Chemical Analysis Report

SO-DIST-2021-06-29-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **2021 SMP: Hatchee Cricks**
Request ID: **RQ-2021-06-28-10**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant Date Certified: 21-JUL-2021 09:16

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: PalmCreek@LeeCivicCtr **Collection Date/Time: 06/28/2021 08:40**

Field ID: G3SD0190 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2257607	EPA 8321B	2,4-D	0.0040	I	ug/L	P400315	
		Acesulfame K	0.13	I	ug/L	P400314	
		2,4,5-T	0.0040	U	ug/L	P400315	
		AMPA	0.24	I	ug/L	P400314	
		Acetaminophen	0.0080	U	ug/L	P400315	
		Acetamiprid	0.0020	U	ug/L	P400315	
		Endothall	0.25	U	ug/L	P400314	
		Glufosinate	0.10	U	ug/L	P400314	
		Glyphosate	0.26	I	ug/L	P400314	
		Afidopyropen	0.0020	U	ug/L	P400315	
		Bentazon	0.0013	I	ug/L	P400315	
		Sucralose	0.13		ug/L	P400314	
		Benzovindiflupyr	0.0020	U	ug/L	P400315	
		Carbamazepine	8.0E-04	U	ug/L	P400315	
		Clothianidin	0.0020	U	ug/L	P400315	
		Dinotefuran	0.0037	I	ug/L	P400315	
		Diuron	0.0020	U	ug/L	P400315	
		Fenuron	0.016	U	ug/L	P400315	
		Fluridone	8.0E-04	U	ug/L	P400315	
		Imazapyr	0.020		ug/L	P400315	MS
		Hydrocodone	0.0020	U	ug/L	P400315	
		Ibuprofen	0.020	U	ug/L	P400315	
		Imidacloprid	0.0021	I	ug/L	P400315	
		Linuron	0.0040	U	ug/L	P400315	
		Mandestrobin	0.0020	U	ug/L	P400315	
		MCPP	0.0020	U	ug/L	P400315	
		Naproxen	0.0080	U	ug/L	P400315	
		Primidone	0.0040	U	ug/L	P400315	
		Pyraclostrobin	0.0020	U	ug/L	P400315	
		Thiamethoxam	0.0020	U	ug/L	P400315	
		Tolfenpyrad	0.0020	U	ug/L	P400315	
		Triclopyr	0.0040	U	ug/L	P400315	

Sample Location: Palm Creek **Collection Date/Time: 06/28/2021 08:50**

Field ID: G3SD0163 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2257608	EPA 8321B	2,4-D	0.017		ug/L	P400315	
		Acesulfame K	0.32	I	ug/L	P400314	
		2,4,5-T	0.0040	U	ug/L	P400315	
		AMPA	0.14	I	ug/L	P400314	
		Acetaminophen	0.0089	I	ug/L	P400315	
		Acetamiprid	0.0020	U	ug/L	P400315	
		Endothall	0.25	U	ug/L	P400314	
		Glufosinate	0.10	U	ug/L	P400314	
		Glyphosate	0.10	U	ug/L	P400314	
		Afidopyropen	0.0020	U	ug/L	P400315	
		Bentazon	0.017		ug/L	P400315	
		Sucralose	0.49		ug/L	P400314	
		Benzovindiflupyr	0.0020	U	ug/L	P400315	
		Carbamazepine	8.0E-04	U	ug/L	P400315	
		Clothianidin	0.0020	U	ug/L	P400315	
		Dinotefuran	0.0020	U	ug/L	P400315	
		Diuron	0.0020	U	ug/L	P400315	
		Fenuron	0.016	U	ug/L	P400315	
		Fluridone	0.0043		ug/L	P400315	
		Imazapyr	0.026		ug/L	P400315	MS
		Hydrocodone	0.0020	U	ug/L	P400315	
		Ibuprofen	0.020	U	ug/L	P400315	
		Imidacloprid	0.0020	U	ug/L	P400315	
		Linuron	0.0040	U	ug/L	P400315	
		Mandestrobin	0.0020	U	ug/L	P400315	
		MCPP	0.0020	U	ug/L	P400315	
		Naproxen	0.0080	U	ug/L	P400315	
		Primidone	0.028		ug/L	P400315	
		Pyraclostrobin	0.0020	U	ug/L	P400315	
		Thiamethoxam	0.0020	U	ug/L	P400315	
		Tolfenpyrad	0.0020	U	ug/L	P400315	
		Triclopyr	0.0040	U	ug/L	P400315	

Sample Location: Bee Branch @ Loblolly Bay Rd **Collection Date/Time: 06/28/2021 10:20**

Field ID: G3SD0085 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2257594	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P400354	
	EPA 300.0 Rev. 2.1	Chloride	120		mg Cl/L	P400626	
		Sulfate	76		mg SO4/L	P400627	
	SM 2120 B-2011	Color (true)	130		PCU	P400351	
	SM 2320 B-2011	Total Alkalinity	34		mg CaCO3/L	P400707	
	SM 2540 C-2011	TDS	402		mg/L	P400763	
	SM 2540 D-2011	TSS	2	U	mg/L	P400671	
	SM 4500 F-C-2011	Fluoride	0.13		mg F/L	P400710	
2257595	EPA 350.1 Rev. 2.0	Ammonia-N	0.015		mg N/L	P400691	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.89		mg N/L	P400587	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.054		mg N/L	P400369	
	EPA 365.1 Rev. 2.0	Total-P	0.055		mg P/L	P400525	
	SM 5310 B-2011	Organic Carbon	22		mg C/L	P400567	
2257596	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.032		mg P/L	P400348	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Pollywog Creek @ SR 78 **Collection Date/Time: 06/28/2021 10:50**

Field ID: G3SD0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2257609	EPA 8321B	2,4-D	0.0020	U	ug/L	P400315	
		Acesulfame K	0.62		ug/L	P400314	
		2,4,5-T	0.0040	U	ug/L	P400315	
		AMPA	0.10	U	ug/L	P400314	
		Acetaminophen	0.0080	U	ug/L	P400315	
		Acetamiprid	0.0020	U	ug/L	P400315	
		Endothall	0.25	U	ug/L	P400314	
		Glufosinate	0.10	U	ug/L	P400314	
		Glyphosate	0.10	U	ug/L	P400314	
		Afidopyropen	0.0020	U	ug/L	P400315	
		Bentazon	0.0011	I	ug/L	P400315	
		Sucralose	0.50		ug/L	P400314	
		Benzovindiflupyr	0.0020	U	ug/L	P400315	
		Carbamazepine	0.0051		ug/L	P400315	
		Clothianidin	0.0020	U	ug/L	P400315	
		Dinotefuran	0.0020	U	ug/L	P400315	
		Diuron	0.0020	U	ug/L	P400315	
		Fenuron	0.016	U	ug/L	P400315	
		Fluridone	8.0E-04	U	ug/L	P400315	
		Imazapyr	0.0085	I	ug/L	P400315	MS
		Hydrocodone	0.0020	U	ug/L	P400315	
		Ibuprofen	0.020	U	ug/L	P400315	
		Imidacloprid	0.0020	U	ug/L	P400315	
		Linuron	0.0040	U	ug/L	P400315	
		Mandestrobin	0.0020	U	ug/L	P400315	
		MCPP	0.0020	U	ug/L	P400315	
		Naproxen	0.0080	U	ug/L	P400315	
		Primidone	0.0040	U	ug/L	P400315	
		Pyraclostrobin	0.0020	U	ug/L	P400315	
		Thiamethoxam	0.0020	U	ug/L	P400315	
		Tolfenpyrad	0.0020	U	ug/L	P400315	
		Triclopyr	0.0040	U	ug/L	P400315	

Sample Location: FB_06282021 **Collection Date/Time: 06/28/2021 11:00**

Field ID: FB_06282021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2257611	EPA 8321B	2,4-D	0.0020	U	ug/L	P400315	
		Acesulfame K	0.10	U	ug/L	P400314	
		2,4,5-T	0.0040	U	ug/L	P400315	
		AMPA	0.10	U	ug/L	P400314	
		Acetaminophen	0.0080	U	ug/L	P400315	
		Acetamiprid	0.0020	U	ug/L	P400315	
		Endothall	0.25	U	ug/L	P400314	
		Glufosinate	0.10	U	ug/L	P400314	
		Glyphosate	0.10	U	ug/L	P400314	
		Afidopyropen	0.0020	U	ug/L	P400315	
		Bentazon	8.0E-04	U	ug/L	P400315	
		Sucralose	0.010	U	ug/L	P400314	
		Benzovindiflupyr	0.0020	U	ug/L	P400315	
		Carbamazepine	8.0E-04	U	ug/L	P400315	
		Clothianidin	0.0020	U	ug/L	P400315	
		Dinotefuran	0.0020	U	ug/L	P400315	
		Diuron	0.0020	U	ug/L	P400315	
		Fenuron	0.016	U	ug/L	P400315	
		Fluridone	8.0E-04	U	ug/L	P400315	
		Imazapyr	0.0040	U	ug/L	P400315	MS
		Hydrocodone	0.0020	U	ug/L	P400315	
		Ibuprofen	0.020	U	ug/L	P400315	
		Imidacloprid	0.0020	U	ug/L	P400315	
		Linuron	0.0040	U	ug/L	P400315	
		Mandestrobin	0.0020	U	ug/L	P400315	
		MCPP	0.0020	U	ug/L	P400315	
		Naproxen	0.0080	U	ug/L	P400315	
		Primidone	0.0040	U	ug/L	P400315	
		Pyraclostrobin	0.0020	U	ug/L	P400315	
		Thiamethoxam	0.0020	U	ug/L	P400315	
		Tolfenpyrad	0.0020	U	ug/L	P400315	
		Triclopyr	0.0040	U	ug/L	P400315	

Sample Location: Pollywog Creek **Collection Date/Time: 06/28/2021 11:15**

Field ID: G3SD0189 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2257610	EPA 8321B	2,4-D	0.0020	U	ug/L	P400315	
		Acesulfame K	0.29	I	ug/L	P400314	
		2,4,5-T	0.0040	U	ug/L	P400315	
		AMPA	0.10	U	ug/L	P400314	
		Acetaminophen	0.0080	U	ug/L	P400315	
		Acetamiprid	0.0020	U	ug/L	P400315	
		Endothall	0.25	U	ug/L	P400314	
		Glufosinate	0.10	U	ug/L	P400314	
		Glyphosate	0.10	U	ug/L	P400314	
		Afidopyropen	0.0020	U	ug/L	P400315	
		Bentazon	0.0018	I	ug/L	P400315	
		Sucralose	0.29		ug/L	P400314	
		Benzovindiflupyr	0.0020	U	ug/L	P400315	
		Carbamazepine	8.0E-04	U	ug/L	P400315	
		Clothianidin	0.0020	U	ug/L	P400315	
		Dinotefuran	0.0020	U	ug/L	P400315	
		Diuron	0.0020	U	ug/L	P400315	
		Fenuron	0.016	U	ug/L	P400315	
		Fluridone	8.0E-04	U	ug/L	P400315	
		Imazapyr	0.0040	U	ug/L	P400315	MS
		Hydrocodone	0.0020	U	ug/L	P400315	
		Ibuprofen	0.020	U	ug/L	P400315	
		Imidacloprid	0.0020	U	ug/L	P400315	
		Linuron	0.0040	U	ug/L	P400315	
		Mandestrobin	0.0020	U	ug/L	P400315	
		MCPP	0.0020	U	ug/L	P400315	
		Naproxen	0.0080	U	ug/L	P400315	
		Primidone	0.0040	U	ug/L	P400315	
		Pyraclostrobin	0.0020	U	ug/L	P400315	
		Thiamethoxam	0.0020	U	ug/L	P400315	
		Tolfenpyrad	0.0020	U	ug/L	P400315	
		Triclopyr	0.0040	U	ug/L	P400315	

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P400354

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400626

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400627

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400691

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400587

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400369

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400525

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400348

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

Reference Method: EPA 8321B
Batch ID: P400314

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P400314

Component	Result	Code	Units
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P400315

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	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
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2120 B-2011
Batch ID: P400351

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P400707

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

Reference Method: SM 2540 C-2011
Batch ID: P400763

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P400671

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P400710

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P400567

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400626

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400627

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400691

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400587

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400369

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400525

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400348

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

Reference Method: EPA 8321B
Batch ID: P400314

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	89.8		P	40 - 150
AMPA	97.0		P	40 - 150
Endothall	97.7		P	40 - 150
Glufosinate	93.3		P	40 - 150
Glyphosate	96.5		P	40 - 150
Sucralose	85.2		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P400315

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	120		P	30 - 160
2,4,5-T	128		P	30 - 160
Acetaminophen	83.0		P	30 - 160
Acetamiprid	90.6		P	30 - 160
Afidopyropen	73.6		P	30 - 160
Bentazon	92.3		P	30 - 160
Benzovindiflupyr	92.8		P	30 - 160
Carbamazepine	92.0		P	30 - 160
Clothianidin	92.2		P	30 - 160
Dinotefuran	88.1		P	30 - 160
Diuron	73.7		P	30 - 160
Fenuron	99.7		P	30 - 160
Fluridone	87.6		P	30 - 160
Hydrocodone	94.6		P	30 - 160
Ibuprofen	86.0		P	30 - 160
Imazapyr	101		P	30 - 160
Imidacloprid	92.6		P	30 - 160
Linuron	73.3		P	30 - 160
Mandestrobin	94.1		P	30 - 160
MCPP	125		P	30 - 160
Naproxen	82.1		P	30 - 160
Primidone	93.3		P	30 - 160
Pyraclostrobin	81.1		P	30 - 160
Thiamethoxam	91.7		P	30 - 160
Tolfenpyrad	47.4		P	30 - 160
Triclopyr	122		P	30 - 160

Reference Method: SM 2120 B-2011
Batch ID: P400351

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.3		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P400707

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

Reference Method: SM 4500 F-C-2011
Batch ID: P400710

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.9		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P400567

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.3		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400626

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257434	Chloride	101		P	90 - 110
2257572	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400627

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257434	Sulfate	101		P	90 - 110
2257572	Sulfate	98.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400691

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257540	Ammonia-N	98.6	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400587

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257595	Kjeldahl Nitrogen	108	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400369

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257587	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400348

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257574	O-Phosphate-P	96.6	97.2	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P400314

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257607	Acesulfame K	78.8	87.6	P/P	40 - 150
2257607	AMPA	85.0	82.9	P/P	40 - 150
2257607	Endothall	93.9	93.7	P/P	40 - 150
2257607	Glufosinate	86.9	89.2	P/P	40 - 150
2257607	Glyphosate	91.4	82.6	P/P	40 - 150
2257607	Sucralose	80.9	85.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P400315

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2256868	2,4-D	122	124	P/P	30 - 160
2256868	2,4,5-T	113	116	P/P	30 - 160
2256868	Acetaminophen	112	112	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P400315

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2256868	Acetamiprid	82.4	74.6	P/P	30 - 160
2256868	Afidopyropen	71.1	57.7	P/P	30 - 160
2256868	Bentazon	79.5	74.5	P/P	30 - 160
2256868	Benzovindiflupyr	84.5	91.2	P/P	30 - 160
2256868	Carbamazepine	85.2	87.3	P/P	30 - 160
2256868	Clothianidin	114	107	P/P	30 - 160
2256868	Dinotefuran	125	123	P/P	30 - 160
2256868	Diuron	75.7	68.5	P/P	30 - 160
2256868	Fenuron	83.1	79.1	P/P	30 - 160
2256868	Fluridone	79.7	81.1	P/P	30 - 160
2256868	Hydrocodone	108	107	P/P	30 - 160
2256868	Ibuprofen	84.8	67.3	P/P	30 - 160
2256868	Imazapyr	168	159	F/P	30 - 160
2256868	Imidacloprid	148	155	P/P	30 - 160
2256868	Linuron	70.6	70.0	P/P	30 - 160
2256868	Mandestrobin	94.0	90.3	P/P	30 - 160
2256868	MCPP	113	112	P/P	30 - 160
2256868	Naproxen	97.4	75.5	P/P	30 - 160
2256868	Primidone	122	111	P/P	30 - 160
2256868	Pyraclostrobin	88.6	80.2	P/P	30 - 160
2256868	Thiamethoxam	145	148	P/P	30 - 160
2256868	Tolfenpyrad	53.7	55.9	P/P	30 - 160
2256868	Triclopyr	121	113	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P400710

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257941	Fluoride	95.0	97.3	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P400567

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257543	Organic Carbon	95.9	96.2	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P400354

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257511	Turbidity	6.76	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400626

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257572	Chloride	0.510	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400627

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257572	Sulfate	0.616	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400691

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257540	Ammonia-N	0.859	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400587

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257595	Kjeldahl Nitrogen	2.70	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400369

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257587	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400525

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257791	Total-P	0.0718	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400348

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257574	O-Phosphate-P	0.500	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P400314

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257607	Acesulfame K	9.91	Spike	P	0 - 30
2257607	AMPA	2.21	Spike	P	0 - 30
2257607	Endothall	0.197	Spike	P	0 - 30
2257607	Glufosinate	2.64	Spike	P	0 - 30
2257607	Glyphosate	9.03	Spike	P	0 - 30
2257607	Sucralose	5.32	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P400315

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2256868	2,4-D	1.26	Spike	P	0 - 30
2256868	2,4,5-T	3.02	Spike	P	0 - 30
2256868	Acetaminophen	0.0414	Spike	P	0 - 30
2256868	Acetamiprid	10.0	Spike	P	0 - 30
2256868	Afidopyropen	20.9	Spike	P	0 - 30
2256868	Bentazon	4.42	Spike	P	0 - 30
2256868	Benzovindiflupyr	7.62	Spike	P	0 - 30
2256868	Carbamazepine	2.49	Spike	P	0 - 30
2256868	Clothianidin	6.72	Spike	P	0 - 30
2256868	Dinotefuran	1.79	Spike	P	0 - 30
2256868	Diuron	9.87	Spike	P	0 - 30
2256868	Fenuron	4.91	Spike	P	0 - 30
2256868	Fluridone	1.73	Spike	P	0 - 30
2256868	Hydrocodone	1.10	Spike	P	0 - 30
2256868	Ibuprofen	23.0	Spike	P	0 - 30
2256868	Imazapyr	5.53	Spike	P	0 - 30
2256868	Imidacloprid	3.73	Spike	P	0 - 30
2256868	Linuron	0.884	Spike	P	0 - 30
2256868	Mandestrobin	4.05	Spike	P	0 - 30
2256868	MCPP	0.487	Spike	P	0 - 30
2256868	Naproxen	25.3	Spike	P	0 - 30
2256868	Primidone	9.27	Spike	P	0 - 30
2256868	Pyraclostrobin	9.94	Spike	P	0 - 30
2256868	Thiamethoxam	2.44	Spike	P	0 - 30
2256868	Tolfenpyrad	4.05	Spike	P	0 - 30
2256868	Triclopyr	6.44	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P400351

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257542	Color (true)	0.107	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P400707

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits

Quality Assurance Report
Precision

Reference Method: SM 2320 B-2011
Batch ID: P400707

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257941	Total Alkalinity	0.884	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P400763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257572	TDS	8.22	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P400710

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257941	Fluoride	0.457	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P400567

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257543	Organic Carbon	0.252	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2257607
Field Sample ID: G3SD0190

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	125	P	30 - 160
EPA 8321B	Carbamazepine-d10	79.7	P	30 - 160
EPA 8321B	Diuron-d6	63.1	P	30 - 160
EPA 8321B	Endothall-d6	92.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	77.3	P	30 - 160
EPA 8321B	Primidone-d5	98.5	P	30 - 160
EPA 8321B	Sucralose-d6	88.4	P	30 - 160

Lab Sample ID: 2257608
Field Sample ID: G3SD0163

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	135	P	30 - 160
EPA 8321B	Carbamazepine-d10	57.7	P	30 - 160
EPA 8321B	Diuron-d6	40.9	P	30 - 160
EPA 8321B	Endothall-d6	88.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	89.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	81.4	P	30 - 160
EPA 8321B	Primidone-d5	94.5	P	30 - 160
EPA 8321B	Sucralose-d6	87.6	P	30 - 160

Lab Sample ID: 2257609
Field Sample ID: G3SD0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	99.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	123	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.8	P	30 - 160
EPA 8321B	Diuron-d6	52.9	P	30 - 160
EPA 8321B	Endothall-d6	87.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	126	P	30 - 160
EPA 8321B	Ibuprofen-d3	71.3	P	30 - 160
EPA 8321B	Primidone-d5	105	P	30 - 160
EPA 8321B	Sucralose-d6	83.4	P	30 - 160

Lab Sample ID: 2257610
Field Sample ID: G3SD0189

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	111	P	30 - 160
EPA 8321B	Acetaminophen-d4	131	P	30 - 160
EPA 8321B	Carbamazepine-d10	71.0	P	30 - 160
EPA 8321B	Diuron-d6	50.5	P	30 - 160
EPA 8321B	Endothall-d6	86.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	118	P	30 - 160
EPA 8321B	Ibuprofen-d3	85.8	P	30 - 160
EPA 8321B	Primidone-d5	103	P	30 - 160
EPA 8321B	Sucralose-d6	87.0	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2257611
Field Sample ID: FB_06282021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	120	P	30 - 160
EPA 8321B	Acetaminophen-d4	89.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	101	P	30 - 160
EPA 8321B	Diuron-d6	77.9	P	30 - 160
EPA 8321B	Endothall-d6	82.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	107	P	30 - 160
EPA 8321B	Ibuprofen-d3	92.4	P	30 - 160
EPA 8321B	Primidone-d5	98.5	P	30 - 160
EPA 8321B	Sucralose-d6	84.2	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A106351
Included Lab Sample IDs: 2257596

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.4	99.2	P/P	90 - 110

Reference Method: SM 2120 B-2011
Run ID: A106352
Included Lab Sample IDs: 2257594

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	101	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A106353
Included Lab Sample IDs: 2257594

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A106362
Included Lab Sample IDs: 2257595

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

Reference Method: EPA 8321B
Run ID: A106390
Included Lab Sample IDs: 2257607, 2257608, 2257609, 2257610, 2257611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	93.1	94.7	P/P	50 - 150
2,4-D	94.7	95.4	P/P	50 - 150
2,4,5-T	104	99.2	P/P	50 - 150
2,4,5-T	96.6	104	P/P	50 - 150
Acetaminophen	102	111	P/P	60 - 160
Acetaminophen	111	104	P/P	60 - 160
Acetamiprid	103	104	P/P	50 - 150
Acetamiprid	104	101	P/P	50 - 150
Afidopyropen	112	97.1	P/P	50 - 150
Afidopyropen	97.1	95.0	P/P	50 - 150
Bentazon	104	105	P/P	50 - 160
Bentazon	105	101	P/P	50 - 160
Benzovindiflupyr	113	113	P/P	50 - 160
Benzovindiflupyr	113	114	P/P	50 - 160
Carbamazepine	105	111	P/P	60 - 150
Carbamazepine	111	109	P/P	60 - 150
Clothianidin	116	105	P/P	60 - 150
Clothianidin	127	116	P/P	60 - 150
Dinotefuran	109	103	P/P	50 - 150
Dinotefuran	97.9	109	P/P	50 - 150
Diuron	105	108	P/P	60 - 160
Diuron	113	105	P/P	60 - 160
Fenuron	101	99.6	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A106390
Included Lab Sample IDs: 2257607, 2257608, 2257609, 2257610, 2257611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenuron	99.6	104	P/P	60 - 150
Fluridone	101	103	P/P	60 - 160
Fluridone	97.5	101	P/P	60 - 160
Hydrocodone	107	109	P/P	60 - 150
Hydrocodone	109	108	P/P	60 - 150
Ibuprofen	96.7	96.7	P/P	50 - 160
Ibuprofen	96.7	103	P/P	50 - 160
Imazapyr	108	94.0	P/P	50 - 160
Imazapyr	96.9	108	P/P	50 - 160
Imidacloprid	94.3	95.4	P/P	60 - 150
Imidacloprid	95.5	94.3	P/P	60 - 150
Linuron	104	114	P/P	60 - 150
Linuron	114	101	P/P	60 - 150
Mandestrobin	107	113	P/P	50 - 150
Mandestrobin	113	107	P/P	50 - 150
MCPP	105	103	P/P	50 - 150
MCPP	107	105	P/P	50 - 150
Naproxen	89.8	91.9	P/P	50 - 160
Naproxen	91.9	102	P/P	50 - 160
Primidone	101	100	P/P	60 - 150
Primidone	113	101	P/P	60 - 150
Pyraclostrobin	104	108	P/P	60 - 150
Pyraclostrobin	105	104	P/P	60 - 150
Thiamethoxam	106	106	P/P	50 - 150
Thiamethoxam	97.2	106	P/P	50 - 150
Tolfenpyrad	101	107	P/P	60 - 150
Tolfenpyrad	107	101	P/P	60 - 150
Triclopyr	103	103	P/P	50 - 150
Triclopyr	109	103	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A106404
Included Lab Sample IDs: 2257607, 2257608, 2257609, 2257610, 2257611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	98.9	75.1	P/P	60 - 160
AMPA	99.8	98.9	P/P	60 - 160
Glufosinate	97.0	78.5	P/P	60 - 160
Glufosinate	97.3	97.0	P/P	60 - 160
Glyphosate	97.2	99.9	P/P	60 - 160
Glyphosate	99.9	84.5	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A106449
Included Lab Sample IDs: 2257595

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

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-2011
Run ID: A106454
Included Lab Sample IDs: 2257595

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.3	97.4	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A106461
Included Lab Sample IDs: 2257607, 2257608, 2257609, 2257610, 2257611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	82.8	75.4	P/P	60 - 160
Acesulfame K	85.4	82.8	P/P	60 - 160
Endothall	105	80.2	P/P	60 - 160
Endothall	80.2	71.1	P/P	60 - 160
Sucralose	77.4	75.8	P/P	60 - 160
Sucralose	95.9	77.4	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A106481
Included Lab Sample IDs: 2257594

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	100	P/P	90 - 110
Sulfate	99.5	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A106491
Included Lab Sample IDs: 2257595

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.4	94.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A106506
Included Lab Sample IDs: 2257595

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	98.4	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A106513
Included Lab Sample IDs: 2257594

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

Reference Method: SM 4500 F-C-2011
Run ID: A106513
Included Lab Sample IDs: 2257594

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

Quality Assurance Report
Calibration Verification

* 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	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					6.76	
EPA 300.0 Rev. 2.1	Chloride	101	100	101		0.510	
	Sulfate	101	98.9	101		0.616	
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	98.6	100			0.859
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	108	103			2.70
EPA 353.2 Rev. 2.0	NO2NO3-N	100	102	102			0.0
EPA 365.1 Rev. 2.0	Total-P	105					0.0718
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103	96.6	97.2			0.500
EPA 8321B	2,4-D	120	122	124			1.26
	2,4,5-T	128	113	116			3.02
	Acesulfame K	89.8	78.8	87.6			9.91
	Acetaminophen	83.0	112	112			0.0414
	Acetamiprid	90.6	82.4	74.6			10.0
	Afidopyropen	73.6	71.1	57.7			20.9
	AMPA	97.0	85.0	82.9			2.21
	Bentazon	92.3	79.5	74.5			4.42
	Benzovindiflupyr	92.8	84.5	91.2			7.62
	Carbamazepine	92.0	85.2	87.3			2.49
	Clothianidin	92.2	114	107			6.72
	Dinotefuran	88.1	125	123			1.79
	Diuron	73.7	75.7	68.5			9.87
	Endothall	97.7	93.9	93.7			0.197
	Fenuron	99.7	83.1	79.1			4.91
	Fluridone	87.6	79.7	81.1			1.73
	Glufosinate	93.3	86.9	89.2			2.64
	Glyphosate	96.5	91.4	82.6			9.03
	Hydrocodone	94.6	108	107			1.10
	Ibuprofen	86.0	84.8	67.3			23.0
	Imazapyr	101	168	159			5.53
	Imidacloprid	92.6	148	155			3.73
	Linuron	73.3	70.6	70.0			0.884
	Mandestrobin	94.1	94.0	90.3			4.05
	MCPP	125	113	112			0.487
	Naproxen	82.1	97.4	75.5			25.3
	Primidone	93.3	122	111			9.27
	Pyraclostrobin	81.1	88.6	80.2			9.94
	Sucralose	85.2	80.9	85.6			5.32
	Thiamethoxam	91.7	145	148			2.44
	Tolfenpyrad	47.4	53.7	55.9			4.05
	Triclopyr	122	121	113			6.44
SM 2120 B-2011	Color (true)	99.3				0.107	
SM 2320 B-2011	Total Alkalinity	103				0.884	
SM 2540 C-2011	TDS					8.22	
SM 4500 F-C-2011	Fluoride	99.9	95.0	97.3			0.457
SM 5310 B-2011	Organic Carbon	95.3	95.9	96.2			0.252

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2257594
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2257594
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2257594
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2257595

Reference Method Descriptions

Method	Description	Associated Samples
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2257595
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2257595
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2257595
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2257596
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2257607, 2257608, 2257609, 2257610, 2257611
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2257594
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2257594
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2257594
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2257594
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2257594
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2257595

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	06/29/2021			06/29/2021 15:42	Sarah A Nixon	2257594
EPA 300.0 Rev. 2.1	06/29/2021			07/07/2021 10:12	Lipi Saha	2257594
EPA 350.1 Rev. 2.0	06/29/2021			07/08/2021 12:03	Roberta Tatti	2257595
EPA 351.2 Rev. 2.0	06/29/2021	07/06/2021 14:20	Benjamin T. Nordmann	07/07/2021 13:43	Letuzia M De Oliveira	2257595
EPA 353.2 Rev. 2.0	06/29/2021			06/30/2021 09:23	Beverly Y. Sanders	2257595
EPA 365.1 Rev. 2.0	06/29/2021	07/02/2021 14:09	Madeline Gruver	07/06/2021 08:44	Shengyu Ding	2257595
EPA 365.1 Rev. 2.0 dissolved	06/29/2021			06/29/2021 15:17	Ping Hua	2257596
EPA 8321B	06/29/2021	06/30/2021 09:00	Hoor Shaik	07/01/2021 01:05	Juyoung Kim	2257607
	06/29/2021	06/30/2021 09:00	Hoor Shaik	07/01/2021 01:40	Juyoung Kim	2257608
	06/29/2021	06/30/2021 09:00	Hoor Shaik	07/01/2021 02:15	Juyoung Kim	2257609
	06/29/2021	06/30/2021 09:00	Hoor Shaik	07/01/2021 02:49	Juyoung Kim	2257610
	06/29/2021	06/30/2021 09:00	Hoor Shaik	07/01/2021 03:59	Juyoung Kim	2257611
	06/29/2021	07/01/2021 11:30	Pramila Ghimire	07/01/2021 16:06	Juyoung Kim	2257607
	06/29/2021	07/01/2021 11:30	Pramila Ghimire	07/01/2021 16:27	Juyoung Kim	2257608
	06/29/2021	07/01/2021 11:30	Pramila Ghimire	07/01/2021 16:38	Juyoung Kim	2257609
	06/29/2021	07/01/2021 11:30	Pramila Ghimire	07/01/2021 17:00	Juyoung Kim	2257610
	06/29/2021	07/01/2021 11:30	Pramila Ghimire	07/01/2021 17:10	Juyoung Kim	2257611
	06/29/2021	07/01/2021 11:30	Pramila Ghimire	07/02/2021 09:45	Pramila Ghimire	2257607
	06/29/2021	07/01/2021 11:30	Pramila Ghimire	07/02/2021 10:12	Pramila Ghimire	2257608
	06/29/2021	07/01/2021 11:30	Pramila Ghimire	07/02/2021 10:26	Pramila Ghimire	2257609
	06/29/2021	07/01/2021 11:30	Pramila Ghimire	07/02/2021 10:53	Pramila Ghimire	2257610
	06/29/2021	07/01/2021 11:30	Pramila Ghimire	07/02/2021 11:07	Pramila Ghimire	2257611
SM 2120 B-2011	06/29/2021			06/29/2021 16:32	Sarah A Nixon	2257594
SM 2320 B-2011	06/29/2021			07/08/2021 22:55	Dale L. Simmons	2257594
SM 2540 C-2011	06/29/2021			07/01/2021 15:22	Yijie Li	2257594
SM 2540 D-2011	06/29/2021			07/01/2021 15:22	Yijie Li	2257594
SM 4500 F-C-2011	06/29/2021			07/08/2021 22:55	Dale L. Simmons	2257594
SM 5310 B-2011	06/29/2021			07/03/2021 00:58	Madeline Gruver	2257595