

Chemical Analysis Report

NE-DIST-2019-12-19-01

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

Event Description: **SCI Reference Nassau**
Request ID: **RQ-2019-10-21-07**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Jacksonville, FL 32256-7577
Attn: Jeremy Parrish

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 13-JAN-2020 14:05



NON-CONFORMANCE REPORT INCLUDED

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Calkins Creek at Turner Cemetery Road

Collection Date/Time: 12/17/2019 10:45

Field ID: 19010076

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2145253	EPA 180.1 Rev. 2.0	Turbidity	1.7	Q	NTU	P376171	
	EPA 300.0	Bromide	0.027	I	mg Br/L	P376633	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P376564	
		Sulfate	3.5		mg SO4/L	P376566	
	SM 2120 B-2011	Color (true)	160	Q	PCU	P376195	
	SM 2320 B-2011	Total Alkalinity	41		mg CaCO3/L	P376377	
	SM 2540 C-2011	TDS	96		mg/L	P376547	
	SM 2540 D-2011	TSS	2	I	mg/L	P376536	
	SM 4500 F-C-2011	Fluoride	0.10		mg F/L	P376381	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P376459	
2145254	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.58		mg N/L	P376561	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.32		mg N/L	P376337	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P376268	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P376385	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	IQ	mg P/L	P376178	
2145275	EPA 8321B	Acesulfame K**	0.10	U	ug/L	P376159	
		2,4-D	0.0020	U	ug/L	P376210	MS
		AMPA**	0.10	U	ug/L	P376159	
		Sucralose**	0.010	U	ug/L	P376159	
		Acetaminophen**	0.0080	U	ug/L	P376210	
		Acetamiprid**	0.0020	U	ug/L	P376210	
		Endothall**	0.25	U	ug/L	P376159	
		Glufosinate**	0.10	U	ug/L	P376159	
		Glyphosate**	0.10	U	ug/L	P376159	
		Afidopyropen**	0.0020	UJ	ug/L	P376210	
		Bentazon	8.0E-04	U	ug/L	P376210	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P376210	
		Carbamazepine**	8.0E-04	U	ug/L	P376210	
		Clothianidin**	0.0020	U	ug/L	P376210	
		Dinotefuran**	0.0020	U	ug/L	P376210	
		Diuron	0.0020	U	ug/L	P376210	
		Fenuron	0.016	U	ug/L	P376210	
		Fluridone**	8.0E-04	U	ug/L	P376210	
		Imazapyr**	0.0040	U	ug/L	P376210	
		Hydrocodone**	0.0020	U	ug/L	P376210	
		Ibuprofen**	0.020	U	ug/L	P376210	
		Imidacloprid	0.0030	I	ug/L	P376210	MS
		Linuron	0.0040	U	ug/L	P376210	
		Mandestrobin**	0.0020	UJ	ug/L	P376210	
		MCP	0.0020	U	ug/L	P376210	MS
		Naproxen**	0.0080	U	ug/L	P376210	
		Primidone**	0.0040	U	ug/L	P376210	
		Pyraclostrobin**	0.0020	U	ug/L	P376210	

Field ID: 19010076

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2145275	EPA 8321B	Thiamethoxam**	0.0020	U	ug/L	P376210	
		Tolfenpyrad**	0.0020	U	ug/L	P376210	
		Triclopyr**	0.0040	U	ug/L	P376210	
2145276	EPA 200.7 Rev. 4.4	Barium	30.7		ug/L	P376414	
		Calcium	11.2		mg/L	P376414	
		Iron	520		ug/L	P376414	
		Magnesium	5.96		mg/L	P376414	
		Potassium	0.79	I	mg/L	P376414	
		Sodium	7.7		mg/L	P376414	
		Zinc	5.0	U	ug/L	P376414	
	EPA 200.8 Rev. 5.4	Aluminum	194		ug/L	P376414	
		Antimony	0.050	U	ug/L	P376414	
		Arsenic	0.27		ug/L	P376414	
		Boron**	15.0		ug/L	P376414	
		Cadmium	0.020	U	ug/L	P376414	
		Chromium	0.40	U	ug/L	P376414	
		Copper	0.40	U	ug/L	P376414	
		Lead	0.21	I	ug/L	P376414	
		Nickel	0.50	U	ug/L	P376414	
		Selenium	0.20	U	ug/L	P376414	
		Silver	0.010	U	ug/L	P376414	
		Thallium	0.10	U	ug/L	P376414	
2145277	EPA 8270E	Acetochlor	0.25	U	ng/L	P376287	
		Alachlor	0.25	U	ng/L	P376287	
		Ametryn	0.60	U	ng/L	P376287	
		Atrazine	0.25	U	ng/L	P376287	
		Atrazine Desethyl	1.5	U	ng/L	P376287	
		Azinphos Methyl	5.0	U	ng/L	P376287	
		Bromacil	0.50	U	ng/L	P376287	MS, RPD
		Butylate	0.40	U	ng/L	P376287	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P376287	
		Chlorpyrifos Methyl	0.10	U	ng/L	P376287	
		Cyanazine	3.3	U	ng/L	P376287	
		Demeton	7.1	U	ng/L	P376287	
		Diazinon	0.13	U	ng/L	P376287	
		Dimethenamid**	0.10	U	ng/L	P376287	
		Disulfoton	0.50	U	ng/L	P376287	
		Dithiopyr**	0.10	U	ng/L	P376287	
		EPTC	1.3	U	ng/L	P376287	
		Ethion	0.15	U	ng/L	P376287	
		Ethoprop	0.10	U	ng/L	P376287	
		Fenamiphos	0.50	U	ng/L	P376287	
		Fipronil	0.25	U	ng/L	P376287	
		Fipronil Desulfinyl**	0.13	U	ng/L	P376287	
		Fipronil Sulfide	0.15	U	ng/L	P376287	

Field ID: 19010076

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2145277	EPA 8270E	Fipronil Sulfone	0.15	U	ng/L	P376287	
		Fonofos	0.20	U	ng/L	P376287	
		Hexazinone	0.50	U	ng/L	P376287	
		Malathion	0.35	U	ng/L	P376287	
		Metalaxyl	0.30	U	ng/L	P376287	
		Metolachlor	0.50	U	ng/L	P376287	
		Metribuzin	0.76	UJ	ng/L	P376287	RPD
		Mevinphos	0.50	U	ng/L	P376287	
		Molinate	0.30	U	ng/L	P376287	
		Norflurazon	0.50	U	ng/L	P376287	
		Oxadiazon**	0.10	U	ng/L	P376287	MS
		Parathion Ethyl	0.25	U	ng/L	P376287	
		Parathion Methyl	0.55	U	ng/L	P376287	
		Pendimethalin	1.0	U	ng/L	P376287	
		Phorate	0.25	U	ng/L	P376287	
		Prodiamine**	0.18	UJ	ng/L	P376287	RPD
		Prometon	0.91	U	ng/L	P376287	
		Prometryn	0.20	U	ng/L	P376287	
		Simazine	0.50	U	ng/L	P376287	
		Tebuconazole**	0.50	UJ	ng/L	P376287	RPD
		Terbufos	0.10	U	ng/L	P376287	
		Terbuthylazine	0.43	U	ng/L	P376287	MS

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: The sample expired prior to receipt.

SM 2120 B-2011: The sample expired prior to receipt.

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 dissolved: O-Phosphate-P: The sample expired prior to receipt.

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.

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Non-Conformance Report

NCR ID: 8084

Event(s)

NE-DIST-2019-12-19-01

Job(s)

Sample(s)

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Samples arrived late

Observation: Samples arrived one or more days late by FedEx, samples received within the acceptable temperature range.

Resolution: Customer J.Parrish was contacted by phone. Samples will be qualified as appropriate.

Authorized by/Date: Joshua Ayres 1/2/2020

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

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P376171

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P376414

Component	Result	Code	Units
Barium	1.0	U	ug/L
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
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P376414

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.11	I	ug/L
Arsenic	0.050	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	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
Batch ID: P376633

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376564

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376566

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P376459

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P376561

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P376337

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P376268

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P376178

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

Reference Method: EPA 8270E
 Batch ID: P376287

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	5.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	7.0	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P376287

Component	Result	Code	Units
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8321B
Batch ID: P376159

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: P376210

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyrophen	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P376210

Component	Result	Code	Units
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: P376195

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P376377

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

Reference Method: SM 2540 C-2011
Batch ID: P376547

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P376536

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P376381

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P376385

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P376414

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	100		P	85 - 115
Calcium	107		P	85 - 115
Iron	107		P	85 - 115
Magnesium	107		P	85 - 115
Potassium	103		P	85 - 115
Sodium	102		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P376414

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.8		P	85 - 115
Antimony	100		P	85 - 115
Arsenic	104		P	85 - 115
Boron	97.3		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	97.9		P	85 - 115
Copper	99.9		P	85 - 115
Lead	110		P	85 - 115
Nickel	100		P	85 - 115
Selenium	101		P	85 - 115
Silver	100		P	85 - 115
Thallium	107		P	85 - 115

Reference Method: EPA 300.0
Batch ID: P376633

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376564

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376566

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376459

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P376561

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P376337

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P376268

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P376178

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

Reference Method: EPA 8270E
Batch ID: P376287

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	98.2	96.7	P/P	69 - 122
Alachlor	95.1	96.3	P/P	71 - 120
Ametryn	108	100	P/P	47 - 138
Atrazine	94.9	98.7	P/P	74 - 124
Atrazine Desethyl	93.5	84.9	P/P	38 - 138
Azinphos Methyl	112	95.3	P/P	69 - 154
Bromacil	90.3	92.9	P/P	39 - 121
Butylate	53.4	55.4	P/P	27 - 87.0
Chlorpyrifos Ethyl	100	98.3	P/P	69 - 118
Chlorpyrifos Methyl	96.0	93.1	P/P	70 - 120
Cyanazine	111	93.9	P/P	20 - 250
Demeton	85.9	78.1	P/P	39 - 118
Diazinon	97.6	95.9	P/P	68 - 127
Dimethenamid	94.6	97.5	P/P	66 - 125
Disulfoton	93.5	88.8	P/P	52 - 126
Dithiopyr	93.4	97.4	P/P	67 - 127
EPTC	53.9	60.8	P/P	24 - 88.0
Ethion	90.3	101	P/P	51 - 132
Ethoprop	76.2	72.7	P/P	58 - 117
Fenamiphos	95.0	99.1	P/P	38 - 139
Fipronil	99.5	101	P/P	61 - 124
Fipronil Desulfinyl	94.6	101	P/P	47 - 120
Fipronil Sulfide	84.4	87.7	P/P	56 - 119
Fipronil Sulfone	83.6	92.4	P/P	50 - 117
Fonofos	82.6	76.3	P/P	60 - 121
Hexazinone	98.2	106	P/P	55 - 137
Malathion	85.6	104	P/P	66 - 126
Metaxyl	93.7	99.4	P/P	33 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P376287

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Metolachlor	90.4	98.5	P/P	69 - 119
Metribuzin	132	93.4	P/P	31 - 238
Mevinphos	78.7	72.1	P/P	42 - 113
Molinate	66.1	66.5	P/P	32 - 96.0
Norflurazon	88.3	96.7	P/P	54 - 123
Oxadiazon	82.1	90.4	P/P	63 - 128
Parathion Ethyl	89.5	89.3	P/P	72 - 111
Parathion Methyl	101	93.3	P/P	74 - 126
Pendimethalin	88.0	91.6	P/P	61 - 131
Phorate	92.7	87.5	P/P	51 - 115
Prodiamine	45.6	103	P/P	38 - 144
Prometon	96.0	96.9	P/P	54 - 119
Prometryn	101	107	P/P	63 - 120
Simazine	94.4	97.6	P/P	75 - 126
Tebuconazole	50.9	89.7	P/P	20 - 119
Terbufos	93.6	85.8	P/P	64 - 116
Terbutylazine	90.7	97.7	P/P	73 - 117

Reference Method: EPA 8321B
Batch ID: P376159

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	114		P	40 - 150
AMPA	96.6		P	40 - 150
Endothall	92.6		P	40 - 150
Glufosinate	92.9		P	40 - 150
Glyphosate	118		P	40 - 140
Sucralose	95.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P376210

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	129		P	40 - 160
Acetaminophen	103		P	30 - 160
Acetamiprid	95.8		P	40 - 160
Afidopyropen	92.1		P	40 - 160
Bentazon	69.7		P	30 - 160
Benzovindiflupyr	93.1		P	40 - 160
Carbamazepine	92.6		P	40 - 160
Clothianidin	94.2		P	40 - 160
Dinotefuran	98.4		P	40 - 160
Diuron	79.0		P	40 - 160
Fenuron	99.2		P	40 - 160
Fluridone	90.1		P	40 - 160
Hydrocodone	106		P	40 - 160
Ibuprofen	69.7		P	30 - 160
Imazapyr	97.6		P	40 - 160
Imidacloprid	104		P	40 - 160
Linuron	56.6		P	40 - 160
Mandestrobin	91.5		P	40 - 160
MCPP	144		P	40 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P376210

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Naproxen	43.0		P	40 - 160
Primidone	92.8		P	40 - 160
Pyraclostrobin	90.6		P	30 - 160
Thiamethoxam	89.5		P	40 - 160
Tolfenpyrad	52.8		P	40 - 160
Triclopyr	89.6		P	30 - 160

Reference Method: SM 2120 B-2011
Batch ID: P376195

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P376377

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	98 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P376381

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	92 - 103

Reference Method: SM 5310 B-2011
Batch ID: P376385

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P376414

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145123	Barium	99.1		P	80 - 120
2145123	Calcium	107		P	80 - 120
2145123	Iron	105		P	80 - 120
2145123	Magnesium	102		P	80 - 120
2145123	Potassium	104		P	80 - 120
2145123	Sodium	104		P	80 - 120
2145123	Zinc	101		P	80 - 120
2145245	Barium	102	105	P/P	80 - 120
2145245	Calcium	109	109	P/P	80 - 120
2145245	Iron	107	107	P/P	80 - 120
2145245	Magnesium	108	109	P/P	80 - 120
2145245	Potassium	107	109	P/P	80 - 120
2145245	Sodium	105		P	80 - 120
2145245	Zinc	105	109	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P376414

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145123	Aluminum	95.1		P	80 - 120
2145123	Antimony	101		P	80 - 120
2145123	Arsenic	101		P	80 - 120
2145123	Boron	93.0		P	80 - 120
2145123	Cadmium	101		P	80 - 120
2145123	Chromium	98.9		P	80 - 120
2145123	Copper	93.9		P	80 - 120
2145123	Lead	108		P	80 - 120
2145123	Nickel	94.9		P	80 - 120
2145123	Selenium	97.4		P	80 - 120
2145123	Silver	101		P	80 - 120
2145123	Thallium	106		P	80 - 120
2145245	Aluminum	96.3	94.9	P/P	80 - 120
2145245	Antimony	99.7	100	P/P	80 - 120
2145245	Arsenic	102	99.6	P/P	80 - 120
2145245	Boron	98.5	98.1	P/P	80 - 120
2145245	Cadmium	103	97.9	P/P	80 - 120
2145245	Chromium	101	99.5	P/P	80 - 120
2145245	Copper	98.6	96.3	P/P	80 - 120
2145245	Lead	110	110	P/P	80 - 120
2145245	Nickel	101	95.8	P/P	80 - 120
2145245	Selenium	93.9	95.2	P/P	80 - 120
2145245	Silver	99.5	99.8	P/P	80 - 120
2145245	Thallium	107	108	P/P	80 - 120

Reference Method: EPA 300.0
Batch ID: P376633

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145253	Bromide	102	104	P/P	90 - 110
2146158	Bromide	103		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145161	Chloride	98.1	97.3	P/P	90 - 110
2145253	Chloride	97.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376566

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145161	Sulfate	98.7	98.1	P/P	90 - 110
2145253	Sulfate	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376459

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145259	Ammonia-N	99.9	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P376561

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145252	Kjeldahl Nitrogen	109	109	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P376337

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145252	NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P376268

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145212	Total-P	105	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P376178

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145260	O-Phosphate-P	97.4	97.4	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P376287

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145488	Acetochlor	92.6	87.4	P/P	63 - 129
2145488	Alachlor	104	94.7	P/P	65 - 127
2145488	Ametryn	135	129	P/P	40 - 164
2145488	Azinphos Methyl	108	129	P/P	49 - 180
2145488	Bromacil	89.8	151	P/F	48 - 130
2145488	Butylate	50.9	52.9	P/P	10 - 94.0
2145488	Chlorpyrifos Ethyl	101	86.3	P/P	58 - 123
2145488	Chlorpyrifos Methyl	93.5	93.2	P/P	58 - 125

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P376287

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145488	Cyanazine	105	102	P/P	24 - 253
2145488	Demeton	94.0	95.5	P/P	25 - 149
2145488	Diazinon	108	101	P/P	59 - 144
2145488	Dimethenamid	97.3	91.3	P/P	46 - 139
2145488	Disulfoton	90.9	90.3	P/P	54 - 132
2145488	Dithiopyr	88.5	80.7	P/P	64 - 130
2145488	EPTC	50.5	54.6	P/P	10 - 92.0
2145488	Ethion	92.5	90.6	P/P	30 - 148
2145488	Ethoprop	74.6	69.9	P/P	50 - 130
2145488	Fenamiphos	95.8	96.8	P/P	49 - 142
2145488	Fipronil	92.1	91.1	P/P	46 - 140
2145488	Fipronil Desulfinylnl	98.3	98.0	P/P	30 - 121
2145488	Fipronil Sulfide	92.5	82.7	P/P	31 - 136
2145488	Fipronil Sulfone	86.9	81.9	P/P	16 - 136
2145488	Fonofos	90.9	90.5	P/P	55 - 129
2145488	Malathion	88.4	83.4	P/P	56 - 135
2145488	Metalaxyl	85.5	75.7	P/P	54 - 135
2145488	Mevinphos	92.4	93.1	P/P	33 - 131
2145488	Molinate	71.5	73.3	P/P	14 - 98.0
2145488	Oxadiazon	70.1	65.5	P/F	67 - 116
2145488	Parathion Ethyl	100	96.1	P/P	66 - 118
2145488	Parathion Methyl	112	113	P/P	64 - 136
2145488	Pendimethalin	100	93.8	P/P	59 - 144
2145488	Phorate	93.2	97.6	P/P	42 - 130
2145488	Prodiamine	60.2	54.3	P/P	42 - 148
2145488	Prometon	93.9	83.1	P/P	59 - 134
2145488	Prometryn	99.8	92.1	P/P	54 - 135
2145488	Tebuconazole	84.3	56.9	P/P	10 - 131
2145488	Terbufos	98.9	101	P/P	57 - 131
2145488	Terbutylazine	12.4	8.61	F/F	68 - 125

Reference Method: EPA 8321B
Batch ID: P376159

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145196	Acesulfame K	67.4	69.8	P/P	40 - 150
2145196	AMPA	108	116	P/P	40 - 150
2145196	Endothall	100	100	P/P	40 - 150
2145196	Glufosinate	88.9	105	P/P	40 - 150
2145196	Glyphosate	110	114	P/P	40 - 140
2145196	Sucralose	85.6	84.1	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P376210

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2144517	2,4-D	160	149	F/P	40 - 160
2144517	Acetaminophen	117	119	P/P	30 - 160
2144517	Acetamiprid	111	112	P/P	40 - 160
2144517	Afidopyropen	108	104	P/P	40 - 160
2144517	Benzovindiflupyr	103	105	P/P	40 - 160
2144517	Carbamazepine	70.2	92.9	P/P	40 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P376210

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2144517	Clothianidin	117	104	P/P	40 - 160
2144517	Dinotefuran	123	127	P/P	40 - 160
2144517	Diuron	80.2	81.4	P/P	40 - 160
2144517	Fenuron	94.0	97.9	P/P	40 - 160
2144517	Hydrocodone	97.0	91.9	P/P	40 - 160
2144517	Ibuprofen	73.1	75.9	P/P	30 - 160
2144517	Imidacloprid	183	167	F/F	40 - 160
2144517	Linuron	71.5	72.9	P/P	40 - 160
2144517	Mandestrobin	90.3	95.6	P/P	40 - 160
2144517	MCPP	149	165	P/F	40 - 160
2144517	Naproxen	99.8	98.7	P/P	40 - 160
2144517	Primidone	101	101	P/P	40 - 160
2144517	Pyraclostrobin	92.7	97.4	P/P	30 - 160
2144517	Thiamethoxam	152	152	P/P	40 - 160
2144517	Tolfenpyrad	55.9	58.4	P/P	40 - 160
2144517	Triclopyr	101	121	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P376381

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145832	Fluoride	102	102	P/P	89 - 106

Reference Method: SM 5310 B-2011
Batch ID: P376385

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145130	Organic Carbon	98.6	96.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P376171

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145333	Turbidity	4.06	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P376414

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145245	Barium	2.94	Spike	P	0 - 20
2145245	Calcium	0.0884	Spike	P	0 - 20
2145245	Iron	0.0965	Spike	P	0 - 20
2145245	Magnesium	0.708	Spike	P	0 - 20
2145245	Potassium	1.74	Spike	P	0 - 20
2145245	Sodium	1.24	Spike	P	0 - 20
2145245	Zinc	3.24	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P376414

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145245	Aluminum	1.30	Spike	P	0 - 20
2145245	Antimony	0.442	Spike	P	0 - 20
2145245	Arsenic	2.12	Spike	P	0 - 20
2145245	Boron	0.312	Spike	P	0 - 20
2145245	Cadmium	4.93	Spike	P	0 - 20
2145245	Chromium	1.49	Spike	P	0 - 20
2145245	Copper	2.39	Spike	P	0 - 20
2145245	Lead	0.0571	Spike	P	0 - 20
2145245	Nickel	5.40	Spike	P	0 - 20
2145245	Selenium	1.33	Spike	P	0 - 20
2145245	Silver	0.299	Spike	P	0 - 20
2145245	Thallium	0.677	Spike	P	0 - 20

Reference Method: EPA 300.0
Batch ID: P376633

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145253	Bromide	1.42	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145161	Chloride	0.624	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376566

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145161	Sulfate	0.547	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376459

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145259	Ammonia-N	0.931	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P376561

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145252	Kjeldahl Nitrogen	0.00470	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P376337

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145252	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P376268

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145212	Total-P	1.50	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P376178

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145260	O-Phosphate-P	0.0	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P376287

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145488	Acetochlor	5.79	Spike	P	0 - 30
2145488	Alachlor	9.62	Spike	P	0 - 30
2145488	Ametryn	4.16	Spike	P	0 - 30
2145488	Atrazine	0.0330	Spike	P	0 - 30
2145488	Atrazine Desethyl	1.39	Spike	P	0 - 30
2145488	Azinphos Methyl	18.1	Spike	P	0 - 30
2145488	Bromacil	50.8	Spike	F	0 - 30
2145488	Butylate	3.94	Spike	P	0 - 30
2145488	Chlorpyrifos Ethyl	15.4	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P376287

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145488	Chlorpyrifos Methyl	0.321	Spike	P	0 - 30
2145488	Cyanazine	2.92	Spike	P	0 - 30
2145488	Demeton	1.64	Spike	P	0 - 30
2145488	Diazinon	6.69	Spike	P	0 - 30
2145488	Dimethenamid	6.31	Spike	P	0 - 30
2145488	Disulfoton	0.608	Spike	P	0 - 30
2145488	Dithiopyr	9.17	Spike	P	0 - 30
2145488	EPTC	7.75	Spike	P	0 - 30
2145488	Ethion	2.03	Spike	P	0 - 30
2145488	Ethoprop	6.48	Spike	P	0 - 30
2145488	Fenamiphos	1.08	Spike	P	0 - 30
2145488	Fipronil	1.04	Spike	P	0 - 30
2145488	Fipronil Desulfinyl	0.317	Spike	P	0 - 30
2145488	Fipronil Sulfide	11.3	Spike	P	0 - 30
2145488	Fipronil Sulfone	5.93	Spike	P	0 - 30
2145488	Fonofos	0.452	Spike	P	0 - 30
2145488	Hexazinone	4.37	Spike	P	0 - 30
2145488	Malathion	5.74	Spike	P	0 - 30
2145488	Metalaxyl	7.66	Spike	P	0 - 30
2145488	Metolachlor	3.13	Spike	P	0 - 30
2145488	Metribuzin	3.16	Spike	P	0 - 30
2145488	Mevinphos	0.759	Spike	P	0 - 30
2145488	Molinate	2.47	Spike	P	0 - 30
2145488	Norflurazon	6.19	Spike	P	0 - 30
2145488	Oxadiazon	6.00	Spike	P	0 - 30
2145488	Parathion Ethyl	4.24	Spike	P	0 - 30
2145488	Parathion Methyl	0.878	Spike	P	0 - 30
2145488	Pendimethalin	6.78	Spike	P	0 - 30
2145488	Phorate	4.55	Spike	P	0 - 30
2145488	Prodiamine	10.2	Spike	P	0 - 30
2145488	Prometon	12.1	Spike	P	0 - 30
2145488	Prometryn	8.02	Spike	P	0 - 30
2145488	Simazine	0.375	Spike	P	0 - 30
2145488	Tebuconazole	38.8	Spike	F	0 - 30
2145488	Terbufos	1.89	Spike	P	0 - 30
2145488	Terbuthylazine	4.34	Spike	P	0 - 30
LFB	Acetochlor	1.53	LCS	P	0 - 30
LFB	Alachlor	1.18	LCS	P	0 - 30
LFB	Ametryn	7.78	LCS	P	0 - 30
LFB	Atrazine	3.91	LCS	P	0 - 30
LFB	Atrazine Desethyl	9.65	LCS	P	0 - 30
LFB	Azinphos Methyl	15.7	LCS	P	0 - 30
LFB	Bromacil	2.85	LCS	P	0 - 30
LFB	Butylate	3.69	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	1.66	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	3.05	LCS	P	0 - 30
LFB	Cyanazine	16.9	LCS	P	0 - 30
LFB	Demeton	9.49	LCS	P	0 - 30
LFB	Diazinon	1.81	LCS	P	0 - 30
LFB	Dimethenamid	3.04	LCS	P	0 - 30
LFB	Disulfoton	5.13	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P376287

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dithiopyr	4.17	LCS	P	0 - 30
LFB	EPTC	12.2	LCS	P	0 - 30
LFB	Ethion	11.0	LCS	P	0 - 30
LFB	Ethoprop	4.67	LCS	P	0 - 30
LFB	Fenamiphos	4.13	LCS	P	0 - 30
LFB	Fipronil	1.19	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	6.18	LCS	P	0 - 30
LFB	Fipronil Sulfide	3.80	LCS	P	0 - 30
LFB	Fipronil Sulfone	9.98	LCS	P	0 - 30
LFB	Fonofos	7.93	LCS	P	0 - 30
LFB	Hexazinone	7.90	LCS	P	0 - 30
LFB	Malathion	19.7	LCS	P	0 - 30
LFB	Metalaxyl	5.86	LCS	P	0 - 30
LFB	Metolachlor	8.64	LCS	P	0 - 30
LFB	Metribuzin	34.5	LCS	F	0 - 30
LFB	Mevinphos	8.87	LCS	P	0 - 30
LFB	Molinate	0.583	LCS	P	0 - 30
LFB	Norflurazon	9.13	LCS	P	0 - 30
LFB	Oxadiazon	9.71	LCS	P	0 - 30
LFB	Parathion Ethyl	0.323	LCS	P	0 - 30
LFB	Parathion Methyl	7.88	LCS	P	0 - 30
LFB	Pendimethalin	3.98	LCS	P	0 - 30
LFB	Phorate	5.70	LCS	P	0 - 30
LFB	Prodiamine	77.3	LCS	F	0 - 30
LFB	Prometon	0.933	LCS	P	0 - 30
LFB	Prometryn	5.77	LCS	P	0 - 30
LFB	Simazine	3.35	LCS	P	0 - 30
LFB	Tebuconazole	55.3	LCS	F	0 - 30
LFB	Terbufos	8.68	LCS	P	0 - 30
LFB	Terbutylazine	7.43	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P376159

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145196	Acesulfame K	3.56	Spike	P	0 - 30
2145196	AMPA	6.95	Spike	P	0 - 30
2145196	Endothall	0.169	Spike	P	0 - 30
2145196	Glufosinate	16.6	Spike	P	0 - 30
2145196	Glyphosate	3.81	Spike	P	0 - 30
2145196	Sucralose	1.71	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P376210

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2144517	2,4-D	5.47	Spike	P	0 - 30
2144517	Acetaminophen	1.61	Spike	P	0 - 30
2144517	Acetamiprid	0.488	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P376210

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2144517	Afidopyropen	3.76	Spike	P	0 - 30
2144517	Bentazon	12.0	Spike	P	0 - 30
2144517	Benzovindiflupyr	2.00	Spike	P	0 - 30
2144517	Carbamazepine	27.8	Spike	P	0 - 30
2144517	Clothianidin	11.6	Spike	P	0 - 30
2144517	Dinotefuran	3.15	Spike	P	0 - 30
2144517	Diuron	1.39	Spike	P	0 - 30
2144517	Fenuron	4.07	Spike	P	0 - 30
2144517	Fluridone	1.88	Spike	P	0 - 30
2144517	Hydrocodone	5.37	Spike	P	0 - 30
2144517	Ibuprofen	3.88	Spike	P	0 - 30
2144517	Imazapyr	15.9	Spike	P	0 - 30
2144517	Imidacloprid	7.44	Spike	P	0 - 30
2144517	Linuron	1.93	Spike	P	0 - 30
2144517	Mandestrobin	5.76	Spike	P	0 - 30
2144517	MCPP	10.0	Spike	P	0 - 30
2144517	Naproxen	1.10	Spike	P	0 - 30
2144517	Primidone	0.124	Spike	P	0 - 30
2144517	Pyraclostrobin	4.94	Spike	P	0 - 30
2144517	Thiamethoxam	0.145	Spike	P	0 - 30
2144517	Tolfenpyrad	4.30	Spike	P	0 - 30
2144517	Triclopyr	17.7	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P376195

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145161	Color (true)	2.12	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P376377

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145832	Total Alkalinity	0.0199	Sample	P	0 - 2.8

Reference Method: SM 2540 C-2011
Batch ID: P376547

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145251	TDS	5.24	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P376381

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145832	Fluoride	0.0	Spike	P	0 - 2.5

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P376385

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145130	Organic Carbon	1.33	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2145275
Field Sample ID: 19010076

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	147	P	30 - 160
EPA 8321B	Acetaminophen-d4	123	P	30 - 160
EPA 8321B	Carbamazepine-d10	90.8	P	30 - 160
EPA 8321B	Diuron-d6	75.3	P	30 - 160
EPA 8321B	Endothall-d6	56.6	P	30 - 160
EPA 8321B	Endothall-d6	56.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	86.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	86.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	90.1	P	30 - 160
EPA 8321B	Primidone-d5	103	P	30 - 160
EPA 8321B	Sucralose-d6	90.8	P	30 - 160
EPA 8321B	Sucralose-d6	90.8	P	30 - 160

Lab Sample ID: 2145277
Field Sample ID: 19010076

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	116	P	68 - 130
EPA 8270E	Terbufos-d10	111	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A96471

Included Lab Sample IDs: 2145253

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A96476

Included Lab Sample IDs: 2145255

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.1	97.3	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A96487

Included Lab Sample IDs: 2145253

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

Reference Method: EPA 8321B

Run ID: A96502

Included Lab Sample IDs: 2145275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	99.6	103	P/P	60 - 160
Endothall	99.0	97.4	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A96534

Included Lab Sample IDs: 2145275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	98.8	101	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A96541

Included Lab Sample IDs: 2145254

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	104	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A96548

Included Lab Sample IDs: 2145254

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	98.8	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A96559

Included Lab Sample IDs: 2145253

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

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A96559

Included Lab Sample IDs: 2145253

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

Reference Method: SM 5310 B-2011

Run ID: A96561

Included Lab Sample IDs: 2145254

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.6	91.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A96586

Included Lab Sample IDs: 2145254

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

Reference Method: EPA 8321B

Run ID: A96588

Included Lab Sample IDs: 2145275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	91.8	92.9	P/P	50 - 150
Acetaminophen	124	118	P/P	60 - 160
Acetamiprid	116	107	P/P	50 - 150
Afidopyropen	115	107	P/P	50 - 150
Bentazon	87.1	88.0	P/P	50 - 160
Benzovindiflupyr	104	107	P/P	50 - 150
Carbamazepine	110	114	P/P	60 - 150
Clothianidin	107	94.4	P/P	60 - 150
Dinotefuran	117	104	P/P	50 - 150
Diuron	108	104	P/P	60 - 150
Fenuron	124	121	P/P	60 - 150
Fluridone	114	110	P/P	60 - 160
Hydrocodone	110	107	P/P	60 - 150
Ibuprofen	121	119	P/P	50 - 160
Imazapyr	119	97.9	P/P	50 - 150
Imidacloprid	115	104	P/P	60 - 150
Linuron	104	100	P/P	60 - 150
Mandestrobin	113	111	P/P	50 - 150
MCPP	88.7	89.4	P/P	50 - 150
Naproxen	94.8	125	P/P	50 - 160
Primidone	105	113	P/P	60 - 150
Pyraclostrobin	116	117	P/P	60 - 150
Thiamethoxam	107	99.7	P/P	50 - 150
Tolfenpyrad	102	104	P/P	60 - 150
Triclopyr	75.3	85.3	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A96634

Included Lab Sample IDs: 2145253

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A96635

Included Lab Sample IDs: 2145276

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	98.9	99.9	P/P	90 - 110
Calcium	103	104	P/P	90 - 110
Iron	103	104	P/P	90 - 110
Magnesium	103	103	P/P	90 - 110
Potassium	102	102	P/P	90 - 110
Sodium	102	103	P/P	90 - 110
Zinc	101	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A96650

Included Lab Sample IDs: 2145275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	95.6	96.1	P/P	60 - 160
Glufosinate	90.4	83.4	P/P	60 - 160
Glyphosate	113	109	P/P	60 - 160

Reference Method: EPA 300.0

Run ID: A96678

Included Lab Sample IDs: 2145253

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	110	109	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A96700

Included Lab Sample IDs: 2145276

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	95.0	91.2	P/P	90 - 110
Arsenic	99.7	97.7	P/P	90 - 110
Boron	92.7	94.9	P/P	90 - 110
Cadmium	99.6	98.0	P/P	90 - 110
Chromium	99.0	98.7	P/P	90 - 110
Copper	96.5	95.1	P/P	90 - 110
Lead	104	104	P/P	90 - 110
Nickel	96.4	95.4	P/P	90 - 110
Selenium	98.1	97.0	P/P	90 - 110
Thallium	94.7	94.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A96728

Included Lab Sample IDs: 2145254

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	108	99.1	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A96741

Included Lab Sample IDs: 2145277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.7		P	80 - 120
Alachlor	103		P	80 - 120
Ametryn	100		P	80 - 120
Atrazine	97.2		P	80 - 120
Atrazine Desethyl	97.4		P	80 - 120
Azinphos Methyl	95.1		P	80 - 120
Bromacil	95.1		P	80 - 120
Butylate	105		P	80 - 120
Chlorpyrifos Ethyl	98.1		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Cyanazine	90.2		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	101		P	80 - 120
Dimethenamid	101		P	80 - 120
Disulfoton	94.8		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	104		P	80 - 120
Ethion	99.7		P	80 - 120
Ethoprop	97.7		P	80 - 120
Fenamiphos	102		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	102		P	80 - 120
Fipronil Sulfide	97.4		P	80 - 120
Fipronil Sulfone	99.9		P	80 - 120
Fonofos	97.7		P	80 - 120
Hexazinone	99.6		P	80 - 120
Malathion	101		P	80 - 120
Metaxyl	102		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	91.4		P	80 - 120
Mevinphos	102		P	80 - 120
Molinate	104		P	80 - 120
Norflurazon	101		P	80 - 120
Oxadiazon	98.7		P	80 - 120
Parathion Ethyl	96.0		P	80 - 120
Parathion Methyl	98.2		P	80 - 120
Pendimethalin	95.8		P	80 - 120
Phorate	100		P	80 - 120
Prodiamine	96.2		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	102		P	80 - 120
Simazine	90.9		P	80 - 120
Tebuconazole	93.5		P	80 - 120
Terbufos	98.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A96741
Included Lab Sample IDs: 2145277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Terbutylazine	99.8		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A96742
Included Lab Sample IDs: 2145276

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	96.8	96.8	P/P	90 - 110
Silver	101	101	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
EPA 180.1 Rev. 2.0	Turbidity							4.06	
EPA 200.7 Rev. 4.4	Barium	100		99.1	102	105			2.94
	Calcium	107		107	109	109			0.0884
	Iron	107		105	107	107			0.0965
	Magnesium	107		102	108	109			0.708
	Potassium	103		104	107	109			1.74
	Sodium	102		104	105				1.24
	Zinc	102		101	105	109			3.24
EPA 200.8 Rev. 5.4	Aluminum	98.8		95.1	96.3	94.9			1.30
	Antimony	100		99.7	100	101			0.442
	Arsenic	104		101	102	99.6			2.12
	Boron	97.3		93.0	98.5	98.1			0.312
	Cadmium	102		101	103	97.9			4.93
	Chromium	97.9		98.9	101	99.5			1.49
	Copper	99.9		93.9	98.6	96.3			2.39
	Lead	110		108	110	110			0.0571
	Nickel	100		94.9	101	95.8			5.40
	Selenium	101		97.4	93.9	95.2			1.33
	Silver	100		99.5	99.8	101			0.299
	Thallium	107		106	107	108			0.677
EPA 300.0	Bromide	107		102	104	103			1.42
EPA 300.0 Rev. 2.1	Chloride	99.2		98.1	97.3	97.6			0.624
	Sulfate	98.5		98.7	98.1	98.4			0.547
EPA 350.1 Rev. 2.0	Ammonia-N	99.8		99.9	101				0.931
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108		109	109				0.0047
EPA 353.2 Rev. 2.0	NO2NO3-N	102		99.0	99.0				0.0
EPA 365.1 Rev. 2.0	Total-P	103		105	103				1.50
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101		97.4	97.4				0.0
EPA 8270E	Acetochlor	98.2	96.7	92.6	87.4		1.53		5.79
	Alachlor	95.1	96.3	104	94.7		1.18		9.62
	Ametryn	108	100	135	129		7.78		4.16
	Atrazine	94.9	98.7				3.91		0.0330
	Atrazine Desethyl	93.5	84.9				9.65		1.39
	Azinphos Methyl	112	95.3	108	129		15.7		18.1
	Bromacil	90.3	92.9	89.8	151		2.85		50.8
	Butylate	53.4	55.4	50.9	52.9		3.69		3.94
	Chlorpyrifos Ethyl	100	98.3	101	86.3		1.66		15.4
	Chlorpyrifos Methyl	96.0	93.1	93.5	93.2		3.05		0.321
	Cyanazine	111	93.9	105	102		16.9		2.92
	Demeton	85.9	78.1	94.0	95.5		9.49		1.64
	Diazinon	97.6	95.9	108	101		1.81		6.69
	Dimethenamid	94.6	97.5	97.3	91.3		3.04		6.31
	Disulfoton	93.5	88.8	90.9	90.3		5.13		0.608
	Dithiopyr	93.4	97.4	88.5	80.7		4.17		9.17
	EPTC	53.9	60.8	50.5	54.6		12.2		7.75
	Ethion	90.3	101	92.5	90.6		11.0		2.03
	Ethoprop	76.2	72.7	74.6	69.9		4.67		6.48
	Fenamiphos	95.0	99.1	95.8	96.8		4.13		1.08
	Fipronil	99.5	101	92.1	91.1		1.19		1.04
	Fipronil Desulfanyl	94.6	101	98.3	98.0		6.18		0.317
	Fipronil Sulfide	84.4	87.7	92.5	82.7		3.80		11.3
	Fipronil Sulfone	83.6	92.4	86.9	81.9		9.98		5.93
	Fonofos	82.6	76.3	90.9	90.5		7.93		0.452
	Hexazinone	98.2	106				7.90		4.37

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Malathion	85.6	104	88.4	83.4	19.7		5.74
	Metalaxyl	93.7	99.4	85.5	75.7	5.86		7.66
	Metolachlor	90.4	98.5			8.64		3.13
	Metribuzin	132	93.4			34.5		3.16
	Mevinphos	78.7	72.1	92.4	93.1	8.87		0.759
	Molinate	66.1	66.5	71.5	73.3	0.583		2.47
	Norflurazon	88.3	96.7			9.13		6.19
	Oxadiazon	82.1	90.4	70.1	65.5	9.71		6.00
	Parathion Ethyl	89.5	89.3	100	96.1	0.323		4.24
	Parathion Methyl	101	93.3	112	113	7.88		0.878
	Pendimethalin	88.0	91.6	100	93.8	3.98		6.78
	Phorate	92.7	87.5	93.2	97.6	5.70		4.55
	Prodiamine	45.6	103	60.2	54.3	77.3		10.2
	Prometon	96.0	96.9	93.9	83.1	0.933		12.1
	Prometryn	101	107	99.8	92.1	5.77		8.02
	Simazine	94.4	97.6			3.35		0.375
	Tebuconazole	50.9	89.7	84.3	56.9	55.3		38.8
	Terbufos	93.6	85.8	98.9	101	8.68		1.89
	Terbuthylazine	90.7	97.7	12.4	8.61	7.43		4.34
EPA 8321B	2,4-D	129		160	149			5.47
	Acesulfame K	114		67.4	69.8			3.56
	Acetaminophen	103		117	119			1.61
	Acetamiprid	95.8		111	112			0.488
	Afidopyropen	92.1		108	104			3.76
	AMPA	96.6		108	116			6.95
	Bentazon	69.7						12.0
	Benzovindiflupyr	93.1		103	105			2.00
	Carbamazepine	92.6		70.2	92.9			27.8
	Clothianidin	94.2		117	104			11.6
	Dinotefuran	98.4		123	127			3.15
	Diuron	79.0		80.2	81.4			1.39
	Endothall	92.6		100	100			0.169
	Fenuron	99.2		94.0	97.9			4.07
	Fluridone	90.1						1.88
	Glufosinate	92.9		88.9	105			16.6
	Glyphosate	118		110	114			3.81
	Hydrocodone	106		97.0	91.9			5.37
	Ibuprofen	69.7		73.1	75.9			3.88
	Imazapyr	97.6						15.9
	Imidacloprid	104		183	167			7.44
	Linuron	56.6		71.5	72.9			1.93
	Mandestrobin	91.5		90.3	95.6			5.76
	MCPP	144		149	165			10.0
	Naproxen	43.0		99.8	98.7			1.10
	Primidone	92.8		101	101			0.124
	Pyraclostrobin	90.6		92.7	97.4			4.94
	Sucralose	95.2		85.6	84.1			1.71
	Thiamethoxam	89.5		152	152			0.145
	Tolfenpyrad	52.8		55.9	58.4			4.30
	Triclopyr	89.6		101	121			17.7
SM 2120 B-2011	Color (true)	101					2.12	
SM 2320 B-2011	Total Alkalinity	104					0.0199	
SM 2540 C-2011	TDS						5.24	
SM 4500 F-C-2011	Fluoride	101		102	102			0.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	Precision	MS
			LCS	SMP	
SM 5310 B-2011	Organic Carbon	95.0	98.6 96.0		1.33

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2145253
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2145276
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2145276
EPA 300.0 / E31780	Bromide in aqueous matrices	2145253
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2145253
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2145253
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2145254
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2145254
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2145254
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2145254
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2145255
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2145277
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2145275
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2145275
SM 2120 B-2011 / E31780	True Color measured at 450 nm	2145253
SM 2320 B-2011 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2145253
SM 2540 C-2011 / E31780	Total Dissolved Solids in aqueous matrices	2145253
SM 2540 D-2011 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2145253
SM 4500 F-C-2011 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2145253
SM 5310 B-2011 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2145254

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	12/19/2019			12/19/2019 14:53	Yen Ta	2145253
EPA 200.7 Rev. 4.4	12/19/2019	12/26/2019 14:00	Elliott D. Healy	12/30/2019 15:32	Betina Topolski	2145276
EPA 200.8 Rev. 5.4	12/19/2019	12/26/2019 14:00	Elliott D. Healy	01/03/2020 23:52	Martin Acosta	2145276
	12/19/2019	12/26/2019 14:00	Elliott D. Healy	01/07/2020 23:50	Alexander Thompson	2145276
EPA 300.0	12/19/2019			01/03/2020 19:24	Jhamieka S. Greenwood	2145253
EPA 300.0 Rev. 2.1	12/19/2019			12/31/2019 01:01	Irina Carbone	2145253
EPA 350.1 Rev. 2.0	12/19/2019			12/26/2019 14:36	Ping Hua	2145254
EPA 351.2 Rev. 2.0	12/19/2019	12/30/2019 12:00	Sima Feizi	01/06/2020 15:37	Virginia P. Brown	2145254
EPA 353.2 Rev. 2.0	12/19/2019			12/23/2019 12:28	Beverly Y. Sanders	2145254
EPA 365.1 Rev. 2.0	12/19/2019	12/20/2019 13:10	Yen Ta	12/23/2019 15:18	Benjamin T. Nordmann	2145254
EPA 365.1 Rev. 2.0 dissolved	12/19/2019			12/19/2019 15:53	Samantha Davila	2145255
EPA 8270E	12/19/2019	12/23/2019 08:00	Fe-Val Siddell	12/26/2019 22:25	Vandana T. Nagar	2145277
EPA 8321B	12/19/2019	12/19/2019 16:00	Rebecca Ware	12/19/2019 18:47	Rebecca Ware	2145275
	12/19/2019	12/19/2019 16:00	Rebecca Ware	12/20/2019 17:06	Rebecca Ware	2145275
	12/19/2019	12/19/2019 16:00	Rebecca Ware	12/24/2019 06:19	Mohammad Ghaffari	2145275
	12/19/2019	12/22/2019 09:00	Hoor Shaik	12/25/2019 14:50	Juyoung Kim	2145275
SM 2120 B-2011	12/19/2019			12/19/2019 17:41	Madeline Funaro	2145253
SM 2320 B-2011	12/19/2019			12/24/2019 20:13	Dale L. Simmons	2145253
SM 2540 C-2011	12/19/2019			12/23/2019 16:45	Yijie Li	2145253
SM 2540 D-2011	12/19/2019			12/23/2019 16:45	Yijie Li	2145253
SM 4500 F-C-2011	12/19/2019			12/24/2019 20:13	Dale L. Simmons	2145253
SM 5310 B-2011	12/19/2019			12/24/2019 04:58	Madeline Funaro	2145254