

Chemical Analysis Report

NE-DIST-2020-12-30-03

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

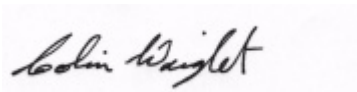
Event Description: **Nassau SCI's**
Request ID: **RQ-2020-12-14-15**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Colin Wright, Program Administrator

Date Certified: 20-JAN-2021 09:10

A handwritten signature in black ink, appearing to read "Colin Wright", is shown 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: St Mary's R Sr 2 East

Collection Date/Time: 12/29/2020 11:55

Field ID: 19010027

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2216136	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P391873	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P392185	
		Sulfate	1.5		mg SO4/L	P392188	
	SM 2120 B-2011	Color (true)	250	A	PCU	P391876	
	SM 2320 B-2011	Total Alkalinity	1.2	I	mg CaCO3/L	P391892	
	SM 2540 C-2011	TDS	94		mg/L	P392111	
	SM 2540 D-2011	TSS	2	I	mg/L	P392114	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P391894	MS
2216137	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P391885	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.56		mg N/L	P391937	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.031		mg N/L	P391900	
	EPA 365.1 Rev. 2.0	Total-P	0.025		mg P/L	P391914	
	SM 5310 B-2011	Organic Carbon	29		mg C/L	P391941	
2216138	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.014		mg P/L	P391874	
2216141	EPA 8321B	2,4-D	0.0020	U	ug/L	P391795	
		Acesulfame K**	0.10	U	ug/L	P391850	
		AMPA**	0.10	U	ug/L	P391850	
		Sucralose**	0.20		ug/L	P391850	
		Acetaminophen**	0.0080	U	ug/L	P391795	
		Acetamiprid**	0.0020	U	ug/L	P391795	
		Endothall**	0.25	U	ug/L	P391850	
		Glufosinate**	0.10	U	ug/L	P391850	
		Glyphosate**	0.10	U	ug/L	P391850	
		Afidopyropen**	0.0020	U	ug/L	P391795	
		Bentazon	8.0E-04	U	ug/L	P391795	
		Benzovindiflupyr**	0.0020	U	ug/L	P391795	
		Carbamazepine**	8.0E-04	U	ug/L	P391795	
		Clothianidin**	0.0020	U	ug/L	P391795	
		Dinotefuran**	0.0020	U	ug/L	P391795	
		Diuron	0.0020	U	ug/L	P391795	
		Fenuron	0.016	U	ug/L	P391795	
		Fluridone**	8.0E-04	U	ug/L	P391795	
		Imazapyr**	0.13		ug/L	P391795	
		Hydrocodone**	0.0020	U	ug/L	P391795	
		Ibuprofen**	0.020	U	ug/L	P391795	
		Imidacloprid	0.0020	U	ug/L	P391795	
		Linuron	0.0040	U	ug/L	P391795	
		Mandestrobin**	0.0020	U	ug/L	P391795	
		MCP	0.0020	U	ug/L	P391795	
		Naproxen**	0.0080	U	ug/L	P391795	
		Primidone**	0.0040	U	ug/L	P391795	
		Pyraclostrobin**	0.0020	U	ug/L	P391795	
		Thiamethoxam**	0.0020	U	ug/L	P391795	

Field ID: 19010027

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2216141	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P391795	
		Triclopyr**	0.0040	U	ug/L	P391795	
2216142	EPA 200.7 Rev. 4.4	Barium	16.3		ug/L	P391917	
		Calcium	4.10		mg/L	P391917	
		Iron	660		ug/L	P391917	
		Magnesium	1.69		mg/L	P391917	
		Potassium	0.66	I	mg/L	P391917	
		Sodium	6.4		mg/L	P391917	
		Zinc	5.0	U	ug/L	P391917	
	EPA 200.8 Rev. 5.4	Aluminum	451		ug/L	P391917	
		Antimony	0.050	U	ug/L	P391917	
		Arsenic	0.35		ug/L	P391917	
		Beryllium	0.040	I	ug/L	P391917	
		Boron**	18.3		ug/L	P391917	
		Cadmium	0.020	U	ug/L	P391917	
		Chromium	0.62	I	ug/L	P391917	
		Copper	0.40	U	ug/L	P391917	
		Lead	0.40	I	ug/L	P391917	
		Nickel	0.51	I	ug/L	P391917	
		Selenium	0.20	U	ug/L	P391917	
		Silver	0.010	U	ug/L	P391917	
		Thallium	0.10	U	ug/L	P391917	
	SM 2340B	Hardness	17.2		mg/L	P391917	
2216143	EPA 8270E	Acetochlor	0.25	U	ng/L	P391902	
		Alachlor	0.25	U	ng/L	P391902	
		Ametryn	0.61	U	ng/L	P391902	
		Atrazine	0.29	I	ng/L	P391902	
		Atrazine Desethyl	1.5	U	ng/L	P391902	
		Azinphos Methyl	2.0	U	ng/L	P391902	
		Azoxystrobin**	0.51	U	ng/L	P391902	
		Bromacil	0.51	U	ng/L	P391902	
		Butylate	0.41	U	ng/L	P391902	
		Carbophenothion	0.51	U	ng/L	P391902	
		Carfentrazone Ethyl**	0.10	U	ng/L	P391902	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P391902	
		Chlorpyrifos Methyl	0.051	U	ng/L	P391902	
		Cyanazine	3.3	U	ng/L	P391902	
		Demeton	1.5	U	ng/L	P391902	
		Diazinon	0.13	U	ng/L	P391902	
		Difenoconazole**	0.61	U	ng/L	P391902	
		Dimethenamid**	0.10	U	ng/L	P391902	
		Disulfoton	0.51	U	ng/L	P391902	
		Dithiopyr**	0.10	U	ng/L	P391902	
		EPTC	1.3	U	ng/L	P391902	
		Ethion	0.15	U	ng/L	P391902	

Field ID: 19010027

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2216143	EPA 8270E	Ethoprop	0.10	U	ng/L	P391902	
		Fenamiphos	0.51	U	ng/L	P391902	
		Fenbuconazole**	0.13	U	ng/L	P391902	
		Fipronil	0.25	U	ng/L	P391902	
		Fipronil Desulfinyl**	0.13	U	ng/L	P391902	
		Fipronil Sulfide	0.15	U	ng/L	P391902	
		Fipronil Sulfone	0.15	U	ng/L	P391902	
		Fluazifop-P-butyl**	0.10	U	ng/L	P391902	
		Fludioxonil**	0.13	U	ng/L	P391902	
		Flumioxazin**	1.8	U	ng/L	P391902	
		Flutolanil**	0.10	U	ng/L	P391902	
		Fluxapyroxad**	0.10	U	ng/L	P391902	
		Fonofos	0.20	U	ng/L	P391902	
		Hexazinone	0.67	I	ng/L	P391902	
		Imazalil**	0.76	U	ng/L	P391902	
		Iprodione**	0.61	U	ng/L	P391902	
		Malathion	0.35	U	ng/L	P391902	
		Metaxyl	0.76	U	ng/L	P391902	
		Metolachlor	0.51	U	ng/L	P391902	
		Metribuzin	3.3	U	ng/L	P391902	
		Mevinphos	0.51	U	ng/L	P391902	
		Molinate	0.30	U	ng/L	P391902	
		Myclobutanil**	0.25	U	ng/L	P391902	
		Naled**	1.5	U	ng/L	P391902	
		Norflurazon	0.51	U	ng/L	P391902	
		Oxadiazon	0.10	U	ng/L	P391902	
		Oxyfluorfen**	0.15	U	ng/L	P391902	
		Parathion Ethyl	0.25	U	ng/L	P391902	
		Parathion Methyl	0.56	U	ng/L	P391902	
		Pendimethalin	1.0	U	ng/L	P391902	
		Phorate	0.25	U	ng/L	P391902	
		Prodiamine**	0.18	U	ng/L	P391902	
		Prometon	0.91	U	ng/L	P391902	
		Prometryn	0.20	U	ng/L	P391902	
		Pronamide**	0.15	U	ng/L	P391902	
		Propiconazole**	0.51	U	ng/L	P391902	
		Pyriproxyfen**	0.13	U	ng/L	P391902	
		Simazine	0.51	U	ng/L	P391902	
		Sulfentrazone**	0.51	U	ng/L	P391902	
		Tebuconazole**	0.51	U	ng/L	P391902	
		Terbufos	0.10	U	ng/L	P391902	
		Terbuthylazine	0.43	U	ng/L	P391902	

Field ID: 19010027

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 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Insufficient sample available to perform duplicate matrix spikes.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P391873

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P391917

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: P391917

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: P392185

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392188

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P391885

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391937

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P391900

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P391914

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P391874

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

Reference Method: EPA 8270E
Batch ID: P391902

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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P391902

Component	Result	Code	Units
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
Metaxyl	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
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8321B

Batch ID: P391795

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P391795

Component	Result	Code	Units
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B

Batch ID: P391850

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

Reference Method: SM 2120 B-2011

Batch ID: P391876

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011

Batch ID: P391892

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

Reference Method: SM 2540 C-2011

Batch ID: P392111

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P392114

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-2011
Batch ID: P391894

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P391941

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: P391917

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	99.4		P	85 - 115
Calcium	99.4		P	85 - 115
Iron	98.4		P	85 - 115
Magnesium	99.0		P	85 - 115
Potassium	97.8		P	85 - 115
Sodium	99.1		P	85 - 115
Zinc	97.5		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P391917

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Antimony	96.5		P	85 - 115
Arsenic	101		P	85 - 115
Beryllium	94.8		P	85 - 115
Boron	109		P	85 - 115
Cadmium	96.3		P	85 - 115
Chromium	96.8		P	85 - 115
Copper	97.8		P	85 - 115
Lead	101		P	85 - 115
Nickel	97.2		P	85 - 115
Selenium	102		P	85 - 115
Silver	106		P	85 - 115
Thallium	95.3		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392185

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392188

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P391885

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391937

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P391900

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P391914

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P391874

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

Reference Method: EPA 8270E

Batch ID: P391902

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	94.2	98.0	P/P	70 - 121
Alachlor	94.2	95.1	P/P	70 - 119
Ametryn	110	116	P/P	61 - 135
Atrazine	100	100	P/P	76 - 123
Atrazine Desethyl	107	97.5	P/P	35 - 140
Azinphos Methyl	118	120	P/P	57 - 163
Azoxystrobin	121	151	P/P	43 - 231
Bromacil	76.7	78.1	P/P	42 - 123
Butylate	59.2	59.8	P/P	34 - 92.0
Carbophenothion	87.5	89.4	P/P	61 - 121
Carfentrazone Ethyl	105	112	P/P	62 - 139
Chlorpyrifos Ethyl	83.8	93.7	P/P	67 - 121
Chlorpyrifos Methyl	94.8	95.7	P/P	67 - 120
Cyanazine	126	106	P/P	20 - 226
Demeton	90.3	89.4	P/P	35 - 125
Diazinon	102	101	P/P	70 - 122
Difenoconazole	118	128	P/P	56 - 186
Dimethenamid	95.2	98.1	P/P	67 - 119
Disulfoton	117	97.4	P/P	47 - 120
Dithiopyr	92.3	93.4	P/P	67 - 118
EPTC	59.2	63.7	P/P	33 - 90.0
Ethion	90.7	92.5	P/P	40 - 133
Ethoprop	91.4	87.1	P/P	61 - 121
Fenamiphos	97.8	102	P/P	31 - 139
Fenbuconazole	107	104	P/P	66 - 141
Fipronil	104	106	P/P	62 - 129
Fipronil Desulfinyl	97.9	99.0	P/P	59 - 126
Fipronil Sulfide	93.1	96.4	P/P	63 - 117
Fipronil Sulfone	94.8	88.3	P/P	57 - 117
Fluazifop-P-butyl	98.0	101	P/P	63 - 124
Fludioxonil	93.1	99.0	P/P	63 - 123
Flumioxazin	141	129	P/P	34 - 245
Flutolanil	100	98.6	P/P	56 - 131
Fluxapyroxad	102	97.4	P/P	57 - 117

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P391902

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fonofos	94.2	86.7	P/P	61 - 116
Hexazinone	92.7	87.6	P/P	55 - 138
Imazalil	106	108	P/P	33 - 143
Iprodione	99.7	99.0	P/P	59 - 118
Malathion	80.1	95.3	P/P	62 - 138
Metalaxyl	104	104	P/P	24 - 147
Metolachlor	86.7	94.5	P/P	68 - 118
Metribuzin	112	112	P/P	20 - 239
Mevinphos	85.9	84.8	P/P	46 - 124
Molinate	69.3	69.2	P/P	46 - 100
Myclobutanil	99.7	104	P/P	32 - 149
Naled	37.4	37.5	P/P	32 - 95.0
Norflurazon	99.0	101	P/P	57 - 127
Oxadiazon	92.9	96.2	P/P	63 - 118
Oxyfluorfen	102	104	P/P	69 - 137
Parathion Ethyl	92.3	99.2	P/P	70 - 113
Parathion Methyl	118	117	P/P	71 - 130
Pendimethalin	93.8	92.3	P/P	55 - 118
Phorate	85.7	86.6	P/P	46 - 125
Prodiamine	28.1	29.4	P/P	20 - 141
Prometon	99.4	93.0	P/P	54 - 122
Prometryn	105	99.0	P/P	66 - 124
Pronamide	105	100	P/P	79 - 122
Propiconazole	101	105	P/P	61 - 126
Pyriproxyfen	108	113	P/P	52 - 131
Simazine	97.8	104	P/P	75 - 128
Sulfentrazone	68.8	65.0	P/P	20 - 132
Tebuconazole	89.9	76.8	P/P	20 - 116
Terbufos	88.5	87.4	P/P	61 - 117
Terbutylazine	97.6	91.8	P/P	74 - 116

Reference Method: EPA 8321B
Batch ID: P391795

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	136		P	30 - 160
Acetaminophen	94.9		P	30 - 160
Acetamiprid	104		P	30 - 160
Afidopyropen	69.0		P	30 - 160
Bentazon	107		P	30 - 160
Benzovindiflupyr	80.8		P	30 - 160
Carbamazepine	88.3		P	30 - 160
Clothianidin	89.9		P	30 - 160
Dinotefuran	103		P	30 - 160
Diuron	68.4		P	30 - 160
Fenuron	95.7		P	30 - 160
Fluridone	88.2		P	30 - 160
Hydrocodone	103		P	30 - 160
Ibuprofen	72.1		P	30 - 160
Imazapyr	98.5		P	30 - 160
Imidacloprid	127		P	30 - 160
Linuron	69.6		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P391795

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mandestrobin	105		P	30 - 160
MCPP	119		P	30 - 160
Naproxen	70.7		P	30 - 160
Primidone	94.8		P	30 - 160
Pyraclostrobin	78.0		P	30 - 160
Thiamethoxam	91.3		P	30 - 160
Tolfenpyrad	51.4		P	30 - 160
Triclopyr	111		P	30 - 160

Reference Method: EPA 8321B

Batch ID: P391850

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	114		P	40 - 150
AMPA	68.4		P	40 - 150
Endothall	93.6		P	40 - 150
Glufosinate	99.6		P	40 - 150
Glyphosate	94.8		P	40 - 140
Sucralose	107		P	40 - 150

Reference Method: SM 2120 B-2011

Batch ID: P391876

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.1		P	85 - 115

Reference Method: SM 2320 B-2011

Batch ID: P391892

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.1		P	93 - 104

Reference Method: SM 4500 F-C-2011

Batch ID: P391894

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.7		P	90 - 106

Reference Method: SM 5310 B-2011

Batch ID: P391941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P391917

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2216142	Barium	105	106	P/P	80 - 120
2216142	Calcium	104		P	80 - 120
2216142	Iron	101	106	P/P	80 - 120
2216142	Magnesium	102	106	P/P	80 - 120
2216142	Potassium	97.5	102	P/P	80 - 120
2216142	Sodium	103		P	80 - 120
2216142	Zinc	108	108	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P391917

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2216142	Aluminum	100	105	P/P	80 - 120
2216142	Antimony	94.3	95.9	P/P	80 - 120
2216142	Arsenic	100	101	P/P	80 - 120
2216142	Beryllium	95.2	95.5	P/P	80 - 120
2216142	Boron	103	107	P/P	80 - 120
2216142	Cadmium	95.4	96.9	P/P	80 - 120
2216142	Chromium	95.8	97.7	P/P	80 - 120
2216142	Copper	96.3	98.6	P/P	80 - 120
2216142	Lead	99.6	102	P/P	80 - 120
2216142	Nickel	93.1	95.2	P/P	80 - 120
2216142	Selenium	101	99.9	P/P	80 - 120
2216142	Silver	102	104	P/P	80 - 120
2216142	Thallium	96.3	98.6	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392185

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2216136	Chloride	93.5		P	90 - 110
2216243	Chloride	95.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392188

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2216136	Sulfate	98.9		P	90 - 110
2216243	Sulfate	95.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P391885

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2216137	Ammonia-N	96.2	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391937

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2216087	Kjeldahl Nitrogen	112	101	F/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P391900

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2216073	NO2NO3-N	95.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P391874

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2216088	O-Phosphate-P	105	106	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P391902

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2216143	Acetochlor	80.5		P	66 - 122
2216143	Alachlor	81.9		P	65 - 122
2216143	Ametryn	126		P	45 - 173
2216143	Atrazine	104		P	70 - 134
2216143	Atrazine Desethyl	124		P	25 - 150
2216143	Azinphos Methyl	103		P	44 - 174
2216143	Azoxystrobin	164		P	10 - 268
2216143	Bromacil	83.9		P	31 - 145
2216143	Butylate	42.6		P	15 - 97.0
2216143	Carbophenothion	73.9		P	42 - 129
2216143	Carfentrazone Ethyl	82.9		P	62 - 145
2216143	Chlorpyrifos Ethyl	69.9		P	60 - 124
2216143	Chlorpyrifos Methyl	81.3		P	66 - 119
2216143	Cyanazine	115		P	17 - 225
2216143	Demeton	78.7		P	36 - 142
2216143	Diazinon	93.8		P	70 - 128
2216143	Difenoconazole	112		P	33 - 222
2216143	Dimethenamid	79.1		P	54 - 125
2216143	Disulfoton	84.7		P	49 - 133
2216143	Dithiopyr	78.8		P	55 - 123
2216143	EPTC	45.8		P	19 - 91.0
2216143	Ethion	74.6		P	13 - 143
2216143	Ethoprop	95.4		P	49 - 144
2216143	Fenamiphos	69.4		P	32 - 136
2216143	Fenbuconazole	80.1		P	73 - 148
2216143	Fipronil	88.3		P	57 - 129
2216143	Fipronil Desulfinyl	84.7		P	49 - 127
2216143	Fipronil Sulfide	72.5		P	44 - 127
2216143	Fipronil Sulfone	75.0		P	35 - 126
2216143	Fluazifop-P-butyl	85.5		P	67 - 129
2216143	Fludioxonil	78.3		P	61 - 126
2216143	Flumioxazin	111		P	38 - 279
2216143	Flutolanil	73.6		P	55 - 136
2216143	Fluxapyroxad	75.4		P	33 - 140
2216143	Fonofos	87.4		P	58 - 125
2216143	Hexazinone	94.2		P	57 - 148
2216143	Imazalil	103		P	10 - 221
2216143	Iprodione	75.0		P	32 - 140
2216143	Malathion	74.8		P	52 - 138
2216143	Metalaxyl	95.7		P	46 - 134

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P391902

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2216143	Metolachlor	73.4		P	58 - 122
2216143	Metribuzin	120		P	16 - 272
2216143	Mevinphos	102		P	45 - 140
2216143	Molinate	67.7		P	41 - 103
2216143	Myclobutanil	86.5		P	60 - 134
2216143	Naled	34.0		P	20 - 113
2216143	Norflurazon	78.3		P	51 - 123
2216143	Oxadiazon	73.0		P	44 - 125
2216143	Oxyfluorfen	88.1		P	66 - 176
2216143	Parathion Ethyl	90.1		P	57 - 132
2216143	Parathion Methyl	118		P	59 - 156
2216143	Pendimethalin	83.1		P	59 - 129
2216143	Phorate	65.8		P	47 - 136
2216143	Prodiamine	26.7		P	10 - 159
2216143	Prometon	87.7		P	59 - 127
2216143	Prometryn	89.4		P	59 - 129
2216143	Pronamide	117		P	65 - 145
2216143	Propiconazole	96.7		P	28 - 165
2216143	Pyriproxyfen	86.6		P	21 - 180
2216143	Simazine	116		P	63 - 147
2216143	Sulfentrazone	79.6		P	32 - 136
2216143	Tebuconazole	54.0		P	10 - 117
2216143	Terbufos	81.4		P	61 - 131
2216143	Terbutylazine	88.6		P	62 - 126

Reference Method: EPA 8321B
Batch ID: P391795

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215905	2,4-D	124	123	P/P	30 - 160
2215905	Acetaminophen	79.7	79.1	P/P	30 - 160
2215905	Acetamiprid	86.6	83.7	P/P	30 - 160
2215905	Afidopyropen	63.1	64.4	P/P	30 - 160
2215905	Benzovindiflupyr	78.3	83.1	P/P	30 - 160
2215905	Carbamazepine	68.9	69.1	P/P	30 - 160
2215905	Clothianidin	82.1	79.9	P/P	30 - 160
2215905	Dinotefuran	102	98.8	P/P	30 - 160
2215905	Diuron	54.9	54.4	P/P	30 - 160
2215905	Fenuron	80.3	69.5	P/P	30 - 160
2215905	Fluridone	84.4	96.8	P/P	30 - 160
2215905	Hydrocodone	102	94.7	P/P	30 - 160
2215905	Ibuprofen	75.0	75.5	P/P	30 - 160
2215905	Imazapyr	94.3	113	P/P	30 - 160
2215905	Imidacloprid	130	133	P/P	30 - 160
2215905	Linuron	68.1	68.1	P/P	30 - 160
2215905	Mandestrobin	91.6	101	P/P	30 - 160
2215905	MCCP	101	100	P/P	30 - 160
2215905	Naproxen	65.0	71.0	P/P	30 - 160
2215905	Primidone	83.4	72.3	P/P	30 - 160
2215905	Pyraclostrobin	71.9	73.3	P/P	30 - 160
2215905	Thiamethoxam	97.6	96.9	P/P	30 - 160
2215905	Tolfenpyrad	51.0	49.9	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P391795

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215905	Triclopyr	98.3	110	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P391850

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215990	Acesulfame K	101	107	P/P	40 - 150
2215990	AMPA	59.4	62.8	P/P	40 - 150
2215990	Endothall	99.8	98.9	P/P	40 - 150
2215990	Glufosinate	90.8	97.8	P/P	40 - 150
2215990	Glyphosate	66.3	82.7	P/P	40 - 140
2215990	Sucralose	59.8	42.9	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P391894

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215931	Fluoride	93.0	91.5	F/F	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P391941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215897	Organic Carbon	100		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P391873

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216125	Turbidity	6.62	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P391917

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216142	Barium	0.808	Spike	P	0 - 20
2216142	Calcium	0.693	Spike	P	0 - 20
2216142	Iron	3.79	Spike	P	0 - 20
2216142	Magnesium	2.26	Spike	P	0 - 20
2216142	Potassium	3.86	Spike	P	0 - 20
2216142	Sodium	1.47	Spike	P	0 - 20
2216142	Zinc	0.503	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P391917

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216142	Aluminum	3.14	Spike	P	0 - 20
2216142	Antimony	1.70	Spike	P	0 - 20
2216142	Arsenic	0.964	Spike	P	0 - 20
2216142	Beryllium	0.315	Spike	P	0 - 20
2216142	Boron	2.58	Spike	P	0 - 20
2216142	Cadmium	1.58	Spike	P	0 - 20
2216142	Chromium	1.91	Spike	P	0 - 20
2216142	Copper	2.32	Spike	P	0 - 20
2216142	Lead	2.05	Spike	P	0 - 20
2216142	Nickel	2.11	Spike	P	0 - 20
2216142	Selenium	0.772	Spike	P	0 - 20
2216142	Silver	1.71	Spike	P	0 - 20
2216142	Thallium	2.44	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P392185

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216243	Chloride	0.980	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P392188

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216243	Sulfate	1.34	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P391885

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216137	Ammonia-N	1.25	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P391937

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216087	Kjeldahl Nitrogen	6.66	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P391900

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216073	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P391914

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216026	Total-P	2.66	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P391874

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216088	O-Phosphate-P	0.663	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P391902

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Acetochlor	3.94	LCS	P	0 - 30
LFB	Alachlor	0.873	LCS	P	0 - 30
LFB	Ametryn	5.36	LCS	P	0 - 30
LFB	Atrazine	0.211	LCS	P	0 - 30
LFB	Atrazine Desethyl	9.41	LCS	P	0 - 30
LFB	Azinphos Methyl	1.87	LCS	P	0 - 30
LFB	Azoxystrobin	21.5	LCS	P	0 - 30
LFB	Bromacil	1.79	LCS	P	0 - 30
LFB	Butylate	0.970	LCS	P	0 - 30
LFB	Carbophenothion	2.14	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	6.51	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	11.2	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	1.01	LCS	P	0 - 30
LFB	Cyanazine	17.5	LCS	P	0 - 30
LFB	Demeton	1.01	LCS	P	0 - 30
LFB	Diazinon	0.298	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P391902

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Difenoconazole	8.49	LCS	P	0 - 30
LFB	Dimethenamid	2.95	LCS	P	0 - 30
LFB	Disulfoton	18.3	LCS	P	0 - 30
LFB	Dithiopyr	1.16	LCS	P	0 - 30
LFB	EPTC	7.31	LCS	P	0 - 30
LFB	Ethion	1.92	LCS	P	0 - 30
LFB	Ethoprop	4.84	LCS	P	0 - 30
LFB	Fenamiphos	3.75	LCS	P	0 - 30
LFB	Fenbuconazole	2.07	LCS	P	0 - 30
LFB	Fipronil	1.49	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	1.11	LCS	P	0 - 30
LFB	Fipronil Sulfide	3.56	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.07	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	3.01	LCS	P	0 - 30
LFB	Fludioxonil	6.11	LCS	P	0 - 30
LFB	Flumioxazin	8.89	LCS	P	0 - 30
LFB	Flutolanil	1.68	LCS	P	0 - 30
LFB	Fluxapyroxad	4.92	LCS	P	0 - 30
LFB	Fonofos	8.35	LCS	P	0 - 30
LFB	Hexazinone	5.64	LCS	P	0 - 30
LFB	Imazalil	2.20	LCS	P	0 - 30
LFB	Iprodione	0.749	LCS	P	0 - 30
LFB	Malathion	17.3	LCS	P	0 - 30
LFB	Metalaxyl	0.327	LCS	P	0 - 30
LFB	Metolachlor	8.64	LCS	P	0 - 30
LFB	Metribuzin	0.286	LCS	P	0 - 30
LFB	Mevinphos	1.29	LCS	P	0 - 30
LFB	Molinate	0.151	LCS	P	0 - 30
LFB	Myclobutanil	3.78	LCS	P	0 - 30
LFB	Naled	0.293	LCS	P	0 - 30
LFB	Norflurazon	2.20	LCS	P	0 - 30
LFB	Oxadiazon	3.55	LCS	P	0 - 30
LFB	Oxyfluorfen	2.46	LCS	P	0 - 30
LFB	Parathion Ethyl	7.19	LCS	P	0 - 30
LFB	Parathion Methyl	1.01	LCS	P	0 - 30
LFB	Pendimethalin	1.64	LCS	P	0 - 30
LFB	Phorate	1.02	LCS	P	0 - 30
LFB	Prodiamine	4.50	LCS	P	0 - 30
LFB	Prometon	6.65	LCS	P	0 - 30
LFB	Prometryn	6.27	LCS	P	0 - 30
LFB	Pronamide	4.17	LCS	P	0 - 30
LFB	Propiconazole	3.54	LCS	P	0 - 30
LFB	Pyriproxyfen	4.39	LCS	P	0 - 30
LFB	Simazine	6.22	LCS	P	0 - 30
LFB	Sulfentrazone	5.72	LCS	P	0 - 30
LFB	Tebuconazole	15.7	LCS	P	0 - 30
LFB	Terbufos	1.32	LCS	P	0 - 30
LFB	Terbuthylazine	6.15	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P391795

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215905	2,4-D	0.537	Spike	P	0 - 30
2215905	Acetaminophen	0.690	Spike	P	0 - 30
2215905	Acetamiprid	3.49	Spike	P	0 - 30
2215905	Afidopyropen	2.06	Spike	P	0 - 30
2215905	Bentazon	2.02	Spike	P	0 - 30
2215905	Benzovindiflupyr	5.90	Spike	P	0 - 30
2215905	Carbamazepine	0.225	Spike	P	0 - 30
2215905	Clothianidin	2.73	Spike	P	0 - 30
2215905	Dinotefuran	3.40	Spike	P	0 - 30
2215905	Diuron	0.951	Spike	P	0 - 30
2215905	Fenuron	14.4	Spike	P	0 - 30
2215905	Fluridone	13.7	Spike	P	0 - 30
2215905	Hydrocodone	7.45	Spike	P	0 - 30
2215905	Ibuprofen	0.654	Spike	P	0 - 30
2215905	Imazapyr	10.9	Spike	P	0 - 30
2215905	Imidacloprid	2.42	Spike	P	0 - 30
2215905	Linuron	0.00382	Spike	P	0 - 30
2215905	Mandestrobin	9.33	Spike	P	0 - 30
2215905	MCPP	0.460	Spike	P	0 - 30
2215905	Naproxen	8.82	Spike	P	0 - 30
2215905	Primidone	14.2	Spike	P	0 - 30
2215905	Pyraclostrobin	2.01	Spike	P	0 - 30
2215905	Thiamethoxam	0.740	Spike	P	0 - 30
2215905	Tolfenpyrad	2.14	Spike	P	0 - 30
2215905	Triclopyr	10.9	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P391850

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215990	Acesulfame K	5.01	Spike	P	0 - 30
2215990	AMPA	3.62	Spike	P	0 - 30
2215990	Endothall	0.975	Spike	P	0 - 30
2215990	Glufosinate	7.44	Spike	P	0 - 30
2215990	Glyphosate	7.88	Spike	P	0 - 30
2215990	Sucralose	29.6	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P391876

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216136	Color (true)	7.08	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P391892

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215931	Total Alkalinity	2.78	Sample	P	0 - 8.1

Quality Assurance Report Precision

Reference Method: SM 2540 C-2011
Batch ID: P392111

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215931	TDS	3.55	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P391894

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215931	Fluoride	1.45	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P391941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215897	Organic Carbon	0.883	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2216141
Field Sample ID: 19010027

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	85.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	56.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	35.7	P	30 - 160
EPA 8321B	Diuron-d6	36.2	P	30 - 160
EPA 8321B	Endothall-d6	103	P	40 - 160
EPA 8321B	Endothall-d6	103	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	83.5	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	83.5	P	40 - 160
EPA 8321B	Ibuprofen-d3	70.1	P	30 - 160
EPA 8321B	Primidone-d5	47.3	P	30 - 160
EPA 8321B	Sucralose-d6	92.3	P	30 - 160
EPA 8321B	Sucralose-d6	92.3	P	30 - 160

Lab Sample ID: 2216143
Field Sample ID: 19010027

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	93.7	P	73 - 135
EPA 8270E	Terbufos-d10	83.9	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A102838

Included Lab Sample IDs: 2216136

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	102	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A102840

Included Lab Sample IDs: 2216138

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.6	99.0	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A102842

Included Lab Sample IDs: 2216136

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.2	100	P/P	90 - 115

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A102851

Included Lab Sample IDs: 2216137

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	98.9	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A102854

Included Lab Sample IDs: 2216136

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	93.3	97.4	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A102854

Included Lab Sample IDs: 2216136

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	95.8	96.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A102857

Included Lab Sample IDs: 2216137

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	99.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A102858

Included Lab Sample IDs: 2216141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	120	102	P/P	60 - 160
AMPA	64.9	63.8	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
 Run ID: A102858
 Included Lab Sample IDs: 2216141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endothall	93.7	93.4	P/P	60 - 160
Glufosinate	98.4	98.8	P/P	60 - 160
Glyphosate	104	101	P/P	60 - 160

Reference Method: EPA 8321B
 Run ID: A102859
 Included Lab Sample IDs: 2216141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	98.7	99.7	P/P	60 - 160

Reference Method: SM 5310 B-2011
 Run ID: A102874
 Included Lab Sample IDs: 2216137

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

Reference Method: EPA 300.0 Rev. 2.1
 Run ID: A102875
 Included Lab Sample IDs: 2216136

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.2	99.2	P/P	90 - 110
Sulfate	98.4	99.2	P/P	90 - 110

Reference Method: EPA 8321B
 Run ID: A102879
 Included Lab Sample IDs: 2216141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	133	107	P/P	60 - 160
Acetamiprid	95.3	114	P/P	50 - 150
Afidopyropen	100	96.4	P/P	50 - 150
Benzovindiflupyr	128	121	P/P	50 - 160
Carbamazepine	146	148	P/P	60 - 150
Clothianidin	118	117	P/P	60 - 150
Dinotefuran	112	104	P/P	50 - 150
Diuron	138	130	P/P	60 - 160
Fenuron	137	131	P/P	60 - 150
Fluridone	139	129	P/P	60 - 160
Hydrocodone	118	117	P/P	60 - 150
Imidacloprid	119	116	P/P	60 - 150
Linuron	119	126	P/P	60 - 150
Mandestrobin	134	135	P/P	50 - 150
Primidone	101	117	P/P	60 - 150
Pyraclostrobin	124	120	P/P	60 - 150
Thiamethoxam	120	121	P/P	50 - 150
Tolfenpyrad	115	111	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A102896
Included Lab Sample IDs: 2216141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	101	93.0	P/P	50 - 150
Bentazon	115	97.8	P/P	50 - 160
Ibuprofen	112	91.6	P/P	50 - 160
Imazapyr	97.8	96.0	P/P	50 - 160
MCP	106	91.6	P/P	50 - 150
Naproxen	98.9	105	P/P	50 - 160
Triclopyr	101	93.3	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A102901
Included Lab Sample IDs: 2216137

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	99.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A102907
Included Lab Sample IDs: 2216142

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	102	P/P	90 - 110
Calcium	97.9	97.9	P/P	90 - 110
Iron	96.1	96.2	P/P	90 - 110
Magnesium	96.2	97.1	P/P	90 - 110
Potassium	95.3	95.6	P/P	90 - 110
Sodium	98.1	97.8	P/P	90 - 110
Zinc	103	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A102922
Included Lab Sample IDs: 2216137

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.9	99.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A102942
Included Lab Sample IDs: 2216142

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	106	102	P/P	90 - 110
Antimony	94.9	94.1	P/P	90 - 110
Arsenic	102	99.9	P/P	90 - 110
Beryllium	99.6	98.9	P/P	90 - 110
Boron	107	109	P/P	90 - 110
Cadmium	98.5	97.4	P/P	90 - 110
Chromium	99.4	97.8	P/P	90 - 110
Copper	98.5	95.5	P/P	90 - 110
Lead	104	104	P/P	90 - 110
Nickel	99.2	95.9	P/P	90 - 110
Selenium	101	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A102942

Included Lab Sample IDs: 2216142

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	103	102	P/P	90 - 110
Thallium	98.4	97.7	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A102951

Included Lab Sample IDs: 2216143

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.1		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	97.8		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	113		P	80 - 120
Azinphos Methyl	90.0		P	80 - 120
Azoxystrobin	96.9		P	80 - 120
Bromacil	95.8		P	80 - 120
Butylate	99.0		P	80 - 120
Carbophenothion	98.9		P	80 - 120
Carfentrazone Ethyl	98.9		P	80 - 120
Chlorpyrifos Ethyl	99.9		P	80 - 120
Chlorpyrifos Methyl	105		P	80 - 120
Cyanazine	100		P	80 - 120
Demeton	96.7		P	80 - 120
Diazinon	101		P	80 - 120
Difenoconazole	98.9		P	80 - 120
Dimethenamid	101		P	80 - 120
Disulfoton	90.6		P	80 - 120
Dithiopyr	104		P	80 - 120
EPTC	99.4		P	80 - 120
Ethion	99.2		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	98.8		P	80 - 120
Fenbuconazole	96.0		P	80 - 120
Fipronil	100		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	99.9		P	80 - 120
Fipronil Sulfone	98.2		P	80 - 120
Fluazifop-P-butyl	103		P	80 - 120
Fludioxonil	98.8		P	80 - 120
Flumioxazin	92.4		P	80 - 120
Flutolanil	100		P	80 - 120
Fluxapyroxad	98.6		P	80 - 120
Fonofos	99.5		P	80 - 120
Hexazinone	98.7		P	80 - 120
Imazalil	102		P	80 - 120
Iprodione	98.9		P	80 - 120
Malathion	98.6		P	80 - 120
Metalaxyl	101		P	80 - 120
Metolachlor	97.9		P	80 - 120
Metribuzin	109		P	80 - 120
Mevinphos	104		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A102951
Included Lab Sample IDs: 2216143

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Molinate	96.1		P	80 - 120
Myclobutanil	99.1		P	80 - 120
Naled	109		P	80 - 120
Norflurazon	96.5		P	80 - 120
Oxadiazon	105		P	80 - 120
Oxyfluorfen	93.6		P	80 - 120
Parathion Ethyl	88.5		P	80 - 120
Parathion Methyl	101		P	80 - 120
Pendimethalin	100		P	80 - 120
Phorate	95.9		P	80 - 120
Prodiamine	98.7		P	80 - 120
Prometon	99.6		P	80 - 120
Prometryn	100		P	80 - 120
Pronamide	104		P	80 - 120
Propiconazole	102		P	80 - 120
Pyriproxyfen	95.9		P	80 - 120
Simazine	99.7		P	80 - 120
Sulfentrazone	97.8		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	99.9		P	80 - 120
Terbutylazine	101		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		LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						6.62	
EPA 200.7 Rev. 4.4	Barium	99.4		105	106			0.808
	Calcium	99.4		104				0.693
	Iron	98.4		101	106			3.79
	Magnesium	99.0		102	106			2.26
	Potassium	97.8		97.5	102			3.86
	Sodium	99.1		103				1.47
	Zinc	97.5		108	108			0.503
EPA 200.8 Rev. 5.4	Aluminum	103		100	105			3.14
	Antimony	96.5		94.3	95.9			1.70
	Arsenic	101		100	101			0.964
	Beryllium	94.8		95.2	95.5			0.315
	Boron	109		103	107			2.58
	Cadmium	96.3		95.4	96.9			1.58
	Chromium	96.8		95.8	97.7			1.91
	Copper	97.8		96.3	98.6			2.32
	Lead	101		99.6	102			2.05
	Nickel	97.2		93.1	95.2			2.11
	Selenium	102		101	99.9			0.772
	Silver	106		102	104			1.71
	Thallium	95.3		96.3	98.6			2.44
EPA 300.0 Rev. 2.1	Chloride	98.7		95.7	93.5		0.980	
	Sulfate	98.3		98.9	95.2		1.34	
EPA 350.1 Rev. 2.0	Ammonia-N	98.0		96.2	97.6			1.25
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102		112	101			6.66
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5		95.0				0.0
EPA 365.1 Rev. 2.0	Total-P	100						2.66
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100		105	106			0.663
EPA 8270E	Acetochlor	94.2	98.0	80.5		3.94		
	Alachlor	94.2	95.1	81.9		0.873		
	Ametryn	110	116	126		5.36		
	Atrazine	100	100	104		0.211		
	Atrazine Desethyl	107	97.5	124		9.41		
	Azinphos Methyl	118	120	103		1.87		
	Azoxystrobin	121	151	164		21.5		
	Bromacil	76.7	78.1	83.9		1.79		
	Butylate	59.2	59.8	42.6		0.970		
	Carbophenothion	87.5	89.4	73.9		2.14		
	Carfentrazone Ethyl	105	112	82.9		6.51		
	Chlorpyrifos Ethyl	83.8	93.7	69.9		11.2		
	Chlorpyrifos Methyl	94.8	95.7	81.3		1.01		
	Cyanazine	126	106	115		17.5		
	Demeton	90.3	89.4	78.7		1.01		
	Diazinon	102	101	93.8		0.298		
	Difenoconazole	118	128	112		8.49		
	Dimethenamid	95.2	98.1	79.1		2.95		
	Disulfoton	117	97.4	84.7		18.3		
	Dithiopyr	92.3	93.4	78.8		1.16		
	EPTC	59.2	63.7	45.8		7.31		
	Ethion	90.7	92.5	74.6		1.92		
	Ethoprop	91.4	87.1	95.4		4.84		
	Fenamiphos	97.8	102	69.4		3.75		
	Fenbuconazole	107	104	80.1		2.07		
	Fipronil	104	106	88.3		1.49		

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision SMP	MS
EPA 8270E	Fipronil Desulfinyll	97.9	99.0	84.7	1.11		
	Fipronil Sulfide	93.1	96.4	72.5	3.56		
	Fipronil Sulfone	94.8	88.3	75.0	7.07		
	Fluazifop-P-butyl	98.0	101	85.5	3.01		
	Fludioxonil	93.1	99.0	78.3	6.11		
	Flumioxazin	141	129	111	8.89		
	Flutolanil	100	98.6	73.6	1.68		
	Fluxapyroxad	102	97.4	75.4	4.92		
	Fonofos	94.2	86.7	87.4	8.35		
	Hexazinone	92.7	87.6	94.2	5.64		
	Imazalil	106	108	103	2.20		
	Iprodione	99.7	99.0	75.0	0.749		
	Malathion	80.1	95.3	74.8	17.3		
	Metalaxyl	104	104	95.7	0.327		
	Metolachlor	86.7	94.5	73.4	8.64		
	Metribuzin	112	112	120	0.286		
	Mevinphos	85.9	84.8	102	1.29		
	Molinate	69.3	69.2	67.7	0.151		
	Myclobutanil	99.7	104	86.5	3.78		
	Naled	37.4	37.5	34.0	0.293		
	Norflurazon	99.0	101	78.3	2.20		
	Oxadiazon	92.9	96.2	73.0	3.55		
	Oxyfluorfen	102	104	88.1	2.46		
	Parathion Ethyl	92.3	99.2	90.1	7.19		
	Parathion Methyl	118	117	118	1.01		
	Pendimethalin	93.8	92.3	83.1	1.64		
	Phorate	85.7	86.6	65.8	1.02		
	Prodiamine	28.1	29.4	26.7	4.50		
	Prometon	99.4	93.0	87.7	6.65		
	Prometryn	105	99.0	89.4	6.27		
	Pronamide	105	100	117	4.17		
	Propiconazole	101	105	96.7	3.54		
	Pyriproxyfen	108	113	86.6	4.39		
	Simazine	97.8	104	116	6.22		
	Sulfentrazone	68.8	65.0	79.6	5.72		
	Tebuconazole	89.9	76.8	54.0	15.7		
	Terbufos	88.5	87.4	81.4	1.32		
	Terbutylazine	97.6	91.8	88.6	6.15		
EPA 8321B	2,4-D	136		124	123		0.537
	Acesulfame K	114		101	107		5.01
	Acetaminophen	94.9		79.1	79.7		0.690
	Acetamiprid	104		83.7	86.6		3.49
	Afidopyropen	69.0		64.4	63.1		2.06
	AMPA	68.4		59.4	62.8		3.62
	Bentazon	107					2.02
	Benzovindiflupyr	80.8		78.3	83.1		5.90
	Carbamazepine	88.3		69.1	68.9		0.225
	Clothianidin	89.9		79.9	82.1		2.73
	Dinotefuran	103		98.8	102		3.40
	Diuron	68.4		54.4	54.9		0.951
	Endothall	93.6		99.8	98.9		0.975
	Fenuron	95.7		69.5	80.3		14.4
	Fluridone	88.2		84.4	96.8		13.7
	Glufosinate	99.6		90.8	97.8		7.44

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	Glyphosate	94.8	66.3	82.7			7.88
	Hydrocodone	103	94.7	102			7.45
	Ibuprofen	72.1	75.0	75.5			0.654
	Imazapyr	98.5	94.3	113			10.9
	Imidacloprid	127	133	130			2.42
	Linuron	69.6	68.1	68.1			0.0038
	Mandestrobin	105	91.6	101			9.33
	MCP	119	101	100			0.460
	Naproxen	70.7	65.0	71.0			8.82
	Primidone	94.8	72.3	83.4			14.2
	Pyraclostrobin	78.0	71.9	73.3			2.01
	Sucralose	107	59.8	42.9			29.6
	Thiamethoxam	91.3	96.9	97.6			0.740
	Tolfenpyrad	51.4	51.0	49.9			2.14
	Triclopyr	111	98.3	110			10.9
SM 2120 B-2011	Color (true)	99.1				7.08	
SM 2320 B-2011	Total Alkalinity	97.1				2.78	
SM 2540 C-2011	TDS					3.55	
SM 4500 F-C-2011	Fluoride	95.7	93.0	91.5			1.45
SM 5310 B-2011	Organic Carbon	95.3	100				0.883

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2216136
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2216142
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2216142
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2216136
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2216136
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2216137
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2216137
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2216137
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2216137
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2216138
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2216143
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2216141
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2216141
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2216136
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2216136
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2216142
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2216136
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2216136
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2216136
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2216137

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	12/30/2020			12/30/2020 13:07	Samantha Davila	2216136
EPA 200.7 Rev. 4.4	12/30/2020	01/04/2021 14:00	Elliott D. Healy	01/06/2021 13:57	Betina Topolski	2216142
EPA 200.8 Rev. 5.4	12/30/2020	01/04/2021 14:00	Elliott D. Healy	01/07/2021 16:07	Alexander Thompson	2216142
EPA 300.0 Rev. 2.1	12/30/2020			01/08/2021 14:54	Lipi Saha	2216136
EPA 350.1 Rev. 2.0	12/30/2020			01/03/2021 15:24	Ping Hua	2216137
EPA 351.2 Rev. 2.0	12/30/2020	01/04/2021 15:35	David Boose	01/06/2021 14:55	Virginia P. Brown	2216137
EPA 353.2 Rev. 2.0	12/30/2020			01/04/2021 09:25	Beverly Y. Sanders	2216137
EPA 365.1 Rev. 2.0	12/30/2020	01/04/2021 13:12	Yen Ta	01/06/2021 11:46	Shengyu Wang	2216137
EPA 365.1 Rev. 2.0 dissolved	12/30/2020			12/30/2020 14:39	Blanca Fach	2216138
EPA 8270E	12/30/2020	01/04/2021 08:00	Fe-Val Siddell	01/05/2021 14:31	Vandana T. Nagar	2216143
EPA 8321B	12/30/2020	01/04/2021 09:00	Hoor Shaik	01/05/2021 01:11	Juyoung Kim	2216141
	12/30/2020	01/04/2021 09:00	Hoor Shaik	01/05/2021 13:43	Juyoung Kim	2216141
	12/30/2020	12/30/2020 12:30	Rebecca Ware	12/30/2020 13:09	Rebecca Ware	2216141
	12/30/2020	12/30/2020 12:30	Rebecca Ware	12/30/2020 17:19	Rebecca Ware	2216141
SM 2120 B-2011	12/30/2020			12/30/2020 15:51	Benjamin T. Nordmann	2216136
SM 2320 B-2011	12/30/2020			12/30/2020 19:26	Dale L. Simmons	2216136
SM 2340B	12/30/2020			01/06/2021 13:57	Betina Topolski	2216142
SM 2540 C-2011	12/30/2020			01/02/2021 13:21	Yijie Li	2216136
SM 2540 D-2011	12/30/2020			01/02/2021 13:21	Yijie Li	2216136
SM 4500 F-C-2011	12/30/2020			12/30/2020 19:26	Dale L. Simmons	2216136
SM 5310 B-2011	12/30/2020			01/05/2021 12:13	Touraj Touran	2216137