

Chemical Analysis Report

SE-DIST-2024-04-09-01

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

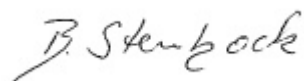
Event Description: **SMP - Turkey Creek**
Request ID: **RQ-2024-03-04-68**
Customer: **SE-DIST**
Project ID: **SMP**

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

For additional information please contact
Colin Wright, Ph.D.
Chris Bowen, B.S.
Marek Topolski, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 29-APR-2024 17:18



Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: NORTH DITCH NEAR BOTTLEBRUSH DR Collection Date/Time: 04/08/2024 09:30

Field ID: G5SE0135 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480670	DEP SOP: NU-094-1	Color (true)	84		PCU	P444011	
	EPA 180.1 Rev. 2.0	Turbidity	7.1		NTU	P444016	
	EPA 300.0 Rev. 2.1	Chloride	190		mg Cl/L	P444324	
		Sulfate	37		mg SO4/L	P444327	
	SM 2320 B-2011	Total Alkalinity	91		mg CaCO3/L	P444228	
	SM 2540 C-2015	TDS	524		mg/L	P444536	
	SM 2540 D-2015	TSS	10		mg/L	P444433	
	SM 4500-F- C-2011	Fluoride	0.067	I	mg F/L	P444232	
2480671	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P444061	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.83		mg N/L	P443993	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.042		mg N/L	P444215	
	EPA 365.1 Rev. 2.0	Total-P	0.033		mg P/L	P444065	
	SM 5310 B-2014	Organic Carbon	19		mg C/L	P444173	
2480735	EPA 8321B	Acesulfame K	0.10	U	ug/L	P443967	
		2,4-D	0.017		ug/L	P443976	MS
		AMPA	0.18	I	ug/L	P443967	
		2,4,5-T	0.0040	U	ug/L	P443976	
		Acetaminophen	0.0080	U	ug/L	P443976	
		Endothall	0.25	U	ug/L	P443967	
		Acetamiprid	0.0020	U	ug/L	P443976	
		Glufosinate	0.10	U	ug/L	P443967	
		Glyphosate	1.1	Q	ug/L	P443967	
		Afidopyropen	0.0020	U	ug/L	P443976	
		Sucralose	0.14		ug/L	P443967	
		Bentazon	0.24		ug/L	P443976	
		Benzovindiflupyr	0.0020	U	ug/L	P443976	
		Carbamazepine	8.0E-04	U	ug/L	P443976	
		Clothianidin	0.0020	U	ug/L	P443976	
		Dinotefuran	0.0020	U	ug/L	P443976	
		Diuron	0.0032	I	ug/L	P443976	
		Fenuron	0.032	U	ug/L	P443976	
		Fluridone	0.0011	I	ug/L	P443976	
		Imazapyr	1.0		ug/L	P443976	
		Hydrocodone	0.0020	U	ug/L	P443976	
		Ibuprofen	0.080	U	ug/L	P443976	
		Imidacloprid	0.0020	U	ug/L	P443976	
		Linuron	0.0040	U	ug/L	P443976	
		Mandestrobin	0.0020	U	ug/L	P443976	
		MCPP	0.0020	U	ug/L	P443976	
		Naproxen	0.0080	U	ug/L	P443976	
		Primidone	0.0040	U	ug/L	P443976	
		Pyraclostrobin	0.0020	U	ug/L	P443976	
		Silvex	0.0040	U	ug/L	P443976	
		Thiamethoxam	0.0020	U	ug/L	P443976	

Field ID: G5SE0135

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480735	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P443976	
		Triclopyr	0.0040	U	ug/L	P443976	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Glyphosate analyzed beyond holding time due to technical difficulties.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: NORTH PRONG TURKEY CREEK TURKEY
CREEK TRAIL

Collection Date/Time: 04/08/2024 09:50

Field ID: G5SE0136

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480674	DEP SOP: NU-094-1	Color (true)	63		PCU	P444011	
	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P444016	
	EPA 300.0 Rev. 2.1	Chloride	260		mg Cl/L	P444324	
		Sulfate	50		mg SO4/L	P444327	
	SM 2320 B-2011	Total Alkalinity	160		mg CaCO3/L	P444228	
	SM 2540 C-2015	TDS	808		mg/L	P444536	
	SM 2540 D-2015	TSS	3	I	mg/L	P444433	
	SM 4500-F- C-2011	Fluoride	0.16		mg F/L	P444232	
2480675	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P444196	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.66		mg N/L	P443993	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P444215	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P444065	
	SM 5310 B-2014	Organic Carbon	16		mg C/L	P444173	
2480737	EPA 8321B	Acesulfame K	0.10	U	ug/L	P443967	
		2,4-D	0.0033	I	ug/L	P443976	MS
		AMPA	0.17	I	ug/L	P443967	
		2,4,5-T	0.0040	U	ug/L	P443976	
		Acetaminophen	0.0080	U	ug/L	P443976	
		Endothall	1.5		ug/L	P443967	
		Acetamiprid	0.0020	U	ug/L	P443976	
		Glufosinate	0.10	U	ug/L	P443967	
		Glyphosate	1.1	Q	ug/L	P443967	
		Afidopyropen	0.0020	U	ug/L	P443976	
		Sucralose	0.19		ug/L	P443967	
		Bentazon	0.097		ug/L	P443976	
		Benzovindiflupyr	0.0020	U	ug/L	P443976	
		Carbamazepine	8.0E-04	U	ug/L	P443976	
		Clothianidin	0.0020	U	ug/L	P443976	
		Dinotefuran	0.0020	U	ug/L	P443976	
		Diuron	0.0020	U	ug/L	P443976	
		Fenuron	0.032	U	ug/L	P443976	
		Fluridone	0.0035		ug/L	P443976	
		Imazapyr	0.55		ug/L	P443976	
		Hydrocodone	0.0020	U	ug/L	P443976	
		Ibuprofen	0.080	U	ug/L	P443976	
		Imidacloprid	0.0020	U	ug/L	P443976	
		Linuron	0.0040	U	ug/L	P443976	
		Mandestrobin	0.0020	U	ug/L	P443976	
		MCP	0.0020	U	ug/L	P443976	
		Naproxen	0.0080	U	ug/L	P443976	
		Primidone	0.0040	U	ug/L	P443976	
		Pyraclostrobin	0.0020	U	ug/L	P443976	
		Silvex	0.0040	U	ug/L	P443976	

Field ID: G5SE0136

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480737	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P443976	
		Tolfenpyrad	0.0020	U	ug/L	P443976	
		Triclopyr	0.0040	U	ug/L	P443976	

Ref. Method and Comment:

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

EPA 8321B: Glyphosate analyzed beyond holding time due to technical difficulties.

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: DITCH NEAR PALM BAY WWTP

Collection Date/Time: 04/08/2024 10:15

Field ID: G5SE0134

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480668	DEP SOP: NU-094-1	Color (true)	78		PCU	P444011	
	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P444016	
	EPA 300.0 Rev. 2.1	Chloride	120		mg Cl/L	P444324	
		Sulfate	28		mg SO4/L	P444327	
	SM 2320 B-2011	Total Alkalinity	71	A	mg CaCO3/L	P444228	
	SM 2540 C-2015	TDS	396		mg/L	P444536	
	SM 2540 D-2015	TSS	4	I	mg/L	P444433	
	SM 4500-F- C-2011	Fluoride	0.098	I	mg F/L	P444232	
2480669	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P444061	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P443993	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.015		mg N/L	P444215	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P444065	
	SM 5310 B-2014	Organic Carbon	15		mg C/L	P444180	
2480734	EPA 8321B	Acesulfame K	0.10	U	ug/L	P443967	
		2,4-D	0.0020	U	ug/L	P443976	MS
		2,4,5-T	0.0040	U	ug/L	P443976	
		AMPA	0.10	U	ug/L	P443967	
		Acetaminophen	0.0080	U	ug/L	P443976	
		Acetamiprid	0.0020	U	ug/L	P443976	
		Endothall	0.25	U	ug/L	P443967	
		Glufosinate	0.10	U	ug/L	P443967	
		Glyphosate	0.10	U	ug/L	P443967	
		Afidopyropen	0.0020	U	ug/L	P443976	
		Bentazon	0.042		ug/L	P443976	
		Sucralose	1.2		ug/L	P443967	
		Benzovindiflupyr	0.0020	U	ug/L	P443976	
		Carbamazepine	8.0E-04	U	ug/L	P443976	
		Clothianidin	0.0020	U	ug/L	P443976	
		Dinotefuran	0.0020	U	ug/L	P443976	
		Diuron	0.0053	I	ug/L	P443976	
		Fenuron	0.032	U	ug/L	P443976	
		Fluridone	0.0069		ug/L	P443976	
		Imazapyr	0.26		ug/L	P443976	
		Hydrocodone	0.0020	U	ug/L	P443976	
		Ibuprofen	0.080	U	ug/L	P443976	
		Imidacloprid	0.013		ug/L	P443976	
		Linuron	0.0040	U	ug/L	P443976	
		Mandestrobin	0.0020	U	ug/L	P443976	
		MCPP	0.0020	U	ug/L	P443976	
		Naproxen	0.0080	U	ug/L	P443976	
		Primidone	0.0081	I	ug/L	P443976	
		Pyraclostrobin	0.0020	U	ug/L	P443976	
		Silvex	0.0040	U	ug/L	P443976	
		Thiamethoxam	0.0020	U	ug/L	P443976	

Field ID: G5SE0134

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480734	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P443976	
		Triclopyr	0.0040	U	ug/L	P443976	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: TURKEY CREEK NEAR BRIAR CREEK BLVD

Collection Date/Time: 04/08/2024 11:30

Field ID: G5SE0146

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480664	DEP SOP: NU-094-1	Color (true)	47		PCU	P444011	
	EPA 180.1 Rev. 2.0	Turbidity	2.5		NTU	P444015	
	EPA 300.0 Rev. 2.1	Chloride	420		mg Cl/L	P444324	
		Sulfate	59		mg SO4/L	P444327	
	SM 2320 B-2011	Total Alkalinity	184		mg CaCO3/L	P444228	
	SM 2540 C-2015	TDS	1.13E+03		mg/L	P444536	
	SM 2540 D-2015	TSS	5	I	mg/L	P444433	
2480665	SM 4500-F- C-2011	Fluoride	0.26		mg F/L	P444232	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P444061	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.48		mg N/L	P443993	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.076		mg N/L	P444214	
	EPA 365.1 Rev. 2.0	Total-P	0.054		mg P/L	P444065	
2480732	SM 5310 B-2014	Organic Carbon	12		mg C/L	P444180	
	EPA 8321B	Acesulfame K	0.10	U	ug/L	P443967	
		2,4-D	0.0020	U	ug/L	P443976	MS
		2,4,5-T	0.0040	U	ug/L	P443976	
		AMPA	1.4	Q	ug/L	P443967	
		Acetaminophen	0.0080	U	ug/L	P443976	
		Acetamiprid	0.0020	U	ug/L	P443976	
		Endothall	0.25	U	ug/L	P443967	
		Glufosinate	0.10	U	ug/L	P443967	
		Glyphosate	3.8	Q	ug/L	P443967	
		Afidopyropen	0.0020	U	ug/L	P443976	
		Bentazon	0.012		ug/L	P443976	
		Sucralose	0.52		ug/L	P443967	
		Benzovindiflupyr	0.0020	U	ug/L	P443976	
		Carbamazepine	8.0E-04	U	ug/L	P443976	
		Clothianidin	0.0020	U	ug/L	P443976	
		Dinotefuran	0.0020	U	ug/L	P443976	
		Diuron	0.0020	U	ug/L	P443976	
		Fenuron	0.032	U	ug/L	P443976	
		Fluridone	0.0015	I	ug/L	P443976	
		Imazapyr	0.058		ug/L	P443976	
		Hydrocodone	0.0020	U	ug/L	P443976	
		Ibuprofen	0.080	U	ug/L	P443976	
		Imidacloprid	0.0020	U	ug/L	P443976	
		Linuron	0.0040	U	ug/L	P443976	
		Mandestrobin	0.0020	U	ug/L	P443976	
		MCPP	0.0020	U	ug/L	P443976	
		Naproxen	0.0080	U	ug/L	P443976	
		Primidone	0.0040	U	ug/L	P443976	
		Pyraclostrobin	0.0020	U	ug/L	P443976	
		Silvex	0.0040	U	ug/L	P443976	
		Thiamethoxam	0.0020	U	ug/L	P443976	

Field ID: G5SE0146

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480732	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P443976	
		Triclopyr	0.0040	U	ug/L	P443976	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Some analytes analyzed beyond holding time due to technical difficulties.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: TURKEY CREEK RESIDENTIAL CANAL

Collection Date/Time: 04/08/2024 11:45

Field ID: G5SE0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480662	DEP SOP: NU-094-1	Color (true)	54		PCU	P444010	
	EPA 180.1 Rev. 2.0	Turbidity	9.5		NTU	P444015	
	EPA 300.0 Rev. 2.1	Chloride	800		mg Cl/L	P444324	
		Sulfate	130		mg SO4/L	P444327	
	SM 2320 B-2011	Total Alkalinity	193		mg CaCO3/L	P444228	
	SM 2540 C-2015	TDS	1.74E+03		mg/L	P444536	
	SM 2540 D-2015	TSS	16		mg/L	P444433	
	SM 4500-F- C-2011	Fluoride	0.23		mg F/L	P444232	
2480663	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P444061	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.95		mg N/L	P443993	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P444214	
	EPA 365.1 Rev. 2.0	Total-P	0.095		mg P/L	P444065	
	SM 5310 B-2014	Organic Carbon	13		mg C/L	P444180	
2480731	EPA 8321B	Acesulfame K	0.10	U	ug/L	P443967	
		2,4-D	0.0083	J	ug/L	P443976	MS
		2,4,5-T	0.0040	U	ug/L	P443976	
		AMPA	0.55	Q	ug/L	P443967	
		Acetaminophen	0.0080	U	ug/L	P443976	
		Acetamiprid	0.0020	U	ug/L	P443976	
		Endothall	0.25	U	ug/L	P443967	
		Glufosinate	0.10	U	ug/L	P443967	
		Glyphosate	0.63	Q	ug/L	P443967	
		Afidopyropen	0.0020	U	ug/L	P443976	
		Bentazon	0.036		ug/L	P443976	
		Sucralose	0.48		ug/L	P443967	
		Benzovindiflupyr	0.0020	U	ug/L	P443976	
		Carbamazepine	0.0043		ug/L	P443976	
		Clothianidin	0.0020	U	ug/L	P443976	
		Dinotefuran	0.0020	U	ug/L	P443976	
		Diuron	0.0020	U	ug/L	P443976	
		Fenuron	0.032	U	ug/L	P443976	
		Fluridone	0.026		ug/L	P443976	
		Imazapyr	0.058		ug/L	P443976	
		Hydrocodone	0.0020	U	ug/L	P443976	
		Ibuprofen	0.080	U	ug/L	P443976	
		Imidacloprid	0.0020	U	ug/L	P443976	
		Linuron	0.0040	U	ug/L	P443976	
		Mandestrobin	0.0020	U	ug/L	P443976	
		MCP	0.0028	I	ug/L	P443976	
		Naproxen	0.0080	U	ug/L	P443976	
		Primidone	0.0057	I	ug/L	P443976	
		Pyraclostrobin	0.0020	U	ug/L	P443976	
		Silvex	0.0040	U	ug/L	P443976	
		Thiamethoxam	0.0020	U	ug/L	P443976	

Field ID: G5SE0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480731	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P443976	
		Triclopyr	0.0040	U	ug/L	P443976	

Ref. Method and Comment:

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

EPA 8321B: Some analytes analyzed beyond holding time due to technical difficulties.

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: LITTLE TURKEY CREEK NEAR FALLON BLVD Collection Date/Time: 04/08/2024 12:15

Field ID: G5SE0150

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480676	DEP SOP: NU-094-1	Color (true)	81		PCU	P444011	
	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P444016	
	EPA 300.0 Rev. 2.1	Chloride	140		mg Cl/L	P444324	
		Sulfate	28		mg SO4/L	P444327	
	SM 2320 B-2011	Total Alkalinity	170		mg CaCO3/L	P444228	
	SM 2540 C-2015	TDS	535		mg/L	P444536	
	SM 2540 D-2015	TSS	2	I	mg/L	P444433	
	SM 4500-F- C-2011	Fluoride	0.15		mg F/L	P444232	
2480677	EPA 350.1 Rev. 2.0	Ammonia-N	0.028		mg N/L	P444196	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.67		mg N/L	P443994	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.012		mg N/L	P444215	
	EPA 365.1 Rev. 2.0	Total-P	0.055		mg P/L	P444241	
	SM 5310 B-2014	Organic Carbon	16		mg C/L	P444173	
2480738	EPA 8321B	Acesulfame K	0.38	I	ug/L	P443967	
		2,4-D	0.0057	I	ug/L	P443976	MS
		2,4,5-T	0.0040	U	ug/L	P443976	
		AMPA	0.63		ug/L	P443967	
		Acetaminophen	0.0080	U	ug/L	P443976	
		Acetamiprid	0.0020	U	ug/L	P443976	
		Endothall	0.25	U	ug/L	P443967	
		Glufosinate	0.10	U	ug/L	P443967	
		Glyphosate	1.5		ug/L	P443967	
		Afidopyropen	0.0020	U	ug/L	P443976	
		Bentazon	0.033		ug/L	P443976	
		Sucralose	1.9		ug/L	P443967	
		Benzovindiflupyr	0.0020	U	ug/L	P443976	
		Carbamazepine	0.0091		ug/L	P443976	
		Clothianidin	0.0020	U	ug/L	P443976	
		Dinotefuran	0.0020	U	ug/L	P443976	
		Diuron	0.0020	U	ug/L	P443976	
		Fenuron	0.032	U	ug/L	P443976	
		Fluridone	0.0042		ug/L	P443976	
		Imazapyr	0.070		ug/L	P443976	
		Hydrocodone	0.0020	U	ug/L	P443976	
		Ibuprofen	0.080	U	ug/L	P443976	
		Imidacloprid	0.0020	U	ug/L	P443976	
		Linuron	0.0040	U	ug/L	P443976	
		Mandestrobin	0.0020	U	ug/L	P443976	
		MCPP	0.0020	U	ug/L	P443976	
		Naproxen	0.0080	U	ug/L	P443976	
		Primidone	0.0040	U	ug/L	P443976	
		Pyraclostrobin	0.0020	U	ug/L	P443976	
		Silvex	0.0040	U	ug/L	P443976	
		Thiamethoxam	0.0020	U	ug/L	P443976	

Field ID: G5SE0150

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480738	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P443976	
		Triclopyr	0.0040	U	ug/L	P443976	

Ref. Method and Comment:

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

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: TURKEY CREEK CLEARMONT ST

Collection Date/Time: 04/08/2024 10:30

Field ID: G5SE0131

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480666	DEP SOP: NU-094-1	Color (true)	69		PCU	P444011	
	EPA 180.1 Rev. 2.0	Turbidity	3.6	A	NTU	P444016	
	EPA 300.0 Rev. 2.1	Chloride	210		mg Cl/L	P444324	
		Sulfate	39		mg SO4/L	P444327	
	SM 2320 B-2011	Total Alkalinity	141		mg CaCO3/L	P444228	
	SM 2540 C-2015	TDS	686		mg/L	P444536	
	SM 2540 D-2015	TSS	4	I	mg/L	P444433	
	SM 4500-F- C-2011	Fluoride	0.16		mg F/L	P444232	
2480667	EPA 350.1 Rev. 2.0	Ammonia-N	0.038		mg N/L	P444061	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.69		mg N/L	P443993	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.17		mg N/L	P444215	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P444065	
	SM 5310 B-2014	Organic Carbon	16		mg C/L	P444180	
2480733	EPA 8321B	Acesulfame K	0.10	U	ug/L	P443967	
		2,4-D	0.0025	I	ug/L	P443976	MS
		AMPA	0.19	I	ug/L	P443967	
		2,4,5-T	0.0040	U	ug/L	P443976	
		Acetaminophen	0.0080	U	ug/L	P443976	
		Endothall	1.7		ug/L	P443967	
		Acetamiprid	0.0020	U	ug/L	P443976	
		Glufosinate	0.10	U	ug/L	P443967	
		Glyphosate	0.90	Q	ug/L	P443967	
		Afidopyropen	0.0020	U	ug/L	P443976	
		Sucralose	0.46		ug/L	P443967	
		Bentazon	0.094		ug/L	P443976	
		Benzovindiflupyr	0.0020	U	ug/L	P443976	
		Carbamazepine	8.0E-04	U	ug/L	P443976	
		Clothianidin	0.0020	U	ug/L	P443976	
		Dinotefuran	0.0020	U	ug/L	P443976	
		Diuron	0.0033	I	ug/L	P443976	
		Fenuron	0.032	U	ug/L	P443976	
		Fluridone	0.0057		ug/L	P443976	
		Imazapyr	0.88		ug/L	P443976	
		Hydrocodone	0.0020	U	ug/L	P443976	
		Ibuprofen	0.080	U	ug/L	P443976	
		Imidacloprid	0.0027	I	ug/L	P443976	
		Linuron	0.0040	U	ug/L	P443976	
		Mandestrobin	0.0020	U	ug/L	P443976	
		MCPP	0.0020	U	ug/L	P443976	
		Naproxen	0.0080	U	ug/L	P443976	
		Primidone	0.0040	U	ug/L	P443976	
		Pyraclostrobin	0.0020	U	ug/L	P443976	
		Silvex	0.0040	U	ug/L	P443976	
		Thiamethoxam	0.0020	U	ug/L	P443976	

Field ID: G5SE0131

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480733	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P443976	
		Triclopyr	0.0040	U	ug/L	P443976	

Ref. Method and Comment:

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

EPA 8321B: Glyphosate analyzed beyond holding time due to technical difficulties.

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: TURKEY CREEK PORT MALABAR BRIDGE

Collection Date/Time: 04/08/2024 11:00

Field ID: G5SE0132

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480672	DEP SOP: NU-094-1	Color (true)	34	A	PCU	P444011	
	EPA 180.1 Rev. 2.0	Turbidity	4.6		NTU	P444016	
	EPA 300.0 Rev. 2.1	Chloride	360		mg Cl/L	P444324	
		Sulfate	69		mg SO4/L	P444327	
	SM 2320 B-2011	Total Alkalinity	220		mg CaCO3/L	P444228	
	SM 2540 C-2015	TDS	962		mg/L	P444536	
	SM 2540 D-2015	TSS	9	I	mg/L	P444433	
	SM 4500-F- C-2011	Fluoride	0.26		mg F/L	P444232	
2480673	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P444061	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.65		mg N/L	P443993	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P444215	
	EPA 365.1 Rev. 2.0	Total-P	0.040		mg P/L	P444065	
	SM 5310 B-2014	Organic Carbon	11		mg C/L	P444173	
2480736	EPA 8321B	Acesulfame K	0.11	I	ug/L	P443967	
		2,4-D	0.0023	I	ug/L	P443976	MS
		AMPA	0.43		ug/L	P443967	
		2,4,5-T	0.0040	U	ug/L	P443976	
		Acetaminophen	0.0080	U	ug/L	P443976	
		Endothall	0.25	U	ug/L	P443967	
		Acetamiprid	0.0020	U	ug/L	P443976	
		Glufosinate	0.10	U	ug/L	P443967	
		Glyphosate	0.67	Q	ug/L	P443967	
		Afidopyropen	0.0020	U	ug/L	P443976	
		Sucralose	1.2		ug/L	P443967	
		Bentazon	0.036		ug/L	P443976	
		Benzovindiflupyr	0.0020	U	ug/L	P443976	
		Carbamazepine	0.0087		ug/L	P443976	
		Clothianidin	0.0020	U	ug/L	P443976	
		Dinotefuran	0.0020	U	ug/L	P443976	
		Diuron	0.0020	U	ug/L	P443976	
		Fenuron	0.032	U	ug/L	P443976	
		Fluridone	0.047		ug/L	P443976	
		Imazapyr	0.088		ug/L	P443976	
		Hydrocodone	0.0020	U	ug/L	P443976	
		Ibuprofen	0.080	U	ug/L	P443976	
		Imidacloprid	0.0024	I	ug/L	P443976	
		Linuron	0.0040	U	ug/L	P443976	
		Mandestrobin	0.0020	U	ug/L	P443976	
		MCPP	0.0020	U	ug/L	P443976	
		Naproxen	0.0080	U	ug/L	P443976	
		Primidone	0.0078	I	ug/L	P443976	
		Pyraclostrobin	0.0020	U	ug/L	P443976	
		Silvex	0.0040	U	ug/L	P443976	
		Thiamethoxam	0.0020	U	ug/L	P443976	

Field ID: G5SE0132

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480736	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P443976	
		Triclopyr	0.0040	U	ug/L	P443976	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Glyphosate analyzed beyond holding time due to technical difficulties.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P444010

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P444011

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P444015

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P444016

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444324

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444327

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444061

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444196

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443993

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443994

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444214

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444215

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444065

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444241

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

Reference Method: EPA 8321B
Batch ID: P443967

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: P443976

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P443976

Component	Result	Code	Units
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P444228

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

Reference Method: SM 2540 C-2015

Batch ID: P444536

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P444433

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P444232

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2014

Batch ID: P444173

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

Reference Method: SM 5310 B-2014

Batch ID: P444180

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: P444010

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.2		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P444011

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: P444015

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P444016

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444324

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444327

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444061

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444196

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443993

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443994

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444214

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444215

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444065

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444241

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

Reference Method: EPA 8321B
Batch ID: P443967

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	96.8		P	40 - 150
AMPA	106		P	40 - 150
Endothall	93.6		P	40 - 150
Glufosinate	92.2		P	40 - 150
Glyphosate	80.3		P	40 - 150
Sucralose	98.8		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P443976

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	123		P	40 - 150
2,4,5-T	110		P	40 - 150
Acetaminophen	85.6		P	30 - 150
Acetamiprid	91.2		P	40 - 150
Afidopyropen	78.5		P	30 - 150
Bentazon	94.4		P	30 - 150
Benzovindiflupyr	90.8		P	40 - 150
Carbamazepine	80.8		P	40 - 150
Clothianidin	100		P	40 - 150
Dinotefuran	103		P	40 - 150
Diuron	74.3		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P443976

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fenuron	99.7		P	40 - 150
Fluridone	101		P	40 - 150
Hydrocodone	101		P	40 - 150
Ibuprofen	79.4		P	40 - 150
Imazapyr	104		P	40 - 150
Imidacloprid	103		P	40 - 150
Linuron	83.8		P	40 - 150
Mandestrobin	96.5		P	40 - 150
MCPP	133		P	40 - 150
Naproxen	84.3		P	40 - 150
Primidone	87.9		P	40 - 150
Pyraclostrobin	87.7		P	40 - 150
Silvex	98.7		P	40 - 150
Thiamethoxam	101		P	40 - 150
Tolfenpyrad	57.2		P	30 - 150
Triclopyr	107		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P444228

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.4		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P444536

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

Reference Method: SM 2540 D-2015
Batch ID: P444433

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	96.8		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P444232

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

Reference Method: SM 5310 B-2014
Batch ID: P444173

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

Reference Method: SM 5310 B-2014
Batch ID: P444180

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444324

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480571	Chloride	104		P	90 - 110
2480615	Chloride	99.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444327

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480571	Sulfate	102		P	90 - 110
2480615	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444061

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480618	Ammonia-N	95.4	96.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444196

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480675	Ammonia-N	97.6	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443993

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480663	Kjeldahl Nitrogen	97.7	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443994

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480677	Kjeldahl Nitrogen	105	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444214

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2479726	NO2NO3-N	99.5	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480667	NO2NO3-N	96.5	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480665	Total-P	104	103	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444241

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480820	Total-P	101	99.0	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P443967

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480734	Acesulfame K	85.7	82.6	P/P	40 - 150
2480734	AMPA	84.5	79.3	P/P	40 - 150
2480734	Endothall	116	117	P/P	40 - 150
2480734	Glufosinate	77.5	78.6	P/P	40 - 150
2480734	Glyphosate	72.4	63.2	P/P	40 - 150
2480734	Sucralose	111	101	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P443976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480731	2,4-D	157	147	F/P	40 - 150
2480731	2,4,5-T	114	95.4	P/P	40 - 150
2480731	Acetaminophen	108	95.5	P/P	30 - 150
2480731	Acetamiprid	85.6	79.3	P/P	40 - 150
2480731	Afidopyrophen	72.4	64.5	P/P	30 - 150
2480731	Benzovindiflupyr	86.1	81.2	P/P	40 - 150
2480731	Carbamazepine	61.2	51.6	P/P	40 - 150
2480731	Clothianidin	93.3	90.0	P/P	40 - 150
2480731	Dinotefuran	109	97.5	P/P	40 - 150
2480731	Diuron	50.1	45.9	P/P	40 - 150
2480731	Fenuron	79.9	74.0	P/P	40 - 150
2480731	Hydrocodone	94.1	84.4	P/P	40 - 150
2480731	Ibuprofen	89.7	76.0	P/P	40 - 150
2480731	Imazapyr	143	123	P/P	40 - 150
2480731	Imidacloprid	142	130	P/P	40 - 150
2480731	Linuron	76.2	64.2	P/P	40 - 150
2480731	Mandestrobin	93.4	82.7	P/P	40 - 150
2480731	MCPP	150	145	P/P	40 - 150
2480731	Naproxen	84.9	81.2	P/P	40 - 150
2480731	Primidone	108	94.6	P/P	40 - 150
2480731	Pyraclostrobin	88.7	83.1	P/P	40 - 150
2480731	Silvex	99.2	102	P/P	40 - 150
2480731	Thiamethoxam	92.1	85.0	P/P	40 - 150
2480731	Tolfenpyrad	73.4	58.8	P/P	30 - 150
2480731	Triclopyr	115	99.0	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P444232

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480668	Fluoride	102	103	P/P	94 - 106

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-2014
Batch ID: P444173

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480671	Organic Carbon	99.5	102	P/P	85 - 115

Reference Method: SM 5310 B-2014
Batch ID: P444180

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480663	Organic Carbon	98.2	101	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P444010

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480654	Color (true)	13.3	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P444011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480672	Color (true)	0.788	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P444015

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480522	Turbidity	5.68	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P444016

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480666	Turbidity	7.78	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444324

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480571	Chloride	1.28	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444327

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480571	Sulfate	1.56	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444061

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480618	Ammonia-N	0.961	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444196

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480675	Ammonia-N	1.14	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443993

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480663	Kjeldahl Nitrogen	2.30	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443994

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480677	Kjeldahl Nitrogen	2.57	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444214

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2479726	NO2NO3-N	0.514	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480667	NO2NO3-N	1.08	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480665	Total-P	0.686	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444241

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480820	Total-P	1.96	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P443967

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480734	Acesulfame K	3.62	Spike	P	0 - 30
2480734	AMPA	6.33	Spike	P	0 - 30
2480734	Endothall	0.434	Spike	P	0 - 30
2480734	Glufosinate	1.43	Spike	P	0 - 30
2480734	Glyphosate	13.5	Spike	P	0 - 30
2480734	Sucralose	6.38	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P443976

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480731	2,4-D	6.11	Spike	P	0 - 30
2480731	2,4,5-T	17.9	Spike	P	0 - 30
2480731	Acetaminophen	12.5	Spike	P	0 - 30
2480731	Acetamiprid	7.73	Spike	P	0 - 30
2480731	Afidopyropen	11.6	Spike	P	0 - 30
2480731	Bentazon	1.66	Spike	P	0 - 30
2480731	Benzovindiflupyr	5.91	Spike	P	0 - 30
2480731	Carbamazepine	12.3	Spike	P	0 - 30
2480731	Clothianidin	3.54	Spike	P	0 - 30
2480731	Dinotefuran	11.5	Spike	P	0 - 30
2480731	Diuron	8.68	Spike	P	0 - 30
2480731	Fenuron	7.61	Spike	P	0 - 30
2480731	Fluridone	10.4	Spike	P	0 - 30
2480731	Hydrocodone	10.8	Spike	P	0 - 30
2480731	Ibuprofen	16.4	Spike	P	0 - 30
2480731	Imazapyr	9.95	Spike	P	0 - 30
2480731	Imidacloprid	8.82	Spike	P	0 - 30
2480731	Linuron	17.1	Spike	P	0 - 30
2480731	Mandestrobin	12.1	Spike	P	0 - 30
2480731	MCPP	3.34	Spike	P	0 - 30
2480731	Naproxen	4.50	Spike	P	0 - 30
2480731	Primidone	12.0	Spike	P	0 - 30
2480731	Pyraclostrobin	6.49	Spike	P	0 - 30
2480731	Silvex	3.19	Spike	P	0 - 30
2480731	Thiamethoxam	7.96	Spike	P	0 - 30
2480731	Tolfenpyrad	22.1	Spike	P	0 - 30
2480731	Triclopyr	14.9	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P444228

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480668	Total Alkalinity	1.16	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P444536

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480522	TDS	0.775	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P444232

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480668	Fluoride	0.480	Spike	P	0 - 1.9

Quality Assurance Report
Precision

Reference Method: SM 5310 B-2014
Batch ID: P444173

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480671	Organic Carbon	1.98	Spike	P	0 - 15

Reference Method: SM 5310 B-2014
Batch ID: P444180

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480663	Organic Carbon	1.99	Spike	P	0 - 15

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

Quality Assurance Report Surrogates

Lab Sample ID: 2480731
Field Sample ID: G5SE0133

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	62.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	105	P	30 - 160
EPA 8321B	Carbamazepine-d10	68.0	P	30 - 160
EPA 8321B	Diuron-d6	50.4	P	30 - 160
EPA 8321B	Endothall-d6	113	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	154	P	30 - 160
EPA 8321B	Ibuprofen-d3	84.2	P	30 - 160
EPA 8321B	Primidone-d5	103	P	30 - 160
EPA 8321B	Sucralose-d6	45.3	P	30 - 160

Lab Sample ID: 2480732
Field Sample ID: G5SE0146

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	57.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	96.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	59.8	P	30 - 160
EPA 8321B	Diuron-d6	48.0	P	30 - 160
EPA 8321B	Endothall-d6	114	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	51.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	85.6	P	30 - 160
EPA 8321B	Primidone-d5	98.6	P	30 - 160
EPA 8321B	Sucralose-d6	80.2	P	30 - 160

Lab Sample ID: 2480733
Field Sample ID: G5SE0131

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	59.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.4	P	30 - 160
EPA 8321B	Diuron-d6	46.3	P	30 - 160
EPA 8321B	Endothall-d6	122	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	63.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	88.8	P	30 - 160
EPA 8321B	Primidone-d5	97.4	P	30 - 160
EPA 8321B	Sucralose-d6	81.9	P	30 - 160

Lab Sample ID: 2480734
Field Sample ID: G5SE0134

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	57.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	67.8	P	30 - 160
EPA 8321B	Diuron-d6	56.7	P	30 - 160
EPA 8321B	Endothall-d6	131	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	73.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	97.5	P	30 - 160
EPA 8321B	Primidone-d5	109	P	30 - 160
EPA 8321B	Sucralose-d6	96.0	P	30 - 160

Quality Assurance Report

Surrogates

Lab Sample ID: 2480735

Field Sample ID: G5SE0135

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	53.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	105	P	30 - 160
EPA 8321B	Carbamazepine-d10	57.5	P	30 - 160
EPA 8321B	Diuron-d6	43.5	P	30 - 160
EPA 8321B	Endothall-d6	124	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	88.6	P	30 - 160
EPA 8321B	Primidone-d5	102	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160

Lab Sample ID: 2480736

Field Sample ID: G5SE0132

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	56.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	104	P	30 - 160
EPA 8321B	Carbamazepine-d10	68.3	P	30 - 160
EPA 8321B	Diuron-d6	55.1	P	30 - 160
EPA 8321B	Endothall-d6	115	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	70.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	78.9	P	30 - 160
EPA 8321B	Primidone-d5	102	P	30 - 160
EPA 8321B	Sucralose-d6	72.8	P	30 - 160

Lab Sample ID: 2480737

Field Sample ID: G5SE0136

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	59.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.8	P	30 - 160
EPA 8321B	Diuron-d6	54.7	P	30 - 160
EPA 8321B	Endothall-d6	121	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	70.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	85.3	P	30 - 160
EPA 8321B	Primidone-d5	111	P	30 - 160
EPA 8321B	Sucralose-d6	67.2	P	30 - 160

Lab Sample ID: 2480738

Field Sample ID: G5SE0150

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	57.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	109	P	30 - 160
EPA 8321B	Carbamazepine-d10	60.2	P	30 - 160
EPA 8321B	Diuron-d6	43.6	P	30 - 160
EPA 8321B	Endothall-d6	126	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	74.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	90.1	P	30 - 160
EPA 8321B	Primidone-d5	89.9	P	30 - 160
EPA 8321B	Sucralose-d6	99.9	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A125240

Included Lab Sample IDs: 2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	98.6	P/P	90 - 110
Color (true)	98.6	99.5	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A125242

Included Lab Sample IDs: 2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A125261

Included Lab Sample IDs: 2480663, 2480665, 2480667, 2480669, 2480671, 2480673

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.3	97.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A125284

Included Lab Sample IDs: 2480663, 2480665, 2480667, 2480675

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A125286

Included Lab Sample IDs: 2480663, 2480665, 2480667, 2480669, 2480671, 2480673, 2480675, 2480677

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	101	P/P	90 - 110
Kjeldahl Nitrogen	97.5	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A125298

Included Lab Sample IDs: 2480669, 2480671, 2480673

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	98.0	P/P	90 - 110

Reference Method: SM 5310 B-2014

Run ID: A125303

Included Lab Sample IDs: 2480671, 2480673, 2480675, 2480677

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	109	98.4	P/P	70 - 130

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2014

Run ID: A125304

Included Lab Sample IDs: 2480663, 2480665, 2480667, 2480669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.9	121	P/P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A125310

Included Lab Sample IDs: 2480675, 2480677

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

Reference Method: EPA 8321B

Run ID: A125312

Included Lab Sample IDs: 2480731, 2480732, 2480733, 2480734, 2480735, 2480736, 2480737, 2480738

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	116	117	P/P	60 - 160
Acesulfame K	91.6	116	P/P	60 - 160
Sucralose	98.4	88.6	P/P	60 - 160
Sucralose	98.6	98.4	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A125318

Included Lab Sample IDs: 2480663, 2480665, 2480667, 2480669, 2480671, 2480673, 2480675, 2480677

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	101	P/P	90 - 110
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A125320

Included Lab Sample IDs: 2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.2	98.0	P/P	90 - 110
Total Alkalinity	98.0	96.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A125320

Included Lab Sample IDs: 2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A125336

Included Lab Sample IDs: 2480677

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A125342

Included Lab Sample IDs: 2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	98.9	P/P	90 - 110
Sulfate	102	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A125347

Included Lab Sample IDs: 2480731, 2480732, 2480733, 2480734, 2480735, 2480736, 2480737, 2480738

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	102	108	P/P	50 - 150
2,4-D	108	118	P/P	50 - 150
2,4,5-T	110	91.2	P/P	50 - 150
2,4,5-T	91.2	115	P/P	50 - 150
Acetaminophen	104	106	P/P	60 - 160
Acetaminophen	106	115	P/P	60 - 160
Acetamiprid	104	114	P/P	50 - 150
Acetamiprid	104	104	P/P	50 - 150
Afidopyropen	101	106	P/P	50 - 150
Afidopyropen	97.0	101	P/P	50 - 150
Bentazon	114	113	P/P	50 - 160
Bentazon	97.5	98.0	P/P	50 - 160
Bentazon	98.0	114	P/P	50 - 160
Benzovindiflupyr	106	107	P/P	50 - 150
Benzovindiflupyr	107	111	P/P	50 - 150
Carbamazepine	105	108	P/P	60 - 150
Carbamazepine	108	107	P/P	60 - 150
Clothianidin	110	108	P/P	60 - 150
Clothianidin	111	110	P/P	60 - 150
Dinotefuran	107	108	P/P	50 - 150
Dinotefuran	110	107	P/P	50 - 150
Diuron	104	105	P/P	60 - 160
Diuron	105	111	P/P	60 - 160
Fenuron	102	103	P/P	60 - 150
Fenuron	103	104	P/P	60 - 150
Fluridone	110	114	P/P	60 - 160
Fluridone	114	117	P/P	60 - 160
Hydrocodone	108	109	P/P	60 - 150
Hydrocodone	109	106	P/P	60 - 150
Ibuprofen	105	90.3	P/P	50 - 160
Ibuprofen	90.3	136	P/P	50 - 160
Imazapyr	102	96.8	P/P	50 - 150
Imazapyr	96.8	101	P/P	50 - 150
Imidacloprid	109	110	P/P	60 - 150
Imidacloprid	111	109	P/P	60 - 150
Linuron	105	114	P/P	60 - 150
Linuron	114	102	P/P	60 - 150
Mandestrobin	108	109	P/P	50 - 150
Mandestrobin	109	114	P/P	50 - 150
MCP	106	106	P/P	50 - 150
MCP	106	125	P/P	50 - 150
Naproxen	116	147	P/P	50 - 160
Naproxen	147	140	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A125347

Included Lab Sample IDs: 2480731, 2480732, 2480733, 2480734, 2480735, 2480736, 2480737, 2480738

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Primidone	100	112	P/P	60 - 150
Primidone	112	97.5	P/P	60 - 150
Pyraclostrobin	107	114	P/P	60 - 150
Pyraclostrobin	110	107	P/P	60 - 150
Silvex	91.4	95.7	P/P	50 - 150
Silvex	95.7	109	P/P	50 - 150
Thiamethoxam	107	113	P/P	50 - 150
Thiamethoxam	113	109	P/P	50 - 150
Tolfenpyrad	104	106	P/P	60 - 150
Tolfenpyrad	106	104	P/P	60 - 150
Triclopyr	104	111	P/P	50 - 150
Triclopyr	106	104	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A125448

Included Lab Sample IDs: 2480731, 2480732, 2480733, 2480734, 2480735, 2480736, 2480737, 2480738

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	102	91.8	P/P	60 - 160
AMPA	91.8	79.1	P/P	60 - 160
Endothall	89.8	95.0	P/P	60 - 160
Endothall	95.0	105	P/P	60 - 160
Glufosinate	100	95.2	P/P	60 - 160
Glufosinate	95.2	92.4	P/P	60 - 160
Glyphosate	85.0	94.5	P/P	60 - 160
Glyphosate	94.5	79.9	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A125451

Included Lab Sample IDs: 2480731, 2480732, 2480733, 2480735, 2480736, 2480737

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	95.7	92.1	P/P	60 - 160
Glyphosate	101	96.4	P/P	60 - 160
Glyphosate	87.2	101	P/P	60 - 160

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

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
DEP SOP: NU-094-1	Color (true)	98.2			13.3	
	Color (true)	96.5			0.788	
EPA 180.1 Rev. 2.0	Turbidity	103			5.68	
	Turbidity	103			7.78	
EPA 300.0 Rev. 2.1	Chloride	101	104	99.0	1.28	
	Sulfate	103	102	101	1.56	
EPA 350.1 Rev. 2.0	Ammonia-N	94.2	95.4	96.4		0.961
	Ammonia-N	97.0	97.6	99.2		1.14
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.8	97.7	101		2.30
	Kjeldahl Nitrogen	99.5	105	101		2.57
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	99.5	98.5		0.514
	NO2NO3-N	99.0	96.5	98.5		1.08
EPA 365.1 Rev. 2.0	Total-P	102	104	103		0.686
	Total-P	101	101	99.0		1.96
EPA 8321B	2,4-D	123	157	147		6.11
	2,4,5-T	110	114	95.4		17.9
	Acesulfame K	96.8	85.7	82.6		3.62
	Acetaminophen	85.6	108	95.5		12.5
	Acetamiprid	91.2	85.6	79.3		7.73
	Afidopyropen	78.5	72.4	64.5		11.6
	AMPA	106	84.5	79.3		6.33
	Bentazon	94.4				1.66
	Benzovindiflupyr	90.8	86.1	81.2		5.91
	Carbamazepine	80.8	61.2	51.6		12.3
	Clothianidin	100	93.3	90.0		3.54
	Dinotefuran	103	109	97.5		11.5
	Diuron	74.3	50.1	45.9		8.68
	Endothall	93.6	116	117		0.434
	Fenuron	99.7	79.9	74.0		7.61
	Fluridone	101				10.4
	Glufosinate	92.2	77.5	78.6		1.43
	Glyphosate	80.3	72.4	63.2		13.5
	Hydrocodone	101	94.1	84.4		10.8
	Ibuprofen	79.4	89.7	76.0		16.4
	Imazapyr	104	143	123		9.95
	Imidacloprid	103	142	130		8.82
	Linuron	83.8	76.2	64.2		17.1
	Mandestrobin	96.5	93.4	82.7		12.1
	MCPP	133	150	145		3.34
	Naproxen	84.3	84.9	81.2		4.50
	Primidone	87.9	108	94.6		12.0
	Pyraclostrobin	87.7	88.7	83.1		6.49
	Silvex	98.7	99.2	102		3.19
	Sucralose	98.8	111	101		6.38
	Thiamethoxam	101	92.1	85.0		7.96
	Tolfenpyrad	57.2	73.4	58.8		22.1
	Triclopyr	107	115	99.0		14.9
SM 2320 B-2011	Total Alkalinity	98.4			1.16	
SM 2540 C-2015	TDS	94.4			0.775	
SM 2540 D-2015	TSS	96.8				
SM 4500-F- C-2011	Fluoride	100	102	103		0.480
SM 5310 B-2014	Organic Carbon	98.1	99.5	102		1.98
	Organic Carbon	98.2	98.2	101		1.99

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2480663, 2480665, 2480667, 2480669, 2480671, 2480673, 2480675, 2480677
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2480663, 2480665, 2480667, 2480669, 2480671, 2480673, 2480675, 2480677
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2480663, 2480665, 2480667, 2480669, 2480671, 2480673, 2480675, 2480677
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2480663, 2480665, 2480667, 2480669, 2480671, 2480673, 2480675, 2480677
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2480731, 2480732, 2480733, 2480734, 2480735, 2480736, 2480737, 2480738
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2480663, 2480665, 2480667, 2480669, 2480671, 2480673, 2480675, 2480677

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	04/09/2024			04/09/2024 14:31	Samantha L Bates	2480662
	04/09/2024			04/09/2024 14:34	Samantha L Bates	2480664
	04/09/2024			04/09/2024 14:35	Samantha L Bates	2480666, 2480668
	04/09/2024			04/09/2024 14:36	Samantha L Bates	2480670
	04/09/2024			04/09/2024 14:37	Samantha L Bates	2480672, 2480674
	04/09/2024			04/09/2024 14:38	Samantha L Bates	2480676
EPA 180.1 Rev. 2.0	04/09/2024			04/09/2024 14:29	Khloe J Berg	2480662
	04/09/2024			04/09/2024 14:30	Khloe J Berg	2480664
	04/09/2024			04/09/2024 14:57	Khloe J Berg	2480666
	04/09/2024			04/09/2024 15:00	Khloe J Berg	2480668
	04/09/2024			04/09/2024 15:01	Khloe J Berg	2480670
	04/09/2024			04/09/2024 15:02	Khloe J Berg	2480672
EPA 300.0 Rev. 2.1	04/09/2024			04/09/2024 15:03	Khloe J Berg	2480674
	04/09/2024			04/09/2024 15:04	Khloe J Berg	2480676
	04/09/2024			04/16/2024 04:45	James L Waggerby	2480662
	04/09/2024			04/16/2024 05:00	James L Waggerby	2480664
	04/09/2024			04/16/2024 05:16	James L Waggerby	2480666
	04/09/2024			04/16/2024 05:31	James L Waggerby	2480668
EPA 350.1 Rev. 2.0	04/09/2024			04/16/2024 05:46	James L Waggerby	2480670
	04/09/2024			04/16/2024 06:01	James L Waggerby	2480672
	04/09/2024			04/16/2024 06:16	James L Waggerby	2480674
	04/09/2024			04/16/2024 06:31	James L Waggerby	2480676
	04/09/2024			04/10/2024 13:10	Khloe J Berg	2480663
	04/09/2024			04/10/2024 13:11	Khloe J Berg	2480665
EPA 351.2 Rev. 2.0	04/09/2024			04/10/2024 13:13	Khloe J Berg	2480667
	04/09/2024			04/10/2024 13:14	Khloe J Berg	2480669
	04/09/2024			04/10/2024 13:15	Khloe J Berg	2480671
	04/09/2024			04/10/2024 13:17	Khloe J Berg	2480673
	04/09/2024			04/12/2024 13:26	Kenneth H Lee	2480675
	04/09/2024			04/12/2024 13:30	Kenneth H Lee	2480677
EPA 353.2 Rev. 2.0	04/09/2024	04/10/2024 11:08	Robyn Blevins	04/11/2024 13:50	Robyn Blevins	2480663
	04/09/2024	04/10/2024 11:08	Robyn Blevins	04/11/2024 13:55	Robyn Blevins	2480665
	04/09/2024	04/10/2024 11:08	Robyn Blevins	04/11/2024 13:57	Robyn Blevins	2480667
	04/09/2024	04/10/2024 11:08	Robyn Blevins	04/11/2024 13:59	Robyn Blevins	2480669
	04/09/2024	04/10/2024 11:08	Robyn Blevins	04/11/2024 14:00	Robyn Blevins	2480671
	04/09/2024	04/10/2024 11:08	Robyn Blevins	04/11/2024 14:02	Robyn Blevins	2480673
	04/09/2024	04/10/2024 11:08	Robyn Blevins	04/11/2024 14:03	Robyn Blevins	2480675
	04/09/2024	04/10/2024 11:08	Robyn Blevins	04/11/2024 14:12	Robyn Blevins	2480677
	04/09/2024			04/12/2024 13:40	Fadila Guebre	2480663
	04/09/2024			04/12/2024 13:41	Fadila Guebre	2480665

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 353.2 Rev. 2.0	04/09/2024			04/12/2024 13:48	Fadila Guebre	2480667
	04/09/2024			04/12/2024 13:54	Fadila Guebre	2480669
	04/09/2024			04/12/2024 13:55	Fadila Guebre	2480671
	04/09/2024			04/12/2024 13:57	Fadila Guebre	2480673
	04/09/2024			04/12/2024 13:58	Fadila Guebre	2480675
	04/09/2024			04/12/2024 13:59	Fadila Guebre	2480677
EPA 365.1 Rev. 2.0	04/09/2024	04/10/2024 15:06	Josephine W Gitau	04/11/2024 12:25	Chandler E Cox	2480665
	04/09/2024	04/10/2024 15:06	Josephine W Gitau	04/11/2024 12:29	Chandler E Cox	2480663
	04/09/2024	04/10/2024 15:06	Josephine W Gitau	04/11/2024 12:30	Chandler E Cox	2480667
	04/09/2024	04/10/2024 15:06	Josephine W Gitau	04/11/2024 12:34	Chandler E Cox	2480675
	04/09/2024	04/10/2024 15:06	Josephine W Gitau	04/12/2024 09:32	Elise M. Gillis	2480669, 2480671
	04/09/2024	04/10/2024 15:06	Josephine W Gitau	04/12/2024 09:33	Elise M. Gillis	2480673
EPA 8321B	04/09/2024	04/15/2024 12:54	Adam P Silver	04/16/2024 12:06	Chandler E Cox	2480677
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/12/2024 10:37	Tae K Lee	2480734
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/12/2024 10:51	Tae K Lee	2480731
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/12/2024 11:05	Tae K Lee	2480732
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/12/2024 11:19	Tae K Lee	2480733
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/12/2024 11:33	Tae K Lee	2480735
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/12/2024 11:47	Tae K Lee	2480736
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/12/2024 12:15	Tae K Lee	2480737
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/12/2024 12:29	Tae K Lee	2480738
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/13/2024 22:42	Tae K Lee	2480734
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/13/2024 22:55	Tae K Lee	2480731
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/13/2024 23:08	Tae K Lee	2480732
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/13/2024 23:21	Tae K Lee	2480733
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/13/2024 23:34	Tae K Lee	2480735
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/13/2024 23:47	Tae K Lee	2480736
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/14/2024 00:13	Tae K Lee	2480737
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/14/2024 00:27	Tae K Lee	2480738
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/17/2024 07:03	Tae K Lee	2480731
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/17/2024 07:17	Tae K Lee	2480732
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/17/2024 07:30	Tae K Lee	2480733
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/17/2024 07:44	Tae K Lee	2480735
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/17/2024 07:57	Tae K Lee	2480736
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/17/2024 08:24	Tae K Lee	2480737
	04/09/2024	04/12/2024 09:00	Hoor Shaik	04/16/2024 16:01	Juyoung Kim	2480731
	04/09/2024	04/12/2024 09:00	Hoor Shaik	04/16/2024 16:19	Juyoung Kim	2480732
	04/09/2024	04/12/2024 09:00	Hoor Shaik	04/16/2024 16:37	Juyoung Kim	2480733
	04/09/2024	04/12/2024 09:00	Hoor Shaik	04/16/2024 16:55	Juyoung Kim	2480734
	04/09/2024	04/12/2024 09:00	Hoor Shaik	04/16/2024 17:12	Juyoung Kim	2480735

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	04/09/2024	04/12/2024 09:00	Hoor Shaik	04/16/2024 17:48	Juyoung Kim	2480736
	04/09/2024	04/12/2024 09:00	Hoor Shaik	04/16/2024 18:06	Juyoung Kim	2480737
	04/09/2024	04/12/2024 09:00	Hoor Shaik	04/16/2024 18:24	Juyoung Kim	2480738
	04/09/2024	04/12/2024 09:00	Hoor Shaik	04/17/2024 10:04	Juyoung Kim	2480735
SM 2320 B-2011	04/09/2024			04/13/2024 08:12	Dale L. Simmons	2480668
	04/09/2024			04/13/2024 08:56	Dale L. Simmons	2480666
	04/09/2024			04/13/2024 09:41	Dale L. Simmons	2480670
	04/09/2024			04/13/2024 09:54	Dale L. Simmons	2480676
	04/09/2024			04/13/2024 11:13	Dale L. Simmons	2480674
	04/09/2024			04/13/2024 11:26	Dale L. Simmons	2480672
	04/09/2024			04/13/2024 11:39	Dale L. Simmons	2480664
	04/09/2024			04/13/2024 11:52	Dale L. Simmons	2480662
SM 2540 C-2015	04/09/2024			04/12/2024 16:19	Yijie Li	2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676
SM 2540 D-2015	04/09/2024			04/12/2024 16:19	Yijie Li	2480662, 2480664, 2480666, 2480668, 2480670, 2480672, 2480674, 2480676
SM 4500-F- C-2011	04/09/2024			04/13/2024 08:03	Dale L. Simmons	2480668
	04/09/2024			04/13/2024 08:56	Dale L. Simmons	2480666
	04/09/2024			04/13/2024 09:41	Dale L. Simmons	2480670
	04/09/2024			04/13/2024 09:54	Dale L. Simmons	2480676
	04/09/2024			04/13/2024 11:13	Dale L. Simmons	2480674
	04/09/2024			04/13/2024 11:26	Dale L. Simmons	2480672
	04/09/2024			04/13/2024 11:39	Dale L. Simmons	2480664
	04/09/2024			04/13/2024 11:52	Dale L. Simmons	2480662
SM 5310 B-2014	04/09/2024			04/11/2024 15:41	Khloe J Berg	2480671
	04/09/2024			04/11/2024 16:25	Khloe J Berg	2480673
	04/09/2024			04/11/2024 16:39	Khloe J Berg	2480675
	04/09/2024			04/11/2024 16:53	Khloe J Berg	2480677
	04/09/2024			04/11/2024 19:52	Elise M. Gillis	2480663
	04/09/2024			04/11/2024 22:04	Elise M. Gillis	2480665
	04/09/2024			04/11/2024 22:19	Elise M. Gillis	2480667
	04/09/2024			04/11/2024 22:34	Elise M. Gillis	2480669