

Chemical Analysis Report

NE-DIST-2022-11-09-01

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

Event Description: **Suwannee Spring 2022**
Request ID: **RQ-2022-10-17-10**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
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8800 Baymeadows Way West
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 02-DEC-2022 10:55



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: Trail Springs (spring vent)

Collection Date/Time: 11/08/2022 09:50

Field ID: 22051007

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2368773	DEP SOP: NU-094-1	Color (true)	6.9		PCU	P422158	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	I	NTU	P422178	
	EPA 300.0 Rev. 2.1	Chloride	11		mg Cl/L	P422650	
		Sulfate	35		mg SO4/L	P422653	
	SM 2320 B-2011	Total Alkalinity	161		mg CaCO3/L	P422794	
	SM 2540 C-2015	TDS	254		mg/L	P422674	
	SM 2540 D-2015	TSS	2	U	mg/L	P422562	RPD
	SM 4500-F- C-2011	Fluoride	0.061	I	mg F/L	P422643	
	2368775	EPA 350.1 Rev. 2.0	0.004	I	mg N/L	P422662	
		EPA 351.2 Rev. 2.0	0.25		mg N/L	P422371	
		EPA 353.2 Rev. 2.0	8.7		mg N/L	P422222	
		EPA 365.1 Rev. 2.0	0.054		mg P/L	P422383	
	SM 5310 B-2011	Organic Carbon	1.2		mg C/L	P422754	

Sample Location: Twin Spings at Vent

Collection Date/Time: 11/08/2022 10:55

Field ID: G1NE0943

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2368774	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P422158	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P422178	
	EPA 300.0 Rev. 2.1	Chloride	7.2		mg Cl/L	P422650	
		Sulfate	14		mg SO4/L	P422653	
	SM 2320 B-2011	Total Alkalinity	138		mg CaCO3/L	P422794	
	SM 2540 C-2015	TDS	164		mg/L	P422674	
	SM 2540 D-2015	TSS	2	U	mg/L	P422562	RPD
	SM 4500-F- C-2011	Fluoride	0.068	I	mg F/L	P422643	
	2368776	EPA 350.1 Rev. 2.0	0.004	I	mg N/L	P422662	
		EPA 351.2 Rev. 2.0	0.20	I	mg N/L	P422855	
		EPA 353.2 Rev. 2.0	2.4		mg N/L	P422480	
		EPA 365.1 Rev. 2.0	0.039		mg P/L	P422689	
	SM 5310 B-2011	Organic Carbon	0.59	I	mg C/L	P422754	

Sample Location: Olustee Creek at SR-18

Collection Date/Time: 11/08/2022 12:20

Field ID: 21030071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2368784	EPA 8270E	Aldrin	0.67	U	ng/L	P422206	
		Alpha-BHC	0.10	U	ng/L	P422206	
		Alpha-Chlordane	0.21	U	ng/L	P422206	MS
		PCB-1016	2.1	U	ng/L	P422206	
		Beta-BHC	0.10	U	ng/L	P422206	
		PCB-1221	2.1	U	ng/L	P422206	
		Beta-Cyfluthrin	1.3	U	ng/L	P422206	
		PCB-1232	2.1	U	ng/L	P422206	
		Bifenthrin	0.52	U	ng/L	P422206	
		PCB-1242	2.1	U	ng/L	P422206	
		PCB-1248	2.1	U	ng/L	P422206	
		Chlorothalonil	1.3	U	ng/L	P422206	
		PCB-1254	2.1	U	ng/L	P422206	
		Cis-Nonachlor	0.21	U	ng/L	P422206	MS
		PCB-1260	2.1	U	ng/L	P422206	
		Cypermethrin	1.6	U	ng/L	P422206	
		Dacthal	0.16	U	ng/L	P422206	
		DDD-p,p'	0.26	U	ng/L	P422206	
		DDE-p,p'	0.21	U	ng/L	P422206	
		DDT-p,p'	0.26	U	ng/L	P422206	
		Delta-BHC	0.41	U	ng/L	P422206	
		Deltamethrin	1.3	U	ng/L	P422206	
		Dichlobenil	0.26	U	ng/L	P422206	
		Dicofol	1.3	U	ng/L	P422206	
		Dieldrin	0.41	U	ng/L	P422206	
		Endosulfan I	0.41	U	ng/L	P422206	
		Endosulfan II	0.41	U	ng/L	P422206	MS
		Endosulfan Sulfate	0.31	U	ng/L	P422206	
		Endrin	0.41	U	ng/L	P422206	MS
		Endrin Aldehyde	0.78	U	ng/L	P422206	
		Endrin Ketone	0.41	U	ng/L	P422206	
		Esfenvalerate	0.78	U	ng/L	P422206	
		Ethalfuralin	0.16	U	ng/L	P422206	
		Fenpropathrin	0.26	U	ng/L	P422206	
		Gamma-BHC	0.13	I	ng/L	P422206	
		Gamma-Chlordane	0.21	U	ng/L	P422206	MS
		Heptachlor	0.21	U	ng/L	P422206	
		Heptachlor Epoxide	0.26	U	ng/L	P422206	
		Hexachlorobenzene**	1.0	U	ng/L	P422206	
		Kepone	5.2	U	ng/L	P422206	
		Lambda-Cyhalothrin	0.78	U	ng/L	P422206	
		Methoprene	0.78	U	ng/L	P422206	
		Methoxychlor	0.31	U	ng/L	P422206	
		MGK-264	0.21	U	ng/L	P422206	

Field ID: 21030071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2368784	EPA 8270E	Mirex	0.36	U	ng/L	P422206	
		Oxychlordane	0.31	U	ng/L	P422206	
		Permethrin	1.7	U	ng/L	P422206	
		Phenothrin	0.93	U	ng/L	P422206	
		Piperonyl Butoxide	0.22	I	ng/L	P422206	
		Prallethrin	2.1	U	ng/L	P422206	
		Tau-Fluvalinate	0.26	U	ng/L	P422206	
		Tetramethrin	0.78	U	ng/L	P422206	
		Trans-Nonachlor	0.21	U	ng/L	P422206	MS
		Triclosan Methyl	0.16	U	ng/L	P422206	
		Trifluralin	0.21	U	ng/L	P422206	
		Chlordane	2.1	U	ng/L	P422206	
		Toxaphene	16	U	ng/L	P422206	
2368786	EPA 8321B	2,4-D	0.0020	U	ug/L	P422267	
		Acesulfame K	0.10	U	ug/L	P422132	
		2,4,5-T	0.0040	U	ug/L	P422267	
		AMPA	0.10	U	ug/L	P422132	
		Acetaminophen	0.0080	U	ug/L	P422267	
		Acetamiprid	0.0020	U	ug/L	P422267	
		Endothall	0.25	U	ug/L	P422132	MS
		Glufosinate	0.10	U	ug/L	P422132	
		Glyphosate	0.10	U	ug/L	P422132	
		Afidopyrophen	0.0020	U	ug/L	P422267	
		Bentazon	8.0E-04	U	ug/L	P422267	
		Sucralose	0.023	I	ug/L	P422132	
		Benzovindiflupyr	0.0020	U	ug/L	P422267	
		Carbamazepine	8.0E-04	U	ug/L	P422267	
		Clothianidin	0.0020	U	ug/L	P422267	
		Dinotefuran	0.0020	U	ug/L	P422267	
		Diuron	0.0020	U	ug/L	P422267	
		Fenuron	0.032	U	ug/L	P422267	
		Fluridone	8.0E-04	U	ug/L	P422267	
		Imazapyr	0.077		ug/L	P422267	
		Hydrocodone	0.0020	U	ug/L	P422267	
		Ibuprofen	0.20	U	ug/L	P422267	
		Imidacloprid	0.0020	U	ug/L	P422267	MS
		Linuron	0.0040	U	ug/L	P422267	
		Mandestrobin	0.0020	U	ug/L	P422267	
		MCPP	0.0040	U	ug/L	P422267	
		Naproxen	0.0080	U	ug/L	P422267	
		Primidone	0.0040	U	ug/L	P422267	
		Pyraclostrobin	0.0020	U	ug/L	P422267	
		Silvex	0.0040	U	ug/L	P422267	
		Thiamethoxam	0.0020	U	ug/L	P422267	
		Tolfenpyrad	0.0020	U	ug/L	P422267	

Field ID: 21030071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2368796	EPA 8321B	Triclopyr	0.0040	U	ug/L	P422267	

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P422158

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P422178

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422650

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422653

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422662

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422371

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422855

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422222

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422480

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: P422383

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422689

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

Reference Method: EPA 8270E
Batch ID: P422206

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P422206

Component	Result	Code	Units
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P422206

Component	Result	Code	Units
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P422206

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

Reference Method: EPA 8321B

Batch ID: P422132

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B

Batch ID: P422267

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P422267

Component	Result	Code	Units
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	0.20	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	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P422794

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

Reference Method: SM 2540 C-2015

Batch ID: P422674

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P422562

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P422643

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P422754

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: P422158

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P422178

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422650

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422653

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422662

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422371

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.5		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422855

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422222

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422480

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P422383

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P422689

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

Reference Method: EPA 8270E

Batch ID: P422206

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	48.3		P	10 - 92.0
Alpha-BHC	76.5		P	75 - 107
Alpha-Chlordane	72.6		P	50 - 108
Beta-BHC	85.7		P	36 - 138
Beta-Cyfluthrin	63.1		P	20 - 161
Bifenthrin	42.8		P	10 - 119
Chlorothalonil	97.0		P	26 - 186
Cis-Nonachlor	68.3		P	42 - 119
Cypermethrin	58.5		P	22 - 150
Dacthal	84.3		P	72 - 119
DDD-p,p'	72.5		P	45 - 107
DDE-p,p'	66.0		P	48 - 106
DDT-p,p'	60.4		P	48 - 110
Delta-BHC	84.6		P	54 - 140
Deltamethrin	56.7		P	22 - 189
Dichlobenil	62.0		P	36 - 117
Dicofol	78.8		P	46 - 155
Dieldrin	71.9		P	54 - 110
Endosulfan I	73.2		P	59 - 105
Endosulfan II	73.2		P	51 - 118
Endosulfan Sulfate	80.4		P	57 - 121
Endrin	74.1		P	10 - 120
Endrin Aldehyde	81.8		P	34 - 118
Endrin Ketone	85.9		P	69 - 177
Esfenvalerate	55.5		P	23 - 168
Ethalfuralin	61.7		P	49 - 99.0
Fenpropathrin	66.5		P	34 - 117
Gamma-BHC	73.3		P	72 - 117
Gamma-Chlordane	77.2		P	43 - 106
Heptachlor	61.3		P	41 - 98.0
Heptachlor Epoxide	76.0		P	57 - 106
Hexachlorobenzene	66.9		P	36 - 99.0
Kepone	90.4		P	16 - 215
Lambda-Cyhalothrin	53.2		P	21 - 177
Methoprene	50.0		P	10 - 119
Methoxychlor	69.9		P	60 - 112
MGK-264	82.2		P	26 - 122
Mirex	49.3		P	10 - 169
Oxychlordane	60.5		P	43 - 105
PCB-1016	79.7		P	48 - 112

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P422206

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PCB-1260	81.6		P	44 - 118
Permethrin	62.6		P	24 - 148
Phenothrin	49.7		P	10 - 106
Piperonyl Butoxide	113		P	10 - 139
Prallethrin	78.4		P	17 - 109
Tau-Fluvalinate	48.8		P	13 - 131
Tetramethrin	83.4		P	10 - 132
Trans-Nonachlor	69.5		P	44 - 106
Triclosan Methyl	81.1		P	59 - 109
Trifluralin	65.7		P	44 - 101

Reference Method: EPA 8276

Batch ID: P422206

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	83.0		P	61 - 116
Toxaphene	88.9		P	48 - 124

Reference Method: EPA 8321B

Batch ID: P422132

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	138		P	40 - 150
AMPA	94.7		P	40 - 150
Endothall	113		P	40 - 150
Glufosinate	76.5		P	40 - 150
Glyphosate	82.4		P	40 - 150
Sucralose	101		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P422267

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	107		P	40 - 150
2,4,5-T	85.1		P	40 - 150
Acetaminophen	91.7		P	30 - 150
Acetamiprid	95.7		P	40 - 150
Afidopyropen	74.1		P	30 - 150
Bentazon	97.1		P	30 - 150
Benzovindiflupyr	80.3		P	40 - 150
Carbamazepine	83.0		P	40 - 150
Clothianidin	96.2		P	40 - 150
Dinotefuran	101		P	40 - 150
Diuron	79.8		P	40 - 150
Fenuron	102		P	40 - 150
Fluridone	108		P	40 - 150
Hydrocodone	111		P	40 - 150
Ibuprofen	69.7		P	40 - 150
Imazapyr	119		P	40 - 150
Imidacloprid	104		P	40 - 150
Linuron	88.4		P	40 - 150
Mandestrobin	93.3		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P422267

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
MCP	95.3		P	40 - 150
Naproxen	80.3		P	40 - 150
Primidone	105		P	40 - 150
Pyraclostrobin	82.9		P	40 - 150
Silvex	79.7		P	40 - 150
Thiamethoxam	101		P	40 - 150
Tolfenpyrad	52.3		P	30 - 150
Triclopyr	86.1		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P422794

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.5		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P422674

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

Reference Method: SM 2540 D-2015
Batch ID: P422562

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	93.1		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P422643

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.9		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P422754

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422650

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368515	Chloride	99.2		P	90 - 110
2368724	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422653

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368515	Sulfate	99.9		P	90 - 110
2368724	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422662

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368775	Ammonia-N	96.6	95.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422371

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368825	Kjeldahl Nitrogen	92.9	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422855

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368827	Kjeldahl Nitrogen	90.2	90.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422222

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368790	NO2NO3-N	99.0	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422480

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367178	NO2NO3-N	100	99.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422383

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368777	Total-P	98.8	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422689

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2370848	Total-P	104	105	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P422206

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369136	PCB-1016	74.4	71.0	P/P	46 - 111
2369136	PCB-1260	68.9	66.2	P/P	45 - 114
2369150	Aldrin	65.0	64.5	P/P	20 - 82.0
2369150	Alpha-BHC	106	96.1	P/P	71 - 109
2369150	Alpha-Chlordane	114	95.2	F/P	42 - 106
2369150	Beta-BHC	88.4	99.7	P/P	69 - 180
2369150	Beta-Cyfluthrin	78.1	79.3	P/P	18 - 175
2369150	Bifenthrin	51.7	51.0	P/P	21 - 128
2369150	Chlorothalonil	141	137	P/P	10 - 300
2369150	Cis-Nonachlor	112	96.0	F/P	34 - 106
2369150	Cypermethrin	78.0	71.0	P/P	22 - 158
2369150	Dacthal	102	96.7	P/P	54 - 116
2369150	DDD-p,p'	87.0	76.3	P/P	34 - 107
2369150	DDE-p,p'	94.9	85.9	P/P	33 - 110
2369150	DDT-p,p'	78.1	67.2	P/P	50 - 122
2369150	Delta-BHC	135	129	P/P	77 - 193
2369150	Deltamethrin	74.0	66.1	P/P	10 - 195
2369150	Dichlobenil	57.5	65.3	P/P	25 - 113
2369150	Dicofol	73.2	64.6	P/P	38 - 247
2369150	Dieldrin	104	98.4	P/P	45 - 118
2369150	Endosulfan I	103	93.9	P/P	51 - 106
2369150	Endosulfan II	132	122	F/F	37 - 122
2369150	Endosulfan Sulfate	108	121	P/P	43 - 132
2369150	Endrin	116	93.2	F/P	29 - 101
2369150	Endrin Aldehyde	75.2	70.7	P/P	19 - 110
2369150	Endrin Ketone	98.6	103	P/P	60 - 140
2369150	Esfenvalerate	81.6	78.3	P/P	26 - 199
2369150	Ethalfuralin	81.2	68.5	P/P	45 - 99.0
2369150	Fenpropathrin	83.4	84.0	P/P	35 - 120
2369150	Gamma-BHC	81.9	84.0	P/P	63 - 128
2369150	Gamma-Chlordane	106	86.6	F/P	40 - 104
2369150	Heptachlor	85.0	73.7	P/P	36 - 97.0
2369150	Heptachlor Epoxide	115	103	P/P	49 - 184
2369150	Hexachlorobenzene	93.7	83.6	P/P	39 - 96.0
2369150	Kepone	95.4	125	P/P	10 - 217
2369150	Lambda-Cyhalothrin	67.6	70.9	P/P	21 - 193
2369150	Methoprene	63.4	57.4	P/P	20 - 106
2369150	Methoxychlor	75.1	61.0	P/P	53 - 118
2369150	MGK-264	100	95.6	P/P	40 - 118
2369150	Mirex	77.2	66.0	P/P	26 - 92.0
2369150	Oxychlordane	90.3	85.5	P/P	44 - 99.0
2369150	Permethrin	78.4	72.0	P/P	33 - 182
2369150	Phenothrin	55.6	55.0	P/P	10 - 129
2369150	Piperonyl Butoxide	89.5	88.1	P/P	10 - 211
2369150	Prallethrin	83.6	86.9	P/P	24 - 113
2369150	Tau-Fluvalinate	65.3	63.4	P/P	14 - 149
2369150	Tetramethrin	72.6	77.7	P/P	17 - 151
2369150	Trans-Nonachlor	108	90.8	F/P	42 - 102
2369150	Triclosan Methyl	102	92.9	P/P	48 - 108
2369150	Trifluralin	92.5	74.0	P/P	47 - 96.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276

Batch ID: P422206

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369136	Chlordane	72.8	78.0	P/P	53 - 126
2369136	Toxaphene	75.5	80.9	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P422132

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368761	Acesulfame K	78.7	67.9	P/P	40 - 150
2368761	AMPA	75.8	80.1	P/P	40 - 150
2368761	Endothall	203	207	F/F	40 - 150
2368761	Glufosinate	84.2	84.3	P/P	40 - 150
2368761	Glyphosate	103	99.3	P/P	40 - 150
2368761	Sucralose	109	104	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P422267

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368560	2,4-D	115	114	P/P	40 - 150
2368560	2,4,5-T	82.9	82.1	P/P	40 - 150
2368560	Acetaminophen	115	94.5	P/P	30 - 150
2368560	Acetamiprid	90.3	92.7	P/P	40 - 150
2368560	Afidopyropen	69.5	75.7	P/P	30 - 150
2368560	Bentazon	83.6	81.4	P/P	30 - 150
2368560	Benzovindiflupyr	80.4	83.6	P/P	40 - 150
2368560	Carbamazepine	84.4	82.4	P/P	40 - 150
2368560	Clothianidin	106	101	P/P	40 - 150
2368560	Dinotefuran	128	110	P/P	40 - 150
2368560	Diuron	72.6	73.4	P/P	40 - 150
2368560	Fenuron	99.5	96.8	P/P	40 - 150
2368560	Fluridone	103	100	P/P	40 - 150
2368560	Hydrocodone	121	111	P/P	40 - 150
2368560	Ibuprofen	75.3	84.0	P/P	40 - 150
2368560	Imazapyr	122	103	P/P	40 - 150
2368560	Imidacloprid	155	145	F/P	40 - 150
2368560	Linuron	86.7	75.5	P/P	40 - 150
2368560	Mandestrobin	90.8	91.1	P/P	40 - 150
2368560	MCPP	92.8	89.0	P/P	40 - 150
2368560	Naproxen	76.9	81.0	P/P	40 - 150
2368560	Primidone	97.8	93.8	P/P	40 - 150
2368560	Pyraclostrobin	88.5	85.6	P/P	40 - 150
2368560	Silvex	84.5	80.6	P/P	40 - 150
2368560	Thiamethoxam	128	124	P/P	40 - 150
2368560	Tolfenpyrad	58.2	55.9	P/P	30 - 150
2368560	Triclopyr	84.7	80.3	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P422643

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368966	Fluoride	102	100	P/P	94 - 104

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P422754

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368640	Organic Carbon	97.6	95.9	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P422158

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368821	Color (true)	1.36	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P422178

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368745	Turbidity	7.71	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422650

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368515	Chloride	0.591	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422653

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368515	Sulfate	0.588	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422662

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368775	Ammonia-N	0.964	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422371

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368825	Kjeldahl Nitrogen	5.78	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422855

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368827	Kjeldahl Nitrogen	0.528	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422222

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368790	NO2NO3-N	0.672	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P422480

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367178	NO2NO3-N	0.157	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P422383

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368777	Total-P	0.795	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P422689

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2370848	Total-P	0.453	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P422206

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369136	PCB-1016	4.68	Spike	P	0 - 32
2369136	PCB-1260	3.94	Spike	P	0 - 31
2369150	Aldrin	0.775	Spike	P	0 - 41
2369150	Alpha-BHC	9.69	Spike	P	0 - 25
2369150	Alpha-Chlordane	17.8	Spike	P	0 - 33
2369150	Beta-BHC	12.0	Spike	P	0 - 36
2369150	Beta-Cyfluthrin	1.46	Spike	P	0 - 42
2369150	Bifenthrin	1.24	Spike	P	0 - 53
2369150	Chlorothalonil	3.48	Spike	P	0 - 71
2369150	Cis-Nonachlor	15.9	Spike	P	0 - 29
2369150	Cypermethrin	9.39	Spike	P	0 - 40
2369150	Dacthal	5.19	Spike	P	0 - 26
2369150	DDD-p,p'	13.1	Spike	P	0 - 39
2369150	DDE-p,p'	9.89	Spike	P	0 - 33
2369150	DDT-p,p'	15.0	Spike	P	0 - 40
2369150	Delta-BHC	4.79	Spike	P	0 - 37
2369150	Deltamethrin	11.2	Spike	P	0 - 100
2369150	Dichlobenil	12.8	Spike	P	0 - 40
2369150	Dicofol	12.5	Spike	P	0 - 31
2369150	Dieldrin	5.16	Spike	P	0 - 27
2369150	Endosulfan I	9.38	Spike	P	0 - 23
2369150	Endosulfan II	7.50	Spike	P	0 - 28
2369150	Endosulfan Sulfate	11.5	Spike	P	0 - 38
2369150	Endrin	22.0	Spike	P	0 - 63
2369150	Endrin Aldehyde	6.06	Spike	P	0 - 60
2369150	Endrin Ketone	3.93	Spike	P	0 - 37
2369150	Esfenvalerate	4.12	Spike	P	0 - 52
2369150	Ethalfuralin	17.0	Spike	P	0 - 23
2369150	Fenpropathrin	0.734	Spike	P	0 - 32
2369150	Gamma-BHC	2.59	Spike	P	0 - 17

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P422206

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369150	Gamma-Chlordane	20.1	Spike	P	0 - 40
2369150	Heptachlor	14.2	Spike	P	0 - 29
2369150	Heptachlor Epoxide	11.1	Spike	P	0 - 25
2369150	Hexachlorobenzene	11.4	Spike	P	0 - 36
2369150	Kepone	27.2	Spike	P	0 - 93
2369150	Lambda-Cyhalothrin	4.79	Spike	P	0 - 55
2369150	Methoprene	9.98	Spike	P	0 - 53
2369150	Methoxychlor	20.7	Spike	P	0 - 29
2369150	MGK-264	4.97	Spike	P	0 - 35
2369150	Mirex	15.5	Spike	P	0 - 46
2369150	Oxychlordane	5.51	Spike	P	0 - 29
2369150	Permethrin	8.63	Spike	P	0 - 44
2369150	Phenothrin	1.08	Spike	P	0 - 56
2369150	Piperonyl Butoxide	1.57	Spike	P	0 - 100
2369150	Prallethrin	3.89	Spike	P	0 - 42
2369150	Tau-Fluvalinate	2.96	Spike	P	0 - 54
2369150	Tetramethrin	6.82	Spike	P	0 - 51
2369150	Trans-Nonachlor	17.7	Spike	P	0 - 37
2369150	Triclosan Methyl	9.01	Spike	P	0 - 31
2369150	Trifluralin	22.3	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P422206

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369136	Chlordane	6.98	Spike	P	0 - 25
2369136	Toxaphene	6.90	Spike	P	0 - 26

Reference Method: EPA 8321B
Batch ID: P422132

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368761	Acesulfame K	14.7	Spike	P	0 - 30
2368761	AMPA	4.66	Spike	P	0 - 30
2368761	Endothall	1.64	Spike	P	0 - 30
2368761	Glufosinate	0.132	Spike	P	0 - 30
2368761	Glyphosate	3.62	Spike	P	0 - 30
2368761	Sucralose	4.51	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P422267

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368560	2,4-D	1.33	Spike	P	0 - 30
2368560	2,4,5-T	0.966	Spike	P	0 - 30
2368560	Acetaminophen	20.0	Spike	P	0 - 30
2368560	Acetamiprid	2.67	Spike	P	0 - 30
2368560	Afidopyropen	8.56	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P422267

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368560	Bentazon	2.02	Spike	P	0 - 30
2368560	Benzovindiflupyr	3.85	Spike	P	0 - 30
2368560	Carbamazepine	2.36	Spike	P	0 - 30
2368560	Clothianidin	4.44	Spike	P	0 - 30
2368560	Dinotefuran	13.5	Spike	P	0 - 30
2368560	Diuron	1.12	Spike	P	0 - 30
2368560	Fenuron	2.77	Spike	P	0 - 30
2368560	Fluridone	2.43	Spike	P	0 - 30
2368560	Hydrocodone	8.20	Spike	P	0 - 30
2368560	Ibuprofen	10.9	Spike	P	0 - 30
2368560	Imazapyr	15.3	Spike	P	0 - 30
2368560	Imidacloprid	6.73	Spike	P	0 - 30
2368560	Linuron	13.8	Spike	P	0 - 30
2368560	Mandestrobin	0.277	Spike	P	0 - 30
2368560	MCPP	4.15	Spike	P	0 - 30
2368560	Naproxen	5.11	Spike	P	0 - 30
2368560	Primidone	4.18	Spike	P	0 - 30
2368560	Pyraclostrobin	3.41	Spike	P	0 - 30
2368560	Silvex	4.72	Spike	P	0 - 30
2368560	Thiamethoxam	3.23	Spike	P	0 - 30
2368560	Tolfenpyrad	4.05	Spike	P	0 - 30
2368560	Triclopyr	5.26	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P422794

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368966	Total Alkalinity	0.733	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P422674

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368619	TDS	5.91	Sample	P	0 - 10

Reference Method: SM 2540 D-2015
Batch ID: P422562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368619	TSS	10.9	Sample	F	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P422643

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368966	Fluoride	0.972	Spike	P	0 - 1.6

Quality Assurance Report

Precision

Reference Method: SM 5310 B-2011
Batch ID: P422754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368640	Organic Carbon	1.25	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2368784
Field Sample ID: 21030071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	71.8	P	29 - 130
EPA 8270E	Decachlorobiphenyl	69.8	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	70.0	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	72.5	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	53.4	P	30 - 101
EPA 8276	PCNB	87.7	P	48 - 121

Lab Sample ID: 2368796
Field Sample ID: 21030071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	102	P	30 - 160
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	38.7	P	30 - 160
EPA 8321B	Diuron-d6	30.7	P	30 - 160
EPA 8321B	Endothall-d6	156	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	93.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	74.0	P	30 - 160
EPA 8321B	Primidone-d5	80.5	P	30 - 160
EPA 8321B	Sucralose-d6	139	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A115836

Included Lab Sample IDs: 2368773, 2368774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.8	99.1	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A115843

Included Lab Sample IDs: 2368773, 2368774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	98.5	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A115863

Included Lab Sample IDs: 2368775

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	108	107	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A115877

Included Lab Sample IDs: 2368796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	93.5	91.3	P/P	60 - 160
Endothall	112	113	P/P	60 - 160
Glufosinate	87.0	78.3	P/P	60 - 160
Glyphosate	86.8	90.0	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A115879

Included Lab Sample IDs: 2368796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	138	145	P/P	60 - 160
Sucralose	96.8	71.3	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A115939

Included Lab Sample IDs: 2368773, 2368774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	99.3	P/P	90 - 110
Sulfate	105	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A115956

Included Lab Sample IDs: 2368776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	104	104	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A115974
Included Lab Sample IDs: 2368784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	98.8		P	80 - 120
PCB-1260	97.4		P	80 - 120

Reference Method: EPA 8321B
Run ID: A115989
Included Lab Sample IDs: 2368796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	102	95.8	P/P	50 - 150
2,4,5-T	103	106	P/P	50 - 150
Acetaminophen	94.0	95.0	P/P	60 - 160
Acetamiprid	104	109	P/P	50 - 150
Afidopyropen	111	107	P/P	50 - 150
Bentazon	107	107	P/P	50 - 160
Benzovindiflupyr	115	110	P/P	50 - 150
Carbamazepine	104	111	P/P	60 - 150
Clothianidin	102	102	P/P	60 - 150
Dinotefuran	109	102	P/P	50 - 150
Diuron	106	106	P/P	60 - 160
Fenuron	101	104	P/P	60 - 150
Fluridone	110	109	P/P	60 - 160
Hydrocodone	102	106	P/P	60 - 150
Ibuprofen	90.9	93.7	P/P	50 - 160
Imazapyr	98.6	108	P/P	50 - 150
Imidacloprid	100	101	P/P	60 - 150
Linuron	101	115	P/P	60 - 150
Mandestrobin	108	105	P/P	50 - 150
MCPP	107	105	P/P	50 - 150
Naproxen	88.8	100	P/P	50 - 160
Primidone	103	94.2	P/P	60 - 150
Pyraclostrobin	108	110	P/P	60 - 150
Silvex	98.5	89.0	P/P	50 - 150
Thiamethoxam	106	105	P/P	50 - 150
Tolfenpyrad	104	102	P/P	60 - 150
Triclopyr	104	105	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A116013
Included Lab Sample IDs: 2368775

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.6	97.6	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A116019
Included Lab Sample IDs: 2368784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	94.7		P	80 - 120
Alpha-BHC	92.4		P	80 - 120
Alpha-Chlordane	104		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A116019
Included Lab Sample IDs: 2368784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beta-BHC	88.4		P	80 - 120
Beta-Cyfluthrin	96.1		P	80 - 120
Bifenthrin	90.2		P	80 - 120
Chlorothalonil	109		P	80 - 120
Cis-Nonachlor	102		P	80 - 120
Cypermethrin	94.3		P	80 - 120
Dacthal	95.8		P	80 - 120
DDD-p,p'	98.8		P	80 - 120
DDE-p,p'	88.3		P	80 - 120
DDT-p,p'	98.2		P	80 - 120
Delta-BHC	98.9		P	80 - 120
Deltamethrin	87.3		P	80 - 120
Dichlobenil	104		P	80 - 120
Dicofol	110		P	80 - 120
Dieldrin	90.7		P	80 - 120
Endosulfan I	95.0		P	80 - 120
Endosulfan II	88.0		P	80 - 120
Endosulfan Sulfate	89.9		P	80 - 120
Endrin	95.0		P	80 - 120
Endrin Aldehyde	100		P	80 - 120
Endrin Ketone	95.8		P	80 - 120
Esfenvalerate	86.9		P	80 - 120
Ethalfuralin	97.4		P	80 - 120
Fenpropathrin	110		P	80 - 120
Gamma-Chlordane	109		P	80 - 120
Heptachlor	89.7		P	80 - 120
Heptachlor Epoxide	99.6		P	80 - 120
Hexachlorobenzene	120		P	80 - 120
Kepone	81.3		P	80 - 120
Lambda-Cyhalothrin	97.4		P	80 - 120
Methoprene	89.4		P	80 - 120
Methoxychlor	99.5		P	80 - 120
MGK-264	95.6		P	80 - 120
Mirex	100		P	80 - 120
Oxychlordane	96.1		P	80 - 120
Permethrin	92.6		P	80 - 120
Phenothrin	99.2		P	80 - 120
Prallethrin	91.4		P	80 - 120
Tau-Fluvalinate	90.6		P	80 - 120
Tetramethrin	90.3		P	80 - 120
Trans-Nonachlor	97.3		P	80 - 120
Triclosan Methyl	96.9		P	80 - 120
Trifluralin	100		P	80 - 120

Reference Method: EPA 8270E
Run ID: A116020
Included Lab Sample IDs: 2368784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Gamma-BHC	97.9		P	80 - 120
Piperonyl Butoxide	103		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A116057

Included Lab Sample IDs: 2368773, 2368774

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

Reference Method: EPA 8276

Run ID: A116058

Included Lab Sample IDs: 2368784

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A116064

Included Lab Sample IDs: 2368775, 2368776

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A116075

Included Lab Sample IDs: 2368775

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.3	93.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A116114

Included Lab Sample IDs: 2368776

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

Reference Method: SM 5310 B-2011

Run ID: A116128

Included Lab Sample IDs: 2368775, 2368776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	100	P/P	90 - 110
Organic Carbon	98.4	100	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A116145

Included Lab Sample IDs: 2368773, 2368774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.5	95.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A116194

Included Lab Sample IDs: 2368776

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

Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A116194

Included Lab Sample IDs: 2368776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.7	98.5	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		LCS	Precision	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	99.1				1.36	
EPA 180.1 Rev. 2.0	Turbidity	99.5				7.71	
EPA 300.0 Rev. 2.1	Chloride	101	99.2	102		0.591	
	Sulfate	101	99.9	103		0.588	
EPA 350.1 Rev. 2.0	Ammonia-N	99.2	96.6	95.6			0.964
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.5	92.9	98.8			5.78
	Kjeldahl Nitrogen	100	90.2	90.7			0.528
EPA 353.2 Rev. 2.0	NO2NO3-N	106	99.0	100			0.672
	NO2NO3-N	104	100	99.8			0.157
EPA 365.1 Rev. 2.0	Total-P	101	98.8	99.6			0.795
	Total-P	105	104	105			0.453
EPA 8270E	Aldrin	48.3	65.0	64.5			0.775
	Alpha-BHC	76.5	106	96.1			9.69
	Alpha-Chlordane	72.6	114	95.2			17.8
	Beta-BHC	85.7	88.4	99.7			12.0
	Beta-Cyfluthrin	63.1	78.1	79.3			1.46
	Bifenthrin	42.8	51.7	51.0			1.24
	Chlorothalonil	97.0	141	137			3.48
	Cis-Nonachlor	68.3	112	96.0			15.9
	Cypermethrin	58.5	78.0	71.0			9.39
	Dacthal	84.3	102	96.7			5.19
	DDD-p,p'	72.5	87.0	76.3			13.1
	DDE-p,p'	66.0	94.9	85.9			9.89
	DDT-p,p'	60.4	78.1	67.2			15.0
	Delta-BHC	84.6	135	129			4.79
	Deltamethrin	56.7	74.0	66.1			11.2
	Dichlobenil	62.0	57.5	65.3			12.8
	Dicofol	78.8	73.2	64.6			12.5
	Dieldrin	71.9	104	98.4			5.16
	Endosulfan I	73.2	103	93.9			9.38
	Endosulfan II	73.2	132	122			7.50
	Endosulfan Sulfate	80.4	108	121			11.5
	Endrin	74.1	116	93.2			22.0
	Endrin Aldehyde	81.8	75.2	70.7			6.06
	Endrin Ketone	85.9	98.6	103			3.93
	Esfenvalerate	55.5	81.6	78.3			4.12
	Ethalfuralin	61.7	81.2	68.5			17.0
	Fenpropathrin	66.5	83.4	84.0			0.734
	Gamma-BHC	73.3	81.9	84.0			2.59
	Gamma-Chlordane	77.2	106	86.6			20.1
	Heptachlor	61.3	85.0	73.7			14.2
	Heptachlor Epoxide	76.0	115	103			11.1
	Hexachlorobenzene	66.9	93.7	83.6			11.4
	Kepone	90.4	95.4	125			27.2
	Lambda-Cyhalothrin	53.2	67.6	70.9			4.79
	Methoprene	50.0	63.4	57.4			9.98
	Methoxychlor	69.9	75.1	61.0			20.7
	MGK-264	82.2	100	95.6			4.97
	Mirex	49.3	77.2	66.0			15.5
	Oxychlordane	60.5	90.3	85.5			5.51
	PCB-1016	79.7	74.4	71.0			4.68
	PCB-1260	81.6	68.9	66.2			3.94
	Permethrin	62.6	78.4	72.0			8.63
	Phenothrin	49.7	55.6	55.0			1.08

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Piperonyl Butoxide	113	89.5	88.1			1.57
	Prallethrin	78.4	83.6	86.9			3.89
	Tau-Fluvalinate	48.8	65.3	63.4			2.96
	Tetramethrin	83.4	72.6	77.7			6.82
	Trans-Nonachlor	69.5	108	90.8			17.7
	Triclosan Methyl	81.1	102	92.9			9.01
	Trifluralin	65.7	92.5	74.0			22.3
EPA 8276	Chlordane	83.0	72.8	78.0			6.98
	Toxaphene	88.9	75.5	80.9			6.90
EPA 8321B	2,4-D	107	115	114			1.33
	2,4,5-T	85.1	82.9	82.1			0.966
	Acesulfame K	138	78.7	67.9			14.7
	Acetaminophen	91.7	115	94.5			20.0
	Acetamiprid	95.7	90.3	92.7			2.67
	Afidopyropen	74.1	69.5	75.7			8.56
	AMPA	94.7	75.8	80.1			4.66
	Bentazon	97.1	83.6	81.4			2.02
	Benzovindiflupyr	80.3	80.4	83.6			3.85
	Carbamazepine	83.0	84.4	82.4			2.36
	Clothianidin	96.2	106	101			4.44
	Dinotefuran	101	128	110			13.5
	Diuron	79.8	72.6	73.4			1.12
	Endothall	113	203	207			1.64
	Fenuron	102	99.5	96.8			2.77
	Fluridone	108	103	100			2.43
	Glufosinate	76.5	84.2	84.3			0.132
	Glyphosate	82.4	103	99.3			3.62
	Hydrocodone	111	121	111			8.20
	Ibuprofen	69.7	75.3	84.0			10.9
	Imazapyr	119	122	103			15.3
	Imidacloprid	104	155	145			6.73
	Linuron	88.4	86.7	75.5			13.8
	Mandestrobin	93.3	90.8	91.1			0.277
	MCPP	95.3	92.8	89.0			4.15
	Naproxen	80.3	76.9	81.0			5.11
	Primidone	105	97.8	93.8			4.18
	Pyraclostrobin	82.9	88.5	85.6			3.41
	Silvex	79.7	84.5	80.6			4.72
	Sucralose	101	109	104			4.51
	Thiamethoxam	101	128	124			3.23
	Tolfenpyrad	52.3	58.2	55.9			4.05
	Triclopyr	86.1	84.7	80.3			5.26
SM 2320 B-2011	Total Alkalinity	95.5				0.733	
SM 2540 C-2015	TDS	97.7				5.91	
SM 2540 D-2015	TSS	93.1				10.9	
SM 4500-F- C-2011	Fluoride	99.9	102	100			0.972
SM 5310 B-2011	Organic Carbon	95.6	97.6	95.9			1.25

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2368773, 2368774
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2368773, 2368774

Reference Method Descriptions

Method	Description	Associated Samples
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2368773, 2368774
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2368773, 2368774
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2368775, 2368776
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2368775, 2368776
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2368775, 2368776
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2368775, 2368776
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2368784
EPA 8270E	PCBs in water matrices by GC/MS/MS	2368784
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2368784
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2368796
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2368773, 2368774
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2368773, 2368774
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2368773, 2368774
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2368773, 2368774
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2368775, 2368776

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	11/09/2022			11/09/2022 14:50	Samantha L Bates	2368773
	11/09/2022			11/09/2022 14:51	Samantha L Bates	2368774
EPA 180.1 Rev. 2.0	11/09/2022			11/09/2022 13:35	Chandler E Cox	2368773
	11/09/2022			11/09/2022 13:36	Chandler E Cox	2368774
EPA 300.0 Rev. 2.1	11/09/2022			11/19/2022 10:58	Anna M. Plaviak	2368773
	11/09/2022			11/19/2022 11:13	Anna M. Plaviak	2368774
EPA 350.1 Rev. 2.0	11/09/2022			11/21/2022 12:42	Ping Hua	2368775
	11/09/2022			11/21/2022 12:46	Ping Hua	2368776
EPA 351.2 Rev. 2.0	11/09/2022	11/16/2022 13:10	Alexandra J Mattheus	11/21/2022 14:31	Judith K. Clark	2368775
	11/09/2022	11/29/2022 13:30	Simonne.V. Calhoun	11/30/2022 11:34	Judith K. Clark	2368776
EPA 353.2 Rev. 2.0	11/09/2022			11/10/2022 12:41	Beverly Y. Sanders	2368775
	11/09/2022			11/16/2022 12:23	Beverly Y. Sanders	2368776
EPA 365.1 Rev. 2.0	11/09/2022	11/16/2022 13:00	Simonne.V. Calhoun	11/17/2022 14:30	James L Waggeberby	2368775
	11/09/2022	11/22/2022 12:22	Adam P Silver	11/22/2022 17:44	James L Waggeberby	2368776
EPA 8270E	11/09/2022	11/14/2022 08:00	Fe-Val Siddell	11/16/2022 01:17	Vandana T. Nagar	2368784
	11/09/2022	11/14/2022 08:00	Fe-Val Siddell	11/16/2022 23:12	Julie Wi	2368784
	11/09/2022	11/14/2022 08:00	Fe-Val Siddell	11/17/2022 22:12	Julie Wi	2368784
EPA 8276	11/09/2022	11/14/2022 08:00	Fe-Val Siddell	11/17/2022 03:12	Lipi Saha	2368784
EPA 8321B	11/09/2022	11/10/2022 10:20	Manjita Shrestha	11/10/2022 11:36	Manjita Shrestha	2368796
	11/09/2022	11/10/2022 10:20	Manjita Shrestha	11/10/2022 17:06	Manjita Shrestha	2368796
	11/09/2022	11/15/2022 09:30	June Rhew	11/15/2022 19:17	Juyoung Kim	2368796
SM 2320 B-2011	11/09/2022			11/21/2022 20:58	Dale L. Simmons	2368773
	11/09/2022			11/21/2022 21:10	Dale L. Simmons	2368774
SM 2540 C-2015	11/09/2022			11/14/2022 15:59	Yijie Li	2368773, 2368774
SM 2540 D-2015	11/09/2022			11/14/2022 15:59	Yijie Li	2368773, 2368774
SM 4500-F- C-2011	11/09/2022			11/19/2022 11:40	Dale L. Simmons	2368773
	11/09/2022			11/19/2022 11:53	Dale L. Simmons	2368774
SM 5310 B-2011	11/09/2022			11/21/2022 22:37	Khloe J Berg	2368775
	11/09/2022			11/21/2022 23:23	Khloe J Berg	2368776