

Chemical Analysis Report

NW-DIST-2022-11-10-01

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

Event Description: **Pensacola Run**
Request ID: **RQ-2022-11-07-26**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
Attn: Myranda Butler

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 05-DEC-2022 09:21



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Jones Creek upstream of Old Corey Field Rd Collection Date/Time: 11/09/2022 09:50

Field ID: G4NW0114

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2369122	EPA 8270E	Aldrin	0.76	U	ng/L	P422430	
		Alpha-BHC	0.12	U	ng/L	P422430	
		Alpha-Chlordane	0.23	U	ng/L	P422430	
		PCB-1016	2.3	U	ng/L	P422430	
		Beta-BHC	0.12	U	ng/L	P422430	
		PCB-1221	2.3	U	ng/L	P422430	
		Beta-Cyfluthrin	1.5	U	ng/L	P422430	
		PCB-1232	2.3	U	ng/L	P422430	
		Bifenthrin	0.58	U	ng/L	P422430	
		PCB-1242	2.3	U	ng/L	P422430	
		Carbophenothion	1.1	U	ng/L	P422430	
		PCB-1248	2.3	U	ng/L	P422430	
		Chlorothalonil	1.5	U	ng/L	P422430	
		PCB-1254	2.3	U	ng/L	P422430	
		Cis-Nonachlor	0.23	U	ng/L	P422430	
		PCB-1260	2.3	U	ng/L	P422430	
		Cypermethrin	1.8	U	ng/L	P422430	
		Dacthal	0.18	U	ng/L	P422430	
		DDD-p,p'	0.29	U	ng/L	P422430	
		DDE-p,p'	0.23	U	ng/L	P422430	
		DDT-p,p'	0.29	U	ng/L	P422430	
		Delta-BHC	0.47	U	ng/L	P422430	
		Deltamethrin	1.5	U	ng/L	P422430	
		Dichlobenil	0.29	U	ng/L	P422430	
		Dicofol	1.5	U	ng/L	P422430	
		Dieldrin	0.83	I	ng/L	P422430	
		Endosulfan I	0.47	U	ng/L	P422430	
		Endosulfan II	0.47	U	ng/L	P422430	
		Endosulfan Sulfate	0.35	U	ng/L	P422430	
		Endrin	0.47	U	ng/L	P422430	
		Endrin Aldehyde	0.88	U	ng/L	P422430	
		Endrin Ketone	0.47	U	ng/L	P422430	
		Esfenvalerate	0.88	U	ng/L	P422430	
		Ethalfuralin	0.18	U	ng/L	P422430	
		Fenpropathrin	0.29	U	ng/L	P422430	
		Gamma-BHC	0.15	U	ng/L	P422430	
		Gamma-Chlordane	0.23	U	ng/L	P422430	
		Heptachlor	0.23	U	ng/L	P422430	
		Heptachlor Epoxide	0.65	I	ng/L	P422430	
		Hexachlorobenzene**	1.2	U	ng/L	P422430	
		Kepone	5.8	U	ng/L	P422430	
		Lambda-Cyhalothrin	0.88	U	ng/L	P422430	
		Methoprene	0.88	U	ng/L	P422430	
		Methoxychlor	0.35	U	ng/L	P422430	

Field ID: G4NW0114

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2369122	EPA 8270E	MGK-264	0.23	U	ng/L	P422430	
		Mirex	0.41	U	ng/L	P422430	
		Oxychlordane	0.35	U	ng/L	P422430	
		Permethrin	1.9	U	ng/L	P422430	
		Phenothrin	1.1	U	ng/L	P422430	
		Piperonyl Butoxide	0.18	U	ng/L	P422430	
		Prallethrin	2.3	U	ng/L	P422430	
		Tau-Fluvalinate	0.29	U	ng/L	P422430	
		Tetramethrin	0.88	U	ng/L	P422430	
		Trans-Nonachlor	0.23	U	ng/L	P422430	
		Triclosan Methyl	0.18	U	ng/L	P422430	
		Trifluralin	0.23	U	ng/L	P422430	
	EPA 8276	Chlordane	2.3	U	ng/L	P422430	
		Toxaphene	18	U	ng/L	P422430	

Sample Location: Jackson Creek upstream of Prieto Drive

Collection Date/Time: 11/09/2022 10:20

Field ID: G4NW0505

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2369123	EPA 8270E	Aldrin	0.76	U	ng/L	P422430	
		Alpha-BHC	0.12	U	ng/L	P422430	
		Alpha-Chlordane	2.2		ng/L	P422430	
		PCB-1016	2.3	U	ng/L	P422430	
		Beta-BHC	0.12	U	ng/L	P422430	
		PCB-1221	2.3	U	ng/L	P422430	
		Beta-Cyfluthrin	1.5	U	ng/L	P422430	
		PCB-1232	2.3	U	ng/L	P422430	
		Bifenthrin	0.59	U	ng/L	P422430	
		PCB-1242	2.3	U	ng/L	P422430	
		Carbophenothion	1.1	U	ng/L	P422430	
		PCB-1248	2.3	U	ng/L	P422430	
		Chlorothalonil	1.5	U	ng/L	P422430	
		PCB-1254	2.3	U	ng/L	P422430	
		Cis-Nonachlor	0.23	U	ng/L	P422430	
		PCB-1260	2.3	U	ng/L	P422430	
		Cypermethrin	1.8	U	ng/L	P422430	
		Dacthal	0.18	U	ng/L	P422430	
		DDD-p,p'	0.29	U	ng/L	P422430	
		DDE-p,p'	0.23	U	ng/L	P422430	
		DDT-p,p'	0.29	U	ng/L	P422430	
		Delta-BHC	0.47	U	ng/L	P422430	
		Deltamethrin	1.5	U	ng/L	P422430	
		Dichlobenil	0.29	U	ng/L	P422430	
		Dicofol	1.5	U	ng/L	P422430	
		Dieldrin	15		ng/L	P422430	
		Endosulfan I	0.47	U	ng/L	P422430	
		Endosulfan II	0.47	U	ng/L	P422430	
		Endosulfan Sulfate	0.35	U	ng/L	P422430	
		Endrin	0.47	U	ng/L	P422430	
		Endrin Aldehyde	0.88	U	ng/L	P422430	
		Endrin Ketone	0.47	U	ng/L	P422430	
		Esfenvalerate	0.88	U	ng/L	P422430	
		Ethalfuralin	0.18	U	ng/L	P422430	
		Fenpropathrin	0.29	U	ng/L	P422430	
		Gamma-BHC	0.15	U	ng/L	P422430	
		Gamma-Chlordane	1.6		ng/L	P422430	
		Heptachlor	0.23	U	ng/L	P422430	
		Heptachlor Epoxide	13		ng/L	P422430	
		Hexachlorobenzene**	1.2	U	ng/L	P422430	
		Kepone	5.9	U	ng/L	P422430	
		Lambda-Cyhalothrin	0.88	U	ng/L	P422430	
		Methoprene	0.88	U	ng/L	P422430	
		Methoxychlor	0.35	U	ng/L	P422430	

Field ID: G4NW0505

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2369123	EPA 8270E	MGK-264	0.23	U	ng/L	P422430	
		Mirex	0.41	U	ng/L	P422430	
		Oxychlordane	0.35	U	ng/L	P422430	
		Permethrin	1.9	U	ng/L	P422430	
		Phenothrin	1.1	U	ng/L	P422430	
		Piperonyl Butoxide	2.1		ng/L	P422430	
		Prallethrin	2.3	U	ng/L	P422430	
		Tau-Fluvalinate	0.29	U	ng/L	P422430	
		Tetramethrin	0.88	U	ng/L	P422430	
		Trans-Nonachlor	0.42	I	ng/L	P422430	
		Triclosan Methyl	0.18	U	ng/L	P422430	
		Trifluralin	0.23	U	ng/L	P422430	
	EPA 8276	Chlordane	14		ng/L	P422430	
		Toxaphene	18	U	ng/L	P422430	

Sample Location: Jackson Creek downstream of Old Corry Rd. Collection Date/Time: 11/09/2022 10:10

Field ID: G4NW0412

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2369124	EPA 8270E	Aldrin	0.70	U	ng/L	P422430	
		Alpha-BHC	0.11	U	ng/L	P422430	
		Alpha-Chlordane	2.9		ng/L	P422430	
		PCB-1016	2.2	U	ng/L	P422430	
		Beta-BHC	0.11	U	ng/L	P422430	
		PCB-1221	2.2	U	ng/L	P422430	
		Beta-Cyfluthrin	1.4	U	ng/L	P422430	
		PCB-1232	2.2	U	ng/L	P422430	
		Bifenthrin	0.54	U	ng/L	P422430	
		PCB-1242	2.2	U	ng/L	P422430	
		Carbophenothion	0.97	U	ng/L	P422430	
		PCB-1248	2.2	U	ng/L	P422430	
		Chlorothalonil	1.4	U	ng/L	P422430	
		PCB-1254	2.2	U	ng/L	P422430	
		Cis-Nonachlor	0.22	U	ng/L	P422430	
		PCB-1260	2.2	U	ng/L	P422430	
		Cypermethrin	1.6	U	ng/L	P422430	
		Dacthal	0.16	U	ng/L	P422430	
		DDD-p,p'	0.27	U	ng/L	P422430	
		DDE-p,p'	0.22	U	ng/L	P422430	
		DDT-p,p'	0.27	U	ng/L	P422430	
		Delta-BHC	0.43	U	ng/L	P422430	
		Deltamethrin	1.4	U	ng/L	P422430	
		Dichlobenil	0.27	U	ng/L	P422430	
		Dicofol	1.4	U	ng/L	P422430	
		Dieldrin	27		ng/L	P422430	
		Endosulfan I	0.43	U	ng/L	P422430	
		Endosulfan II	0.43	U	ng/L	P422430	
		Endosulfan Sulfate	0.32	U	ng/L	P422430	
		Endrin	0.43	U	ng/L	P422430	
		Endrin Aldehyde	0.81	U	ng/L	P422430	
		Endrin Ketone	0.43	U	ng/L	P422430	
		Esfenvalerate	0.81	U	ng/L	P422430	
		Ethalfuralin	0.16	U	ng/L	P422430	
		Fenpropathrin	0.27	U	ng/L	P422430	
		Gamma-BHC	0.14	U	ng/L	P422430	
		Gamma-Chlordane	1.4		ng/L	P422430	
		Heptachlor	0.22	U	ng/L	P422430	
		Heptachlor Epoxide	13		ng/L	P422430	
		Hexachlorobenzene**	1.1	U	ng/L	P422430	
		Kepone	5.4	U	ng/L	P422430	
		Lambda-Cyhalothrin	0.81	U	ng/L	P422430	
		Methoprene	0.81	U	ng/L	P422430	
		Methoxychlor	0.32	U	ng/L	P422430	

Field ID: G4NW0412

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2369124	EPA 8270E	MGK-264	0.22	U	ng/L	P422430	
		Mirex	0.38	U	ng/L	P422430	
		Oxychlordane	0.32	U	ng/L	P422430	
		Permethrin	1.7	U	ng/L	P422430	
		Phenothrin	0.97	U	ng/L	P422430	
		Piperonyl Butoxide	1.2		ng/L	P422430	
		Prallethrin	2.2	U	ng/L	P422430	
		Tau-Fluvalinate	0.27	U	ng/L	P422430	
		Tetramethrin	0.81	U	ng/L	P422430	
		Trans-Nonachlor	0.55	I	ng/L	P422430	
		Triclosan Methyl	0.16	U	ng/L	P422430	
		Trifluralin	0.22	U	ng/L	P422430	
	EPA 8276	Chlordane	15		ng/L	P422430	
		Toxaphene	16	U	ng/L	P422430	

Sample Location: Marcus Creek upstream of Marcus Pointe Blvd Collection Date/Time: 11/09/2022 10:57

Field ID: G4NW0179

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2369118	DEP SOP: NU-094-1	Color (true)	36	A	PCU	P422216	
	EPA 180.1 Rev. 2.0	Turbidity	5.4	A	NTU	P422214	
	EPA 300.0 Rev. 2.1	Chloride	9.6	A	mg Cl/L	P422829	
		Sulfate	1.8	A	mg SO4/L	P422833	
	SM 2320 B-2011	Total Alkalinity	60		mg CaCO3/L	P422794	
	SM 2540 C-2015	TDS	85		mg/L	P422674	
	SM 2540 D-2015	TSS	3	I	mg/L	P422562	RPD
2369119	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P422643	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P422914	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27		mg N/L	P422450	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.22		mg N/L	P422484	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P422386	
2369125	SM 5310 B-2011	Organic Carbon	3.9		mg C/L	P422755	
	EPA 200.7 Rev. 4.4	Calcium	15.7		mg/L	P422403	
		Iron	1.14E+03		ug/L	P422403	
		Magnesium	3.29		mg/L	P422403	
		Potassium	4.8		mg/L	P422403	
		Sodium	6.5		mg/L	P422403	
		Strontium	68.6		ug/L	P422403	
		Tin	3.0	U	ug/L	P422403	
		Titanium	0.75	U	ug/L	P422403	
		Vanadium	2.0	U	ug/L	P422403	
		Zinc	5.0	U	ug/L	P422403	
	EPA 200.8 Rev. 5.4	Aluminum	19	I	ug/L	P422403	
		Antimony	0.050	U	ug/L	P422403	
		Arsenic	0.43		ug/L	P422403	
		Barium	28.3		ug/L	P422403	
		Beryllium	0.010	I	ug/L	P422403	
		Boron	109		ug/L	P422403	
		Cadmium	0.020	U	ug/L	P422403	
		Chromium	0.40	U	ug/L	P422403	
		Cobalt	0.217		ug/L	P422729	
		Copper	0.40	U	ug/L	P422403	
		Lead	0.20	U	ug/L	P422403	
		Manganese	197		ug/L	P422403	
		Molybdenum	0.15	U	ug/L	P422403	
		Nickel	0.50	U	ug/L	P422403	
		Selenium	0.20	U	ug/L	P422403	
		Silver	0.010	U	ug/L	P422403	
		Thallium	0.10	U	ug/L	P422403	
	SM 2340 B-2011	Hardness	52.8		mg/L	P422403	

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P422216

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P422214

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P422403

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P422403

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P422729

Component	Result	Code	Units
Cobalt	0.020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422829

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422833

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422914

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422450

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422484

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422386

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

Reference Method: EPA 8270E
Batch ID: P422430

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Carbophenothion	0.90	U	ng/L
Carbophenothion	0.90	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P422430

Component	Result	Code	Units
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P422430

Component	Result	Code	Units
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P422430

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8276
Batch ID: P422430

Component	Result	Code	Units
Toxaphene	15	U	ng/L

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

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /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: P422755

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: P422216

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P422214

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P422403

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	99.4		P	85 - 115
Iron	101		P	85 - 115
Magnesium	99.4		P	85 - 115
Potassium	98.2		P	85 - 115
Sodium	101		P	85 - 115
Strontium	102		P	85 - 115
Tin	100		P	85 - 115
Titanium	103		P	85 - 115
Vanadium	100		P	85 - 115
Zinc	99.0		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P422403

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	103		P	85 - 115
Arsenic	101		P	85 - 115
Barium	104		P	85 - 115
Beryllium	95.8		P	85 - 115
Boron	105		P	85 - 115
Cadmium	100		P	85 - 115
Chromium	101		P	85 - 115
Copper	96.3		P	85 - 115
Lead	94.5		P	85 - 115
Molybdenum	98.2		P	85 - 115
Nickel	97.8		P	85 - 115
Selenium	100		P	85 - 115
Silver	99.1		P	85 - 115
Thallium	97.6		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P422729

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cobalt	101		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422829

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422833

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422914

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422450

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422484

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422386

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

Reference Method: EPA 8270E
Batch ID: P422430

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	62.1		P	10 - 92.0
Alpha-BHC	101		P	75 - 107
Alpha-Chlordane	91.6		P	50 - 108
Beta-BHC	120		P	36 - 138
Beta-Cyfluthrin	74.4		P	20 - 161
Bifenthrin	50.9		P	10 - 119
Carbophenothion	75.7		P	19 - 94.0
Chlorothalonil	114		P	26 - 186
Cis-Nonachlor	72.7		P	42 - 119
Cypermethrin	75.9		P	22 - 150
Dacthal	93.4		P	72 - 119
DDD-p,p'	88.3		P	45 - 107
DDE-p,p'	83.4		P	48 - 106
DDT-p,p'	76.5		P	48 - 110
Delta-BHC	117		P	54 - 140
Deltamethrin	74.8		P	22 - 189

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P422430

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dichlobenil	97.8		P	36 - 117
Dicofol	87.8		P	46 - 155
Dieldrin	85.5		P	54 - 110
Endosulfan I	82.2		P	59 - 105
Endosulfan II	94.1		P	51 - 118
Endosulfan Sulfate	103		P	57 - 121
Endrin	80.7		P	10 - 120
Endrin Aldehyde	81.6		P	34 - 118
Endrin Ketone	101		P	69 - 177
Esfenvalerate	72.2		P	23 - 168
Ethalfuralin	76.3		P	49 - 99.0
Fenpropathrin	81.4		P	34 - 117
Gamma-BHC	94.8		P	72 - 117
Gamma-Chlordane	88.5		P	43 - 106
Heptachlor	70.6		P	41 - 98.0
Heptachlor Epoxide	89.2		P	57 - 106
Hexachlorobenzene	73.9		P	36 - 99.0
Kepone	120		P	16 - 215
Lambda-Cyhalothrin	65.8		P	21 - 177
Methoprene	73.2		P	10 - 119
Methoxychlor	81.4		P	60 - 112
MGK-264	104		P	26 - 122
Mirex	60.8		P	10 - 169
Oxychlordane	80.0		P	43 - 105
PCB-1016	70.5		P	48 - 112
PCB-1260	68.2		P	44 - 118
Permethrin	72.8		P	24 - 148
Phenothrin	59.3		P	10 - 106
Piperonyl Butoxide	78.1		P	10 - 139
Prallethrin	101		P	17 - 109
Tau-Fluvalinate	58.3		P	13 - 131
Tetramethrin	105		P	10 - 132
Trans-Nonachlor	72.9		P	44 - 106
Triclosan Methyl	80.9		P	59 - 109
Trifluralin	78.2		P	44 - 101

Reference Method: EPA 8276

Batch ID: P422430

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	78.6		P	53 - 126
Toxaphene	87.0		P	56 - 211

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

Quality Assurance Report

Laboratory Control Sample Accuracy

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: P422755

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P422403

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369125	Calcium	97.1		P	80 - 120
2369125	Iron	98.0	97.9	P/P	80 - 120
2369125	Magnesium	95.0	94.4	P/P	80 - 120
2369125	Potassium	95.7		P	80 - 120
2369125	Sodium	98.8		P	80 - 120
2369125	Strontium	102	100	P/P	80 - 120
2369125	Tin	103	101	P/P	80 - 120
2369125	Titanium	104	103	P/P	80 - 120
2369125	Vanadium	101	99.5	P/P	80 - 120
2369125	Zinc	99.0	97.8	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P422403

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369125	Aluminum	101	102	P/P	80 - 120
2369125	Antimony	105	107	P/P	80 - 120
2369125	Arsenic	104	104	P/P	80 - 120
2369125	Barium	106	106	P/P	80 - 120
2369125	Beryllium	95.3	94.5	P/P	80 - 120
2369125	Boron	109	113	P/P	80 - 120
2369125	Cadmium	103	102	P/P	80 - 120
2369125	Chromium	104	105	P/P	80 - 120
2369125	Copper	99.6	101	P/P	80 - 120
2369125	Lead	97.4	98.6	P/P	80 - 120
2369125	Molybdenum	102	103	P/P	80 - 120
2369125	Nickel	101	102	P/P	80 - 120
2369125	Selenium	101	102	P/P	80 - 120
2369125	Silver	101	103	P/P	80 - 120
2369125	Thallium	101	104	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P422729

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2370267	Cobalt	98.1		P	80 - 120
2370498	Cobalt	99.4	102	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P422829

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369118	Chloride	97.0		P	90 - 110
2369236	Chloride	98.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P422833

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369118	Sulfate	94.4		P	90 - 110
2369236	Sulfate	95.8		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422914

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368967	Ammonia-N	95.2	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422450

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369086	Kjeldahl Nitrogen	100	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368988	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422386

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368983	Total-P	101	101	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P422430

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369122	Aldrin	69.3	69.1	P/P	20 - 82.0
2369122	Alpha-BHC	95.2	94.4	P/P	71 - 109
2369122	Alpha-Chlordane	86.5	94.0	P/P	42 - 106
2369122	Beta-BHC	115	112	P/P	69 - 180
2369122	Beta-Cyfluthrin	92.7	98.1	P/P	18 - 175
2369122	Bifenthrin	83.3	84.0	P/P	21 - 128
2369122	Carbophenothion	77.8	82.2	P/P	10 - 126
2369122	Chlorothalonil	146	147	P/P	10 - 300
2369122	Cis-Nonachlor	74.5	80.4	P/P	34 - 106
2369122	Cypermethrin	92.9	100	P/P	22 - 158
2369122	Dacthal	87.3	89.6	P/P	54 - 116
2369122	DDD-p,p'	82.5	88.6	P/P	34 - 107
2369122	DDE-p,p'	78.5	81.6	P/P	33 - 110
2369122	DDT-p,p'	80.0	80.7	P/P	50 - 122
2369122	Delta-BHC	135	133	P/P	77 - 193
2369122	Deltamethrin	95.3	106	P/P	10 - 195
2369122	Dichlobenil	70.5	67.9	P/P	25 - 113
2369122	Dicofol	89.8	84.4	P/P	38 - 247
2369122	Dieldrin	78.3	80.7	P/P	45 - 118
2369122	Endosulfan I	76.6	84.9	P/P	51 - 106
2369122	Endosulfan II	85.0	88.9	P/P	37 - 122
2369122	Endosulfan Sulfate	87.5	93.0	P/P	43 - 132
2369122	Endrin	84.1	85.8	P/P	29 - 101
2369122	Endrin Aldehyde	58.3	62.2	P/P	19 - 110
2369122	Endrin Ketone	83.2	81.3	P/P	60 - 140
2369122	Esfenvalerate	93.3	97.2	P/P	26 - 199
2369122	Ethalfuralin	78.5	69.5	P/P	45 - 99.0
2369122	Fenpropathrin	83.9	81.4	P/P	35 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P422430

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369122	Gamma-BHC	88.6	93.1	P/P	63 - 128
2369122	Gamma-Chlordane	89.8	102	P/P	40 - 104
2369122	Heptachlor	75.9	77.3	P/P	36 - 97.0
2369122	Heptachlor Epoxide	79.8	90.1	P/P	49 - 184
2369122	Hexachlorobenzene	81.1	80.5	P/P	39 - 96.0
2369122	Kepone	85.5	96.7	P/P	10 - 217
2369122	Lambda-Cyhalothrin	88.4	93.9	P/P	21 - 193
2369122	Methoprene	86.4	87.9	P/P	20 - 106
2369122	Methoxychlor	78.7	74.8	P/P	53 - 118
2369122	MGK-264	101	100	P/P	40 - 118
2369122	Mirex	74.4	77.9	P/P	26 - 92.0
2369122	Oxychlordane	80.6	85.6	P/P	44 - 99.0
2369122	Permethrin	86.2	92.1	P/P	33 - 182
2369122	Phenothrin	77.3	92.4	P/P	10 - 129
2369122	Piperonyl Butoxide	91.8	89.7	P/P	10 - 211
2369122	Prallethrin	94.0	95.5	P/P	24 - 113
2369122	Tau-Fluvalinate	89.1	92.5	P/P	14 - 149
2369122	Tetramethrin	137	137	P/P	17 - 151
2369122	Trans-Nonachlor	70.9	84.3	P/P	42 - 102
2369122	Triclosan Methyl	73.1	84.2	P/P	48 - 108
2369122	Trifluralin	81.7	77.9	P/P	47 - 96.0
2369177	PCB-1016	72.8	74.8	P/P	46 - 111
2369177	PCB-1260	64.7	67.2	P/P	45 - 114

Reference Method: EPA 8276

Batch ID: P422430

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2369177	Chlordane	72.4	69.4	P/P	53 - 126
2369177	Toxaphene	80.4	70.9	P/P	56 - 211

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

Reference Method: SM 5310 B-2011

Batch ID: P422755

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368941	Organic Carbon	96.4	96.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P422216

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369118	Color (true)	9.27	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P422214

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369118	Turbidity	6.32	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P422403

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369125	Calcium	2.30	Spike	P	0 - 20
2369125	Iron	0.118	Spike	P	0 - 20
2369125	Magnesium	0.355	Spike	P	0 - 20
2369125	Potassium	1.41	Spike	P	0 - 20
2369125	Sodium	1.69	Spike	P	0 - 20
2369125	Strontium	1.66	Spike	P	0 - 20
2369125	Tin	2.04	Spike	P	0 - 20
2369125	Titanium	1.73	Spike	P	0 - 20
2369125	Vanadium	1.83	Spike	P	0 - 20
2369125	Zinc	1.26	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P422403

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369125	Aluminum	0.369	Spike	P	0 - 20
2369125	Antimony	1.37	Spike	P	0 - 20
2369125	Arsenic	0.167	Spike	P	0 - 20
2369125	Barium	0.112	Spike	P	0 - 20
2369125	Beryllium	0.826	Spike	P	0 - 20
2369125	Boron	1.83	Spike	P	0 - 20
2369125	Cadmium	0.153	Spike	P	0 - 20
2369125	Chromium	1.26	Spike	P	0 - 20
2369125	Copper	1.72	Spike	P	0 - 20
2369125	Lead	1.23	Spike	P	0 - 20
2369125	Molybdenum	1.29	Spike	P	0 - 20
2369125	Nickel	0.928	Spike	P	0 - 20
2369125	Selenium	1.20	Spike	P	0 - 20
2369125	Silver	2.02	Spike	P	0 - 20
2369125	Thallium	3.71	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P422729

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P422729

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2370498	Cobalt	2.75	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422829

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369118	Chloride	0.152	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422833

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369118	Sulfate	0.0331	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422914

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368967	Ammonia-N	3.93	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422450

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369086	Kjeldahl Nitrogen	1.50	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368988	NO2NO3-N	0.962	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422386

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368983	Total-P	0.536	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P422430

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369122	Aldrin	0.260	Spike	P	0 - 41
2369122	Alpha-BHC	0.874	Spike	P	0 - 25

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P422430

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369122	Alpha-Chlordane	8.34	Spike	P	0 - 33
2369122	Beta-BHC	2.90	Spike	P	0 - 36
2369122	Beta-Cyfluthrin	5.72	Spike	P	0 - 42
2369122	Bifenthrin	0.874	Spike	P	0 - 53
2369122	Carbophenothion	5.46	Spike	P	0 - 30
2369122	Chlorothalonil	0.569	Spike	P	0 - 71
2369122	Cis-Nonachlor	7.61	Spike	P	0 - 29
2369122	Cypermethrin	7.40	Spike	P	0 - 40
2369122	Dacthal	2.55	Spike	P	0 - 26
2369122	DDD-p,p'	7.07	Spike	P	0 - 39
2369122	DDE-p,p'	3.88	Spike	P	0 - 33
2369122	DDT-p,p'	0.904	Spike	P	0 - 40
2369122	Delta-BHC	1.10	Spike	P	0 - 37
2369122	Deltamethrin	10.2	Spike	P	0 - 100
2369122	Dichlobenil	3.68	Spike	P	0 - 40
2369122	Dicofol	6.14	Spike	P	0 - 31
2369122	Dieldrin	2.80	Spike	P	0 - 27
2369122	Endosulfan I	10.3	Spike	P	0 - 23
2369122	Endosulfan II	4.51	Spike	P	0 - 28
2369122	Endosulfan Sulfate	6.06	Spike	P	0 - 38
2369122	Endrin	2.04	Spike	P	0 - 63
2369122	Endrin Aldehyde	6.45	Spike	P	0 - 60
2369122	Endrin Ketone	2.34	Spike	P	0 - 37
2369122	Esfenvalerate	4.06	Spike	P	0 - 52
2369122	Ethalfuralin	12.2	Spike	P	0 - 23
2369122	Fenpropathrin	3.08	Spike	P	0 - 32
2369122	Gamma-BHC	4.93	Spike	P	0 - 17
2369122	Gamma-Chlordane	12.7	Spike	P	0 - 40
2369122	Heptachlor	1.74	Spike	P	0 - 29
2369122	Heptachlor Epoxide	10.0	Spike	P	0 - 25
2369122	Hexachlorobenzene	0.797	Spike	P	0 - 36
2369122	Kepone	12.2	Spike	P	0 - 93
2369122	Lambda-Cyhalothrin	5.99	Spike	P	0 - 55
2369122	Methoprene	1.78	Spike	P	0 - 53
2369122	Methoxychlor	5.01	Spike	P	0 - 29
2369122	MGK-264	0.701	Spike	P	0 - 35
2369122	Mirex	4.68	Spike	P	0 - 46
2369122	Oxychlordane	6.08	Spike	P	0 - 29
2369122	Permethrin	6.59	Spike	P	0 - 44
2369122	Phenothrin	17.8	Spike	P	0 - 56
2369122	Piperonyl Butoxide	2.31	Spike	P	0 - 100
2369122	Prallethrin	1.58	Spike	P	0 - 42
2369122	Tau-Fluvalinate	3.71	Spike	P	0 - 54
2369122	Tetramethrin	0.653	Spike	P	0 - 51
2369122	Trans-Nonachlor	17.2	Spike	P	0 - 37
2369122	Triclosan Methyl	14.1	Spike	P	0 - 31
2369122	Trifluralin	4.78	Spike	P	0 - 30
2369177	PCB-1016	2.68	Spike	P	0 - 32
2369177	PCB-1260	3.83	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P422430

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2369177	Chlordane	4.20	Spike	P	0 - 25
2369177	Toxaphene	12.5	Spike	P	0 - 26

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

Reference Method: SM 5310 B-2011

Batch ID: P422755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368941	Organic Carbon	0.167	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2369122

Field Sample ID: G4NW0114

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	82.7	P	29 - 130
EPA 8270E	Decachlorobiphenyl	71.2	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	57.9	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	59.8	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	48.4	P	30 - 101
EPA 8276	PCNB	76.6	P	48 - 121

Lab Sample ID: 2369123

Field Sample ID: G4NW0505

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	79.3	P	29 - 130
EPA 8270E	Decachlorobiphenyl	73.3	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	52.8	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	67.4	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	51.1	P	30 - 101
EPA 8276	PCNB	79.0	P	48 - 121

Lab Sample ID: 2369124

Field Sample ID: G4NW0412

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	81.9	P	29 - 130
EPA 8270E	Decachlorobiphenyl	81.3	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	65.4	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	73.6	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	51.9	P	30 - 101
EPA 8276	PCNB	83.2	P	48 - 121

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A115860

Included Lab Sample IDs: 2369118

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

Reference Method: DEP SOP: NU-094-1

Run ID: A115862

Included Lab Sample IDs: 2369118

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.2	96.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A115956

Included Lab Sample IDs: 2369119

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

Reference Method: EPA 8270E

Run ID: A116012

Included Lab Sample IDs: 2369122, 2369123, 2369124

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	98.4		P	80 - 120
PCB-1260	98.6		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A116017

Included Lab Sample IDs: 2369125

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.1	96.8	P/P	90 - 110
Antimony	100	101	P/P	90 - 110
Arsenic	102	101	P/P	90 - 110
Barium	101	102	P/P	90 - 110
Beryllium	98.5	99.5	P/P	90 - 110
Boron	107	103	P/P	90 - 110
Cadmium	101	102	P/P	90 - 110
Chromium	101	101	P/P	90 - 110
Copper	98.3	97.5	P/P	90 - 110
Lead	94.2	95.3	P/P	90 - 110
Manganese	105	104	P/P	90 - 110
Molybdenum	98.6	99.6	P/P	90 - 110
Nickel	98.3	98.4	P/P	90 - 110
Selenium	101	101	P/P	90 - 110
Silver	98.0	98.4	P/P	90 - 110
Thallium	99.9	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A116030

Included Lab Sample IDs: 2369119

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A116030

Included Lab Sample IDs: 2369119

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

Reference Method: SM 4500-F- C-2011

Run ID: A116057

Included Lab Sample IDs: 2369118

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

Reference Method: EPA 8276

Run ID: A116074

Included Lab Sample IDs: 2369122, 2369123, 2369124

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	102		P	80 - 120
Toxaphene	110		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A116108

Included Lab Sample IDs: 2369118

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	99.2	P/P	90 - 110
Sulfate	101	98.8	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A116120

Included Lab Sample IDs: 2369122, 2369123, 2369124

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.0		P	80 - 120
Alpha-BHC	104		P	80 - 120
Alpha-Chlordane	94.4		P	80 - 120
Beta-BHC	112		P	80 - 120
Beta-Cyfluthrin	82.2		P	80 - 120
Bifenthrin	102		P	80 - 120
Carbophenothion	94.0		P	80 - 120
Chlorothalonil	106		P	80 - 120
Cis-Nonachlor	95.1		P	80 - 120
Cypermethrin	82.0		P	80 - 120
Dacthal	94.8		P	80 - 120
DDD-p,p'	98.8		P	80 - 120
DDE-p,p'	96.6		P	80 - 120
DDT-p,p'	100		P	80 - 120
Delta-BHC	105		P	80 - 120
Deltamethrin	86.6		P	80 - 120
Dichlobenil	113		P	80 - 120
Dicofol	101		P	80 - 120
Dieldrin	97.0		P	80 - 120
Endosulfan I	89.0		P	80 - 120
Endosulfan II	95.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A116120

Included Lab Sample IDs: 2369122, 2369123, 2369124

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endosulfan Sulfate	89.9		P	80 - 120
Endrin	97.2		P	80 - 120
Endrin Aldehyde	115		P	80 - 120
Esfenvalerate	88.7		P	80 - 120
Ethalfuralin	93.7		P	80 - 120
Fenpropathrin	88.5		P	80 - 120
Gamma-BHC	97.7		P	80 - 120
Gamma-Chlordane	104		P	80 - 120
Heptachlor	95.8		P	80 - 120
Heptachlor Epoxide	101		P	80 - 120
Hexachlorobenzene	102		P	80 - 120
Kepone	92.1		P	80 - 120
Lambda-Cyhalothrin	87.3		P	80 - 120
Methoprene	93.5		P	80 - 120
Methoxychlor	96.8		P	80 - 120
MGK-264	88.1		P	80 - 120
Mirex	106		P	80 - 120
Oxychlordane	97.2		P	80 - 120
Permethrin	82.7		P	80 - 120
Phenothrin	86.2		P	80 - 120
Prallethrin	88.0		P	80 - 120
Tau-Fluvalinate	87.1		P	80 - 120
Tetramethrin	86.6		P	80 - 120
Trans-Nonachlor	97.9		P	80 - 120
Triclosan Methyl	90.0		P	80 - 120
Trifluralin	101		P	80 - 120

Reference Method: EPA 8270E

Run ID: A116121

Included Lab Sample IDs: 2369122, 2369123, 2369124

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endrin Ketone	98.7		P	80 - 120
Piperonyl Butoxide	104		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A116128

Included Lab Sample IDs: 2369119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.4	99.1	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A116145

Included Lab Sample IDs: 2369118

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A116154

Included Lab Sample IDs: 2369119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	92.6	95.9	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A116172

Included Lab Sample IDs: 2369125

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	97.0	P/P	90 - 110
Iron	99.5	97.1	P/P	90 - 110
Magnesium	97.5	95.1	P/P	90 - 110
Potassium	99.0	96.6	P/P	90 - 110
Sodium	103	99.0	P/P	90 - 110
Strontium	102	99.1	P/P	90 - 110
Tin	98.6	99.0	P/P	90 - 110
Titanium	102	101	P/P	90 - 110
Vanadium	99.1	98.0	P/P	90 - 110
Zinc	98.9	98.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A116189

Included Lab Sample IDs: 2369119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.1	99.6	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A116220

Included Lab Sample IDs: 2369125

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cobalt	94.9	97.9	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 SMP	MS
DEP SOP: NU-094-1	Color (true)	97.5				9.27	
EPA 180.1 Rev. 2.0	Turbidity	101				6.32	
EPA 200.7 Rev. 4.4	Calcium	99.4		97.1			2.30
	Iron	101		98.0	97.9		0.118
	Magnesium	99.4		95.0	94.4		0.355
	Potassium	98.2		95.7			1.41
	Sodium	101		98.8			1.69
	Strontium	102		102	100		1.66
	Tin	100		103	101		2.04
	Titanium	103		104	103		1.73
	Vanadium	100		101	99.5		1.83
	Zinc	99.0		99.0	97.8		1.26
EPA 200.8 Rev. 5.4	Aluminum	100		101	102		0.369
	Antimony	103		105	107		1.37
	Arsenic	101		104	104		0.167
	Barium	104		106	106		0.112
	Beryllium	95.8		95.3	94.5		0.826
	Boron	105		109	113		1.83
	Cadmium	100		103	102		0.153
	Chromium	101		104	105		1.26
	Cobalt	101		99.4	102	98.1	2.75
	Copper	96.3		99.6	101		1.72
	Lead	94.5		97.4	98.6		1.23
	Molybdenum	98.2		102	103		1.29
	Nickel	97.8		101	102		0.928
	Selenium	100		101	102		1.20
	Silver	99.1		101	103		2.02
	Thallium	97.6		101	104		3.71
EPA 300.0 Rev. 2.1	Chloride	99.5		97.0	98.4	0.152	
	Sulfate	98.7		94.4	95.8	0.0331	
EPA 350.1 Rev. 2.0	Ammonia-N	98.6		95.2	99.2		3.93
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101		100	103		1.50
EPA 353.2 Rev. 2.0	NO2NO3-N	104		104	104		0.962
EPA 365.1 Rev. 2.0	Total-P	102		101	101		0.536
EPA 8270E	Aldrin	62.1		69.3	69.1		0.260
	Alpha-BHC	101		95.2	94.4		0.874
	Alpha-Chlordane	91.6		86.5	94.0		8.34
	Beta-BHC	120		115	112		2.90
	Beta-Cyfluthrin	74.4		92.7	98.1		5.72
	Bifenthrin	50.9		83.3	84.0		0.874
	Carbophenothion	75.7		77.8	82.2		5.46
	Chlorothalonil	114		146	147		0.569
	Cis-Nonachlor	72.7		74.5	80.4		7.61
	Cypermethrin	75.9		92.9	100		7.40
	Dacthal	93.4		87.3	89.6		2.55
	DDD-p,p'	88.3		82.5	88.6		7.07
	DDE-p,p'	83.4		78.5	81.6		3.88
	DDT-p,p'	76.5		80.0	80.7		0.904
	Delta-BHC	117		135	133		1.10
	Deltamethrin	74.8		95.3	106		10.2
	Dichlobenil	97.8		70.5	67.9		3.68
	Dicofol	87.8		89.8	84.4		6.14
	Dieldrin	85.5		78.3	80.7		2.80
	Endosulfan I	82.2		76.6	84.9		10.3

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Endosulfan II	94.1	85.0	88.9			4.51
	Endosulfan Sulfate	103	87.5	93.0			6.06
	Endrin	80.7	84.1	85.8			2.04
	Endrin Aldehyde	81.6	58.3	62.2			6.45
	Endrin Ketone	101	83.2	81.3			2.34
	Esfenvalerate	72.2	93.3	97.2			4.06
	Ethalfuralin	76.3	78.5	69.5			12.2
	Fenpropathrin	81.4	83.9	81.4			3.08
	Gamma-BHC	94.8	88.6	93.1			4.93
	Gamma-Chlordane	88.5	89.8	102			12.7
	Heptachlor	70.6	75.9	77.3			1.74
	Heptachlor Epoxide	89.2	79.8	90.1			10.0
	Hexachlorobenzene	73.9	81.1	80.5			0.797
	Kepone	120	85.5	96.7			12.2
	Lambda-Cyhalothrin	65.8	88.4	93.9			5.99
	Methoprene	73.2	86.4	87.9			1.78
	Methoxychlor	81.4	78.7	74.8			5.01
	MGK-264	104	101	100			0.701
	Mirex	60.8	74.4	77.9			4.68
	Oxychlordane	80.0	80.6	85.6			6.08
	PCB-1016	70.5	72.8	74.8			2.68
	PCB-1260	68.2	64.7	67.2			3.83
	Permethrin	72.8	86.2	92.1			6.59
	Phenothrin	59.3	77.3	92.4			17.8
	Piperonyl Butoxide	78.1	91.8	89.7			2.31
	Prallethrin	101	94.0	95.5			1.58
	Tau-Fluvalinate	58.3	89.1	92.5			3.71
	Tetramethrin	105	137	137			0.653
	Trans-Nonachlor	72.9	70.9	84.3			17.2
	Triclosan Methyl	80.9	73.1	84.2			14.1
	Trifluralin	78.2	81.7	77.9			4.78
EPA 8276	Chlordane	78.6	72.4	69.4			4.20
	Toxaphene	87.0	80.4	70.9			12.5
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	97.0	96.4	96.7			0.167

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2369118
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2369118
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2369125
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2369125
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2369118
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2369118
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2369119
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2369119
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2369119

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2369119
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2369122, 2369123, 2369124
EPA 8270E	PCBs in water matrices by GC/MS/MS	2369122, 2369123, 2369124
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2369122, 2369123, 2369124
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2369118
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2369125
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2369118
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2369118
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2369118
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2369119

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	11/10/2022			11/10/2022 12:04	Chandler E Cox	2369118
EPA 180.1 Rev. 2.0	11/10/2022			11/10/2022 11:51	Anna M. Plaviak	2369118
EPA 200.7 Rev. 4.4	11/10/2022	11/16/2022 11:55	George D Taylor	11/29/2022 14:34	McKinley C Carter	2369125
EPA 200.8 Rev. 5.4	11/10/2022	11/16/2022 11:55	George D Taylor	11/17/2022 21:11	Megan Whitefoot	2369125
	11/10/2022	11/22/2022 12:10	Vijayalakshmi Reddy	12/01/2022 13:34	Emily M Philpot	2369125
EPA 300.0 Rev. 2.1	11/10/2022			11/22/2022 21:26	James L Waggeberby	2369118
EPA 350.1 Rev. 2.0	11/10/2022			11/29/2022 11:37	Ping Hua	2369119
EPA 351.2 Rev. 2.0	11/10/2022	11/17/2022 10:34	Samantha L Bates	11/28/2022 13:16	Judith K. Clark	2369119
EPA 353.2 Rev. 2.0	11/10/2022			11/16/2022 11:35	Beverly Y. Sanders	2369119
EPA 365.1 Rev. 2.0	11/10/2022	11/16/2022 13:00	Simonne.V. Calhoun	11/18/2022 13:51	Simonne.V. Calhoun	2369119
EPA 8270E	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/17/2022 20:15	Vandana T. Nagar	2369122
	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/17/2022 20:45	Vandana T. Nagar	2369123
	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/17/2022 21:16	Vandana T. Nagar	2369124
	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/21/2022 19:26	Michael Poppell	2369122
	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/21/2022 19:56	Michael Poppell	2369123
	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/21/2022 20:25	Michael Poppell	2369124
	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/25/2022 22:03	Michael Poppell	2369122
	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/25/2022 22:33	Michael Poppell	2369123
	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/25/2022 23:02	Michael Poppell	2369124
EPA 8276	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/19/2022 06:21	Lipi Saha	2369122
	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/19/2022 07:18	Lipi Saha	2369123
	11/10/2022	11/15/2022 08:30	Rasheda Ghaffari	11/19/2022 08:15	Lipi Saha	2369124
SM 2320 B-2011	11/10/2022			11/21/2022 22:04	Dale L. Simmons	2369118
SM 2340 B-2011	11/10/2022			11/29/2022 14:34	McKinley C Carter	2369125
SM 2540 C-2015	11/10/2022			11/14/2022 15:59	Yijie Li	2369118
SM 2540 D-2015	11/10/2022			11/14/2022 15:59	Yijie Li	2369118
SM 4500-F- C-2011	11/10/2022			11/19/2022 13:10	Dale L. Simmons	2369118
SM 5310 B-2011	11/10/2022			11/22/2022 06:06	Khloe J Berg	2369119