Chemical Analysis Report

SO-DIST-2019-10-15-01

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

Event Description: **SMPs : SCIs**
Request ID: **RQ-2019-07-29-74**
Customer: **SO-DIST**
Project ID: **SMP**

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FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
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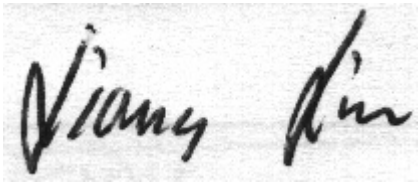
Date Certified: 12-NOV-2019 11:48



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: Arbuckle Branch **Collection Date/Time: 10/14/2019 11:10**

Field ID: G4SD0172 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2127770	EPA 180.1 Rev. 2.0	Turbidity	6.0	A	NTU	P372502	
	EPA 300.0 Rev. 2.1	Chloride	36		mg Cl/L	P372762	
		Sulfate	29		mg SO4/L	P372766	
	SM 2120 B	Color (true)	100		PCU	P372525	
	SM 2320 B-97	Total Alkalinity	15		mg CaCO3/L	P372877	
	SM 2540 C-97	TDS	164		mg/L	P372900	
	SM 2540 D-97	TSS	5	I	mg/L	P372871	
	SM 4500 F-C-97	Fluoride	0.046	I	mg F/L	P372881	
2127771	EPA 350.1 Rev. 2.0	Ammonia-N	0.21		mg N/L	P372775	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P372539	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.074		mg N/L	P372729	
	EPA 365.1 Rev. 2.0	Total-P	0.042		mg P/L	P372579	
	SM 5310 B-00	Organic Carbon	20		mg C/L	P372778	
2127772	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P372516	
2127774	EPA 8321B	2,4-D	0.010		ug/L	P372475	
		Acesulfame K**	0.10	U	ug/L	P372361	
		AMPA**	0.10	U	ug/L	P372361	
		Sucralose**	0.010	UJ	ug/L	P372361	MS, SUR
		Acetaminophen**	0.010	I	ug/L	P372475	
		Acetamiprid**	0.0020	U	ug/L	P372475	
		Endothall**	0.25	U	ug/L	P372361	
		Glufosinate**	0.10	U	ug/L	P372361	
		Glyphosate**	0.10	U	ug/L	P372361	
		Afidopyropen**	0.0020	UJ	ug/L	P372475	
		Bentazon	0.0063		ug/L	P372475	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P372475	
		Carbamazepine**	8.0E-04	U	ug/L	P372475	
		Clothianidin**	0.0020	U	ug/L	P372475	
		Dinotefuran**	0.0020	U	ug/L	P372475	
		Diuron	0.0020	U	ug/L	P372475	
		Fenuron	0.016	U	ug/L	P372475	
		Fluridone**	8.0E-04	U	ug/L	P372475	
		Imazapyr**	0.0040	U	ug/L	P372475	
		Hydrocodone**	0.0020	U	ug/L	P372475	
		Ibuprofen**	0.020	U	ug/L	P372475	
		Imidacloprid	0.0020	U	ug/L	P372475	MS
		Linuron	0.0040	U	ug/L	P372475	
		Mandestrobin**	0.0020	UJ	ug/L	P372475	
		MCPP	0.0020	U	ug/L	P372475	
		Naproxen**	0.0080	U	ug/L	P372475	
		Primidone**	0.0040	U	ug/L	P372475	
		Pyraclostrobin**	0.0020	U	ug/L	P372475	
		Thiamethoxam**	0.0020	U	ug/L	P372475	MS

Field ID: G4SD0172 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2127774	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P372475	
		Triclopyr**	0.0040	U	ug/L	P372475	
2127776	EPA 200.7 Rev. 4.4	Barium	30.4		ug/L	P372597	
		Calcium	13.0		mg/L	P372597	
		Iron	1.01E+03		ug/L	P372597	
		Magnesium	4.43		mg/L	P372597	
		Potassium	6.1		mg/L	P372597	
		Sodium	22.1		mg/L	P372597	
		Zinc	5.0	U	ug/L	P372597	
	EPA 200.8 Rev. 5.4	Aluminum	367		ug/L	P372597	
		Antimony	0.056	I	ug/L	P372597	
		Arsenic	0.63		ug/L	P372597	
		Boron**	92.9		ug/L	P372597	
		Cadmium	0.020	U	ug/L	P372597	
		Chromium	1.1	I	ug/L	P372597	
		Copper	0.55	I	ug/L	P372597	
		Lead	0.24	I	ug/L	P372597	
		Nickel	0.50	U	ug/L	P373262	
		Selenium	0.22	I	ug/L	P372597	
		Silver	0.010	U	ug/L	P372597	
		Thallium	0.10	U	ug/L	P372597	
2127777	EPA 8270E	Acetochlor	0.24	U	ng/L	P372696	
		Alachlor	0.24	U	ng/L	P372696	
		Ametryn	0.59	U	ng/L	P372696	
		Atrazine	0.51	I	ng/L	P372696	
		Atrazine Desethyl	1.5	U	ng/L	P372696	
		Azinphos Methyl	4.9	U	ng/L	P372696	
		Bromacil	0.49	U	ng/L	P372696	
		Butylate	0.39	U	ng/L	P372696	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P372696	
		Chlorpyrifos Methyl	0.098	U	ng/L	P372696	
		Cyanazine	3.2	U	ng/L	P372696	
		Demeton	6.8	UJ	ng/L	P372696	LCS, MS
		Diazinon	0.12	U	ng/L	P372696	
		Dimethenamid**	0.098	U	ng/L	P372696	
		Disulfoton	0.49	U	ng/L	P372696	
		Dithiopyr**	0.098	U	ng/L	P372696	
		EPTC	1.2	U	ng/L	P372696	
		Ethion	0.15	U	ng/L	P372696	
		Ethoprop	0.098	U	ng/L	P372696	
		Fenamiphos	0.49	U	ng/L	P372696	
		Fipronil	0.24	U	ng/L	P372696	
		Fipronil Desulfinyl**	0.12	U	ng/L	P372696	
		Fipronil Sulfide	0.15	UJ	ng/L	P372696	CCV
		Fipronil Sulfone	0.15	U	ng/L	P372696	

Field ID: G4SD0172 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2127777	EPA 8270E	Fonofos	0.20	U	ng/L	P372696	
		Hexazinone	0.49	U	ng/L	P372696	
		Malathion	0.34	U	ng/L	P372696	
		Metalaxyl	0.29	U	ng/L	P372696	
		Metolachlor	0.49	U	ng/L	P372696	
		Metribuzin	0.73	UJ	ng/L	P372696	CCV
		Mevinphos	0.49	U	ng/L	P372696	
		Molinate	0.29	U	ng/L	P372696	
		Norflurazon	0.49	U	ng/L	P372696	
		Oxadiazon**	0.10	I	ng/L	P372696	
		Parathion Ethyl	0.24	U	ng/L	P372696	MS
		Parathion Methyl	0.54	U	ng/L	P372696	
		Pendimethalin	0.98	U	ng/L	P372696	
		Phorate	0.24	U	ng/L	P372696	
		Prodiamine**	0.17	U	ng/L	P372696	
		Prometon	0.88	U	ng/L	P372696	
		Prometryn	0.20	U	ng/L	P372696	
		Simazine	0.49	U	ng/L	P372696	
		Tebuconazole**	0.49	U	ng/L	P372696	
		Terbufos	0.098	U	ng/L	P372696	
		Terbuthylazine	0.42	U	ng/L	P372696	

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 bentazon and imazapyr could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8321B: Refer to the narrative for an explanation of QC Codes. Results confirmed in re-extraction. Surrogate spike recovery exceeding the control limits in sample and sample duplicate matrix spikes.
EPA 8270E: MS accuracy for bromacil, metolachlor, fipronil sulfone, atrazine, metalaxyl, and metribuzin not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P372502

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P372597

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: P372597

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: P373262

Component	Result	Code	Units
Nickel	0.50	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372762

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372766

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372775

Component	Result	Code	Units

Quality Assurance Report
Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372775

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372539

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372729

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372579

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372516

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

Reference Method: EPA 8270E
Batch ID: P372696

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: P372696

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
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8321B
Batch ID: P372361

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P372475

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P372475

Component	Result	Code	Units
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2120 B
Batch ID: P372525

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P372877

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

Reference Method: SM 2540 C-97
Batch ID: P372900

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P372871

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P372881

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P372778

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: P372597

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	100		P	85 - 115
Calcium	103		P	85 - 115
Iron	102		P	85 - 115
Magnesium	114		P	85 - 115
Potassium	102		P	85 - 115
Sodium	108		P	85 - 115
Zinc	98.5		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P372597

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.3		P	85 - 115
Antimony	103		P	85 - 115
Arsenic	103		P	85 - 115
Boron	97.1		P	85 - 115
Cadmium	97.9		P	85 - 115
Chromium	98.2		P	85 - 115
Copper	91.6		P	85 - 115
Lead	99.8		P	85 - 115
Selenium	97.1		P	85 - 115
Silver	100		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P373262

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Nickel	91.3		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372762

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372766

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372775

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372539

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372539

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.6		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372729

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372579

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372516

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

Reference Method: EPA 8270E
Batch ID: P372696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	103	93.9	P/P	69 - 122
Alachlor	104	99.1	P/P	71 - 120
Ametryn	82.1	80.9	P/P	47 - 138
Atrazine	93.0	95.1	P/P	74 - 124
Atrazine Desethyl	87.0	78.1	P/P	38 - 138
Azinphos Methyl	109	89.1	P/P	69 - 154
Bromacil	87.8	80.2	P/P	39 - 121
Butylate	69.6	62.9	P/P	27 - 87.0
Chlorpyrifos Ethyl	106	97.5	P/P	69 - 118
Chlorpyrifos Methyl	97.1	90.4	P/P	70 - 120
Cyanazine	139	123	P/P	20 - 250
Demeton	174	159	F/F	39 - 118
Diazinon	97.6	84.9	P/P	68 - 127
Dimethenamid	89.4	83.0	P/P	66 - 125
Disulfoton	94.3	85.2	P/P	52 - 126
Dithiopyr	93.0	87.2	P/P	67 - 127
EPTC	63.4	59.7	P/P	24 - 88.0
Ethion	56.5	53.4	P/P	51 - 132
Ethoprop	94.5	87.1	P/P	58 - 117
Fenamiphos	86.5	87.9	P/P	38 - 139
Fipronil	91.5	84.7	P/P	61 - 124
Fipronil Desulfinyl	68.1	60.4	P/P	47 - 120
Fipronil Sulfide	105	85.0	P/P	56 - 119
Fipronil Sulfone	90.1	82.8	P/P	50 - 117
Fonofos	95.7	90.0	P/P	60 - 121
Hexazinone	111	102	P/P	55 - 137
Malathion	92.6	87.1	P/P	66 - 126
Metalaxyl	105	96.8	P/P	33 - 140

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P372696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Metolachlor	107	94.4	P/P	69 - 119
Metribuzin	177	149	P/P	31 - 238
Mevinphos	96.5	90.7	P/P	42 - 113
Molinate	70.8	65.9	P/P	32 - 96.0
Norflurazon	107	103	P/P	54 - 123
Oxadiazon	84.1	76.2	P/P	63 - 128
Parathion Ethyl	106	89.3	P/P	72 - 111
Parathion Methyl	110	90.7	P/P	74 - 126
Pendimethalin	98.3	86.1	P/P	61 - 131
Phorate	67.4	82.7	P/P	51 - 115
Prodiamine	61.4	55.5	P/P	38 - 144
Prometon	92.3	80.5	P/P	54 - 119
Prometryn	93.8	83.5	P/P	63 - 120
Simazine	104	96.7	P/P	75 - 126
Tebuconazole	52.3	52.8	P/P	20 - 119
Terbufos	102	96.3	P/P	64 - 116
Terbuthylazine	88.4	80.1	P/P	73 - 117

Reference Method: EPA 8321B
Batch ID: P372361

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	64.0		P	40 - 150
AMPA	116		P	40 - 150
Endothall	86.6		P	40 - 150
Glufosinate	88.6		P	40 - 150
Glyphosate	86.3		P	40 - 140
Sucralose	112		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P372475

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	147		P	40 - 160
Acetaminophen	94.0		P	30 - 160
Acetamiprid	98.8		P	40 - 160
Afidopyropen	101		P	40 - 160
Bentazon	127		P	30 - 160
Benzovindiflupyr	99.4		P	40 - 160
Carbamazepine	114		P	40 - 160
Clothianidin	102		P	40 - 160
Dinotefuran	91.2		P	40 - 160
Diuron	107		P	40 - 160
Fenuron	106		P	40 - 160
Fluridone	103		P	40 - 160
Hydrocodone	99.1		P	40 - 160
Ibuprofen	92.7		P	30 - 160
Imazapyr	101		P	40 - 160
Imidacloprid	108		P	40 - 160
Linuron	89.0		P	40 - 160
Mandestrobin	111		P	40 - 160
MCPP	159		P	40 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P372475

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Naproxen	114		P	40 - 160
Primidone	102		P	40 - 160
Pyraclostrobin	95.2		P	30 - 160
Thiamethoxam	105		P	40 - 160
Tolfenpyrad	58.7		P	40 - 160
Triclopyr	139		P	30 - 160

Reference Method: SM 2120 B
Batch ID: P372525

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.2		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P372877

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	105		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P372881

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P372778

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.8		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P372597

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127981	Barium	99.0	99.6	P/P	80 - 120
2127981	Calcium	102		P	80 - 120
2127981	Iron	99.8		P	80 - 120
2127981	Magnesium	111	109	P/P	80 - 120
2127981	Potassium	113	112	P/P	80 - 120
2127981	Sodium	109	107	P/P	80 - 120
2127981	Zinc	98.3	98.6	P/P	80 - 120
2127995	Barium	101		P	80 - 120
2127995	Calcium	107		P	80 - 120
2127995	Iron	106		P	80 - 120
2127995	Magnesium	111		P	80 - 120
2127995	Potassium	102		P	80 - 120
2127995	Sodium	102		P	80 - 120
2127995	Zinc	100		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P372597

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127981	Aluminum	97.0	95.9	P/P	80 - 120
2127981	Antimony	103	104	P/P	80 - 120
2127981	Arsenic	98.9	102	P/P	80 - 120
2127981	Boron	96.1	95.1	P/P	80 - 120
2127981	Cadmium	98.3	99.6	P/P	80 - 120
2127981	Chromium	98.9	94.6	P/P	80 - 120
2127981	Copper	97.4	92.8	P/P	80 - 120
2127981	Lead	101	101	P/P	80 - 120
2127981	Selenium	90.5	94.9	P/P	80 - 120
2127981	Silver	101	101	P/P	80 - 120
2127981	Thallium	105	104	P/P	80 - 120
2127995	Aluminum	97.5		P	80 - 120
2127995	Antimony	102		P	80 - 120
2127995	Arsenic	100		P	80 - 120
2127995	Boron	98.3		P	80 - 120
2127995	Cadmium	99.3		P	80 - 120
2127995	Chromium	91.3		P	80 - 120
2127995	Copper	89.6		P	80 - 120
2127995	Lead	98.9		P	80 - 120
2127995	Selenium	94.6		P	80 - 120
2127995	Silver	101		P	80 - 120
2127995	Thallium	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P373262

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127969	Nickel	89.4		P	80 - 120
2127982	Nickel	87.8	88.6	P/P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372762

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127425	Chloride	100		P	90 - 110
2127770	Chloride	99.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372766

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127425	Sulfate	102		P	90 - 110
2127770	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127786	Ammonia-N	96.7	97.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372539

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127740	Kjeldahl Nitrogen	101	96.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372729

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127431	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372579

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127735	Total-P	99.8	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372516

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127736	O-Phosphate-P	100	99.3	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P372696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129047	Acetochlor	97.1	97.0	P/P	63 - 129
2129047	Alachlor	104	102	P/P	65 - 127
2129047	Ametryn	83.2	86.7	P/P	40 - 164
2129047	Atrazine Desethyl	72.0	98.2	P/P	14 - 157
2129047	Azinphos Methyl	99.6	91.3	P/P	49 - 180
2129047	Butylate	58.3	49.9	P/P	10 - 94.0
2129047	Chlorpyrifos Ethyl	118	117	P/P	58 - 123
2129047	Chlorpyrifos Methyl	98.5	98.0	P/P	58 - 125

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P372696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129047	Cyanazine	171	170	P/P	24 - 253
2129047	Demeton	188	180	F/F	25 - 149
2129047	Diazinon	96.0	99.0	P/P	59 - 144
2129047	Dimethenamid	95.2	89.9	P/P	46 - 139
2129047	Disulfoton	97.5	93.7	P/P	54 - 132
2129047	Dithiopyr	91.1	91.0	P/P	64 - 130
2129047	EPTC	53.0	47.9	P/P	10 - 92.0
2129047	Ethion	90.0	73.4	P/P	30 - 148
2129047	Ethoprop	102	96.8	P/P	50 - 130
2129047	Fenamiphos	85.9	89.4	P/P	49 - 142
2129047	Fipronil	101	98.7	P/P	46 - 140
2129047	Fipronil Desulfinyl	70.0	68.4	P/P	30 - 121
2129047	Fipronil Sulfide	101	100	P/P	31 - 136
2129047	Fonofos	105	102	P/P	55 - 129
2129047	Hexazinone	121	121	P/P	56 - 141
2129047	Malathion	103	101	P/P	56 - 135
2129047	Mevinphos	104	93.1	P/P	33 - 131
2129047	Molinate	70.3	63.2	P/P	14 - 98.0
2129047	Norflurazon	111	99.6	P/P	34 - 136
2129047	Oxadiazon	88.7	88.0	P/P	67 - 116
2129047	Parathion Ethyl	131	128	F/F	66 - 118
2129047	Parathion Methyl	121	124	P/P	64 - 136
2129047	Pendimethalin	123	129	P/P	59 - 144
2129047	Phorate	81.8	82.7	P/P	42 - 130
2129047	Prodiamine	62.2	61.6	P/P	42 - 148
2129047	Prometon	106	127	P/P	59 - 134
2129047	Prometryn	92.4	94.9	P/P	54 - 135
2129047	Simazine	129	133	P/P	53 - 156
2129047	Tebuconazole	76.6	61.8	P/P	10 - 131
2129047	Terbufos	104	109	P/P	57 - 131
2129047	Terbuthylazine	91.5	89.9	P/P	68 - 125

Reference Method: EPA 8321B
Batch ID: P372361

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127774	Acesulfame K	86.6	82.5	P/P	40 - 150
2127774	AMPA	82.9	80.2	P/P	40 - 150
2127774	Endothall	115	101	P/P	40 - 150
2127774	Glufosinate	80.0	75.5	P/P	40 - 150
2127774	Glyphosate	84.8	85.0	P/P	40 - 140
2127774	Sucralose	30.6	26.5	F/F	40 - 150

Reference Method: EPA 8321B
Batch ID: P372475

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127757	2,4-D	141	152	P/P	40 - 160
2127757	Acetaminophen	95.1	85.5	P/P	30 - 160
2127757	Acetamiprid	110	120	P/P	40 - 160
2127757	Afidopyropen	116	122	P/P	40 - 160
2127757	Benzovindiflupyr	111	114	P/P	40 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P372475

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127757	Carbamazepine	121	117	P/P	40 - 160
2127757	Clothianidin	111	111	P/P	40 - 160
2127757	Dinotefuran	109	115	P/P	40 - 160
2127757	Diuron	113	110	P/P	40 - 160
2127757	Fenuron	116	101	P/P	40 - 160
2127757	Fluridone	104	94.7	P/P	40 - 160
2127757	Hydrocodone	110	111	P/P	40 - 160
2127757	Ibuprofen	98.4	92.6	P/P	30 - 160
2127757	Imidacloprid	171	158	F/P	40 - 160
2127757	Linuron	79.3	77.8	P/P	40 - 160
2127757	Mandestrobin	124	117	P/P	40 - 160
2127757	MCPP	149	153	P/P	40 - 160
2127757	Naproxen	91.5	91.2	P/P	40 - 160
2127757	Primidone	98.5	116	P/P	40 - 160
2127757	Pyraclostrobin	107	112	P/P	30 - 160
2127757	Thiamethoxam	158	162	P/F	40 - 160
2127757	Tolfenpyrad	74.6	83.6	P/P	40 - 160
2127757	Triclopyr	111	118	P/P	30 - 160

Reference Method: SM 4500 F-C-97
Batch ID: P372881

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2128000	Fluoride	95.3	94.8	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P372778

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127771	Organic Carbon	88.5	93.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P372502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127770	Turbidity	0.667	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P372597

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127981	Barium	0.528	Spike	P	0 - 20
2127981	Calcium	1.53	Spike	P	0 - 20
2127981	Iron	1.69	Spike	P	0 - 20
2127981	Magnesium	1.69	Spike	P	0 - 20
2127981	Potassium	1.49	Spike	P	0 - 20
2127981	Sodium	1.22	Spike	P	0 - 20
2127981	Zinc	0.303	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P372597

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127981	Aluminum	1.18	Spike	P	0 - 20
2127981	Antimony	1.30	Spike	P	0 - 20
2127981	Arsenic	3.14	Spike	P	0 - 20
2127981	Boron	1.01	Spike	P	0 - 20
2127981	Cadmium	1.24	Spike	P	0 - 20
2127981	Chromium	4.43	Spike	P	0 - 20
2127981	Copper	4.51	Spike	P	0 - 20
2127981	Lead	0.369	Spike	P	0 - 20
2127981	Selenium	4.81	Spike	P	0 - 20
2127981	Silver	0.321	Spike	P	0 - 20
2127981	Thallium	1.05	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P373262

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127982	Nickel	0.953	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372762

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127425	Chloride	0.323	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372766

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P372766

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127425	Sulfate	0.660	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127786	Ammonia-N	0.573	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372539

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127740	Kjeldahl Nitrogen	2.68	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372729

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127431	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372579

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127735	Total-P	0.111	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372516

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127736	O-Phosphate-P	0.522	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P372696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129047	Acetochlor	0.0689	Spike	P	0 - 30
2129047	Alachlor	1.27	Spike	P	0 - 30
2129047	Ametryn	4.12	Spike	P	0 - 30
2129047	Atrazine	2.72	Spike	P	0 - 30
2129047	Atrazine Desethyl	16.7	Spike	P	0 - 30
2129047	Azinphos Methyl	8.78	Spike	P	0 - 30
2129047	Bromacil	3.98	Spike	P	0 - 30
2129047	Butylate	15.5	Spike	P	0 - 30
2129047	Chlorpyrifos Ethyl	0.263	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P372696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129047	Chlorpyrifos Methyl	0.585	Spike	P	0 - 30
2129047	Cyanazine	0.951	Spike	P	0 - 30
2129047	Demeton	4.68	Spike	P	0 - 30
2129047	Diazinon	3.12	Spike	P	0 - 30
2129047	Dimethenamid	5.64	Spike	P	0 - 30
2129047	Disulfoton	3.99	Spike	P	0 - 30
2129047	Dithiopyr	0.118	Spike	P	0 - 30
2129047	EPTC	10.1	Spike	P	0 - 30
2129047	Ethion	20.3	Spike	P	0 - 30
2129047	Ethoprop	5.62	Spike	P	0 - 30
2129047	Fenamiphos	3.96	Spike	P	0 - 30
2129047	Fipronil	1.87	Spike	P	0 - 30
2129047	Fipronil Desulfinyl	2.36	Spike	P	0 - 30
2129047	Fipronil Sulfide	0.444	Spike	P	0 - 30
2129047	Fipronil Sulfone	4.88	Spike	P	0 - 30
2129047	Fonofos	2.53	Spike	P	0 - 30
2129047	Hexazinone	0.412	Spike	P	0 - 30
2129047	Malathion	2.13	Spike	P	0 - 30
2129047	Metalaxyl	1.54	Spike	P	0 - 30
2129047	Metolachlor	2.24	Spike	P	0 - 30
2129047	Metribuzin	20.4	Spike	P	0 - 30
2129047	Mevinphos	11.5	Spike	P	0 - 30
2129047	Molinate	10.7	Spike	P	0 - 30
2129047	Norflurazon	9.03	Spike	P	0 - 30
2129047	Oxadiazon	0.791	Spike	P	0 - 30
2129047	Parathion Ethyl	2.35	Spike	P	0 - 30
2129047	Parathion Methyl	2.24	Spike	P	0 - 30
2129047	Pendimethalin	4.42	Spike	P	0 - 30
2129047	Phorate	1.11	Spike	P	0 - 30
2129047	Prodiamine	0.883	Spike	P	0 - 30
2129047	Prometon	17.7	Spike	P	0 - 30
2129047	Prometryn	2.67	Spike	P	0 - 30
2129047	Simazine	3.49	Spike	P	0 - 30
2129047	Tebuconazole	17.8	Spike	P	0 - 30
2129047	Terbufos	4.13	Spike	P	0 - 30
2129047	Terbuthylazine	1.69	Spike	P	0 - 30
LFB	Acetochlor	9.33	LCS	P	0 - 30
LFB	Alachlor	4.76	LCS	P	0 - 30
LFB	Ametryn	1.52	LCS	P	0 - 30
LFB	Atrazine	2.14	LCS	P	0 - 30
LFB	Atrazine Desethyl	10.8	LCS	P	0 - 30
LFB	Azinphos Methyl	19.8	LCS	P	0 - 30
LFB	Bromacil	9.06	LCS	P	0 - 30
LFB	Butylate	10.1	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	8.08	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	7.12	LCS	P	0 - 30
LFB	Cyanazine	12.4	LCS	P	0 - 30
LFB	Demeton	9.41	LCS	P	0 - 30
LFB	Diazinon	13.9	LCS	P	0 - 30
LFB	Dimethenamid	7.45	LCS	P	0 - 30
LFB	Disulfoton	10.2	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P372696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dithiopyr	6.47	LCS	P	0 - 30
LFB	EPTC	5.91	LCS	P	0 - 30
LFB	Ethion	5.73	LCS	P	0 - 30
LFB	Ethoprop	8.11	LCS	P	0 - 30
LFB	Fenamiphos	1.60	LCS	P	0 - 30
LFB	Fipronil	7.80	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	12.0	LCS	P	0 - 30
LFB	Fipronil Sulfide	21.0	LCS	P	0 - 30
LFB	Fipronil Sulfone	8.52	LCS	P	0 - 30
LFB	Fonofos	6.13	LCS	P	0 - 30
LFB	Hexazinone	8.33	LCS	P	0 - 30
LFB	Malathion	6.14	LCS	P	0 - 30
LFB	Metalaxyl	7.79	LCS	P	0 - 30
LFB	Metolachlor	12.5	LCS	P	0 - 30
LFB	Metribuzin	17.0	LCS	P	0 - 30
LFB	Mevinphos	6.19	LCS	P	0 - 30
LFB	Molinate	7.20	LCS	P	0 - 30
LFB	Norflurazon	3.98	LCS	P	0 - 30
LFB	Oxadiazon	9.83	LCS	P	0 - 30
LFB	Parathion Ethyl	17.3	LCS	P	0 - 30
LFB	Parathion Methyl	19.0	LCS	P	0 - 30
LFB	Pendimethalin	13.2	LCS	P	0 - 30
LFB	Phorate	20.3	LCS	P	0 - 30
LFB	Prodiamine	10.2	LCS	P	0 - 30
LFB	Prometon	13.7	LCS	P	0 - 30
LFB	Prometryn	11.6	LCS	P	0 - 30
LFB	Simazine	6.87	LCS	P	0 - 30
LFB	Tebuconazole	0.945	LCS	P	0 - 30
LFB	Terbufos	5.58	LCS	P	0 - 30
LFB	Terbuthylazine	9.78	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P372361

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127774	Acesulfame K	4.81	Spike	P	0 - 30
2127774	AMPA	3.39	Spike	P	0 - 30
2127774	Endothall	12.9	Spike	P	0 - 30
2127774	Glufosinate	5.79	Spike	P	0 - 30
2127774	Glyphosate	0.133	Spike	P	0 - 30
2127774	Sucralose	14.5	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P372475

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127757	2,4-D	6.65	Spike	P	0 - 30
2127757	Acetaminophen	10.6	Spike	P	0 - 30
2127757	Acetamiprid	8.74	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P372475

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127757	Afidopyropen	4.64	Spike	P	0 - 30
2127757	Bentazon	1.47	Spike	P	0 - 30
2127757	Benzovindiflupyr	2.69	Spike	P	0 - 30
2127757	Carbamazepine	3.36	Spike	P	0 - 30
2127757	Clothianidin	0.124	Spike	P	0 - 30
2127757	Dinotefuran	5.29	Spike	P	0 - 30
2127757	Diuron	1.68	Spike	P	0 - 30
2127757	Fenuron	14.6	Spike	P	0 - 30
2127757	Fluridone	5.60	Spike	P	0 - 30
2127757	Hydrocodone	1.23	Spike	P	0 - 30
2127757	Ibuprofen	6.09	Spike	P	0 - 30
2127757	Imazapyr	1.59	Spike	P	0 - 30
2127757	Imidacloprid	6.50	Spike	P	0 - 30
2127757	Linuron	2.00	Spike	P	0 - 30
2127757	Mandestrobin	5.93	Spike	P	0 - 30
2127757	MCPP	2.87	Spike	P	0 - 30
2127757	Naproxen	0.384	Spike	P	0 - 30
2127757	Primidone	15.9	Spike	P	0 - 30
2127757	Pyraclostrobin	5.10	Spike	P	0 - 30
2127757	Thiamethoxam	2.15	Spike	P	0 - 30
2127757	Tolfenpyrad	11.4	Spike	P	0 - 30
2127757	Triclopyr	6.09	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P372525

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127734	Color (true)	0.952	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P372877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128000	Total Alkalinity	0.360	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P372900

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127425	TDS	6.22	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P372881

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128000	Fluoride	0.477	Spike	P	0 - 2.5

Quality Assurance Report
Precision

Reference Method: SM 5310 B-00
Batch ID: P372778

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127771	Organic Carbon	2.66	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2127774
Field Sample ID: G4SD0172

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	127	P	30 - 160
EPA 8321B	Acetaminophen-d4	67.7	P	30 - 160
EPA 8321B	Bentazon-d7	39.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	79.7	P	30 - 160
EPA 8321B	Diuron-d6	64.1	P	30 - 160
EPA 8321B	Endothall-d6	119	P	30 - 160
EPA 8321B	Endothall-d6	119	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	74.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	74.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	92.8	P	30 - 160
EPA 8321B	Primidone-d5	78.8	P	30 - 160
EPA 8321B	Sucralose-d6	25.8	F	30 - 160
EPA 8321B	Sucralose-d6	25.8	F	30 - 160

Lab Sample ID: 2127777
Field Sample ID: G4SD0172

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	94.3	P	68 - 130
EPA 8270E	Terbufos-d10	103	P	61 - 136

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A94965
Included Lab Sample IDs: 2127770

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	99.0	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A94971
Included Lab Sample IDs: 2127772

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.3	97.9	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A94979
Included Lab Sample IDs: 2127770

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.1	98.6	P/P	90 - 115

Reference Method: EPA 8321B
Run ID: A94981
Included Lab Sample IDs: 2127774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	116	121	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A94986
Included Lab Sample IDs: 2127774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	87.7	65.3	P/P	60 - 160
Glufosinate	69.1	63.1	P/P	60 - 160
Glyphosate	71.6	72.8	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A95003
Included Lab Sample IDs: 2127770

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

Reference Method: EPA 8321B
Run ID: A95006
Included Lab Sample IDs: 2127774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	139	61.1	P/P	60 - 160
Endothall	102	96.9	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A95031
Included Lab Sample IDs: 2127771

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A95043
Included Lab Sample IDs: 2127776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	101	P/P	90 - 110
Calcium	104	103	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Magnesium	102	102	P/P	90 - 110
Potassium	101	100	P/P	90 - 110
Sodium	101	100	P/P	90 - 110
Zinc	99.5	99.3	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A95046
Included Lab Sample IDs: 2127774

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	98.7	101	P/P	50 - 150
Acetaminophen	107	108	P/P	60 - 160
Acetamiprid	108	114	P/P	50 - 150
Afidopyropen	120	102	P/P	50 - 150
Bentazon	122	126	P/P	50 - 160
Benzovindiflupyr	117	123	P/P	50 - 150
Carbamazepine	110	112	P/P	60 - 150
Clothianidin	104	101	P/P	60 - 150
Dinotefuran	92.2	100	P/P	50 - 150
Diuron	114	116	P/P	60 - 150
Fenuron	105	103	P/P	60 - 150
Fluridone	107	106	P/P	60 - 160
Hydrocodone	102	103	P/P	60 - 150
Ibuprofen	105	101	P/P	50 - 160
Imazapyr	84.2	84.3	P/P	50 - 150
Imidacloprid	103	104	P/P	60 - 150
Linuron	102	103	P/P	60 - 150
Mandestrobin	126	128	P/P	50 - 150
MCPP	122	135	P/P	50 - 150
Naproxen	85.1	151	P/P	50 - 160
Primidone	94.7	97.9	P/P	60 - 150
Pyraclostrobin	119	116	P/P	60 - 150
Thiamethoxam	105	103	P/P	50 - 150
Tolfenpyrad	118	117	P/P	60 - 150
Triclopyr	123	119	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A95072
Included Lab Sample IDs: 2127771

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A95072
Included Lab Sample IDs: 2127771

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A95080
Included Lab Sample IDs: 2127771

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: 2127771

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.8	94.0	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A95130
Included Lab Sample IDs: 2127770

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	105	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A95130
Included Lab Sample IDs: 2127770

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A95145
Included Lab Sample IDs: 2127771

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.3	98.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A95182
Included Lab Sample IDs: 2127776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	96.8	P/P	90 - 110
Antimony	101	102	P/P	90 - 110
Arsenic	104	104	P/P	90 - 110
Boron	99.1	98.1	P/P	90 - 110
Cadmium	101	103	P/P	90 - 110
Lead	100	101	P/P	90 - 110
Selenium	104	104	P/P	90 - 110
Silver	99.7	101	P/P	90 - 110
Thallium	97.1	97.3	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A95228
Included Lab Sample IDs: 2127776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	93.0	91.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A95370
Included Lab Sample IDs: 2127776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	97.7	97.6	P/P	90 - 110
Nickel	91.3	90.0	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A95396
Included Lab Sample IDs: 2127777

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	104		P	80 - 120
Alachlor	103		P	80 - 120
Ametryn	99.6		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	90.3		P	80 - 120
Azinphos Methyl	96.2		P	80 - 120
Bromacil	106		P	80 - 120
Butylate	96.9		P	80 - 120
Chlorpyrifos Ethyl	103		P	80 - 120
Chlorpyrifos Methyl	97.5		P	80 - 120
Cyanazine	81.9		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	103		P	80 - 120
Dimethenamid	105		P	80 - 120
Disulfoton	99.5		P	80 - 120
Dithiopyr	103		P	80 - 120
EPTC	101		P	80 - 120
Ethion	101		P	80 - 120
Ethoprop	100		P	80 - 120
Fenamiphos	96.8		P	80 - 120
Fipronil	105		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	122*		F	80 - 120
Fipronil Sulfone	97.9		P	80 - 120
Fonofos	98.7		P	80 - 120
Hexazinone	98.3		P	80 - 120
Malathion	93.9		P	80 - 120
Metalaxyl	106		P	80 - 120
Metolachlor	111		P	80 - 120
Metribuzin	72.3*		F	80 - 120
Mevinphos	103		P	80 - 120
Molinate	98.7		P	80 - 120
Norflurazon	105		P	80 - 120
Oxadiazon	106		P	80 - 120
Parathion Ethyl	100		P	80 - 120
Parathion Methyl	96.3		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A95396
Included Lab Sample IDs: 2127777

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pendimethalin	98.1		P	80 - 120
Phorate	105		P	80 - 120
Prodiamine	97.2		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	95.7		P	80 - 120
Simazine	98.0		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	100		P	80 - 120
Terbuthylazine	104		P	80 - 120

* 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		
							LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							0.667	
EPA 200.7 Rev. 4.4	Barium	100		99.0	99.6	101			0.528
	Calcium	103		102	107				1.53
	Iron	102		99.8	106				1.69
	Magnesium	114		111	109	111			1.69
	Potassium	102		113	112	102			1.49
	Sodium	108		109	107	102			1.22
	Zinc	98.5		98.3	98.6	100			0.303
EPA 200.8 Rev. 5.4	Aluminum	98.3		97.0	95.9	97.5			1.18
	Antimony	103		103	104	102			1.30
	Arsenic	103		98.9	102	100			3.14
	Boron	97.1		96.1	95.1	98.3			1.01
	Cadmium	97.9		98.3	99.6	99.3			1.24
	Chromium	98.2		98.9	94.6	91.3			4.43
	Copper	91.6		97.4	92.8	89.6			4.51
	Lead	99.8		101	101	98.9			0.369
	Nickel	91.3		89.4	87.8	88.6			0.953
	Selenium	97.1		90.5	94.9	94.6			4.81
	Silver	100		101	101	101			0.321
	Thallium	103		105	104	102			1.05
EPA 300.0 Rev. 2.1	Chloride	102		100	99.4			0.323	
	Sulfate	102		102	103			0.660	
EPA 350.1 Rev. 2.0	Ammonia-N	101		96.7	97.4				0.573
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.6		101	96.2				2.68
EPA 353.2 Rev. 2.0	NO2NO3-N	100		100	100				0.0
EPA 365.1 Rev. 2.0	Total-P	98.8		99.8	99.6				0.111
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103		100	99.3				0.522
EPA 8270E	Acetochlor	103	93.9	97.1	97.0		9.33		0.0689
	Alachlor	104	99.1	104	102		4.76		1.27
	Ametryn	82.1	80.9	83.2	86.7		1.52		4.12
	Atrazine	95.1	93.0				2.14		2.72
	Atrazine Desethyl	87.0	78.1	72.0	98.2		10.8		16.7
	Azinphos Methyl	89.1	109	99.6	91.3		19.8		8.78
	Bromacil	80.2	87.8				9.06		3.98
	Butylate	62.9	69.6	58.3	49.9		10.1		15.5
	Chlorpyrifos Ethyl	97.5	106	118	117		8.08		0.263
	Chlorpyrifos Methyl	97.1	90.4	98.5	98.0		7.12		0.585
	Cyanazine	139	123	171	170		12.4		0.951
	Demeton	174	159	188	180		9.41		4.68
	Diazinon	97.6	84.9	96.0	99.0		13.9		3.12
	Dimethenamid	89.4	83.0	95.2	89.9		7.45		5.64
	Disulfoton	94.3	85.2	97.5	93.7		10.2		3.99
	Dithiopyr	93.0	87.2	91.1	91.0		6.47		0.118
	EPTC	63.4	59.7	53.0	47.9		5.91		10.1
	Ethion	56.5	53.4	90.0	73.4		5.73		20.3
	Ethoprop	94.5	87.1	102	96.8		8.11		5.62
	Fenamiphos	86.5	87.9	85.9	89.4		1.60		3.96
	Fipronil	91.5	84.7	101	98.7		7.80		1.87
	Fipronil Desulfinyl	68.1	60.4	70.0	68.4		12.0		2.36
	Fipronil Sulfide	105	85.0	101	100		21.0		0.444
	Fipronil Sulfone	90.1	82.8				8.52		4.88
	Fonofos	95.7	90.0	105	102		6.13		2.53
	Hexazinone	111	102	121	121		8.33		0.412
	Malathion	92.6	87.1	103	101		6.14		2.13

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Metalaxyl	105	96.8			7.79		1.54
	Metolachlor	107	94.4			12.5		2.24
	Metribuzin	177	149			17.0		20.4
	Mevinphos	90.7	96.5	104	93.1	6.19		11.5
	Molinate	65.9	70.8	70.3	63.2	7.20		10.7
	Norflurazon	103	107	111	99.6	3.98		9.03
	Oxadiazon	76.2	84.1	88.7	88.0	9.83		0.791
	Parathion Ethyl	89.3	106	131	128	17.3		2.35
	Parathion Methyl	90.7	110	121	124	19.0		2.24
	Pendimethalin	86.1	98.3	123	129	13.2		4.42
	Phorate	82.7	67.4	81.8	82.7	20.3		1.11
	Prodiamine	55.5	61.4	62.2	61.6	10.2		0.883
	Prometon	80.5	92.3	106	127	13.7		17.7
	Prometryn	83.5	93.8	92.4	94.9	11.6		2.67
	Simazine	96.7	104	129	133	6.87		3.49
	Tebuconazole	52.8	52.3	76.6	61.8	0.945		17.8
	Terbufos	96.3	102	104	109	5.58		4.13
	Terbuthylazine	80.1	88.4	91.5	89.9	9.78		1.69
EPA 8321B	2,4-D	147		141	152			6.65
	Acesulfame K	64.0		86.6	82.5			4.81
	Acetaminophen	94.0		95.1	85.5			10.6
	Acetamiprid	98.8		110	120			8.74
	Afidopyropen	101		116	122			4.64
	AMPA	116		82.9	80.2			3.39
	Bentazon	127						1.47
	Benzovindiflupyr	99.4		111	114			2.69
	Carbamazepine	114		121	117			3.36
	Clothianidin	102		111	111			0.124
	Dinotefuran	91.2		109	115			5.29
	Diuron	107		113	110			1.68
	Endothall	86.6		115	101			12.9
	Fenuron	106		116	101			14.6
	Fluridone	103		104	94.7			5.60
	Glufosinate	88.6		80.0	75.5			5.79
	Glyphosate	86.3		84.8	85.0			0.133
	Hydrocodone	99.1		110	111			1.23
	Ibuprofen	92.7		98.4	92.6			6.09
	Imazapyr	101						1.59
	Imidacloprid	108		171	158			6.50
	Linuron	89.0		79.3	77.8			2.00
	Mandestrobin	111		124	117			5.93
	MCPP	159		149	153			2.87
	Naproxen	114		91.5	91.2			0.384
	Primidone	102		98.5	116			15.9
	Pyraclostrobin	95.2		107	112			5.10
	Sucralose	112		30.6	26.5			14.5
	Thiamethoxam	105		158	162			2.15
	Tolfenpyrad	58.7		74.6	83.6			11.4
	Triclopyr	139		111	118			6.09
SM 2120 B	Color (true)	99.2					0.952	
SM 2320 B-97	Total Alkalinity	105					0.360	
SM 2540 C-97	TDS						6.22	
SM 4500 F-C-97	Fluoride	94.8		95.3	94.8			0.477
SM 5310 B-00	Organic Carbon	95.8		88.5	93.6			2.66

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2127770
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2127776
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2127776
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2127770
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2127770
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2127771
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2127771
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2127771
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2127771
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2127772
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2127777
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2127774
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2127774
SM 2120 B / E31780	True Color measured at 450 nm	2127770
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2127770
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2127770
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2127770
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2127770
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2127771

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	10/15/2019			10/15/2019 16:32	Samantha Davila	2127770
EPA 200.7 Rev. 4.4	10/15/2019	10/16/2019 16:55	Elliott D. Healy	10/17/2019 14:46	Alexander Thompson	2127776
EPA 200.8 Rev. 5.4	10/15/2019	10/16/2019 16:55	Elliott D. Healy	10/23/2019 04:27	Robert K Palmer	2127776
	10/15/2019	10/16/2019 16:55	Elliott D. Healy	10/24/2019 21:01	Robert K Palmer	2127776
	10/15/2019	10/16/2019 16:55	Elliott D. Healy	10/31/2019 04:31	Robert K Palmer	2127776
	10/15/2019	10/28/2019 17:00	Elliott D. Healy	10/31/2019 07:24	Robert K Palmer	2127776
EPA 300.0 Rev. 2.1	10/15/2019			10/17/2019 15:57	Jhamieka S. Greenwood	2127770
EPA 350.1 Rev. 2.0	10/15/2019			10/18/2019 14:50	Ping Hua	2127771
EPA 351.2 Rev. 2.0	10/15/2019	10/16/2019 12:17	Sima Feizi	10/18/2019 20:28	Jhamieka S. Greenwood	2127771
EPA 353.2 Rev. 2.0	10/15/2019			10/17/2019 11:12	Beverly Y. Sanders	2127771
EPA 365.1 Rev. 2.0	10/15/2019	10/16/2019 10:45	Lipi Saha	10/17/2019 16:49	Rosalyn Ballman	2127771
EPA 365.1 Rev. 2.0 dissolved	10/15/2019			10/15/2019 15:51	Virginia P. Brown	2127772
EPA 8270E	10/15/2019	10/18/2019 09:00	Julie Wi	10/22/2019 23:57	Vandana T. Nagar	2127777
EPA 8321B	10/15/2019	10/15/2019 14:45	Mohammad Ghaffari	10/15/2019 15:52	Mohammad Ghaffari	2127774
	10/15/2019	10/15/2019 14:45	Mohammad Ghaffari	10/15/2019 21:29	Mohammad Ghaffari	2127774
	10/15/2019	10/15/2019 14:45	Mohammad Ghaffari	10/16/2019 10:59	Mohammad Ghaffari	2127774
	10/15/2019	10/17/2019 10:00	Hoor Shaik	10/18/2019 02:28	Juyoung Kim	2127774
SM 2120 B	10/15/2019			10/15/2019 17:43	Madeline Funaro	2127770
SM 2320 B-97	10/15/2019			10/19/2019 07:43	Dale L. Simmons	2127770
SM 2540 C-97	10/15/2019			10/16/2019 13:25	Yijie Li	2127770
SM 2540 D-97	10/15/2019			10/16/2019 13:25	Yijie Li	2127770
SM 4500 F-C-97	10/15/2019			10/19/2019 07:43	Dale L. Simmons	2127770
SM 5310 B-00	10/15/2019			10/18/2019 02:07	Madeline Funaro	2127771