

Chemical Analysis Report

CEN-DIST-2019-12-13-01

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

Event Description: **Dot / Jane / Panther X3**

Request ID: **RQ-2019-12-09-52**

Customer: **CEN-DIST**

Project ID: **SMP**

Send Reports to:

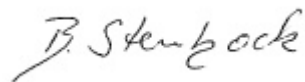
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 02-JAN-2020 18:10



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: Panther Lake @ center of central lobe

Collection Date/Time: 12/12/2019 10:34

Field ID: G4CE0156

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2143922	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P376185	
	EPA 300.0 Rev. 2.1	Chloride	30		mg Cl/L	P376406	
		Sulfate	24		mg SO4/L	P376408	
	SM 2120 B	Color (true)	19		PCU	P375988	
	SM 2320 B-97	Total Alkalinity	27		mg CaCO3/L	P376259	
	SM 2540 C-97	TDS	110		mg/L	P376419	
	SM 2540 D-97	TSS	2	I	mg/L	P376359	
	SM 4500 F-C-97	Fluoride	0.061	I	mg F/L	P376262	
2143925	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P376278	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.62		mg N/L	P375917	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P375963	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P376004	
	SM 5310 B-00	Organic Carbon	8.4		mg C/L	P376028	
2143928	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P375859	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Panther Lake @ Center of West Lobe

Collection Date/Time: 12/12/2019 10:21

Field ID: G4CE0164

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2143923	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P376187	
	EPA 300.0 Rev. 2.1	Chloride	31		mg Cl/L	P376406	
		Sulfate	25		mg SO4/L	P376408	
		Color (true)	23		PCU	P375988	
	SM 2320 B-97	Total Alkalinity	28	A	mg CaCO3/L	P376259	
	SM 2540 C-97	TDS	116		mg/L	P376419	
	SM 2540 D-97	TSS	2	I	mg/L	P376359	
	SM 4500 F-C-97	Fluoride	0.059	I	mg F/L	P376262	
2143926	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P376346	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.67		mg N/L	P375917	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.019		mg N/L	P375963	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P376004	
	SM 5310 B-00	Organic Carbon	8.8		mg C/L	P376028	
2143929	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P375859	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Panther Lake @ Center of East Lobe

Collection Date/Time: 12/12/2019 11:00

Field ID: G4CE0165

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2143924	EPA 180.1 Rev. 2.0	Turbidity	0.85		NTU	P376185	
	EPA 300.0 Rev. 2.1	Chloride	32		mg Cl/L	P376406	
		Sulfate	22		mg SO4/L	P376408	
	SM 2120 B	Color (true)	41		PCU	P375988	
	SM 2320 B-97	Total Alkalinity	27		mg CaCO3/L	P376259	
	SM 2540 C-97	TDS	123	A	mg/L	P376420	
	SM 2540 D-97	TSS	2	IA	mg/L	P376360	
	SM 4500 F-C-97	Fluoride	0.061	I	mg F/L	P376262	
2143927	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P376346	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.65		mg N/L	P375917	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P375963	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P376004	
	SM 5310 B-00	Organic Carbon	9.7		mg C/L	P376028	
2143930	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P375859	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Lake Jane @ Center

Collection Date/Time: 12/12/2019 12:41

Field ID: G4CE0152

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2143919	EPA 180.1 Rev. 2.0	Turbidity	5.5		NTU	P376185	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P376426	
		Sulfate	15		mg SO4/L	P376429	
	SM 2120 B	Color (true)	29		PCU	P375988	
	SM 2320 B-97	Total Alkalinity	114		mg CaCO3/L	P376259	
	SM 2540 C-97	TDS	171		mg/L	P376419	
	SM 2540 D-97	TSS	8	I	mg/L	P376359	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P376262	
2143920	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P376278	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P375917	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P375963	
	EPA 365.1 Rev. 2.0	Total-P	0.085		mg P/L	P376004	
	SM 5310 B-00	Organic Carbon	10		mg C/L	P376028	
2143921	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P375859	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Lake Dot @ Center

Collection Date/Time: 12/12/2019 13:07

Field ID: G2CE0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2143916	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P376185	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P376426	
		Sulfate	22		mg SO4/L	P376429	
	SM 2120 B	Color (true)	7.9		PCU	P375988	
	SM 2320 B-97	Total Alkalinity	77		mg CaCO3/L	P376259	
	SM 2540 C-97	TDS	126		mg/L	P376419	
	SM 2540 D-97	TSS	2	U	mg/L	P376359	
	SM 4500 F-C-97	Fluoride	0.050	I	mg F/L	P376262	
2143917	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P376278	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34		mg N/L	P375916	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.33		mg N/L	P375963	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P375927	
	SM 5310 B-00	Organic Carbon	3.4		mg C/L	P376028	
2143918	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P375859	
2143951	EPA 8321B	2,4-D	0.22		ug/L	P375999	
		Acesulfame K**	0.10	U	ug/L	P375926	
		AMPA**	0.38	I	ug/L	P375926	
		Sucralose**	0.078		ug/L	P375926	
		Acetaminophen**	0.013	I	ug/L	P375999	RPD
		Endothall**	0.25	U	ug/L	P375926	
		Acetamiprid**	0.0020	U	ug/L	P375999	RPD
		Glufosinate**	0.10	U	ug/L	P375926	
		Glyphosate**	0.74		ug/L	P375926	
		Afidopyrophen**	0.0020	UJ	ug/L	P375999	RPD
		Bentazon	0.017		ug/L	P375999	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P375999	
		Carbamazepine**	0.0011	I	ug/L	P375999	
		Clothianidin**	0.0022	I	ug/L	P375999	
		Dinotefuran**	0.0020	U	ug/L	P375999	RPD
		Diuron	0.044		ug/L	P375999	
		Fenuron	0.016	U	ug/L	P375999	RPD
		Fluridone**	0.0024	I	ug/L	P375999	
		Imazapyr**	0.0052	I	ug/L	P375999	
		Hydrocodone**	0.0020	U	ug/L	P375999	MS, RPD
		Ibuprofen**	0.020	U	ug/L	P375999	
		Imidacloprid	0.021		ug/L	P375999	MS
		Linuron	0.0040	U	ug/L	P375999	
		Mandestrobin**	0.0020	UJ	ug/L	P375999	
		MCP	0.0020	UJ	ug/L	P375999	LCS, MS
		Naproxen**	0.0080	U	ug/L	P375999	
		Primidone**	0.0040	U	ug/L	P375999	
		Pyraclostrobin**	0.0020	U	ug/L	P375999	
		Thiamethoxam**	0.0020	U	ug/L	P375999	MS

Field ID: G2CE0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2143951	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P375999	
		Triclopyr**	0.0040	U	ug/L	P375999	MS, RPD

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8321B: J - second source check standards for some analytes were not available for analysis. 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.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P376185

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P376187

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376406

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376408

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376426

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376429

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376278

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376346

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375916

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: P375917

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375963

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375927

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P376004

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375859

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

Reference Method: EPA 8321B
Batch ID: P375926

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: P375999

Component	Result	Code	Units
2,4-D	0.0020	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P375999

Component	Result	Code	Units
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
Batch ID: P375988

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P376259

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

Reference Method: SM 2540 C-97
Batch ID: P376419

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P376420

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P376359

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P376360

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 4500 F-C-97
Batch ID: P376262

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P376028

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: P376406

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376408

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376426

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376429

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376278

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376346

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375916

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375917

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375963

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.0		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375927

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P376004

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375859

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

Reference Method: EPA 8321B
Batch ID: P375926

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	146		P	40 - 150
AMPA	95.8		P	40 - 150
Endothall	82.5		P	40 - 150
Glufosinate	95.3		P	40 - 150
Glyphosate	104		P	40 - 140
Sucralose	92.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P375999

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	140		P	40 - 160
Acetaminophen	83.2		P	30 - 160
Acetamiprid	83.5		P	40 - 160
Afidopyropen	86.1		P	40 - 160
Bentazon	82.6		P	30 - 160
Benzovindiflupyr	96.2		P	40 - 160
Carbamazepine	98.8		P	40 - 160
Clothianidin	83.3		P	40 - 160
Dinotefuran	84.2		P	40 - 160
Diuron	95.1		P	40 - 160
Fenuron	97.7		P	40 - 160
Fluridone	102		P	40 - 160
Hydrocodone	97.4		P	40 - 160
Ibuprofen	78.6		P	30 - 160
Imazapyr	109		P	40 - 160
Imidacloprid	104		P	40 - 160
Linuron	82.9		P	40 - 160
Mandestrobin	106		P	40 - 160
MCPP	172		F	40 - 160
Naproxen	85.3		P	40 - 160
Primidone	98.5		P	40 - 160
Pyraclostrobin	105		P	30 - 160
Thiamethoxam	109		P	40 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P375999

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Tolfenpyrad	68.6		P	40 - 160
Triclopyr	89.3		P	30 - 160

Reference Method: SM 2120 B
Batch ID: P375988

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.6		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P376259

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P376262

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P376028

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376406

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143349	Chloride	99.1		P	90 - 110
2144045	Chloride	98.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376408

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143349	Sulfate	99.4		P	90 - 110
2144045	Sulfate	99.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143448	Chloride	100		P	90 - 110
2143991	Chloride	97.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376429

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143448	Sulfate	99.9		P	90 - 110
2143991	Sulfate	98.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143917	Ammonia-N	98.9	98.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376346

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143926	Ammonia-N	99.7	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375916

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143835	Kjeldahl Nitrogen	102	108	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375917

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143925	Kjeldahl Nitrogen	99.7	108	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375963

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375963

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143917	NO2NO3-N	97.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375927

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143697	Total-P	105	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P376004

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143920	Total-P	107	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375859

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143918	O-Phosphate-P	92.7	96.3	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P375926

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143044	Acesulfame K	117	120	P/P	40 - 150
2143044	AMPA	102	101	P/P	40 - 150
2143044	Endothall	88.9	87.5	P/P	40 - 150
2143044	Glufosinate	108	87.3	P/P	40 - 150
2143044	Glyphosate	103	101	P/P	40 - 140
2143044	Sucralose	69.2	68.3	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P375999

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143857	Acetaminophen	45.1	97.8	P/P	30 - 160
2143857	Acetamiprid	112	80.8	P/P	40 - 160
2143857	Afidopyropen	110	65.4	P/P	40 - 160
2143857	Benzovindiflupyr	107	93.2	P/P	40 - 160
2143857	Carbamazepine	100	90.4	P/P	40 - 160
2143857	Clothianidin	111	108	P/P	40 - 160
2143857	Dinotefuran	55.7	117	P/P	40 - 160
2143857	Diuron	89.8	81.6	P/P	40 - 160
2143857	Fenuron	99.7	64.4	P/P	40 - 160
2143857	Hydrocodone	33.5	98.2	F/P	40 - 160
2143857	Ibuprofen	84.2	73.9	P/P	30 - 160
2143857	Imidacloprid	192	158	F/P	40 - 160
2143857	Linuron	77.0	77.9	P/P	40 - 160
2143857	Mandestrobin	112	98.0	P/P	40 - 160
2143857	MCP	211	156	F/P	40 - 160
2143857	Naproxen	123	106	P/P	40 - 160
2143857	Primidone	104	96.1	P/P	40 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P375999

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143857	Pyraclostrobin	123	105	P/P	30 - 160
2143857	Thiamethoxam	165	165	F/F	40 - 160
2143857	Tolfenpyrad	78.8	64.3	P/P	40 - 160
2143857	Triclopyr	161	106	F/P	30 - 160

Reference Method: SM 4500 F-C-97
Batch ID: P376262

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143923	Fluoride	98.0	99.1	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P376028

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143400	Organic Carbon	98.0	96.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P376185

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143832	Turbidity	4.79	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P376187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143999	Turbidity	1.40	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376406

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143349	Chloride	0.133	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376408

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143349	Sulfate	0.0434	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143448	Chloride	1.34	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376429

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143448	Sulfate	0.585	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376278

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143917	Ammonia-N	0.539	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376346

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143926	Ammonia-N	0.478	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375916

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143835	Kjeldahl Nitrogen	4.12	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375917

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143925	Kjeldahl Nitrogen	5.26	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375963

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143917	NO2NO3-N	0.574	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375927

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143697	Total-P	0.630	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P376004

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143920	Total-P	0.0391	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375859

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143918	O-Phosphate-P	3.81	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P375926

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143044	Acesulfame K	2.54	Spike	P	0 - 30
2143044	AMPA	0.966	Spike	P	0 - 30
2143044	Endothall	1.64	Spike	P	0 - 30
2143044	Glufosinate	21.5	Spike	P	0 - 30
2143044	Glyphosate	1.52	Spike	P	0 - 30
2143044	Sucralose	1.29	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P375999

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143857	2,4-D	29.6	Spike	P	0 - 30
2143857	Acetaminophen	73.8	Spike	F	0 - 30
2143857	Acetamiprid	32.0	Spike	F	0 - 30
2143857	Afidopyropen	51.2	Spike	F	0 - 30
2143857	Bentazon	18.5	Spike	P	0 - 30
2143857	Benzovindiflupyr	13.9	Spike	P	0 - 30
2143857	Carbamazepine	10.1	Spike	P	0 - 30
2143857	Clothianidin	2.80	Spike	P	0 - 30
2143857	Dinotefuran	71.0	Spike	F	0 - 30
2143857	Diuron	8.55	Spike	P	0 - 30
2143857	Fenuron	43.0	Spike	F	0 - 30
2143857	Fluridone	12.0	Spike	P	0 - 30
2143857	Hydrocodone	98.2	Spike	F	0 - 30
2143857	Ibuprofen	12.9	Spike	P	0 - 30
2143857	Imazapyr	5.84	Spike	P	0 - 30
2143857	Imidacloprid	15.4	Spike	P	0 - 30
2143857	Linuron	1.12	Spike	P	0 - 30
2143857	Mandestrobin	13.4	Spike	P	0 - 30
2143857	MCPP	28.7	Spike	P	0 - 30
2143857	Naproxen	15.0	Spike	P	0 - 30
2143857	Primidone	7.47	Spike	P	0 - 30
2143857	Pyraclostrobin	15.5	Spike	P	0 - 30
2143857	Thiamethoxam	0.0652	Spike	P	0 - 30
2143857	Tolfenpyrad	20.2	Spike	P	0 - 30
2143857	Triclopyr	40.9	Spike	F	0 - 30

Reference Method: SM 2120 B
Batch ID: P375988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143841	Color (true)	4.09	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P376259

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143923	Total Alkalinity	0.576	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P376419

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143452	TDS	3.45	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
Batch ID: P376420

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143924	TDS	3.25	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P376262

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143923	Fluoride	0.963	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P376028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143400	Organic Carbon	0.964	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2143951
Field Sample ID: G2CE0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	143	P	30 - 160
EPA 8321B	Acetaminophen-d4	138	P	30 - 160
EPA 8321B	Carbamazepine-d10	90.9	P	30 - 160
EPA 8321B	Diuron-d6	110	P	30 - 160
EPA 8321B	Endothall-d6	78.4	P	30 - 160
EPA 8321B	Endothall-d6	78.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	92.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	92.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	85.6	P	30 - 160
EPA 8321B	Primidone-d5	109	P	30 - 160
EPA 8321B	Sucralose-d6	95.6	P	30 - 160
EPA 8321B	Sucralose-d6	95.6	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A96350

Included Lab Sample IDs: 2143918, 2143921, 2143928, 2143929, 2143930

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.5	95.3	P/P	90 - 110
O-Phosphate-P	98.0	103	P/P	90 - 110
O-Phosphate-P	98.3	97.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A96387

Included Lab Sample IDs: 2143917, 2143920, 2143925, 2143926, 2143927

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A96395

Included Lab Sample IDs: 2143920, 2143925, 2143926, 2143927

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A96396

Included Lab Sample IDs: 2143917

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

Reference Method: SM 2120 B

Run ID: A96397

Included Lab Sample IDs: 2143916, 2143919, 2143922, 2143923, 2143924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.8	100	P/P	90 - 115

Reference Method: SM 5310 B-00

Run ID: A96415

Included Lab Sample IDs: 2143917, 2143920, 2143925, 2143926, 2143927

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.1	99.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A96427

Included Lab Sample IDs: 2143951

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	79.3	79.8	P/P	60 - 160
Glufosinate	83.1	79.7	P/P	60 - 160
Glyphosate	122	114	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A96434

Included Lab Sample IDs: 2143920

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A96441

Included Lab Sample IDs: 2143917, 2143925, 2143926, 2143927

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	99.2	P/P	90 - 110
Total-P	98.0	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A96468

Included Lab Sample IDs: 2143951

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	117	145	P/P	60 - 160
Endothall	97.0	89.7	P/P	60 - 160

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A96479

Included Lab Sample IDs: 2143916, 2143919, 2143922, 2143923, 2143924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	102	P/P	95 - 105
Turbidity	99.5	100	P/P	95 - 105

Reference Method: SM 2320 B-97

Run ID: A96510

Included Lab Sample IDs: 2143916, 2143919, 2143922, 2143923, 2143924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	104	P/P	90 - 110
Total Alkalinity	104	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A96510

Included Lab Sample IDs: 2143916, 2143919, 2143922, 2143923, 2143924

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A96515

Included Lab Sample IDs: 2143917, 2143920, 2143925

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.9	99.8	P/P	90 - 110
Ammonia-N	99.8	98.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A96534

Included Lab Sample IDs: 2143951

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	95.8	99.2	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A96549

Included Lab Sample IDs: 2143926, 2143927

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A96570

Included Lab Sample IDs: 2143922, 2143923, 2143924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	96.9	97.0	P/P	90 - 110
Sulfate	97.8	97.9	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A96574

Included Lab Sample IDs: 2143916, 2143919

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

Reference Method: EPA 8321B

Run ID: A96588

Included Lab Sample IDs: 2143951

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	90.2	106	P/P	50 - 150
Acetaminophen	151	147	P/P	60 - 160
Acetamiprid	138	139	P/P	50 - 150
Afidopyropen	131	81.9	P/P	50 - 150
Bentazon	81.6	82.7	P/P	50 - 160
Benzovindiflupyr	122	118	P/P	50 - 150
Carbamazepine	127	128	P/P	60 - 150
Clothianidin	117	112	P/P	60 - 150
Dinotefuran	138	129	P/P	50 - 150
Diuron	142	136	P/P	60 - 150
Fenuron	139	113	P/P	60 - 150
Fluridone	125	118	P/P	60 - 160
Hydrocodone	143	124	P/P	60 - 150
Ibuprofen	111	113	P/P	50 - 160
Imazapyr	93.8	100	P/P	50 - 150
Imidacloprid	122	129	P/P	60 - 150
Linuron	122	87.6	P/P	60 - 150
Mandestrobin	125	120	P/P	50 - 150
MCPP	91.6	94.7	P/P	50 - 150
Naproxen	65.5	78.3	P/P	50 - 160
Primidone	139	118	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A96588

Included Lab Sample IDs: 2143951

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	125	120	P/P	60 - 150
Thiamethoxam	130	135	P/P	50 - 150
Tolfenpyrad	121	114	P/P	60 - 150
Triclopyr	76.5	98.1	P/P	50 - 150

* 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	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					4.79	
	Turbidity					1.40	
EPA 300.0 Rev. 2.1	Chloride	98.6	99.1	98.9		0.133	
	Chloride	99.8	100	97.4		1.34	
	Sulfate	99.3	99.4	99.9		0.0434	
	Sulfate	100	99.9	98.8		0.585	
EPA 350.1 Rev. 2.0	Ammonia-N	99.0	98.9	98.2			0.539
	Ammonia-N	99.7	99.7	100			0.478
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107	102	108			4.12
	Kjeldahl Nitrogen	99.4	99.7	108			5.26
EPA 353.2 Rev. 2.0	NO2NO3-N	96.0	97.0				0.574
EPA 365.1 Rev. 2.0	Total-P	105	105	106			0.630
	Total-P	107	107	107			0.0391
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	105	92.7	96.3			3.81
EPA 8321B	2,4-D	140					29.6
	Acesulfame K	146	117	120			2.54
	Acetaminophen	83.2	45.1	97.8			73.8
	Acetamiprid	83.5	112	80.8			32.0
	Afidopyropen	86.1	110	65.4			51.2
	AMPA	95.8	102	101			0.966
	Bentazon	82.6					18.5
	Benzovindiflupyr	96.2	107	93.2			13.9
	Carbamazepine	98.8	100	90.4			10.1
	Clothianidin	83.3	111	108			2.80
	Dinotefuran	84.2	55.7	117			71.0
	Diuron	95.1	89.8	81.6			8.55
	Endothall	82.5	88.9	87.5			1.64
	Fenuron	97.7	99.7	64.4			43.0
	Fluridone	102					12.0
	Glufosinate	95.3	108	87.3			21.5
	Glyphosate	104	103	101			1.52
	Hydrocodone	97.4	33.5	98.2			98.2
	Ibuprofen	78.6	84.2	73.9			12.9
	Imazapyr	109					5.84
	Imidacloprid	104	192	158			15.4
	Linuron	82.9	77.0	77.9			1.12
	Mandestrobin	106	112	98.0			13.4
	MCPP	172	211	156			28.7
	Naproxen	85.3	123	106			15.0
	Primidone	98.5	104	96.1			7.47
	Pyraclostrobin	105	123	105			15.5
	Sucralose	92.4	69.2	68.3			1.29
	Thiamethoxam	109	165	165			0.0652
	Tolfenpyrad	68.6	78.8	64.3			20.2
	Triclopyr	89.3	161	106			40.9
SM 2120 B	Color (true)	98.6				4.09	
SM 2320 B-97	Total Alkalinity	103				0.576	
SM 2540 C-97	TDS					3.45	
	TDS					3.25	
SM 4500 F-C-97	Fluoride	98.8	98.0	99.1			0.963
SM 5310 B-00	Organic Carbon	98.4	98.0	96.4			0.964

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2143916, 2143919, 2143922, 2143923, 2143924
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2143916, 2143919, 2143922, 2143923, 2143924
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2143916, 2143919, 2143922, 2143923, 2143924
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2143917, 2143920, 2143925, 2143926, 2143927
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2143917, 2143920, 2143925, 2143926, 2143927
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2143917, 2143920, 2143925, 2143926, 2143927
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2143917, 2143920, 2143925, 2143926, 2143927
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2143918, 2143921, 2143928, 2143929, 2143930
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2143951
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2143951
SM 2120 B / E31780	True Color measured at 450 nm	2143916, 2143919, 2143922, 2143923, 2143924
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2143916, 2143919, 2143922, 2143923, 2143924
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2143916, 2143919, 2143922, 2143923, 2143924
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2143916, 2143919, 2143922, 2143923, 2143924
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2143916, 2143919, 2143922, 2143923, 2143924
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2143917, 2143920, 2143925, 2143926, 2143927

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	12/13/2019			12/13/2019 17:27	Yen Ta	2143916, 2143919, 2143922, 2143923, 2143924
EPA 300.0 Rev. 2.1	12/13/2019			12/24/2019 09:21	Jhamieka S. Greenwood	2143916
	12/13/2019			12/24/2019 09:33	Jhamieka S. Greenwood	2143919
	12/13/2019			12/25/2019 02:15	Jhamieka S. Greenwood	2143922
	12/13/2019			12/25/2019 02:32	Jhamieka S. Greenwood	2143923
	12/13/2019			12/25/2019 02:50	Jhamieka S. Greenwood	2143924
EPA 350.1 Rev. 2.0	12/13/2019			12/18/2019 12:33	Ping Hua	2143917
	12/13/2019			12/18/2019 12:52	Ping Hua	2143920
	12/13/2019			12/18/2019 12:54	Ping Hua	2143925
	12/13/2019			12/23/2019 10:52	Ping Hua	2143926
	12/13/2019			12/23/2019 10:57	Ping Hua	2143927
EPA 351.2 Rev. 2.0	12/13/2019	12/16/2019 12:58	Sima Feizi	12/17/2019 14:23	Jhamieka S. Greenwood	2143925
	12/13/2019	12/16/2019 12:58	Sima Feizi	12/17/2019 14:28	Jhamieka S. Greenwood	2143920
	12/13/2019	12/16/2019 12:58	Sima Feizi	12/17/2019 14:33	Jhamieka S. Greenwood	2143926
	12/13/2019	12/16/2019 12:58	Sima Feizi	12/17/2019 14:34	Jhamieka S. Greenwood	2143927
	12/13/2019	12/16/2019 12:58	Sima Feizi	12/17/2019 16:24	Jhamieka S. Greenwood	2143917
EPA 353.2 Rev. 2.0	12/13/2019			12/17/2019 10:17	Beverly Y. Sanders	2143917
	12/13/2019			12/17/2019 10:23	Beverly Y. Sanders	2143920
	12/13/2019			12/17/2019 10:24	Beverly Y. Sanders	2143925
	12/13/2019			12/17/2019 10:25	Beverly Y. Sanders	2143926
	12/13/2019			12/17/2019 10:27	Beverly Y. Sanders	2143927
EPA 365.1 Rev. 2.0	12/13/2019	12/16/2019 14:17	Yen Ta	12/18/2019 15:53	Benjamin T. Nordmann	2143917
	12/13/2019	12/17/2019 15:15	Lipi Saha	12/18/2019 11:54	Benjamin T. Nordmann	2143920
	12/13/2019	12/17/2019 15:15	Lipi Saha	12/18/2019 16:06	Benjamin T. Nordmann	2143925
	12/13/2019	12/17/2019 15:15	Lipi Saha	12/18/2019 16:07	Benjamin T. Nordmann	2143926
	12/13/2019	12/17/2019 15:15	Lipi Saha	12/18/2019 16:08	Benjamin T. Nordmann	2143927
EPA 365.1 Rev. 2.0 dissolved	12/13/2019			12/13/2019 18:00	Samantha Davila	2143918
	12/13/2019			12/13/2019 18:46	Samantha Davila	2143928
	12/13/2019			12/13/2019 18:47	Samantha Davila	2143929
	12/13/2019			12/13/2019 18:48	Samantha Davila	2143930
	12/13/2019			12/13/2019 19:12	Samantha Davila	2143921
EPA 8321B	12/13/2019	12/17/2019 09:45	Rebecca Ware	12/17/2019 21:50	Rebecca Ware	2143951
	12/13/2019	12/17/2019 09:45	Rebecca Ware	12/18/2019 12:56	Rebecca Ware	2143951
	12/13/2019	12/17/2019 09:45	Rebecca Ware	12/23/2019 21:56	Mohammad Ghaffari	2143951
	12/13/2019	12/18/2019 11:00	Hoor Shaik	12/24/2019 21:31	Juyoung Kim	2143951
SM 2120 B	12/13/2019			12/13/2019 18:41	Madeline Funaro	2143916
	12/13/2019			12/13/2019 18:42	Madeline Funaro	2143919, 2143922
	12/13/2019			12/13/2019 18:43	Madeline Funaro	2143923
	12/13/2019			12/13/2019 18:44	Madeline Funaro	2143924

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2320 B-97	12/13/2019			12/19/2019 02:46	Dale L. Simmons	2143923
	12/13/2019			12/19/2019 06:11	Dale L. Simmons	2143916
	12/13/2019			12/19/2019 06:23	Dale L. Simmons	2143919
	12/13/2019			12/19/2019 06:35	Dale L. Simmons	2143922
	12/13/2019			12/19/2019 06:48	Dale L. Simmons	2143924
SM 2540 C-97	12/13/2019			12/17/2019 16:36	Yijie Li	2143916, 2143919, 2143922, 2143923, 2143924
SM 2540 D-97	12/13/2019			12/17/2019 16:36	Yijie Li	2143916, 2143919, 2143922, 2143923, 2143924
SM 4500 F-C-97	12/13/2019			12/19/2019 02:37	Dale L. Simmons	2143923
	12/13/2019			12/19/2019 06:11	Dale L. Simmons	2143916
	12/13/2019			12/19/2019 06:23	Dale L. Simmons	2143919
	12/13/2019			12/19/2019 06:35	Dale L. Simmons	2143922
	12/13/2019			12/19/2019 06:48	Dale L. Simmons	2143924
SM 5310 B-00	12/13/2019			12/17/2019 19:41	Madeline Funaro	2143917
	12/13/2019			12/17/2019 19:57	Madeline Funaro	2143920
	12/13/2019			12/17/2019 20:10	Madeline Funaro	2143925
	12/13/2019			12/17/2019 20:23	Madeline Funaro	2143926
	12/13/2019			12/17/2019 20:37	Madeline Funaro	2143927