

Chemical Analysis Report

SW-DIST-2019-10-11-03

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

Event Description: **SCIs**
Request ID: **RQ-2019-10-07-18**
Customer: **SW-DIST**
Project ID: **SMP**

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

Date Certified: 04-NOV-2019 17:14



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: Salix Slough @ Lil Manatee River SP

Collection Date/Time: 10/10/2019 10:40

Field ID: G2SW0104

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2127389	EPA 180.1 Rev. 2.0	Turbidity	2.1	A	NTU	P372376	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P372761	
		Sulfate	55		mg SO4/L	P372765	
	SM 2120 B	Color (true)	180		PCU	P372533	
	SM 2320 B-97	Total Alkalinity	79		mg CaCO3/L	P372647	
	SM 2540 C-97	TDS	252		mg/L	P372899	
	SM 2540 D-97	TSS	2	U	mg/L	P372870	
	SM 4500 F-C-97	Fluoride	0.29		mg F/L	P372649	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.015		mg N/L	P372774	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P372392	
2127390	EPA 353.2 Rev. 2.0	NO2NO3-N	0.20		mg N/L	P372728	
	EPA 365.1 Rev. 2.0	Total-P	0.63		mg P/L	P372472	
	SM 5310 B-00	Organic Carbon	21		mg C/L	P372777	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.57		mg P/L	P372368	
	EPA 8321B	2,4-D	0.0029	I	ug/L	P372252	
2127408		Acesulfame K**	0.10	U	ug/L	P372267	
		AMPA**	0.78		ug/L	P372267	
		Sucralose**	0.10		ug/L	P372267	
		Acetaminophen**	0.0080	U	ug/L	P372252	
		Acetamiprid**	0.0020	U	ug/L	P372252	
		Endothall**	0.25	U	ug/L	P372267	
		Glufosinate**	0.10	U	ug/L	P372267	
		Glyphosate**	0.97		ug/L	P372267	
		Afidopyropen**	0.0020	UJ	ug/L	P372252	
		Bentazon	8.5E-04	I	ug/L	P372252	
		Benzovindiflupyr**	0.0023	UJ	ug/L	P372252	
		Carbamazepine**	8.0E-04	U	ug/L	P372252	
		Clothianidin**	0.0032	I	ug/L	P372252	
		Dinotefuran**	0.0020	U	ug/L	P372252	
		Diuron	0.0020	U	ug/L	P372252	
		Fenuron	0.016	U	ug/L	P372252	
		Fluridone**	8.0E-04	U	ug/L	P372252	
		Imazapyr**	0.011	I	ug/L	P372252	
		Hydrocodone**	0.0020	U	ug/L	P372252	
		Ibuprofen**	0.020	U	ug/L	P372252	
		Imidacloprid	0.0035	I	ug/L	P372252	
		Linuron	0.0040	U	ug/L	P372252	
		Mandestrobin**	0.0020	UJ	ug/L	P372252	
		MCP	0.0020	U	ug/L	P372252	MS
		Naproxen**	0.0080	U	ug/L	P372252	
		Primidone**	0.0040	U	ug/L	P372252	
		Pyraclostrobin**	0.0020	U	ug/L	P372252	
		Thiamethoxam**	0.0020	U	ug/L	P372252	

Field ID: G2SW0104

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2127408	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P372252	
		Triclopyr**	0.0040	U	ug/L	P372252	
2127409	EPA 200.7 Rev. 4.4	Barium	15.3		ug/L	P372399	
		Calcium	37.8		mg/L	P372399	
		Iron	440		ug/L	P372399	
		Magnesium	13.5		mg/L	P372399	
		Potassium	9.4		mg/L	P372399	
		Sodium	11.6		mg/L	P372399	
		Zinc	5.0	U	ug/L	P372399	
	EPA 200.8 Rev. 5.4	Aluminum	85		ug/L	P372399	
		Antimony	0.16	I	ug/L	P372399	
		Arsenic	1.45		ug/L	P372399	
		Boron**	43.7		ug/L	P372399	
		Cadmium	0.020	U	ug/L	P372399	
		Chromium	0.45	I	ug/L	P372399	
		Copper	1.78		ug/L	P372399	
		Lead	0.26	I	ug/L	P372399	
		Nickel	0.55	I	ug/L	P373085	
		Selenium	0.20	U	ug/L	P372399	
		Silver	0.010	U	ug/L	P372399	
		Thallium	0.10	U	ug/L	P372399	
2127410	EPA 8270E	Acetochlor	0.26	U	ng/L	P372333	
		Alachlor	0.26	U	ng/L	P372333	
		Ametryn	0.63	U	ng/L	P372333	
		Atrazine	1.4		ng/L	P372333	
		Atrazine Desethyl	1.6	U	ng/L	P372333	
		Azinphos Methyl	5.3	U	ng/L	P372333	
		Bromacil	0.53	UJ	ng/L	P372333	MS
		Butylate	0.42	U	ng/L	P372333	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P372333	
		Chlorpyrifos Methyl	0.11	U	ng/L	P372333	
		Cyanazine	3.4	U	ng/L	P372333	
		Demeton	7.4	U	ng/L	P372333	
		Diazinon	0.13	U	ng/L	P372333	
		Dimethenamid**	0.11	U	ng/L	P372333	
		Disulfoton	0.53	U	ng/L	P372333	
		Dithiopyr**	0.11	U	ng/L	P372333	
		EPTC	1.3	U	ng/L	P372333	
		Ethion	0.16	U	ng/L	P372333	
		Ethoprop	0.11	U	ng/L	P372333	
		Fenamiphos	0.53	U	ng/L	P372333	
		Fipronil	0.26	U	ng/L	P372333	
		Fipronil Desulfinyl**	0.14	I	ng/L	P372333	
		Fipronil Sulfide	0.60	I	ng/L	P372333	
		Fipronil Sulfone	1.2		ng/L	P372333	

Field ID: G2SW0104

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2127410	EPA 8270E	Fonofos	0.21	U	ng/L	P372333	
		Hexazinone	0.53	U	ng/L	P372333	
		Malathion	0.37	U	ng/L	P372333	
		Metaxyl	4.7		ng/L	P372333	
		Metolachlor	1.2	I	ng/L	P372333	
		Metribuzin	0.95	IJ	ng/L	P372333	MS
		Mevinphos	0.53	U	ng/L	P372333	
		Molinate	0.32	U	ng/L	P372333	
		Norflurazon	0.53	U	ng/L	P372333	
		Oxadiazon**	0.16	I	ng/L	P372333	
		Parathion Ethyl	0.26	U	ng/L	P372333	
		Parathion Methyl	0.58	U	ng/L	P372333	
		Pendimethalin	1.1	U	ng/L	P372333	
		Phorate	0.26	U	ng/L	P372333	
		Prodiamine**	0.18	UJ	ng/L	P372333	MS
		Prometon	0.95	U	ng/L	P372333	
		Prometryn	0.21	U	ng/L	P372333	
		Simazine	0.53	U	ng/L	P372333	
		Tebuconazole**	0.53	U	ng/L	P372333	
		Terbufos	0.11	U	ng/L	P372333	
		Terbuthylazine	0.45	U	ng/L	P372333	

Ref. Method and Comment:

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

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

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: P372376

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P372399

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: P372399

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
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: P373085

Component	Result	Code	Units
Nickel	0.50	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372761

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372765

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372774

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372774

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372392

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372728

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372472

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372368

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

Reference Method: EPA 8270E
Batch ID: P372333

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: P372333

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: P372252

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P372252

Component	Result	Code	Units
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P372267

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: P372533

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P372647

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

Reference Method: SM 2540 C-97
Batch ID: P372899

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P372870

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P372649

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P372777

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: P372399

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	99.8		P	85 - 115
Calcium	103		P	85 - 115
Iron	99.4		P	85 - 115
Magnesium	108		P	85 - 115
Potassium	98.7		P	85 - 115
Sodium	95.5		P	85 - 115
Zinc	98.2		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P372399

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Antimony	107		P	85 - 115
Arsenic	108		P	85 - 115
Boron	99.8		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	99.1		P	85 - 115
Copper	106		P	85 - 115
Lead	102		P	85 - 115
Selenium	96.6		P	85 - 115
Silver	108		P	85 - 115
Thallium	109		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P373085

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Nickel	99.9		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372761

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372765

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372774

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372392

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: P372392

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.9		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P372728

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: P372472

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P372368

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.1		P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P372333

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	98.9	94.1	P/P	69 - 122
Alachlor	97.8	95.1	P/P	71 - 120
Ametryn	98.1	96.2	P/P	47 - 138
Atrazine	102	96.7	P/P	74 - 124
Atrazine Desethyl	81.6	77.3	P/P	38 - 138
Azinphos Methyl	93.0	91.2	P/P	69 - 154
Bromacil	76.6	74.7	P/P	39 - 121
Butylate	53.3	71.2	P/P	27 - 87.0
Chlorpyrifos Ethyl	96.3	95.1	P/P	69 - 118
Chlorpyrifos Methyl	87.6	89.8	P/P	70 - 120
Cyanazine	106	110	P/P	20 - 250
Demeton	64.0	53.7	P/P	39 - 118
Diazinon	94.0	94.4	P/P	68 - 127
Dimethenamid	98.7	94.5	P/P	66 - 125
Disulfoton	77.8	78.3	P/P	52 - 126
Dithiopyr	98.0	96.5	P/P	67 - 127
EPTC	59.5	71.3	P/P	24 - 88.0
Ethion	101	100	P/P	51 - 132
Ethoprop	80.4	80.0	P/P	58 - 117
Fenamiphos	96.1	94.4	P/P	38 - 139
Fipronil	107	102	P/P	61 - 124
Fipronil Desulfinyl	95.2	91.1	P/P	47 - 120
Fipronil Sulfide	98.3	91.7	P/P	56 - 119
Fipronil Sulfone	92.1	88.9	P/P	50 - 117
Fonofos	77.8	83.8	P/P	60 - 121
Hexazinone	111	103	P/P	55 - 137
Malathion	96.5	94.3	P/P	66 - 126
Metalaxyl	101	97.7	P/P	33 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P372333

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Metolachlor	99.9	98.6	P/P	69 - 119
Metribuzin	104	105	P/P	31 - 238
Mevinphos	77.5	76.1	P/P	42 - 113
Molinate	64.1	71.2	P/P	32 - 96.0
Norflurazon	99.7	93.6	P/P	54 - 123
Oxadiazon	103	98.7	P/P	63 - 128
Parathion Ethyl	94.0	91.2	P/P	72 - 111
Parathion Methyl	95.1	90.6	P/P	74 - 126
Pendimethalin	94.0	95.2	P/P	61 - 131
Phorate	85.8	80.5	P/P	51 - 115
Prodiamine	95.0	90.3	P/P	38 - 144
Prometon	98.1	94.0	P/P	54 - 119
Prometryn	94.7	99.0	P/P	63 - 120
Simazine	102	99.6	P/P	75 - 126
Tebuconazole	97.1	96.8	P/P	20 - 119
Terbufos	82.1	84.2	P/P	64 - 116
Terbutylazine	104	97.1	P/P	73 - 117

Reference Method: EPA 8321B
Batch ID: P372252

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	131		P	40 - 160
Acetaminophen	87.2		P	30 - 160
Acetamiprid	95.8		P	40 - 160
Afidopyropen	89.3		P	40 - 160
Bentazon	105		P	30 - 160
Benzovindiflupyr	96.3		P	40 - 160
Carbamazepine	98.1		P	40 - 160
Clothianidin	78.4		P	40 - 160
Dinotefuran	91.9		P	40 - 160
Diuron	95.8		P	40 - 160
Fenuron	115		P	40 - 160
Fluridone	96.0		P	40 - 160
Hydrocodone	96.8		P	40 - 160
Ibuprofen	87.3		P	30 - 160
Imazapyr	98.6		P	40 - 160
Imidacloprid	96.5		P	40 - 160
Linuron	84.6		P	40 - 160
Mandestrobin	94.6		P	40 - 160
MCPP	146		P	40 - 160
Naproxen	103		P	40 - 160
Primidone	87.5		P	40 - 160
Pyraclostrobin	98.0		P	30 - 160
Thiamethoxam	89.3		P	40 - 160
Tolfenpyrad	63.9		P	40 - 160
Triclopyr	115		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P372267

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

Reference Method: EPA 8321B
Batch ID: P372267

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	85.6		P	40 - 150
AMPA	131		P	40 - 150
Endothall	81.9		P	40 - 150
Glufosinate	103		P	40 - 150
Glyphosate	91.3		P	40 - 140
Sucralose	102		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P372533

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.9		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P372647

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

Reference Method: SM 4500 F-C-97
Batch ID: P372649

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P372777

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	102		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P372399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126629	Barium	99.8	98.9	P/P	80 - 120
2126629	Calcium	100	102	P/P	80 - 120
2126629	Iron	98.9	98.8	P/P	80 - 120
2126629	Magnesium	104	105	P/P	80 - 120
2126629	Potassium	94.8	99.9	P/P	80 - 120
2126629	Sodium	98.2		P	80 - 120
2126629	Zinc	99.6	98.3	P/P	80 - 120
2127179	Barium	95.8		P	80 - 120
2127179	Calcium	97.6		P	80 - 120
2127179	Iron	98.8		P	80 - 120
2127179	Magnesium	99.2		P	80 - 120
2127179	Potassium	93.4		P	80 - 120
2127179	Sodium	96.0		P	80 - 120
2127179	Zinc	94.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P372399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126629	Aluminum	104	102	P/P	80 - 120
2126629	Antimony	108	107	P/P	80 - 120
2126629	Arsenic	109	109	P/P	80 - 120
2126629	Boron	102	99.0	P/P	80 - 120
2126629	Cadmium	104	104	P/P	80 - 120
2126629	Chromium	102	101	P/P	80 - 120
2126629	Copper	107	107	P/P	80 - 120
2126629	Lead	105	103	P/P	80 - 120
2126629	Selenium	98.2	97.1	P/P	80 - 120
2126629	Silver	108	106	P/P	80 - 120
2126629	Thallium	113	112	P/P	80 - 120
2127179	Aluminum	103		P	80 - 120
2127179	Antimony	112		P	80 - 120
2127179	Arsenic	110		P	80 - 120
2127179	Boron	101		P	80 - 120
2127179	Cadmium	106		P	80 - 120
2127179	Chromium	100		P	80 - 120
2127179	Copper	102		P	80 - 120
2127179	Lead	103		P	80 - 120
2127179	Selenium	97.3		P	80 - 120
2127179	Silver	108		P	80 - 120
2127179	Thallium	113		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P373085

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2131041	Nickel	99.6	97.2	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372761

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372761

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127138	Chloride	101	102	P/P	90 - 110
2127259	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372765

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127138	Sulfate	102	102	P/P	90 - 110
2127259	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372774

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127432	Ammonia-N	101	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372392

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127426	Kjeldahl Nitrogen	96.3	97.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372728

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127325	NO2NO3-N	99.4	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372472

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127247	Total-P	99.8	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372368

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127433	O-Phosphate-P	97.9	99.7	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P372333

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127410	Acetochlor	105	94.6	P/P	63 - 129
2127410	Alachlor	102	91.4	P/P	65 - 127
2127410	Ametryn	89.5	90.1	P/P	40 - 164
2127410	Atrazine	123	111	P/P	66 - 135
2127410	Atrazine Desethyl	155	138	P/P	14 - 157
2127410	Azinphos Methyl	110	111	P/P	49 - 180
2127410	Bromacil	167	140	F/F	48 - 130
2127410	Butylate	58.8	44.0	P/P	10 - 94.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P372333

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127410	Chlorpyrifos Ethyl	88.8	83.9	P/P	58 - 123
2127410	Chlorpyrifos Methyl	96.7	88.8	P/P	58 - 125
2127410	Cyanazine	172	158	P/P	24 - 253
2127410	Demeton	94.0	69.6	P/P	25 - 149
2127410	Diazinon	119	109	P/P	59 - 144
2127410	Dimethenamid	100	94.3	P/P	46 - 139
2127410	Disulfoton	115	98.7	P/P	54 - 132
2127410	Dithiopyr	98.4	92.8	P/P	64 - 130
2127410	EPTC	66.9	53.1	P/P	10 - 92.0
2127410	Ethion	79.9	80.1	P/P	30 - 148
2127410	Ethoprop	115	93.3	P/P	50 - 130
2127410	Fenamiphos	115	107	P/P	49 - 142
2127410	Fipronil	100	98.3	P/P	46 - 140
2127410	Fipronil Desulfiny	82.7	81.2	P/P	30 - 121
2127410	Fipronil Sulfide	79.4	78.1	P/P	31 - 136
2127410	Fipronil Sulfone	75.9	75.4	P/P	16 - 136
2127410	Fonofos	113	97.0	P/P	55 - 129
2127410	Hexazinone	108	103	P/P	56 - 141
2127410	Malathion	82.7	85.4	P/P	56 - 135
2127410	Metalaxyl	106	99.4	P/P	54 - 135
2127410	Metolachlor	90.0	82.8	P/P	51 - 140
2127410	Metribuzin	256	233	F/P	45 - 254
2127410	Mevinphos	104	99.7	P/P	33 - 131
2127410	Molinate	87.1	75.8	P/P	14 - 98.0
2127410	Norflurazon	86.4	89.9	P/P	34 - 136
2127410	Oxadiazon	87.2	79.4	P/P	67 - 116
2127410	Parathion Ethyl	102	92.6	P/P	66 - 118
2127410	Parathion Methyl	114	105	P/P	64 - 136
2127410	Pendimethalin	106	95.6	P/P	59 - 144
2127410	Phorate	119	101	P/P	42 - 130
2127410	Prodiamine	42.4	38.9	P/F	42 - 148
2127410	Prometon	97.8	93.2	P/P	59 - 134
2127410	Prometryn	97.5	88.9	P/P	54 - 135
2127410	Simazine	112	114	P/P	53 - 156
2127410	Tebuconazole	38.0	48.6	P/P	10 - 131
2127410	Terbufos	115	101	P/P	57 - 131
2127410	Terbuthylazine	105	97.6	P/P	68 - 125

Reference Method: EPA 8321B
Batch ID: P372252

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126726	2,4-D	129	133	P/P	40 - 160
2126726	Acetaminophen	82.4	83.4	P/P	30 - 160
2126726	Afidopyropen	88.6	82.8	P/P	40 - 160
2126726	Bentazon	91.4	89.3	P/P	30 - 160
2126726	Benzovindiflupyr	97.2	98.9	P/P	40 - 160
2126726	Carbamazepine	107	102	P/P	40 - 160
2126726	Clothianidin	106	105	P/P	40 - 160
2126726	Dinotefuran	105	99.9	P/P	40 - 160
2126726	Diuron	96.6	92.3	P/P	40 - 160
2126726	Fenuron	106	101	P/P	40 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P372252

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2126726	Fluridone	88.3	90.0	P/P	40 - 160
2126726	Hydrocodone	107	104	P/P	40 - 160
2126726	Ibuprofen	89.9	87.4	P/P	30 - 160
2126726	Imazapyr	122	115	P/P	40 - 160
2126726	Linuron	80.5	79.3	P/P	40 - 160
2126726	Mandestrobin	102	92.2	P/P	40 - 160
2126726	MCP	165	161	F/F	40 - 160
2126726	Naproxen	111	105	P/P	40 - 160
2126726	Primidone	97.7	99.2	P/P	40 - 160
2126726	Pyraclostrobin	97.5	93.7	P/P	30 - 160
2126726	Tolfenpyrad	70.8	69.1	P/P	40 - 160
2126726	Triclopyr	116	131	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P372267

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127171	Acesulfame K	108	110	P/P	40 - 150
2127171	AMPA	147	137	P/P	40 - 150
2127171	Endothall	92.2	102	P/P	40 - 150
2127171	Glufosinate	117	104	P/P	40 - 150
2127171	Glyphosate	121	117	P/P	40 - 140
2127171	Sucralose	86.6	82.5	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P372649

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127226	Fluoride	95.1	94.6	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P372777

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127328	Organic Carbon	101	96.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P372376

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127389	Turbidity	6.33	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P372399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126629	Barium	0.880	Spike	P	0 - 20
2126629	Calcium	1.39	Spike	P	0 - 20
2126629	Iron	0.0686	Spike	P	0 - 20
2126629	Magnesium	0.151	Spike	P	0 - 20
2126629	Potassium	4.20	Spike	P	0 - 20
2126629	Sodium	0.605	Spike	P	0 - 20
2126629	Zinc	1.35	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P372399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126629	Aluminum	1.53	Spike	P	0 - 20
2126629	Antimony	0.611	Spike	P	0 - 20
2126629	Arsenic	0.0246	Spike	P	0 - 20
2126629	Boron	2.38	Spike	P	0 - 20
2126629	Cadmium	0.202	Spike	P	0 - 20
2126629	Chromium	1.31	Spike	P	0 - 20
2126629	Copper	0.356	Spike	P	0 - 20
2126629	Lead	1.50	Spike	P	0 - 20
2126629	Selenium	1.04	Spike	P	0 - 20
2126629	Silver	2.04	Spike	P	0 - 20
2126629	Thallium	0.550	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P373085

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2131041	Nickel	2.45	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P372761

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127138	Chloride	0.361	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P372765

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: P372765

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127138	Sulfate	0.0117	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127432	Ammonia-N	0.603	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372392

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127426	Kjeldahl Nitrogen	0.719	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372728

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127325	NO2NO3-N	0.730	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372472

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127247	Total-P	2.10	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372368

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127433	O-Phosphate-P	1.82	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P372333

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127410	Acetochlor	10.4	Spike	P	0 - 30
2127410	Alachlor	11.0	Spike	P	0 - 30
2127410	Ametryn	0.680	Spike	P	0 - 30
2127410	Atrazine	7.93	Spike	P	0 - 30
2127410	Atrazine Desethyl	11.7	Spike	P	0 - 30
2127410	Azinphos Methyl	0.985	Spike	P	0 - 30
2127410	Bromacil	17.8	Spike	P	0 - 30
2127410	Butylate	28.8	Spike	P	0 - 30
2127410	Chlorpyrifos Ethyl	5.64	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P372333

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127410	Chlorpyrifos Methyl	8.60	Spike	P	0 - 30
2127410	Cyanazine	8.79	Spike	P	0 - 30
2127410	Demeton	29.8	Spike	P	0 - 30
2127410	Diazinon	8.89	Spike	P	0 - 30
2127410	Dimethenamid	6.21	Spike	P	0 - 30
2127410	Disulfoton	15.3	Spike	P	0 - 30
2127410	Dithiopyr	5.85	Spike	P	0 - 30
2127410	EPTC	23.0	Spike	P	0 - 30
2127410	Ethion	0.233	Spike	P	0 - 30
2127410	Ethoprop	21.3	Spike	P	0 - 30
2127410	Fenamiphos	6.78	Spike	P	0 - 30
2127410	Fipronil	1.98	Spike	P	0 - 30
2127410	Fipronil Desulfinyl	1.84	Spike	P	0 - 30
2127410	Fipronil Sulfide	1.23	Spike	P	0 - 30
2127410	Fipronil Sulfone	0.364	Spike	P	0 - 30
2127410	Fonofos	15.1	Spike	P	0 - 30
2127410	Hexazinone	4.79	Spike	P	0 - 30
2127410	Malathion	3.21	Spike	P	0 - 30
2127410	Metalaxyl	4.92	Spike	P	0 - 30
2127410	Metolachlor	7.46	Spike	P	0 - 30
2127410	Metribuzin	9.11	Spike	P	0 - 30
2127410	Mevinphos	4.18	Spike	P	0 - 30
2127410	Molinate	13.9	Spike	P	0 - 30
2127410	Norflurazon	3.96	Spike	P	0 - 30
2127410	Oxadiazon	9.01	Spike	P	0 - 30
2127410	Parathion Ethyl	9.61	Spike	P	0 - 30
2127410	Parathion Methyl	8.54	Spike	P	0 - 30
2127410	Pendimethalin	10.5	Spike	P	0 - 30
2127410	Phorate	16.8	Spike	P	0 - 30
2127410	Prodiamine	8.57	Spike	P	0 - 30
2127410	Prometon	4.79	Spike	P	0 - 30
2127410	Prometryn	9.20	Spike	P	0 - 30
2127410	Simazine	1.24	Spike	P	0 - 30
2127410	Tebuconazole	24.6	Spike	P	0 - 30
2127410	Terbufos	13.4	Spike	P	0 - 30
2127410	Terbuthylazine	6.91	Spike	P	0 - 30
LFB	Acetochlor	4.93	LCS	P	0 - 30
LFB	Alachlor	2.84	LCS	P	0 - 30
LFB	Ametryn	1.98	LCS	P	0 - 30
LFB	Atrazine	5.76	LCS	P	0 - 30
LFB	Atrazine Desethyl	5.44	LCS	P	0 - 30
LFB	Azinphos Methyl	1.95	LCS	P	0 - 30
LFB	Bromacil	2.54	LCS	P	0 - 30
LFB	Butylate	28.7	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	1.29	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	2.46	LCS	P	0 - 30
LFB	Cyanazine	3.85	LCS	P	0 - 30
LFB	Demeton	17.4	LCS	P	0 - 30
LFB	Diazinon	0.458	LCS	P	0 - 30
LFB	Dimethenamid	4.39	LCS	P	0 - 30
LFB	Disulfoton	0.537	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P372333

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dithiopyr	1.53	LCS	P	0 - 30
LFB	EPTC	18.0	LCS	P	0 - 30
LFB	Ethion	0.753	LCS	P	0 - 30
LFB	Ethoprop	0.486	LCS	P	0 - 30
LFB	Fenamiphos	1.76	LCS	P	0 - 30
LFB	Fipronil	5.42	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	4.43	LCS	P	0 - 30
LFB	Fipronil Sulfide	6.89	LCS	P	0 - 30
LFB	Fipronil Sulfone	3.56	LCS	P	0 - 30
LFB	Fonofos	7.49	LCS	P	0 - 30
LFB	Hexazinone	7.76	LCS	P	0 - 30
LFB	Malathion	2.29	LCS	P	0 - 30
LFB	Metalaxyl	3.18	LCS	P	0 - 30
LFB	Metolachlor	1.28	LCS	P	0 - 30
LFB	Metribuzin	1.48	LCS	P	0 - 30
LFB	Mevinphos	1.90	LCS	P	0 - 30
LFB	Molinate	10.4	LCS	P	0 - 30
LFB	Norflurazon	6.28	LCS	P	0 - 30
LFB	Oxadiazon	4.32	LCS	P	0 - 30
LFB	Parathion Ethyl	3.00	LCS	P	0 - 30
LFB	Parathion Methyl	4.84	LCS	P	0 - 30
LFB	Pendimethalin	1.37	LCS	P	0 - 30
LFB	Phorate	6.48	LCS	P	0 - 30
LFB	Prodiamine	5.01	LCS	P	0 - 30
LFB	Prometon	4.31	LCS	P	0 - 30
LFB	Prometryn	4.44	LCS	P	0 - 30
LFB	Simazine	2.16	LCS	P	0 - 30
LFB	Tebuconazole	0.318	LCS	P	0 - 30
LFB	Terbufos	2.52	LCS	P	0 - 30
LFB	Terbutylazine	6.72	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P372252

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126726	2,4-D	2.09	Spike	P	0 - 30
2126726	Acetaminophen	1.28	Spike	P	0 - 30
2126726	Acetamiprid	3.06	Spike	P	0 - 30
2126726	Afidopyropen	6.75	Spike	P	0 - 30
2126726	Bentazon	2.23	Spike	P	0 - 30
2126726	Benzovindiflupyr	1.72	Spike	P	0 - 30
2126726	Carbamazepine	4.31	Spike	P	0 - 30
2126726	Clothianidin	0.883	Spike	P	0 - 30
2126726	Dinotefuran	4.62	Spike	P	0 - 30
2126726	Diuron	3.91	Spike	P	0 - 30
2126726	Fenuron	3.81	Spike	P	0 - 30
2126726	Fluridone	1.23	Spike	P	0 - 30
2126726	Hydrocodone	2.56	Spike	P	0 - 30
2126726	Ibuprofen	2.83	Spike	P	0 - 30
2126726	Imazapyr	4.28	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P372252

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2126726	Imidacloprid	3.20	Spike	P	0 - 30
2126726	Linuron	1.54	Spike	P	0 - 30
2126726	Mandestrobin	10.6	Spike	P	0 - 30
2126726	MCP	1.88	Spike	P	0 - 30
2126726	Naproxen	5.98	Spike	P	0 - 30
2126726	Primidone	1.42	Spike	P	0 - 30
2126726	Pyraclostrobin	3.91	Spike	P	0 - 30
2126726	Thiamethoxam	0.934	Spike	P	0 - 30
2126726	Tolfenpyrad	2.39	Spike	P	0 - 30
2126726	Triclopyr	12.5	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P372267

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127171	Acesulfame K	1.95	Spike	P	0 - 30
2127171	AMPA	6.51	Spike	P	0 - 30
2127171	Endothall	10.1	Spike	P	0 - 30
2127171	Glufosinate	12.2	Spike	P	0 - 30
2127171	Glyphosate	3.61	Spike	P	0 - 30
2127171	Sucralose	4.84	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P372533

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127259	Color (true)	3.35	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P372647

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127226	Total Alkalinity	0.0444	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P372899

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127324	TDS	5.79	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P372649

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127226	Fluoride	0.477	Spike	P	0 - 2.5

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P372777

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127328	Organic Carbon	3.23	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2127408
Field Sample ID: G2SW0104

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	159	P	30 - 160
EPA 8321B	Acetaminophen-d4	87.2	P	30 - 160
EPA 8321B	Bentazon-d7	67.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	82.9	P	30 - 160
EPA 8321B	Diuron-d6	75.4	P	30 - 160
EPA 8321B	Endothall-d6	112	P	30 - 160
EPA 8321B	Endothall-d6	112	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	30 - 160
EPA 8321B	Ibuprofen-d3	101	P	30 - 160
EPA 8321B	Primidone-d5	97.5	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	30 - 160

Lab Sample ID: 2127410
Field Sample ID: G2SW0104

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	111	P	68 - 130
EPA 8270E	Terbufos-d10	91.7	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A94905

Included Lab Sample IDs: 2127391

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.6	97.9	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A94912

Included Lab Sample IDs: 2127408

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	77.0	76.8	P/P	60 - 160
Endothall	89.3	94.0	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A94917

Included Lab Sample IDs: 2127408

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	131	84.3	P/P	60 - 160
Glufosinate	111	69.7	P/P	60 - 160
Glyphosate	97.4	72.8	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A94919

Included Lab Sample IDs: 2127408

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	116	117	P/P	50 - 150
Acetaminophen	104	102	P/P	60 - 160
Acetamiprid	100	105	P/P	50 - 150
Afidopyropen	98.4	94.3	P/P	50 - 150
Bentazon	101	108	P/P	50 - 160
Benzovindiflupyr	101	102	P/P	50 - 150
Carbamazepine	109	107	P/P	60 - 150
Clothianidin	101	110	P/P	60 - 150
Dinotefuran	100	99.0	P/P	50 - 150
Diuron	109	105	P/P	60 - 150
Fenuron	121	116	P/P	60 - 150
Fluridone	102	107	P/P	60 - 160
Hydrocodone	97.8	99.5	P/P	60 - 150
Ibuprofen	91.7	97.9	P/P	50 - 160
Imazapyr	101	110	P/P	50 - 150
Imidacloprid	103	99.0	P/P	60 - 150
Linuron	107	109	P/P	60 - 150
Mandestrobin	105	103	P/P	50 - 150
MCPP	97.3	105	P/P	50 - 150
Naproxen	154	144	P/P	50 - 160
Primidone	99.6	93.0	P/P	60 - 150
Pyraclostrobin	97.5	95.9	P/P	60 - 150
Thiamethoxam	99.2	93.6	P/P	50 - 150
Tolfenpyrad	111	111	P/P	60 - 150
Triclopyr	99.0	107	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A94921

Included Lab Sample IDs: 2127389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	99.5	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A94940

Included Lab Sample IDs: 2127408

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	116	113	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A94968

Included Lab Sample IDs: 2127409

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	101	P/P	90 - 110
Calcium	101	99.5	P/P	90 - 110
Iron	99.8	100	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Potassium	99.0	98.7	P/P	90 - 110
Sodium	99.2	98.7	P/P	90 - 110
Zinc	101	101	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A94980

Included Lab Sample IDs: 2127389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.8	101	P/P	90 - 115

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A94982

Included Lab Sample IDs: 2127390

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A95003

Included Lab Sample IDs: 2127389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	101	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A95005

Included Lab Sample IDs: 2127390

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97
Run ID: A95027
Included Lab Sample IDs: 2127389

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

Reference Method: SM 4500 F-C-97
Run ID: A95027
Included Lab Sample IDs: 2127389

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A95031
Included Lab Sample IDs: 2127390

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A95080
Included Lab Sample IDs: 2127390

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

Reference Method: SM 5310 B-00
Run ID: A95081
Included Lab Sample IDs: 2127390

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	104	95.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A95119
Included Lab Sample IDs: 2127409

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	103	P/P	90 - 110
Antimony	104	104	P/P	90 - 110
Arsenic	108	107	P/P	90 - 110
Boron	97.5	99.1	P/P	90 - 110
Cadmium	104	105	P/P	90 - 110
Chromium	99.7	99.9	P/P	90 - 110
Copper	105	104	P/P	90 - 110
Lead	99.5	100	P/P	90 - 110
Silver	103	104	P/P	90 - 110
Thallium	97.5	97.4	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A95156
Included Lab Sample IDs: 2127410

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

Reference Method: EPA 8270E
 Run ID: A95156
 Included Lab Sample IDs: 2127410

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	105		P	80 - 120
Ametryn	104		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	96.2		P	80 - 120
Azinphos Methyl	93.0		P	80 - 120
Bromacil	102		P	80 - 120
Butylate	99.8		P	80 - 120
Chlorpyrifos Ethyl	98.6		P	80 - 120
Chlorpyrifos Methyl	97.5		P	80 - 120
Cyanazine	98.5		P	80 - 120
Demeton	94.5		P	80 - 120
Diazinon	102		P	80 - 120
Dimethenamid	104		P	80 - 120
Disulfoton	96.1		P	80 - 120
Dithiopyr	103		P	80 - 120
EPTC	101		P	80 - 120
Ethion	95.4		P	80 - 120
Ethoprop	98.2		P	80 - 120
Fenamiphos	97.9		P	80 - 120
Fipronil	103		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	96.2		P	80 - 120
Fipronil Sulfone	99.7		P	80 - 120
Fonofos	96.6		P	80 - 120
Hexazinone	100		P	80 - 120
Malathion	95.6		P	80 - 120
Metaxyl	102		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	99.6		P	80 - 120
Mevinphos	98.0		P	80 - 120
Molinate	98.3		P	80 - 120
Norflurazon	98.1		P	80 - 120
Oxadiazon	101		P	80 - 120
Parathion Ethyl	97.4		P	80 - 120
Parathion Methyl	96.8		P	80 - 120
Pendimethalin	98.6		P	80 - 120
Phorate	95.7		P	80 - 120
Prodiamine	97.3		P	80 - 120
Prometon	103		P	80 - 120
Prometryn	103		P	80 - 120
Simazine	98.9		P	80 - 120
Tebuconazole	106		P	80 - 120
Terbufos	95.7		P	80 - 120
Terbutylazine	100		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
 Run ID: A95161
 Included Lab Sample IDs: 2127409

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A95161

Included Lab Sample IDs: 2127409

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Selenium	95.5	93.3	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A95361

Included Lab Sample IDs: 2127409

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

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						6.33	
EPA 200.7 Rev. 4.4	Barium	99.8		99.8	98.9	95.8		0.880
	Calcium	103		100	102	97.6		1.39
	Iron	99.4		98.9	98.8	98.8		0.0686
	Magnesium	108		104	105	99.2		0.151
	Potassium	98.7		94.8	99.9	93.4		4.20
	Sodium	95.5		98.2	96.0			0.605
	Zinc	98.2		99.6	98.3	94.7		1.35
EPA 200.8 Rev. 5.4	Aluminum	103		104	102	103		1.53
	Antimony	107		108	107	112		0.611
	Arsenic	108		109	109	110		0.0246
	Boron	99.8		102	99.0	101		2.38
	Cadmium	102		104	104	106		0.202
	Chromium	99.1		102	101	100		1.31
	Copper	106		107	107	102		0.356
	Lead	102		105	103	103		1.50
	Nickel	99.9		99.6	97.2			2.45
	Selenium	96.6		98.2	97.1	97.3		1.04
	Silver	108		108	106	108		2.04
	Thallium	109		113	112	113		0.550
EPA 300.0 Rev. 2.1	Chloride	99.8		101	102	100		0.361
	Sulfate	99.9		102	102	101		0.0117
EPA 350.1 Rev. 2.0	Ammonia-N	99.6		101	100			0.603
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.9		96.3	97.3			0.719
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5		99.4	100			0.730
EPA 365.1 Rev. 2.0	Total-P	98.0		99.8	97.6			2.10
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.1		97.9	99.7			1.82
EPA 8270E	Acetochlor	98.9	94.1	105	94.6	4.93		10.4
	Alachlor	97.8	95.1	102	91.4	2.84		11.0
	Ametryn	98.1	96.2	89.5	90.1	1.98		0.680
	Atrazine	102	96.7	123	111	5.76		7.93
	Atrazine Desethyl	81.6	77.3	155	138	5.44		11.7
	Azinphos Methyl	93.0	91.2	110	111	1.95		0.985
	Bromacil	76.6	74.7	167	140	2.54		17.8
	Butylate	53.3	71.2	58.8	44.0	28.7		28.8
	Chlorpyrifos Ethyl	96.3	95.1	88.8	83.9	1.29		5.64
	Chlorpyrifos Methyl	87.6	89.8	96.7	88.8	2.46		8.60
	Cyanazine	106	110	172	158	3.85		8.79
	Demeton	64.0	53.7	94.0	69.6	17.4		29.8
	Diazinon	94.0	94.4	119	109	0.458		8.89
	Dimethenamid	98.7	94.5	100	94.3	4.39		6.21
	Disulfoton	77.8	78.3	115	98.7	0.537		15.3
	Dithiopyr	98.0	96.5	98.4	92.8	1.53		5.85
	EPTC	59.5	71.3	66.9	53.1	18.0		23.0
	Ethion	101	100	79.9	80.1	0.753		0.233
	Ethoprop	80.4	80.0	115	93.3	0.486		21.3
	Fenamiphos	96.1	94.4	115	107	1.76		6.78
	Fipronil	107	102	100	98.3	5.42		1.98
	Fipronil Desulfinyl	95.2	91.1	82.7	81.2	4.43		1.84
	Fipronil Sulfide	98.3	91.7	79.4	78.1	6.89		1.23
	Fipronil Sulfone	92.1	88.9	75.9	75.4	3.56		0.364
	Fonofos	77.8	83.8	113	97.0	7.49		15.1
	Hexazinone	111	103	108	103	7.76		4.79
	Malathion	96.5	94.3	82.7	85.4	2.29		3.21

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Metalaxyl	101	97.7	106	99.4	3.18	4.92
	Metolachlor	99.9	98.6	90.0	82.8	1.28	7.46
	Metribuzin	104	105	256	233	1.48	9.11
	Mevinphos	77.5	76.1	104	99.7	1.90	4.18
	Molinate	64.1	71.2	87.1	75.8	10.4	13.9
	Norflurazon	99.7	93.6	86.4	89.9	6.28	3.96
	Oxadiazon	103	98.7	87.2	79.4	4.32	9.01
	Parathion Ethyl	94.0	91.2	102	92.6	3.00	9.61
	Parathion Methyl	95.1	90.6	114	105	4.84	8.54
	Pendimethalin	94.0	95.2	106	95.6	1.37	10.5
	Phorate	85.8	80.5	119	101	6.48	16.8
	Prodiamine	95.0	90.3	42.4	38.9	5.01	8.57
	Prometon	98.1	94.0	97.8	93.2	4.31	4.79
	Prometryn	94.7	99.0	97.5	88.9	4.44	9.20
	Simazine	102	99.6	112	114	2.16	1.24
	Tebuconazole	97.1	96.8	38.0	48.6	0.318	24.6
	Terbufos	82.1	84.2	115	101	2.52	13.4
	Terbuthylazine	104	97.1	105	97.6	6.72	6.91
EPA 8321B	2,4-D	131		129	133		2.09
	Acesulfame K	85.6		108	110		1.95
	Acetaminophen	87.2		82.4	83.4		1.28
	Acetamiprid	95.8					3.06
	Afidopyropen	89.3		88.6	82.8		6.75
	AMPA	131		147	137		6.51
	Bentazon	105		91.4	89.3		2.23
	Benzovindiflupyr	96.3		97.2	98.9		1.72
	Carbamazepine	98.1		107	102		4.31
	Clothianidin	78.4		106	105		0.883
	Dinotefuran	91.9		105	99.9		4.62
	Diuron	95.8		96.6	92.3		3.91
	Endothall	81.9		92.2	102		10.1
	Fenuron	115		106	101		3.81
	Fluridone	96.0		88.3	90.0		1.23
	Glufosinate	103		117	104		12.2
	Glyphosate	91.3		121	117		3.61
	Hydrocodone	96.8		107	104		2.56
	Ibuprofen	87.3		89.9	87.4		2.83
	Imazapyr	98.6		122	115		4.28
	Imidacloprid	96.5					3.20
	Linuron	84.6		80.5	79.3		1.54
	Mandestrobin	94.6		102	92.2		10.6
	MCPP	146		165	161		1.88
	Naproxen	103		111	105		5.98
	Primidone	87.5		97.7	99.2		1.42
	Pyraclostrobin	98.0		97.5	93.7		3.91
	Sucralose	102		86.6	82.5		4.84
	Thiamethoxam	89.3					0.934
	Tolfenpyrad	63.9		70.8	69.1		2.39
	Triclopyr	115		116	131		12.5
SM 2120 B	Color (true)	98.9				3.35	
SM 2320 B-97	Total Alkalinity	104				0.0444	
SM 2540 C-97	TDS					5.79	
SM 4500 F-C-97	Fluoride	96.2		95.1	94.6		0.477
SM 5310 B-00	Organic Carbon	102		101	96.0		3.23

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2127389
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2127409
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2127409
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2127389
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2127389
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2127390
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2127390
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2127390
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2127390
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2127391
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2127410
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2127408
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2127408
SM 2120 B / E31780	True Color measured at 450 nm	2127389
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2127389
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2127389
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2127389
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2127389
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2127390

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	10/11/2019			10/11/2019 15:36	Blanca Fach	2127389
EPA 200.7 Rev. 4.4	10/11/2019	10/14/2019 15:00	Elliott D. Healy	10/15/2019 15:32	Betina Topolski	2127409
EPA 200.8 Rev. 5.4	10/11/2019	10/14/2019 15:00	Elliott D. Healy	10/22/2019 04:08	Justin Cutchin	2127409
	10/11/2019	10/14/2019 15:00	Elliott D. Healy	10/23/2019 01:33	Justin Cutchin	2127409
	10/11/2019	10/24/2019 15:30	Elliott D. Healy	10/30/2019 20:33	Robert K Palmer	2127409
EPA 300.0 Rev. 2.1	10/11/2019			10/17/2019 13:32	Jhamieka S. Greenwood	2127389
EPA 350.1 Rev. 2.0	10/11/2019			10/18/2019 13:26	Ping Hua	2127390
EPA 351.2 Rev. 2.0	10/11/2019	10/14/2019 13:01	Sima Feizi	10/15/2019 18:07	Jhamieka S. Greenwood	2127390
EPA 353.2 Rev. 2.0	10/11/2019			10/17/2019 10:47	Beverly Y. Sanders	2127390
EPA 365.1 Rev. 2.0	10/11/2019	10/15/2019 13:09	Lipi Saha	10/16/2019 10:49	Rosalyn Ballman	2127390
EPA 365.1 Rev. 2.0 dissolved	10/11/2019			10/11/2019 16:37	Jhamieka S. Greenwood	2127391
EPA 8270E	10/11/2019	10/14/2019 09:00	Fe-Val Siddell	10/15/2019 17:24	Vandana T. Nagar	2127410
EPA 8321B	10/11/2019	10/11/2019 12:30	Hoor Shaik	10/12/2019 12:22	Juyoung Kim	2127408
	10/11/2019	10/11/2019 14:30	Mohammad Ghaffari	10/11/2019 21:19	Mohammad Ghaffari	2127408
	10/11/2019	10/11/2019 14:30	Mohammad Ghaffari	10/12/2019 03:54	Mohammad Ghaffari	2127408
	10/11/2019	10/11/2019 14:30	Mohammad Ghaffari	10/15/2019 00:12	Mohammad Ghaffari	2127408
SM 2120 B	10/11/2019			10/11/2019 17:22	Madeline Funaro	2127389
SM 2320 B-97	10/11/2019			10/15/2019 22:39	Dale L. Simmons	2127389
SM 2540 C-97	10/11/2019			10/16/2019 13:25	Yijie Li	2127389
SM 2540 D-97	10/11/2019			10/16/2019 13:25	Yijie Li	2127389
SM 4500 F-C-97	10/11/2019			10/15/2019 22:39	Dale L. Simmons	2127389
SM 5310 B-00	10/11/2019			10/17/2019 23:52	Madeline Funaro	2127390