Spike	P	0 - 34
2473967	Endosulfan Sulfate	5.74	Spike	P	0 - 36
2473967	Endrin	2.26	Spike	P	0 - 45
2473967	Endrin Aldehyde	52.7	Spike	P	0 - 76
2473967	Endrin Ketone	4.35	Spike	P	0 - 43
2473967	Esfenvalerate	15.4	Spike	P	0 - 51
2473967	Ethalfluralin	8.29	Spike	P	0 - 22
2473967	Fenpropathrin	2.85	Spike	P	0 - 49
2473967	Gamma-BHC	2.83	Spike	P	0 - 28
2473967	Gamma-Chlordane	5.66	Spike	P	0 - 40
2473967	Heptachlor	5.94	Spike	P	0 - 29

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P442724

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473967	Heptachlor Epoxide	2.02	Spike	P	0 - 33
2473967	Hexachlorobenzene	6.61	Spike	P	0 - 36
2473967	Kepone	44.7	Spike	P	0 - 85
2473967	Lambda-Cyhalothrin	16.7	Spike	P	0 - 55
2473967	Methoprene	12.4	Spike	P	0 - 53
2473967	Methoxychlor	3.31	Spike	P	0 - 50
2473967	MGK-264	1.86	Spike	P	0 - 43
2473967	Mirex	12.7	Spike	P	0 - 40
2473967	Oxychlordane	1.45	Spike	P	0 - 31
2473967	Permethrin	12.9	Spike	P	0 - 50
2473967	Phenothrin	8.06	Spike	P	0 - 58
2473967	Piperonyl Butoxide	8.97	Spike	P	0 - 100
2473967	Prallethrin	9.54	Spike	P	0 - 39
2473967	Tau-Fluvalinate	29.5	Spike	P	0 - 54
2473967	Tetramethrin	0.863	Spike	P	0 - 51
2473967	Trans-Nonachlor	1.23	Spike	P	0 - 39
2473967	Triclosan Methyl	6.64	Spike	P	0 - 31
2473967	Trifluralin	1.56	Spike	P	0 - 22
2474007	PCB-1016	4.90	Spike	P	0 - 25
2474007	PCB-1260	0.987	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P442724

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2474007	Chlordane	3.60	Spike	P	0 - 28
2474007	Toxaphene	10.2	Spike	P	0 - 27

Reference Method: EPA 8321B
Batch ID: P442283

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2472399	2,4-D	9.16	Spike	P	0 - 30
2472399	2,4,5-T	6.75	Spike	P	0 - 30
2472399	Acetaminophen	14.5	Spike	P	0 - 30
2472399	Acetamiprid	45.7	Spike	F	0 - 30
2472399	Afidopyropen	15.4	Spike	P	0 - 30
2472399	Bentazon	8.00	Spike	P	0 - 30
2472399	Benzovindiflupyr	2.69	Spike	P	0 - 30
2472399	Carbamazepine	8.13	Spike	P	0 - 30
2472399	Clothianidin	12.1	Spike	P	0 - 30
2472399	Dinotefuran	18.2	Spike	P	0 - 30
2472399	Diuron	4.49	Spike	P	0 - 30
2472399	Fenuron	13.3	Spike	P	0 - 30
2472399	Fluridone	0.326	Spike	P	0 - 30
2472399	Hydrocodone	11.5	Spike	P	0 - 30
2472399	Ibuprofen	26.7	Spike	P	0 - 30
2472399	Imazapyr	6.50	Spike	P	0 - 30
2472399	Imidacloprid	10.3	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P442283

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2472399	Linuron	8.09	Spike	P	0 - 30
2472399	Mandestrobin	5.48	Spike	P	0 - 30
2472399	MCPP	2.44	Spike	P	0 - 30
2472399	Naproxen	21.1	Spike	P	0 - 30
2472399	Primidone	5.90	Spike	P	0 - 30
2472399	Pyraclostrobin	4.24	Spike	P	0 - 30
2472399	Silvex	4.31	Spike	P	0 - 30
2472399	Thiamethoxam	17.8	Spike	P	0 - 30
2472399	Tolfenpyrad	12.0	Spike	P	0 - 30
2472399	Triclopyr	1.38	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P442305

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473091	Acesulfame K	0.778	Spike	P	0 - 30
2473091	AMPA	4.31	Spike	P	0 - 30
2473091	Endothall	1.25	Spike	P	0 - 30
2473091	Glufosinate	0.985	Spike	P	0 - 30
2473091	Glyphosate	6.54	Spike	P	0 - 30
2473091	Sucralose	3.12	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P442482

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2472768	Total Alkalinity	0.0568	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P442490

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473612	Total Alkalinity	0.144	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P442491

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473074	Total Alkalinity	4.45	Sample	F	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P442810

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2472522	TDS	2.56	Sample	P	0 - 10

Quality Assurance Report
Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P442484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2472768	Fluoride	0.979	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P442493

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473612	Fluoride	0.483	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P442494

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473074	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2014
Batch ID: P442420

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473021	Organic Carbon	0.605	Spike	P	0 - 15

Reference Method: SM 5310 B-2014
Batch ID: P442421

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2473075	Organic Carbon	1.42	Spike	P	0 - 15

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2473090
Field Sample ID: G3SD0083

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	76.8	P	37 - 129
EPA 8270E	Decachlorobiphenyl	95.0	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	72.4	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	75.2	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	54.7	P	23 - 110
EPA 8276	PCNB	58.8	P	51 - 130

Lab Sample ID: 2473091
Field Sample ID: G3SD0083

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	73.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	67.0	P	30 - 160
EPA 8321B	Diuron-d6	70.5	P	30 - 160
EPA 8321B	Endothall-d6	106	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	30 - 160
EPA 8321B	Ibuprofen-d3	67.1	P	30 - 160
EPA 8321B	Primidone-d5	78.1	P	30 - 160
EPA 8321B	Sucralose-d6	97.9	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: NU-094-1
Run ID: A124548
Included Lab Sample IDs: 2473070, 2473072, 2473073, 2473074, 2473078

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	99.7	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A124551
Included Lab Sample IDs: 2473070, 2473072, 2473073, 2473074, 2473078

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	101	P/P	95 - 105

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A124581
Included Lab Sample IDs: 2473070, 2473072, 2473073, 2473074, 2473078

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	96.1	97.8	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A124587
Included Lab Sample IDs: 2473091

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	103	99.0	P/P	60 - 160
Endothall	91.4	89.6	P/P	60 - 160
Glufosinate	99.5	96.7	P/P	60 - 160
Glyphosate	95.8	101	P/P	60 - 160

Reference Method: SM 5310 B-2014
Run ID: A124592
Included Lab Sample IDs: 2473071, 2473075, 2473076, 2473077, 2473079

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.8	98.7	P/P	85 - 115
Organic Carbon	98.7	118	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A124598
Included Lab Sample IDs: 2473075, 2473076, 2473077

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A124603
Included Lab Sample IDs: 2473071, 2473075, 2473076, 2473077, 2473079

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	98.6	P/P	90 - 110
Kjeldahl Nitrogen	98.6	100	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A124608
Included Lab Sample IDs: 2473079

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	98.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A124609
Included Lab Sample IDs: 2473071, 2473075, 2473076, 2473077, 2473079

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.1		P	90 - 110
Ammonia-N	98.7	99.1	P/P	90 - 110
Ammonia-N	99.1	98.1	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A124614
Included Lab Sample IDs: 2473091

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	98.9	115	P/P	60 - 160
Sucralose	93.2	93.8	P/P	60 - 160

Reference Method: SM 2320 B-2011
Run ID: A124624
Included Lab Sample IDs: 2473070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	98.1	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A124624
Included Lab Sample IDs: 2473070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	105	106	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A124627
Included Lab Sample IDs: 2473072, 2473073, 2473074, 2473078

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.1	100	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A124627
Included Lab Sample IDs: 2473072, 2473073, 2473074, 2473078

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A124637
Included Lab Sample IDs: 2473091

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	109	98.8	P/P	50 - 150
2,4,5-T	111	111	P/P	50 - 150
Acetaminophen	98.2	98.2	P/P	60 - 160
Acetamiprid	105	105	P/P	50 - 150
Afidopyropen	100	119	P/P	50 - 150
Bentazon	103	100	P/P	50 - 160
Benzovindiflupyr	105	102	P/P	50 - 150
Carbamazepine	109	104	P/P	60 - 150
Clothianidin	104	101	P/P	60 - 150
Dinotefuran	106	108	P/P	50 - 150
Diuron	107	124	P/P	60 - 160
Fenuron	108	104	P/P	60 - 150
Fluridone	112	110	P/P	60 - 160
Hydrocodone	106	111	P/P	60 - 150
Ibuprofen	119	80.1	P/P	50 - 160
Imazapyr	106	101	P/P	50 - 150
Imidacloprid	100	106	P/P	60 - 150
Linuron	103	114	P/P	60 - 150
Mandestrobin	112	110	P/P	50 - 150
MCPP	110	120	P/P	50 - 150
Naproxen	82.7	109	P/P	50 - 160
Primidone	107	108	P/P	60 - 150
Pyraclostrobin	103	98.5	P/P	60 - 150
Silvex	103	117	P/P	50 - 150
Thiamethoxam	115	114	P/P	50 - 150
Tolfenpyrad	103	97.1	P/P	60 - 150
Triclopyr	106	110	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A124657
Included Lab Sample IDs: 2473071, 2473075, 2473076, 2473077, 2473079

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	99.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A124710
Included Lab Sample IDs: 2473070, 2473072, 2473073, 2473074

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	95.3	98.6	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A124816
Included Lab Sample IDs: 2473090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	88.4		P	80 - 120
PCB-1260	87.9		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8276
Run ID: A124827
Included Lab Sample IDs: 2473090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	94.7		P	80 - 120
Toxaphene	102		P	80 - 120

Reference Method: EPA 8270E
Run ID: A124859
Included Lab Sample IDs: 2473090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	100		P	80 - 120
Alpha-BHC	99.6		P	80 - 120
Alpha-Chlordane	107		P	80 - 120
Beta-Cyfluthrin	102		P	80 - 120
Bifenthrin	99.8		P	80 - 120
Chlorothalonil	97.9		P	80 - 120
Cis-Nonachlor	103		P	80 - 120
Cypermethrin	103		P	80 - 120
Dacthal	100		P	80 - 120
DDD-p,p'	104		P	80 - 120
DDE-p,p'	103		P	80 - 120
DDT-p,p'	95.9		P	80 - 120
Delta-BHC	100		P	80 - 120
Deltamethrin	100		P	80 - 120
Dichlobenil	103		P	80 - 120
Dicofol	90.8		P	80 - 120
Dieldrin	101		P	80 - 120
Endosulfan I	102		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	96.0		P	80 - 120
Endrin	102		P	80 - 120
Endrin Aldehyde	99.7		P	80 - 120
Endrin Ketone	98.6		P	80 - 120
Esfenvalerate	103		P	80 - 120
Ethalfluralin	96.0		P	80 - 120
Fenpropathrin	102		P	80 - 120
Gamma-BHC	97.5		P	80 - 120
Gamma-Chlordane	103		P	80 - 120
Heptachlor	102		P	80 - 120
Heptachlor Epoxide	102		P	80 - 120
Hexachlorobenzene	99.9		P	80 - 120
Kepone	56.7*		F	80 - 120
Lambda-Cyhalothrin	102		P	80 - 120
Methoxychlor	98.5		P	80 - 120
MGK-264	100		P	80 - 120
Mirex	101		P	80 - 120
Oxychlordane	102		P	80 - 120
Permethrin	102		P	80 - 120
Phenothrin	101		P	80 - 120
Piperonyl Butoxide	95.2		P	80 - 120
Prallethrin	97.8		P	80 - 120
Tau-Fluvalinate	99.6		P	80 - 120
Tetramethrin	100		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A124859
Included Lab Sample IDs: 2473090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Trans-Nonachlor	101		P	80 - 120
Triclosan Methyl	103		P	80 - 120
Trifluralin	101		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A124884
Included Lab Sample IDs: 2473071

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A124913
Included Lab Sample IDs: 2473078

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	96.9	99.8	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A124927
Included Lab Sample IDs: 2473090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beta-BHC	107		P	80 - 120

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	98.1				5.68	
EPA 180.1 Rev. 2.0	Turbidity	105				4.49	
EPA 300.0 Rev. 2.1	Chloride	98.2	93.9	91.1		1.27	
	Sulfate	94.3	92.7			1.16	
	Sulfate	101	100	101		3.48	
EPA 350.1 Rev. 2.0	Ammonia-N	95.6	102	101			0.368
	Ammonia-N	97.2	98.2	97.6			0.551
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	97.2	103			3.68
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	97.8	98.8			0.885
EPA 365.1 Rev. 2.0	Total-P	100	105	104			1.59
	Total-P	102	103	102			1.07
EPA 8270E	Aldrin	32.8	34.0	35.9			5.23
	Alpha-BHC	73.4	76.7	73.2			4.79
	Alpha-Chlordane	48.0	54.0	53.0			1.89
	Beta-BHC	81.5	79.7	77.8			2.28
	Beta-Cyfluthrin	29.7	29.2	34.4			16.4
	Bifenthrin	41.6	41.2	53.7			26.4
	Chlorothalonil	36.6	34.3	30.7			11.2
	Cis-Nonachlor	39.4	38.9	40.1			2.93
	Cypermethrin	44.5	42.7	50.5			16.7
	Dacthal	70.2	71.9	70.1			2.56
	DDD-p,p'	92.5	36.2	43.4			14.9
	DDE-p,p'	60.7	65.4	67.3			2.91
	DDT-p,p'	58.7	42.3	42.2			0.145
	Delta-BHC	71.1	78.8	75.5			4.26
	Deltamethrin	62.1	55.3	60.9			9.71
	Dichlobenil	58.1	54.9	51.3			6.68
	Dicofol	42.9	44.2	41.7			5.69
	Dieldrin	56.3	62.7	61.3			2.13
	Endosulfan I	58.0	65.2	61.9			5.15
	Endosulfan II	54.5	52.8	50.2			5.02
	Endosulfan Sulfate	69.8	71.3	67.3			5.74
	Endrin	49.1	49.1	50.3			2.26
	Endrin Aldehyde	52.5	52.0	30.3			52.7
	Endrin Ketone	78.5	81.2	77.8			4.35
	Esfenvalerate	48.5	50.5	58.9			15.4
	Ethalfluralin	51.4	59.7	54.9			8.29
	Fenpropathrin	45.8	45.0	46.3			2.85
	Gamma-BHC	73.7	70.7	72.7			2.83
	Gamma-Chlordane	51.2	57.6	54.4			5.66
	Heptachlor	43.9	49.6	52.7			5.94
	Heptachlor Epoxide	60.4	65.7	64.4			2.02
	Hexachlorobenzene	49.1	50.0	53.4			6.61
	Kepone	62.4	75.6	48.0			44.7
	Lambda-Cyhalothrin	43.9	42.6	50.3			16.7
	Methoprene	31.8	36.6	41.5			12.4
	Methoxychlor	56.5	59.4	57.5			3.31
	MGK-264	57.4	60.0	61.1			1.86
	Mirex	28.1	30.3	34.4			12.7
	Oxychlordane	47.9	54.5	53.8			1.45
	PCB-1016	56.9	53.0	55.7			4.90
	PCB-1260	50.3	48.8	49.3			0.987
	Permethrin	58.4	64.0	72.8			12.9
	Phenothrin	23.3	30.3	32.9			8.06

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Piperonyl Butoxide	63.7	72.3	79.1			8.97
	Prallethrin	50.5	51.8	57.0			9.54
	Tau-Fluvalinate	32.8	30.7	41.4			29.5
	Tetramethrin	52.9	59.4	59.9			0.863
	Trans-Nonachlor	49.8	55.6	56.3			1.23
	Triclosan Methyl	69.6	73.0	68.3			6.64
	Trifluralin	47.3	52.5	51.7			1.56
EPA 8276	Chlordane	62.6	63.8	66.2			3.60
	Toxaphene	69.9	99.5	89.8			10.2
EPA 8321B	2,4-D	105	75.3	83.6			9.16
	2,4,5-T	122	84.1	90.0			6.75
	Acesulfame K	98.7	127	128			0.778
	Acetaminophen	83.8	67.2	77.8			14.5
	Acetamiprid	75.7	34.3	54.7			45.7
	Afidopyropen	70.1	58.0	67.7			15.4
	AMPA	102	94.4	90.4			4.31
	Bentazon	99.1					8.00
	Benzovindiflupyr	86.8	82.8	85.0			2.69
	Carbamazepine	87.8	65.8	71.3			8.13
	Clothianidin	87.6	60.4	68.2			12.1
	Dinotefuran	96.7	57.4	69.8			18.2
	Diuron	85.7	67.7	70.8			4.49
	Endothall	93.0	111	112			1.25
	Fenuron	90.1	55.5	63.4			13.3
	Fluridone	98.8	80.2	80.5			0.326
	Glufosinate	108	101	100			0.985
	Glyphosate	98.7	101	108			6.54
	Hydrocodone	92.5	56.5	63.4			11.5
	Ibuprofen	80.9	85.4	65.3			26.7
	Imazapyr	99.4	97.4	86.8			6.50
	Imidacloprid	90.3	69.4	76.9			10.3
	Linuron	81.0	78.1	72.0			8.09
	Mandestrobin	91.4	84.4	89.2			5.48
	MCPP	110	90.5	88.3			2.44
	Naproxen	74.9	69.6	86.0			21.1
	Primidone	88.7	75.5	80.1			5.90
	Pyraclostrobin	78.8	74.1	77.3			4.24
	Silvex	106	107	102			4.31
	Sucralose	93.5	96.3	99.4			3.12
	Thiamethoxam	95.9	57.5	68.8			17.8
	Tolfenpyrad	55.4	57.6	51.0			12.0
	Triclopyr	121	89.0	90.3			1.38
SM 2320 B-2011	Total Alkalinity	101				0.0568	
	Total Alkalinity	102				0.144	
	Total Alkalinity	104				4.45	
SM 2540 C-2015	TDS	92.8				2.56	
SM 2540 D-2015	TSS	106					
SM 4500-F- C-2011	Fluoride	103	103	104			0.979
	Fluoride	99.6	100	99.8			0.483
	Fluoride	99.6	101	101			0.0
SM 5310 B-2014	Organic Carbon	99.6	101	102			0.605
	Organic Carbon	99.6	98.0	100			1.42

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2473070, 2473072, 2473073, 2473074, 2473078
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2473070, 2473072, 2473073, 2473074, 2473078
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2473070, 2473072, 2473073, 2473074, 2473078
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2473070, 2473072, 2473073, 2473074, 2473078
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2473071, 2473075, 2473076, 2473077, 2473079
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2473071, 2473075, 2473076, 2473077, 2473079
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2473071, 2473075, 2473076, 2473077, 2473079
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2473071, 2473075, 2473076, 2473077, 2473079
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2473090
EPA 8270E	PCBs in water matrices by GC/MS/MS	2473090
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2473090
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2473091
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2473070, 2473072, 2473073, 2473074, 2473078
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2473070, 2473072, 2473073, 2473074, 2473078
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2473070, 2473072, 2473073, 2473074, 2473078
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2473070, 2473072, 2473073, 2473074, 2473078
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2473071, 2473075, 2473076, 2473077, 2473079

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	03/05/2024			03/05/2024 13:11	Jessica K Wilks	2473070
	03/05/2024			03/05/2024 13:12	Jessica K Wilks	2473072
	03/05/2024			03/05/2024 13:13	Jessica K Wilks	2473073
	03/05/2024			03/05/2024 13:14	Jessica K Wilks	2473074
	03/05/2024			03/05/2024 13:15	Jessica K Wilks	2473078
EPA 180.1 Rev. 2.0	03/05/2024			03/05/2024 14:24	Anna M. Plaviak	2473070
	03/05/2024			03/05/2024 14:46	Anna M. Plaviak	2473072
	03/05/2024			03/05/2024 14:47	Anna M. Plaviak	2473073
	03/05/2024			03/05/2024 14:48	Anna M. Plaviak	2473074, 2473078
EPA 300.0 Rev. 2.1	03/05/2024			03/08/2024 17:57	Samantha L Bates	2473070
	03/05/2024			03/08/2024 18:12	Samantha L Bates	2473072
	03/05/2024			03/08/2024 18:27	Samantha L Bates	2473073
	03/05/2024			03/08/2024 18:42	Samantha L Bates	2473074
	03/05/2024			03/08/2024 18:58	Samantha L Bates	2473078
	03/05/2024			03/13/2024 18:19	James L Waggerby	2473070
	03/05/2024			03/13/2024 18:34	James L Waggerby	2473072
	03/05/2024			03/13/2024 18:50	James L Waggerby	2473073
	03/05/2024			03/13/2024 19:05	James L Waggerby	2473074
	03/05/2024			03/20/2024 21:58	James L Waggerby	2473078
EPA 350.1 Rev. 2.0	03/05/2024			03/07/2024 14:22	Ping Hua	2473071
	03/05/2024			03/07/2024 14:34	Ping Hua	2473077
	03/05/2024			03/07/2024 14:38	Ping Hua	2473075
	03/05/2024			03/07/2024 14:40	Ping Hua	2473076
	03/05/2024			03/07/2024 15:16	Ping Hua	2473079
EPA 351.2 Rev. 2.0	03/05/2024	03/06/2024 10:07	Ping Hua	03/07/2024 13:09	Robyn Blevins	2473071
	03/05/2024	03/06/2024 10:07	Ping Hua	03/07/2024 13:11	Robyn Blevins	2473075
	03/05/2024	03/06/2024 10:07	Ping Hua	03/07/2024 13:13	Robyn Blevins	2473076
	03/05/2024	03/06/2024 10:07	Ping Hua	03/07/2024 13:17	Robyn Blevins	2473077
	03/05/2024	03/06/2024 10:07	Ping Hua	03/07/2024 13:19	Robyn Blevins	2473079
EPA 353.2 Rev. 2.0	03/05/2024			03/08/2024 14:25	Fadila Guebre	2473071
	03/05/2024			03/08/2024 14:26	Fadila Guebre	2473075
	03/05/2024			03/08/2024 14:28	Fadila Guebre	2473076
	03/05/2024			03/08/2024 14:29	Fadila Guebre	2473077
	03/05/2024			03/08/2024 14:30	Fadila Guebre	2473079
EPA 365.1 Rev. 2.0	03/05/2024	03/06/2024 14:05	Josephine W Gitau	03/07/2024 10:14	Elise M. Gillis	2473075
	03/05/2024	03/06/2024 14:05	Josephine W Gitau	03/07/2024 10:15	Elise M. Gillis	2473076
	03/05/2024	03/06/2024 14:05	Josephine W Gitau	03/07/2024 10:16	Elise M. Gillis	2473077
	03/05/2024	03/06/2024 14:05	Josephine W Gitau	03/07/2024 15:48	Elise M. Gillis	2473079
	03/05/2024	03/20/2024 11:29	Josephine W Gitau	03/21/2024 09:53	Elise M. Gillis	2473071
EPA 8270E	03/05/2024	03/08/2024 08:00	Kenedi Mills	03/16/2024 01:28	Lipi Saha	2473090

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	03/05/2024	03/08/2024 08:00	Kenedi Mills	03/19/2024 21:41	Kenedi Mills	2473090
	03/05/2024	03/08/2024 08:00	Kenedi Mills	03/22/2024 01:15	Kenedi Mills	2473090
EPA 8276	03/05/2024	03/08/2024 08:00	Kenedi Mills	03/15/2024 09:53	Kenedi Mills	2473090
EPA 8321B	03/05/2024	03/06/2024 08:00	Hoor Shaik	03/08/2024 01:06	Juyoung Kim	2473091
	03/05/2024	03/06/2024 08:00	Hoor Shaik	03/08/2024 11:31	Juyoung Kim	2473091
	03/05/2024	03/06/2024 13:00	Samatha Luckman	03/06/2024 17:02	Samatha Luckman	2473091
	03/05/2024	03/06/2024 13:00	Samatha Luckman	03/08/2024 13:36	Samatha Luckman	2473091
SM 2320 B-2011	03/05/2024			03/07/2024 06:44	Dale L. Simmons	2473070
	03/05/2024			03/08/2024 03:39	Dale L. Simmons	2473072
	03/05/2024			03/08/2024 03:50	Dale L. Simmons	2473073
	03/05/2024			03/08/2024 04:43	Dale L. Simmons	2473074
	03/05/2024			03/08/2024 05:01	Dale L. Simmons	2473078
SM 2540 C-2015	03/05/2024			03/06/2024 14:09	Yijie Li	2473070, 2473072, 2473073, 2473074, 2473078
SM 2540 D-2015	03/05/2024			03/06/2024 16:09	Yijie Li	2473070, 2473072, 2473073, 2473074, 2473078
SM 4500-F- C-2011	03/05/2024			03/07/2024 06:44	Dale L. Simmons	2473070
	03/05/2024			03/08/2024 03:39	Dale L. Simmons	2473072
	03/05/2024			03/08/2024 03:50	Dale L. Simmons	2473073
	03/05/2024			03/08/2024 04:34	Dale L. Simmons	2473074
	03/05/2024			03/08/2024 05:01	Dale L. Simmons	2473078
SM 5310 B-2014	03/05/2024			03/06/2024 21:37	Khloe J Berg	2473071
	03/05/2024			03/06/2024 22:56	Khloe J Berg	2473075
	03/05/2024			03/06/2024 23:42	Khloe J Berg	2473076
	03/05/2024			03/06/2024 23:57	Khloe J Berg	2473077
	03/05/2024			03/07/2024 00:11	Khloe J Berg	2473079