

Chemical Analysis Report

SO-DIST-2019-12-10-01

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

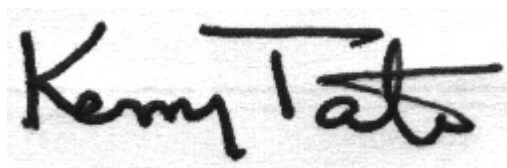
Event Description: **SMP : Pollywog Creek**
Request ID: **RQ-2019-11-25-28**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 02-JAN-2020 10:12

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the "T" and a long horizontal stroke at the end.

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: PollywogCreek@SR78

Collection Date/Time: 12/09/2019 11:35

Field ID: G3SD0098

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141653	EPA 180.1 Rev. 2.0	Turbidity	6.3		NTU	P375623	
	EPA 300.0 Rev. 2.1	Chloride	22		mg Cl/L	P375657	
		Sulfate	7.4		mg SO4/L	P375660	
	SM 2120 B	Color (true)	68		PCU	P375533	
	SM 2320 B-97	Total Alkalinity	39		mg CaCO3/L	P375873	
	SM 2540 C-97	TDS	117		mg/L	P376056	
	SM 2540 D-97	TSS	3	I	mg/L	P376061	
	SM 4500 F-C-97	Fluoride	0.27		mg F/L	P375877	
2141654	EPA 350.1 Rev. 2.0	Ammonia-N	0.043		mg N/L	P375865	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.46		mg N/L	P375602	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.046		mg N/L	P375683	
	EPA 365.1 Rev. 2.0	Total-P	1.1		mg P/L	P375697	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P375830	
2141655	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.85		mg P/L	P375524	
2141661	EPA 8321B	2,4-D	0.0092		ug/L	P375428	
		Acesulfame K**	0.84		ug/L	P375589	
		AMPA**	0.10	U	ug/L	P375589	
		Sucralose**	0.59		ug/L	P375589	
		Acetaminophen**	0.0080	U	ug/L	P375428	
		Acetamiprid**	0.0020	U	ug/L	P375428	
		Endothall**	0.25	U	ug/L	P375589	
		Glufosinate**	0.10	U	ug/L	P375589	
		Glyphosate**	0.10	UJ	ug/L	P375589	MS
		Afidopyropen**	0.0020	UJ	ug/L	P375428	
		Bentazon	8.0E-04	U	ug/L	P375428	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P375428	
		Carbamazepine**	0.0074		ug/L	P375428	
		Clothianidin**	0.0020	U	ug/L	P375428	
		Dinotefuran**	0.0020	U	ug/L	P375428	
		Diuron	0.0020	U	ug/L	P375428	
		Fenuron	0.016	U	ug/L	P375428	
		Fluridone**	8.0E-04	U	ug/L	P375428	
		Imazapyr**	0.0040	U	ug/L	P375428	
		Hydrocodone**	0.0020	U	ug/L	P375428	
		Ibuprofen**	0.020	U	ug/L	P375428	
		Imidacloprid	0.0051	I	ug/L	P375428	MS
		Linuron	0.0040	U	ug/L	P375428	
		Mandestrobin**	0.0020	UJ	ug/L	P375428	
		MCP	0.0023	I	ug/L	P375428	
		Naproxen**	0.0080	U	ug/L	P375428	
		Primidone**	0.0040	U	ug/L	P375428	
		Pyraclostrobin**	0.0020	U	ug/L	P375428	
		Thiamethoxam**	0.0020	U	ug/L	P375428	

Field ID: G3SD0098

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141661	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P375428	
		Triclopyr**	0.0040	U	ug/L	P375428	
2141662	EPA 200.7 Rev. 4.4	Barium	17.0		ug/L	P375741	
		Calcium	14.9		mg/L	P375741	
		Iron	1.25E+03		ug/L	P375741	
		Magnesium	5.49		mg/L	P375741	
		Potassium	1.5		mg/L	P375741	
		Sodium	12.0		mg/L	P375741	
		Zinc	5.0	U	ug/L	P375741	
	EPA 200.8 Rev. 5.4	Aluminum	98		ug/L	P375741	
		Antimony	0.050	I	ug/L	P375741	
		Arsenic	0.62		ug/L	P375741	
		Boron**	28.7		ug/L	P375741	
		Cadmium	0.020	U	ug/L	P375741	
		Chromium	1.6		ug/L	P375741	
		Copper	0.40	U	ug/L	P375741	
		Lead	0.20	U	ug/L	P375741	
		Nickel	1.0	I	ug/L	P375741	
		Selenium	0.20	U	ug/L	P375741	
		Silver	0.010	U	ug/L	P375741	
		Thallium	0.10	U	ug/L	P375741	
2141663	EPA 8270E	Acetochlor	0.24	U	ng/L	P375698	
		Alachlor	0.24	UJ	ng/L	P375698	LCS
		Ametryn	0.59	UJ	ng/L	P375698	MS, RPD
		Atrazine	0.36	IJ	ng/L	P375698	LCS
		Atrazine Desethyl	1.5	U	ng/L	P375698	
		Azinphos Methyl	4.9	U	ng/L	P375698	
		Bromacil	0.49	U	ng/L	P375698	
		Butylate	0.39	U	ng/L	P375698	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P375698	
		Chlorpyrifos Methyl	0.098	U	ng/L	P375698	
		Cyanazine	3.2	U	ng/L	P375698	
		Demeton	6.9	U	ng/L	P375698	
		Diazinon	0.12	U	ng/L	P375698	
		Dimethenamid**	0.098	U	ng/L	P375698	
		Disulfoton	0.49	U	ng/L	P375698	
		Dithiopyr**	0.098	U	ng/L	P375698	
		EPTC	1.2	U	ng/L	P375698	
		Ethion	0.15	U	ng/L	P375698	
		Ethoprop	0.098	U	ng/L	P375698	
		Fenamiphos	0.49	UJ	ng/L	P375698	RPD
		Fipronil	0.24	U	ng/L	P375698	
		Fipronil Desulfinyl**	0.12	U	ng/L	P375698	
		Fipronil Sulfide	0.15	UJ	ng/L	P375698	RPD
		Fipronil Sulfone	0.15	UJ	ng/L	P375698	RPD

Field ID: G3SD0098

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141663	EPA 8270E	Fonofos	0.20	U	ng/L	P375698	
		Hexazinone	0.49	U	ng/L	P375698	
		Malathion	0.34	U	ng/L	P375698	
		Metaxyl	0.29	U	ng/L	P375698	
		Metolachlor	1.2	I	ng/L	P375698	
		Metribuzin	0.73	U	ng/L	P375698	
		Mevinphos	0.49	U	ng/L	P375698	
		Molinate	0.29	UJ	ng/L	P375698	LCS
		Norflurazon	0.75	I	ng/L	P375698	
		Oxadiazon**	0.098	U	ng/L	P375698	
		Parathion Ethyl	0.24	UJ	ng/L	P375698	LCS
		Parathion Methyl	0.54	UJ	ng/L	P375698	LCS
		Pendimethalin	0.98	U	ng/L	P375698	
		Phorate	0.24	UJ	ng/L	P375698	LCS, RPD
		Prodiamine**	0.17	UJ	ng/L	P375698	RPD
		Prometon	0.88	U	ng/L	P375698	
		Prometryn	0.20	U	ng/L	P375698	
		Simazine	0.49	U	ng/L	P375698	
		Tebuconazole**	0.49	UJ	ng/L	P375698	RPD
		Terbufos	0.098	U	ng/L	P375698	
		Terbuthylazine	0.42	UJ	ng/L	P375698	LCS

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

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

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

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

EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: PollywogCreek@SR78

Collection Date/Time: 12/09/2019 13:15

Field ID: FB_12092019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141664	EPA 8270E	Acetochlor	0.24	U	ng/L	P375698	
		Alachlor	0.24	UJ	ng/L	P375698	LCS
		Ametryn	0.58	U	ng/L	P375698	MS, RPD
		Atrazine	0.24	UJ	ng/L	P375698	LCS
		Atrazine Desethyl	1.5	U	ng/L	P375698	
		Azinphos Methyl	4.9	U	ng/L	P375698	
		Bromacil	0.49	U	ng/L	P375698	
		Butylate	0.39	U	ng/L	P375698	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P375698	
		Chlorpyrifos Methyl	0.097	U	ng/L	P375698	
		Cyanazine	3.2	U	ng/L	P375698	
		Demeton	6.8	U	ng/L	P375698	
		Diazinon	0.12	U	ng/L	P375698	
		Dimethenamid**	0.097	U	ng/L	P375698	
		Disulfoton	0.49	U	ng/L	P375698	
		Dithiopyr**	0.097	U	ng/L	P375698	
		EPTC	1.2	U	ng/L	P375698	
		Ethion	0.15	U	ng/L	P375698	
		Ethoprop	0.097	U	ng/L	P375698	
		Fenamiphos	0.49	UJ	ng/L	P375698	RPD
		Fipronil	0.24	U	ng/L	P375698	
		Fipronil Desulfinyl**	0.12	U	ng/L	P375698	
		Fipronil Sulfide	0.15	UJ	ng/L	P375698	RPD
		Fipronil Sulfone	0.15	UJ	ng/L	P375698	RPD
		Fonofos	0.19	U	ng/L	P375698	
		Hexazinone	0.49	U	ng/L	P375698	
		Malathion	0.34	U	ng/L	P375698	
		Metalaxyl	0.29	U	ng/L	P375698	
		Metolachlor	0.49	U	ng/L	P375698	
		Metribuzin	0.73	U	ng/L	P375698	
		Mevinphos	0.49	U	ng/L	P375698	
		Molinate	0.29	UJ	ng/L	P375698	LCS
		Norflurazon	0.49	U	ng/L	P375698	
		Oxadiazon**	0.097	U	ng/L	P375698	
		Parathion Ethyl	0.24	UJ	ng/L	P375698	LCS
		Parathion Methyl	0.53	UJ	ng/L	P375698	LCS
		Pendimethalin	0.97	U	ng/L	P375698	
		Phorate	0.24	UJ	ng/L	P375698	LCS, RPD
		Prodiamine**	0.17	UJ	ng/L	P375698	RPD
		Prometon	0.87	U	ng/L	P375698	
		Prometryn	0.19	U	ng/L	P375698	
		Simazine	0.49	U	ng/L	P375698	
		Tebuconazole**	0.49	UJ	ng/L	P375698	RPD
		Terbufos	0.097	U	ng/L	P375698	

Field ID: FB_12092019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141664	EPA 8270E	Terbutylazine	0.41	UJ	ng/L	P375698	LCS

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P375623

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P375741

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: P375741

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	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 300.0 Rev. 2.1
Batch ID: P375657

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375660

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375865

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P375602

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P375683

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P375697

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P375524

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

Reference Method: EPA 8270E
 Batch ID: P375698

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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P375698

Component	Result	Code	Units
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: P375428

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
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: EPA 8321B
Batch ID: P375589

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P375589

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: SM 2120 B
Batch ID: P375533

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P375873

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

Reference Method: SM 2540 C-97
Batch ID: P376056

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P376061

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P375877

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P375830

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: P375741

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	102		P	85 - 115
Calcium	107		P	85 - 115
Iron	106		P	85 - 115
Magnesium	112		P	85 - 115
Potassium	106		P	85 - 115
Sodium	109		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P375741

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	105		P	85 - 115
Antimony	109		P	85 - 115
Arsenic	103		P	85 - 115
Boron	107		P	85 - 115
Cadmium	104		P	85 - 115
Chromium	104		P	85 - 115
Copper	100		P	85 - 115
Lead	111		P	85 - 115
Nickel	101		P	85 - 115
Selenium	104		P	85 - 115
Silver	108		P	85 - 115
Thallium	112		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375657

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375660

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375865

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375602

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.8		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375683

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: P375697

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: P375524

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

Reference Method: EPA 8270E
Batch ID: P375698

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	118	91.9	P/P	69 - 122
Alachlor	123	98.0	F/P	71 - 120
Ametryn	121	113	P/P	47 - 138
Atrazine	133	107	F/P	74 - 124
Atrazine Desethyl	90.9	77.9	P/P	38 - 138
Azinphos Methyl	111	84.1	P/P	69 - 154
Bromacil	108	81.7	P/P	39 - 121
Butylate	80.3	64.9	P/P	27 - 87.0
Chlorpyrifos Ethyl	116	86.8	P/P	69 - 118
Chlorpyrifos Methyl	116	86.3	P/P	70 - 120
Cyanazine	114	89.3	P/P	20 - 250
Demeton	117	89.6	P/P	39 - 118
Diazinon	116	91.8	P/P	68 - 127
Dimethenamid	113	96.5	P/P	66 - 125
Disulfoton	110	81.7	P/P	52 - 126
Dithiopyr	116	90.3	P/P	67 - 127
EPTC	80.2	61.9	P/P	24 - 88.0
Ethion	114	84.5	P/P	51 - 132
Ethoprop	108	82.4	P/P	58 - 117
Fenamiphos	134	91.2	P/P	38 - 139
Fipronil	112	89.9	P/P	61 - 124
Fipronil Desulfinyl	118	89.7	P/P	47 - 120
Fipronil Sulfide	88.5	64.3	P/P	56 - 119
Fipronil Sulfone	99.1	71.6	P/P	50 - 117
Fonofos	105	81.2	P/P	60 - 121
Hexazinone	125	94.0	P/P	55 - 137
Malathion	125	111	P/P	66 - 126
Metalaxyl	119	94.3	P/P	33 - 140
Metolachlor	114	86.1	P/P	69 - 119
Metribuzin	137	105	P/P	31 - 238
Mevinphos	102	80.6	P/P	42 - 113
Molinate	98.5	76.8	F/P	32 - 96.0
Norflurazon	111	82.9	P/P	54 - 123
Oxadiazon	115	88.1	P/P	63 - 128

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P375698

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Parathion Ethyl	122	97.1	F/P	72 - 111
Parathion Methyl	126	102	F/P	74 - 126
Pendimethalin	118	96.1	P/P	61 - 131
Phorate	117	78.3	F/P	51 - 115
Prodiamine	130	83.6	P/P	38 - 144
Prometon	115	85.3	P/P	54 - 119
Prometryn	117	92.4	P/P	63 - 120
Simazine	124	101	P/P	75 - 126
Tebuconazole	85.7	59.9	P/P	20 - 119
Terbufos	114	87.9	P/P	64 - 116
Terbuthylazine	123	96.5	F/P	73 - 117

Reference Method: EPA 8321B
Batch ID: P375428

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	158		P	30 - 160
Acetaminophen	103		P	30 - 150
Acetamiprid	104		P	30 - 160
Afidopyropen	101		P	30 - 160
Bentazon	98.5		P	30 - 150
Benzovindiflupyr	100		P	30 - 160
Carbamazepine	112		P	30 - 160
Clothianidin	102		P	30 - 160
Dinotefuran	107		P	30 - 160
Diuron	90.6		P	30 - 160
Fenuron	108		P	30 - 160
Fluridone	106		P	30 - 160
Hydrocodone	102		P	30 - 160
Ibuprofen	96.0		P	30 - 160
Imazapyr	110		P	30 - 160
Imidacloprid	114		P	30 - 160
Linuron	77.6		P	30 - 160
Mandestrobin	91.1		P	30 - 160
MCPP	159		P	30 - 160
Naproxen	97.7		P	30 - 160
Primidone	99.5		P	30 - 160
Pyraclostrobin	88.9		P	30 - 160
Thiamethoxam	108		P	30 - 160
Tolfenpyrad	56.6		P	30 - 160
Triclopyr	136		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P375589

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	112		P	40 - 150
AMPA	98.1		P	40 - 150
Endothall	133		P	40 - 150
Glufosinate	94.1		P	40 - 150
Glyphosate	126		P	40 - 140
Sucralose	109		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P375533

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	96.3		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P375873

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

Reference Method: SM 4500 F-C-97
Batch ID: P375877

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.0		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P375830

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	101		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P375741

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141882	Barium	99.2		P	80 - 120
2141882	Calcium	97.7		P	80 - 120
2141882	Iron	105		P	80 - 120
2141882	Magnesium	102		P	80 - 120
2141882	Potassium	104		P	80 - 120
2141882	Sodium	101		P	80 - 120
2141882	Zinc	99.6		P	80 - 120
2142694	Barium	103	103	P/P	80 - 120
2142694	Calcium	103	107	P/P	80 - 120
2142694	Iron	105	108	P/P	80 - 120
2142694	Magnesium	108	113	P/P	80 - 120
2142694	Potassium	105	104	P/P	80 - 120
2142694	Sodium	105	104	P/P	80 - 120
2142694	Zinc	100	101	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P375741

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141882	Aluminum	104		P	80 - 120
2141882	Antimony	111		P	80 - 120
2141882	Arsenic	108		P	80 - 120
2141882	Boron	109		P	80 - 120
2141882	Cadmium	108		P	80 - 120
2141882	Chromium	107		P	80 - 120
2141882	Copper	101		P	80 - 120
2141882	Lead	113		P	80 - 120
2141882	Nickel	102		P	80 - 120
2141882	Selenium	107		P	80 - 120
2141882	Silver	107		P	80 - 120
2141882	Thallium	114		P	80 - 120
2142694	Aluminum	104	101	P/P	80 - 120
2142694	Antimony	108	107	P/P	80 - 120
2142694	Arsenic	104	104	P/P	80 - 120
2142694	Boron	108	106	P/P	80 - 120
2142694	Cadmium	102	103	P/P	80 - 120
2142694	Chromium	107	106	P/P	80 - 120
2142694	Copper	101	98.9	P/P	80 - 120
2142694	Lead	111	109	P/P	80 - 120
2142694	Nickel	102	99.3	P/P	80 - 120
2142694	Selenium	106	103	P/P	80 - 120
2142694	Silver	107	107	P/P	80 - 120
2142694	Thallium	109	109	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141313	Chloride	106		P	90 - 110
2141479	Chloride	107		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P375660

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141313	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P375865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141647	Ammonia-N	100	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P375602

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141654	Kjeldahl Nitrogen	100	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P375683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141683	NO2NO3-N	96.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P375524

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141642	O-Phosphate-P	93.2	94.4	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P375698

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141663	Acetochlor	103	95.5	P/P	63 - 129
2141663	Alachlor	114	105	P/P	65 - 127
2141663	Ametryn	127	176	P/F	40 - 164
2141663	Atrazine	110	114	P/P	66 - 135
2141663	Atrazine Desethyl	86.1	96.0	P/P	14 - 157
2141663	Azinphos Methyl	89.6	95.3	P/P	49 - 180
2141663	Bromacil	88.3	65.3	P/P	48 - 130
2141663	Butylate	49.4	40.5	P/P	10 - 94.0
2141663	Chlorpyrifos Ethyl	91.7	81.5	P/P	58 - 123
2141663	Chlorpyrifos Methyl	84.2	84.0	P/P	58 - 125
2141663	Cyanazine	94.8	82.1	P/P	24 - 253
2141663	Demeton	83.2	94.1	P/P	25 - 149
2141663	Diazinon	104	97.5	P/P	59 - 144
2141663	Dimethenamid	99.2	101	P/P	46 - 139
2141663	Disulfoton	80.8	81.3	P/P	54 - 132
2141663	Dithiopyr	102	91.8	P/P	64 - 130
2141663	EPTC	45.3	40.9	P/P	10 - 92.0
2141663	Ethion	74.9	71.8	P/P	30 - 148
2141663	Ethoprop	95.4	94.8	P/P	50 - 130
2141663	Fenamiphos	74.1	83.8	P/P	49 - 142
2141663	Fipronil	99.3	88.7	P/P	46 - 140
2141663	Fipronil Desulfynil	97.8	86.8	P/P	30 - 121

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P375698

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141663	Fipronil Sulfide	64.2	59.8	P/P	31 - 136
2141663	Fipronil Sulfone	72.8	70.8	P/P	16 - 136
2141663	Fonofos	81.2	82.8	P/P	55 - 129
2141663	Hexazinone	135	130	P/P	56 - 141
2141663	Malathion	92.8	90.9	P/P	56 - 135
2141663	Metalaxyl	109	103	P/P	54 - 135
2141663	Metolachlor	93.6	88.3	P/P	51 - 140
2141663	Metribuzin	131	126	P/P	45 - 254
2141663	Mevinphos	84.5	89.7	P/P	33 - 131
2141663	Molinate	72.3	64.3	P/P	14 - 98.0
2141663	Norflurazon	94.2	92.7	P/P	34 - 136
2141663	Oxadiazon	87.2	81.9	P/P	67 - 116
2141663	Parathion Ethyl	102	101	P/P	66 - 118
2141663	Parathion Methyl	102	109	P/P	64 - 136
2141663	Pendimethalin	109	107	P/P	59 - 144
2141663	Phorate	89.5	98.0	P/P	42 - 130
2141663	Prodiamine	77.6	51.1	P/P	42 - 148
2141663	Prometon	104	97.6	P/P	59 - 134
2141663	Prometryn	101	91.0	P/P	54 - 135
2141663	Simazine	107	110	P/P	53 - 156
2141663	Tebuconazole	55.1	52.5	P/P	10 - 131
2141663	Terbufos	92.5	89.2	P/P	57 - 131
2141663	Terbutylazine	107	102	P/P	68 - 125

Reference Method: EPA 8321B
Batch ID: P375428

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141488	2,4-D	137	126	P/P	30 - 160
2141488	Acetaminophen	106	102	P/P	30 - 150
2141488	Acetamiprid	120	115	P/P	30 - 160
2141488	Afidopyropen	102	96.7	P/P	30 - 160
2141488	Bentazon	84.4	69.3	P/P	30 - 150
2141488	Benzovindiflupyr	100	94.9	P/P	30 - 160
2141488	Carbamazepine	94.8	93.2	P/P	30 - 160
2141488	Clothianidin	109	99.0	P/P	30 - 160
2141488	Dinotefuran	128	127	P/P	30 - 160
2141488	Diuron	77.6	78.5	P/P	30 - 160
2141488	Fenuron	90.8	86.5	P/P	30 - 160
2141488	Fluridone	105	104	P/P	30 - 160
2141488	Hydrocodone	111	103	P/P	30 - 160
2141488	Ibuprofen	80.6	74.2	P/P	30 - 160
2141488	Imazapyr	139	129	P/P	30 - 160
2141488	Imidacloprid	185	170	F/F	30 - 160
2141488	Linuron	75.1	69.9	P/P	30 - 160
2141488	Mandestrobin	90.6	87.9	P/P	30 - 160
2141488	MCP	156	139	P/P	30 - 160
2141488	Naproxen	103	86.0	P/P	30 - 160
2141488	Primidone	106	102	P/P	30 - 160
2141488	Pyraclostrobin	87.8	83.3	P/P	30 - 160
2141488	Thiamethoxam	153	150	P/P	30 - 160
2141488	Tolfenpyrad	59.9	52.3	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P375428

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141488	Triclopyr	140	124	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P375589

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141661	Acesulfame K	137	144	P/P	40 - 150
2141661	AMPA	118	116	P/P	40 - 150
2141661	Endothall	131	140	P/P	40 - 150
2141661	Glufosinate	105	116	P/P	40 - 150
2141661	Glyphosate	187	219	F/F	40 - 140
2141661	Sucralose	104	108	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P375877

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2142132	Fluoride	98.6	97.5	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P375830

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141641	Organic Carbon	98.5	98.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P375623

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141646	Turbidity	2.77	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P375741

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2142694	Barium	0.263	Spike	P	0 - 20
2142694	Calcium	3.01	Spike	P	0 - 20
2142694	Iron	1.91	Spike	P	0 - 20
2142694	Magnesium	3.91	Spike	P	0 - 20
2142694	Potassium	0.703	Spike	P	0 - 20
2142694	Sodium	0.289	Spike	P	0 - 20
2142694	Zinc	0.693	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P375741

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2142694	Aluminum	1.88	Spike	P	0 - 20
2142694	Antimony	1.43	Spike	P	0 - 20
2142694	Arsenic	0.481	Spike	P	0 - 20
2142694	Boron	1.97	Spike	P	0 - 20
2142694	Cadmium	0.498	Spike	P	0 - 20
2142694	Chromium	1.61	Spike	P	0 - 20
2142694	Copper	2.40	Spike	P	0 - 20
2142694	Lead	1.41	Spike	P	0 - 20
2142694	Nickel	3.11	Spike	P	0 - 20
2142694	Selenium	2.35	Spike	P	0 - 20
2142694	Silver	0.423	Spike	P	0 - 20
2142694	Thallium	0.588	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141313	Chloride	0.759	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375660

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141313	Sulfate	0.938	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141647	Ammonia-N	0.0459	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375602

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141654	Kjeldahl Nitrogen	0.0120	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141683	NO2NO3-N	0.232	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375697

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141654	Total-P	1.21	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375524

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141642	O-Phosphate-P	1.22	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P375698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141663	Acetochlor	7.84	Spike	P	0 - 30
2141663	Alachlor	8.40	Spike	P	0 - 30
2141663	Ametryn	32.1	Spike	F	0 - 30
2141663	Atrazine	3.17	Spike	P	0 - 30
2141663	Atrazine Desethyl	10.8	Spike	P	0 - 30
2141663	Azinphos Methyl	6.07	Spike	P	0 - 30
2141663	Bromacil	29.9	Spike	P	0 - 30
2141663	Butylate	19.8	Spike	P	0 - 30
2141663	Chlorpyrifos Ethyl	11.7	Spike	P	0 - 30
2141663	Chlorpyrifos Methyl	0.299	Spike	P	0 - 30
2141663	Cyanazine	14.4	Spike	P	0 - 30
2141663	Demeton	12.3	Spike	P	0 - 30
2141663	Diazinon	6.31	Spike	P	0 - 30
2141663	Dimethenamid	1.27	Spike	P	0 - 30
2141663	Disulfoton	0.552	Spike	P	0 - 30
2141663	Dithiopyr	10.5	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P375698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141663	EPTC	10.2	Spike	P	0 - 30
2141663	Ethion	4.28	Spike	P	0 - 30
2141663	Ethoprop	0.585	Spike	P	0 - 30
2141663	Fenamiphos	12.4	Spike	P	0 - 30
2141663	Fipronil	11.2	Spike	P	0 - 30
2141663	Fipronil Desulfinyl	11.9	Spike	P	0 - 30
2141663	Fipronil Sulfide	7.05	Spike	P	0 - 30
2141663	Fipronil Sulfone	2.81	Spike	P	0 - 30
2141663	Fonofos	1.97	Spike	P	0 - 30
2141663	Hexazinone	3.61	Spike	P	0 - 30
2141663	Malathion	2.09	Spike	P	0 - 30
2141663	Metaxyl	5.83	Spike	P	0 - 30
2141663	Metolachlor	5.25	Spike	P	0 - 30
2141663	Metribuzin	4.14	Spike	P	0 - 30
2141663	Mevinphos	5.91	Spike	P	0 - 30
2141663	Molinate	11.6	Spike	P	0 - 30
2141663	Norflurazon	1.49	Spike	P	0 - 30
2141663	Oxadiazon	6.24	Spike	P	0 - 30
2141663	Parathion Ethyl	0.378	Spike	P	0 - 30
2141663	Parathion Methyl	6.88	Spike	P	0 - 30
2141663	Pendimethalin	1.20	Spike	P	0 - 30
2141663	Phorate	9.05	Spike	P	0 - 30
2141663	Prodiamine	41.2	Spike	F	0 - 30
2141663	Prometon	6.71	Spike	P	0 - 30
2141663	Prometryn	10.5	Spike	P	0 - 30
2141663	Simazine	2.40	Spike	P	0 - 30
2141663	Tebuconazole	4.91	Spike	P	0 - 30
2141663	Terbufos	3.64	Spike	P	0 - 30
2141663	Terbutylazine	5.07	Spike	P	0 - 30
LFB	Acetochlor	24.6	LCS	P	0 - 30
LFB	Alachlor	22.5	LCS	P	0 - 30
LFB	Ametryn	6.67	LCS	P	0 - 30
LFB	Atrazine	22.0	LCS	P	0 - 30
LFB	Atrazine Desethyl	15.3	LCS	P	0 - 30
LFB	Azinphos Methyl	27.3	LCS	P	0 - 30
LFB	Bromacil	27.4	LCS	P	0 - 30
LFB	Butylate	21.3	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	28.8	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	29.6	LCS	P	0 - 30
LFB	Cyanazine	24.0	LCS	P	0 - 30
LFB	Demeton	26.6	LCS	P	0 - 30
LFB	Diazinon	23.6	LCS	P	0 - 30
LFB	Dimethenamid	15.4	LCS	P	0 - 30
LFB	Disulfoton	29.9	LCS	P	0 - 30
LFB	Dithiopyr	24.7	LCS	P	0 - 30
LFB	EPTC	25.8	LCS	P	0 - 30
LFB	Ethion	29.8	LCS	P	0 - 30
LFB	Ethoprop	26.9	LCS	P	0 - 30
LFB	Fenamiphos	37.9	LCS	F	0 - 30
LFB	Fipronil	22.0	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	27.5	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P375698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Fipronil Sulfide	31.6	LCS	F	0 - 30
LFB	Fipronil Sulfone	32.2	LCS	F	0 - 30
LFB	Fonofos	25.9	LCS	P	0 - 30
LFB	Hexazinone	28.6	LCS	P	0 - 30
LFB	Malathion	11.3	LCS	P	0 - 30
LFB	Metalaxyl	23.6	LCS	P	0 - 30
LFB	Metolachlor	27.5	LCS	P	0 - 30
LFB	Metribuzin	26.4	LCS	P	0 - 30
LFB	Mevinphos	23.7	LCS	P	0 - 30
LFB	Molinate	24.8	LCS	P	0 - 30
LFB	Norflurazon	29.2	LCS	P	0 - 30
LFB	Oxadiazon	26.2	LCS	P	0 - 30
LFB	Parathion Ethyl	23.0	LCS	P	0 - 30
LFB	Parathion Methyl	21.6	LCS	P	0 - 30
LFB	Pendimethalin	20.7	LCS	P	0 - 30
LFB	Phorate	39.4	LCS	F	0 - 30
LFB	Prodiamine	43.6	LCS	F	0 - 30
LFB	Prometon	29.3	LCS	P	0 - 30
LFB	Prometryn	23.6	LCS	P	0 - 30
LFB	Simazine	20.5	LCS	P	0 - 30
LFB	Tebuconazole	35.4	LCS	F	0 - 30
LFB	Terbufos	26.1	LCS	P	0 - 30
LFB	Terbuthylazine	24.3	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P375428

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141488	2,4-D	8.27	Spike	P	0 - 30
2141488	Acetaminophen	4.45	Spike	P	0 - 30
2141488	Acetamiprid	4.30	Spike	P	0 - 30
2141488	Afidopyropen	5.10	Spike	P	0 - 30
2141488	Bentazon	8.70	Spike	P	0 - 30
2141488	Benzovindiflupyr	5.50	Spike	P	0 - 30
2141488	Carbamazepine	1.68	Spike	P	0 - 30
2141488	Clothianidin	9.47	Spike	P	0 - 30
2141488	Dinotefuran	0.742	Spike	P	0 - 30
2141488	Diuron	0.818	Spike	P	0 - 30
2141488	Fenuron	4.81	Spike	P	0 - 30
2141488	Fluridone	0.335	Spike	P	0 - 30
2141488	Hydrocodone	8.01	Spike	P	0 - 30
2141488	Ibuprofen	8.29	Spike	P	0 - 30
2141488	Imazapyr	3.38	Spike	P	0 - 30
2141488	Imidacloprid	7.99	Spike	P	0 - 30
2141488	Linuron	7.18	Spike	P	0 - 30
2141488	Mandestrobin	3.08	Spike	P	0 - 30
2141488	MCP	11.8	Spike	P	0 - 30
2141488	Naproxen	17.7	Spike	P	0 - 30
2141488	Primidone	3.88	Spike	P	0 - 30
2141488	Pyraclostrobin	5.25	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P375428

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141488	Thiamethoxam	1.97	Spike	P	0 - 30
2141488	Tolfenpyrad	13.5	Spike	P	0 - 30
2141488	Triclopyr	12.0	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P375589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141661	Acesulfame K	4.21	Spike	P	0 - 30
2141661	AMPA	1.82	Spike	P	0 - 30
2141661	Endothall	6.77	Spike	P	0 - 30
2141661	Glufosinate	9.75	Spike	P	0 - 30
2141661	Glyphosate	15.6	Spike	P	0 - 30
2141661	Sucralose	3.17	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P375533

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141674	Color (true)	2.21	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P375873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2142132	Total Alkalinity	0.167	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P376056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141349	TDS	7.33	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P375877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2142132	Fluoride	0.998	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P375830

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141641	Organic Carbon	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

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

Quality Assurance Report Surrogates

Lab Sample ID: 2141661
Field Sample ID: G3SD0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	111	P	30 - 160
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	79.1	P	30 - 160
EPA 8321B	Diuron-d6	66.5	P	30 - 160
EPA 8321B	Endothall-d6	88.7	P	30 - 160
EPA 8321B	Endothall-d6	88.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	159	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	159	P	30 - 160
EPA 8321B	Ibuprofen-d3	71.5	P	30 - 160
EPA 8321B	Primidone-d5	92.2	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	30 - 160

Lab Sample ID: 2141663
Field Sample ID: G3SD0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	106	P	68 - 130
EPA 8270E	Terbufos-d10	92.1	P	61 - 136

Lab Sample ID: 2141664
Field Sample ID: FB_12092019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	102	P	68 - 130
EPA 8270E	Simazine-d10	105	P	68 - 130
EPA 8270E	Terbufos-d10	98.7	P	61 - 136
EPA 8270E	Terbufos-d10	88.4	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A96205

Included Lab Sample IDs: 2141653

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	102	P/P	90 - 110
Sulfate	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A96226

Included Lab Sample IDs: 2141655

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.1	94.5	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A96231

Included Lab Sample IDs: 2141653

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.4	100	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A96254

Included Lab Sample IDs: 2141653

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	101	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A96283

Included Lab Sample IDs: 2141661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	93.1	90.6	P/P	60 - 160
Glufosinate	112	106	P/P	60 - 160
Glyphosate	110	109	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A96284

Included Lab Sample IDs: 2141654

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A96285

Included Lab Sample IDs: 2141654

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.6	103	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A96319

Included Lab Sample IDs: 2141654

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

Reference Method: SM 5310 B-00

Run ID: A96328

Included Lab Sample IDs: 2141654

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.6	101	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A96333

Included Lab Sample IDs: 2141662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	99.3	99.9	P/P	95 - 105
Calcium	101	101	P/P	95 - 105
Iron	103	104	P/P	95 - 105
Magnesium	104	104	P/P	95 - 105
Potassium	102	102	P/P	95 - 105
Sodium	103	104	P/P	95 - 105
Zinc	101	101	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A96351

Included Lab Sample IDs: 2141654

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

Reference Method: SM 2320 B-97

Run ID: A96352

Included Lab Sample IDs: 2141653

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

Reference Method: SM 4500 F-C-97

Run ID: A96352

Included Lab Sample IDs: 2141653

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

Reference Method: EPA 8321B

Run ID: A96367

Included Lab Sample IDs: 2141661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	124	87.3	P/P	60 - 160
Endothall	125	150	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A96420

Included Lab Sample IDs: 2141661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	98.3	98.6	P/P	60 - 160

Reference Method: EPA 8270E

Run ID: A96463

Included Lab Sample IDs: 2141663, 2141664

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.9		P	80 - 120
Alachlor	105		P	80 - 120
Ametryn	102		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	101		P	80 - 120
Azinphos Methyl	95.9		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	97.6		P	80 - 120
Chlorpyrifos Ethyl	95.1		P	80 - 120
Chlorpyrifos Methyl	98.2		P	80 - 120
Cyanazine	95.5		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	98.6		P	80 - 120
Dimethenamid	100		P	80 - 120
Disulfoton	91.8		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	98.3		P	80 - 120
Ethion	95.9		P	80 - 120
Ethoprop	102		P	80 - 120
Fenamiphos	99.6		P	80 - 120
Fipronil	97.8		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	82.2		P	80 - 120
Fipronil Sulfone	95.7		P	80 - 120
Fonofos	98.6		P	80 - 120
Hexazinone	99.8		P	80 - 120
Malathion	86.7		P	80 - 120
Metaxyl	103		P	80 - 120
Metolachlor	99.1		P	80 - 120
Metribuzin	95.4		P	80 - 120
Mevinphos	99.7		P	80 - 120
Molinate	100		P	80 - 120
Norflurazon	99.4		P	80 - 120
Oxadiazon	100		P	80 - 120
Parathion Ethyl	98.8		P	80 - 120
Parathion Methyl	98.3		P	80 - 120
Pendimethalin	97.6		P	80 - 120
Phorate	98.8		P	80 - 120
Prodiamine	101		P	80 - 120
Prometon	104		P	80 - 120
Prometryn	98.8		P	80 - 120
Simazine	102		P	80 - 120
Tebuconazole	100		P	80 - 120
Terbufos	97.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A96463

Included Lab Sample IDs: 2141663, 2141664

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Terbutylazine	100		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A96520

Included Lab Sample IDs: 2141662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.9	102	P/P	90 - 110
Arsenic	101	100	P/P	90 - 110
Boron	102	105	P/P	90 - 110
Cadmium	99.1	101	P/P	90 - 110
Chromium	102	106	P/P	90 - 110
Copper	99.3	99.1	P/P	90 - 110
Lead	105	107	P/P	90 - 110
Nickel	99.5	100	P/P	90 - 110
Thallium	96.2	98.6	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A96525

Included Lab Sample IDs: 2141662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	99.6	101	P/P	90 - 110
Selenium	102	104	P/P	90 - 110
Silver	103	106	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A96566

Included Lab Sample IDs: 2141661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	79.9	87.1	P/P	50 - 150
Acetaminophen	106	108	P/P	60 - 160
Acetamiprid	102	106	P/P	60 - 160
Afidopyropen	106	100	P/P	50 - 150
Bentazon	98.0	98.7	P/P	50 - 160
Benzovindiflupyr	111	103	P/P	60 - 150
Carbamazepine	99.1	98.2	P/P	60 - 150
Clothianidin	104	107	P/P	50 - 150
Dinotefuran	107	106	P/P	50 - 150
Diuron	97.2	95.6	P/P	60 - 150
Fenuron	103	108	P/P	60 - 150
Fluridone	110	110	P/P	60 - 160
Hydrocodone	103	107	P/P	60 - 150
Ibuprofen	86.3	110	P/P	50 - 160
Imazapyr	101	106	P/P	50 - 150
Imidacloprid	98.2	101	P/P	60 - 150
Linuron	97.0	104	P/P	60 - 150
Mandestrobin	102	104	P/P	50 - 150
MCPP	91.4	88.5	P/P	50 - 150
Naproxen	145	117	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A96566

Included Lab Sample IDs: 2141661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Primidone	99.1	101	P/P	60 - 150
Pyraclostrobin	102	97.4	P/P	60 - 150
Thiamethoxam	108	112	P/P	60 - 150
Tolfenpyrad	99.3	95.3	P/P	50 - 150
Triclopyr	108	92.5	P/P	50 - 150

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							2.77	
EPA 200.7 Rev. 4.4	Barium	102		99.2	103	103			0.263
	Calcium	107		97.7	103	107			3.01
	Iron	106		105	105	108			1.91
	Magnesium	112		102	108	113			3.91
	Potassium	106		104	105	104			0.703
	Sodium	109		101	105	104			0.289
	Zinc	100		99.6	100	101			0.693
EPA 200.8 Rev. 5.4	Aluminum	105		104	104	101			1.88
	Antimony	109		111	108	107			1.43
	Arsenic	103		108	104	104			0.481
	Boron	107		109	108	106			1.97
	Cadmium	104		108	102	103			0.498
	Chromium	104		107	107	106			1.61
	Copper	100		101	101	98.9			2.40
	Lead	111		113	111	109			1.41
	Nickel	101		102	102	99.3			3.11
	Selenium	104		107	106	103			2.35
	Silver	108		107	107	107			0.423
	Thallium	112		114	109	109			0.588
EPA 300.0 Rev. 2.1	Chloride	105		106	107			0.759	
	Sulfate	101		102				0.938	
EPA 350.1 Rev. 2.0	Ammonia-N	99.4		100	100				0.0459
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.8		100	100				0.0120
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5		96.5					0.232
EPA 365.1 Rev. 2.0	Total-P	104							1.21
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.5		93.2	94.4				1.22
EPA 8270E	Acetochlor	118	91.9	95.5	103		24.6		7.84
	Alachlor	123	98.0	105	114		22.5		8.40
	Ametryn	121	113	176	127		6.67		32.1
	Atrazine	133	107	110	114		22.0		3.17
	Atrazine Desethyl	90.9	77.9	86.1	96.0		15.3		10.8
	Azinphos Methyl	111	84.1	89.6	95.3		27.3		6.07
	Bromacil	108	81.7	88.3	65.3		27.4		29.9
	Butylate	80.3	64.9	49.4	40.5		21.3		19.8
	Chlorpyrifos Ethyl	116	86.8	91.7	81.5		28.8		11.7
	Chlorpyrifos Methyl	116	86.3	84.0	84.2		29.6		0.299
	Cyanazine	114	89.3	82.1	94.8		24.0		14.4
	Demeton	117	89.6	83.2	94.1		26.6		12.3
	Diazinon	116	91.8	97.5	104		23.6		6.31
	Dimethenamid	113	96.5	101	99.2		15.4		1.27
	Disulfoton	110	81.7	81.3	80.8		29.9		0.552
	Dithiopyr	116	90.3	91.8	102		24.7		10.5
	EPTC	80.2	61.9	40.9	45.3		25.8		10.2
	Ethion	114	84.5	71.8	74.9		29.8		4.28
	Ethoprop	108	82.4	94.8	95.4		26.9		0.585
	Fenamiphos	134	91.2	83.8	74.1		37.9		12.4
	Fipronil	112	89.9	88.7	99.3		22.0		11.2
	Fipronil Desulfinyl	118	89.7	86.8	97.8		27.5		11.9
	Fipronil Sulfide	88.5	64.3	59.8	64.2		31.6		7.05
	Fipronil Sulfone	99.1	71.6	70.8	72.8		32.2		2.81
	Fonofos	105	81.2	82.8	81.2		25.9		1.97
	Hexazinone	125	94.0	130	135		28.6		3.61
	Malathion	125	111	90.9	92.8		11.3		2.09

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Metalaxyl	119	94.3	109	103	23.6	5.83
	Metolachlor	114	86.1	93.6	88.3	27.5	5.25
	Metribuzin	137	105	131	126	26.4	4.14
	Mevinphos	102	80.6	84.5	89.7	23.7	5.91
	Molinate	98.5	76.8	72.3	64.3	24.8	11.6
	Norflurazon	111	82.9	94.2	92.7	29.2	1.49
	Oxadiazon	115	88.1	87.2	81.9	26.2	6.24
	Parathion Ethyl	122	97.1	102	101	23.0	0.378
	Parathion Methyl	126	102	102	109	21.6	6.88
	Pendimethalin	118	96.1	109	107	20.7	1.20
	Phorate	117	78.3	89.5	98.0	39.4	9.05
	Prodiamine	130	83.6	77.6	51.1	43.6	41.2
	Prometon	115	85.3	104	97.6	29.3	6.71
	Prometryn	117	92.4	101	91.0	23.6	10.5
	Simazine	124	101	107	110	20.5	2.40
	Tebuconazole	85.7	59.9	55.1	52.5	35.4	4.91
	Terbufos	114	87.9	92.5	89.2	26.1	3.64
	Terbuthylazine	123	96.5	107	102	24.3	5.07
EPA 8321B	2,4-D	158		137	126		8.27
	Acesulfame K	112		137	144		4.21
	Acetaminophen	103		106	102		4.45
	Acetamiprid	104		120	115		4.30
	Afidopyropen	101		102	96.7		5.10
	AMPA	98.1		118	116		1.82
	Bentazon	98.5		84.4	69.3		8.70
	Benzovindiflupyr	100		100	94.9		5.50
	Carbamazepine	112		94.8	93.2		1.68
	Clothianidin	102		109	99.0		9.47
	Dinotefuran	107		128	127		0.742
	Diuron	90.6		77.6	78.5		0.818
	Endothall	133		131	140		6.77
	Fenuron	108		90.8	86.5		4.81
	Fluridone	106		105	104		0.335
	Glufosinate	94.1		105	116		9.75
	Glyphosate	126		187	219		15.6
	Hydrocodone	102		111	103		8.01
	Ibuprofen	96.0		80.6	74.2		8.29
	Imazapyr	110		139	129		3.38
	Imidacloprid	114		185	170		7.99
	Linuron	77.6		75.1	69.9		7.18
	Mandestrobin	91.1		90.6	87.9		3.08
	MCPP	159		156	139		11.8
	Naproxen	97.7		103	86.0		17.7
	Primidone	99.5		106	102		3.88
	Pyraclostrobin	88.9		87.8	83.3		5.25
	Sucralose	109		104	108		3.17
	Thiamethoxam	108		153	150		1.97
	Tolfenpyrad	56.6		59.9	52.3		13.5
	Triclopyr	136		140	124		12.0
SM 2120 B	Color (true)	96.3				2.21	
SM 2320 B-97	Total Alkalinity	103				0.167	
SM 2540 C-97	TDS					7.33	
SM 4500 F-C-97	Fluoride	97.0		98.6	97.5		0.998
SM 5310 B-00	Organic Carbon	101		98.5	98.5		0.0

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2141653
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2141662
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2141662
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2141653
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2141653
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2141654
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2141654
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2141654
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2141654
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2141655
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2141663, 2141664
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2141661
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2141661
SM 2120 B / E31780	True Color measured at 450 nm	2141653
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2141653
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2141653
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2141653
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2141653
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2141654

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	12/10/2019			12/10/2019 16:40	Yen Ta	2141653
EPA 200.7 Rev. 4.4	12/10/2019	12/12/2019 16:45	Elliott D. Healy	12/13/2019 13:41	Betina Topolski	2141662
EPA 200.8 Rev. 5.4	12/10/2019	12/12/2019 16:45	Elliott D. Healy	12/20/2019 20:59	Justin Cutchin	2141662
	12/10/2019	12/12/2019 16:45	Elliott D. Healy	12/21/2019 20:33	Justin Cutchin	2141662
EPA 300.0 Rev. 2.1	12/10/2019			12/12/2019 08:26	Lipi Saha	2141653
EPA 350.1 Rev. 2.0	12/10/2019			12/13/2019 11:20	Ping Hua	2141654
EPA 351.2 Rev. 2.0	12/10/2019	12/11/2019 12:14	Sima Feizi	12/12/2019 13:00	Jhamieka S. Greenwood	2141654
EPA 353.2 Rev. 2.0	12/10/2019			12/12/2019 10:23	Beverly Y. Sanders	2141654
EPA 365.1 Rev. 2.0	12/10/2019	12/12/2019 10:19	Yen Ta	12/13/2019 14:12	Benjamin T. Nordmann	2141654
EPA 365.1 Rev. 2.0 dissolved	12/10/2019			12/10/2019 14:14	Lipi Saha	2141655
EPA 8270E	12/10/2019	12/11/2019 08:30	Rasheda Ghaffari	12/16/2019 15:13	Vandana T. Nagar	2141663
	12/10/2019	12/11/2019 08:30	Rasheda Ghaffari	12/16/2019 15:39	Vandana T. Nagar	2141664
EPA 8321B	12/10/2019	12/11/2019 10:00	Hoor Shaik	12/21/2019 03:10	Juyoung Kim	2141661
	12/10/2019	12/11/2019 14:00	Rebecca Ware	12/11/2019 15:50	Rebecca Ware	2141661
	12/10/2019	12/11/2019 14:00	Rebecca Ware	12/13/2019 11:13	Rebecca Ware	2141661
	12/10/2019	12/11/2019 14:00	Rebecca Ware	12/17/2019 23:44	Mohammad Ghaffari	2141661
SM 2120 B	12/10/2019			12/10/2019 16:00	Madeline Funaro	2141653
SM 2320 B-97	12/10/2019			12/14/2019 03:25	Dale L. Simmons	2141653
SM 2540 C-97	12/10/2019			12/11/2019 15:32	Yijie Li	2141653
SM 2540 D-97	12/10/2019			12/11/2019 15:32	Yijie Li	2141653
SM 4500 F-C-97	12/10/2019			12/14/2019 03:25	Dale L. Simmons	2141653
SM 5310 B-00	12/10/2019			12/11/2019 19:31	Madeline Funaro	2141654