

Chemical Analysis Report

SE-DIST-2023-06-15-02

Florida DEP Laboratory
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Tallahassee, FL 32399-2400
DOH Accreditation E31780

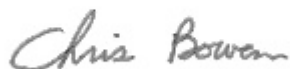
Event Description: **Stuart Run**
Request ID: **RQ-2023-06-12-69**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Chris Bowen, Environmental Administrator

Date Certified: 06-JUL-2023 10:09



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: Roebuck Creek at Locks

Collection Date/Time: 06/14/2023 08:35

Field ID: G2SE0029

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2417779	EPA 8321B	2,4-D	0.014		ug/L	P431434	
		Acesulfame K	0.34	I	ug/L	P431314	
		2,4,5-T	0.0040	U	ug/L	P431434	
		AMPA	0.64		ug/L	P431314	
		Acetaminophen	0.0080	U	ug/L	P431434	
		Acetamiprid	0.0020	U	ug/L	P431434	
		Endothall	0.25	U	ug/L	P431314	
		Glufosinate	0.10	U	ug/L	P431314	
		Glyphosate	0.78		ug/L	P431314	
		Afidopyropen	0.0020	U	ug/L	P431434	
		Bentazon	0.046		ug/L	P431434	
		Sucralose	17		ug/L	P431314	
		Benzovindiflupyr	0.0020	U	ug/L	P431434	
		Carbamazepine	0.013		ug/L	P431434	
		Clothianidin	0.046		ug/L	P431434	
		Dinotefuran	0.0048	I	ug/L	P431434	
		Diuron	0.0020	U	ug/L	P431434	RPD
		Fenuron	0.032	U	ug/L	P431434	
		Fluridone	0.052		ug/L	P431434	
		Imazapyr	0.27		ug/L	P431434	
		Hydrocodone	0.0020	U	ug/L	P431434	
		Ibuprofen	0.080	U	ug/L	P431434	
		Imidacloprid	0.055		ug/L	P431434	
		Linuron	0.0040	U	ug/L	P431434	
		Mandestrobin	0.0020	U	ug/L	P431434	
		MCPP	0.0047	I	ug/L	P431434	
		Naproxen	0.0080	U	ug/L	P431434	
		Primidone	0.041		ug/L	P431434	
		Pyraclostrobin	0.0020	U	ug/L	P431434	
		Silvex	0.0040	U	ug/L	P431434	
		Thiamethoxam	0.0020	U	ug/L	P431434	
		Tolfenpyrad	0.0020	U	ug/L	P431434	
		Triclopyr	0.0040	U	ug/L	P431434	

Sample Location: Krueger Creek near Commissioners Park

Collection Date/Time: 06/14/2023 12:20

Field ID: G2SE0069

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2417761	DEP SOP: NU-094-1	Color (true)	37		PCU	P431339	
	EPA 180.1 Rev. 2.0	Turbidity	6.8		NTU	P431349	
	EPA 300.0 Rev. 2.1	Chloride	7.7E+03		mg Cl/L	P431683	
		Sulfate	1.1E+03		mg SO4/L	P431686	
	SM 2320 B-2011	Total Alkalinity	118		mg CaCO3/L	P431796	
	SM 2540 C-2015	TDS	1.38E+04		mg/L	P431886	
	SM 2540 D-2015	TSS	10		mg/L	P431827	
2417762	SM 4500-F- C-2011	Fluoride	0.61		mg F/L	P431698	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P431661	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P431648	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P431754	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P431452	
2417777	SM 5310 B-2011	Organic Carbon	8.4		mg C/L	P431591	
	EPA 8270E	Aldrin	0.67	U	ng/L	P431304	
		Alpha-BHC	0.10	U	ng/L	P431304	
		Alpha-Chlordane	0.20	U	ng/L	P431304	
		PCB-1016	2.0	U	ng/L	P431304	
		Beta-BHC	0.78		ng/L	P431304	
		PCB-1221	2.0	U	ng/L	P431304	
		Beta-Cyfluthrin	1.3	U	ng/L	P431304	
		PCB-1232	2.0	U	ng/L	P431304	
		Bifenthrin	0.51	U	ng/L	P431304	
		PCB-1242	2.0	U	ng/L	P431304	
		Carbophenothion	0.92	UJ	ng/L	P431304	RPD
		PCB-1248	2.0	U	ng/L	P431304	
		Chlorothalonil	3.7	U	ng/L	P431304	
		PCB-1254	2.0	U	ng/L	P431304	
		Cis-Nonachlor	0.20	U	ng/L	P431304	
		PCB-1260	2.0	U	ng/L	P431304	
		Cypermethrin	1.5	U	ng/L	P431304	
		Dacthal	0.15	U	ng/L	P431304	
		DDD-p,p'	0.34	I	ng/L	P431304	
		DDE-p,p'	0.20	U	ng/L	P431304	
		DDT-p,p'	3.3	V	ng/L	P431304	
		Delta-BHC	0.41	U	ng/L	P431304	
		Deltamethrin	1.3	U	ng/L	P431304	
		Dichlobenil	0.26	U	ng/L	P431304	
		Dicofol	1.3	U	ng/L	P431304	
		Dieldrin	0.41	I	ng/L	P431304	
		Endosulfan I	0.41	U	ng/L	P431304	
		Endosulfan II	0.41	U	ng/L	P431304	
		Endosulfan Sulfate	0.31	U	ng/L	P431304	
		Endrin	0.41	U	ng/L	P431304	
		Endrin Aldehyde	0.77	U	ng/L	P431304	

Field ID: G2SE0069

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2417777	EPA 8270E	Endrin Ketone	0.41	U	ng/L	P431304	
		Esfenvalerate	0.77	U	ng/L	P431304	
		Ethalfuralin	0.15	U	ng/L	P431304	
		Fenpropathrin	0.26	U	ng/L	P431304	
		Gamma-BHC	0.13	U	ng/L	P431304	
		Gamma-Chlordane	0.20	U	ng/L	P431304	
		Heptachlor	0.20	U	ng/L	P431304	
		Heptachlor Epoxide	0.45	I	ng/L	P431304	
		Hexachlorobenzene**	1.0	U	ng/L	P431304	
		Kepone	5.1	U	ng/L	P431304	
		Lambda-Cyhalothrin	0.77	U	ng/L	P431304	
		Methoprene	0.77	U	ng/L	P431304	
		Methoxychlor	0.31	U	ng/L	P431304	
		MGK-264	0.20	U	ng/L	P431304	
		Mirex	0.36	U	ng/L	P431304	
		Oxychlordane	0.31	U	ng/L	P431304	
		Permethrin	1.6	U	ng/L	P431304	
		Phenothrin	0.92	U	ng/L	P431304	
		Piperonyl Butoxide	0.15	U	ng/L	P431304	
		Prallethrin	2.0	U	ng/L	P431304	
		Tau-Fluvalinate	0.26	U	ng/L	P431304	
		Tetramethrin	0.77	U	ng/L	P431304	
		Trans-Nonachlor	0.20	UJ	ng/L	P431304	CCV
		Triclosan Methyl	0.15	U	ng/L	P431304	
		Trifluralin	0.20	U	ng/L	P431304	
	EPA 8276	Chlordane	2.0	U	ng/L	P431304	MS
		Toxaphene	15	U	ng/L	P431304	MS
2417780	EPA 200.7 Rev. 4.4	Calcium	190		mg/L	P431440	
		Iron	350	I	ug/L	P431440	
		Magnesium	486		mg/L	P431440	
		Potassium	148		mg/L	P431440	
		Sodium	3.83E+03		mg/L	P431440	
		Strontium	3.58E+03		ug/L	P431440	
		Tin	150	U	ug/L	P431440	
		Titanium	4.1	I	ug/L	P431440	
		Vanadium	6.0	U	ug/L	P431440	
		Zinc	20	I	ug/L	P431440	
	EPA 200.8 Rev. 5.4	Aluminum	282		ug/L	P431440	
		Antimony	0.20	U	ug/L	P431440	
		Arsenic	3.71		ug/L	P431440	
		Barium	15.0		ug/L	P431440	
		Beryllium	0.042	I	ug/L	P431440	
		Boron	1.72E+03		ug/L	P431440	
		Cadmium	0.080	U	ug/L	P431440	
		Chromium	4.0	U	ug/L	P431440	

Field ID: G2SE0069

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2417780	EPA 200.8 Rev. 5.4	Cobalt	0.12	I	ug/L	P431440	
		Copper	3.0	I	ug/L	P431440	
		Lead	0.80	U	ug/L	P431440	
		Manganese	26.7		ug/L	P431440	
		Molybdenum	5.4		ug/L	P431440	
		Nickel	2.0	U	ug/L	P431440	
		Selenium	0.80	U	ug/L	P431440	
		Silver	0.040	U	ug/L	P431440	
		Thallium	0.40	U	ug/L	P431440	
	SM 2340 B-2011	Hardness	2.48E+03		mg/L	P431440	

Ref. Method and Comment:
 SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
 SM 4500-F- C-2011: Batch matrix spike recoveries and relative percent difference are unavailable because of analytical difficulties.
 EPA 8270E: V - Due to the presence of ddt-p,p' in both the Method Blank and the sample. Refer to the Lab Analysis Report for an explanation of QC Codes.
 EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for magnesium, potassium and sodium are unavailable because of high analyte concentration in the QC sample.

Sample Location: FB

Collection Date/Time: 06/14/2023 12:30

Field ID: FB_06142023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2417765	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P431339	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P431349	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P431683	
		Sulfate	0.20	U	mg SO4/L	P431686	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P431569	
	SM 2540 C-2015	TDS	15	U	mg/L	P431886	
	SM 2540 D-2015	TSS	2	U	mg/L	P431826	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P431572	
2417766	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P431530	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P431702	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P431721	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P431454	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P431590	
2417784	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P431414	
		Iron	30	U	ug/L	P431414	
		Magnesium	0.040	U	mg/L	P431414	
		Potassium	0.30	U	mg/L	P431414	
		Sodium	0.50	U	mg/L	P431414	
		Strontium	2.0	U	ug/L	P431414	
		Tin	3.0	U	ug/L	P431414	
		Titanium	0.75	U	ug/L	P431414	
		Vanadium	2.0	U	ug/L	P431414	
		Zinc	5.0	U	ug/L	P431414	
		Aluminum	5.0	U	ug/L	P431414	
		Antimony	0.050	U	ug/L	P431414	
		Arsenic	0.050	U	ug/L	P431414	
		Barium	0.20	U	ug/L	P431414	
	EPA 200.8 Rev. 5.4	Beryllium	0.010	U	ug/L	P431414	
		Boron	2.0	U	ug/L	P431414	
		Cadmium	0.020	U	ug/L	P431414	
		Chromium	0.40	U	ug/L	P431414	
		Cobalt	0.020	U	ug/L	P431414	
		Copper	0.40	U	ug/L	P431414	
		Lead	0.20	U	ug/L	P431414	
		Manganese	0.10	U	ug/L	P431414	
		Molybdenum	0.15	U	ug/L	P431414	
		Nickel	0.50	U	ug/L	P431414	
		Selenium	0.20	U	ug/L	P431414	
		Silver	0.010	U	ug/L	P431414	
		Thallium	0.10	U	ug/L	P431414	
		Hardness	0.35	U	mg/L	P431414	
	SM 2340 B-2011	Hardness	0.35	U	mg/L	P431414	

Sample Location: Mapps Creek Tidal at Mapp Rd

Collection Date/Time: 06/14/2023 13:15

Field ID: G2SE0076

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2417782	EPA 200.7 Rev. 4.4	Calcium	57.8		mg/L	P431414	
		Iron	1.12E+03		ug/L	P431414	
		Magnesium	4.22		mg/L	P431414	
		Potassium	2.1		mg/L	P431414	
		Sodium	28.2		mg/L	P431414	
		Strontium	347		ug/L	P431414	
		Tin	3.0	U	ug/L	P431414	
		Titanium	10.7		ug/L	P431414	
		Vanadium	2.0	U	ug/L	P431414	
		Zinc	5.0	U	ug/L	P431414	
	EPA 200.8 Rev. 5.4	Aluminum	77		ug/L	P431414	
		Antimony	0.093	I	ug/L	P431414	
		Arsenic	2.06		ug/L	P431414	
		Barium	10.8		ug/L	P431414	
		Beryllium	0.010	U	ug/L	P431414	
		Boron	53.0		ug/L	P431414	
		Cadmium	0.020	U	ug/L	P431414	
		Chromium	0.47	I	ug/L	P431414	
		Cobalt	0.081		ug/L	P431414	
		Copper	0.88		ug/L	P431414	
		Lead	0.20	U	ug/L	P431414	
		Manganese	14.7		ug/L	P431414	
		Molybdenum	0.73		ug/L	P431414	
		Nickel	0.50	U	ug/L	P431414	
		Selenium	0.20	U	ug/L	P431414	
		Silver	0.010	U	ug/L	P431414	
		Thallium	0.10	U	ug/L	P431414	
	SM 2340 B-2011	Hardness	162		mg/L	P431414	

Sample Location: St Lucie Canal near I 95

Collection Date/Time: 06/14/2023 13:50

Field ID: G2SE0077

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2417763	DEP SOP: NU-094-1	Color (true)	65		PCU	P431340	RPD
	EPA 180.1 Rev. 2.0	Turbidity	16		NTU	P431349	
	EPA 300.0 Rev. 2.1	Chloride	810		mg Cl/L	P431683	
		Sulfate	130		mg SO4/L	P431686	
	SM 2320 B-2011	Total Alkalinity	172		mg CaCO3/L	P431569	
	SM 2540 C-2015	TDS	1.63E+03	A	mg/L	P431886	
	SM 2540 D-2015	TSS	24	A	mg/L	P431826	
	SM 4500-F- C-2011	Fluoride	0.28		mg F/L	P431572	
2417764	EPA 350.1 Rev. 2.0	Ammonia-N	0.089		mg N/L	P431530	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P431649	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.045		mg N/L	P431721	
	EPA 365.1 Rev. 2.0	Total-P	0.21		mg P/L	P431453	
	SM 5310 B-2011	Organic Carbon	15		mg C/L	P431590	
2417783	EPA 200.7 Rev. 4.4	Calcium	92.6		mg/L	P431414	
		Iron	480		ug/L	P431414	
		Magnesium	58.7		mg/L	P431414	
		Potassium	19.8		mg/L	P431414	
		Sodium	476		mg/L	P431414	
		Strontium	1.00E+03		ug/L	P431414	
		Tin	3.1	I	ug/L	P431414	
		Titanium	5.9		ug/L	P431414	
	EPA 200.8 Rev. 5.4	Vanadium	2.2	I	ug/L	P431414	
		Zinc	6.9	I	ug/L	P431414	
		Aluminum	207		ug/L	P431414	
		Antimony	0.10	I	ug/L	P431414	
		Arsenic	1.27		ug/L	P431414	
		Barium	16.1		ug/L	P431414	
		Beryllium	0.010	I	ug/L	P431414	
		Boron	34.8		ug/L	P431414	
		Cadmium	0.020	U	ug/L	P431414	
		Chromium	0.72	I	ug/L	P431414	
		Cobalt	0.099		ug/L	P431414	
		Copper	0.83		ug/L	P431414	
		Lead	0.25	I	ug/L	P431414	
		Manganese	14.8		ug/L	P431414	
		Molybdenum	0.84		ug/L	P431414	
		Nickel	0.76	I	ug/L	P431414	
		Selenium	0.20	U	ug/L	P431414	
		Silver	0.010	U	ug/L	P431414	
		Thallium	0.10	U	ug/L	P431414	
	SM 2340 B-2011	Hardness	473		mg/L	P431414	

Sample Location: Bessey Creek at Murphy

Collection Date/Time: 06/14/2023 14:20

Field ID: G2SE0017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2417778	EPA 8270E	Aldrin	0.68	U	ng/L	P431304	
		Alpha-BHC	0.10	U	ng/L	P431304	
		Alpha-Chlordane	0.43	I	ng/L	P431304	
		PCB-1016	2.1	U	ng/L	P431304	
		Beta-BHC	0.53		ng/L	P431304	
		PCB-1221	2.1	U	ng/L	P431304	
		Beta-Cyfluthrin	1.3	U	ng/L	P431304	
		PCB-1232	2.1	U	ng/L	P431304	
		Bifenthrin	0.52	U	ng/L	P431304	
		PCB-1242	2.1	U	ng/L	P431304	
		Carbophenothion	0.94	U	ng/L	P431304	RPD
		PCB-1248	2.1	U	ng/L	P431304	
		Chlorothalonil	3.8	U	ng/L	P431304	
		PCB-1254	2.1	U	ng/L	P431304	
		Cis-Nonachlor	0.21	U	ng/L	P431304	
		PCB-1260	2.1	U	ng/L	P431304	
		Cypermethrin	1.6	U	ng/L	P431304	
		Dacthal	0.16	U	ng/L	P431304	
		DDD-p,p'	0.63	I	ng/L	P431304	
		DDE-p,p'	0.38	I	ng/L	P431304	
		DDT-p,p'	5.5	V	ng/L	P431304	
		Delta-BHC	0.47	I	ng/L	P431304	
		Deltamethrin	1.3	U	ng/L	P431304	
		Dichlobenil	0.26	U	ng/L	P431304	
		Dicofol	1.3	U	ng/L	P431304	
		Dieldrin	0.76	I	ng/L	P431304	
		Endosulfan I	0.42	U	ng/L	P431304	
		Endosulfan II	0.42	U	ng/L	P431304	
		Endosulfan Sulfate	0.96	I	ng/L	P431304	
		Endrin	0.42	U	ng/L	P431304	
		Endrin Aldehyde	0.78	U	ng/L	P431304	
		Endrin Ketone	0.42	U	ng/L	P431304	
		Esfenvalerate	0.78	U	ng/L	P431304	
		Ethalfuralin	0.16	U	ng/L	P431304	
		Fenpropathrin	0.26	U	ng/L	P431304	
		Gamma-BHC	0.13	U	ng/L	P431304	
		Gamma-Chlordane	0.47	I	ng/L	P431304	
		Heptachlor	0.25	I	ng/L	P431304	
		Heptachlor Epoxide	0.26	U	ng/L	P431304	
		Hexachlorobenzene**	1.0	U	ng/L	P431304	
		Kepone	5.2	U	ng/L	P431304	
		Lambda-Cyhalothrin	0.78	U	ng/L	P431304	
		Methoprene	0.78	U	ng/L	P431304	
		Methoxychlor	0.31	U	ng/L	P431304	

Field ID: G2SE0017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2417778	EPA 8270E	MGK-264	0.21	U	ng/L	P431304	
		Mirex	0.36	U	ng/L	P431304	
		Oxychlordane	0.31	U	ng/L	P431304	
		Permethrin	1.7	U	ng/L	P431304	
		Phenothrin	0.94	U	ng/L	P431304	
		Piperonyl Butoxide	0.52	I	ng/L	P431304	
		Prallethrin	2.1	U	ng/L	P431304	
		Tau-Fluvalinate	0.26	U	ng/L	P431304	
		Tetramethrin	0.78	U	ng/L	P431304	
		Trans-Nonachlor	0.21	UJ	ng/L	P431304	CCV
		Triclosan Methyl	0.16	U	ng/L	P431304	
		Trifluralin	0.21	U	ng/L	P431304	
		Chlordane	3.8	I	ng/L	P431304	MS
		Toxaphene	16	U	ng/L	P431304	MS
2417781	EPA 200.7 Rev. 4.4	Calcium	47.4		mg/L	P431414	
		Iron	710		ug/L	P431414	
		Magnesium	5.89		mg/L	P431414	
		Potassium	2.9		mg/L	P431414	
		Sodium	45.3		mg/L	P431414	
		Strontium	311		ug/L	P431414	
		Tin	3.7	I	ug/L	P431414	
		Titanium	1.5	I	ug/L	P431414	
		Vanadium	2.0	U	ug/L	P431414	
		Zinc	5.0	U	ug/L	P431414	
	EPA 200.8 Rev. 5.4	Aluminum	177		ug/L	P431414	
		Antimony	0.050	U	ug/L	P431414	
		Arsenic	0.51		ug/L	P431414	
		Barium	19.7		ug/L	P431414	
		Beryllium	0.010	U	ug/L	P431414	
		Boron	14.6		ug/L	P431414	
		Cadmium	0.020	U	ug/L	P431414	
		Chromium	0.47	I	ug/L	P431414	
		Cobalt	0.129		ug/L	P431414	
		Copper	0.40	U	ug/L	P431414	
		Lead	0.20	U	ug/L	P431414	
		Manganese	51.5		ug/L	P431414	
		Molybdenum	0.24	I	ug/L	P431414	
		Nickel	0.50	U	ug/L	P431414	
		Selenium	0.20	U	ug/L	P431414	
	SM 2340 B-2011	Silver	0.010	U	ug/L	P431414	
		Thallium	0.10	U	ug/L	P431414	
		Hardness	143		mg/L	P431414	

Ref. Method and Comment:
EPA 8270E: V - Due to the presence of ddt-p,p' in both the Method Blank and the sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P431339

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P431340

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P431349

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431414

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 200.7 Rev. 4.4
Batch ID: P431440

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: P431414

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P431414

Component	Result	Code	Units
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P431440

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P431683

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P431686

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P431530

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431530

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431661

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431648

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431649

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431702

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431721

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431754

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431452

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431453

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P431454

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

Reference Method: EPA 8270E

Batch ID: P431304

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Carbophenothion	0.90	U	ng/L
Carbophenothion	0.90	U	ng/L
Chlorothalonil	3.6	U	ng/L
Chlorothalonil	3.6	U	ng/L
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'	0.71	I	ng/L
DDT-p,p'	0.77	I	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P431304

Component	Result	Code	Units
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
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P431304

Component	Result	Code	Units
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: P431304

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: P431314

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: P431434

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P431434

Component	Result	Code	Units
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P431569

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

Reference Method: SM 2320 B-2011

Batch ID: P431796

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

Reference Method: SM 2540 C-2015

Batch ID: P431886

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P431826

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P431827

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P431572

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P431698

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P431590

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

Reference Method: SM 5310 B-2011
Batch ID: P431591

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: P431339

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P431340

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P431349

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431414

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	107		P	85 - 115
Iron	110		P	85 - 115
Magnesium	110		P	85 - 115
Potassium	107		P	85 - 115
Sodium	106		P	85 - 115
Strontium	108		P	85 - 115
Tin	108		P	85 - 115
Titanium	107		P	85 - 115
Vanadium	107		P	85 - 115
Zinc	110		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431440

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	85 - 115
Iron	105		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	101		P	85 - 115
Sodium	96.7		P	85 - 115
Strontium	101		P	85 - 115
Tin	103		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	100		P	85 - 115
Zinc	104		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431414

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.9		P	85 - 115
Antimony	100		P	85 - 115
Arsenic	101		P	85 - 115
Barium	102		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431414

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Beryllium	94.6		P	85 - 115
Boron	103		P	85 - 115
Cadmium	99.5		P	85 - 115
Chromium	97.4		P	85 - 115
Cobalt	101		P	85 - 115
Copper	102		P	85 - 115
Lead	95.3		P	85 - 115
Manganese	98.1		P	85 - 115
Molybdenum	98.4		P	85 - 115
Nickel	102		P	85 - 115
Selenium	102		P	85 - 115
Silver	104		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431440

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	102		P	85 - 115
Barium	102		P	85 - 115
Beryllium	95.6		P	85 - 115
Boron	105		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	101		P	85 - 115
Cobalt	99.7		P	85 - 115
Copper	99.2		P	85 - 115
Lead	94.6		P	85 - 115
Manganese	99.9		P	85 - 115
Molybdenum	100		P	85 - 115
Nickel	100		P	85 - 115
Selenium	100		P	85 - 115
Silver	105		P	85 - 115
Thallium	98.8		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431683

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431686

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431530

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

Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431530

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431661

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431648

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431649

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431702

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431721

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	105		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431754

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431452

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431453

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P431454

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

Reference Method: EPA 8270E

Batch ID: P431304

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	58.2		P	10 - 92.0
Alpha-BHC	76.2		P	75 - 107
Alpha-Chlordane	71.6		P	50 - 108
Beta-BHC	130		P	36 - 138
Beta-Cyfluthrin	49.7		P	20 - 161
Bifenthrin	54.9		P	10 - 119
Carbophenothion	48.2		P	19 - 94.0
Chlorothalonil	62.2		P	26 - 186
Cis-Nonachlor	65.6		P	42 - 119
Cypermethrin	54.1		P	22 - 150
Dacthal	111		P	72 - 119
DDD-p,p'	61.6		P	45 - 107
DDE-p,p'	52.2		P	48 - 106
DDT-p,p'	81.1		P	48 - 110
Delta-BHC	79.2		P	54 - 140
Deltamethrin	62.2		P	22 - 189
Dichlobenil	68.7		P	36 - 117
Dicofol	53.4		P	46 - 155
Dieldrin	69.5		P	54 - 110
Endosulfan I	84.0		P	59 - 105
Endosulfan II	52.2		P	51 - 118
Endosulfan Sulfate	89.7		P	57 - 121
Endrin	68.7		P	10 - 120
Endrin Aldehyde	94.1		P	34 - 118
Endrin Ketone	83.4		P	69 - 177
Esfenvalerate	104		P	23 - 168
Ethalfuralin	59.3		P	49 - 99.0
Fenpropathrin	93.2		P	34 - 117
Gamma-BHC	82.6		P	72 - 117
Gamma-Chlordane	71.6		P	43 - 106
Heptachlor	71.5		P	41 - 98.0
Heptachlor Epoxide	79.7		P	57 - 106
Hexachlorobenzene	54.2		P	36 - 99.0
Kepone	115		P	16 - 215
Lambda-Cyhalothrin	58.7		P	21 - 177
Methoprene	33.6		P	10 - 119
Methoxychlor	68.7		P	60 - 112
MGK-264	59.0		P	26 - 122
Mirex	40.2		P	10 - 169
Oxychlordane	87.0		P	43 - 105
PCB-1016	66.4		P	48 - 112
PCB-1260	73.1		P	44 - 118
Permethrin	48.1		P	24 - 148
Phenothrin	41.4		P	10 - 106
Piperonyl Butoxide	65.8		P	10 - 139
Prallethrin	51.9		P	17 - 109

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P431304

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Tau-Fluvalinate	71.1		P	13 - 131
Tetramethrin	57.6		P	10 - 132
Trans-Nonachlor	55.5		P	44 - 106
Triclosan Methyl	76.1		P	59 - 109
Trifluralin	57.6		P	44 - 101

Reference Method: EPA 8276
Batch ID: P431304

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	79.3		P	53 - 126
Toxaphene	95.2		P	56 - 211

Reference Method: EPA 8321B
Batch ID: P431314

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	146		P	40 - 150
AMPA	81.6		P	40 - 150
Endothall	97.0		P	40 - 150
Glufosinate	102		P	40 - 150
Glyphosate	107		P	40 - 150
Sucralose	120		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P431434

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	108		P	40 - 150
2,4,5-T	106		P	40 - 150
Acetaminophen	61.5		P	30 - 150
Acetamiprid	92.1		P	40 - 150
Afidopyropen	87.5		P	30 - 150
Bentazon	115		P	30 - 150
Benzovindiflupyr	76.0		P	40 - 150
Carbamazepine	86.3		P	40 - 150
Clothianidin	91.1		P	40 - 150
Dinotefuran	95.6		P	40 - 150
Diuron	89.6		P	40 - 150
Fenuron	87.0		P	40 - 150
Fluridone	87.8		P	40 - 150
Hydrocodone	95.6		P	40 - 150
Ibuprofen	92.1		P	40 - 150
Imazapyr	92.4		P	40 - 150
Imidacloprid	90.5		P	40 - 150
Linuron	86.0		P	40 - 150
Mandestrobin	96.3		P	40 - 150
MCPP	106		P	40 - 150
Naproxen	76.8		P	40 - 150
Primidone	85.8		P	40 - 150
Pyraclostrobin	93.9		P	40 - 150
Silvex	105		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P431434

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Thiamethoxam	87.3		P	40 - 150
Tolfenpyrad	66.8		P	30 - 150
Triclopyr	107		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P431569

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.3		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P431796

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.9		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P431886

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

Reference Method: SM 2540 D-2015
Batch ID: P431826

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	94.9		P	85 - 106

Reference Method: SM 2540 D-2015
Batch ID: P431827

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	98.5		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P431572

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

Reference Method: SM 4500-F- C-2011
Batch ID: P431698

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

Reference Method: SM 5310 B-2011
Batch ID: P431590

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.5		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P431591

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 200.7 Rev. 4.4

Batch ID: P431414

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417441	Calcium	104		P	80 - 120
2417441	Iron	108	107	P/P	80 - 120
2417441	Magnesium	106	105	P/P	80 - 120
2417441	Potassium	105	104	P/P	80 - 120
2417441	Sodium	109	109	P/P	80 - 120
2417441	Strontium	106	106	P/P	80 - 120
2417441	Tin	109	109	P/P	80 - 120
2417441	Titanium	102	105	P/P	80 - 120
2417441	Vanadium	107	108	P/P	80 - 120
2417441	Zinc	106	106	P/P	80 - 120
2417511	Calcium	108		P	80 - 120
2417511	Iron	110		P	80 - 120
2417511	Magnesium	110		P	80 - 120
2417511	Potassium	107		P	80 - 120
2417511	Sodium	112		P	80 - 120
2417511	Strontium	108		P	80 - 120
2417511	Tin	106		P	80 - 120
2417511	Titanium	106		P	80 - 120
2417511	Vanadium	109		P	80 - 120
2417511	Zinc	109		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P431440

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417073	Calcium	105		P	70 - 130
2417073	Iron	106	106	P/P	70 - 130
2417073	Strontium	103	104	P/P	70 - 130
2417073	Tin	94.9	96.7	P/P	70 - 130
2417073	Titanium	103	106	P/P	70 - 130
2417073	Vanadium	101	103	P/P	70 - 130
2417073	Zinc	103	103	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P431414

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417441	Aluminum	97.7	98.2	P/P	80 - 120
2417441	Antimony	101	102	P/P	80 - 120
2417441	Arsenic	101	101	P/P	80 - 120
2417441	Barium	103	105	P/P	80 - 120
2417441	Beryllium	92.9	94.6	P/P	80 - 120
2417441	Boron	103	105	P/P	80 - 120
2417441	Cadmium	100	102	P/P	80 - 120
2417441	Chromium	94.8	95.0	P/P	80 - 120
2417441	Cobalt	98.6	99.7	P/P	80 - 120
2417441	Copper	101	102	P/P	80 - 120
2417441	Lead	95.1	95.4	P/P	80 - 120
2417441	Manganese	94.9	96.2	P/P	80 - 120
2417441	Molybdenum	100	102	P/P	80 - 120
2417441	Nickel	97.4	98.6	P/P	80 - 120
2417441	Selenium	98.8	99.6	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P431414

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417441	Silver	103	106	P/P	80 - 120
2417441	Thallium	103	104	P/P	80 - 120
2417511	Aluminum	99.6		P	80 - 120
2417511	Antimony	101		P	80 - 120
2417511	Arsenic	100		P	80 - 120
2417511	Barium	105		P	80 - 120
2417511	Beryllium	94.1		P	80 - 120
2417511	Boron	106		P	80 - 120
2417511	Cadmium	99.2		P	80 - 120
2417511	Chromium	96.6		P	80 - 120
2417511	Cobalt	101		P	80 - 120
2417511	Copper	102		P	80 - 120
2417511	Lead	96.3		P	80 - 120
2417511	Manganese	96.7		P	80 - 120
2417511	Molybdenum	97.9		P	80 - 120
2417511	Nickel	102		P	80 - 120
2417511	Selenium	99.3		P	80 - 120
2417511	Silver	104		P	80 - 120
2417511	Thallium	103		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P431440

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417073	Aluminum	96.7	97.3	P/P	70 - 130
2417073	Antimony	101	102	P/P	70 - 130
2417073	Arsenic	104	105	P/P	70 - 130
2417073	Barium	101	98.7	P/P	70 - 130
2417073	Beryllium	102	104	P/P	70 - 130
2417073	Boron	103	104	P/P	70 - 130
2417073	Cadmium	99.2	100	P/P	70 - 130
2417073	Chromium	98.0	95.9	P/P	70 - 130
2417073	Cobalt	96.8	97.4	P/P	70 - 130
2417073	Copper	98.9	95.5	P/P	70 - 130
2417073	Lead	94.4	94.4	P/P	70 - 130
2417073	Manganese	94.4	92.8	P/P	70 - 130
2417073	Molybdenum	102	103	P/P	70 - 130
2417073	Nickel	96.3	95.4	P/P	70 - 130
2417073	Selenium	100	97.8	P/P	70 - 130
2417073	Silver	96.0	98.4	P/P	70 - 130
2417073	Thallium	94.2	97.2	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P431683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417681	Chloride	96.5		P	90 - 110
2417909	Chloride	103		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431686

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417681	Sulfate	96.3		P	90 - 110
2417909	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431530

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417677	Ammonia-N	102	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431661

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417472	Ammonia-N	103	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417572	Kjeldahl Nitrogen	106	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431649

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2418205	Kjeldahl Nitrogen	97.0	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431702

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417913	Kjeldahl Nitrogen	102	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431721

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417644	NO2NO3-N	105	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431754

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417762	NO2NO3-N	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431452

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417576	Total-P	91.8	94.4	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431453

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417642	Total-P	97.2	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431454

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417865	Total-P	103	102	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P431304

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417656	PCB-1016	54.0	56.2	P/P	46 - 111
2417656	PCB-1260	46.3	45.7	P/P	45 - 114
2417777	Aldrin	65.6	59.8	P/P	20 - 82.0
2417777	Alpha-BHC	81.6	82.3	P/P	71 - 109
2417777	Alpha-Chlordane	55.7	62.5	P/P	42 - 106
2417777	Beta-BHC	85.3	75.8	P/P	69 - 180
2417777	Beta-Cyfluthrin	74.5	72.1	P/P	18 - 175
2417777	Bifenthrin	110	96.9	P/P	21 - 128
2417777	Carbophenothion	55.0	78.4	P/P	10 - 126
2417777	Chlorothalonil	74.6	72.3	P/P	10 - 300
2417777	Cis-Nonachlor	50.7	63.2	P/P	34 - 106
2417777	Cypermethrin	74.4	74.8	P/P	22 - 158
2417777	Dacthal	75.8	81.9	P/P	54 - 116
2417777	DDD-p,p'	70.4	78.5	P/P	34 - 107
2417777	DDE-p,p'	76.7	77.5	P/P	33 - 110
2417777	DDT-p,p'	72.5	66.9	P/P	50 - 122
2417777	Delta-BHC	104	93.5	P/P	77 - 193
2417777	Deltamethrin	77.5	79.0	P/P	10 - 195
2417777	Dichlobenil	40.2	43.5	P/P	25 - 113
2417777	Dicofol	74.4	69.9	P/P	38 - 247
2417777	Dieldrin	66.6	67.5	P/P	45 - 118
2417777	Endosulfan I	75.0	75.0	P/P	51 - 106
2417777	Endosulfan II	63.2	61.1	P/P	37 - 122
2417777	Endosulfan Sulfate	71.7	71.4	P/P	43 - 132
2417777	Endrin	62.4	57.6	P/P	29 - 101
2417777	Endrin Aldehyde	53.3	69.5	P/P	19 - 110
2417777	Endrin Ketone	66.1	70.9	P/P	60 - 140
2417777	Esfenvalerate	119	108	P/P	26 - 199
2417777	Ethalfuralin	69.3	71.5	P/P	45 - 99.0
2417777	Fenpropathrin	100	103	P/P	35 - 120
2417777	Gamma-BHC	88.7	93.8	P/P	63 - 128
2417777	Gamma-Chlordane	71.0	65.1	P/P	40 - 104
2417777	Heptachlor	75.6	71.1	P/P	36 - 97.0
2417777	Heptachlor Epoxide	50.0	63.9	P/P	49 - 184
2417777	Hexachlorobenzene	68.3	72.7	P/P	39 - 96.0
2417777	Kepone	85.2	80.5	P/P	10 - 217
2417777	Lambda-Cyhalothrin	125	113	P/P	21 - 193
2417777	Methoprene	48.6	54.9	P/P	20 - 106
2417777	Methoxychlor	82.5	70.3	P/P	53 - 118
2417777	MGK-264	56.7	68.0	P/P	40 - 118

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P431304

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417777	Mirex	60.5	59.2	P/P	26 - 92.0
2417777	Oxychlordane	58.9	73.1	P/P	44 - 99.0
2417777	Permethrin	55.6	56.9	P/P	33 - 182
2417777	Phenothrin	70.1	76.5	P/P	10 - 129
2417777	Piperonyl Butoxide	84.7	76.0	P/P	10 - 211
2417777	Prallethrin	57.6	53.8	P/P	24 - 113
2417777	Tau-Fluvalinate	111	102	P/P	14 - 149
2417777	Tetramethrin	79.3	79.5	P/P	17 - 151
2417777	Trans-Nonachlor	47.1	57.2	P/P	42 - 102
2417777	Triclosan Methyl	59.8	67.8	P/P	48 - 108
2417777	Trifluralin	74.2	69.2	P/P	47 - 96.0

Reference Method: EPA 8276
Batch ID: P431304

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417656	Chlordane	46.4	43.3	F/F	53 - 126
2417656	Toxaphene	29.6	26.6	F/F	56 - 211

Reference Method: EPA 8321B
Batch ID: P431314

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417495	Acesulfame K	135	135	P/P	40 - 150
2417495	AMPA	74.7	71.7	P/P	40 - 150
2417495	Endothall	101	102	P/P	40 - 150
2417495	Glufosinate	92.8	94.6	P/P	40 - 150
2417495	Glyphosate	90.5	92.4	P/P	40 - 150
2417495	Sucralose	124	123	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P431434

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417875	2,4-D	113	87.7	P/P	40 - 150
2417875	2,4,5-T	113	89.8	P/P	40 - 150
2417875	Acetaminophen	69.2	61.5	P/P	30 - 150
2417875	Acetamiprid	77.4	68.6	P/P	40 - 150
2417875	Afidopyropen	76.6	74.4	P/P	30 - 150
2417875	Bentazon	69.8	53.6	P/P	30 - 150
2417875	Benzovindiflupyr	85.6	85.4	P/P	40 - 150
2417875	Carbamazepine	69.9	58.0	P/P	40 - 150
2417875	Clothianidin	102	82.0	P/P	40 - 150
2417875	Dinotefuran	81.0	69.2	P/P	40 - 150
2417875	Diuron	43.3	79.4	P/P	40 - 150
2417875	Fenuron	65.0	59.7	P/P	40 - 150
2417875	Fluridone	77.4	74.6	P/P	40 - 150
2417875	Hydrocodone	71.1	66.2	P/P	40 - 150
2417875	Ibuprofen	83.9	70.1	P/P	40 - 150
2417875	Imazapyr	90.4	79.7	P/P	40 - 150
2417875	Imidacloprid	125	109	P/P	40 - 150
2417875	Linuron	72.4	67.4	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P431434

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417875	Mandestrobin	90.9	86.8	P/P	40 - 150
2417875	MCPPP	124	109	P/P	40 - 150
2417875	Naproxen	66.7	59.8	P/P	40 - 150
2417875	Primidone	81.1	66.9	P/P	40 - 150
2417875	Pyraclostrobin	83.4	77.3	P/P	40 - 150
2417875	Silvex	93.1	79.3	P/P	40 - 150
2417875	Thiamethoxam	88.2	95.1	P/P	40 - 150
2417875	Tolfenpyrad	58.9	48.4	P/P	30 - 150
2417875	Triclopyr	108	93.2	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P431572

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417428	Fluoride	101	101	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P431590

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417643	Organic Carbon	91.3	96.2	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P431591

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417663	Organic Carbon	87.9	91.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P431339

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417571	Color (true)	0.519	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P431340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417380	Color (true)	21.2	Sample	F	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P431349

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417573	Turbidity	11.0	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431414

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417441	Calcium	0.537	Spike	P	0 - 20
2417441	Iron	0.606	Spike	P	0 - 20
2417441	Magnesium	0.780	Spike	P	0 - 20
2417441	Potassium	0.195	Spike	P	0 - 20
2417441	Sodium	0.421	Spike	P	0 - 20
2417441	Strontium	0.00440	Spike	P	0 - 20
2417441	Tin	0.265	Spike	P	0 - 20
2417441	Titanium	2.04	Spike	P	0 - 20
2417441	Vanadium	0.921	Spike	P	0 - 20
2417441	Zinc	0.222	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431440

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417073	Calcium	0.420	Spike	P	0 - 20
2417073	Iron	0.0474	Spike	P	0 - 20
2417073	Magnesium	0.629	Spike	P	0 - 20
2417073	Potassium	0.539	Spike	P	0 - 20
2417073	Sodium	13.2	Spike	P	0 - 20
2417073	Strontium	0.969	Spike	P	0 - 20
2417073	Tin	1.91	Spike	P	0 - 20
2417073	Titanium	2.93	Spike	P	0 - 20
2417073	Vanadium	1.68	Spike	P	0 - 20
2417073	Zinc	0.481	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431414

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417441	Aluminum	0.371	Spike	P	0 - 20
2417441	Antimony	1.22	Spike	P	0 - 20
2417441	Arsenic	0.866	Spike	P	0 - 20
2417441	Barium	0.755	Spike	P	0 - 20
2417441	Beryllium	1.48	Spike	P	0 - 20
2417441	Boron	1.23	Spike	P	0 - 20
2417441	Cadmium	1.24	Spike	P	0 - 20
2417441	Chromium	0.154	Spike	P	0 - 20
2417441	Cobalt	1.13	Spike	P	0 - 20
2417441	Copper	0.741	Spike	P	0 - 20
2417441	Lead	0.328	Spike	P	0 - 20
2417441	Manganese	1.05	Spike	P	0 - 20
2417441	Molybdenum	1.28	Spike	P	0 - 20
2417441	Nickel	1.12	Spike	P	0 - 20
2417441	Selenium	0.832	Spike	P	0 - 20
2417441	Silver	2.13	Spike	P	0 - 20
2417441	Thallium	0.793	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431440

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417073	Aluminum	0.667	Spike	P	0 - 20
2417073	Antimony	0.895	Spike	P	0 - 20
2417073	Arsenic	1.14	Spike	P	0 - 20
2417073	Barium	1.90	Spike	P	0 - 20
2417073	Beryllium	2.41	Spike	P	0 - 20
2417073	Boron	0.526	Spike	P	0 - 20
2417073	Cadmium	1.17	Spike	P	0 - 20
2417073	Chromium	2.18	Spike	P	0 - 20
2417073	Cobalt	0.582	Spike	P	0 - 20
2417073	Copper	3.50	Spike	P	0 - 20
2417073	Lead	0.0583	Spike	P	0 - 20
2417073	Manganese	1.60	Spike	P	0 - 20
2417073	Molybdenum	1.28	Spike	P	0 - 20
2417073	Nickel	1.01	Spike	P	0 - 20
2417073	Selenium	2.20	Spike	P	0 - 20
2417073	Silver	2.46	Spike	P	0 - 20
2417073	Thallium	3.13	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417681	Chloride	0.613	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P431686

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417681	Sulfate	0.693	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431530

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417677	Ammonia-N	1.38	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P431661

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417472	Ammonia-N	2.41	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417572	Kjeldahl Nitrogen	1.08	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431649

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2418205	Kjeldahl Nitrogen	4.11	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P431702

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417913	Kjeldahl Nitrogen	1.72	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431721

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417644	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P431754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417762	NO2NO3-N	0.477	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431452

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417576	Total-P	2.79	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431453

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417642	Total-P	1.41	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P431454

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417865	Total-P	0.807	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P431304

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417656	PCB-1016	3.89	Spike	P	0 - 32
2417656	PCB-1260	1.23	Spike	P	0 - 31
2417777	Aldrin	9.34	Spike	P	0 - 41
2417777	Alpha-BHC	0.818	Spike	P	0 - 25
2417777	Alpha-Chlordane	11.6	Spike	P	0 - 33
2417777	Beta-BHC	9.11	Spike	P	0 - 36
2417777	Beta-Cyfluthrin	3.25	Spike	P	0 - 42
2417777	Bifenthrin	12.7	Spike	P	0 - 53
2417777	Carbophenothion	35.1	Spike	F	0 - 30
2417777	Chlorothalonil	3.13	Spike	P	0 - 71
2417777	Cis-Nonachlor	21.9	Spike	P	0 - 29
2417777	Cypermethrin	0.521	Spike	P	0 - 40
2417777	Dacthal	7.63	Spike	P	0 - 26
2417777	DDD-p,p'	9.47	Spike	P	0 - 39
2417777	DDE-p,p'	1.11	Spike	P	0 - 33
2417777	DDT-p,p'	4.66	Spike	P	0 - 40
2417777	Delta-BHC	11.1	Spike	P	0 - 37
2417777	Deltamethrin	1.98	Spike	P	0 - 100
2417777	Dichlobenil	7.73	Spike	P	0 - 40
2417777	Dicofol	6.19	Spike	P	0 - 31
2417777	Dieldrin	1.25	Spike	P	0 - 27
2417777	Endosulfan I	0.0135	Spike	P	0 - 23
2417777	Endosulfan II	3.42	Spike	P	0 - 28
2417777	Endosulfan Sulfate	0.496	Spike	P	0 - 38
2417777	Endrin	8.04	Spike	P	0 - 63
2417777	Endrin Aldehyde	26.4	Spike	P	0 - 60
2417777	Endrin Ketone	6.96	Spike	P	0 - 37
2417777	Esfenvalerate	9.76	Spike	P	0 - 52
2417777	Ethalfuralin	3.01	Spike	P	0 - 23
2417777	Fenpropathrin	2.89	Spike	P	0 - 32

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P431304

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417777	Gamma-BHC	5.67	Spike	P	0 - 17
2417777	Gamma-Chlordane	8.70	Spike	P	0 - 40
2417777	Heptachlor	6.14	Spike	P	0 - 29
2417777	Heptachlor Epoxide	19.7	Spike	P	0 - 25
2417777	Hexachlorobenzene	6.14	Spike	P	0 - 36
2417777	Kepone	5.66	Spike	P	0 - 93
2417777	Lambda-Cyhalothrin	9.96	Spike	P	0 - 55
2417777	Methoprene	12.3	Spike	P	0 - 53
2417777	Methoxychlor	15.9	Spike	P	0 - 29
2417777	MGK-264	18.0	Spike	P	0 - 35
2417777	Mirex	2.05	Spike	P	0 - 46
2417777	Oxychlordane	21.5	Spike	P	0 - 29
2417777	Permethrin	1.88	Spike	P	0 - 44
2417777	Phenothrin	8.74	Spike	P	0 - 56
2417777	Piperonyl Butoxide	10.8	Spike	P	0 - 100
2417777	Prallethrin	6.76	Spike	P	0 - 42
2417777	Tau-Fluvalinate	8.56	Spike	P	0 - 54
2417777	Tetramethrin	0.175	Spike	P	0 - 51
2417777	Trans-Nonachlor	19.2	Spike	P	0 - 37
2417777	Triclosan Methyl	12.5	Spike	P	0 - 31
2417777	Trifluralin	6.90	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P431304

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417656	Chlordane	6.92	Spike	P	0 - 25
2417656	Toxaphene	5.57	Spike	P	0 - 26

Reference Method: EPA 8321B
Batch ID: P431314

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417495	Acesulfame K	0.395	Spike	P	0 - 30
2417495	AMPA	4.02	Spike	P	0 - 30
2417495	Endothall	0.867	Spike	P	0 - 30
2417495	Glufosinate	1.92	Spike	P	0 - 30
2417495	Glyphosate	2.11	Spike	P	0 - 30
2417495	Sucralose	0.971	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P431434

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417875	2,4-D	15.0	Spike	P	0 - 30
2417875	2,4,5-T	22.7	Spike	P	0 - 30
2417875	Acetaminophen	11.8	Spike	P	0 - 30
2417875	Acetamiprid	12.0	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P431434

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417875	Afidopyropen	2.81	Spike	P	0 - 30
2417875	Bentazon	16.6	Spike	P	0 - 30
2417875	Benzovindiflupyr	0.292	Spike	P	0 - 30
2417875	Carbamazepine	18.6	Spike	P	0 - 30
2417875	Clothianidin	21.8	Spike	P	0 - 30
2417875	Dinotefuran	14.0	Spike	P	0 - 30
2417875	Diuron	52.2	Spike	F	0 - 30
2417875	Fenuron	8.42	Spike	P	0 - 30
2417875	Fluridone	3.68	Spike	P	0 - 30
2417875	Hydrocodone	7.16	Spike	P	0 - 30
2417875	Ibuprofen	18.0	Spike	P	0 - 30
2417875	Imazapyr	10.3	Spike	P	0 - 30
2417875	Imidacloprid	13.4	Spike	P	0 - 30
2417875	Linuron	7.17	Spike	P	0 - 30
2417875	Mandestrobin	4.59	Spike	P	0 - 30
2417875	MCPP	13.5	Spike	P	0 - 30
2417875	Naproxen	10.9	Spike	P	0 - 30
2417875	Primidone	19.2	Spike	P	0 - 30
2417875	Pyraclostrobin	7.49	Spike	P	0 - 30
2417875	Silvex	16.0	Spike	P	0 - 30
2417875	Thiamethoxam	7.60	Spike	P	0 - 30
2417875	Tolfenpyrad	19.5	Spike	P	0 - 30
2417875	Triclopyr	14.6	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P431569

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417428	Total Alkalinity	1.34	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P431796

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2419627	Total Alkalinity	0.138	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P431886

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417763	TDS	1.35	Sample	P	0 - 10

Reference Method: SM 2540 D-2015
Batch ID: P431826

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417763	TSS	5.04	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P431572

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417428	Fluoride	0.476	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P431590

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417643	Organic Carbon	3.30	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P431591

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417663	Organic Carbon	2.81	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2417777
Field Sample ID: G2SE0069

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	73.2	P	29 - 130
EPA 8270E	Decachlorobiphenyl	53.9	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	62.0	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	62.8	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	64.3	P	30 - 101
EPA 8276	PCNB	86.1	P	48 - 121

Lab Sample ID: 2417778
Field Sample ID: G2SE0017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	76.7	P	29 - 130
EPA 8270E	Decachlorobiphenyl	90.8	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	61.8	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	60.1	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	76.0	P	30 - 101
EPA 8276	PCNB	89.9	P	48 - 121

Lab Sample ID: 2417779
Field Sample ID: G2SE0029

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	106	P	30 - 160
EPA 8321B	Acetaminophen-d4	62.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	63.6	P	30 - 160
EPA 8321B	Diuron-d6	41.5	P	30 - 160
EPA 8321B	Endothall-d6	123	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	78.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	69.9	P	30 - 160
EPA 8321B	Primidone-d5	77.9	P	30 - 160
EPA 8321B	Sucralose-d6	144	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: 119977

Included Lab Sample IDs: 2417762

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

Reference Method: DEP SOP: NU-094-1

Run ID: A119831

Included Lab Sample IDs: 2417761, 2417763, 2417765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	90 - 110
Color (true)	101	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A119833

Included Lab Sample IDs: 2417761, 2417763, 2417765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.5	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A119868

Included Lab Sample IDs: 2417779

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	145	143	P/P	60 - 160
Sucralose	87.7	105	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A119875

Included Lab Sample IDs: 2417779

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	101	100	P/P	60 - 160
Endothall	92.6	98.1	P/P	60 - 160
Glufosinate	90.1	96.8	P/P	60 - 160
Glyphosate	101	105	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119899

Included Lab Sample IDs: 2417781, 2417782, 2417783, 2417784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.4	99.0	P/P	90 - 110
Aluminum	98.7	98.7	P/P	90 - 110
Antimony	98.2	99.3	P/P	90 - 110
Antimony	98.5	98.2	P/P	90 - 110
Arsenic	99.5	98.9	P/P	90 - 110
Arsenic	99.9	99.4	P/P	90 - 110
Barium	97.5	98.1	P/P	90 - 110
Barium	98.8	97.7	P/P	90 - 110
Beryllium	95.8	97.8	P/P	90 - 110
Beryllium	99.2	98.1	P/P	90 - 110
Boron	101	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119899

Included Lab Sample IDs: 2417781, 2417782, 2417783, 2417784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	96.5	100	P/P	90 - 110
Cadmium	98.6	99.1	P/P	90 - 110
Cadmium	98.8	98.4	P/P	90 - 110
Chromium	95.0	97.4	P/P	90 - 110
Chromium	97.7	96.9	P/P	90 - 110
Cobalt	100	99.4	P/P	90 - 110
Cobalt	99.6	99.8	P/P	90 - 110
Copper	98.9	98.2	P/P	90 - 110
Copper	99.6	99.3	P/P	90 - 110
Lead	93.1	94.1	P/P	90 - 110
Lead	93.3	92.6	P/P	90 - 110
Manganese	96.6	98.5	P/P	90 - 110
Manganese	98.6	99.0	P/P	90 - 110
Molybdenum	97.2	98.6	P/P	90 - 110
Molybdenum	97.8	98.0	P/P	90 - 110
Nickel	99.3	98.2	P/P	90 - 110
Nickel	99.4	99.4	P/P	90 - 110
Selenium	97.3	100	P/P	90 - 110
Selenium	97.7	99.0	P/P	90 - 110
Silver	101	102	P/P	90 - 110
Silver	103	101	P/P	90 - 110
Thallium	101	99.9	P/P	90 - 110
Thallium	99.3	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A119900

Included Lab Sample IDs: 2417779

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	105	87.1	P/P	50 - 150
2,4,5-T	108	91.8	P/P	50 - 150
Acetaminophen	71.0	68.5	P/P	60 - 160
Acetamiprid	102	110	P/P	50 - 150
Afidopyropen	83.3	136	P/P	50 - 150
Bentazon	125	137	P/P	50 - 160
Benzovindiflupyr	123	110	P/P	50 - 150
Carbamazepine	111	96.9	P/P	60 - 150
Clothianidin	113	109	P/P	60 - 150
Dinotefuran	105	107	P/P	50 - 150
Diuron	108	124	P/P	60 - 160
Fenuron	105	92.5	P/P	60 - 150
Fluridone	104	95.5	P/P	60 - 160
Hydrocodone	118	111	P/P	60 - 150
Ibuprofen	95.5	89.5	P/P	50 - 160
Imazapyr	105	105	P/P	50 - 150
Imidacloprid	97.3	109	P/P	60 - 150
Linuron	84.3	99.8	P/P	60 - 150
Mandestrobin	110	116	P/P	50 - 150
MCPP	104	98.5	P/P	50 - 150
Naproxen	110	98.0	P/P	50 - 160
Primidone	85.2	101	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A119900
Included Lab Sample IDs: 2417779

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	113	116	P/P	60 - 150
Silvex	93.8	119	P/P	50 - 150
Thiamethoxam	105	106	P/P	50 - 150
Tolfenpyrad	99.7	96.1	P/P	60 - 150
Triclopyr	96.6	90.5	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A119901
Included Lab Sample IDs: 2417764

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A119917
Included Lab Sample IDs: 2417762, 2417766

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A119925
Included Lab Sample IDs: 2417764, 2417766

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A119927
Included Lab Sample IDs: 2417761, 2417763, 2417765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	101	P/P	90 - 110
Sulfate	99.6	100	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A119931
Included Lab Sample IDs: 2417780

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.4	99.3	P/P	90 - 110
Antimony	100	100	P/P	90 - 110
Arsenic	101	101	P/P	90 - 110
Barium	98.2	99.4	P/P	90 - 110
Beryllium	101	102	P/P	90 - 110
Boron	99.4	99.5	P/P	90 - 110
Cadmium	101	99.5	P/P	90 - 110
Chromium	102	103	P/P	90 - 110
Cobalt	100	101	P/P	90 - 110
Copper	99.0	98.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119931

Included Lab Sample IDs: 2417780

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	93.7	93.5	P/P	90 - 110
Manganese	101	103	P/P	90 - 110
Molybdenum	98.6	98.8	P/P	90 - 110
Nickel	100	100	P/P	90 - 110
Selenium	101	102	P/P	90 - 110
Silver	101	101	P/P	90 - 110
Thallium	103	104	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A119941

Included Lab Sample IDs: 2417763, 2417765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.4	94.6	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A119941

Included Lab Sample IDs: 2417763, 2417765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	104	105	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A119946

Included Lab Sample IDs: 2417762, 2417764, 2417766

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.6	97.1	P/P	90 - 110
Organic Carbon	97.2	97.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A119954

Included Lab Sample IDs: 2417780

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Magnesium	101	99.9	P/P	90 - 110
Potassium	98.5	98.0	P/P	90 - 110
Sodium	96.1	95.7	P/P	90 - 110
Strontium	99.4	101	P/P	90 - 110
Tin	103	102	P/P	90 - 110
Titanium	101	101	P/P	90 - 110
Vanadium	100	100	P/P	90 - 110
Zinc	104	103	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A119988

Included Lab Sample IDs: 2417761

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

Reference Method: SM 4500-F- C-2011

Run ID: A119988

Included Lab Sample IDs: 2417761

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119992

Included Lab Sample IDs: 2417762

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.5	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A119996

Included Lab Sample IDs: 2417764, 2417766

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119997

Included Lab Sample IDs: 2417764

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.6	96.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A120022

Included Lab Sample IDs: 2417762

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

Reference Method: EPA 8270E

Run ID: A120025

Included Lab Sample IDs: 2417777, 2417778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Alpha-BHC	105		P	80 - 120
Alpha-Chlordane	89.9		P	80 - 120
Beta-BHC	112		P	80 - 120
Beta-Cyfluthrin	95.0		P	80 - 120
Bifenthrin	102		P	80 - 120
Carbophenothion	100		P	80 - 120
Chlorothalonil	94.0		P	80 - 120
Cis-Nonachlor	86.7		P	80 - 120
Cypermethrin	108		P	80 - 120
Dacthal	110		P	80 - 120
DDD-p,p'	105		P	80 - 120
DDE-p,p'	107		P	80 - 120
DDT-p,p'	95.3		P	80 - 120
Delta-BHC	104		P	80 - 120
Deltamethrin	81.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A120025

Included Lab Sample IDs: 2417777, 2417778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dichlobenil	107		P	80 - 120
Dicofol	88.8		P	80 - 120
Dieldrin	104		P	80 - 120
Endosulfan I	98.8		P	80 - 120
Endosulfan II	105		P	80 - 120
Endosulfan Sulfate	86.2		P	80 - 120
Endrin	93.7		P	80 - 120
Endrin Aldehyde	100		P	80 - 120
Endrin Ketone	118		P	80 - 120
Esfenvalerate	99.7		P	80 - 120
Ethalfuralin	99.5		P	80 - 120
Fenpropathrin	83.8		P	80 - 120
Gamma-BHC	105		P	80 - 120
Gamma-Chlordane	108		P	80 - 120
Heptachlor	110		P	80 - 120
Heptachlor Epoxide	92.7		P	80 - 120
Hexachlorobenzene	104		P	80 - 120
Kepone	85.6		P	80 - 120
Lambda-Cyhalothrin	105		P	80 - 120
Methoprene	106		P	80 - 120
Methoxychlor	105		P	80 - 120
MGK-264	107		P	80 - 120
Mirex	82.6		P	80 - 120
Oxychlordane	107		P	80 - 120
Permethrin	110		P	80 - 120
Phenothrin	87.4		P	80 - 120
Piperonyl Butoxide	91.0		P	80 - 120
Prallethrin	101		P	80 - 120
Tau-Fluvalinate	94.2		P	80 - 120
Tetramethrin	102		P	80 - 120
Trans-Nonachlor	69.6*		F	80 - 120
Triclosan Methyl	87.9		P	80 - 120
Trifluralin	94.6		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A120038

Included Lab Sample IDs: 2417766

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.3	91.0	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A120040

Included Lab Sample IDs: 2417761

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	92.1	95.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A120063

Included Lab Sample IDs: 2417781, 2417782, 2417783, 2417784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	103	P/P	90 - 110
Calcium	103	101	P/P	90 - 110
Calcium	106	104	P/P	90 - 110
Iron	102	103	P/P	90 - 110
Iron	103	102	P/P	90 - 110
Iron	107	105	P/P	90 - 110
Magnesium	102	102	P/P	90 - 110
Magnesium	103	102	P/P	90 - 110
Magnesium	106	105	P/P	90 - 110
Potassium	101	102	P/P	90 - 110
Potassium	103	101	P/P	90 - 110
Potassium	104	104	P/P	90 - 110
Sodium	103	105	P/P	90 - 110
Sodium	104	103	P/P	90 - 110
Sodium	106	105	P/P	90 - 110
Strontium	104	106	P/P	90 - 110
Strontium	105	107	P/P	90 - 110
Strontium	107	104	P/P	90 - 110
Tin	104	106	P/P	90 - 110
Tin	105	104	P/P	90 - 110
Tin	105	107	P/P	90 - 110
Titanium	102	104	P/P	90 - 110
Titanium	99.4	104	P/P	90 - 110
Titanium	100	99.4	P/P	90 - 110
Vanadium	101	104	P/P	90 - 110
Vanadium	103	105	P/P	90 - 110
Vanadium	104	101	P/P	90 - 110
Zinc	104	107	P/P	90 - 110
Zinc	104	104	P/P	90 - 110
Zinc	105	107	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A120101

Included Lab Sample IDs: 2417777, 2417778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	108		P	80 - 120
PCB-1260	97.3		P	80 - 120

Reference Method: EPA 8276

Run ID: A120127

Included Lab Sample IDs: 2417777, 2417778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	86.9		P	80 - 120
Toxaphene	80.7		P	80 - 120

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

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	101				0.519	
	Color (true)	101				21.2	
EPA 180.1 Rev. 2.0	Turbidity	98.7				11.0	
EPA 200.7 Rev. 4.4	Calcium	107	104	108			0.537
	Calcium	102	105				0.420
	Iron	110	108	107	110		0.606
	Iron	105	106	106			0.0474
	Magnesium	110	106	105	110		0.780
	Magnesium	102					0.629
	Potassium	107	105	104	107		0.195
	Potassium	101					0.539
	Sodium	106	109	109	112		0.421
	Sodium	96.7					13.2
	Strontium	108	106	106	108		0.0044
	Strontium	101	103	104			0.969
	Tin	108	109	109	106		0.265
	Tin	103	94.9	96.7			1.91
	Titanium	107	102	105	106		2.04
	Titanium	101	106	103			2.93
	Vanadium	107	107	108	109		0.921
	Vanadium	100	101	103			1.68
	Zinc	110	106	106	109		0.222
	Zinc	104	103	103			0.481
EPA 200.8 Rev. 5.4	Aluminum	99.9	97.7	98.2	99.6		0.371
	Aluminum	100	96.7	97.3			0.667
	Antimony	100	101	102	101		1.22
	Antimony	101	101	102			0.895
	Arsenic	101	101	101	100		0.866
	Arsenic	102	104	105			1.14
	Barium	102	103	105	105		0.755
	Barium	102	101	98.7			1.90
	Beryllium	94.6	92.9	94.6	94.1		1.48
	Beryllium	95.6	102	104			2.41
	Boron	103	103	105	106		1.23
	Boron	105	103	104			0.526
	Cadmium	99.5	100	102	99.2		1.24
	Cadmium	102	99.2	100			1.17
	Chromium	97.4	94.8	95.0	96.6		0.154
	Chromium	101	98.0	95.9			2.18
	Cobalt	101	98.6	99.7	101		1.13
	Cobalt	99.7	96.8	97.4			0.582
	Copper	102	101	102	102		0.741
	Copper	99.2	98.9	95.5			3.50
	Lead	95.3	95.1	95.4	96.3		0.328
	Lead	94.6	94.4	94.4			0.0583
	Manganese	98.1	94.9	96.2	96.7		1.05
	Manganese	99.9	94.4	92.8			1.60
	Molybdenum	98.4	100	102	97.9		1.28
	Molybdenum	100	102	103			1.28
	Nickel	102	97.4	98.6	102		1.12
	Nickel	100	96.3	95.4			1.01
	Selenium	102	98.8	99.6	99.3		0.832
	Selenium	100	100	97.8			2.20
	Silver	104	103	106	104		2.13

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision SMP	MS
			LCS				
EPA 200.8 Rev. 5.4	Silver	105	96.0	98.4	103		2.46
	Thallium	102	103	104			0.793
	Thallium	98.8	94.2	97.2			3.13
EPA 300.0 Rev. 2.1	Chloride	101	96.5	103		0.613	
	Sulfate	99.6	96.3	100		0.693	
EPA 350.1 Rev. 2.0	Ammonia-N	96.8	102	104			1.38
	Ammonia-N	96.4	103	99.2			2.41
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	106	104			1.08
	Kjeldahl Nitrogen	104	97.0	104			4.11
	Kjeldahl Nitrogen	102	102	105			1.72
EPA 353.2 Rev. 2.0	NO2NO3-N	105	105	105			0.0
	NO2NO3-N	107	105	105			0.477
EPA 365.1 Rev. 2.0	Total-P	96.6	91.8	94.4			2.79
	Total-P	97.7	97.2	98.6			1.41
	Total-P	101	103	102			0.807
EPA 8270E	Aldrin	58.2	65.6	59.8			9.34
	Alpha-BHC	76.2	81.6	82.3			0.818
	Alpha-Chlordane	71.6	55.7	62.5			11.6
	Beta-BHC	130	85.3	75.8			9.11
	Beta-Cyfluthrin	49.7	74.5	72.1			3.25
	Bifenthrin	54.9	110	96.9			12.7
	Carbophenothion	48.2	55.0	78.4			35.1
	Chlorothalonil	62.2	74.6	72.3			3.13
	Cis-Nonachlor	65.6	50.7	63.2			21.9
	Cypermethrin	54.1	74.4	74.8			0.521
	Dacthal	111	75.8	81.9			7.63
	DDD-p,p'	61.6	70.4	78.5			9.47
	DDE-p,p'	52.2	76.7	77.5			1.11
	DDT-p,p'	81.1	72.5	66.9			4.66
	Delta-BHC	79.2	104	93.5			11.1
	Deltamethrin	62.2	77.5	79.0			1.98
	Dichlobenil	68.7	40.2	43.5			7.73
	Dicofol	53.4	74.4	69.9			6.19
	Dieldrin	69.5	66.6	67.5			1.25
	Endosulfan I	84.0	75.0	75.0			0.0135
	Endosulfan II	52.2	63.2	61.1			3.42
	Endosulfan Sulfate	89.7	71.7	71.4			0.496
	Endrin	68.7	62.4	57.6			8.04
	Endrin Aldehyde	94.1	53.3	69.5			26.4
	Endrin Ketone	83.4	66.1	70.9			6.96
	Esfenvalerate	104	119	108			9.76
	Ethalfuralin	59.3	69.3	71.5			3.01
	Fenpropathrin	93.2	100	103			2.89
	Gamma-BHC	82.6	88.7	93.8			5.67
	Gamma-Chlordane	71.6	71.0	65.1			8.70
	Heptachlor	71.5	75.6	71.1			6.14
	Heptachlor Epoxide	79.7	50.0	63.9			19.7
	Hexachlorobenzene	54.2	68.3	72.7			6.14
	Kepone	115	85.2	80.5			5.66
	Lambda-Cyhalothrin	58.7	125	113			9.96
	Methoprene	33.6	48.6	54.9			12.3
	Methoxychlor	68.7	82.5	70.3			15.9
	MGK-264	59.0	56.7	68.0			18.0
	Mirex	40.2	60.5	59.2			2.05

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Oxychlordane	87.0	58.9	73.1		21.5
	PCB-1016	66.4	54.0	56.2		3.89
	PCB-1260	73.1	46.3	45.7		1.23
	Permethrin	48.1	55.6	56.9		1.88
	Phenothrin	41.4	70.1	76.5		8.74
	Piperonyl Butoxide	65.8	84.7	76.0		10.8
	Prallethrin	51.9	57.6	53.8		6.76
	Tau-Fluvalinate	71.1	111	102		8.56
	Tetramethrin	57.6	79.3	79.5		0.175
	Trans-Nonachlor	55.5	47.1	57.2		19.2
	Triclosan Methyl	76.1	59.8	67.8		12.5
	Trifluralin	57.6	74.2	69.2		6.90
EPA 8276	Chlordane	79.3	46.4	43.3		6.92
	Toxaphene	95.2	29.6	26.6		5.57
EPA 8321B	2,4-D	108	113	87.7		15.0
	2,4,5-T	106	113	89.8		22.7
	Acesulfame K	146	135	135		0.395
	Acetaminophen	61.5	69.2	61.5		11.8
	Acetamiprid	92.1	77.4	68.6		12.0
	Afidopyropen	87.5	76.6	74.4		2.81
	AMPA	81.6	74.7	71.7		4.02
	Bentazon	115	69.8	53.6		16.6
	Benzovindiflupyr	76.0	85.6	85.4		0.292
	Carbamazepine	86.3	69.9	58.0		18.6
	Clothianidin	91.1	102	82.0		21.8
	Dinotefuran	95.6	81.0	69.2		14.0
	Diuron	89.6	43.3	79.4		52.2
	Endothall	97.0	101	102		0.867
	Fenuron	87.0	65.0	59.7		8.42
	Fluridone	87.8	77.4	74.6		3.68
	Glufosinate	102	92.8	94.6		1.92
	Glyphosate	107	90.5	92.4		2.11
	Hydrocodone	95.6	71.1	66.2		7.16
	Ibuprofen	92.1	83.9	70.1		18.0
	Imazapyr	92.4	90.4	79.7		10.3
	Imidacloprid	90.5	125	109		13.4
	Linuron	86.0	72.4	67.4		7.17
	Mandestrobin	96.3	90.9	86.8		4.59
	MCPP	106	124	109		13.5
	Naproxen	76.8	66.7	59.8		10.9
	Primidone	85.8	81.1	66.9		19.2
	Pyraclostrobin	93.9	83.4	77.3		7.49
	Silvex	105	93.1	79.3		16.0
	Sucralose	120	124	123		0.971
	Thiamethoxam	87.3	88.2	95.1		7.60
	Tolfenpyrad	66.8	58.9	48.4		19.5
	Triclopyr	107	108	93.2		14.6
SM 2320 B-2011	Total Alkalinity	97.3			1.34	
	Total Alkalinity	95.9			0.138	
SM 2540 C-2015	TDS	97.2			1.35	
SM 2540 D-2015	TSS	94.9			5.04	
	TSS	98.5				
SM 4500-F- C-2011	Fluoride	102	101	101		0.476
	Fluoride	103				

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 5310 B-2011	Organic Carbon	93.5	91.3	96.2		3.30
	Organic Carbon	95.6	87.9	91.1		2.81

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2417761, 2417763, 2417765
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2417761, 2417763, 2417765
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2417780, 2417781, 2417782, 2417783, 2417784
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2417780, 2417781, 2417782, 2417783, 2417784
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2417761, 2417763, 2417765
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2417761, 2417763, 2417765
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2417762, 2417764, 2417766
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2417762, 2417764, 2417766
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2417762, 2417764, 2417766
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2417762, 2417764, 2417766
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2417777, 2417778
EPA 8270E	PCBs in water matrices by GC/MS/MS	2417777, 2417778
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2417777, 2417778
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2417779
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2417761, 2417763, 2417765
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2417780, 2417781, 2417782, 2417783, 2417784
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2417761, 2417763, 2417765
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2417761, 2417763, 2417765
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2417761, 2417763, 2417765
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2417762, 2417764, 2417766

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	06/15/2023			06/15/2023 15:06	Chandler E Cox	2417761
	06/15/2023			06/15/2023 15:07	Chandler E Cox	2417765
	06/15/2023			06/15/2023 15:13	Chandler E Cox	2417763
EPA 180.1 Rev. 2.0	06/15/2023			06/15/2023 13:34	Alexis Price	2417761
	06/15/2023			06/15/2023 13:35	Alexis Price	2417763, 2417765
EPA 200.7 Rev. 4.4	06/15/2023	06/16/2023 11:55	George D Taylor	06/27/2023 16:26	Samatha Luckman	2417784
	06/15/2023	06/16/2023 11:55	George D Taylor	06/27/2023 20:08	Samatha Luckman	2417781
	06/15/2023	06/16/2023 11:55	George D Taylor	06/27/2023 20:42	Samatha Luckman	2417782
	06/15/2023	06/16/2023 11:55	George D Taylor	06/27/2023 20:50	Samatha Luckman	2417783
	06/15/2023	06/16/2023 11:55	George D Taylor	06/27/2023 20:58	Samatha Luckman	2417783
	06/15/2023	06/19/2023 12:45	George D Taylor	06/21/2023 23:16	McKinley C Carter	2417780
EPA 200.8 Rev. 5.4	06/15/2023	06/19/2023 12:45	George D Taylor	06/21/2023 23:28	McKinley C Carter	2417780
	06/15/2023	06/16/2023 11:55	George D Taylor	06/19/2023 18:41	Emily M Philpot	2417784
	06/15/2023	06/16/2023 11:55	George D Taylor	06/19/2023 22:50	Emily M Philpot	2417781
	06/15/2023	06/16/2023 11:55	George D Taylor	06/19/2023 23:00	Emily M Philpot	2417782
	06/15/2023	06/16/2023 11:55	George D Taylor	06/19/2023 23:10	Emily M Philpot	2417783
	06/15/2023	06/19/2023 12:45	George D Taylor	06/20/2023 19:12	Emily M Philpot	2417780
EPA 300.0 Rev. 2.1	06/15/2023	06/19/2023 12:45	George D Taylor	06/20/2023 21:26	Emily M Philpot	2417780
	06/15/2023			06/21/2023 21:32	James L Waggeberby	2417761
	06/15/2023			06/21/2023 21:47	James L Waggeberby	2417763
EPA 350.1 Rev. 2.0	06/15/2023			06/21/2023 22:02	James L Waggeberby	2417765
	06/15/2023			06/20/2023 15:59	Khloe J Berg	2417764
	06/15/2023			06/20/2023 16:00	Khloe J Berg	2417766
EPA 351.2 Rev. 2.0	06/15/2023			06/22/2023 13:59	Ping Hua	2417762
	06/15/2023	06/22/2023 12:16	Dana G. Hughes	06/23/2023 09:41	Ping Hua	2417762
	06/15/2023	06/22/2023 12:16	Dana G. Hughes	06/23/2023 11:18	Ping Hua	2417764
	06/15/2023	06/23/2023 09:33	Dana G. Hughes	06/26/2023 15:35	Ping Hua	2417766
EPA 353.2 Rev. 2.0	06/15/2023			06/23/2023 12:03	Beverly Y. Sanders	2417764
	06/15/2023			06/23/2023 12:04	Beverly Y. Sanders	2417766
	06/15/2023			06/26/2023 10:20	Beverly Y. Sanders	2417762
EPA 365.1 Rev. 2.0	06/15/2023	06/19/2023 15:25	Adam P Silver	06/20/2023 10:00	James L Waggeberby	2417764
	06/15/2023	06/19/2023 15:25	Adam P Silver	06/20/2023 12:14	James L Waggeberby	2417762
	06/15/2023	06/19/2023 15:25	Adam P Silver	06/20/2023 12:27	James L Waggeberby	2417766
EPA 8270E	06/15/2023	06/21/2023 08:00	Rasheda Ghaffari	06/23/2023 01:16	Lipi Saha	2417777
	06/15/2023	06/21/2023 08:00	Rasheda Ghaffari	06/23/2023 01:46	Lipi Saha	2417778
	06/15/2023	06/21/2023 08:00	Rasheda Ghaffari	06/23/2023 20:13	Michael Poppell	2417777
	06/15/2023	06/21/2023 08:00	Rasheda Ghaffari	06/23/2023 22:23	Michael Poppell	2417778
EPA 8276	06/15/2023	06/21/2023 08:00	Rasheda Ghaffari	06/24/2023 13:26	Lipi Saha	2417777
	06/15/2023	06/21/2023 08:00	Rasheda Ghaffari	06/24/2023 14:23	Lipi Saha	2417778
EPA 8321B	06/15/2023	06/16/2023 12:00	Touraj Touran	06/16/2023 16:57	Touraj Touran	2417779

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	06/15/2023	06/16/2023 12:00	Touraj Touran	06/16/2023 23:16	Touraj Touran	2417779
	06/15/2023	06/16/2023 12:00	Touraj Touran	06/18/2023 20:41	Touraj Touran	2417779
	06/15/2023	06/20/2023 09:00	Hoor Shaik	06/21/2023 04:58	Juyoung Kim	2417779
SM 2320 B-2011	06/15/2023			06/21/2023 10:14	Dale L. Simmons	2417765
	06/15/2023			06/21/2023 10:29	Dale L. Simmons	2417763
	06/15/2023			06/26/2023 23:10	Adam P Silver	2417761
SM 2340 B-2011	06/15/2023			06/21/2023 23:28	McKinley C Carter	2417780
	06/15/2023			06/27/2023 16:26	Samatha Luckman	2417784
	06/15/2023			06/27/2023 20:08	Samatha Luckman	2417781
	06/15/2023			06/27/2023 20:42	Samatha Luckman	2417782
	06/15/2023			06/27/2023 20:50	Samatha Luckman	2417783
SM 2540 C-2015	06/15/2023			06/19/2023 14:50	Dana G. Hughes	2417761, 2417763, 2417765
SM 2540 D-2015	06/15/2023			06/19/2023 14:50	Dana G. Hughes	2417761, 2417763, 2417765
SM 4500-F- C-2011	06/15/2023			06/21/2023 10:14	Dale L. Simmons	2417765
	06/15/2023			06/21/2023 10:29	Dale L. Simmons	2417763
	06/15/2023			06/23/2023 02:19	Adam P Silver	2417761
SM 5310 B-2011	06/15/2023			06/20/2023 19:47	Elise M. Gillis	2417764
	06/15/2023			06/20/2023 20:01	Elise M. Gillis	2417766
	06/15/2023			06/21/2023 04:38	Elise M. Gillis	2417762