

Chemical Analysis Report

NE-DIST-2023-05-03-01

Florida DEP Laboratory
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DOH Accreditation E31780

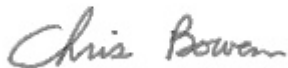
Event Description: **Black Creek HA/RPS/LVS**
Request ID: **RQ-2023-04-24-47**
Customer: **NE-DIST**
Project ID: **SMP**

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

Date Certified: 22-MAY-2023 11:34



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: BLACK CREEK N PRONG ABOVE BIG BRANCH Collection Date/Time: 05/02/2023 10:10

Field ID: 20030437

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405274	DEP SOP: NU-094-1	Color (true)	120		PCU	P429362	
	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P429347	
	EPA 300.0 Rev. 2.1	Chloride	9.1		mg Cl/L	P429564	
		Sulfate	6.3		mg SO4/L	P429567	
	SM 2320 B-2011	Total Alkalinity	22		mg CaCO3/L	P429832	
	SM 2540 C-2015	TDS	70		mg/L	P429834	
	SM 2540 D-2015	TSS	2	U	mg/L	P429764	
	SM 4500-F- C-2011	Fluoride	0.051	I	mg F/L	P429696	
2405275	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P429476	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31		mg N/L	P429455	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.023		mg N/L	P429639	
	EPA 365.1 Rev. 2.0	Total-P	0.048		mg P/L	P429464	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P429582	
2405276	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.030		mg P/L	P429364	
2405279	EPA 8321B	2,4-D	0.0025	I	ug/L	P429412	
		Acesulfame K	0.10	U	ug/L	P429244	
		2,4,5-T	0.0040	U	ug/L	P429412	
		AMPA	0.10	U	ug/L	P429244	
		Acetaminophen	0.0080	U	ug/L	P429412	
		Acetamiprid	0.0020	U	ug/L	P429412	
		Endothall	0.25	U	ug/L	P429244	
		Glufosinate	0.10	U	ug/L	P429244	
		Glyphosate	0.10	U	ug/L	P429244	
		Afidopyropen	0.0020	U	ug/L	P429412	
		Sucralose	0.035	I	ug/L	P429244	
		Bentazon	0.0018	I	ug/L	P429412	MS
		Benzovindiflupyr	0.0020	U	ug/L	P429412	
		Carbamazepine	8.0E-04	U	ug/L	P429412	
		Clothianidin	0.0020	U	ug/L	P429412	
		Dinotefuran	0.0020	U	ug/L	P429412	
		Diuron	0.0020	U	ug/L	P429412	
		Fenuron	0.032	U	ug/L	P429412	
		Fluridone	8.0E-04	U	ug/L	P429412	
		Imazapyr	0.17		ug/L	P429412	
		Hydrocodone	0.0020	U	ug/L	P429412	
		Ibuprofen	0.080	U	ug/L	P429412	
		Imidacloprid	0.0020	U	ug/L	P429412	
		Linuron	0.0040	U	ug/L	P429412	
		Mandestrobin	0.0020	U	ug/L	P429412	
		MCP	0.0020	U	ug/L	P429412	
		Naproxen	0.0080	U	ug/L	P429412	
		Primidone	0.0040	U	ug/L	P429412	
		Pyraclostrobin	0.0020	U	ug/L	P429412	

Field ID: 20030437

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2405279	EPA 8321B	Silvex	0.0040	U	ug/L	P429412	
		Thiamethoxam	0.0020	U	ug/L	P429412	
		Tolfenpyrad	0.0020	U	ug/L	P429412	
		Triclopyr	0.0040	U	ug/L	P429412	
2405280	EPA 200.7 Rev. 4.4	Calcium	9.86		mg/L	P429542	
		Iron	320		ug/L	P429542	
		Magnesium	2.16		mg/L	P429542	
		Potassium	0.52	I	mg/L	P429542	
		Sodium	5.4		mg/L	P429542	
		Strontium	35.4		ug/L	P429542	
		Tin	3.0	U	ug/L	P429542	
		Titanium	1.5	I	ug/L	P429542	
		Vanadium	2.0	U	ug/L	P429542	
		Zinc	5.0	U	ug/L	P429542	
	EPA 200.8 Rev. 5.4	Aluminum	148		ug/L	P429542	
		Antimony	0.050	U	ug/L	P429542	
		Arsenic	0.30		ug/L	P429542	
		Barium	13.6		ug/L	P429542	
		Beryllium	0.015	I	ug/L	P429542	
		Boron	15.3		ug/L	P429542	
		Cadmium	0.020	U	ug/L	P429542	
		Chromium	0.40	U	ug/L	P429542	
		Cobalt	0.057	I	ug/L	P429542	
		Copper	0.40	U	ug/L	P429542	
		Lead	0.20	U	ug/L	P429542	
		Manganese	3.95		ug/L	P429542	
		Molybdenum	0.20	I	ug/L	P429542	
		Nickel	0.50	U	ug/L	P429542	
		Selenium	0.20	U	ug/L	P429542	
		Silver	0.010	U	ug/L	P429542	
		Thallium	0.10	U	ug/L	P429542	
		Hardness	33.5		mg/L	P429542	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P429362

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429347

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429542

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: P429542

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429564

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429567

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429476

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429455

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429639

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429464

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P429364

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 8321B
Batch ID: P429244

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: P429412

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P429412

Component	Result	Code	Units
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
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: P429832

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

Reference Method: SM 2540 C-2015

Batch ID: P429834

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P429764

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P429696

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P429582

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: P429362

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429347

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.1		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429542

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	100		P	80 - 120
Iron	100		P	80 - 120
Magnesium	101		P	80 - 120
Potassium	100		P	80 - 120
Sodium	99.5		P	80 - 120
Strontium	102		P	80 - 120
Tin	102		P	80 - 120
Titanium	100		P	80 - 120
Vanadium	99.7		P	80 - 120
Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P429542

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	108		P	85 - 115
Arsenic	102		P	85 - 115
Barium	105		P	85 - 115
Beryllium	98.9		P	85 - 115
Boron	103		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	98.6		P	85 - 115
Cobalt	103		P	85 - 115
Copper	98.5		P	85 - 115
Lead	105		P	85 - 115
Manganese	99.7		P	85 - 115
Molybdenum	101		P	85 - 115
Nickel	98.0		P	85 - 115
Selenium	102		P	85 - 115
Silver	106		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429564

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429567

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429476

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429455

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.3		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429639

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429464

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.7		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P429364

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

Reference Method: EPA 8321B
Batch ID: P429244

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	107		P	40 - 150
AMPA	97.1		P	40 - 150
Endothall	81.3		P	40 - 150
Glufosinate	81.9		P	40 - 150
Glyphosate	97.4		P	40 - 150
Sucralose	96.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429412

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	94.0		P	40 - 150
2,4,5-T	91.9		P	40 - 150
Acetaminophen	74.1		P	30 - 150
Acetamiprid	82.4		P	40 - 150
Afidopyropen	68.1		P	30 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P429412

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bentazon	139		P	30 - 150
Benzovindiflupyr	79.3		P	40 - 150
Carbamazepine	72.2		P	40 - 150
Clothianidin	84.7		P	40 - 150
Dinotefuran	94.6		P	40 - 150
Diuron	70.0		P	40 - 150
Fenuron	81.9		P	40 - 150
Fluridone	73.3		P	40 - 150
Hydrocodone	78.2		P	40 - 150
Ibuprofen	73.6		P	40 - 150
Imazapyr	88.6		P	40 - 150
Imidacloprid	83.3		P	40 - 150
Linuron	68.3		P	40 - 150
Mandestrobin	82.6		P	40 - 150
MCPP	98.2		P	40 - 150
Naproxen	75.7		P	40 - 150
Primidone	84.1		P	40 - 150
Pyraclostrobin	77.6		P	40 - 150
Silvex	87.8		P	40 - 150
Thiamethoxam	79.7		P	40 - 150
Tolfenpyrad	51.9		P	30 - 150
Triclopyr	91.7		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P429832

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.6		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P429834

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	96.5		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P429764

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.3		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P429696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.0		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P429582

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P429542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405704	Calcium	99.2		P	80 - 120
2405704	Iron	105	103	P/P	80 - 120
2405704	Magnesium	104	102	P/P	80 - 120
2405704	Potassium	104	103	P/P	80 - 120
2405704	Sodium	98.9		P	80 - 120
2405704	Strontium	104	103	P/P	80 - 120
2405704	Tin	101	99.4	P/P	80 - 120
2405704	Titanium	101	102	P/P	80 - 120
2405704	Vanadium	101	102	P/P	80 - 120
2405704	Zinc	104	103	P/P	80 - 120
2406025	Calcium	99.2		P	80 - 120
2406025	Iron	102		P	80 - 120
2406025	Magnesium	100		P	80 - 120
2406025	Potassium	100		P	80 - 120
2406025	Sodium	98.9		P	80 - 120
2406025	Strontium	101		P	80 - 120
2406025	Tin	97.8		P	80 - 120
2406025	Titanium	101		P	80 - 120
2406025	Vanadium	100		P	80 - 120
2406025	Zinc	98.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P429542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405704	Aluminum	98.9	100	P/P	80 - 120
2405704	Antimony	107	107	P/P	80 - 120
2405704	Arsenic	102	101	P/P	80 - 120
2405704	Barium	103	104	P/P	80 - 120
2405704	Beryllium	99.1	98.6	P/P	80 - 120
2405704	Boron	100	102	P/P	80 - 120
2405704	Cadmium	103	103	P/P	80 - 120
2405704	Chromium	97.5	97.4	P/P	80 - 120
2405704	Cobalt	101	101	P/P	80 - 120
2405704	Copper	96.8	96.6	P/P	80 - 120
2405704	Lead	104	104	P/P	80 - 120
2405704	Manganese	97.9	97.1	P/P	80 - 120
2405704	Molybdenum	103	101	P/P	80 - 120
2405704	Nickel	97.5	96.8	P/P	80 - 120
2405704	Selenium	102	101	P/P	80 - 120
2405704	Silver	103	102	P/P	80 - 120
2405704	Thallium	103	103	P/P	80 - 120
2406025	Aluminum	98.8		P	80 - 120
2406025	Antimony	107		P	80 - 120
2406025	Arsenic	100		P	80 - 120
2406025	Barium	103		P	80 - 120
2406025	Beryllium	96.8		P	80 - 120
2406025	Boron	103		P	80 - 120
2406025	Cadmium	101		P	80 - 120
2406025	Chromium	96.8		P	80 - 120
2406025	Cobalt	101		P	80 - 120
2406025	Copper	96.2		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P429542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2406025	Lead	105		P	80 - 120
2406025	Manganese	98.0		P	80 - 120
2406025	Molybdenum	100		P	80 - 120
2406025	Nickel	96.5		P	80 - 120
2406025	Selenium	101		P	80 - 120
2406025	Silver	104		P	80 - 120
2406025	Thallium	104		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404879	Chloride	101		P	90 - 110
2405038	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429567

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404879	Sulfate	101		P	90 - 110
2405038	Sulfate	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429476

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405197	Ammonia-N	97.4	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429455

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405167	Kjeldahl Nitrogen	99.4	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429639

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405223	NO2NO3-N	104	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429464

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405298	Total-P	99.8	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P429364

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405276	O-Phosphate-P	99.0	98.8	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P429244

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2404443	Acesulfame K	129	130	P/P	40 - 150
2404443	AMPA	87.0	94.2	P/P	40 - 150
2404443	Endothall	85.3	83.2	P/P	40 - 150
2404443	Glufosinate	84.9	85.0	P/P	40 - 150
2404443	Glyphosate	97.6	92.2	P/P	40 - 150
2404443	Sucralose	107	101	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429412

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405330	2,4-D	113	110	P/P	40 - 150
2405330	2,4,5-T	115	109	P/P	40 - 150
2405330	Acetaminophen	85.7	84.1	P/P	30 - 150
2405330	Acetamiprid	98.6	96.6	P/P	40 - 150
2405330	Afidopyropen	99.1	95.3	P/P	30 - 150
2405330	Bentazon	164	174	F/F	30 - 150
2405330	Benzovindiflupyr	81.9	87.3	P/P	40 - 150
2405330	Carbamazepine	82.6	84.1	P/P	40 - 150
2405330	Clothianidin	99.7	99.2	P/P	40 - 150
2405330	Dinotefuran	112	116	P/P	40 - 150
2405330	Diuron	72.5	73.5	P/P	40 - 150
2405330	Fenuron	77.3	84.5	P/P	40 - 150
2405330	Fluridone	81.8	96.1	P/P	40 - 150
2405330	Hydrocodone	80.7	85.4	P/P	40 - 150
2405330	Ibuprofen	86.5	78.2	P/P	40 - 150
2405330	Imazapyr	143	114	P/P	40 - 150
2405330	Imidacloprid	104	102	P/P	40 - 150
2405330	Linuron	74.5	74.5	P/P	40 - 150
2405330	Mandestrobin	94.1	90.4	P/P	40 - 150
2405330	MCPP	126	110	P/P	40 - 150
2405330	Naproxen	93.3	73.3	P/P	40 - 150
2405330	Primidone	98.8	95.8	P/P	40 - 150
2405330	Pyraclostrobin	85.1	85.7	P/P	40 - 150
2405330	Silvex	112	117	P/P	40 - 150
2405330	Thiamethoxam	98.5	95.4	P/P	40 - 150
2405330	Tolfenpyrad	51.2	49.7	P/P	30 - 150
2405330	Triclopyr	105	103	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P429696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405446	Fluoride	102	103	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P429582

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405451	Organic Carbon	96.9	98.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P429362

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405195	Color (true)	2.69	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429347

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404872	Turbidity	0.397	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P429542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405704	Calcium	1.17	Spike	P	0 - 20
2405704	Iron	1.58	Spike	P	0 - 20
2405704	Magnesium	1.48	Spike	P	0 - 20
2405704	Potassium	0.505	Spike	P	0 - 20
2405704	Sodium	0.341	Spike	P	0 - 20
2405704	Strontium	1.30	Spike	P	0 - 20
2405704	Tin	1.73	Spike	P	0 - 20
2405704	Titanium	0.741	Spike	P	0 - 20
2405704	Vanadium	0.432	Spike	P	0 - 20
2405704	Zinc	0.175	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P429542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405704	Aluminum	1.15	Spike	P	0 - 20
2405704	Antimony	0.0221	Spike	P	0 - 20
2405704	Arsenic	0.678	Spike	P	0 - 20
2405704	Barium	0.369	Spike	P	0 - 20
2405704	Beryllium	0.549	Spike	P	0 - 20
2405704	Boron	0.948	Spike	P	0 - 20
2405704	Cadmium	0.285	Spike	P	0 - 20
2405704	Chromium	0.202	Spike	P	0 - 20
2405704	Cobalt	0.0975	Spike	P	0 - 20
2405704	Copper	0.165	Spike	P	0 - 20
2405704	Lead	0.260	Spike	P	0 - 20
2405704	Manganese	0.716	Spike	P	0 - 20
2405704	Molybdenum	1.46	Spike	P	0 - 20
2405704	Nickel	0.800	Spike	P	0 - 20
2405704	Selenium	1.12	Spike	P	0 - 20
2405704	Silver	0.598	Spike	P	0 - 20
2405704	Thallium	0.226	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404879	Chloride	0.298	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429567

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404879	Sulfate	0.772	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429476

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405197	Ammonia-N	0.844	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429455

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405167	Kjeldahl Nitrogen	0.508	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429639

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405223	NO2NO3-N	0.541	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429464

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405298	Total-P	0.557	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P429364

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405276	O-Phosphate-P	0.155	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P429244

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404443	Acesulfame K	0.713	Spike	P	0 - 30
2404443	AMPA	7.95	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P429244

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404443	Endothall	2.43	Spike	P	0 - 30
2404443	Glufosinate	0.0367	Spike	P	0 - 30
2404443	Glyphosate	5.66	Spike	P	0 - 30
2404443	Sucralose	5.67	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P429412

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405330	2,4-D	2.74	Spike	P	0 - 30
2405330	2,4,5-T	5.85	Spike	P	0 - 30
2405330	Acetaminophen	1.85	Spike	P	0 - 30
2405330	Acetamiprid	2.02	Spike	P	0 - 30
2405330	Afidopyropen	3.85	Spike	P	0 - 30
2405330	Bentazon	5.03	Spike	P	0 - 30
2405330	Benzovindiflupyr	6.39	Spike	P	0 - 30
2405330	Carbamazepine	1.79	Spike	P	0 - 30
2405330	Clothianidin	0.475	Spike	P	0 - 30
2405330	Dinotefuran	3.54	Spike	P	0 - 30
2405330	Diuron	1.32	Spike	P	0 - 30
2405330	Fenuron	8.83	Spike	P	0 - 30
2405330	Fluridone	16.1	Spike	P	0 - 30
2405330	Hydrocodone	5.60	Spike	P	0 - 30
2405330	Ibuprofen	9.98	Spike	P	0 - 30
2405330	Imazapyr	20.0	Spike	P	0 - 30
2405330	Imidacloprid	2.17	Spike	P	0 - 30
2405330	Linuron	0.0137	Spike	P	0 - 30
2405330	Mandestrobin	3.98	Spike	P	0 - 30
2405330	MCPP	13.5	Spike	P	0 - 30
2405330	Naproxen	23.9	Spike	P	0 - 30
2405330	Primidone	3.10	Spike	P	0 - 30
2405330	Pyraclostrobin	0.684	Spike	P	0 - 30
2405330	Silvex	3.93	Spike	P	0 - 30
2405330	Thiamethoxam	3.27	Spike	P	0 - 30
2405330	Tolfenpyrad	2.86	Spike	P	0 - 30
2405330	Triclopyr	2.18	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P429832

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406052	Total Alkalinity	0.346	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015

Batch ID: P429834

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2404876	TDS	2.69	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P429696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405446	Fluoride	0.480	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P429582

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405451	Organic Carbon	0.917	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2405279

Field Sample ID: 20030437

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	113	P	30 - 160
EPA 8321B	Acetaminophen-d4	78.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	74.9	P	30 - 160
EPA 8321B	Diuron-d6	65.9	P	30 - 160
EPA 8321B	Endothall-d6	96.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	95.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	69.6	P	30 - 160
EPA 8321B	Primidone-d5	87.7	P	30 - 160
EPA 8321B	Sucralose-d6	112	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118937

Included Lab Sample IDs: 2405274

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	97.5	97.5	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1

Run ID: A118941

Included Lab Sample IDs: 2405274

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A118942

Included Lab Sample IDs: 2405276

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.6	98.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118977

Included Lab Sample IDs: 2405275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.1	98.8	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A118997

Included Lab Sample IDs: 2405279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	131	153	P/P	60 - 160
Sucralose	103	114	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A118999

Included Lab Sample IDs: 2405279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.8	92.2	P/P	50 - 150
2,4,5-T	86.0	85.6	P/P	50 - 150
Acetaminophen	84.6	86.4	P/P	60 - 160
Acetamiprid	107	106	P/P	50 - 150
Afidopyropen	96.7	96.4	P/P	50 - 150
Bentazon	121	127	P/P	50 - 160
Benzovindiflupyr	99.5	106	P/P	50 - 150
Carbamazepine	101	97.7	P/P	60 - 150
Clothianidin	105	106	P/P	60 - 150
Dinotefuran	112	113	P/P	50 - 150
Diuron	114	102	P/P	60 - 160
Fenuron	104	101	P/P	60 - 150
Fluridone	104	118	P/P	60 - 160
Hydrocodone	102	104	P/P	60 - 150
Ibuprofen	78.9	86.9	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A118999
Included Lab Sample IDs: 2405279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazapyr	95.4	91.0	P/P	50 - 150
Imidacloprid	96.3	96.9	P/P	60 - 150
Linuron	101	110	P/P	60 - 150
Mandestrobin	106	111	P/P	50 - 150
MCPP	90.7	91.4	P/P	50 - 150
Naproxen	91.9	120	P/P	50 - 160
Primidone	89.9	101	P/P	60 - 150
Pyraclostrobin	102	101	P/P	60 - 150
Silvex	87.3	101	P/P	50 - 150
Thiamethoxam	98.9	92.3	P/P	50 - 150
Tolfenpyrad	95.3	95.3	P/P	60 - 150
Triclopyr	80.7	87.5	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A119009
Included Lab Sample IDs: 2405279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	99.4	94.2	P/P	60 - 160
Endothall	85.1	81.9	P/P	60 - 160
Glufosinate	81.5	83.1	P/P	60 - 160
Glyphosate	103	97.2	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A119016
Included Lab Sample IDs: 2405275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A119017
Included Lab Sample IDs: 2405275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.1	107	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A119022
Included Lab Sample IDs: 2405274

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

Reference Method: SM 5310 B-2011
Run ID: A119029
Included Lab Sample IDs: 2405275

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A119040

Included Lab Sample IDs: 2405275

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119053

Included Lab Sample IDs: 2405280

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	100	P/P	90 - 110
Antimony	105	106	P/P	90 - 110
Arsenic	101	100	P/P	90 - 110
Barium	100	102	P/P	90 - 110
Beryllium	98.3	97.1	P/P	90 - 110
Boron	98.3	98.9	P/P	90 - 110
Cadmium	102	102	P/P	90 - 110
Chromium	99.6	97.3	P/P	90 - 110
Cobalt	103	102	P/P	90 - 110
Copper	96.1	96.8	P/P	90 - 110
Lead	103	103	P/P	90 - 110
Manganese	101	99.0	P/P	90 - 110
Molybdenum	100	101	P/P	90 - 110
Nickel	98.0	97.1	P/P	90 - 110
Selenium	103	103	P/P	90 - 110
Silver	104	105	P/P	90 - 110
Thallium	102	101	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A119080

Included Lab Sample IDs: 2405274

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A119091

Included Lab Sample IDs: 2405280

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	98.9	99.2	P/P	90 - 110
Iron	101	102	P/P	90 - 110
Magnesium	100	102	P/P	90 - 110
Potassium	99.9	102	P/P	90 - 110
Sodium	99.1	99.5	P/P	90 - 110
Strontium	101	102	P/P	90 - 110
Tin	98.8	98.1	P/P	90 - 110
Titanium	99.2	99.5	P/P	90 - 110
Vanadium	98.9	98.7	P/P	90 - 110
Zinc	99.3	96.2	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A119143

Included Lab Sample IDs: 2405274

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.2	99.4	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	101					2.69	
EPA 180.1 Rev. 2.0	Turbidity	97.1					0.397	
EPA 200.7 Rev. 4.4	Calcium	100	99.2	99.2				1.17
	Iron	100	105	103	102			1.58
	Magnesium	101	104	102	100			1.48
	Potassium	100	104	103	100			0.505
	Sodium	99.5	98.9	98.9				0.341
	Strontium	102	104	103	101			1.30
	Tin	102	101	99.4	97.8			1.73
	Titanium	100	101	102	101			0.741
	Vanadium	99.7	101	102	100			0.432
	Zinc	102	104	103	98.7			0.175
EPA 200.8 Rev. 5.4	Aluminum	102	98.9	100	98.8			1.15
	Antimony	108	107	107	107			0.0221
	Arsenic	102	102	101	100			0.678
	Barium	105	103	104	103			0.369
	Beryllium	98.9	99.1	98.6	96.8			0.549
	Boron	103	100	102	103			0.948
	Cadmium	102	103	103	101			0.285
	Chromium	98.6	97.5	97.4	96.8			0.202
	Cobalt	103	101	101	101			0.0975
	Copper	98.5	96.8	96.6	96.2			0.165
	Lead	105	104	104	105			0.260
	Manganese	99.7	97.9	97.1	98.0			0.716
	Molybdenum	101	103	101	100			1.46
	Nickel	98.0	97.5	96.8	96.5			0.800
	Selenium	102	102	101	101			1.12
	Silver	106	103	102	104			0.598
	Thallium	101	103	103	104			0.226
EPA 300.0 Rev. 2.1	Chloride	101	101	101			0.298	
	Sulfate	101	101	104			0.772	
EPA 350.1 Rev. 2.0	Ammonia-N	97.2	97.4	99.0				0.844
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.3	99.4	98.5				0.508
EPA 353.2 Rev. 2.0	NO2NO3-N	106	104	103				0.541
EPA 365.1 Rev. 2.0	Total-P	99.7	99.8	100				0.557
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	99.0	98.8				0.155
EPA 8321B	2,4-D	94.0	113	110				2.74
	2,4,5-T	91.9	115	109				5.85
	Acesulfame K	107	129	130				0.713
	Acetaminophen	74.1	85.7	84.1				1.85
	Acetamiprid	82.4	98.6	96.6				2.02
	Afidopyropen	68.1	99.1	95.3				3.85
	AMPA	97.1	87.0	94.2				7.95
	Bentazon	139	164	174				5.03
	Benzovindiflupyr	79.3	81.9	87.3				6.39
	Carbamazepine	72.2	82.6	84.1				1.79
	Clothianidin	84.7	99.7	99.2				0.475
	Dinotefuran	94.6	112	116				3.54
	Diuron	70.0	72.5	73.5				1.32
	Endothall	81.3	85.3	83.2				2.43
	Fenuron	81.9	77.3	84.5				8.83
	Fluridone	73.3	81.8	96.1				16.1
	Glufosinate	81.9	84.9	85.0				0.0367
	Glyphosate	97.4	97.6	92.2				5.66

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	Hydrocodone	78.2	80.7	85.4			5.60
	Ibuprofen	73.6	86.5	78.2			9.98
	Imazapyr	88.6	143	114			20.0
	Imidacloprid	83.3	104	102			2.17
	Linuron	68.3	74.5	74.5			0.0137
	Mandestrobin	82.6	94.1	90.4			3.98
	MCP	98.2	126	110			13.5
	Naproxen	75.7	93.3	73.3			23.9
	Primidone	84.1	98.8	95.8			3.10
	Pyraclorobin	77.6	85.1	85.7			0.684
	Silvex	87.8	112	117			3.93
	Sucralose	96.6	107	101			5.67
	Thiamethoxam	79.7	98.5	95.4			3.27
	Tolfenpyrad	51.9	51.2	49.7			2.86
	Triclopyr	91.7	105	103			2.18
SM 2320 B-2011	Total Alkalinity	98.6				0.346	
SM 2540 C-2015	TDS	96.5				2.69	
SM 2540 D-2015	TSS	95.3					
SM 4500-F- C-2011	Fluoride	99.0	102	103			0.480
SM 5310 B-2011	Organic Carbon	96.3	96.9	98.0			0.917

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2405274
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2405274
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2405280
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2405280
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2405274
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2405274
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2405275
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2405275
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2405275
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2405275
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2405276
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2405279
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2405274
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2405280
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2405274
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2405274
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2405274
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2405275

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	05/03/2023			05/03/2023 14:52	Alexis Price	2405274
EPA 180.1 Rev. 2.0	05/03/2023			05/03/2023 13:03	Alexis Price	2405274
EPA 200.7 Rev. 4.4	05/03/2023	05/08/2023 12:00	George D Taylor	05/10/2023 20:26	McKinley C Carter	2405280
EPA 200.8 Rev. 5.4	05/03/2023	05/08/2023 12:00	George D Taylor	05/09/2023 15:24	Emily M Philpot	2405280
EPA 300.0 Rev. 2.1	05/03/2023			05/06/2023 06:18	Anna M. Plaviak	2405274
EPA 350.1 Rev. 2.0	05/03/2023			05/05/2023 12:02	Khloe J Berg	2405275
EPA 351.2 Rev. 2.0	05/03/2023	05/05/2023 10:27	Dana G. Hughes	05/08/2023 16:20	Samantha L Bates	2405275
EPA 353.2 Rev. 2.0	05/03/2023			05/09/2023 11:37	Beverly Y. Sanders	2405275
EPA 365.1 Rev. 2.0	05/03/2023	05/05/2023 14:00	Alexis Price	05/08/2023 14:18	James L Waggerby	2405275
EPA 365.1 Rev. 2.0 dissolved	05/03/2023			05/03/2023 14:54	James L Waggerby	2405276
EPA 8321B	05/03/2023	05/05/2023 09:00	Hoor Shaik	05/05/2023 18:33	Juyoung Kim	2405279
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/05/2023 16:27	Manjita Shrestha	2405279
	05/03/2023	05/05/2023 09:00	Manjita Shrestha	05/06/2023 16:06	Manjita Shrestha	2405279
SM 2320 B-2011	05/03/2023			05/11/2023 16:19	Dale L. Simmons	2405274
SM 2340 B-2011	05/03/2023			05/10/2023 20:26	McKinley C Carter	2405280
SM 2540 C-2015	05/03/2023			05/05/2023 16:02	Yijie Li	2405274
SM 2540 D-2015	05/03/2023			05/05/2023 16:02	Yijie Li	2405274
SM 4500-F- C-2011	05/03/2023			05/10/2023 00:49	Dale L. Simmons	2405274
SM 5310 B-2011	05/03/2023			05/08/2023 20:18	Elise M. Gillis	2405275