

Chemical Analysis Report

NE-DIST-2020-11-06-01

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

Event Description: **Stevens, Pringle SCI**
Request ID: **RQ-2020-10-26-13**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
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8800 Baymeadows Way West
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Jacksonville, FL 32256
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 01-DEC-2020 10:03

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

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: Moses Cr At US 1

Collection Date/Time: 11/05/2020 11:30

Field ID: 27010050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206980	EPA 180.1 Rev. 2.0	Turbidity	2.5		NTU	P389883	
	EPA 300.0 Rev. 2.1	Chloride	48		mg Cl/L	P390002	
		Sulfate	7.1		mg SO4/L	P390004	
	SM 2120 B-2011	Color (true)	570		PCU	P389878	
	SM 2320 B-2011	Total Alkalinity	48		mg CaCO3/L	P389994	
	SM 2540 C-2011	TDS	279		mg/L	P390170	
	SM 2540 D-2011	TSS	3	I	mg/L	P390147	
2206982	SM 4500 F-C-2011	Fluoride	0.084	I	mg F/L	P389995	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P389899	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P390010	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.01	I	mg N/L	P389917	
	EPA 365.1 Rev. 2.0	Total-P	0.050		mg P/L	P389933	
2206984	SM 5310 B-2011	Organic Carbon	50		mg C/L	P390046	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.023		mg P/L	P389888	
2206991	EPA 8321B	2,4-D	0.0020	U	ug/L	P389930	
		Acesulfame K**	0.10	U	ug/L	P389918	
		AMPA**	0.10	U	ug/L	P389918	
		Sucralose**	0.010	U	ug/L	P389918	
		Acetaminophen**	0.0080	U	ug/L	P389930	
		Acetamiprid**	0.0020	U	ug/L	P389930	
		Endothall**	0.25	U	ug/L	P389918	
		Glufosinate**	0.10	U	ug/L	P389918	
		Glyphosate**	0.10	U	ug/L	P389918	
		Afidopyropen**	0.0020	U	ug/L	P389930	
		Bentazon	0.0045		ug/L	P389930	
		Benzovindiflupyr**	0.0020	U	ug/L	P389930	
		Carbamazepine**	8.0E-04	U	ug/L	P389930	
		Clothianidin**	0.0020	U	ug/L	P389930	
		Dinotefuran**	0.0020	U	ug/L	P389930	
		Diuron	0.0020	UJ	ug/L	P389930	MS, SUR
		Fenuron	0.016	UJ	ug/L	P389930	SUR
		Fluridone**	8.0E-04	UJ	ug/L	P389930	SUR
		Imazapyr**	0.11		ug/L	P389930	
		Hydrocodone**	0.0020	U	ug/L	P389930	
		Ibuprofen**	0.020	U	ug/L	P389930	
		Imidacloprid	0.0024	IJ	ug/L	P389930	SUR
		Linuron	0.0040	UJ	ug/L	P389930	SUR
		Mandestrobin**	0.0020	U	ug/L	P389930	
		MCP	0.0020	U	ug/L	P389930	
		Naproxen**	0.0080	U	ug/L	P389930	MS
		Primidone**	0.0040	U	ug/L	P389930	
		Pyraclostrobin**	0.0020	UJ	ug/L	P389930	SUR
		Thiamethoxam**	0.0020	U	ug/L	P389930	

Field ID: 27010050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206991	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P389930	
		Triclopyr**	0.0040	U	ug/L	P389930	
2206994	EPA 200.7 Rev. 4.4	Barium	16.5		ug/L	P389937	
		Calcium	25.6		mg/L	P389937	
		Iron	1.37E+03		ug/L	P389937	
		Magnesium	3.69		mg/L	P389937	
		Potassium	0.62	I	mg/L	P389937	
		Sodium	26.4		mg/L	P389937	
		Zinc	5.0	U	ug/L	P389937	
	EPA 200.8 Rev. 5.4	Aluminum	428		ug/L	P389937	
		Antimony	0.063	I	ug/L	P389937	
		Arsenic	0.90		ug/L	P389937	
		Beryllium	0.025	I	ug/L	P389937	
		Boron**	26.3		ug/L	P389937	
		Cadmium	0.020	U	ug/L	P389937	
		Chromium	0.74	I	ug/L	P389937	
		Copper	0.40	U	ug/L	P389937	
		Lead	0.38	I	ug/L	P389937	
		Nickel	0.56	I	ug/L	P389937	
		Selenium	0.20	U	ug/L	P389937	MS
		Silver	0.010	U	ug/L	P389937	
		Thallium	0.10	U	ug/L	P389937	
	SM 2340B	Hardness	79.2		mg/L	P389937	
2206997	EPA 8270E	Acetochlor	0.24	U	ng/L	P389780	
		Alachlor	0.24	U	ng/L	P389780	
		Ametryn	0.58	U	ng/L	P389780	
		Atrazine	60		ng/L	P389780	
		Atrazine Desethyl	5.1	I	ng/L	P389780	
		Azinphos Methyl	1.9	U	ng/L	P389780	
		Azoxystrobin**	0.48	U	ng/L	P389780	
		Bromacil	0.48	U	ng/L	P389780	
		Butylate	0.39	U	ng/L	P389780	
		Carbophenothion	0.48	U	ng/L	P389780	
		Carfentrazone Ethyl**	0.097	U	ng/L	P389780	
		Chlorpyrifos Ethyl	0.26	I	ng/L	P389780	
		Chlorpyrifos Methyl	0.048	U	ng/L	P389780	
		Cyanazine	3.2	U	ng/L	P389780	
		Demeton	1.5	U	ng/L	P389780	
		Diazinon	0.12	U	ng/L	P389780	
		Difenoconazole**	0.58	U	ng/L	P389780	
		Dimethenamid**	0.097	U	ng/L	P389780	
		Disulfoton	0.48	U	ng/L	P389780	
		Dithiopyr**	0.097	U	ng/L	P389780	
		EPTC	1.2	U	ng/L	P389780	
		Ethion	0.15	U	ng/L	P389780	

Field ID: 27010050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206997	EPA 8270E	Ethoprop	0.097	U	ng/L	P389780	
		Fenamiphos	0.48	U	ng/L	P389780	
		Fenbuconazole**	0.12	U	ng/L	P389780	
		Fipronil	0.24	U	ng/L	P389780	
		Fipronil Desulfinyl**	0.12	U	ng/L	P389780	
		Fipronil Sulfide	0.16	I	ng/L	P389780	
		Fipronil Sulfone	0.27	I	ng/L	P389780	
		Fluazifop-P-butyl**	0.097	U	ng/L	P389780	
		Fludioxonil**	0.12	U	ng/L	P389780	
		Flumioxazin**	1.7	U	ng/L	P389780	
		Flutolanil**	0.097	U	ng/L	P389780	
		Fluxapyroxad**	0.097	U	ng/L	P389780	
		Fonofos	0.19	U	ng/L	P389780	
		Hexazinone	1.2	I	ng/L	P389780	
		Imazalil**	0.73	U	ng/L	P389780	
		Iprodione**	0.58	U	ng/L	P389780	
		Malathion	0.34	U	ng/L	P389780	
		Metalaxyl	0.73	U	ng/L	P389780	
		Metolachlor	0.48	U	ng/L	P389780	
		Metribuzin	3.2	U	ng/L	P389780	
		Mevinphos	0.48	U	ng/L	P389780	
		Molinate	0.29	U	ng/L	P389780	
		Myclobutanil**	0.62	I	ng/L	P389780	
		Naled**	1.5	U	ng/L	P389780	
		Norflurazon	0.48	U	ng/L	P389780	
		Oxadiazon	0.097	U	ng/L	P389780	
		Oxyfluorfen**	0.15	U	ng/L	P389780	
		Parathion Ethyl	0.24	U	ng/L	P389780	
		Parathion Methyl	0.53	U	ng/L	P389780	
		Pendimethalin	0.97	U	ng/L	P389780	
		Phorate	0.24	U	ng/L	P389780	
		Prodiamine**	0.17	U	ng/L	P389780	
		Prometon	0.87	U	ng/L	P389780	
		Prometryn	0.19	U	ng/L	P389780	
		Pronamide**	0.15	U	ng/L	P389780	
		Propiconazole**	0.48	U	ng/L	P389780	
		Pyriproxyfen**	0.12	U	ng/L	P389780	
		Simazine	1.2	I	ng/L	P389780	
		Sulfentrazone**	1.3	I	ng/L	P389780	
		Tebuconazole**	0.48	U	ng/L	P389780	
		Terbufos	0.097	U	ng/L	P389780	
		Terbuthylazine	0.41	U	ng/L	P389780	

Field ID: 27010050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample. Surrogate spike recovery exceeding the control limits. Results confirmed in re-extraction. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked.

Sample Location: Stevens Branch S of Pelicer Cemetery Off Cr 204

Collection Date/Time: 11/05/2020 10:40

Field ID: 27010070

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206981	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P389883	
	EPA 300.0 Rev. 2.1	Chloride	27		mg Cl/L	P390002	
		Sulfate	11		mg SO4/L	P390004	
	SM 2120 B-2011	Color (true)	620		PCU	P389878	
	SM 2320 B-2011	Total Alkalinity	54		mg CaCO3/L	P389994	
	SM 2540 C-2011	TDS	262	A	mg/L	P390170	
	SM 2540 D-2011	TSS	4	IA	mg/L	P390147	
	SM 4500 F-C-2011	Fluoride	0.10		mg F/L	P389995	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P389900	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P390010	
2206983	EPA 353.2 Rev. 2.0	NO2NO3-N	0.012		mg N/L	P389917	
	EPA 365.1 Rev. 2.0	Total-P	0.066		mg P/L	P389933	
	SM 5310 B-2011	Organic Carbon	58		mg C/L	P390046	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.045		mg P/L	P389888	
	EPA 8321B	2,4-D	0.0020	U	ug/L	P389930	
2206992		Acesulfame K**	0.10	U	ug/L	P389918	
		AMPA**	0.10	U	ug/L	P389918	
		Sucralose**	0.010	U	ug/L	P389918	
		Acetaminophen**	0.0080	U	ug/L	P389930	
		Acetamiprid**	0.0020	U	ug/L	P389930	
		Endothall**	0.25	U	ug/L	P389918	
		Glufosinate**	0.10	U	ug/L	P389918	
		Glyphosate**	0.10	U	ug/L	P389918	
		Afidopyropen**	0.0020	U	ug/L	P389930	
		Bentazon	8.0E-04	U	ug/L	P389930	
		Benzovindiflupyr**	0.0020	U	ug/L	P389930	
		Carbamazepine**	8.0E-04	U	ug/L	P389930	
		Clothianidin**	0.0020	U	ug/L	P389930	
		Dinotefuran**	0.0020	U	ug/L	P389930	
		Diuron	0.0020	UJ	ug/L	P389930	MS, SUR
		Fenuron	0.016	UJ	ug/L	P389930	SUR
		Fluridone**	8.0E-04	UJ	ug/L	P389930	SUR
		Imazapyr**	0.018		ug/L	P389930	
		Hydrocodone**	0.0020	U	ug/L	P389930	
		Ibuprofen**	0.020	U	ug/L	P389930	
		Imidacloprid	0.0020	UJ	ug/L	P389930	SUR
		Linuron	0.0040	UJ	ug/L	P389930	SUR
		Mandestrobin**	0.0020	U	ug/L	P389930	
		MCPP	0.0020	U	ug/L	P389930	
		Naproxen**	0.0080	U	ug/L	P389930	MS
		Primidone**	0.0040	U	ug/L	P389930	
		Pyraclostrobin**	0.0020	UJ	ug/L	P389930	SUR

Field ID: 27010070

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206992	EPA 8321B	Thiamethoxam**	0.0020	U	ug/L	P389930	
		Tolfenpyrad**	0.0020	U	ug/L	P389930	
		Triclopyr**	0.0040	U	ug/L	P389930	
2206995	EPA 200.7 Rev. 4.4	Barium	13.0		ug/L	P389937	
		Calcium	30.4		mg/L	P389937	
		Iron	930		ug/L	P389937	
		Magnesium	2.25		mg/L	P389937	
		Potassium	0.34	I	mg/L	P389937	
		Sodium	14.7		mg/L	P389937	
		Zinc	5.0	U	ug/L	P389937	
	EPA 200.8 Rev. 5.4	Aluminum	460		ug/L	P389937	
		Antimony	0.050	U	ug/L	P389937	
		Arsenic	0.49		ug/L	P389937	
		Beryllium	0.045		ug/L	P389937	
		Boron**	21.5		ug/L	P389937	
		Cadmium	0.020	U	ug/L	P389937	
		Chromium	0.71	I	ug/L	P389937	
		Copper	0.40	U	ug/L	P389937	
		Lead	0.41		ug/L	P389937	
		Nickel	0.60	I	ug/L	P389937	
		Selenium	0.20	U	ug/L	P389937	MS
		Silver	0.010	U	ug/L	P389937	
		Thallium	0.10	U	ug/L	P389937	
	SM 2340B	Hardness	85.2		mg/L	P389937	
2206998	EPA 8270E	Acetochlor	0.24	U	ng/L	P389780	
		Alachlor	0.24	U	ng/L	P389780	
		Ametryn	0.58	U	ng/L	P389780	
		Atrazine	0.25	I	ng/L	P389780	
		Atrazine Desethyl	1.8	I	ng/L	P389780	
		Azinphos Methyl	1.9	U	ng/L	P389780	
		Azoxystrobin**	0.48	U	ng/L	P389780	
		Bromacil	0.48	U	ng/L	P389780	
		Butylate	0.38	U	ng/L	P389780	
		Carbophenothion	0.48	U	ng/L	P389780	
		Carfentrazone Ethyl**	0.096	U	ng/L	P389780	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P389780	
		Chlorpyrifos Methyl	0.048	U	ng/L	P389780	
		Cyanazine	3.1	U	ng/L	P389780	
		Demeton	1.4	U	ng/L	P389780	
		Diazinon	0.12	U	ng/L	P389780	
		Difenoconazole**	0.58	U	ng/L	P389780	
		Dimethenamid**	0.096	U	ng/L	P389780	
		Disulfoton	0.48	U	ng/L	P389780	
		Dithiopyr**	0.096	U	ng/L	P389780	
		EPTC	1.2	U	ng/L	P389780	

Field ID: 27010070

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206998	EPA 8270E	Ethion	0.14	U	ng/L	P389780	
		Ethoprop	0.096	U	ng/L	P389780	
		Fenamiphos	0.48	U	ng/L	P389780	
		Fenbuconazole**	0.12	U	ng/L	P389780	
		Fipronil	0.24	U	ng/L	P389780	
		Fipronil Desulfinyl**	0.12	U	ng/L	P389780	
		Fipronil Sulfide	0.14	U	ng/L	P389780	
		Fipronil Sulfone	0.14	U	ng/L	P389780	
		Fluazifop-P-butyl**	0.096	U	ng/L	P389780	
		Fludioxonil**	0.12	U	ng/L	P389780	
		Flumioxazin**	1.7	U	ng/L	P389780	
		Flutolanil**	0.096	U	ng/L	P389780	
		Fluxapyroxad**	0.096	U	ng/L	P389780	
		Fonofos	0.19	U	ng/L	P389780	
		Hexazinone	0.48	U	ng/L	P389780	
		Imazalil**	0.72	U	ng/L	P389780	
		Iprodione**	0.58	U	ng/L	P389780	
		Malathion	0.34	U	ng/L	P389780	
		Metalaxyl	0.72	U	ng/L	P389780	
		Metolachlor	0.48	U	ng/L	P389780	
		Metribuzin	3.1	U	ng/L	P389780	
		Mevinphos	0.48	U	ng/L	P389780	
		Molinate	0.29	U	ng/L	P389780	
		Myclobutanil**	0.24	U	ng/L	P389780	
		Naled**	1.4	U	ng/L	P389780	
		Norflurazon	0.48	U	ng/L	P389780	
		Oxadiazon	0.096	U	ng/L	P389780	
		Oxyfluorfen**	0.14	U	ng/L	P389780	
		Parathion Ethyl	0.24	U	ng/L	P389780	
		Parathion Methyl	0.53	U	ng/L	P389780	
		Pendimethalin	0.96	U	ng/L	P389780	
		Phorate	0.24	U	ng/L	P389780	
		Prodiamine**	0.17	U	ng/L	P389780	
		Prometon	0.86	U	ng/L	P389780	
		Prometryn	0.19	U	ng/L	P389780	
		Pronamide**	0.14	U	ng/L	P389780	
		Propiconazole**	0.48	U	ng/L	P389780	
		Pyriproxyfen**	0.12	U	ng/L	P389780	
		Simazine	0.48	U	ng/L	P389780	
		Sulfentrazone**	0.48	U	ng/L	P389780	
		Tebuconazole**	0.48	U	ng/L	P389780	
		Terbufos	0.096	U	ng/L	P389780	
		Terbuthylazine	0.41	U	ng/L	P389780	

Field ID: 27010070

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample. Surrogate spike recovery exceeding the control limits. Results confirmed in re-extraction. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P389883

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P389937

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: P389937

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390002

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390004

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389899

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P389900

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P390010

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P389917

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P389933

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P389888

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

Reference Method: EPA 8270E
 Batch ID: P389780

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	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P389780

Component	Result	Code	Units
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Oxyfluorfen	0.15	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
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	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: P389918

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P389918

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P389930

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2120 B-2011
Batch ID: P389878

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P389994

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

Reference Method: SM 2540 C-2011
Batch ID: P390170

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P390147

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P389995

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P390046

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: P389937

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	91.2		P	85 - 115
Calcium	99.2		P	85 - 115
Iron	100		P	85 - 115
Magnesium	98.7		P	85 - 115
Potassium	90.2		P	85 - 115
Sodium	99.1		P	85 - 115
Zinc	87.9		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P389937

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	99.3		P	85 - 115
Arsenic	100		P	85 - 115
Beryllium	99.3		P	85 - 115
Boron	100		P	85 - 115
Cadmium	99.0		P	85 - 115
Chromium	99.3		P	85 - 115
Copper	98.0		P	85 - 115
Lead	103		P	85 - 115
Nickel	97.7		P	85 - 115
Selenium	99.4		P	85 - 115
Silver	109		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390002

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390004

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389899

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389900

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.7		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P390010

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P389917

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO ₂ NO ₃ -N	98.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P389933

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P389888

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

Reference Method: EPA 8270E
 Batch ID: P389780

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	108	109	P/P	71 - 122
Alachlor	106	105	P/P	70 - 121
Ametryn	111	109	P/P	49 - 137
Atrazine	98.2	94.3	P/P	76 - 125
Atrazine Desethyl	97.5	92.7	P/P	31 - 144
Azinphos Methyl	129	124	P/P	67 - 150
Azoxystrobin	112	114	P/P	70 - 170
Bromacil	102	87.7	P/P	36 - 121
Butylate	67.6	84.1	P/P	33 - 88.0
Carbophenothion	84.8	82.6	P/P	66 - 116
Carfentrazone Ethyl	112	114	P/P	50 - 150
Chlorpyrifos Ethyl	93.4	88.2	P/P	73 - 117
Chlorpyrifos Methyl	106	98.2	P/P	68 - 121
Cyanazine	139	143	P/P	20 - 250
Demeton	104	78.3	P/P	30 - 123
Diazinon	112	112	P/P	70 - 128
Difenoconazole	121	116	P/P	50 - 150
Dimethenamid	103	105	P/P	66 - 122
Disulfoton	93.4	87.2	P/P	46 - 124
Dithiopyr	101	104	P/P	69 - 122
EPTC	65.4	70.3	P/P	31 - 90.0
Ethion	71.9	73.2	P/P	45 - 135
Ethoprop	101	94.2	P/P	59 - 118
Fenamiphos	103	88.3	P/P	30 - 136
Fenbuconazole	103	99.2	P/P	50 - 150
Fipronil	107	105	P/P	57 - 127
Fipronil Desulfinyl	95.9	94.3	P/P	51 - 122
Fipronil Sulfide	92.8	82.3	P/P	57 - 119

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P389780

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fipronil Sulfone	93.5	81.0	P/P	51 - 119
Fluazifop-P-butyl	95.7	103	P/P	50 - 150
Fludioxonil	97.9	93.2	P/P	50 - 150
Flumioxazin	142	154	P/P	20 - 250
Flutolanil	105	91.3	P/P	50 - 150
Fluxapyroxad	94.4	92.8	P/P	50 - 150
Fonofos	95.5	88.4	P/P	60 - 120
Hexazinone	89.7	86.6	P/P	57 - 142
Imazalil	111	99.7	P/P	30 - 139
Iprodione	92.6	96.2	P/P	50 - 150
Malathion	94.9	79.3	P/P	67 - 128
Metaxyl	98.0	100	P/P	21 - 148
Metolachlor	102	97.9	P/P	70 - 120
Metribuzin	112	105	P/P	20 - 250
Mevinphos	91.4	81.0	P/P	47 - 116
Molinate	80.2	77.5	P/P	41 - 99.0
Myclobutanil	101	97.1	P/P	50 - 150
Naled	51.0	46.3	P/P	38 - 97.0
Norflurazon	97.5	94.9	P/P	54 - 127
Oxadiazon	90.1	92.6	P/P	65 - 122
Oxyfluorfen	114	118	P/P	50 - 150
Parathion Ethyl	91.7	89.2	P/P	71 - 113
Parathion Methyl	102	108	P/P	73 - 129
Pendimethalin	90.4	97.4	P/P	63 - 130
Phorate	81.4	78.0	P/P	48 - 118
Prodiamine	71.8	69.9	P/P	20 - 144
Prometon	99.2	95.4	P/P	53 - 120
Prometryn	108	106	P/P	63 - 119
Pronamide	102	101	P/P	81 - 122
Propiconazole	108	111	P/P	62 - 124
Pyriproxyfen	109	118	P/P	50 - 150
Simazine	111	109	P/P	77 - 129
Sulfentrazone	73.6	76.5	P/P	20 - 137
Tebuconazole	66.6	68.7	P/P	20 - 118
Terbufos	90.5	85.9	P/P	61 - 119
Terbuthylazine	96.1	94.8	P/P	75 - 119

Reference Method: EPA 8321B
Batch ID: P389918

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	136		P	40 - 150
AMPA	100		P	40 - 150
Endothall	94.0		P	40 - 150
Glufosinate	100		P	40 - 150
Glyphosate	103		P	40 - 140
Sucralose	129		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P389930

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: P389930

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	42.8		P	30 - 160
Acetaminophen	45.3		P	30 - 160
Acetamiprid	58.7		P	30 - 160
Afidopyropen	35.8		P	30 - 160
Bentazon	41.9		P	30 - 160
Benzovindiflupyr	58.6		P	30 - 160
Carbamazepine	52.4		P	30 - 160
Clothianidin	67.0		P	30 - 160
Dinotefuran	69.8		P	30 - 160
Diuron	61.0		P	30 - 160
Fenuron	84.4		P	30 - 160
Fluridone	53.1		P	30 - 160
Hydrocodone	66.8		P	30 - 160
Ibuprofen	57.8		P	30 - 160
Imazapyr	76.5		P	30 - 160
Imidacloprid	73.9		P	30 - 160
Linuron	85.4		P	30 - 160
Mandestrobin	66.5		P	30 - 160
MCPP	52.0		P	30 - 160
Naproxen	43.8		P	30 - 160
Primidone	78.2		P	30 - 160
Pyraclostrobin	47.0		P	30 - 160
Thiamethoxam	70.1		P	30 - 160
Tolfenpyrad	30.1		P	30 - 160
Triclopyr	42.0		P	30 - 160

Reference Method: SM 2120 B-2011
Batch ID: P389878

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	103		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P389994

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P389995

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.5		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P390046

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: P389937

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206964	Barium	104	98.6	P/P	80 - 120
2206964	Calcium	105		P	80 - 120
2206964	Iron	104		P	80 - 120
2206964	Magnesium	101		P	80 - 120
2206964	Potassium	103	99.5	P/P	80 - 120
2206964	Sodium	103		P	80 - 120
2206964	Zinc	99.7	96.2	P/P	80 - 120
2207140	Barium	101		P	80 - 120
2207140	Calcium	97.2		P	80 - 120
2207140	Iron	106		P	80 - 120
2207140	Magnesium	106		P	80 - 120
2207140	Potassium	103		P	80 - 120
2207140	Sodium	97.8		P	80 - 120
2207140	Zinc	98.6		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P389937

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206964	Aluminum	98.5	99.5	P/P	80 - 120
2206964	Antimony	102	103	P/P	80 - 120
2206964	Arsenic	106	106	P/P	80 - 120
2206964	Beryllium	96.6	100	P/P	80 - 120
2206964	Boron	99.7	98.8	P/P	80 - 120
2206964	Cadmium	99.3	102	P/P	80 - 120
2206964	Chromium	95.5	95.4	P/P	80 - 120
2206964	Copper	98.0	99.5	P/P	80 - 120
2206964	Lead	104	104	P/P	80 - 120
2206964	Nickel	96.1	97.2	P/P	80 - 120
2206964	Selenium	68.9	69.5	F/F	80 - 120
2206964	Silver	105	106	P/P	80 - 120
2206964	Thallium	103	104	P/P	80 - 120
2207140	Aluminum	96.4		P	80 - 120
2207140	Antimony	100		P	80 - 120
2207140	Arsenic	102		P	80 - 120
2207140	Beryllium	102		P	80 - 120
2207140	Boron	101		P	80 - 120
2207140	Cadmium	100		P	80 - 120
2207140	Chromium	99.3		P	80 - 120
2207140	Copper	101		P	80 - 120
2207140	Lead	102		P	80 - 120
2207140	Nickel	99.1		P	80 - 120
2207140	Selenium	99.0		P	80 - 120
2207140	Silver	106		P	80 - 120
2207140	Thallium	102		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390002

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206977	Chloride	98.9		P	90 - 110
2207145	Chloride	98.1		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390004

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206977	Sulfate	98.3		P	90 - 110
2207145	Sulfate	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389899

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206701	Ammonia-N	101	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389900

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207126	Ammonia-N	93.3	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P390010

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205371	Kjeldahl Nitrogen	109	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389917

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206701	NO2NO3-N	98.5	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389933

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205417	Total-P	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207124	O-Phosphate-P	101	102	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P389780

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206381	Acetochlor	110	116	P/P	68 - 126
2206381	Alachlor	101	102	P/P	66 - 125
2206381	Ametryn	117	121	P/P	31 - 182
2206381	Atrazine Desethyl	91.6	92.3	P/P	13 - 161
2206381	Azinphos Methyl	124	139	P/P	54 - 162
2206381	Azoxystrobin	107	116	P/P	70 - 170
2206381	Butylate	72.5	85.7	P/P	16 - 92.0
2206381	Carbophenothion	86.4	85.2	P/P	30 - 131
2206381	Carfentrazone Ethyl	114	116	P/P	50 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P389780

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206381	Chlorpyrifos Ethyl	94.2	97.2	P/P	63 - 124
2206381	Chlorpyrifos Methyl	102	98.8	P/P	64 - 125
2206381	Cyanazine	133	143	P/P	13 - 245
2206381	Demeton	79.8	80.5	P/P	20 - 154
2206381	Diazinon	108	122	P/P	66 - 141
2206381	Difenoconazole	130	134	P/P	50 - 150
2206381	Dimethenamid	99.9	109	P/P	50 - 130
2206381	Disulfoton	88.4	90.0	P/P	55 - 130
2206381	Dithiopyr	101	109	P/P	66 - 122
2206381	EPTC	68.2	69.5	P/P	15 - 93.0
2206381	Ethion	73.7	79.8	P/P	15 - 148
2206381	Ethoprop	102	102	P/P	59 - 126
2206381	Fenamiphos	71.5	81.3	P/P	39 - 137
2206381	Fenbuconazole	105	110	P/P	50 - 150
2206381	Fipronil	108	114	P/P	47 - 131
2206381	Fipronil Desulfinyl	96.9	105	P/P	43 - 121
2206381	Fipronil Sulfide	93.5	86.1	P/P	29 - 134
2206381	Fipronil Sulfone	94.6	78.9	P/P	19 - 131
2206381	Fluazifop-P-butyl	101	107	P/P	50 - 150
2206381	Fludioxonil	93.7	96.2	P/P	50 - 150
2206381	Flumioxazin	168	174	P/P	10 - 300
2206381	Flutolanil	93.6	96.2	P/P	50 - 150
2206381	Fluxapyroxad	92.1	98.8	P/P	50 - 150
2206381	Fonofos	93.2	92.2	P/P	62 - 128
2206381	Hexazinone	88.9	95.1	P/P	58 - 154
2206381	Imazalil	93.8	96.6	P/P	10 - 215
2206381	Iprodione	97.0	100	P/P	50 - 150
2206381	Malathion	92.0	83.3	P/P	54 - 135
2206381	Metalaxyl	98.8	101	P/P	46 - 136
2206381	Metolachlor	96.5	101	P/P	62 - 126
2206381	Metribuzin	106	106	P/P	44 - 277
2206381	Mevinphos	87.6	82.5	P/P	44 - 135
2206381	Molinate	81.1	84.4	P/P	31 - 104
2206381	Myclobutanil	103	109	P/P	50 - 150
2206381	Naled	48.1	47.1	P/P	33 - 113
2206381	Norflurazon	96.5	101	P/P	32 - 134
2206381	Oxadiazon	92.3	98.5	P/P	55 - 123
2206381	Oxyfluorfen	128	138	P/P	50 - 150
2206381	Parathion Ethyl	98.1	99.4	P/P	67 - 120
2206381	Parathion Methyl	104	108	P/P	70 - 140
2206381	Pendimethalin	104	109	P/P	59 - 145
2206381	Phorate	79.3	80.5	P/P	52 - 127
2206381	Prodiamine	88.5	92.9	P/P	11 - 157
2206381	Prometon	90.4	102	P/P	55 - 130
2206381	Prometryn	110	116	P/P	55 - 127
2206381	Pronamide	94.2	108	P/P	66 - 150
2206381	Propiconazole	123	131	P/P	14 - 178
2206381	Pyriproxyfen	104	116	P/P	50 - 150
2206381	Sulfentrazone	114	97.2	P/P	21 - 144
2206381	Tebuconazole	65.4	74.7	P/P	10 - 122
2206381	Terbufos	91.5	93.9	P/P	65 - 131
2206381	Terbutylazine	96.1	106	P/P	63 - 131

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
 Batch ID: P389918

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206526	Acesulfame K	51.2	45.8	P/P	40 - 150
2206526	AMPA	70.6	66.2	P/P	40 - 150
2206526	Endothall	115	121	P/P	40 - 150
2206526	Glufosinate	101	94.6	P/P	40 - 150
2206526	Glyphosate	100	91.2	P/P	40 - 140
2206526	Sucralose	57.0	55.6	P/P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P389930

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206563	2,4-D	45.3	42.1	P/P	30 - 160
2206563	Acetaminophen	47.5	49.5	P/P	30 - 160
2206563	Acetamiprid	34.6	34.2	P/P	30 - 160
2206563	Afidopyropen	38.1	35.8	P/P	30 - 160
2206563	Benzovindiflupyr	51.8	56.5	P/P	30 - 160
2206563	Carbamazepine	45.4	44.3	P/P	30 - 160
2206563	Clothianidin	30.7	31.2	P/P	30 - 160
2206563	Dinotefuran	61.5	61.4	P/P	30 - 160
2206563	Diuron	29.0	26.6	F/F	30 - 160
2206563	Fenuron	34.9	33.6	P/P	30 - 160
2206563	Fluridone	50.0	69.2	P/P	30 - 160
2206563	Hydrocodone	48.6	50.9	P/P	30 - 160
2206563	Ibuprofen	48.7	43.4	P/P	30 - 160
2206563	Imidacloprid	77.5	74.9	P/P	30 - 160
2206563	Linuron	60.3	57.6	P/P	30 - 160
2206563	Mandestrobin	60.2	57.3	P/P	30 - 160
2206563	MCP	49.4	46.6	P/P	30 - 160
2206563	Naproxen	254	215	F/F	30 - 160
2206563	Primidone	43.3	46.5	P/P	30 - 160
2206563	Pyraclostrobin	52.8	50.1	P/P	30 - 160
2206563	Thiamethoxam	54.7	52.5	P/P	30 - 160
2206563	Tolfenpyrad	41.6	38.2	P/P	30 - 160
2206563	Triclopyr	56.0	48.8	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
 Batch ID: P389995

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207003	Fluoride	99.5	99.5	P/P	94 - 107

Reference Method: SM 5310 B-2011
 Batch ID: P390046

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206978	Organic Carbon	102	105	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P389883

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206977	Turbidity	1.96	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P389937

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206964	Barium	3.29	Spike	P	0 - 20
2206964	Calcium	1.81	Spike	P	0 - 20
2206964	Iron	3.65	Spike	P	0 - 20
2206964	Magnesium	3.33	Spike	P	0 - 20
2206964	Potassium	2.69	Spike	P	0 - 20
2206964	Sodium	1.28	Spike	P	0 - 20
2206964	Zinc	3.60	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P389937

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206964	Aluminum	0.564	Spike	P	0 - 20
2206964	Antimony	0.620	Spike	P	0 - 20
2206964	Arsenic	0.185	Spike	P	0 - 20
2206964	Beryllium	1.70	Spike	P	0 - 20
2206964	Boron	0.758	Spike	P	0 - 20
2206964	Cadmium	2.35	Spike	P	0 - 20
2206964	Chromium	0.161	Spike	P	0 - 20
2206964	Copper	1.47	Spike	P	0 - 20
2206964	Lead	0.356	Spike	P	0 - 20
2206964	Nickel	1.07	Spike	P	0 - 20
2206964	Selenium	0.861	Spike	P	0 - 20
2206964	Silver	0.803	Spike	P	0 - 20
2206964	Thallium	1.04	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390002

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206977	Chloride	0.887	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390004

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206977	Sulfate	0.575	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389899

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206701	Ammonia-N	1.08	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389900

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207126	Ammonia-N	7.18	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P390010

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205371	Kjeldahl Nitrogen	3.23	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389917

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206701	NO2NO3-N	0.506	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389933

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205417	Total-P	1.45	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207124	O-Phosphate-P	0.494	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P389780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206381	Acetochlor	5.50	Spike	P	0 - 30
2206381	Alachlor	0.906	Spike	P	0 - 30
2206381	Ametryn	3.42	Spike	P	0 - 30
2206381	Atrazine	4.55	Spike	P	0 - 30
2206381	Atrazine Desethyl	0.541	Spike	P	0 - 30
2206381	Azinphos Methyl	10.8	Spike	P	0 - 30
2206381	Azoxystrobin	8.02	Spike	P	0 - 30
2206381	Bromacil	3.19	Spike	P	0 - 30
2206381	Butylate	16.7	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206381	Carbophenothion	1.39	Spike	P	0 - 30
2206381	Carfentrazone Ethyl	1.98	Spike	P	0 - 30
2206381	Chlorpyrifos Ethyl	3.16	Spike	P	0 - 30
2206381	Chlorpyrifos Methyl	3.02	Spike	P	0 - 30
2206381	Cyanazine	7.29	Spike	P	0 - 30
2206381	Demeton	0.846	Spike	P	0 - 30
2206381	Diazinon	12.0	Spike	P	0 - 30
2206381	Difenoconazole	2.32	Spike	P	0 - 30
2206381	Dimethenamid	8.50	Spike	P	0 - 30
2206381	Disulfoton	1.74	Spike	P	0 - 30
2206381	Dithiopyr	7.65	Spike	P	0 - 30
2206381	EPTC	1.86	Spike	P	0 - 30
2206381	Ethion	8.02	Spike	P	0 - 30
2206381	Ethoprop	0.0751	Spike	P	0 - 30
2206381	Fenamiphos	12.8	Spike	P	0 - 30
2206381	Fenbuconazole	4.71	Spike	P	0 - 30
2206381	Fipronil	4.51	Spike	P	0 - 30
2206381	Fipronil Desulfinyl	6.86	Spike	P	0 - 30
2206381	Fipronil Sulfide	6.68	Spike	P	0 - 30
2206381	Fipronil Sulfone	7.85	Spike	P	0 - 30
2206381	Fluazifop-P-butyl	6.28	Spike	P	0 - 30
2206381	Fludioxonil	2.65	Spike	P	0 - 30
2206381	Flumioxazin	3.17	Spike	P	0 - 30
2206381	Flutolanil	2.49	Spike	P	0 - 30
2206381	Fluxapyroxad	6.75	Spike	P	0 - 30
2206381	Fonofos	1.07	Spike	P	0 - 30
2206381	Hexazinone	6.04	Spike	P	0 - 30
2206381	Imazalil	2.98	Spike	P	0 - 30
2206381	Iprodione	3.53	Spike	P	0 - 30
2206381	Malathion	9.98	Spike	P	0 - 30
2206381	Metalaxyl	2.27	Spike	P	0 - 30
2206381	Metolachlor	4.16	Spike	P	0 - 30
2206381	Metribuzin	0.256	Spike	P	0 - 30
2206381	Mevinphos	5.94	Spike	P	0 - 30
2206381	Molinate	3.96	Spike	P	0 - 30
2206381	Myclobutanil	5.61	Spike	P	0 - 30
2206381	Naled	2.03	Spike	P	0 - 30
2206381	Norflurazon	4.97	Spike	P	0 - 30
2206381	Oxadiazon	6.42	Spike	P	0 - 30
2206381	Oxyfluorfen	7.80	Spike	P	0 - 30
2206381	Parathion Ethyl	1.31	Spike	P	0 - 30
2206381	Parathion Methyl	3.94	Spike	P	0 - 30
2206381	Pendimethalin	5.29	Spike	P	0 - 30
2206381	Phorate	1.49	Spike	P	0 - 30
2206381	Prodiamine	4.84	Spike	P	0 - 30
2206381	Prometon	10.6	Spike	P	0 - 30
2206381	Prometryn	5.29	Spike	P	0 - 30
2206381	Pronamide	13.7	Spike	P	0 - 30
2206381	Propiconazole	6.11	Spike	P	0 - 30
2206381	Pyriproxyfen	10.8	Spike	P	0 - 30
2206381	Simazine	10.5	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206381	Sulfentrazone	16.3	Spike	P	0 - 30
2206381	Tebuconazole	11.9	Spike	P	0 - 30
2206381	Terbufos	2.55	Spike	P	0 - 30
2206381	Terbutylazine	10.3	Spike	P	0 - 30
LFB	Acetochlor	1.27	LCS	P	0 - 30
LFB	Alachlor	0.814	LCS	P	0 - 30
LFB	Ametryn	1.74	LCS	P	0 - 30
LFB	Atrazine	4.00	LCS	P	0 - 30
LFB	Atrazine Desethyl	4.98	LCS	P	0 - 30
LFB	Azinphos Methyl	3.87	LCS	P	0 - 30
LFB	Azoxystrobin	2.40	LCS	P	0 - 30
LFB	Bromacil	14.6	LCS	P	0 - 30
LFB	Butylate	21.7	LCS	P	0 - 30
LFB	Carbophenothion	2.68	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	1.75	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	5.74	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	7.84	LCS	P	0 - 30
LFB	Cyanazine	2.92	LCS	P	0 - 30
LFB	Demeton	28.6	LCS	P	0 - 30
LFB	Diazinon	0.182	LCS	P	0 - 30
LFB	Difenoconazole	4.06	LCS	P	0 - 30
LFB	Dimethenamid	2.13	LCS	P	0 - 30
LFB	Disulfoton	6.86	LCS	P	0 - 30
LFB	Dithiopyr	3.11	LCS	P	0 - 30
LFB	EPTC	7.28	LCS	P	0 - 30
LFB	Ethion	1.83	LCS	P	0 - 30
LFB	Ethoprop	7.42	LCS	P	0 - 30
LFB	Fenamiphos	15.2	LCS	P	0 - 30
LFB	Fenbuconazole	3.36	LCS	P	0 - 30
LFB	Fipronil	1.95	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	1.64	LCS	P	0 - 30
LFB	Fipronil Sulfide	12.0	LCS	P	0 - 30
LFB	Fipronil Sulfone	14.4	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	7.05	LCS	P	0 - 30
LFB	Fludioxonil	4.96	LCS	P	0 - 30
LFB	Flumioxazin	7.51	LCS	P	0 - 30
LFB	Flutolanil	13.5	LCS	P	0 - 30
LFB	Fluxapyroxad	1.63	LCS	P	0 - 30
LFB	Fonofos	7.72	LCS	P	0 - 30
LFB	Hexazinone	3.55	LCS	P	0 - 30
LFB	Imazalil	10.9	LCS	P	0 - 30
LFB	Iprodione	3.90	LCS	P	0 - 30
LFB	Malathion	17.9	LCS	P	0 - 30
LFB	Metalaxyl	2.01	LCS	P	0 - 30
LFB	Metolachlor	3.98	LCS	P	0 - 30
LFB	Metribuzin	5.96	LCS	P	0 - 30
LFB	Mevinphos	12.2	LCS	P	0 - 30
LFB	Molinate	3.44	LCS	P	0 - 30
LFB	Myclobutanil	3.62	LCS	P	0 - 30
LFB	Naled	9.64	LCS	P	0 - 30
LFB	Norflurazon	2.76	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P389780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Oxadiazon	2.77	LCS	P	0 - 30
LFB	Oxyfluorfen	3.51	LCS	P	0 - 30
LFB	Parathion Ethyl	2.85	LCS	P	0 - 30
LFB	Parathion Methyl	5.04	LCS	P	0 - 30
LFB	Pendimethalin	7.42	LCS	P	0 - 30
LFB	Phorate	4.29	LCS	P	0 - 30
LFB	Prodiamine	2.73	LCS	P	0 - 30
LFB	Prometon	3.87	LCS	P	0 - 30
LFB	Prometryn	2.36	LCS	P	0 - 30
LFB	Pronamide	0.932	LCS	P	0 - 30
LFB	Propiconazole	2.81	LCS	P	0 - 30
LFB	Pyriproxyfen	8.28	LCS	P	0 - 30
LFB	Simazine	1.28	LCS	P	0 - 30
LFB	Sulfentrazone	3.80	LCS	P	0 - 30
LFB	Tebuconazole	3.07	LCS	P	0 - 30
LFB	Terbufos	5.22	LCS	P	0 - 30
LFB	Terbutylazine	1.34	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389918

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206526	Acesulfame K	10.1	Spike	P	0 - 30
2206526	AMPA	4.46	Spike	P	0 - 30
2206526	Endothall	5.06	Spike	P	0 - 30
2206526	Glufosinate	6.41	Spike	P	0 - 30
2206526	Glyphosate	4.26	Spike	P	0 - 30
2206526	Sucralose	2.27	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P389930

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206563	2,4-D	4.35	Spike	P	0 - 30
2206563	Acetaminophen	4.07	Spike	P	0 - 30
2206563	Acetamiprid	1.34	Spike	P	0 - 30
2206563	Afidopyropen	6.30	Spike	P	0 - 30
2206563	Bentazon	7.18	Spike	P	0 - 30
2206563	Benzovindiflupyr	8.72	Spike	P	0 - 30
2206563	Carbamazepine	2.34	Spike	P	0 - 30
2206563	Clothianidin	1.39	Spike	P	0 - 30
2206563	Dinotefuran	0.161	Spike	P	0 - 30
2206563	Diuron	8.52	Spike	P	0 - 30
2206563	Fenuron	3.59	Spike	P	0 - 30
2206563	Fluridone	15.4	Spike	P	0 - 30
2206563	Hydrocodone	4.64	Spike	P	0 - 30
2206563	Ibuprofen	11.5	Spike	P	0 - 30
2206563	Imazapyr	1.31	Spike	P	0 - 30
2206563	Imidacloprid	2.76	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P389930

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206563	Linuron	4.60	Spike	P	0 - 30
2206563	Mandestrobin	4.82	Spike	P	0 - 30
2206563	MCP	5.93	Spike	P	0 - 30
2206563	Naproxen	16.6	Spike	P	0 - 30
2206563	Primidone	7.30	Spike	P	0 - 30
2206563	Pyraclostrobin	5.11	Spike	P	0 - 30
2206563	Thiamethoxam	3.69	Spike	P	0 - 30
2206563	Tolfenpyrad	8.66	Spike	P	0 - 30
2206563	Triclopyr	13.7	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P389878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207003	Color (true)	0.726	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P389994

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207003	Total Alkalinity	0.553	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P390170

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206981	TDS	4.95	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P389995

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207003	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P390046

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206978	Organic Carbon	1.87	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2206991
Field Sample ID: 27010050

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	40.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	37.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	32.8	P	30 - 160
EPA 8321B	Diuron-d6	35.7	P	30 - 160
EPA 8321B	Diuron-d6	23.2	F	30 - 160
EPA 8321B	Endothall-d6	100	P	30 - 160
EPA 8321B	Endothall-d6	100	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	69.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	69.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	44.7	P	30 - 160
EPA 8321B	Primidone-d5	30.0	P	30 - 160
EPA 8321B	Sucralose-d6	49.0	P	30 - 160
EPA 8321B	Sucralose-d6	49.0	P	30 - 160

Lab Sample ID: 2206992
Field Sample ID: 27010070

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	39.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	39.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	31.9	P	30 - 160
EPA 8321B	Diuron-d6	41.2	P	30 - 160
EPA 8321B	Diuron-d6	21.2	F	30 - 160
EPA 8321B	Endothall-d6	106	P	30 - 160
EPA 8321B	Endothall-d6	106	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	48.3	P	30 - 160
EPA 8321B	Primidone-d5	30.8	P	30 - 160
EPA 8321B	Sucralose-d6	60.5	P	30 - 160
EPA 8321B	Sucralose-d6	60.5	P	30 - 160

Lab Sample ID: 2206997
Field Sample ID: 27010050

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	101	P	72 - 135
EPA 8270E	Terbufos-d10	92.0	P	57 - 134

Lab Sample ID: 2206998
Field Sample ID: 27010070

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	118	P	72 - 135
EPA 8270E	Terbufos-d10	92.1	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B-2011

Run ID: A102020

Included Lab Sample IDs: 2206980, 2206981

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	99.7	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A102023

Included Lab Sample IDs: 2206980, 2206981

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.0	98.5	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A102024

Included Lab Sample IDs: 2206984, 2206985

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A102031

Included Lab Sample IDs: 2206982, 2206983

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	91.0	96.0	P/P	90 - 110
Ammonia-N	93.4	91.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A102043

Included Lab Sample IDs: 2206982, 2206983

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	99.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A102065

Included Lab Sample IDs: 2206980, 2206981

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.5	99.7	P/P	90 - 110
Sulfate	99.5	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A102070

Included Lab Sample IDs: 2206983

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.4	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A102076

Included Lab Sample IDs: 2206991, 2206992

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

Reference Method: EPA 8321B

Run ID: A102076

Included Lab Sample IDs: 2206991, 2206992

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	130	122	P/P	50 - 160
Endothall	100	93.0	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A102077

Included Lab Sample IDs: 2206991, 2206992

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	68.2	60.6	P/P	50 - 160
Glufosinate	90.2	95.6	P/P	50 - 160
Glyphosate	109	106	P/P	50 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A102092

Included Lab Sample IDs: 2206994, 2206995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	97.4	98.0	P/P	90 - 110
Calcium	102	100	P/P	90 - 110
Iron	102	100	P/P	90 - 110
Magnesium	101	99.4	P/P	90 - 110
Potassium	99.8	98.9	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Zinc	98.0	97.1	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A102094

Included Lab Sample IDs: 2206980, 2206981

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.9	99.1	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A102094

Included Lab Sample IDs: 2206980, 2206981

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

Reference Method: EPA 8270E

Run ID: A102095

Included Lab Sample IDs: 2206997, 2206998

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.5		P	80 - 120
Alachlor	97.3		P	80 - 120
Ametryn	92.6		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	89.7		P	80 - 120
Azinphos Methyl	95.3		P	80 - 120
Azoxystrobin	91.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A102095

Included Lab Sample IDs: 2206997, 2206998

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromacil	93.9		P	80 - 120
Butylate	98.5		P	80 - 120
Carbophenothion	99.0		P	80 - 120
Carfentrazone Ethyl	99.1		P	80 - 120
Chlorpyrifos Ethyl	99.6		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Cyanazine	84.5		P	80 - 120
Demeton	99.7		P	80 - 120
Diazinon	99.1		P	80 - 120
Difenoconazole	95.7		P	80 - 120
Dimethenamid	97.3		P	80 - 120
Disulfoton	93.7		P	80 - 120
Dithiopyr	103		P	80 - 120
EPTC	97.1		P	80 - 120
Ethion	94.1		P	80 - 120
Ethoprop	108		P	80 - 120
Fenamiphos	98.9		P	80 - 120
Fenbuconazole	94.0		P	80 - 120
Fipronil	98.7		P	80 - 120
Fipronil Desulfinyl	99.2		P	80 - 120
Fipronil Sulfide	91.9		P	80 - 120
Fipronil Sulfone	93.0		P	80 - 120
Fluazifop-P-butyl	99.1		P	80 - 120
Fludioxonil	93.4		P	80 - 120
Flumioxazin	96.2		P	80 - 120
Flutolanil	93.3		P	80 - 120
Fluxapyroxad	89.6		P	80 - 120
Fonofos	92.6		P	80 - 120
Hexazinone	93.3		P	80 - 120
Imazalil	89.0		P	80 - 120
Iprodione	98.5		P	80 - 120
Malathion	95.5		P	80 - 120
Metalaxyl	98.6		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	110		P	80 - 120
Mevinphos	96.0		P	80 - 120
Molinate	97.8		P	80 - 120
Myclobutanil	94.5		P	80 - 120
Naled	98.0		P	80 - 120
Norflurazon	91.3		P	80 - 120
Oxadiazon	98.6		P	80 - 120
Oxyfluorfen	98.7		P	80 - 120
Parathion Ethyl	91.5		P	80 - 120
Parathion Methyl	98.4		P	80 - 120
Pendimethalin	102		P	80 - 120
Phorate	97.7		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	98.2		P	80 - 120
Pronamide	99.0		P	80 - 120
Propiconazole	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A102095

Included Lab Sample IDs: 2206997, 2206998

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyriproxyfen	102		P	80 - 120
Simazine	95.1		P	80 - 120
Sulfentrazone	93.4		P	80 - 120
Tebuconazole	94.2		P	80 - 120
Terbufos	97.3		P	80 - 120
Terbutylazine	96.4		P	80 - 120

Reference Method: EPA 8270E

Run ID: A102097

Included Lab Sample IDs: 2206997

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	105		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A102121

Included Lab Sample IDs: 2206982, 2206983

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	105	104	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A102123

Included Lab Sample IDs: 2206991, 2206992

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

Reference Method: EPA 8321B

Run ID: A102132

Included Lab Sample IDs: 2206991, 2206992

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.1	77.0	P/P	50 - 150
Acetaminophen	110	109	P/P	60 - 160
Acetamiprid	101	107	P/P	50 - 150
Afidopyropen	75.6	70.4	P/P	50 - 150
Bentazon	72.6	87.0	P/P	50 - 160
Benzovindiflupyr	112	113	P/P	50 - 150
Carbamazepine	76.9	92.1	P/P	60 - 150
Clothianidin	93.4	87.6	P/P	60 - 150
Dinotefuran	98.2	104	P/P	50 - 150
Diuron	73.1	80.1	P/P	60 - 160
Fenuron	107	110	P/P	60 - 150
Fluridone	108	99.8	P/P	60 - 160
Hydrocodone	115	109	P/P	60 - 150
Ibuprofen	86.8	80.0	P/P	50 - 160
Imazapyr	94.6	112	P/P	50 - 160
Imidacloprid	93.1	99.1	P/P	60 - 150
Linuron	103	101	P/P	60 - 150
Mandestrobin	104	110	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A102132

Included Lab Sample IDs: 2206991, 2206992

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
MCP	83.5	88.9	P/P	50 - 150
Naproxen	64.8	61.5	P/P	50 - 160
Primidone	90.5	110	P/P	60 - 150
Pyraclostrobin	106	109	P/P	60 - 150
Thiamethoxam	88.5	96.7	P/P	50 - 150
Tolfenpyrad	132	132	P/P	60 - 150
Triclopyr	73.8	70.4	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A102135

Included Lab Sample IDs: 2206982, 2206983

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A102136

Included Lab Sample IDs: 2206982

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A102248

Included Lab Sample IDs: 2206994, 2206995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	100	99.7	P/P	90 - 110
Arsenic	101	101	P/P	90 - 110
Boron	102	104	P/P	90 - 110
Cadmium	99.9	99.8	P/P	90 - 110
Chromium	100	99.6	P/P	90 - 110
Copper	98.7	99.0	P/P	90 - 110
Lead	102	103	P/P	90 - 110
Nickel	99.4	100	P/P	90 - 110
Thallium	98.6	99.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A102273

Included Lab Sample IDs: 2206994, 2206995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	100	P/P	90 - 110
Beryllium	101	101	P/P	90 - 110
Selenium	103	100	P/P	90 - 110
Silver	104	105	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							1.96	
EPA 200.7 Rev. 4.4	Barium	91.2		104	98.6	101			3.29
	Calcium	99.2		105	97.2				1.81
	Iron	100		104	106				3.65
	Magnesium	98.7		101	106				3.33
	Potassium	90.2		103	99.5	103			2.69
	Sodium	99.1		103	97.8				1.28
	Zinc	87.9		99.7	96.2	98.6			3.60
EPA 200.8 Rev. 5.4	Aluminum	102		98.5	99.5	96.4			0.564
	Antimony	99.3		102	103	100			0.620
	Arsenic	100		106	106	102			0.185
	Beryllium	99.3		96.6	100	102			1.70
	Boron	100		99.7	98.8	101			0.758
	Cadmium	99.0		99.3	102	100			2.35
	Chromium	99.3		95.5	95.4	99.3			0.161
	Copper	98.0		98.0	99.5	101			1.47
	Lead	103		104	104	102			0.356
	Nickel	97.7		96.1	97.2	99.1			1.07
	Selenium	99.4		68.9	69.5	99.0			0.861
	Silver	109		105	106	106			0.803
	Thallium	102		103	104	102			1.04
EPA 300.0 Rev. 2.1	Chloride	99.4		98.9	98.1			0.887	
	Sulfate	99.8		98.3	98.4			0.575	
EPA 350.1 Rev. 2.0	Ammonia-N	101		101	102				1.08
	Ammonia-N	94.7		93.3	103				7.18
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107		109	104				3.23
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5		98.5	99.0				0.506
EPA 365.1 Rev. 2.0	Total-P	105		102	103				1.45
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.5		101	102				0.494
EPA 8270E	Acetochlor	108	109	110	116		1.27		5.50
	Alachlor	106	105	101	102		0.814		0.906
	Ametryn	109	111	117	121		1.74		3.42
	Atrazine	94.3	98.2				4.00		4.55
	Atrazine Desethyl	92.7	97.5	91.6	92.3		4.98		0.541
	Azinphos Methyl	124	129	124	139		3.87		10.8
	Azoxystrobin	114	112	107	116		2.40		8.02
	Bromacil	87.7	102				14.6		3.19
	Butylate	84.1	67.6	72.5	85.7		21.7		16.7
	Carbophenothion	84.8	82.6	86.4	85.2		2.68		1.39
	Carfentrazone Ethyl	112	114	114	116		1.75		1.98
	Chlorpyrifos Ethyl	93.4	88.2	94.2	97.2		5.74		3.16
	Chlorpyrifos Methyl	106	98.2	102	98.8		7.84		3.02
	Cyanazine	139	143	133	143		2.92		7.29
	Demeton	104	78.3	79.8	80.5		28.6		0.846
	Diazinon	112	112	108	122		0.182		12.0
	Difenoconazole	121	116	130	134		4.06		2.32
	Dimethenamid	103	105	99.9	109		2.13		8.50
	Disulfoton	93.4	87.2	88.4	90.0		6.86		1.74
	Dithiopyr	101	104	101	109		3.11		7.65
	EPTC	65.4	70.3	68.2	69.5		7.28		1.86
	Ethion	71.9	73.2	73.7	79.8		1.83		8.02
	Ethoprop	101	94.2	102	102		7.42		0.0751
	Fenamiphos	103	88.3	71.5	81.3		15.2		12.8
	Fenbuconazole	99.2	103	105	110		3.36		4.71

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Fipronil	105	107	108	114	1.95	4.51
	Fipronil Desulfinyl	94.3	95.9	96.9	105	1.64	6.86
	Fipronil Sulfide	82.3	92.8	93.5	86.1	12.0	6.68
	Fipronil Sulfone	81.0	93.5	94.6	78.9	14.4	7.85
	Fluazifop-P-butyl	103	95.7	101	107	7.05	6.28
	Fludioxonil	93.2	97.9	93.7	96.2	4.96	2.65
	Flumioxazin	154	142	168	174	7.51	3.17
	Flutolanil	91.3	105	93.6	96.2	13.5	2.49
	Fluxapyroxad	92.8	94.4	92.1	98.8	1.63	6.75
	Fonofos	88.4	95.5	93.2	92.2	7.72	1.07
	Hexazinone	86.6	89.7	88.9	95.1	3.55	6.04
	Imazalil	99.7	111	93.8	96.6	10.9	2.98
	Iprodione	96.2	92.6	97.0	100	3.90	3.53
	Malathion	79.3	94.9	92.0	83.3	17.9	9.98
	Metalaxyl	100	98.0	98.8	101	2.01	2.27
	Metolachlor	97.9	102	96.5	101	3.98	4.16
	Metribuzin	105	112	106	106	5.96	0.256
	Mevinphos	81.0	91.4	87.6	82.5	12.2	5.94
	Molinate	77.5	80.2	81.1	84.4	3.44	3.96
	Myclobutanil	97.1	101	103	109	3.62	5.61
	Naled	46.3	51.0	48.1	47.1	9.64	2.03
	Norflurazon	94.9	97.5	96.5	101	2.76	4.97
	Oxadiazon	92.6	90.1	92.3	98.5	2.77	6.42
	Oxyfluorfen	118	114	128	138	3.51	7.80
	Parathion Ethyl	89.2	91.7	98.1	99.4	2.85	1.31
	Parathion Methyl	108	102	104	108	5.04	3.94
	Pendimethalin	97.4	90.4	104	109	7.42	5.29
	Phorate	78.0	81.4	79.3	80.5	4.29	1.49
	Prodiamine	69.9	71.8	88.5	92.9	2.73	4.84
	Prometon	95.4	99.2	90.4	102	3.87	10.6
	Prometryn	106	108	110	116	2.36	5.29
	Pronamide	101	102	94.2	108	0.932	13.7
	Propiconazole	111	108	123	131	2.81	6.11
	Pyriproxyfen	118	109	104	116	8.28	10.8
	Simazine	109	111			1.28	10.5
	Sulfentrazone	76.5	73.6	114	97.2	3.80	16.3
	Tebuconazole	68.7	66.6	65.4	74.7	3.07	11.9
	Terbufos	85.9	90.5	91.5	93.9	5.22	2.55
	Terbuthylazine	94.8	96.1	96.1	106	1.34	10.3
EPA 8321B	2,4-D	42.8		45.3	42.1		4.35
	Acesulfame K	136		51.2	45.8		10.1
	Acetaminophen	45.3		47.5	49.5		4.07
	Acetamiprid	58.7		34.6	34.2		1.34
	Afidopyropen	35.8		38.1	35.8		6.30
	AMPA	100		70.6	66.2		4.46
	Bentazon	41.9					7.18
	Benzovindiflupyr	58.6		51.8	56.5		8.72
	Carbamazepine	52.4		45.4	44.3		2.34
	Clothianidin	67.0		30.7	31.2		1.39
	Dinotefuran	69.8		61.5	61.4		0.161
	Diuron	61.0		29.0	26.6		8.52
	Endothall	94.0		115	121		5.06
	Fenuron	84.4		34.9	33.6		3.59
	Fluridone	53.1		50.0	69.2		15.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	Glufosinate	100	101	94.6			6.41
	Glyphosate	103	100	91.2			4.26
	Hydrocodone	66.8	48.6	50.9			4.64
	Ibuprofen	57.8	48.7	43.4			11.5
	Imazapyr	76.5					1.31
	Imidacloprid	73.9	77.5	74.9			2.76
	Linuron	85.4	60.3	57.6			4.60
	Mandestrobin	66.5	60.2	57.3			4.82
	MCPP	52.0	49.4	46.6			5.93
	Naproxen	43.8	254	215			16.6
	Primidone	78.2	43.3	46.5			7.30
	Pyraclostrobin	47.0	52.8	50.1			5.11
	Sucralose	129	57.0	55.6			2.27
	Thiamethoxam	70.1	54.7	52.5			3.69
	Tolfenpyrad	30.1	41.6	38.2			8.66
	Triclopyr	42.0	56.0	48.8			13.7
SM 2120 B-2011	Color (true)	103				0.726	
SM 2320 B-2011	Total Alkalinity	102				0.553	
SM 2540 C-2011	TDS					4.95	
SM 4500 F-C-2011	Fluoride	99.5	99.5	99.5			0.0
SM 5310 B-2011	Organic Carbon	102	102	105			1.87

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2206980, 2206981
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2206994, 2206995
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2206994, 2206995
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2206980, 2206981
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2206980, 2206981
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2206982, 2206983
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2206982, 2206983
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2206982, 2206983
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2206982, 2206983
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2206984, 2206985
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2206997, 2206998
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2206991, 2206992
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2206991, 2206992
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2206980, 2206981
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2206980, 2206981
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2206994, 2206995
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2206980, 2206981
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2206980, 2206981
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2206980, 2206981
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2206982, 2206983

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	11/06/2020			11/06/2020 15:46	Yen Ta	2206980, 2206981
EPA 200.7 Rev. 4.4	11/06/2020	11/09/2020 14:50	Elliott D. Healy	11/10/2020 18:05	Betina Topolski	2206994
	11/06/2020	11/09/2020 14:50	Elliott D. Healy	11/10/2020 18:13	Betina Topolski	2206995
EPA 200.8 Rev. 5.4	11/06/2020	11/09/2020 14:50	Elliott D. Healy	11/21/2020 22:51	Alexander Thompson	2206994
	11/06/2020	11/09/2020 14:50	Elliott D. Healy	11/21/2020 23:01	Alexander Thompson	2206995
	11/06/2020	11/09/2020 14:50	Elliott D. Healy	11/23/2020 22:15	Alexander Thompson	2206994
	11/06/2020	11/09/2020 14:50	Elliott D. Healy	11/23/2020 22:22	Alexander Thompson	2206995
EPA 300.0 Rev. 2.1	11/06/2020			11/10/2020 22:12	Lipi Saha	2206980
	11/06/2020			11/10/2020 22:25	Lipi Saha	2206981
EPA 350.1 Rev. 2.0	11/06/2020			11/08/2020 12:41	Ping Hua	2206982
	11/06/2020			11/08/2020 13:01	Ping Hua	2206983
EPA 351.2 Rev. 2.0	11/06/2020	11/12/2020 12:15	David Boose	11/13/2020 13:48	Elliott Rodriguez	2206982
	11/06/2020	11/12/2020 12:15	David Boose	11/13/2020 13:50	Elliott Rodriguez	2206983
EPA 353.2 Rev. 2.0	11/06/2020			11/09/2020 09:39	Beverly Y. Sanders	2206982
	11/06/2020			11/09/2020 09:40	Beverly Y. Sanders	2206983
EPA 365.1 Rev. 2.0	11/06/2020	11/09/2020 12:24	Yen Ta	11/10/2020 12:48	Benjamin T. Nordmann	2206983
	11/06/2020	11/09/2020 12:24	Yen Ta	11/13/2020 13:50	Shengyu Wang	2206982
EPA 365.1 Rev. 2.0 dissolved	11/06/2020			11/06/2020 17:07	Ping Hua	2206984
	11/06/2020			11/06/2020 17:08	Ping Hua	2206985
EPA 8270E	11/06/2020	11/06/2020 13:00	Fe-Val Siddell	11/09/2020 17:28	Vandana T. Nagar	2206997
	11/06/2020	11/06/2020 13:00	Fe-Val Siddell	11/09/2020 17:53	Vandana T. Nagar	2206998
	11/06/2020	11/06/2020 13:00	Fe-Val Siddell	11/10/2020 12:52	Vandana T. Nagar	2206997
EPA 8321B	11/06/2020	11/09/2020 12:00	Rebecca Ware	11/09/2020 14:06	Rebecca Ware	2206991
	11/06/2020	11/09/2020 12:00	Rebecca Ware	11/09/2020 14:17	Rebecca Ware	2206992
	11/06/2020	11/09/2020 12:00	Rebecca Ware	11/10/2020 12:09	Rebecca Ware	2206991
	11/06/2020	11/09/2020 12:00	Rebecca Ware	11/10/2020 12:23	Rebecca Ware	2206992
	11/06/2020	11/09/2020 12:00	Rebecca Ware	11/12/2020 14:46	Rebecca Ware	2206992
	11/06/2020	11/09/2020 12:00	Rebecca Ware	11/12/2020 16:34	Rebecca Ware	2206991
	11/06/2020	11/10/2020 09:00	Hoor Shaik	11/11/2020 07:06	Juyoung Kim	2206991
	11/06/2020	11/10/2020 09:00	Hoor Shaik	11/11/2020 07:41	Juyoung Kim	2206992
SM 2120 B-2011	11/06/2020			11/06/2020 16:00	Benjamin T. Nordmann	2206980
	11/06/2020			11/06/2020 16:01	Benjamin T. Nordmann	2206981
SM 2320 B-2011	11/06/2020			11/09/2020 17:16	Dale L. Simmons	2206980
	11/06/2020			11/09/2020 17:29	Dale L. Simmons	2206981
SM 2340B	11/06/2020			11/10/2020 18:05	Betina Topolski	2206994
	11/06/2020			11/10/2020 18:13	Betina Topolski	2206995
SM 2540 C-2011	11/06/2020			11/09/2020 13:51	Yijie Li	2206980, 2206981
SM 2540 D-2011	11/06/2020			11/09/2020 13:51	Yijie Li	2206980, 2206981
SM 4500 F-C-2011	11/06/2020			11/09/2020 17:16	Dale L. Simmons	2206980
	11/06/2020			11/09/2020 17:29	Dale L. Simmons	2206981

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2011	11/06/2020			11/12/2020 17:25	Touraj Touran	2206982
	11/06/2020			11/12/2020 17:38	Touraj Touran	2206983