

Chemical Analysis Report

SE-DIST-2021-12-01-01

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

Event Description: **SMP-SCI - Goat Creek (Brevard)**

Request ID: **RQ-2021-11-15-52**

Customer: **SE-DIST**

Project ID: **SMP**

Send Reports to:

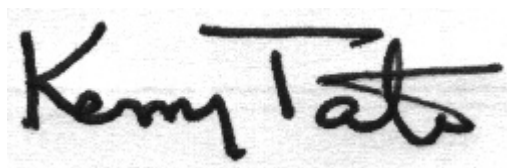
FL Dept. of Environmental Protection
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2199 South Rock Road
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Attn: Drew Liddick

For additional information please contact

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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 21-DEC-2021 13:05

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first name.

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: Goat Creek @ Gradick

Collection Date/Time: 11/30/2021 13:00

Field ID: G5SE0080

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2291878	EPA 180.1 Rev. 2.0	Turbidity	4.4	A	NTU	P406923	
	EPA 300.0 Rev. 2.1	Chloride	250		mg Cl/L	P407186	
		Sulfate	33		mg SO4/L	P407189	
	SM 2120 B-2011	Color (true)	69		PCU	P406897	
	SM 2320 B-2011	Total Alkalinity	171		mg CaCO3/L	P407030	
	SM 2540 C-2011	TDS	616		mg/L	P407378	
	SM 2540 D-2011	TSS	3	I	mg/L	P407347	
	SM 4500 F-C-2011	Fluoride	0.25		mg F/L	P407039	
2291879	EPA 350.1 Rev. 2.0	Ammonia-N	0.073		mg N/L	P407370	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.72		mg N/L	P406996	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P406983	
	EPA 365.1 Rev. 2.0	Total-P	0.037		mg P/L	P406886	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P407288	
2291880	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P406901	
2291896	EPA 8321B	2,4-D	0.042		ug/L	P406988	
		Acesulfame K	0.20	I	ug/L	P406948	MS
		AMPA	1.0	U	ug/L	P406948	
		2,4,5-T	0.0040	U	ug/L	P406988	
		Acetaminophen	0.0080	U	ug/L	P406988	
		Endothall	0.25	U	ug/L	P406948	
		Acetamiprid	0.0020	U	ug/L	P406988	
		Glufosinate	1.0	U	ug/L	P406948	
		Glyphosate	1.0	U	ug/L	P406948	
		Afidopyropen	0.0020	U	ug/L	P406988	
		Sucralose	0.27		ug/L	P406948	
		Bentazon	0.0035		ug/L	P406988	
		Benzovindiflupyr	0.0020	U	ug/L	P406988	
		Carbamazepine	8.0E-04	U	ug/L	P406988	
		Clothianidin	0.0020	U	ug/L	P406988	
		Dinotefuran	0.0020	U	ug/L	P406988	
		Diuron	0.0020	U	ug/L	P406988	
		Fenuron	0.016	U	ug/L	P406988	
		Fluridone	8.0E-04	U	ug/L	P406988	
		Imazapyr	0.13		ug/L	P406988	
		Hydrocodone	0.0020	U	ug/L	P406988	
		Ibuprofen	0.020	U	ug/L	P406988	
		Imidacloprid	0.0020	U	ug/L	P406988	
		Linuron	0.0040	U	ug/L	P406988	RPD
		Mandestrobin	0.0020	U	ug/L	P406988	
		MCP	0.0040	U	ug/L	P406988	
		Naproxen	0.0080	U	ug/L	P406988	
		Primidone	0.0040	U	ug/L	P406988	
		Pyraclostrobin	0.0020	U	ug/L	P406988	

Field ID: G5SE0080

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2291896	EPA 8321B	Silvex	0.0040	U	ug/L	P406988	
		Thiamethoxam	0.0020	U	ug/L	P406988	
		Tolfenpyrad	0.0020	U	ug/L	P406988	
		Triclopyr	0.0040	U	ug/L	P406988	
2291899	EPA 200.7 Rev. 4.4	Calcium	94.1		mg/L	P406931	
		Iron	750		ug/L	P406931	
		Magnesium	18.6		mg/L	P406931	
		Potassium	2.4		mg/L	P406931	
		Sodium	106		mg/L	P406931	
		Strontium	2.07E+03		ug/L	P406931	
		Tin	3.0	U	ug/L	P406931	
		Titanium	1.4	I	ug/L	P406931	
		Vanadium	2.0	U	ug/L	P406931	
		Zinc	5.3	I	ug/L	P406931	
	EPA 200.8 Rev. 5.4	Aluminum	76		ug/L	P406931	
		Antimony	0.051	I	ug/L	P406931	
		Arsenic	0.48		ug/L	P406931	
		Barium	49.3		ug/L	P406931	
		Beryllium	0.014	I	ug/L	P406931	
		Boron**	45.4		ug/L	P406931	
		Cadmium	0.020	U	ug/L	P406931	
		Chromium	0.40	U	ug/L	P406931	
		Cobalt	0.084		ug/L	P406931	
		Copper	0.40	U	ug/L	P406931	
		Lead	0.20	U	ug/L	P406931	
		Manganese	15.8		ug/L	P406931	
		Molybdenum	0.34	I	ug/L	P406931	
		Nickel	0.50	U	ug/L	P406931	
		Selenium	0.20	U	ug/L	P406931	
		Silver	0.010	U	ug/L	P406931	
		Thallium	0.10	U	ug/L	P406931	
	SM 2340B	Hardness	312		mg/L	P406931	
2291903	EPA 8270E	Acetochlor	0.27	U	ng/L	P406865	
		Alachlor	0.27	U	ng/L	P406865	
		Ametryn	0.64	U	ng/L	P406865	
		Atrazine	15		ng/L	P406865	
		Atrazine Desethyl	2.0	I	ng/L	P406865	
		Azinphos Methyl	2.1	U	ng/L	P406865	
		Azoxystrobin**	1.1	I	ng/L	P406865	
		Bromacil	0.54	U	ng/L	P406865	
		Butylate	0.43	U	ng/L	P406865	
		Caffeine**	8.0	U	ng/L	P406865	
		Carbophenothion	0.54	U	ng/L	P406865	
		Carfentrazone Ethyl**	0.11	U	ng/L	P406865	
		Chlorfenapyr**	0.19	U	ng/L	P406865	

Field ID: G5SE0080

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2291903	EPA 8270E	Chlorpyrifos Ethyl	0.27	U	ng/L	P406865	
		Chlorpyrifos Methyl	0.054	U	ng/L	P406865	
		Coumaphos**	0.54	U	ng/L	P406865	
		Cyanazine	3.5	UJ	ng/L	P406865	LCS, MS
		Cyprodinil**	0.11	U	ng/L	P406865	
		Demeton	1.6	U	ng/L	P406865	
		Diazinon	0.13	U	ng/L	P406865	
		Difenoconazole**	0.64	U	ng/L	P406865	
		Dimethenamid**	0.11	U	ng/L	P406865	
		Dimethomorph**	0.19	UJ	ng/L	P406865	MS
		Disulfoton	0.54	U	ng/L	P406865	
		Dithiopyr**	0.19	U	ng/L	P406865	
		EPTC	1.3	U	ng/L	P406865	
		Ethion	0.16	U	ng/L	P406865	
		Ethoprop	0.11	U	ng/L	P406865	
		Etridiazole**	0.16	U	ng/L	P406865	
		Fenamiphos	0.54	U	ng/L	P406865	
		Fenbuconazole**	0.13	U	ng/L	P406865	
		Fipronil	0.27	U	ng/L	P406865	
		Fipronil Desulfinyl**	0.13	U	ng/L	P406865	
		Fipronil Sulfide	0.16	U	ng/L	P406865	
		Fipronil Sulfone	0.21	I	ng/L	P406865	
		Fluazifop-P-butyl**	0.11	U	ng/L	P406865	
		Fludioxonil**	0.13	U	ng/L	P406865	
		Flumioxazin**	1.9	U	ng/L	P406865	
		Flutolanil**	0.14	I	ng/L	P406865	
		Fluxapyroxad**	0.11	U	ng/L	P406865	
		Fonofos	0.21	U	ng/L	P406865	
		Hexazinone	0.54	U	ng/L	P406865	
		Imazalil**	0.80	U	ng/L	P406865	
		Iprodione**	0.64	U	ng/L	P406865	
		Loratadine**	0.11	U	ng/L	P406865	
		Malathion	0.37	U	ng/L	P406865	
		Metalaxyl	0.80	U	ng/L	P406865	
		Metolachlor	0.37	U	ng/L	P406865	
		Metribuzin	3.5	U	ng/L	P406865	
		Mevinphos	1.1	U	ng/L	P406865	
		Molinate	0.32	U	ng/L	P406865	
		Myclobutanil**	0.27	U	ng/L	P406865	
		Naled**	1.6	UJ	ng/L	P406865	LCS
		Napropamide**	0.43	U	ng/L	P406865	
		Norflurazon	0.54	U	ng/L	P406865	
		Oxadiazon	0.63	I	ng/L	P406865	
		Oxyfluorfen**	0.16	U	ng/L	P406865	
		Parathion Ethyl	0.27	U	ng/L	P406865	

Field ID: G5SE0080

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2291903	EPA 8270E	Parathion Methyl	0.59	U	ng/L	P406865	
		Pendimethalin	1.1	U	ng/L	P406865	
		Phenytol**	3.7	UJ	ng/L	P406865	MS
		Phorate	0.56	U	ng/L	P406865	
		Prodiamine**	0.32	U	ng/L	P406865	
		Prometon	0.96	U	ng/L	P406865	
		Prometryn	0.21	U	ng/L	P406865	
		Pronamide**	0.16	U	ng/L	P406865	
		Propanil**	0.13	U	ng/L	P406865	
		Propargite**	1.6	U	ng/L	P406865	
		Propiconazole**	0.54	U	ng/L	P406865	
		Pyraflufen Ethyl**	0.27	U	ng/L	P406865	
		Pyridaben**	0.48	U	ng/L	P406865	
		Pyriproxyfen**	0.13	U	ng/L	P406865	
		Simazine	0.54	U	ng/L	P406865	
		Stirophos**	0.13	U	ng/L	P406865	
		Sulfentrazone**	3.1		ng/L	P406865	
		Tebuconazole**	0.54	U	ng/L	P406865	
		Terbufos	0.11	U	ng/L	P406865	
		Terbutylazine	0.46	U	ng/L	P406865	
		Thiobencarb**	0.64	U	ng/L	P406865	
		Triadimefon**	0.27	U	ng/L	P406865	

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.

EPA 8321B: MDL for some parameters elevated due to matrix interference.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

EPA 8270E: MS accuracy for Atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P406923

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P406931

Component	Result	Code	Units
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
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P406931

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	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
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	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: P407186

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407189

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407370

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406996

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406983

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P406886

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P406901

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

Reference Method: EPA 8270E
Batch ID: P406865

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P406865

Component	Result	Code	Units
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P406865

Component	Result	Code	Units
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.75	U	ng/L
Metaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytol	3.5	U	ng/L
Phenytol	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiatamine	0.30	U	ng/L
Prodiatamine	0.30	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P406865

Component	Result	Code	Units
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8321B

Batch ID: P406948

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

Reference Method: EPA 8321B

Batch ID: P406988

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P406988

Component	Result	Code	Units
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	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	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: P406897

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011

Batch ID: P407030

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

Reference Method: SM 2540 C-2011

Batch ID: P407378

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P407347

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-2011
Batch ID: P407039

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P407288

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: P406931

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	107		P	85 - 115
Magnesium	109		P	85 - 115
Potassium	102		P	85 - 115
Sodium	97.3		P	85 - 115
Strontium	99.7		P	85 - 115
Tin	104		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	102		P	85 - 115
Zinc	105		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P406931

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	98.4		P	85 - 115
Arsenic	96.8		P	85 - 115
Barium	104		P	85 - 115
Beryllium	97.4		P	85 - 115
Boron	98.6		P	85 - 115
Cadmium	97.8		P	85 - 115
Chromium	99.2		P	85 - 115
Cobalt	104		P	85 - 115
Copper	99.1		P	85 - 115
Lead	98.5		P	85 - 115
Manganese	102		P	85 - 115
Molybdenum	99.1		P	85 - 115
Nickel	99.4		P	85 - 115
Selenium	96.6		P	85 - 115
Silver	102		P	85 - 115
Thallium	100		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407186

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407189

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P407370

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P406996

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P406983

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P406886

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: P406901

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

Reference Method: EPA 8270E

Batch ID: P406865

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	111	107	P/P	70 - 121
Alachlor	106	108	P/P	70 - 119
Ametryn	109	109	P/P	61 - 135
Atrazine	102	102	P/P	76 - 123
Atrazine Desethyl	106	106	P/P	35 - 140
Azinphos Methyl	145	142	P/P	57 - 163
Azoxystrobin	103	107	P/P	43 - 231
Bromacil	94.9	119	P/P	42 - 123
Butylate	55.1	45.3	P/P	34 - 92.0
Caffeine	75.4	89.5	P/P	70 - 130
Carbophenothion	102	97.7	P/P	61 - 121
Carfentrazone Ethyl	115	115	P/P	62 - 139
Chlorfenapyr	95.4	87.3	P/P	50 - 150
Chlorpyrifos Ethyl	94.2	89.0	P/P	67 - 121
Chlorpyrifos Methyl	95.9	91.4	P/P	67 - 120
Coumaphos	113	107	P/P	50 - 220
Cyanazine	240	252	F/F	20 - 226
Cyprodinil	125	119	P/P	50 - 150
Demeton	91.0	89.9	P/P	35 - 125
Diazinon	114	118	P/P	70 - 122
Difenoconazole	167	163	P/P	56 - 186
Dimethenamid	92.0	93.0	P/P	67 - 119
Dimethomorph	126	139	P/P	50 - 150
Disulfoton	98.1	93.4	P/P	47 - 120
Dithiopyr	106	110	P/P	67 - 118
EPTC	58.8	47.1	P/P	33 - 90.0
Ethion	84.7	81.5	P/P	40 - 133
Ethoprop	93.0	93.6	P/P	61 - 121

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P406865

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Etridiazole	70.2	64.0	P/P	50 - 150
Fenamiphos	94.9	91.4	P/P	31 - 139
Fenbuconazole	112	107	P/P	66 - 141
Fipronil	119	118	P/P	62 - 129
Fipronil Desulfinyl	123	115	P/P	59 - 126
Fipronil Sulfide	94.8	86.7	P/P	63 - 117
Fipronil Sulfone	92.3	88.1	P/P	57 - 117
Fluazifop-P-butyl	104	107	P/P	63 - 124
Fludioxonil	106	106	P/P	63 - 123
Flumioxazin	157	152	P/P	34 - 245
Flutolanil	112	112	P/P	56 - 131
Fluxapyroxad	97.4	99.1	P/P	57 - 117
Fonofos	89.0	93.3	P/P	61 - 116
Hexazinone	103	101	P/P	55 - 138
Imazalil	104	83.4	P/P	33 - 143
Iprodione	114	106	P/P	59 - 118
Loratadine	100	115	P/P	50 - 150
Malathion	91.6	86.2	P/P	62 - 138
Metaxyl	107	110	P/P	24 - 147
Metolachlor	104	106	P/P	68 - 118
Metribuzin	103	99.9	P/P	20 - 239
Mevinphos	86.4	81.9	P/P	46 - 124
Molinate	67.3	61.7	P/P	46 - 100
Myclobutanil	106	107	P/P	32 - 149
Naled	108	91.0	F/P	32 - 95.0
Napropamide	104	103	P/P	50 - 150
Norflurazon	107	99.0	P/P	57 - 127
Oxadiazon	92.6	92.5	P/P	63 - 118
Oxyfluorfen	103	111	P/P	69 - 137
Parathion Ethyl	89.8	92.8	P/P	70 - 113
Parathion Methyl	109	107	P/P	71 - 130
Pendimethalin	94.5	96.8	P/P	55 - 118
Phenytoin	68.3	65.5	P/P	50 - 200
Phorate	82.8	85.1	P/P	46 - 125
Prodiamine	36.0	34.1	P/P	20 - 141
Prometon	110	108	P/P	54 - 122
Prometryn	102	100	P/P	66 - 124
Pronamide	106	102	P/P	79 - 122
Propanil	102	97.3	P/P	50 - 150
Propargite	94.5	101	P/P	50 - 200
Propiconazole	106	104	P/P	61 - 126
Pyraflufen Ethyl	105	103	P/P	50 - 150
Pyridaben	115	107	P/P	50 - 200
Pyriproxyfen	104	103	P/P	52 - 131
Simazine	94.2	93.0	P/P	75 - 128
Stirophos	86.5	82.5	P/P	50 - 150
Sulfentrazone	109	99.7	P/P	20 - 132
Tebuconazole	89.4	85.7	P/P	20 - 116
Terbufos	108	111	P/P	61 - 117
Terbuthylazine	99.4	95.8	P/P	74 - 116
Thiobencarb	103	103	P/P	50 - 150
Triadimefon	102	100	P/P	50 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P406948

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	81.0		P	40 - 150
AMPA	111		P	40 - 160
Endothall	71.4		P	40 - 150
Glufosinate	96.1		P	40 - 160
Glyphosate	115		P	40 - 160
Sucralose	100		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P406988

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	99.1		P	40 - 150
2,4,5-T	109		P	40 - 150
Acetaminophen	100		P	30 - 150
Acetamiprid	96.1		P	40 - 150
Afidopyropen	70.4		P	40 - 150
Bentazon	95.1		P	30 - 150
Benzovindiflupyr	75.6		P	40 - 150
Carbamazepine	86.7		P	40 - 150
Clothianidin	112		P	40 - 150
Dinotefuran	89.9		P	40 - 150
Diuron	103		P	40 - 150
Fenuron	94.3		P	40 - 150
Fluridone	91.8		P	40 - 150
Hydrocodone	92.9		P	40 - 150
Ibuprofen	57.7		P	40 - 150
Imazapyr	120		P	40 - 150
Imidacloprid	103		P	40 - 150
Linuron	107		P	40 - 150
Mandestrobin	86.2		P	40 - 150
MCPP	104		P	40 - 150
Naproxen	140		P	40 - 150
Primidone	91.4		P	40 - 150
Pyraclostrobin	83.7		P	40 - 150
Silvex	106		P	40 - 150
Thiamethoxam	105		P	40 - 150
Tolfenpyrad	36.4		P	30 - 150
Triclopyr	129		P	40 - 150

Reference Method: SM 2120 B-2011

Batch ID: P406897

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

Reference Method: SM 2320 B-2011

Batch ID: P407030

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.9		P	94 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P407039

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

Reference Method: SM 5310 B-2011
Batch ID: P407288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P406931

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291403	Calcium	102	99.8	P/P	80 - 120
2291403	Iron	106	104	P/P	80 - 120
2291403	Magnesium	107	104	P/P	80 - 120
2291403	Potassium	97.9	95.8	P/P	80 - 120
2291403	Sodium	95.2		P	80 - 120
2291403	Strontium	99.2	97.3	P/P	80 - 120
2291403	Tin	106	104	P/P	80 - 120
2291403	Titanium	105	102	P/P	80 - 120
2291403	Vanadium	105	101	P/P	80 - 120
2291403	Zinc	109	105	P/P	80 - 120
2291656	Calcium	97.6		P	80 - 120
2291656	Iron	106		P	80 - 120
2291656	Magnesium	99.5		P	80 - 120
2291656	Potassium	106		P	80 - 120
2291656	Sodium	102		P	80 - 120
2291656	Strontium	98.7		P	80 - 120
2291656	Tin	101		P	80 - 120
2291656	Titanium	103		P	80 - 120
2291656	Vanadium	103		P	80 - 120
2291656	Zinc	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P406931

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291403	Aluminum	97.0	96.7	P/P	80 - 120
2291403	Antimony	97.0	99.0	P/P	80 - 120
2291403	Arsenic	95.2	97.4	P/P	80 - 120
2291403	Barium	101	103	P/P	80 - 120
2291403	Beryllium	91.0	94.5	P/P	80 - 120
2291403	Boron	92.7	95.2	P/P	80 - 120
2291403	Cadmium	95.9	98.2	P/P	80 - 120
2291403	Chromium	98.7	100	P/P	80 - 120
2291403	Cobalt	102	105	P/P	80 - 120
2291403	Copper	93.9	97.5	P/P	80 - 120
2291403	Lead	96.2	98.2	P/P	80 - 120
2291403	Manganese	97.4	99.7	P/P	80 - 120
2291403	Molybdenum	97.9	99.9	P/P	80 - 120
2291403	Nickel	98.7	101	P/P	80 - 120
2291403	Selenium	93.7	95.4	P/P	80 - 120
2291403	Silver	99.2	101	P/P	80 - 120
2291403	Thallium	98.9	101	P/P	80 - 120
2291656	Aluminum	99.0		P	80 - 120
2291656	Antimony	102		P	80 - 120
2291656	Arsenic	99.4		P	80 - 120
2291656	Barium	105		P	80 - 120
2291656	Beryllium	98.5		P	80 - 120
2291656	Boron	97.3		P	80 - 120
2291656	Cadmium	101		P	80 - 120
2291656	Chromium	102		P	80 - 120
2291656	Cobalt	106		P	80 - 120
2291656	Copper	98.3		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P406931

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291656	Lead	99.7		P	80 - 120
2291656	Molybdenum	102		P	80 - 120
2291656	Nickel	102		P	80 - 120
2291656	Selenium	97.2		P	80 - 120
2291656	Silver	104		P	80 - 120
2291656	Thallium	104		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407186

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291650	Chloride	98.1		P	90 - 110
2291960	Chloride	99.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407189

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291650	Sulfate	93.5		P	90 - 110
2291960	Sulfate	95.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P407370

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291863	Ammonia-N	97.6	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P406996

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291863	Kjeldahl Nitrogen	104	108	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P406983

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291857	NO2NO3-N	98.5	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P406886

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291879	Total-P	105	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P406901

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291880	O-Phosphate-P	97.8	96.7	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P406865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291903	Acetochlor	102	99.7	P/P	66 - 122
2291903	Alachlor	97.0	96.2	P/P	65 - 122
2291903	Ametryn	107	99.0	P/P	45 - 173
2291903	Atrazine Desethyl	92.5	88.5	P/P	25 - 150
2291903	Azinphos Methyl	124	126	P/P	44 - 174
2291903	Azoxystrobin	97.2	106	P/P	10 - 268
2291903	Bromacil	105	110	P/P	31 - 145
2291903	Butylate	57.7	51.5	P/P	15 - 97.0
2291903	Caffeine	89.5	88.1	P/P	70 - 130
2291903	Carbophenothion	89.0	88.7	P/P	42 - 129
2291903	Carfentrazone Ethyl	99.7	99.2	P/P	62 - 145
2291903	Chlorfenapyr	85.3	88.4	P/P	50 - 150
2291903	Chlorpyrifos Ethyl	76.0	77.5	P/P	60 - 124
2291903	Chlorpyrifos Methyl	91.2	88.3	P/P	66 - 119
2291903	Coumaphos	94.3	90.3	P/P	50 - 220
2291903	Cyanazine	241	237	F/F	17 - 225
2291903	Cyprodinil	110	98.2	P/P	50 - 150
2291903	Demeton	97.7	106	P/P	36 - 142
2291903	Diazinon	112	115	P/P	70 - 128
2291903	Difenoconazole	148	149	P/P	33 - 222
2291903	Dimethenamid	82.6	81.3	P/P	54 - 125
2291903	Dimethomorph	142	156	P/F	50 - 150
2291903	Disulfoton	102	131	P/P	49 - 133
2291903	Dithiopyr	99.5	91.5	P/P	55 - 123
2291903	EPTC	66.7	57.2	P/P	19 - 91.0
2291903	Ethion	75.3	68.7	P/P	13 - 143
2291903	Ethoprop	102	108	P/P	49 - 144
2291903	Etridiazole	82.9	79.0	P/P	50 - 150
2291903	Fenamiphos	85.2	72.0	P/P	32 - 136
2291903	Fenbuconazole	96.5	96.6	P/P	73 - 148
2291903	Fipronil	109	108	P/P	57 - 129
2291903	Fipronil Desulfinyl	111	117	P/P	49 - 127
2291903	Fipronil Sulfide	90.7	84.5	P/P	44 - 127
2291903	Fipronil Sulfone	73.4	72.8	P/P	35 - 126
2291903	Fluazifop-P-butyl	94.9	95.4	P/P	67 - 129
2291903	Fludioxonil	97.1	93.5	P/P	61 - 126
2291903	Flumioxazin	147	141	P/P	38 - 279
2291903	Flutolanil	98.2	88.5	P/P	55 - 136
2291903	Fluxapyroxad	82.8	85.5	P/P	33 - 140
2291903	Fonofos	98.6	95.9	P/P	58 - 125
2291903	Hexazinone	91.2	91.8	P/P	57 - 148
2291903	Imazalil	117	113	P/P	10 - 221
2291903	Iprodione	89.3	84.8	P/P	32 - 140
2291903	Loratadine	124	137	P/P	50 - 150
2291903	Malathion	82.9	64.6	P/P	52 - 138
2291903	Metalaxyl	106	98.8	P/P	46 - 134
2291903	Metolachlor	93.6	91.4	P/P	58 - 122
2291903	Metribuzin	85.1	94.3	P/P	16 - 272
2291903	Mevinphos	98.7	100	P/P	45 - 140
2291903	Molinate	72.6	70.9	P/P	41 - 103
2291903	Myclobutanil	97.2	98.2	P/P	60 - 134
2291903	Naled	105	104	P/P	20 - 113

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P406865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291903	Napropamide	92.1	87.1	P/P	50 - 150
2291903	Norflurazon	87.9	85.9	P/P	51 - 123
2291903	Oxadiazon	81.1	76.3	P/P	44 - 125
2291903	Oxyfluorfen	107	108	P/P	66 - 176
2291903	Parathion Ethyl	98.8	93.7	P/P	57 - 132
2291903	Parathion Methyl	109	114	P/P	59 - 156
2291903	Pendimethalin	104	101	P/P	59 - 129
2291903	Phenytoin	51.7	42.4	P/F	50 - 200
2291903	Phorate	98.2	95.7	P/P	47 - 136
2291903	Prodiamine	39.7	39.7	P/P	10 - 159
2291903	Prometon	113	117	P/P	59 - 127
2291903	Prometryn	92.2	94.6	P/P	59 - 129
2291903	Pronamide	95.9	106	P/P	65 - 145
2291903	Propanil	92.8	90.8	P/P	50 - 150
2291903	Propargite	75.4	74.7	P/P	50 - 200
2291903	Propiconazole	100	97.5	P/P	28 - 165
2291903	Pyraflufen Ethyl	97.0	80.5	P/P	50 - 150
2291903	Pyridaben	112	96.5	P/P	50 - 200
2291903	Pyriproxyfen	89.3	85.4	P/P	21 - 180
2291903	Simazine	91.5	93.3	P/P	63 - 147
2291903	Stirophos	77.6	68.6	P/P	50 - 150
2291903	Sulfentrazone	80.5	84.6	P/P	32 - 136
2291903	Tebuconazole	63.4	56.9	P/P	10 - 117
2291903	Terbufos	120	118	P/P	61 - 131
2291903	Terbutylazine	92.0	96.4	P/P	62 - 126
2291903	Thiobencarb	81.0	74.8	P/P	50 - 150
2291903	Triadimefon	95.3	84.6	P/P	50 - 150

Reference Method: EPA 8321B

Batch ID: P406948

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291412	Acesulfame K	168	177	F/F	40 - 150
2291412	AMPA	82.8	97.7	P/P	40 - 160
2291412	Endothall	79.4	81.4	P/P	40 - 150
2291412	Glufosinate	78.5	89.1	P/P	40 - 160
2291412	Glyphosate	79.7	85.3	P/P	40 - 160
2291412	Sucralose	104	109	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P406988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291477	2,4,5-T	141	108	P/P	40 - 150
2291477	Acetaminophen	88.9	114	P/P	30 - 150
2291477	Acetamiprid	92.1	94.8	P/P	40 - 150
2291477	Afidopyropen	82.6	82.8	P/P	40 - 150
2291477	Benzovindiflupyr	80.3	87.3	P/P	40 - 150
2291477	Carbamazepine	82.8	94.2	P/P	40 - 150
2291477	Clothianidin	118	109	P/P	40 - 150
2291477	Dinotefuran	107	120	P/P	40 - 150
2291477	Diuron	80.8	76.5	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P406988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291477	Fenuron	81.6	84.0	P/P	40 - 150
2291477	Hydrocodone	101	103	P/P	40 - 150
2291477	Ibuprofen	68.2	61.1	P/P	40 - 150
2291477	Imazapyr	98.1	125	P/P	40 - 150
2291477	Imidacloprid	128	130	P/P	40 - 150
2291477	Linuron	102	69.9	P/P	40 - 150
2291477	Mandestrobin	78.1	87.6	P/P	40 - 150
2291477	MCCP	97.0	95.3	P/P	40 - 150
2291477	Naproxen	59.6	78.6	P/P	40 - 150
2291477	Primidone	102	103	P/P	40 - 150
2291477	Pyraclostrobin	76.2	85.4	P/P	40 - 150
2291477	Silvex	87.9	92.7	P/P	40 - 150
2291477	Thiamethoxam	132	146	P/P	40 - 150
2291477	Tolfenpyrad	44.8	57.0	P/P	30 - 150
2291477	Triclopyr	110	82.5	P/P	40 - 150

Reference Method: SM 4500 F-C-2011

Batch ID: P407039

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291991	Fluoride	98.9	98.9	P/P	92 - 107

Reference Method: SM 5310 B-2011

Batch ID: P407288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291841	Organic Carbon	95.6	94.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P406923

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291878	Turbidity	4.52	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P406931

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291403	Calcium	1.64	Spike	P	0 - 20
2291403	Iron	1.91	Spike	P	0 - 20
2291403	Magnesium	1.92	Spike	P	0 - 20
2291403	Potassium	1.92	Spike	P	0 - 20
2291403	Sodium	1.89	Spike	P	0 - 20
2291403	Strontium	1.90	Spike	P	0 - 20
2291403	Tin	2.15	Spike	P	0 - 20
2291403	Titanium	2.85	Spike	P	0 - 20
2291403	Vanadium	3.23	Spike	P	0 - 20
2291403	Zinc	3.13	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P406931

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291403	Aluminum	0.219	Spike	P	0 - 20
2291403	Antimony	2.07	Spike	P	0 - 20
2291403	Arsenic	2.37	Spike	P	0 - 20
2291403	Barium	1.42	Spike	P	0 - 20
2291403	Beryllium	3.10	Spike	P	0 - 20
2291403	Boron	2.24	Spike	P	0 - 20
2291403	Cadmium	2.33	Spike	P	0 - 20
2291403	Chromium	1.64	Spike	P	0 - 20
2291403	Cobalt	2.72	Spike	P	0 - 20
2291403	Copper	2.10	Spike	P	0 - 20
2291403	Lead	1.94	Spike	P	0 - 20
2291403	Manganese	1.68	Spike	P	0 - 20
2291403	Molybdenum	2.08	Spike	P	0 - 20
2291403	Nickel	2.18	Spike	P	0 - 20
2291403	Selenium	1.76	Spike	P	0 - 20
2291403	Silver	1.34	Spike	P	0 - 20
2291403	Thallium	2.24	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407186

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291650	Chloride	0.983	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407189

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291650	Sulfate	0.0726	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291863	Ammonia-N	1.11	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406996

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291863	Kjeldahl Nitrogen	2.16	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406983

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291857	NO2NO3-N	0.506	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P406886

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291879	Total-P	1.01	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P406901

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291880	O-Phosphate-P	1.06	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P406865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291903	Acetochlor	1.87	Spike	P	0 - 24
2291903	Alachlor	0.753	Spike	P	0 - 24
2291903	Ametryn	7.68	Spike	P	0 - 27
2291903	Atrazine	5.38	Spike	P	0 - 29
2291903	Atrazine Desethyl	3.92	Spike	P	0 - 30
2291903	Azinphos Methyl	1.18	Spike	P	0 - 50
2291903	Azoxystrobin	6.80	Spike	P	0 - 32
2291903	Bromacil	4.33	Spike	P	0 - 30
2291903	Butylate	11.3	Spike	P	0 - 47

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P406865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291903	Caffeine	1.50	Spike	P	0 - 60
2291903	Carbophenothion	0.342	Spike	P	0 - 24
2291903	Carfentrazone Ethyl	0.482	Spike	P	0 - 26
2291903	Chlorfenapyr	3.52	Spike	P	0 - 30
2291903	Chlorpyrifos Ethyl	1.90	Spike	P	0 - 27
2291903	Chlorpyrifos Methyl	3.23	Spike	P	0 - 22
2291903	Coumaphos	4.32	Spike	P	0 - 30
2291903	Cyanazine	1.55	Spike	P	0 - 32
2291903	Cyprodinil	11.0	Spike	P	0 - 30
2291903	Demeton	7.75	Spike	P	0 - 25
2291903	Diazinon	2.56	Spike	P	0 - 24
2291903	Difenoconazole	0.778	Spike	P	0 - 25
2291903	Dimethenamid	1.55	Spike	P	0 - 30
2291903	Dimethomorph	9.45	Spike	P	0 - 30
2291903	Disulfoton	24.6	Spike	P	0 - 26
2291903	Dithiopyr	8.42	Spike	P	0 - 22
2291903	EPTC	15.3	Spike	P	0 - 38
2291903	Ethion	9.21	Spike	P	0 - 47
2291903	Ethoprop	5.21	Spike	P	0 - 23
2291903	Etridiazole	4.90	Spike	P	0 - 30
2291903	Fenamiphos	16.8	Spike	P	0 - 34
2291903	Fenbuconazole	0.124	Spike	P	0 - 37
2291903	Fipronil	0.601	Spike	P	0 - 23
2291903	Fipronil Desulfinyl	5.04	Spike	P	0 - 26
2291903	Fipronil Sulfide	7.09	Spike	P	0 - 23
2291903	Fipronil Sulfone	0.733	Spike	P	0 - 24
2291903	Fluazifop-P-butyl	0.545	Spike	P	0 - 24
2291903	Fludioxonil	3.70	Spike	P	0 - 26
2291903	Flumioxazin	4.08	Spike	P	0 - 37
2291903	Flutolanil	9.96	Spike	P	0 - 26
2291903	Fluxapyroxad	3.21	Spike	P	0 - 34
2291903	Fonofos	2.73	Spike	P	0 - 22
2291903	Hexazinone	0.726	Spike	P	0 - 21
2291903	Imazalil	3.83	Spike	P	0 - 65
2291903	Iprodione	5.20	Spike	P	0 - 33
2291903	Loratadine	10.1	Spike	P	0 - 30
2291903	Malathion	24.8	Spike	P	0 - 26
2291903	Metalaxyl	7.32	Spike	P	0 - 38
2291903	Metolachlor	2.41	Spike	P	0 - 36
2291903	Metribuzin	10.3	Spike	P	0 - 29
2291903	Mevinphos	1.44	Spike	P	0 - 26
2291903	Molinate	2.30	Spike	P	0 - 27
2291903	Myclobutanil	0.983	Spike	P	0 - 21
2291903	Naled	0.972	Spike	P	0 - 26
2291903	Napropamide	5.53	Spike	P	0 - 30
2291903	Norflurazon	2.29	Spike	P	0 - 24
2291903	Oxadiazon	5.15	Spike	P	0 - 23
2291903	Oxyfluorfen	0.593	Spike	P	0 - 24
2291903	Parathion Ethyl	5.27	Spike	P	0 - 23
2291903	Parathion Methyl	4.38	Spike	P	0 - 23
2291903	Pendimethalin	2.13	Spike	P	0 - 31

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P406865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291903	Phenytoin	19.8	Spike	P	0 - 30
2291903	Phorate	2.57	Spike	P	0 - 27
2291903	Prodiamine	0.139	Spike	P	0 - 52
2291903	Prometon	3.68	Spike	P	0 - 31
2291903	Prometryn	2.50	Spike	P	0 - 24
2291903	Pronamide	9.64	Spike	P	0 - 26
2291903	Propanil	2.19	Spike	P	0 - 30
2291903	Propargite	0.942	Spike	P	0 - 30
2291903	Propiconazole	2.75	Spike	P	0 - 31
2291903	Pyraflufen Ethyl	18.6	Spike	P	0 - 30
2291903	Pyridaben	14.5	Spike	P	0 - 30
2291903	Pyriproxyfen	4.56	Spike	P	0 - 50
2291903	Simazine	1.99	Spike	P	0 - 25
2291903	Stirophos	12.3	Spike	P	0 - 30
2291903	Sulfentrazone	3.50	Spike	P	0 - 33
2291903	Tebuconazole	10.7	Spike	P	0 - 43
2291903	Terbufos	1.94	Spike	P	0 - 22
2291903	Terbutylazine	4.74	Spike	P	0 - 24
2291903	Thiobencarb	7.96	Spike	P	0 - 30
2291903	Triadimefon	11.9	Spike	P	0 - 30
LFB	Acetochlor	3.56	LCS	P	0 - 22
LFB	Alachlor	1.67	LCS	P	0 - 20
LFB	Ametryn	0.289	LCS	P	0 - 25
LFB	Atrazine	0.0116	LCS	P	0 - 20
LFB	Atrazine Desethyl	0.333	LCS	P	0 - 33
LFB	Azinphos Methyl	2.17	LCS	P	0 - 51
LFB	Azoxystrobin	3.69	LCS	P	0 - 47
LFB	Bromacil	22.3	LCS	P	0 - 26
LFB	Butylate	19.6	LCS	P	0 - 35
LFB	Caffeine	17.1	LCS	P	0 - 27
LFB	Carbophenothion	4.30	LCS	P	0 - 22
LFB	Carfentrazone Ethyl	0.614	LCS	P	0 - 21
LFB	Chlorfenapyr	8.80	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	5.69	LCS	P	0 - 23
LFB	Chlorpyrifos Methyl	4.78	LCS	P	0 - 24
LFB	Coumaphos	6.22	LCS	P	0 - 30
LFB	Cyanazine	5.01	LCS	P	0 - 37
LFB	Cyprodinil	5.19	LCS	P	0 - 30
LFB	Demeton	1.17	LCS	P	0 - 32
LFB	Diazinon	4.21	LCS	P	0 - 21
LFB	Difenoconazole	2.96	LCS	P	0 - 37
LFB	Dimethenamid	0.990	LCS	P	0 - 21
LFB	Dimethomorph	10.2	LCS	P	0 - 30
LFB	Disulfoton	4.85	LCS	P	0 - 31
LFB	Dithiopyr	3.33	LCS	P	0 - 21
LFB	EPTC	22.2	LCS	P	0 - 41
LFB	Ethion	3.82	LCS	P	0 - 45
LFB	Ethoprop	0.612	LCS	P	0 - 28
LFB	Etridiazole	9.28	LCS	P	0 - 30
LFB	Fenamiphos	3.78	LCS	P	0 - 28
LFB	Fenbuconazole	4.53	LCS	P	0 - 36

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P406865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Fipronil	1.09	LCS	P	0 - 23
LFB	Fipronil Desulfinyl	6.20	LCS	P	0 - 22
LFB	Fipronil Sulfide	8.95	LCS	P	0 - 24
LFB	Fipronil Sulfone	4.67	LCS	P	0 - 24
LFB	Fluazifop-P-butyl	3.55	LCS	P	0 - 23
LFB	Fludioxonil	0.408	LCS	P	0 - 23
LFB	Flumioxazin	3.21	LCS	P	0 - 39
LFB	Flutolanil	0.748	LCS	P	0 - 27
LFB	Fluxapyroxad	1.79	LCS	P	0 - 38
LFB	Fonofos	4.75	LCS	P	0 - 28
LFB	Hexazinone	2.09	LCS	P	0 - 27
LFB	Imazalil	22.4	LCS	P	0 - 45
LFB	Iprodione	7.21	LCS	P	0 - 42
LFB	Loratadine	13.2	LCS	P	0 - 30
LFB	Malathion	6.13	LCS	P	0 - 23
LFB	Metalaxyl	2.93	LCS	P	0 - 41
LFB	Metolachlor	1.76	LCS	P	0 - 21
LFB	Metribuzin	2.85	LCS	P	0 - 31
LFB	Mevinphos	5.31	LCS	P	0 - 32
LFB	Molinate	8.77	LCS	P	0 - 31
LFB	Myclobutanil	1.18	LCS	P	0 - 27
LFB	Naled	16.9	LCS	P	0 - 32
LFB	Napropamide	0.775	LCS	P	0 - 30
LFB	Norflurazon	7.64	LCS	P	0 - 25
LFB	Oxadiazon	0.0527	LCS	P	0 - 25
LFB	Oxyfluorfen	7.44	LCS	P	0 - 22
LFB	Parathion Ethyl	3.38	LCS	P	0 - 32
LFB	Parathion Methyl	1.79	LCS	P	0 - 30
LFB	Pendimethalin	2.43	LCS	P	0 - 39
LFB	Phenytoin	4.10	LCS	P	0 - 30
LFB	Phorate	2.72	LCS	P	0 - 36
LFB	Prodiamine	5.41	LCS	P	0 - 71
LFB	Prometon	1.23	LCS	P	0 - 23
LFB	Prometryn	1.61	LCS	P	0 - 22
LFB	Pronamide	4.42	LCS	P	0 - 21
LFB	Propanil	4.98	LCS	P	0 - 30
LFB	Propargite	6.21	LCS	P	0 - 30
LFB	Propiconazole	1.42	LCS	P	0 - 23
LFB	Pyraflufen Ethyl	1.08	LCS	P	0 - 30
LFB	Pyridaben	7.21	LCS	P	0 - 30
LFB	Pyriproxyfen	0.477	LCS	P	0 - 53
LFB	Simazine	1.33	LCS	P	0 - 22
LFB	Stirophos	4.75	LCS	P	0 - 30
LFB	Sulfentrazone	8.80	LCS	P	0 - 45
LFB	Tebuconazole	4.21	LCS	P	0 - 52
LFB	Terbufos	3.35	LCS	P	0 - 27
LFB	Terbuthylazine	3.76	LCS	P	0 - 21
LFB	Thiobencarb	0.545	LCS	P	0 - 30
LFB	Triadimefon	1.67	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P406948

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291412	Acesulfame K	5.18	Spike	P	0 - 30
2291412	AMPA	16.5	Spike	P	0 - 30
2291412	Endothall	2.51	Spike	P	0 - 30
2291412	Glufosinate	12.6	Spike	P	0 - 30
2291412	Glyphosate	6.81	Spike	P	0 - 30
2291412	Sucralose	4.48	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P406988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291477	2,4-D	20.9	Spike	P	0 - 30
2291477	2,4,5-T	26.4	Spike	P	0 - 30
2291477	Acetaminophen	24.6	Spike	P	0 - 30
2291477	Acetamiprid	2.92	Spike	P	0 - 30
2291477	Afidopyropen	0.164	Spike	P	0 - 30
2291477	Bentazon	27.0	Spike	P	0 - 30
2291477	Benzovindiflupyr	8.39	Spike	P	0 - 30
2291477	Carbamazepine	12.3	Spike	P	0 - 30
2291477	Clothianidin	8.05	Spike	P	0 - 30
2291477	Dinotefuran	11.0	Spike	P	0 - 30
2291477	Diuron	4.69	Spike	P	0 - 30
2291477	Fenuron	2.92	Spike	P	0 - 30
2291477	Fluridone	2.80	Spike	P	0 - 30
2291477	Hydrocodone	2.54	Spike	P	0 - 30
2291477	Ibuprofen	11.0	Spike	P	0 - 30
2291477	Imazapyr	24.3	Spike	P	0 - 30
2291477	Imidacloprid	1.74	Spike	P	0 - 30
2291477	Linuron	37.2	Spike	F	0 - 30
2291477	Mandestrobin	11.5	Spike	P	0 - 30
2291477	MCPP	1.86	Spike	P	0 - 30
2291477	Naproxen	27.6	Spike	P	0 - 30
2291477	Primidone	1.01	Spike	P	0 - 30
2291477	Pyraclostrobin	11.4	Spike	P	0 - 30
2291477	Silvex	5.28	Spike	P	0 - 30
2291477	Thiamethoxam	9.57	Spike	P	0 - 30
2291477	Tolfenpyrad	24.0	Spike	P	0 - 30
2291477	Triclopyr	28.5	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P406897

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291840	Color (true)	2.00	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P407030

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291991	Total Alkalinity	4.56	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P407378

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291887	TDS	4.62	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P407039

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291991	Fluoride	0.0	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P407288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291841	Organic Carbon	1.34	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2291896
Field Sample ID: G5SE0080

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	113	P	30 - 160
EPA 8321B	Acetaminophen-d4	109	P	30 - 160
EPA 8321B	Carbamazepine-d10	118	P	30 - 160
EPA 8321B	Diuron-d6	65.0	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	81.8	P	30 - 160
EPA 8321B	Primidone-d5	145	P	30 - 160
EPA 8321B	Sucralose-d6	89.0	P	30 - 160

Lab Sample ID: 2291903
Field Sample ID: G5SE0080

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	84.5	P	20 - 200
EPA 8270E	Simazine-d10	126	P	73 - 135
EPA 8270E	Terbufos-d10	114	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B-2011

Run ID: A109149

Included Lab Sample IDs: 2291878

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	99.8	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A109150

Included Lab Sample IDs: 2291880

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A109159

Included Lab Sample IDs: 2291878

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A109189

Included Lab Sample IDs: 2291896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	90.3	95.7	P/P	60 - 160
Glufosinate	85.3	93.8	P/P	60 - 160
Glyphosate	94.7	100	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A109190

Included Lab Sample IDs: 2291879

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A109202

Included Lab Sample IDs: 2291899

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	93.7	92.9	P/P	90 - 110
Arsenic	96.5	96.8	P/P	90 - 110
Barium	98.9	97.3	P/P	90 - 110
Beryllium	94.3	94.7	P/P	90 - 110
Boron	97.9	97.4	P/P	90 - 110
Cadmium	97.2	96.4	P/P	90 - 110
Chromium	95.6	95.6	P/P	90 - 110
Cobalt	99.0	99.0	P/P	90 - 110
Copper	94.6	95.3	P/P	90 - 110
Lead	94.8	94.5	P/P	90 - 110
Manganese	97.0	97.3	P/P	90 - 110
Molybdenum	95.8	96.1	P/P	90 - 110
Nickel	95.2	96.0	P/P	90 - 110
Selenium	96.6	96.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A109202

Included Lab Sample IDs: 2291899

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

Reference Method: SM 2320 B-2011

Run ID: A109203

Included Lab Sample IDs: 2291878

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.0	97.0	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A109203

Included Lab Sample IDs: 2291878

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A109217

Included Lab Sample IDs: 2291879

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.9	98.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A109218

Included Lab Sample IDs: 2291896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	68.3	77.4	P/P	60 - 160
Endothall	75.7	70.4	P/P	60 - 160
Sucralose	100	106	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A109220

Included Lab Sample IDs: 2291879

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: A109225

Included Lab Sample IDs: 2291899

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	93.2	91.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A109229

Included Lab Sample IDs: 2291899

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A109229

Included Lab Sample IDs: 2291899

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	99.0	99.7	P/P	90 - 110
Iron	102	103	P/P	90 - 110
Magnesium	102	102	P/P	90 - 110
Potassium	97.4	97.1	P/P	90 - 110
Sodium	99.2	98.6	P/P	90 - 110
Strontium	101	100	P/P	90 - 110
Tin	102	99.8	P/P	90 - 110
Titanium	99.6	96.9	P/P	90 - 110
Vanadium	98.3	97.5	P/P	90 - 110
Zinc	103	99.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A109236

Included Lab Sample IDs: 2291899

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Thallium	95.1	93.1	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A109256

Included Lab Sample IDs: 2291878

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.3	100	P/P	90 - 110
Sulfate	98.0	98.4	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A109311

Included Lab Sample IDs: 2291903

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	101		P	80 - 120
Atrazine	103		P	80 - 120
Atrazine Desethyl	102		P	80 - 120
Azinphos Methyl	96.8		P	80 - 120
Azoxystrobin	98.2		P	80 - 120
Bromacil	107		P	80 - 120
Butylate	104		P	80 - 120
Caffeine	98.1		P	80 - 120
Carbophenothion	99.3		P	80 - 120
Carfentrazone Ethyl	95.8		P	80 - 120
Chlorfenapyr	99.1		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	100		P	80 - 120
Coumaphos	98.6		P	80 - 120
Cyanazine	104		P	80 - 120
Cyprodinil	104		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	101		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E
Run ID: A109311
Included Lab Sample IDs: 2291903

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Difenoconazole	94.4		P	80 - 120
Dimethenamid	103		P	80 - 120
Dimethomorph	101		P	80 - 120
Disulfoton	98.3		P	80 - 120
Dithiopyr	103		P	80 - 120
EPTC	105		P	80 - 120
Ethion	93.5		P	80 - 120
Ethoprop	104		P	80 - 120
Etridiazole	99.4		P	80 - 120
Fenamiphos	103		P	80 - 120
Fenbuconazole	96.4		P	80 - 120
Fipronil	100		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	99.2		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	99.3		P	80 - 120
Fludioxonil	98.1		P	80 - 120
Flumioxazin	92.4		P	80 - 120
Flutolanil	107		P	80 - 120
Fluxapyroxad	94.3		P	80 - 120
Fonofos	103		P	80 - 120
Hexazinone	99.8		P	80 - 120
Imazalil	99.6		P	80 - 120
Iprodione	95.2		P	80 - 120
Loratadine	106		P	80 - 120
Malathion	99.9		P	80 - 120
Metalaxyl	105		P	80 - 120
Metolachlor	99.1		P	80 - 120
Metribuzin	99.8		P	80 - 120
Mevinphos	102		P	80 - 120
Molinate	105		P	80 - 120
Myclobutanil	103		P	80 - 120
Naled	102		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	94.5		P	80 - 120
Oxadiazon	104		P	80 - 120
Oxyfluorfen	99.3		P	80 - 120
Parathion Ethyl	104		P	80 - 120
Parathion Methyl	101		P	80 - 120
Pendimethalin	108		P	80 - 120
Phenytoin	97.4		P	80 - 120
Phorate	111		P	80 - 120
Prodiamine	96.1		P	80 - 120
Prometon	104		P	80 - 120
Prometryn	100		P	80 - 120
Pronamide	105		P	80 - 120
Propanil	93.0		P	80 - 120
Propargite	94.5		P	80 - 120
Propiconazole	99.1		P	80 - 120
Pyraflufen Ethyl	103		P	80 - 120
Pyridaben	92.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A109311
Included Lab Sample IDs: 2291903

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyriproxyfen	101		P	80 - 120
Simazine	105		P	80 - 120
Stirophos	103		P	80 - 120
Sulfentrazone	91.7		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	99.5		P	80 - 120
Terbuthylazine	102		P	80 - 120
Thiobencarb	105		P	80 - 120
Triadimefon	104		P	80 - 120

Reference Method: SM 5310 B-2011
Run ID: A109313
Included Lab Sample IDs: 2291879

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.2	96.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A109347
Included Lab Sample IDs: 2291879

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.4	98.4	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A109350
Included Lab Sample IDs: 2291896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	119	69.6	P/P	50 - 150
2,4,5-T	100	94.5	P/P	50 - 150
Acetaminophen	94.6	91.9	P/P	60 - 160
Acetamiprid	103	96.1	P/P	50 - 150
Afidopyropen	104	102	P/P	50 - 150
Bentazon	110	111	P/P	50 - 160
Benzovindiflupyr	83.0	118	P/P	50 - 150
Carbamazepine	107	96.2	P/P	60 - 150
Clothianidin	106	115	P/P	60 - 150
Dinotefuran	118	93.1	P/P	50 - 150
Diuron	109	109	P/P	60 - 160
Fenuron	100	102	P/P	60 - 150
Fluridone	99.7	111	P/P	60 - 160
Hydrocodone	99.0	98.4	P/P	60 - 150
Ibuprofen	113	69.9	P/P	50 - 160
Imazapyr	94.6	85.4	P/P	50 - 150
Imidacloprid	75.3	94.6	P/P	60 - 150
Linuron	92.2	84.6	P/P	60 - 150
Mandestrobin	106	111	P/P	50 - 150
MCPP	94.1	110	P/P	50 - 150
Naproxen	141	92.8	P/P	50 - 160
Primidone	111	83.0	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A109350

Included Lab Sample IDs: 2291896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	117	108	P/P	60 - 150
Silvex	96.8	97.9	P/P	50 - 150
Thiamethoxam	111	113	P/P	50 - 150
Tolfenpyrad	101	61.8	P/P	60 - 150
Triclopyr	108	87.3	P/P	50 - 150

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

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							4.52	
EPA 200.7 Rev. 4.4	Calcium	105		102	99.8	97.6			1.64
	Iron	107		106	104	106			1.91
	Magnesium	109		107	104	99.5			1.92
	Potassium	102		97.9	95.8	106			1.92
	Sodium	97.3		102	95.2				1.89
	Strontium	99.7		99.2	97.3	98.7			1.90
	Tin	104		106	104	101			2.15
	Titanium	102		105	102	103			2.85
	Vanadium	102		105	101	103			3.23
	Zinc	105		109	105	101			3.13
EPA 200.8 Rev. 5.4	Aluminum	100		97.0	96.7	99.0			0.219
	Antimony	98.4		97.0	99.0	102			2.07
	Arsenic	96.8		95.2	97.4	99.4			2.37
	Barium	104		101	103	105			1.42
	Beryllium	97.4		91.0	94.5	98.5			3.10
	Boron	98.6		92.7	95.2	97.3			2.24
	Cadmium	97.8		95.9	98.2	101			2.33
	Chromium	99.2		98.7	100	102			1.64
	Cobalt	104		102	105	106			2.72
	Copper	99.1		93.9	97.5	98.3			2.10
	Lead	98.5		96.2	98.2	99.7			1.94
	Manganese	102		97.4	99.7				1.68
	Molybdenum	99.1		97.9	99.9	102			2.08
	Nickel	99.4		98.7	101	102			2.18
	Selenium	96.6		93.7	95.4	97.2			1.76
	Silver	102		99.2	101	104			1.34
	Thallium	100		98.9	101	104			2.24
EPA 300.0 Rev. 2.1	Chloride	98.8		98.1	99.5			0.983	
	Sulfate	96.3		93.5	95.8			0.0726	
EPA 350.1 Rev. 2.0	Ammonia-N	99.4		97.6	99.2				1.11
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.5		104	108				2.16
EPA 353.2 Rev. 2.0	NO2NO3-N	102		98.5	99.0				0.506
EPA 365.1 Rev. 2.0	Total-P	105		105	106				1.01
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.6		97.8	96.7				1.06
EPA 8270E	Acetochlor	111	107	102	99.7	3.56			1.87
	Alachlor	106	108	97.0	96.2	1.67			0.753
	Ametryn	109	109	107	99.0	0.289			7.68
	Atrazine	102	102			0.0116			5.38
	Atrazine Desethyl	106	106	92.5	88.5	0.333			3.92
	Azinphos Methyl	145	142	124	126	2.17			1.18
	Azoxystrobin	103	107	97.2	106	3.69			6.80
	Bromacil	94.9	119	105	110	22.3			4.33
	Butylate	55.1	45.3	57.7	51.5	19.6			11.3
	Caffeine	75.4	89.5	89.5	88.1	17.1			1.50
	Carbophenothion	102	97.7	89.0	88.7	4.30			0.342
	Carfentrazone Ethyl	115	115	99.7	99.2	0.614			0.482
	Chlorfenapyr	95.4	87.3	85.3	88.4	8.80			3.52
	Chlorpyrifos Ethyl	94.2	89.0	76.0	77.5	5.69			1.90
	Chlorpyrifos Methyl	95.9	91.4	91.2	88.3	4.78			3.23
	Coumaphos	113	107	94.3	90.3	6.22			4.32
	Cyanazine	240	252	241	237	5.01			1.55
	Cyprodinil	125	119	110	98.2	5.19			11.0
	Demeton	91.0	89.9	97.7	106	1.17			7.75

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Diazinon	114	118	112	115	4.21	2.56
	Difenoconazole	167	163	148	149	2.96	0.778
	Dimethenamid	92.0	93.0	82.6	81.3	0.990	1.55
	Dimethomorph	126	139	142	156	10.2	9.45
	Disulfoton	98.1	93.4	102	131	4.85	24.6
	Dithiopyr	106	110	99.5	91.5	3.33	8.42
	EPTC	58.8	47.1	66.7	57.2	22.2	15.3
	Ethion	84.7	81.5	75.3	68.7	3.82	9.21
	Ethoprop	93.0	93.6	102	108	0.612	5.21
	Etridiazole	70.2	64.0	82.9	79.0	9.28	4.90
	Fenamiphos	94.9	91.4	85.2	72.0	3.78	16.8
	Fenbuconazole	112	107	96.5	96.6	4.53	0.124
	Fipronil	119	118	109	108	1.09	0.601
	Fipronil Desulfinyl	123	115	111	117	6.20	5.04
	Fipronil Sulfide	94.8	86.7	90.7	84.5	8.95	7.09
	Fipronil Sulfone	92.3	88.1	73.4	72.8	4.67	0.733
	Fluazifop-P-butyl	104	107	94.9	95.4	3.55	0.545
	Fludioxonil	106	106	97.1	93.5	0.408	3.70
	Flumioxazin	157	152	147	141	3.21	4.08
	Flutolanil	112	112	98.2	88.5	0.748	9.96
	Fluxapyroxad	97.4	99.1	82.8	85.5	1.79	3.21
	Fonofos	89.0	93.3	98.6	95.9	4.75	2.73
	Hexazinone	103	101	91.2	91.8	2.09	0.726
	Imazalil	104	83.4	117	113	22.4	3.83
	Iprodione	114	106	89.3	84.8	7.21	5.20
	Loratadine	100	115	124	137	13.2	10.1
	Malathion	91.6	86.2	82.9	64.6	6.13	24.8
	Metalaxyl	107	110	106	98.8	2.93	7.32
	Metolachlor	104	106	93.6	91.4	1.76	2.41
	Metribuzin	103	99.9	85.1	94.3	2.85	10.3
	Mevinphos	86.4	81.9	98.7	100	5.31	1.44
	Molinate	67.3	61.7	72.6	70.9	8.77	2.30
	Myclobutanil	106	107	97.2	98.2	1.18	0.983
	Naled	108	91.0	105	104	16.9	0.972
	Napropamide	104	103	92.1	87.1	0.775	5.53
	Norflurazon	107	99.0	87.9	85.9	7.64	2.29
	Oxadiazon	92.6	92.5	81.1	76.3	0.0527	5.15
	Oxyfluorfen	103	111	107	108	7.44	0.593
	Parathion Ethyl	89.8	92.8	98.8	93.7	3.38	5.27
	Parathion Methyl	109	107	109	114	1.79	4.38
	Pendimethalin	94.5	96.8	104	101	2.43	2.13
	Phenytoin	68.3	65.5	51.7	42.4	4.10	19.8
	Phorate	82.8	85.1	98.2	95.7	2.72	2.57
	Prodiamine	36.0	34.1	39.7	39.7	5.41	0.139
	Prometon	110	108	113	117	1.23	3.68
	Prometryn	102	100	92.2	94.6	1.61	2.50
	Pronamide	106	102	95.9	106	4.42	9.64
	Propanil	102	97.3	92.8	90.8	4.98	2.19
	Propargite	94.5	101	75.4	74.7	6.21	0.942
	Propiconazole	106	104	100	97.5	1.42	2.75
	Pyraflufen Ethyl	105	103	80.5	97.0	1.08	18.6
	Pyridaben	115	107	96.5	112	7.21	14.5
	Pyriproxyfen	104	103	85.4	89.3	0.477	4.56
	Simazine	94.2	93.0	93.3	91.5	1.33	1.99

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Stirophos	86.5	82.5	68.6	77.6	4.75	12.3
	Sulfentrazone	109	99.7	84.6	80.5	8.80	3.50
	Tebuconazole	89.4	85.7	56.9	63.4	4.21	10.7
	Terbufos	108	111	120	118	3.35	1.94
	Terbutylazine	99.4	95.8	92.0	96.4	3.76	4.74
	Thiobencarb	103	103	81.0	74.8	0.545	7.96
	Triadimefon	102	100	95.3	84.6	1.67	11.9
EPA 8321B	2,4-D	99.1					20.9
	2,4,5-T	109		141	108		26.4
	Acesulfame K	81.0		168	177		5.18
	Acetaminophen	100		88.9	114		24.6
	Acetamiprid	96.1		92.1	94.8		2.92
	Afidopyropen	70.4		82.6	82.8		0.164
	AMPA	111		82.8	97.7		16.5
	Bentazon	95.1					27.0
	Benzovindiflupyr	75.6		80.3	87.3		8.39
	Carbamazepine	86.7		82.8	94.2		12.3
	Clothianidin	112		118	109		8.05
	Dinotefuran	89.9		107	120		11.0
	Diuron	103		80.8	76.5		4.69
	Endothall	71.4		79.4	81.4		2.51
	Fenuron	94.3		81.6	84.0		2.92
	Fluridone	91.8					2.80
	Glufosinate	96.1		78.5	89.1		12.6
	Glyphosate	115		79.7	85.3		6.81
	Hydrocodone	92.9		101	103		2.54
	Ibuprofen	57.7		68.2	61.1		11.0
	Imazapyr	120		98.1	125		24.3
	Imidacloprid	103		128	130		1.74
	Linuron	107		102	69.9		37.2
	Mandestrobin	86.2		78.1	87.6		11.5
	MCPP	104		97.0	95.3		1.86
	Naproxen	140		59.6	78.6		27.6
	Primidone	91.4		102	103		1.01
	Pyraclostrobin	83.7		76.2	85.4		11.4
	Silvex	106		87.9	92.7		5.28
	Sucralose	100		104	109		4.48
	Thiamethoxam	105		132	146		9.57
	Tolfenpyrad	36.4		44.8	57.0		24.0
	Triclopyr	129		110	82.5		28.5
SM 2120 B-2011	Color (true)	99.2				2.00	
SM 2320 B-2011	Total Alkalinity	98.9				4.56	
SM 2540 C-2011	TDS					4.62	
SM 4500 F-C-2011	Fluoride	102		98.9	98.9		0.0
SM 5310 B-2011	Organic Carbon	97.4		95.6	94.1		1.34

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2291878
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2291899

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2291899
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2291878
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2291878
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2291879
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2291879
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2291879
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2291879
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2291880
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2291903
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2291896
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2291878
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2291878
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2291899
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2291878
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2291878
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2291878
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2291879

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	12/01/2021			12/01/2021 17:34	Khloe J Berg	2291878
EPA 200.7 Rev. 4.4	12/01/2021	12/02/2021 10:40	Vijayalakshmi Reddy	12/06/2021 21:28	Josef B Mick	2291899
EPA 200.8 Rev. 5.4	12/01/2021	12/02/2021 10:40	Vijayalakshmi Reddy	12/04/2021 00:33	Emily M Philpot	2291899
	12/01/2021	12/02/2021 10:40	Vijayalakshmi Reddy	12/06/2021 19:04	Alexander Thompson	2291899
	12/01/2021	12/02/2021 10:40	Vijayalakshmi Reddy	12/07/2021 11:08	Alexander Thompson	2291899
EPA 300.0 Rev. 2.1	12/01/2021			12/07/2021 17:01	Roberta Tatti	2291878
EPA 350.1 Rev. 2.0	12/01/2021			12/13/2021 12:03	Ping Hua	2291879
EPA 351.2 Rev. 2.0	12/01/2021	12/03/2021 12:35	Benjamin T. Nordmann	12/06/2021 11:44	Alexandra J Mattheus	2291879
EPA 353.2 Rev. 2.0	12/01/2021			12/03/2021 09:36	Beverly Y. Sanders	2291879
EPA 365.1 Rev. 2.0	12/01/2021	12/02/2021 14:15	Simonne.V. Calhoun	12/06/2021 12:36	Shengyu Ding	2291879
EPA 365.1 Rev. 2.0 dissolved	12/01/2021			12/01/2021 14:25	James L Waggeberby	2291880
EPA 8270E	12/01/2021	12/06/2021 08:00	Rasheda Ghaffari	12/08/2021 21:26	Michael Poppell	2291903
EPA 8321B	12/01/2021	12/02/2021 15:00	Juyoung Kim	12/03/2021 08:50	Juyoung Kim	2291896
	12/01/2021	12/02/2021 15:00	Juyoung Kim	12/03/2021 14:21	Manjita Shrestha	2291896
	12/01/2021	12/06/2021 09:00	Hoor Shaik	12/11/2021 07:17	Juyoung Kim	2291896
SM 2120 B-2011	12/01/2021			12/01/2021 15:51	Samantha L Bates	2291878
SM 2320 B-2011	12/01/2021			12/04/2021 07:50	Dale L. Simmons	2291878
SM 2340B	12/01/2021			12/06/2021 21:28	Josef B Mick	2291899
SM 2540 C-2011	12/01/2021			12/03/2021 15:08	Yijie Li	2291878
SM 2540 D-2011	12/01/2021			12/03/2021 15:35	Yijie Li	2291878
SM 4500 F-C-2011	12/01/2021			12/04/2021 07:50	Dale L. Simmons	2291878
SM 5310 B-2011	12/01/2021			12/09/2021 20:07	Touraj Touran	2291879