

Chemical Analysis Report

CEN-DIST-2019-12-18-01

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

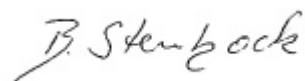
Event Description: **Taylor Creek + SCI**
Request ID: **RQ-2019-12-02-51**
Customer: **CEN-DIST**
Project ID: **SMP**

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

Date Certified: 15-JAN-2020 12:41



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: Catfish Creek @ 450m DS of Lake Pierce

Collection Date/Time: 12/17/2019 11:10

Field ID: G4CE0175

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2145086	EPA 180.1 Rev. 2.0	Turbidity	10		NTU	P376124	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P376563	
		Sulfate	10		mg SO4/L	P376565	
	SM 2120 B	Color (true)	53		PCU	P376109	
	SM 2320 B-97	Total Alkalinity	43		mg CaCO3/L	P376376	
	SM 2540 C-97	TDS	96		mg/L	P376545	
	SM 2540 D-97	TSS	15	I	mg/L	P376534	
	SM 4500 F-C-97	Fluoride	0.056	I	mg F/L	P376673	
2145087	EPA 350.1 Rev. 2.0	Ammonia-N	0.29		mg N/L	P376457	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.2		mg N/L	P376665	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.058		mg N/L	P376334	
	EPA 365.1 Rev. 2.0	Total-P	0.050	J	mg P/L	P376211	MS
	SM 5310 B-00	Organic Carbon	15		mg C/L	P376383	
2145088	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P376106	
2145091	EPA 8321B	Acesulfame K**	0.10	U	ug/L	P376087	
		2,4-D	0.14		ug/L	P376210	MS
		AMPA**	0.10	U	ug/L	P376087	
		Sucralose**	0.090		ug/L	P376087	
		Acetaminophen**	0.0080	U	ug/L	P376210	
		Acetamiprid**	0.0020	U	ug/L	P376210	
		Endothall**	0.25	U	ug/L	P376087	
		Glufosinate**	0.10	U	ug/L	P376087	
		Glyphosate**	0.10	U	ug/L	P376087	
		Afidopyropen**	0.0020	UJ	ug/L	P376210	
		Bentazon	8.6E-04	I	ug/L	P376210	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P376210	
		Carbamazepine**	8.0E-04	U	ug/L	P376210	
		Clothianidin**	0.0048	I	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**	0.017		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	0.067		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	
		Thiamethoxam**	0.011		ug/L	P376210	

Field ID: G4CE0175

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2145091	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P376210	
		Triclopyr**	0.0040	U	ug/L	P376210	
2145092	EPA 200.7 Rev. 4.4	Barium	19.7		ug/L	P376414	
		Calcium	15.7		mg/L	P376414	
		Iron	110	I	ug/L	P376414	
		Magnesium	5.23		mg/L	P376414	
		Potassium	4.2		mg/L	P376414	
		Sodium	5.7		mg/L	P376414	
		Zinc	5.0	U	ug/L	P376414	
		Aluminum	43		ug/L	P376414	
	EPA 200.8 Rev. 5.4	Antimony	0.086	I	ug/L	P376838	
		Arsenic	1.13		ug/L	P376414	
		Boron**	26.2		ug/L	P376414	
		Cadmium	0.020	U	ug/L	P376414	
		Chromium	0.40	U	ug/L	P376414	
		Copper	0.50	I	ug/L	P376414	
		Lead	0.52		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	
		Acetochlor	0.24	U	ng/L	P376091	
		Alachlor	0.24	U	ng/L	P376091	
		Ametryn	0.59	U	ng/L	P376091	
		Atrazine	3.3		ng/L	P376091	
		Atrazine Desethyl	1.5	U	ng/L	P376091	
		Azinphos Methyl	4.9	U	ng/L	P376091	
		Bromacil	20		ng/L	P376091	
		Butylate	0.39	U	ng/L	P376091	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P376091	
		Chlorpyrifos Methyl	0.098	U	ng/L	P376091	
		Cyanazine	3.2	U	ng/L	P376091	
2145093	EPA 8270E	Demeton	6.8	U	ng/L	P376091	
		Diazinon	0.12	U	ng/L	P376091	
		Dimethenamid**	0.098	U	ng/L	P376091	
		Disulfoton	0.49	U	ng/L	P376091	
		Dithiopyr**	0.098	U	ng/L	P376091	
		EPTC	1.2	U	ng/L	P376091	
		Ethion	0.15	U	ng/L	P376091	
		Ethoprop	0.098	U	ng/L	P376091	
		Fenamiphos	0.49	U	ng/L	P376091	
		Fipronil	0.24	U	ng/L	P376091	
		Fipronil Desulfinyl**	0.12	U	ng/L	P376091	
		Fipronil Sulfide	0.15	U	ng/L	P376091	
		Fipronil Sulfone	0.15	U	ng/L	P376091	

Field ID: G4CE0175

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2145093	EPA 8270E	Fonofos	0.20	U	ng/L	P376091	
		Hexazinone	0.49	U	ng/L	P376091	
		Malathion	0.34	U	ng/L	P376091	
		Metaxyl	12		ng/L	P376091	
		Metolachlor	0.49	U	ng/L	P376091	
		Metribuzin	0.73	U	ng/L	P376091	
		Mevinphos	0.49	U	ng/L	P376091	
		Molinate	0.29	U	ng/L	P376091	
		Norflurazon	82		ng/L	P376091	
		Oxadiazon**	0.098	U	ng/L	P376091	MS
		Parathion Ethyl	0.24	U	ng/L	P376091	
		Parathion Methyl	0.54	U	ng/L	P376091	
		Pendimethalin	0.98	U	ng/L	P376091	
		Phorate	0.24	U	ng/L	P376091	
		Prodiamine**	0.17	U	ng/L	P376091	
		Prometon	0.88	U	ng/L	P376091	
		Prometryn	0.20	U	ng/L	P376091	
		Simazine	7.7		ng/L	P376091	
		Tebuconazole**	0.49	U	ng/L	P376091	MS
		Terbufos	0.098	U	ng/L	P376091	
		Terbuthylazine	0.42	U	ng/L	P376091	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The PQL was elevated because of sample matrix interference.

EPA 365.1 Rev. 2.0: Total-P: Refer to the Lab Analysis Report for an explanation of QC Codes.

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 atrazine not assessed due to high content of this parameter in the sample spiked.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P376124

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
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 200.8 Rev. 5.4
Batch ID: P376838

Component	Result	Code	Units
Antimony	0.050	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376563

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376565

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376457

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376457

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P376665

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P376334

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P376211

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P376106

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

Reference Method: EPA 8270E
Batch ID: P376091

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: P376091

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: P376087

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
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L

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
Batch ID: P376109

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P376376

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

Reference Method: SM 2540 C-97
Batch ID: P376545

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P376534

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P376673

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P376383

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
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 200.8 Rev. 5.4
Batch ID: P376838

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Antimony	106		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376563

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376565

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376457

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.9		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P376665

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P376665

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P376334

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P376211

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P376106

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.8		P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P376091

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	85.7	82.3	P/P	69 - 122
Alachlor	82.1	77.1	P/P	71 - 120
Ametryn	78.8	83.4	P/P	47 - 138
Atrazine	98.8	95.9	P/P	74 - 124
Atrazine Desethyl	119	99.8	P/P	38 - 138
Azinphos Methyl	99.9	94.9	P/P	69 - 154
Bromacil	66.8	70.4	P/P	39 - 121
Butylate	59.3	59.5	P/P	27 - 87.0
Chlorpyrifos Ethyl	90.5	84.6	P/P	69 - 118
Chlorpyrifos Methyl	93.2	86.5	P/P	70 - 120
Cyanazine	213	174	P/P	20 - 250
Demeton	81.8	73.3	P/P	39 - 118
Diazinon	93.4	88.9	P/P	68 - 127
Dimethenamid	84.8	82.1	P/P	66 - 125
Disulfoton	97.8	89.4	P/P	52 - 126
Dithiopyr	84.7	80.3	P/P	67 - 127
EPTC	54.7	59.1	P/P	24 - 88.0
Ethion	94.1	87.3	P/P	51 - 132
Ethoprop	92.3	86.1	P/P	58 - 117
Fenamiphos	57.0	72.3	P/P	38 - 139
Fipronil	76.9	78.0	P/P	61 - 124
Fipronil Desulfinyl	87.6	87.6	P/P	47 - 120
Fipronil Sulfide	84.6	80.5	P/P	56 - 119
Fipronil Sulfone	77.8	75.0	P/P	50 - 117
Fonofos	93.1	83.6	P/P	60 - 121
Hexazinone	93.0	88.7	P/P	55 - 137
Malathion	67.8	89.6	P/P	66 - 126
Metalaxyl	82.4	82.6	P/P	33 - 140

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P376091

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Metolachlor	80.8	80.0	P/P	69 - 119
Metribuzin	135	123	P/P	31 - 238
Mevinphos	84.0	79.5	P/P	42 - 113
Molinate	72.8	70.6	P/P	32 - 96.0
Norflurazon	85.1	86.0	P/P	54 - 123
Oxadiazon	81.7	76.2	P/P	63 - 128
Parathion Ethyl	95.1	86.0	P/P	72 - 111
Parathion Methyl	103	97.6	P/P	74 - 126
Pendimethalin	93.8	83.7	P/P	61 - 131
Phorate	91.5	79.5	P/P	51 - 115
Prodiamine	87.9	85.4	P/P	38 - 144
Prometon	75.3	62.1	P/P	54 - 119
Prometryn	85.4	83.7	P/P	63 - 120
Simazine	103	101	P/P	75 - 126
Tebuconazole	20.9	27.1	P/P	20 - 119
Terbufos	93.2	81.4	P/P	64 - 116
Terbutylazine	90.8	87.6	P/P	73 - 117

Reference Method: EPA 8321B

Batch ID: P376087

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	116		P	40 - 150
AMPA	89.4		P	40 - 150
Endothall	90.3		P	40 - 150
Glufosinate	86.6		P	40 - 150
Glyphosate	123		P	40 - 140
Sucralose	91.6		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
MCP	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
Batch ID: P376109

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.5		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P376376

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P376673

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P376383

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.8		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	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	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 200.8 Rev. 5.4
Batch ID: P376838

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145120	Antimony	108	107	P/P	80 - 120
2145223	Antimony	107		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P376563

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143451	Chloride	95.8		P	90 - 110
2144973	Chloride	96.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P376565

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143451	Sulfate	93.2		P	90 - 110
2144973	Sulfate	96.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P376457

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145129	Ammonia-N	102	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P376665

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145104	Kjeldahl Nitrogen	115	114	F/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P376334

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145001	NO2NO3-N	96.5	96.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P376211

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145087	Total-P	104	111	P/F	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P376106

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145020	O-Phosphate-P	92.3	93.2	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P376091

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143866	Acetochlor	79.9	81.2	P/P	63 - 129
2143866	Alachlor	81.4	86.2	P/P	65 - 127
2143866	Ametryn	89.8	106	P/P	40 - 164
2143866	Atrazine Desethyl	116	120	P/P	14 - 157
2143866	Azinphos Methyl	81.0	60.7	P/P	49 - 180
2143866	Bromacil	68.9	67.6	P/P	48 - 130
2143866	Butylate	54.4	61.2	P/P	10 - 94.0
2143866	Chlorpyrifos Ethyl	102	103	P/P	58 - 123

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
 Batch ID: P376091

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2143866	Chlorpyrifos Methyl	85.8	80.4	P/P	58 - 125
2143866	Cyanazine	191	202	P/P	24 - 253
2143866	Demeton	109	106	P/P	25 - 149
2143866	Diazinon	97.9	102	P/P	59 - 144
2143866	Dimethenamid	76.3	80.0	P/P	46 - 139
2143866	Disulfoton	98.5	98.5	P/P	54 - 132
2143866	Dithiopyr	79.0	81.3	P/P	64 - 130
2143866	EPTC	64.4	68.4	P/P	10 - 92.0
2143866	Ethion	69.8	64.1	P/P	30 - 148
2143866	Ethoprop	99.9	101	P/P	50 - 130
2143866	Fenamiphos	69.5	89.0	P/P	49 - 142
2143866	Fipronil	79.7	81.3	P/P	46 - 140
2143866	Fipronil Desulfinyln	86.1	87.9	P/P	30 - 121
2143866	Fipronil Sulfide	72.0	62.1	P/P	31 - 136
2143866	Fipronil Sulfone	43.6	30.7	P/P	16 - 136
2143866	Fonofos	95.2	92.1	P/P	55 - 129
2143866	Hexazinone	92.5	91.7	P/P	56 - 141
2143866	Malathion	98.9	90.7	P/P	56 - 135
2143866	Metalaxyl	80.5	78.3	P/P	54 - 135
2143866	Metolachlor	79.2	78.7	P/P	51 - 140
2143866	Metribuzin	161	148	P/P	45 - 254
2143866	Mevinphos	88.1	86.5	P/P	33 - 131
2143866	Molinate	71.1	75.0	P/P	14 - 98.0
2143866	Norflurazon	63.9	65.4	P/P	34 - 136
2143866	Oxadiazon	60.9	55.5	F/F	67 - 116
2143866	Parathion Ethyl	87.0	88.2	P/P	66 - 118
2143866	Parathion Methyl	108	110	P/P	64 - 136
2143866	Pendimethalin	87.2	87.9	P/P	59 - 144
2143866	Phorate	91.6	91.4	P/P	42 - 130
2143866	Prodiamine	85.1	86.0	P/P	42 - 148
2143866	Prometon	78.1	80.4	P/P	59 - 134
2143866	Prometryn	82.9	83.0	P/P	54 - 135
2143866	Simazine	115	116	P/P	53 - 156
2143866	Tebuconazole	4.84	6.51	F/F	10 - 131
2143866	Terbufos	97.6	97.1	P/P	57 - 131
2143866	Terbutylazine	92.5	96.6	P/P	68 - 125

Reference Method: EPA 8321B
 Batch ID: P376087

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2144312	Acesulfame K	57.7	60.7	P/P	40 - 150
2144312	AMPA	97.8	96.0	P/P	40 - 150
2144312	Endothall	89.2	90.2	P/P	40 - 150
2144312	Glufosinate	85.3	90.8	P/P	40 - 150
2144312	Glyphosate	110	95.3	P/P	40 - 140
2144312	Sucralose	87.4	90.4	P/P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P376210

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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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	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
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	MCCP	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-97
Batch ID: P376673

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145099	Fluoride	98.2	98.2	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P376383

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145000	Organic Carbon	97.0	97.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P376124

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145018	Turbidity	2.54	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	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 200.8 Rev. 5.4
 Batch ID: P376838

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145120	Antimony	1.19	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P376563

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143451	Chloride	1.99	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P376565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P376565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143451	Sulfate	0.202	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P376457

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145129	Ammonia-N	1.33	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P376665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145104	Kjeldahl Nitrogen	0.639	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P376334

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145001	NO2NO3-N	0.336	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P376211

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145087	Total-P	6.43	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P376106

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145020	O-Phosphate-P	0.803	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P376091

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143866	Acetochlor	1.68	Spike	P	0 - 30
2143866	Alachlor	5.70	Spike	P	0 - 30
2143866	Ametryn	16.1	Spike	P	0 - 30
2143866	Atrazine	0.426	Spike	P	0 - 30
2143866	Atrazine Desethyl	2.10	Spike	P	0 - 30
2143866	Azinphos Methyl	28.8	Spike	P	0 - 30
2143866	Bromacil	1.86	Spike	P	0 - 30
2143866	Butylate	11.7	Spike	P	0 - 30
2143866	Chlorpyrifos Ethyl	0.995	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P376091

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2143866	Chlorpyrifos Methyl	6.44	Spike	P	0 - 30
2143866	Cyanazine	5.74	Spike	P	0 - 30
2143866	Demeton	2.61	Spike	P	0 - 30
2143866	Diazinon	4.39	Spike	P	0 - 30
2143866	Dimethenamid	4.78	Spike	P	0 - 30
2143866	Disulfoton	0.0241	Spike	P	0 - 30
2143866	Dithiopyr	2.86	Spike	P	0 - 30
2143866	EPTC	6.08	Spike	P	0 - 30
2143866	Ethion	8.49	Spike	P	0 - 30
2143866	Ethoprop	0.967	Spike	P	0 - 30
2143866	Fenamiphos	24.5	Spike	P	0 - 30
2143866	Fipronil	0.979	Spike	P	0 - 30
2143866	Fipronil Desulfinyl	1.67	Spike	P	0 - 30
2143866	Fipronil Sulfide	9.16	Spike	P	0 - 30
2143866	Fipronil Sulfone	10.6	Spike	P	0 - 30
2143866	Fonofos	3.29	Spike	P	0 - 30
2143866	Hexazinone	0.662	Spike	P	0 - 30
2143866	Malathion	8.58	Spike	P	0 - 30
2143866	Metalaxyl	2.36	Spike	P	0 - 30
2143866	Metolachlor	0.630	Spike	P	0 - 30
2143866	Metribuzin	8.42	Spike	P	0 - 30
2143866	Mevinphos	1.78	Spike	P	0 - 30
2143866	Molinate	5.26	Spike	P	0 - 30
2143866	Norflurazon	2.26	Spike	P	0 - 30
2143866	Oxadiazon	5.40	Spike	P	0 - 30
2143866	Parathion Ethyl	1.39	Spike	P	0 - 30
2143866	Parathion Methyl	1.64	Spike	P	0 - 30
2143866	Pendimethalin	0.797	Spike	P	0 - 30
2143866	Phorate	0.145	Spike	P	0 - 30
2143866	Prodiamine	0.910	Spike	P	0 - 30
2143866	Prometon	2.89	Spike	P	0 - 30
2143866	Prometryn	0.120	Spike	P	0 - 30
2143866	Simazine	0.293	Spike	P	0 - 30
2143866	Tebuconazole	10.7	Spike	P	0 - 30
2143866	Terbufos	0.474	Spike	P	0 - 30
2143866	Terbuthylazine	4.37	Spike	P	0 - 30
LFB	Acetochlor	3.99	LCS	P	0 - 30
LFB	Alachlor	6.32	LCS	P	0 - 30
LFB	Ametryn	5.67	LCS	P	0 - 30
LFB	Atrazine	3.02	LCS	P	0 - 30
LFB	Atrazine Desethyl	17.2	LCS	P	0 - 30
LFB	Azinphos Methyl	5.10	LCS	P	0 - 30
LFB	Bromacil	5.29	LCS	P	0 - 30
LFB	Butylate	0.234	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	6.70	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	7.50	LCS	P	0 - 30
LFB	Cyanazine	20.1	LCS	P	0 - 30
LFB	Demeton	11.0	LCS	P	0 - 30
LFB	Diazinon	4.87	LCS	P	0 - 30
LFB	Dimethenamid	3.25	LCS	P	0 - 30
LFB	Disulfoton	8.87	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P376091

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dithiopyr	5.36	LCS	P	0 - 30
LFB	EPTC	7.82	LCS	P	0 - 30
LFB	Ethion	7.43	LCS	P	0 - 30
LFB	Ethoprop	6.92	LCS	P	0 - 30
LFB	Fenamiphos	23.8	LCS	P	0 - 30
LFB	Fipronil	1.49	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	0.0243	LCS	P	0 - 30
LFB	Fipronil Sulfide	5.04	LCS	P	0 - 30
LFB	Fipronil Sulfone	3.70	LCS	P	0 - 30
LFB	Fonofos	10.7	LCS	P	0 - 30
LFB	Hexazinone	4.77	LCS	P	0 - 30
LFB	Malathion	27.8	LCS	P	0 - 30
LFB	Metalaxyl	0.202	LCS	P	0 - 30
LFB	Metolachlor	0.957	LCS	P	0 - 30
LFB	Metribuzin	9.79	LCS	P	0 - 30
LFB	Mevinphos	5.43	LCS	P	0 - 30
LFB	Molinate	3.10	LCS	P	0 - 30
LFB	Norflurazon	1.09	LCS	P	0 - 30
LFB	Oxadiazon	7.07	LCS	P	0 - 30
LFB	Parathion Ethyl	10.1	LCS	P	0 - 30
LFB	Parathion Methyl	5.71	LCS	P	0 - 30
LFB	Pendimethalin	11.4	LCS	P	0 - 30
LFB	Phorate	14.0	LCS	P	0 - 30
LFB	Prodiamine	2.91	LCS	P	0 - 30
LFB	Prometon	19.1	LCS	P	0 - 30
LFB	Prometryn	1.98	LCS	P	0 - 30
LFB	Simazine	1.73	LCS	P	0 - 30
LFB	Tebuconazole	25.6	LCS	P	0 - 30
LFB	Terbufos	13.6	LCS	P	0 - 30
LFB	Terbutylazine	3.57	LCS	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P376087

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2144312	Acesulfame K	5.03	Spike	P	0 - 30
2144312	AMPA	1.66	Spike	P	0 - 30
2144312	Endothall	1.07	Spike	P	0 - 30
2144312	Glufosinate	6.30	Spike	P	0 - 30
2144312	Glyphosate	14.5	Spike	P	0 - 30
2144312	Sucralose	1.81	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
Batch ID: P376109

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2144998	Color (true)	6.33	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P376376

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145099	Total Alkalinity	0.105	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P376545

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145096	TDS	9.03	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P376673

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145099	Fluoride	0.0	Spike	P	0 - 2.5

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P376383

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145000	Organic Carbon	0.609	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2145091
Field Sample ID: G4CE0175

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	149	P	30 - 160
EPA 8321B	Acetaminophen-d4	116	P	30 - 160
EPA 8321B	Carbamazepine-d10	92.0	P	30 - 160
EPA 8321B	Diuron-d6	81.0	P	30 - 160
EPA 8321B	Endothall-d6	51.8	P	30 - 160
EPA 8321B	Endothall-d6	51.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	79.1	P	30 - 160
EPA 8321B	Primidone-d5	110	P	30 - 160
EPA 8321B	Sucralose-d6	95.7	P	30 - 160
EPA 8321B	Sucralose-d6	95.7	P	30 - 160

Lab Sample ID: 2145093
Field Sample ID: G4CE0175

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	104	P	68 - 130
EPA 8270E	Terbufos-d10	81.4	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A96435

Included Lab Sample IDs: 2145088

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.3	97.0	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A96436

Included Lab Sample IDs: 2145086

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	100	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A96446

Included Lab Sample IDs: 2145086

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

Reference Method: EPA 8321B

Run ID: A96502

Included Lab Sample IDs: 2145091

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	108	99.6	P/P	60 - 160
Endothall	92.7	99.0	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A96534

Included Lab Sample IDs: 2145091

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	102	98.8	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A96541

Included Lab Sample IDs: 2145087

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A96548

Included Lab Sample IDs: 2145087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.0	98.5	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A96559

Included Lab Sample IDs: 2145086

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

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00
 Run ID: A96560
 Included Lab Sample IDs: 2145087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.8	98.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Run ID: A96586
 Included Lab Sample IDs: 2145087

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: 2145091

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

Reference Method: EPA 300.0 Rev. 2.1
 Run ID: A96634
 Included Lab Sample IDs: 2145086

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A96635

Included Lab Sample IDs: 2145092

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	100	98.4	P/P	95 - 105
Calcium	104	105	P/P	95 - 105
Iron	102	103	P/P	95 - 105
Magnesium	101	102	P/P	95 - 105
Potassium	100	102	P/P	95 - 105
Sodium	104	104	P/P	95 - 105
Zinc	102	99.3	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A96650

Included Lab Sample IDs: 2145091

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	92.9	95.6	P/P	60 - 160
Glufosinate	98.7	90.4	P/P	60 - 160
Glyphosate	95.6	113	P/P	60 - 160

Reference Method: EPA 8270E

Run ID: A96660

Included Lab Sample IDs: 2145093

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	102		P	80 - 120
Alachlor	103		P	80 - 120
Ametryn	98.6		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	115		P	80 - 120
Azinphos Methyl	100		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	99.8		P	80 - 120
Chlorpyrifos Ethyl	96.4		P	80 - 120
Chlorpyrifos Methyl	98.4		P	80 - 120
Cyanazine	111		P	80 - 120
Demeton	97.5		P	80 - 120
Diazinon	102		P	80 - 120
Dimethenamid	102		P	80 - 120
Disulfoton	103		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	101		P	80 - 120
Ethion	96.3		P	80 - 120
Ethoprop	97.1		P	80 - 120
Fenamiphos	95.9		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	98.9		P	80 - 120
Fipronil Sulfide	97.3		P	80 - 120
Fipronil Sulfone	98.0		P	80 - 120
Fonofos	99.2		P	80 - 120
Hexazinone	104		P	80 - 120
Malathion	101		P	80 - 120
Metalaxyl	100		P	80 - 120
Metolachlor	106		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A96660

Included Lab Sample IDs: 2145093

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Metribuzin	107		P	80 - 120
Mevinphos	99.8		P	80 - 120
Molinate	99.8		P	80 - 120
Norflurazon	99.3		P	80 - 120
Oxadiazon	104		P	80 - 120
Parathion Ethyl	95.3		P	80 - 120
Parathion Methyl	99.0		P	80 - 120
Pendimethalin	95.3		P	80 - 120
Phorate	100		P	80 - 120
Prodiamine	93.2		P	80 - 120
Prometon	99.0		P	80 - 120
Prometryn	99.7		P	80 - 120
Simazine	102		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	98.6		P	80 - 120
Terbutylazine	103		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A96700

Included Lab Sample IDs: 2145092

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.2	94.1	P/P	90 - 110
Arsenic	100	98.7	P/P	90 - 110
Boron	95.8	94.3	P/P	90 - 110
Cadmium	97.6	98.6	P/P	90 - 110
Chromium	94.8	98.3	P/P	90 - 110
Copper	98.5	96.1	P/P	90 - 110
Lead	103	104	P/P	90 - 110
Nickel	97.7	95.4	P/P	90 - 110
Selenium	97.2	97.9	P/P	90 - 110
Thallium	93.9	94.9	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A96714

Included Lab Sample IDs: 2145086

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A96742

Included Lab Sample IDs: 2145092

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A96743

Included Lab Sample IDs: 2145087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	107	99.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A96843

Included Lab Sample IDs: 2145092

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	98.4	98.9	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							2.54	
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	106		108	107	107			1.19
	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 Rev. 2.1	Chloride	98.0		95.8	96.5			1.99	
	Sulfate	97.2		93.2	96.4			0.202	
EPA 350.1 Rev. 2.0	Ammonia-N	97.9		102	100				1.33
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106		115	114				0.639
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5		96.5	96.0				0.336
EPA 365.1 Rev. 2.0	Total-P	104		104	111				6.43
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.8		92.3	93.2				0.803
EPA 8270E	Acetochlor	85.7	82.3	79.9	81.2		3.99		1.68
	Alachlor	82.1	77.1	81.4	86.2		6.32		5.70
	Ametryn	78.8	83.4	89.8	106		5.67		16.1
	Atrazine	98.8	95.9				3.02		0.426
	Atrazine Desethyl	119	99.8	116	120		17.2		2.10
	Azinphos Methyl	99.9	94.9	81.0	60.7		5.10		28.8
	Bromacil	66.8	70.4	68.9	67.6		5.29		1.86
	Butylate	59.3	59.5	54.4	61.2		0.234		11.7
	Chlorpyrifos Ethyl	90.5	84.6	102	103		6.70		0.995
	Chlorpyrifos Methyl	93.2	86.5	85.8	80.4		7.50		6.44
	Cyanazine	213	174	191	202		20.1		5.74
	Demeton	81.8	73.3	109	106		11.0		2.61
	Diazinon	93.4	88.9	97.9	102		4.87		4.39
	Dimethenamid	84.8	82.1	76.3	80.0		3.25		4.78
	Disulfoton	97.8	89.4	98.5	98.5		8.87		0.0241
	Dithiopyr	84.7	80.3	79.0	81.3		5.36		2.86
	EPTC	54.7	59.1	64.4	68.4		7.82		6.08
	Ethion	94.1	87.3	69.8	64.1		7.43		8.49
	Ethoprop	92.3	86.1	99.9	101		6.92		0.967
	Fenamiphos	57.0	72.3	69.5	89.0		23.8		24.5
	Fipronil	76.9	78.0	79.7	81.3		1.49		0.979
	Fipronil Desulfinyl	87.6	87.6	86.1	87.9		0.0243		1.67
	Fipronil Sulfide	84.6	80.5	72.0	62.1		5.04		9.16
	Fipronil Sulfone	77.8	75.0	43.6	30.7		3.70		10.6
	Fonofos	93.1	83.6	95.2	92.1		10.7		3.29
	Hexazinone	93.0	88.7	92.5	91.7		4.77		0.662
	Malathion	67.8	89.6	98.9	90.7		27.8		8.58

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Metalaxyl	82.4	82.6	80.5	78.3	0.202	2.36
	Metolachlor	80.8	80.0	79.2	78.7	0.957	0.630
	Metribuzin	135	123	161	148	9.79	8.42
	Mevinphos	84.0	79.5	88.1	86.5	5.43	1.78
	Molinate	72.8	70.6	71.1	75.0	3.10	5.26
	Norflurazon	85.1	86.0	63.9	65.4	1.09	2.26
	Oxadiazon	81.7	76.2	60.9	55.5	7.07	5.40
	Parathion Ethyl	95.1	86.0	87.0	88.2	10.1	1.39
	Parathion Methyl	103	97.6	108	110	5.71	1.64
	Pendimethalin	93.8	83.7	87.2	87.9	11.4	0.797
	Phorate	91.5	79.5	91.6	91.4	14.0	0.145
	Prodiamine	87.9	85.4	85.1	86.0	2.91	0.910
	Prometon	75.3	62.1	78.1	80.4	19.1	2.89
	Prometryn	85.4	83.7	82.9	83.0	1.98	0.120
	Simazine	103	101	115	116	1.73	0.293
	Tebuconazole	20.9	27.1	4.84	6.51	25.6	10.7
	Terbufos	93.2	81.4	97.6	97.1	13.6	0.474
	Terbuthylazine	90.8	87.6	92.5	96.6	3.57	4.37
EPA 8321B	2,4-D	129		160	149		5.47
	Acesulfame K	116		57.7	60.7		5.03
	Acetaminophen	103		117	119		1.61
	Acetamiprid	95.8		111	112		0.488
	Afidopyropen	92.1		108	104		3.76
	AMPA	89.4		97.8	96.0		1.66
	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	90.3		89.2	90.2		1.07
	Fenuron	99.2		94.0	97.9		4.07
	Fluridone	90.1					1.88
	Glufosinate	86.6		85.3	90.8		6.30
	Glyphosate	123		110	95.3		14.5
	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	91.6		87.4	90.4		1.81
	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	Color (true)	99.5				6.33	
SM 2320 B-97	Total Alkalinity	102				0.105	
SM 2540 C-97	TDS					9.03	
SM 4500 F-C-97	Fluoride	99.9		98.2	98.2		0.0
SM 5310 B-00	Organic Carbon	96.8		97.0	97.8		0.609

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2145086
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2145092
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2145092
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2145086
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2145086
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2145087
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2145087
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2145087
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2145087
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2145088
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2145093
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2145091
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2145091
SM 2120 B / E31780	True Color measured at 450 nm	2145086
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2145086
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2145086
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2145086
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2145086
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2145087

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	12/18/2019			12/18/2019 16:50	Blanca Fach	2145086
EPA 200.7 Rev. 4.4	12/18/2019	12/26/2019 14:00	Elliott D. Healy	12/30/2019 12:20	Betina Topolski	2145092
EPA 200.8 Rev. 5.4	12/18/2019	01/09/2020 14:15	Elliott D. Healy	01/13/2020 17:24	Justin Cutchin	2145092
	12/18/2019	12/26/2019 14:00	Elliott D. Healy	01/03/2020 19:44	Martin Acosta	2145092
	12/18/2019	12/26/2019 14:00	Elliott D. Healy	01/07/2020 20:39	Alexander Thompson	2145092
EPA 300.0 Rev. 2.1	12/18/2019			12/30/2019 21:37	Irina Carbone	2145086
EPA 350.1 Rev. 2.0	12/18/2019			12/26/2019 16:22	Ping Hua	2145087
EPA 351.2 Rev. 2.0	12/18/2019	01/06/2020 17:22	Jhamieka S. Greenwood	01/07/2020 14:05	Virginia P. Brown	2145087
EPA 353.2 Rev. 2.0	12/18/2019			12/23/2019 11:10	Beverly Y. Sanders	2145087
EPA 365.1 Rev. 2.0	12/18/2019	12/20/2019 13:10	Yen Ta	12/23/2019 14:47	Benjamin T. Nordmann	2145087
EPA 365.1 Rev. 2.0 dissolved	12/18/2019			12/18/2019 16:12	Samantha Davila	2145088
EPA 8270E	12/18/2019	12/19/2019 09:00	Julie Wi	12/23/2019 16:10	Vandana T. Nagar	2145093
EPA 8321B	12/18/2019	12/18/2019 16:30	Rebecca Ware	12/19/2019 16:43	Rebecca Ware	2145091
	12/18/2019	12/18/2019 16:30	Rebecca Ware	12/20/2019 15:12	Rebecca Ware	2145091
	12/18/2019	12/18/2019 16:30	Rebecca Ware	12/24/2019 04:27	Mohammad Ghaffari	2145091
	12/18/2019	12/22/2019 09:00	Hoor Shaik	12/25/2019 13:06	Juyoung Kim	2145091
SM 2120 B	12/18/2019			12/18/2019 16:17	Madeline Funaro	2145086
SM 2320 B-97	12/18/2019			12/24/2019 14:23	Dale L. Simmons	2145086
SM 2540 C-97	12/18/2019			12/23/2019 16:45	Yijie Li	2145086
SM 2540 D-97	12/18/2019			12/23/2019 16:45	Yijie Li	2145086
SM 4500 F-C-97	12/18/2019			01/07/2020 02:34	Dale L. Simmons	2145086
SM 5310 B-00	12/18/2019			12/24/2019 06:22	Madeline Funaro	2145087