

Chemical Analysis Report

SE-DIST-2024-05-01-02

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

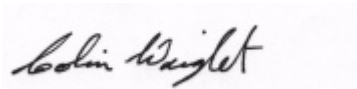
Event Description: **SMP - Clarke**
Request ID: **RQ-2024-03-18-37**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Andrew Luering

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Certified by: Colin Wright, Program Administrator

Date Certified: 04-JUN-2024 09:32



NON-CONFORMANCE REPORT INCLUDED

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: C 17 CANAL NEAR BLUE HERON BLVD

Collection Date/Time: 04/30/2024 10:00

Field ID: G3SE0078

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2485827	DEP SOP: NU-094-1	Color (true)	33		PCU	P445071	
	EPA 180.1 Rev. 2.0	Turbidity	2.8		NTU	P445075	
	EPA 300.0 Rev. 2.1	Chloride	43		mg Cl/L	P445474	
		Sulfate	12		mg SO4/L	P445478	
	SM 2320 B-2011	Total Alkalinity	142		mg CaCO3/L	P445249	
	SM 2540 C-2015	TDS	232		mg/L	P445590	
	SM 2540 D-2015	TSS	7	I	mg/L	P445511	
	SM 4500-F- C-2011	Fluoride	0.12		mg F/L	P445603	
2485828	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P445220	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P445188	
	EPA 365.1 Rev. 2.0	Total-P	0.033		mg P/L	P445132	
	SM 5310 B-2014	Organic Carbon	11		mg C/L	P445382	
2485878	EPA 200.7 Rev. 4.4	Calcium	56.3		mg/L	P445135	
		Iron	110	I	ug/L	P445135	
		Magnesium	3.65		mg/L	P445135	
		Potassium	2.4		mg/L	P445135	
		Sodium	25.5		mg/L	P445135	
		Strontium	660		ug/L	P445135	
		Tin	3.0	U	ug/L	P445135	
		Titanium	0.98	I	ug/L	P445135	
	EPA 200.8 Rev. 5.4	Vanadium	2.0	U	ug/L	P445135	
		Zinc	11	I	ug/L	P445135	
		Aluminum	19	I	ug/L	P445135	
		Antimony	0.25		ug/L	P445135	
		Arsenic	1.08		ug/L	P445135	
		Barium	15.4		ug/L	P445135	
		Beryllium	0.010	U	ug/L	P445135	
		Boron	43.7		ug/L	P445135	
		Cadmium	0.020	U	ug/L	P445135	
		Chromium	0.43	I	ug/L	P445135	
		Cobalt	0.051	I	ug/L	P445135	
		Copper	1.46		ug/L	P445135	
		Lead	0.20	U	ug/L	P445135	
		Manganese	5.03		ug/L	P445135	
		Molybdenum	1.28		ug/L	P445135	
		Nickel	0.50	U	ug/L	P445135	
		Selenium	0.20	U	ug/L	P445135	
		Silver	0.010	U	ug/L	P445135	
		Thallium	0.10	U	ug/L	P445135	
	SM 2340 B-2011	Hardness	156		mg/L	P445135	

Ref. Method and Comment:

EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: C 51 EAST NEAR BELVEDERE

Collection Date/Time: 04/30/2024 10:30

Field ID: G3SE0053

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2485831	DEP SOP: NU-094-1	Color (true)	29		PCU	P445072	
	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P445075	
	EPA 300.0 Rev. 2.1	Chloride	36		mg Cl/L	P445474	
		Sulfate	11		mg SO4/L	P445478	
	SM 2320 B-2011	Total Alkalinity	127		mg CaCO3/L	P445249	
	SM 2540 C-2015	TDS	218		mg/L	P445590	
	SM 2540 D-2015	TSS	10		mg/L	P445511	
	SM 4500-F- C-2011	Fluoride	0.078	I	mg F/L	P445603	
2485832	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P445220	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.98		mg N/L	P445188	
	EPA 365.1 Rev. 2.0	Total-P	0.089		mg P/L	P445132	
	SM 5310 B-2014	Organic Carbon	8.9		mg C/L	P445383	

Ref. Method and Comment:
EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: LAKE CLARKE INFLOW 1 S CONGRESS AVE
ABOVE COLLIN DR

Collection Date/Time: 04/30/2024 10:50

Field ID: G3SE0072

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2485833	DEP SOP: NU-094-1	Color (true)	39		PCU	P445072	
	EPA 180.1 Rev. 2.0	Turbidity	7.1		NTU	P445075	
	EPA 300.0 Rev. 2.1	Chloride	8.5		mg Cl/L	P445474	
		Sulfate	4.1		mg SO4/L	P445478	
	SM 2320 B-2011	Total Alkalinity	40		mg CaCO3/L	P445249	
	SM 2540 C-2015	TDS	74		mg/L	P445590	
	SM 2540 D-2015	TSS	8	I	mg/L	P445511	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P445603	
2485834	EPA 350.1 Rev. 2.0	Ammonia-N	0.042		mg N/L	P445223	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.57		mg N/L	P445188	
	EPA 365.1 Rev. 2.0	Total-P	0.096		mg P/L	P445132	
	SM 5310 B-2014	Organic Carbon	6.3		mg C/L	P445383	

Sample Location: LAKE CLARKE INFLOW 4 S CONGRESS AVE Collection Date/Time: 04/30/2024 11:20
BELOW LARK RD

Field ID: G3SE0075 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2485839	DEP SOP: NU-094-1	Color (true)	80		PCU	P445072	
	EPA 180.1 Rev. 2.0	Turbidity	4.3		NTU	P445075	
	EPA 300.0 Rev. 2.1	Chloride	18	A	mg Cl/L	P445474	
		Sulfate	11	A	mg SO4/L	P445478	
	SM 2320 B-2011	Total Alkalinity	74	A	mg CaCO3/L	P445290	
	SM 2540 C-2015	TDS	146	A	mg/L	P445591	
	SM 2540 D-2015	TSS	5	IA	mg/L	P445512	
	SM 4500-F- C-2011	Fluoride	0.032	I	mg F/L	P445603	
2485840	EPA 350.1 Rev. 2.0	Ammonia-N	0.015		mg N/L	P445223	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.88		mg N/L	P445188	
	EPA 365.1 Rev. 2.0	Total-P	0.081		mg P/L	P445134	
	SM 5310 B-2014	Organic Carbon	16		mg C/L	P445383	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: LAKE CLARKE INFLOW 3 S CONGRESS AVE Collection Date/Time: 04/30/2024 11:40
BELOW LAURA LN

Field ID: G3SE0074 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2485837	DEP SOP: NU-094-1	Color (true)	27		PCU	P445072	
	EPA 180.1 Rev. 2.0	Turbidity	6.9		NTU	P445075	
	EPA 300.0 Rev. 2.1	Chloride	6.2		mg Cl/L	P445474	
		Sulfate	3.3		mg SO4/L	P445478	
	SM 2320 B-2011	Total Alkalinity	28		mg CaCO3/L	P445249	
	SM 2540 C-2015	TDS	45		mg/L	P445590	
	SM 2540 D-2015	TSS	7	I	mg/L	P445511	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P445603	
2485838	EPA 350.1 Rev. 2.0	Ammonia-N	0.034		mg N/L	P445223	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.48		mg N/L	P445188	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P445132	
	SM 5310 B-2014	Organic Carbon	4.5		mg C/L	P445383	

Sample Location: LAKE CLARKE INFLOW 2 S CONGRESS AVE ABOVE CHEROKEE RD Collection Date/Time: 04/30/2024 12:00

Field ID: G3SE0073 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2485835	DEP SOP: NU-094-1	Color (true)	59		PCU	P445072	
	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P445075	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P445474	
		Sulfate	12		mg SO4/L	P445478	
	SM 2320 B-2011	Total Alkalinity	53		mg CaCO3/L	P445249	
	SM 2540 C-2015	TDS	105		mg/L	P445590	
	SM 2540 D-2015	TSS	10	I	mg/L	P445511	
	SM 4500-F- C-2011	Fluoride	0.034	I	mg F/L	P445603	
2485836	EPA 350.1 Rev. 2.0	Ammonia-N	0.076		mg N/L	P445223	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.73		mg N/L	P445188	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P445132	
	SM 5310 B-2014	Organic Carbon	8.5		mg C/L	P445383	

Sample Location: LAKE CLARKE CENTER

Collection Date/Time: 04/30/2024 12:15

Field ID: G3SE0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2485829	DEP SOP: NU-094-1	Color (true)	49	A	PCU	P445072	
	EPA 180.1 Rev. 2.0	Turbidity	3.1		NTU	P445075	
	EPA 300.0 Rev. 2.1	Chloride	120		mg Cl/L	P445474	
		Sulfate	55		mg SO4/L	P445478	
	SM 2320 B-2011	Total Alkalinity	211		mg CaCO3/L	P445249	
	SM 2540 C-2015	TDS	512		mg/L	P445590	
	SM 2540 D-2015	TSS	6	I	mg/L	P445511	
	SM 4500-F- C-2011	Fluoride	0.20		mg F/L	P445603	
2485830	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P445220	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P445188	
	EPA 365.1 Rev. 2.0	Total-P	0.056		mg P/L	P445132	
	SM 5310 B-2014	Organic Carbon	17		mg C/L	P445382	
2485874	EPA 8321B	Aldicarb	0.020	U	ug/L	P445127	
		Aldicarb Sulfone	0.0020	U	ug/L	P445127	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P445127	MS
		Carbaryl	0.0020	U	ug/L	P445127	
		Carbofuran	0.0020	U	ug/L	P445127	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P445127	
		Methiocarb	0.0020	U	ug/L	P445127	
		Methomyl	0.012		ug/L	P445127	
		Oxamyl	0.0020	U	ug/L	P445127	
		Propoxur	0.0020	U	ug/L	P445127	
2485875		2,4-D	0.027		ug/L	P444820	
		Acesulfame K	0.14	I	ug/L	P444881	
		2,4,5-T	0.0040	U	ug/L	P444820	
		AMPA	0.37	I	ug/L	P444881	
		Acetaminophen	0.0080	U	ug/L	P444820	
		Acetamiprid	0.0020	U	ug/L	P444820	
		Endothall	0.25	U	ug/L	P444881	
		Glufosinate	0.10	U	ug/L	P444881	
		Glyphosate	0.89		ug/L	P444881	
		Afidopypropen	0.0020	U	ug/L	P444820	
		Bentazon	0.066		ug/L	P444820	
		Sucralose	0.37		ug/L	P444881	
		Benzovindiflupyr	0.0020	U	ug/L	P444820	
		Carbamazepine	0.0012	I	ug/L	P444820	
		Clothianidin	0.0020	U	ug/L	P444820	
		Dinotefuran	0.0048	I	ug/L	P444820	
		Diuron	0.0020	U	ug/L	P444820	
		Fenuron	0.032	U	ug/L	P444820	
		Fluridone	0.013		ug/L	P444820	
		Imazapyr	0.26		ug/L	P444820	
		Hydrocodone	0.0020	U	ug/L	P444820	
		Ibuprofen	0.080	U	ug/L	P444820	

Field ID: G3SE0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2485875	EPA 8321B	Imidacloprid	0.0087		ug/L	P444820	
		Linuron	0.0020	U	ug/L	P444820	
		Mandestrobin	0.0020	U	ug/L	P444820	
		MCP	0.0020	U	ug/L	P444820	
		Naproxen	0.0080	U	ug/L	P444820	
		Primidone	0.0040	U	ug/L	P444820	
		Pyraclostrobin	0.0020	U	ug/L	P444820	
		Silvex	0.0040	U	ug/L	P444820	
		Thiamethoxam	0.0020	U	ug/L	P444820	
		Tolfenpyrad	0.0020	U	ug/L	P444820	
		Triclopyr	0.0040	U	ug/L	P444820	
2485879	EPA 200.7 Rev. 4.4	Calcium	86.6		mg/L	P445135	
		Iron	64	I	ug/L	P445135	
		Magnesium	12.2		mg/L	P445135	
		Potassium	5.2		mg/L	P445135	
		Sodium	78.3		mg/L	P445135	
		Strontium	999		ug/L	P445135	
		Tin	3.0	U	ug/L	P445135	
		Titanium	1.2	I	ug/L	P445135	
		Vanadium	2.7	I	ug/L	P445135	
		Zinc	5.0	U	ug/L	P445135	
	EPA 200.8 Rev. 5.4	Aluminum	23		ug/L	P445135	
		Antimony	0.20		ug/L	P445135	
		Arsenic	1.94		ug/L	P445135	
		Barium	29.1		ug/L	P445135	
		Beryllium	0.010	U	ug/L	P445135	
		Boron	83.1		ug/L	P445135	
		Cadmium	0.020	U	ug/L	P445135	
		Chromium	0.40	U	ug/L	P445135	
		Cobalt	0.089		ug/L	P445135	
		Copper	1.09		ug/L	P445135	
		Lead	0.20	U	ug/L	P445135	
		Manganese	11.1		ug/L	P445135	
		Molybdenum	3.11		ug/L	P445135	
		Nickel	0.50	U	ug/L	P445135	
		Selenium	0.25	I	ug/L	P445135	
		Silver	0.010	U	ug/L	P445135	
		Thallium	0.10	U	ug/L	P445135	
	SM 2340 B-2011	Hardness	266		mg/L	P445135	

Ref. Method and Comment:
EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: LAKE CLARKE OUTFLOW EAST OF PINE TREE LN Collection Date/Time: 04/30/2024 12:45

Field ID: G3SE0077 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2485841	DEP SOP: NU-094-1	Color (true)	50		PCU	P445072	
	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P445075	
	EPA 300.0 Rev. 2.1	Chloride	120		mg Cl/L	P445474	
		Sulfate	53		mg SO4/L	P445478	
	SM 2320 B-2011	Total Alkalinity	208		mg CaCO3/L	P445546	
	SM 2540 C-2015	TDS	590		mg/L	P445591	
	SM 2540 D-2015	TSS	7	I	mg/L	P445512	
	SM 4500-F- C-2011	Fluoride	0.23		mg F/L	P445550	
2485842	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P445223	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P445188	
	EPA 365.1 Rev. 2.0	Total-P	0.049		mg P/L	P445134	
	SM 5310 B-2014	Organic Carbon	17		mg C/L	P445383	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Non-Conformance Report

NCR ID: 10476

<u>Event(s)</u>	<u>Job(s)</u>	<u>Sample(s)</u>	<u>Test(s)</u>
SE-DIST-2024-05-01-02	TLH-2024-05-01-47		
NCR Type: CUSTODY		NCR Category: General	
Observation: After 05/09/2024, sample(s) were stored above room temperature for multiple days because of a power outage.			
Resolution: Customer elected not to receive Y and/or Q qualified data resulting from power outage, so any affected tests were removed or the sample was cancelled.			

Authorized by/Date: Sarah A Nixon 5/29/2024

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

ChemistryColin Wright(850) 245-8085
BiologyCheryl Swanson(850) 245-8177

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P445071

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P445072

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P445075

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P445135

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: P445135

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P445474

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P445478

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P445220

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P445223

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P445188

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445132

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445134

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

Reference Method: EPA 8321B
Batch ID: P444820

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P444820

Component	Result	Code	Units
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	4.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0020	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B

Batch ID: P444881

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: P445127

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P445249

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P445290

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

Reference Method: SM 2320 B-2011
Batch ID: P445546

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

Reference Method: SM 2540 C-2015
Batch ID: P445590

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015
Batch ID: P445591

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P445511

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P445512

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P445550

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P445603

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2014
Batch ID: P445382

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 5310 B-2014
Batch ID: P445383

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: P445071

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	95.6		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P445072

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	96.5		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P445075

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P445135

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	103		P	85 - 115
Magnesium	106		P	85 - 115
Potassium	98.7		P	85 - 115
Sodium	104		P	85 - 115
Strontium	100		P	85 - 115
Tin	99.5		P	85 - 115
Titanium	99.2		P	85 - 115
Vanadium	101		P	85 - 115
Zinc	99.4		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P445135

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	101		P	85 - 115
Barium	101		P	85 - 115
Beryllium	103		P	85 - 115
Boron	108		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	104		P	85 - 115
Cobalt	101		P	85 - 115
Copper	100		P	85 - 115
Lead	98.7		P	85 - 115
Manganese	103		P	85 - 115
Molybdenum	99.7		P	85 - 115
Nickel	102		P	85 - 115
Selenium	101		P	85 - 115
Silver	109		P	85 - 115
Thallium	98.8		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P445474

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P445478

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P445220

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P445223

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P445188

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445132

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445134

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

Reference Method: EPA 8321B
Batch ID: P444820

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	116		P	40 - 150
2,4,5-T	105		P	40 - 150
Acetaminophen	78.5		P	30 - 150
Acetamiprid	81.2		P	40 - 150
Afidopyropen	63.1		P	30 - 150
Bentazon	84.2		P	30 - 150
Benzovindiflupyr	73.8		P	40 - 150
Carbamazepine	80.0		P	40 - 150
Clothianidin	85.3		P	40 - 150
Dinotefuran	97.4		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P444820

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Diuron	73.7		P	40 - 150
Fenuron	92.1		P	40 - 150
Fluridone	84.6		P	40 - 150
Hydrocodone	89.3		P	40 - 150
Ibuprofen	76.4		P	40 - 150
Imazapyr	81.7		P	40 - 150
Imidacloprid	84.7		P	40 - 150
Linuron	75.2		P	40 - 150
Mandestrobin	68.4		P	40 - 150
MCPP	105		P	40 - 150
Naproxen	53.7		P	40 - 150
Primidone	83.7		P	40 - 150
Pyraclostrobin	66.9		P	40 - 150
Silvex	84.7		P	40 - 150
Thiamethoxam	93.5		P	40 - 150
Tolfenpyrad	47.6		P	30 - 150
Triclopyr	95.0		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P444881

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	96.8		P	40 - 150
AMPA	96.3		P	40 - 160
Endothall	108		P	40 - 160
Glufosinate	97.2		P	40 - 160
Glyphosate	85.7		P	40 - 160
Sucralose	99.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P445127

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	56.9		P	40 - 150
Aldicarb	41.6		P	30 - 150
Aldicarb Sulfone	103		P	40 - 150
Aldicarb Sulfoxide	129		P	40 - 150
Carbaryl	83.2		P	40 - 150
Carbofuran	83.3		P	40 - 150
Methiocarb	74.5		P	40 - 150
Methomyl	103		P	40 - 150
Oxamyl	103		P	40 - 150
Propoxur	81.2		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P445249

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.1		P	92 - 105

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P445290

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.6		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P445546

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	93 - 103

Reference Method: SM 2540 C-2015
Batch ID: P445590

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

Reference Method: SM 2540 C-2015
Batch ID: P445591

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

Reference Method: SM 2540 D-2015
Batch ID: P445511

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	99.2		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P445512

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	94.4		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P445550

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	106		P	95 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P445603

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.0		P	95 - 106

Reference Method: SM 5310 B-2014
Batch ID: P445382

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2014
Batch ID: P445383

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P445135

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485762	Calcium	98.6		P	80 - 120
2485762	Iron	102	102	P/P	80 - 120
2485762	Magnesium	103	102	P/P	80 - 120
2485762	Potassium	109	108	P/P	80 - 120
2485762	Sodium	103	104	P/P	80 - 120
2485762	Strontium	99.2	99.8	P/P	80 - 120
2485762	Tin	100	101	P/P	80 - 120
2485762	Titanium	102	102	P/P	80 - 120
2485762	Vanadium	105	105	P/P	80 - 120
2485762	Zinc	101	101	P/P	80 - 120
2486116	Calcium	101		P	80 - 120
2486116	Iron	102		P	80 - 120
2486116	Magnesium	104		P	80 - 120
2486116	Potassium	97.6		P	80 - 120
2486116	Sodium	101		P	80 - 120
2486116	Strontium	98.4		P	80 - 120
2486116	Tin	99.3		P	80 - 120
2486116	Titanium	101		P	80 - 120
2486116	Vanadium	104		P	80 - 120
2486116	Zinc	103		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P445135

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485762	Aluminum	100	103	P/P	80 - 120
2485762	Antimony	101	103	P/P	80 - 120
2485762	Arsenic	98.7	102	P/P	80 - 120
2485762	Barium	101	104	P/P	80 - 120
2485762	Beryllium	105	108	P/P	80 - 120
2485762	Boron	108	111	P/P	80 - 120
2485762	Cadmium	101	104	P/P	80 - 120
2485762	Chromium	102	104	P/P	80 - 120
2485762	Cobalt	97.8	101	P/P	80 - 120
2485762	Copper	95.6	96.9	P/P	80 - 120
2485762	Lead	98.2	100	P/P	80 - 120
2485762	Manganese	101	105	P/P	80 - 120
2485762	Molybdenum	101	103	P/P	80 - 120
2485762	Nickel	97.6	99.8	P/P	80 - 120
2485762	Selenium	98.6	99.6	P/P	80 - 120
2485762	Silver	111	112	P/P	80 - 120
2485762	Thallium	100	102	P/P	80 - 120
2486116	Aluminum	102		P	80 - 120
2486116	Antimony	102		P	80 - 120
2486116	Arsenic	101		P	80 - 120
2486116	Barium	101		P	80 - 120
2486116	Beryllium	107		P	80 - 120
2486116	Boron	108		P	80 - 120
2486116	Cadmium	103		P	80 - 120
2486116	Chromium	104		P	80 - 120
2486116	Cobalt	100		P	80 - 120
2486116	Copper	100		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P445135

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2486116	Lead	101		P	80 - 120
2486116	Manganese	103		P	80 - 120
2486116	Molybdenum	102		P	80 - 120
2486116	Nickel	98.9		P	80 - 120
2486116	Selenium	99.9		P	80 - 120
2486116	Silver	108		P	80 - 120
2486116	Thallium	101		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P445474

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485839	Chloride	100		P	90 - 110
2485889	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P445478

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485839	Sulfate	97.1		P	90 - 110
2485889	Sulfate	97.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P445223

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485845	Ammonia-N	93.2	94.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P445188

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485828	Kjeldahl Nitrogen	101	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445132

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485830	Total-P	100	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445134

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485845	Total-P	101	103	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P444820

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485280	2,4-D	113	126	P/P	40 - 150
2485280	2,4,5-T	115	120	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P444820

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485280	Acetaminophen	104	108	P/P	30 - 150
2485280	Acetamiprid	62.3	73.5	P/P	40 - 150
2485280	Afidopyropen	47.4	61.2	P/P	30 - 150
2485280	Bentazon	55.0	54.7	P/P	30 - 150
2485280	Benzovindiflupyr	79.3	77.7	P/P	40 - 150
2485280	Carbamazepine	69.7	70.2	P/P	40 - 150
2485280	Clothianidin	96.2	101	P/P	40 - 150
2485280	Dinotefuran	111	115	P/P	40 - 150
2485280	Diuron	60.9	57.3	P/P	40 - 150
2485280	Fenuron	70.7	72.9	P/P	40 - 150
2485280	Hydrocodone	90.0	88.9	P/P	40 - 150
2485280	Ibuprofen	72.9	64.5	P/P	40 - 150
2485280	Imidacloprid	112	112	P/P	40 - 150
2485280	Linuron	73.0	77.2	P/P	40 - 150
2485280	Mandestrobin	68.4	67.4	P/P	40 - 150
2485280	MCP	108	110	P/P	40 - 150
2485280	Naproxen	58.4	70.0	P/P	40 - 150
2485280	Primidone	88.9	92.4	P/P	40 - 150
2485280	Pyraclostrobin	75.6	74.8	P/P	40 - 150
2485280	Silvex	91.6	94.8	P/P	40 - 150
2485280	Thiamethoxam	112	118	P/P	40 - 150
2485280	Tolfenpyrad	55.9	55.9	P/P	30 - 150
2485280	Triclopyr	99.2	107	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P444881

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485412	Acesulfame K	105	108	P/P	40 - 150
2485412	AMPA	102	97.9	P/P	40 - 160
2485412	Endothall	121	125	P/P	40 - 160
2485412	Glufosinate	97.4	98.7	P/P	40 - 160
2485412	Glyphosate	88.0	87.9	P/P	40 - 160
2485412	Sucralose	91.5	96.4	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P445127

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485874	3-Hydroxycarbofuran	85.4	73.1	P/P	40 - 150
2485874	Aldicarb	48.3	42.5	P/P	30 - 150
2485874	Aldicarb Sulfone	93.1	88.8	P/P	40 - 150
2485874	Aldicarb Sulfoxide	35.0	33.2	F/F	40 - 150
2485874	Carbaryl	61.0	60.2	P/P	40 - 150
2485874	Carbofuran	51.1	49.7	P/P	40 - 150
2485874	Methiocarb	74.3	74.0	P/P	40 - 150
2485874	Methomyl	82.9	79.1	P/P	40 - 150
2485874	Oxamyl	88.2	85.3	P/P	40 - 150
2485874	Propoxur	52.7	47.0	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P445550

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2486331	Fluoride	105	104	P/P	95 - 107

Reference Method: SM 4500-F- C-2011
Batch ID: P445603

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485831	Fluoride	99.7	101	P/P	95 - 107

Reference Method: SM 5310 B-2014
Batch ID: P445382

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485747	Organic Carbon	98.1	98.8	P/P	85 - 115

Reference Method: SM 5310 B-2014
Batch ID: P445383

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2485832	Organic Carbon	100	103	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P445071

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485768	Color (true)	1.67	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P445072

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485829	Color (true)	0.455	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P445075

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485745	Turbidity	7.15	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P445135

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485762	Calcium	0.167	Spike	P	0 - 20
2485762	Iron	0.305	Spike	P	0 - 20
2485762	Magnesium	0.736	Spike	P	0 - 20
2485762	Potassium	0.519	Spike	P	0 - 20
2485762	Sodium	0.160	Spike	P	0 - 20
2485762	Strontium	0.540	Spike	P	0 - 20
2485762	Tin	1.03	Spike	P	0 - 20
2485762	Titanium	0.527	Spike	P	0 - 20
2485762	Vanadium	0.00943	Spike	P	0 - 20
2485762	Zinc	0.525	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P445135

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485762	Aluminum	2.61	Spike	P	0 - 20
2485762	Antimony	2.14	Spike	P	0 - 20
2485762	Arsenic	2.78	Spike	P	0 - 20
2485762	Barium	2.32	Spike	P	0 - 20
2485762	Beryllium	3.32	Spike	P	0 - 20
2485762	Boron	2.54	Spike	P	0 - 20
2485762	Cadmium	2.13	Spike	P	0 - 20
2485762	Chromium	2.66	Spike	P	0 - 20
2485762	Cobalt	3.11	Spike	P	0 - 20
2485762	Copper	1.26	Spike	P	0 - 20
2485762	Lead	2.07	Spike	P	0 - 20
2485762	Manganese	2.94	Spike	P	0 - 20
2485762	Molybdenum	2.10	Spike	P	0 - 20
2485762	Nickel	2.21	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P445135

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485762	Selenium	0.951	Spike	P	0 - 20
2485762	Silver	1.43	Spike	P	0 - 20
2485762	Thallium	2.17	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P445474

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485839	Chloride	1.49	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P445478

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485839	Sulfate	1.15	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P445220

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485769	Ammonia-N	0.0	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P445223

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485845	Ammonia-N	1.42	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P445188

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485828	Kjeldahl Nitrogen	4.20	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445132

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485830	Total-P	2.29	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445134

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445134

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485845	Total-P	1.88	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P444820

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485280	2,4-D	9.26	Spike	P	0 - 30
2485280	2,4,5-T	4.08	Spike	P	0 - 30
2485280	Acetaminophen	4.54	Spike	P	0 - 30
2485280	Acetamiprid	16.5	Spike	P	0 - 30
2485280	Afidopyropen	25.4	Spike	P	0 - 30
2485280	Bentazon	0.198	Spike	P	0 - 30
2485280	Benzovindiflupyr	2.15	Spike	P	0 - 30
2485280	Carbamazepine	0.644	Spike	P	0 - 30
2485280	Clothianidin	5.33	Spike	P	0 - 30
2485280	Dinotefuran	3.38	Spike	P	0 - 30
2485280	Diuron	5.97	Spike	P	0 - 30
2485280	Fenuron	2.98	Spike	P	0 - 30
2485280	Fluridone	6.69	Spike	P	0 - 30
2485280	Hydrocodone	1.22	Spike	P	0 - 30
2485280	Ibuprofen	12.3	Spike	P	0 - 30
2485280	Imazapyr	4.21	Spike	P	0 - 30
2485280	Imidacloprid	0.308	Spike	P	0 - 30
2485280	Linuron	5.58	Spike	P	0 - 30
2485280	Mandestrobin	1.50	Spike	P	0 - 30
2485280	MCP	1.82	Spike	P	0 - 30
2485280	Naproxen	18.1	Spike	P	0 - 30
2485280	Primidone	3.87	Spike	P	0 - 30
2485280	Pyraclostrobin	0.994	Spike	P	0 - 30
2485280	Silvex	3.51	Spike	P	0 - 30
2485280	Thiamethoxam	5.21	Spike	P	0 - 30
2485280	Tolfenpyrad	0.0233	Spike	P	0 - 30
2485280	Triclopyr	7.53	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P444881

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485412	Acesulfame K	2.10	Spike	P	0 - 30
2485412	AMPA	3.68	Spike	P	0 - 30
2485412	Endothall	3.24	Spike	P	0 - 30
2485412	Glufosinate	1.24	Spike	P	0 - 30
2485412	Glyphosate	0.125	Spike	P	0 - 30
2485412	Sucralose	5.03	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P445127

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485874	3-Hydroxycarbofuran	15.5	Spike	P	0 - 30
2485874	Aldicarb	12.7	Spike	P	0 - 30
2485874	Aldicarb Sulfone	4.73	Spike	P	0 - 30
2485874	Aldicarb Sulfoxide	5.52	Spike	P	0 - 30
2485874	Carbaryl	1.27	Spike	P	0 - 30
2485874	Carbofuran	2.82	Spike	P	0 - 30
2485874	Methiocarb	0.425	Spike	P	0 - 30
2485874	Methomyl	3.94	Spike	P	0 - 30
2485874	Oxamyl	3.35	Spike	P	0 - 30
2485874	Propoxur	11.5	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P445249

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485288	Total Alkalinity	3.43	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P445290

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485839	Total Alkalinity	0.347	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P445546

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2486331	Total Alkalinity	0.00355	Sample	P	0 - 4.1

Reference Method: SM 2540 C-2015
Batch ID: P445590

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485595	TDS	4.71	Sample	P	0 - 10

Reference Method: SM 2540 C-2015
Batch ID: P445591

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485839	TDS	5.48	Sample	P	0 - 10

Reference Method: SM 2540 D-2015
Batch ID: P445511

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

Reference Method: SM 2540 D-2015
Batch ID: P445511

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485595	TSS	5.03	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P445550

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2486331	Fluoride	0.470	Spike	P	0 - 1.7

Reference Method: SM 4500-F- C-2011
Batch ID: P445603

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485831	Fluoride	1.06	Spike	P	0 - 1.7

Reference Method: SM 5310 B-2014
Batch ID: P445382

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485747	Organic Carbon	0.443	Spike	P	0 - 15

Reference Method: SM 5310 B-2014
Batch ID: P445383

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2485832	Organic Carbon	2.69	Spike	P	0 - 15

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2485874
Field Sample ID: G3SE0043

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	53.7	P	30 - 160

Lab Sample ID: 2485875
Field Sample ID: G3SE0043

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	95.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	113	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.1	P	30 - 160
EPA 8321B	Diuron-d6	52.7	P	30 - 160
EPA 8321B	Endothall-d6	147	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	68.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.5	P	30 - 160
EPA 8321B	Primidone-d5	95.8	P	30 - 160
EPA 8321B	Sucralose-d6	91.5	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A125623

Included Lab Sample IDs: 2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	95.8	97.6	P/P	90 - 110
Color (true)	97.6	97.3	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A125626

Included Lab Sample IDs: 2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.5	P/P	95 - 105
Turbidity	99.5	99.0	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A125656

Included Lab Sample IDs: 2485875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	102	109	P/P	60 - 160
Endothall	119	123	P/P	60 - 160
Glufosinate	95.5	116	P/P	60 - 160
Glyphosate	92.3	99.3	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A125664

Included Lab Sample IDs: 2485830, 2485832, 2485834, 2485836, 2485838, 2485840

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	101	P/P	90 - 110
Total-P	101	101	P/P	90 - 110
Total-P	99.8	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A125668

Included Lab Sample IDs: 2485828, 2485842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	100	P/P	90 - 110
Total-P	99.0	99.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A125671

Included Lab Sample IDs: 2485828, 2485830, 2485832, 2485834, 2485836, 2485838, 2485840, 2485842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	102	P/P	90 - 110
Ammonia-N	102	101	P/P	90 - 110
Ammonia-N	99.5	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A125680

Included Lab Sample IDs: 2485827, 2485829, 2485831, 2485833, 2485835, 2485837

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.0	100	P/P	90 - 110
Total Alkalinity	99.1	96.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A125681

Included Lab Sample IDs: 2485875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	90.4	103	P/P	60 - 160
Sucralose	95.5	96.4	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A125682

Included Lab Sample IDs: 2485878, 2485879

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	103	P/P	90 - 110
Antimony	97.8	99.6	P/P	90 - 110
Arsenic	99.1	100	P/P	90 - 110
Barium	98.5	99.4	P/P	90 - 110
Beryllium	97.8	104	P/P	90 - 110
Boron	105	105	P/P	90 - 110
Cadmium	98.2	100	P/P	90 - 110
Chromium	101	102	P/P	90 - 110
Cobalt	99.7	100	P/P	90 - 110
Copper	99.1	100	P/P	90 - 110
Lead	98.5	99.6	P/P	90 - 110
Manganese	102	103	P/P	90 - 110
Molybdenum	97.7	99.2	P/P	90 - 110
Nickel	99.8	100	P/P	90 - 110
Selenium	98.0	99.7	P/P	90 - 110
Silver	96.4	98.3	P/P	90 - 110
Thallium	99.9	101	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A125685

Included Lab Sample IDs: 2485878, 2485879

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	99.9	P/P	90 - 110
Iron	101	99.1	P/P	90 - 110
Magnesium	102	99.8	P/P	90 - 110
Potassium	102	102	P/P	90 - 110
Sodium	102	101	P/P	90 - 110
Strontium	102	104	P/P	90 - 110
Tin	100	100	P/P	90 - 110
Titanium	99.0	98.0	P/P	90 - 110
Vanadium	102	103	P/P	90 - 110
Zinc	101	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A125704

Included Lab Sample IDs: 2485839

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.2	99.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A125705

Included Lab Sample IDs: 2485828, 2485830, 2485832, 2485834, 2485836, 2485838, 2485840, 2485842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.4	103	P/P	90 - 110

Reference Method: SM 5310 B-2014

Run ID: A125736

Included Lab Sample IDs: 2485828, 2485830, 2485832, 2485834, 2485836, 2485838, 2485840, 2485842

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.4	98.8	P/P	85 - 115
Organic Carbon	98.8	112	P/P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A125768

Included Lab Sample IDs: 2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841

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

Reference Method: SM 2320 B-2011

Run ID: A125801

Included Lab Sample IDs: 2485841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.1	91.9	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A125801

Included Lab Sample IDs: 2485841

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

Reference Method: EPA 8321B

Run ID: A125818

Included Lab Sample IDs: 2485875

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	111	104	P/P	50 - 150
2,4,5-T	106	106	P/P	50 - 150
3-Hydroxycarbofuran	111	106	P/P	60 - 150
Acetaminophen	110	117	P/P	60 - 160
Acetamiprid	121	118	P/P	50 - 150
Afidopyropen	108	102	P/P	50 - 150
Aldicarb	111	124	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A125818
Included Lab Sample IDs: 2485874

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldicarb Sulfone	117	122	P/P	50 - 150
Aldicarb Sulfoxide	113	112	P/P	50 - 150
Bentazon	107	103	P/P	50 - 160
Benzovindiflupyr	112	112	P/P	50 - 150
Carbamazepine	115	114	P/P	60 - 150
Carbaryl	114	113	P/P	60 - 150
Carbofuran	115	120	P/P	50 - 150
Clothianidin	107	109	P/P	60 - 150
Dinotefuran	119	124	P/P	50 - 150
Diuron	118	115	P/P	60 - 160
Fenuron	118	117	P/P	60 - 150
Fluridone	125	105	P/P	60 - 160
Hydrocodone	120	115	P/P	60 - 150
Ibuprofen	101	85.7	P/P	50 - 160
Imazapyr	92.7	94.4	P/P	50 - 150
Imidacloprid	105	105	P/P	60 - 150
Linuron	120	137	P/P	60 - 150
Mandestrobin	109	101	P/P	50 - 150
MCPP	96.5	98.3	P/P	50 - 150
Methiocarb	126	118	P/P	50 - 150
Methomyl	118	123	P/P	50 - 150
Naproxen	109	99.3	P/P	50 - 160
Oxamyl	118	118	P/P	50 - 150
Primidone	109	105	P/P	60 - 150
Propoxur	112	125	P/P	50 - 150
Pyraclostrobin	104	106	P/P	60 - 150
Silvex	95.2	90.9	P/P	50 - 150
Thiamethoxam	122	121	P/P	50 - 150
Tolfenpyrad	108	98.3	P/P	60 - 150
Triclopyr	92.6	99.5	P/P	50 - 150

Reference Method: SM 4500-F- C-2011
Run ID: A125829
Included Lab Sample IDs: 2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839

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

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	95.6				1.67	
	Color (true)	96.5				0.455	
EPA 180.1 Rev. 2.0	Turbidity	103				7.15	
EPA 200.7 Rev. 4.4	Calcium	101	98.6	101			0.167
	Iron	103	102	102	102		0.305
	Magnesium	106	103	102	104		0.736
	Potassium	98.7	109	108	97.6		0.519
	Sodium	104	103	104	101		0.160
	Strontium	100	99.2	99.8	98.4		0.540
	Tin	99.5	100	101	99.3		1.03
	Titanium	99.2	102	102	101		0.527
	Vanadium	101	105	105	104		0.0094
	Zinc	99.4	101	101	103		0.525
EPA 200.8 Rev. 5.4	Aluminum	102	100	103	102		2.61
	Antimony	101	101	103	102		2.14
	Arsenic	101	98.7	102	101		2.78
	Barium	101	101	104	101		2.32
	Beryllium	103	105	108	107		3.32
	Boron	108	108	111	108		2.54
	Cadmium	101	101	104	103		2.13
	Chromium	104	102	104	104		2.66
	Cobalt	101	97.8	101	100		3.11
	Copper	100	95.6	96.9	100		1.26
	Lead	98.7	98.2	100	101		2.07
	Manganese	103	101	105	103		2.94
	Molybdenum	99.7	101	103	102		2.10
	Nickel	102	97.6	99.8	98.9		2.21
	Selenium	101	98.6	99.6	99.9		0.951
	Silver	109	111	112	108		1.43
	Thallium	98.8	100	102	101		2.17
EPA 300.0 Rev. 2.1	Chloride	103	100	101		1.49	
	Sulfate	101	97.1	97.1		1.15	
EPA 350.1 Rev. 2.0	Ammonia-N	95.0					0.0
	Ammonia-N	94.8	93.2	94.6			1.42
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100	101	107			4.20
EPA 365.1 Rev. 2.0	Total-P	100	100	103			2.29
	Total-P	102	101	103			1.88
EPA 8321B	2,4-D	116	113	126			9.26
	2,4,5-T	105	115	120			4.08
	3-Hydroxycarbofuran	56.9	85.4	73.1			15.5
	Acesulfame K	96.8	105	108			2.10
	Acetaminophen	78.5	104	108			4.54
	Acetamiprid	81.2	62.3	73.5			16.5
	Afidopyropen	63.1	47.4	61.2			25.4
	Aldicarb	41.6	48.3	42.5			12.7
	Aldicarb Sulfone	103	93.1	88.8			4.73
	Aldicarb Sulfoxide	129	35.0	33.2			5.52
	AMPA	96.3	102	97.9			3.68
	Bentazon	84.2	55.0	54.7			0.198
	Benzovindiflupyr	73.8	79.3	77.7			2.15
	Carbamazepine	80.0	69.7	70.2			0.644
	Carbaryl	83.2	61.0	60.2			1.27
	Carbofuran	83.3	51.1	49.7			2.82
	Clothianidin	85.3	96.2	101			5.33

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	Dinotefuran	97.4	111	115		3.38
	Diuron	73.7	60.9	57.3		5.97
	Endothall	108	121	125		3.24
	Fenuron	92.1	70.7	72.9		2.98
	Fluridone	84.6				6.69
	Glufosinate	97.2	97.4	98.7		1.24
	Glyphosate	85.7	88.0	87.9		0.125
	Hydrocodone	89.3	90.0	88.9		1.22
	Ibuprofen	76.4	72.9	64.5		12.3
	Imazapyr	81.7				4.21
	Imidacloprid	84.7	112	112		0.308
	Linuron	75.2	73.0	77.2		5.58
	Mandestrobin	68.4	68.4	67.4		1.50
	MCPPP	105	108	110		1.82
	Methiocarb	74.5	74.3	74.0		0.425
	Methomyl	103	82.9	79.1		3.94
	Naproxen	53.7	58.4	70.0		18.1
	Oxamyl	103	88.2	85.3		3.35
	Primidone	83.7	88.9	92.4		3.87
	Propoxur	81.2	52.7	47.0		11.5
	Pyraclostrobin	66.9	75.6	74.8		0.994
	Silvex	84.7	91.6	94.8		3.51
	Sucralose	99.9	91.5	96.4		5.03
	Thiamethoxam	93.5	112	118		5.21
	Tolfenpyrad	47.6	55.9	55.9		0.0233
	Triclopyr	95.0	99.2	107		7.53
SM 2320 B-2011	Total Alkalinity	95.1				3.43
	Total Alkalinity	98.6				0.347
	Total Alkalinity	101				0.0035
SM 2540 C-2015	TDS	95.2				4.71
	TDS	95.6				5.48
SM 2540 D-2015	TSS	99.2				5.03
	TSS	94.4				
SM 4500-F- C-2011	Fluoride	106	105	104		0.470
	Fluoride	96.0	99.7	101		1.06
SM 5310 B-2014	Organic Carbon	102	98.1	98.8		0.443
	Organic Carbon	102	100	103		2.69

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2485878, 2485879
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2485878, 2485879
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841

Reference Method Descriptions

Method	Description	Associated Samples
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2485828, 2485830, 2485832, 2485834, 2485836, 2485838, 2485840, 2485842
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2485828, 2485830, 2485832, 2485834, 2485836, 2485838, 2485840, 2485842
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2485828, 2485830, 2485832, 2485834, 2485836, 2485838, 2485840, 2485842
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2485874
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2485875
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2485878, 2485879
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2485828, 2485830, 2485832, 2485834, 2485836, 2485838, 2485840, 2485842

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	05/01/2024			05/01/2024 15:36	Samantha L Bates	2485827
	05/01/2024			05/01/2024 15:39	Samantha L Bates	2485829, 2485831
	05/01/2024			05/01/2024 15:40	Samantha L Bates	2485833, 2485835
	05/01/2024			05/01/2024 15:41	Samantha L Bates	2485837, 2485839
	05/01/2024			05/01/2024 15:42	Samantha L Bates	2485841
EPA 180.1 Rev. 2.0	05/01/2024			05/01/2024 15:13	Jessica K Wilks	2485827
	05/01/2024			05/01/2024 15:16	Jessica K Wilks	2485829
	05/01/2024			05/01/2024 15:18	Jessica K Wilks	2485831
	05/01/2024			05/01/2024 15:19	Jessica K Wilks	2485833
	05/01/2024			05/01/2024 15:20	Jessica K Wilks	2485835
	05/01/2024			05/01/2024 15:21	Jessica K Wilks	2485837
	05/01/2024			05/01/2024 15:22	Jessica K Wilks	2485839
	05/01/2024			05/01/2024 15:23	Jessica K Wilks	2485841
	05/01/2024					
	05/01/2024					
EPA 200.7 Rev. 4.4	05/01/2024	05/02/2024 13:10	George D Taylor	05/03/2024 14:56	Chase Roberts	2485878
	05/01/2024	05/02/2024 13:10	George D Taylor	05/03/2024 15:04	Chase Roberts	2485879
EPA 200.8 Rev. 5.4	05/01/2024	05/02/2024 13:10	George D Taylor	05/03/2024 16:10	McKinley C Carter	2485878
	05/01/2024	05/02/2024 13:10	George D Taylor	05/03/2024 16:19	McKinley C Carter	2485879
EPA 300.0 Rev. 2.1	05/01/2024			05/07/2024 19:11	James L Waggeberby	2485839
	05/01/2024			05/07/2024 20:11	James L Waggeberby	2485827
	05/01/2024			05/07/2024 20:26	James L Waggeberby	2485829
	05/01/2024			05/07/2024 20:41	James L Waggeberby	2485831
	05/01/2024			05/07/2024 20:56	James L Waggeberby	2485833
	05/01/2024			05/07/2024 21:12	James L Waggeberby	2485835
	05/01/2024			05/07/2024 21:27	James L Waggeberby	2485837
	05/01/2024			05/07/2024 21:42	James L Waggeberby	2485841
EPA 350.1 Rev. 2.0	05/01/2024			05/03/2024 12:08	Kenneth H Lee	2485828
	05/01/2024			05/03/2024 12:09	Kenneth H Lee	2485830
	05/01/2024			05/03/2024 13:21	Kenneth H Lee	2485834
	05/01/2024			05/03/2024 13:22	Kenneth H Lee	2485836
	05/01/2024			05/03/2024 13:24	Kenneth H Lee	2485838
	05/01/2024			05/03/2024 13:25	Kenneth H Lee	2485840
	05/01/2024			05/03/2024 13:26	Kenneth H Lee	2485842
	05/01/2024			05/03/2024 13:44	Kenneth H Lee	2485832
EPA 351.2 Rev. 2.0	05/01/2024	05/03/2024 13:14	Ping Hua	05/06/2024 15:30	Samantha L Bates	2485828
	05/01/2024	05/03/2024 13:14	Ping Hua	05/06/2024 15:35	Samantha L Bates	2485830
	05/01/2024	05/03/2024 13:14	Ping Hua	05/06/2024 15:37	Samantha L Bates	2485832
	05/01/2024	05/03/2024 13:14	Ping Hua	05/06/2024 15:38	Samantha L Bates	2485834
	05/01/2024	05/03/2024 13:14	Ping Hua	05/06/2024 15:40	Samantha L Bates	2485836
	05/01/2024	05/03/2024 13:14	Ping Hua	05/06/2024 15:42	Samantha L Bates	2485838
	05/01/2024	05/03/2024 13:14	Ping Hua	05/06/2024 15:43	Samantha L Bates	2485840

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 351.2 Rev. 2.0	05/01/2024	05/03/2024 13:14	Ping Hua	05/06/2024 15:45	Samantha L Bates	2485842
EPA 365.1 Rev. 2.0	05/01/2024	05/02/2024 13:57	Josephine W Gitau	05/03/2024 10:54	Simonne.V. Calhoun	2485830
	05/01/2024	05/02/2024 13:57	Josephine W Gitau	05/03/2024 11:03	Simonne.V. Calhoun	2485832
	05/01/2024	05/02/2024 13:57	Josephine W Gitau	05/03/2024 11:04	Simonne.V. Calhoun	2485834
	05/01/2024	05/02/2024 13:57	Josephine W Gitau	05/03/2024 11:05	Simonne.V. Calhoun	2485836
	05/01/2024	05/02/2024 13:57	Josephine W Gitau	05/03/2024 11:06	Simonne.V. Calhoun	2485838
	05/01/2024	05/02/2024 13:57	Josephine W Gitau	05/03/2024 11:24	Simonne.V. Calhoun	2485840
	05/01/2024	05/02/2024 13:57	Josephine W Gitau	05/03/2024 12:01	Simonne.V. Calhoun	2485828
	05/01/2024	05/02/2024 13:57	Josephine W Gitau	05/03/2024 12:19	Simonne.V. Calhoun	2485842
	05/01/2024	05/02/2024 09:00	Hoor Shaik	05/10/2024 07:02	Juyoung Kim	2485875
	05/01/2024	05/02/2024 11:30	Tae K Lee	05/02/2024 16:57	Tae K Lee	2485875
EPA 8321B	05/01/2024	05/02/2024 11:30	Tae K Lee	05/03/2024 18:51	Tae K Lee	2485875
	05/01/2024	05/07/2024 09:00	Hoor Shaik	05/10/2024 10:18	Juyoung Kim	2485874
	05/01/2024			05/04/2024 02:08	Dale L. Simmons	2485827
	05/01/2024			05/04/2024 02:21	Dale L. Simmons	2485829
	05/01/2024			05/04/2024 02:33	Dale L. Simmons	2485831
	05/01/2024			05/04/2024 02:44	Dale L. Simmons	2485833
	05/01/2024			05/04/2024 02:55	Dale L. Simmons	2485835
	05/01/2024			05/04/2024 03:40	Dale L. Simmons	2485837
	05/01/2024			05/06/2024 16:53	Dale L. Simmons	2485839
	05/01/2024			05/10/2024 03:41	Dale L. Simmons	2485841
SM 2320 B-2011	05/01/2024			05/03/2024 14:56	Chase Roberts	2485878
	05/01/2024			05/03/2024 15:04	Chase Roberts	2485879
SM 2340 B-2011	05/01/2024			05/03/2024 15:46	Yijie Li	2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841
SM 2540 C-2015	05/01/2024			05/03/2024 15:46	Yijie Li	2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841
SM 2540 D-2015	05/01/2024			05/03/2024 15:46	Yijie Li	2485827, 2485829, 2485831, 2485833, 2485835, 2485837, 2485839, 2485841
SM 4500-F- C-2011	05/01/2024			05/10/2024 03:41	Dale L. Simmons	2485841
	05/01/2024			05/21/2024 16:21	Dale L. Simmons	2485831
	05/01/2024			05/21/2024 17:59	Dale L. Simmons	2485827
	05/01/2024			05/21/2024 18:04	Dale L. Simmons	2485829
	05/01/2024			05/21/2024 18:09	Dale L. Simmons	2485833
	05/01/2024			05/21/2024 18:15	Dale L. Simmons	2485835
	05/01/2024			05/21/2024 18:20	Dale L. Simmons	2485837
	05/01/2024			05/21/2024 18:25	Dale L. Simmons	2485839
	05/01/2024			05/07/2024 00:50	Jessica K Wilks	2485828
	05/01/2024			05/07/2024 01:04	Jessica K Wilks	2485830
SM 5310 B-2014	05/01/2024			05/07/2024 02:20	Jessica K Wilks	2485832
	05/01/2024			05/07/2024 03:05	Jessica K Wilks	2485834
	05/01/2024			05/07/2024 03:20	Jessica K Wilks	2485836
	05/01/2024			05/07/2024 03:20	Jessica K Wilks	2485836

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2014	05/01/2024			05/07/2024 03:34	Jessica K Wilks	2485838
	05/01/2024			05/07/2024 03:49	Jessica K Wilks	2485840
	05/01/2024			05/07/2024 04:04	Jessica K Wilks	2485842