

Chemical Analysis Report

NE-DIST-2022-01-26-01

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

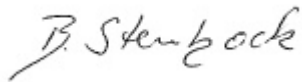
Event Description: **SCI's wbid 2323, 2549**
Request ID: **RQ-2022-01-03-20**
Customer: **NE-DIST**
Project ID: **SMP**

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

Date Certified: 16-FEB-2022 18:05



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: Pringle BR Unnamed Dirt Rd 0.5mi S Dave Br Collection Date/Time: 01/25/2022 10:30

Field ID: 27010203

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2301705	DEP SOP: NU-094-1	Color (true)**	88		PCU	P409004	
	EPA 180.1 Rev. 2.0	Turbidity	4.0		NTU	P409008	
	EPA 300.0 Rev. 2.1	Chloride	30		mg Cl/L	P409417	
		Sulfate	2.7		mg SO4/L	P409420	
	SM 2320 B-2011	Total Alkalinity	122		mg CaCO3/L	P409140	
	SM 2540 C-2011	TDS	225		mg/L	P409501	
	SM 2540 D-2011	TSS	2	U	mg/L	P409493	
	SM 4500 F-C-2011	Fluoride	0.098	I	mg F/L	P409145	
2301706	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P409406	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.41		mg N/L	P409375	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P409097	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P409034	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P409765	
2301707	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.087		mg P/L	P409001	
2301711	EPA 8321B	2,4-D	0.0020	U	ug/L	P408990	
		Acesulfame K	0.10	UJ	ug/L	P409043	SUR
		2,4,5-T	0.0040	U	ug/L	P408990	
		AMPA	0.10	U	ug/L	P409043	
		Acetaminophen	0.0080	U	ug/L	P408990	
		Acetamiprid	0.0020	U	ug/L	P408990	
		Endothall	0.25	UJ	ug/L	P409043	MS, SUR
		Glufosinate	0.10	U	ug/L	P409043	
		Glyphosate	0.10	U	ug/L	P409043	
		Afidopyrophen	0.0033	I	ug/L	P408990	
		Bentazon	8.0E-04	U	ug/L	P408990	
		Sucralose	0.010	U	ug/L	P409043	
		Benzovindiflupyr	0.0020	U	ug/L	P408990	
		Carbamazepine	8.0E-04	U	ug/L	P408990	
		Clothianidin	0.0020	U	ug/L	P408990	
		Dinotefuran	0.0020	U	ug/L	P408990	
		Diuron	0.0020	U	ug/L	P408990	
		Fenuron	0.016	U	ug/L	P408990	
		Fluridone	8.0E-04	U	ug/L	P408990	
		Imazapyr	0.070		ug/L	P408990	
		Hydrocodone	0.0020	U	ug/L	P408990	
		Ibuprofen	0.020	U	ug/L	P408990	
		Imidacloprid	0.0020	U	ug/L	P408990	MS
		Linuron	0.0040	U	ug/L	P408990	
		Mandestrobin	0.0020	U	ug/L	P408990	
		MCP	0.0020	U	ug/L	P408990	
		Naproxen	0.0080	U	ug/L	P408990	
		Primidone	0.0040	U	ug/L	P408990	
		Pyraclostrobin	0.0020	U	ug/L	P408990	

Field ID: 27010203

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2301711	EPA 8321B	Silvex	0.0040	U	ug/L	P408990	
		Thiamethoxam	0.0020	U	ug/L	P408990	MS
		Tolfenpyrad	0.0020	U	ug/L	P408990	
		Triclopyr	0.0040	U	ug/L	P408990	
2301712	EPA 200.7 Rev. 4.4	Barium	18.1		ug/L	P409121	
		Calcium	52.3		mg/L	P409121	
		Iron	870		ug/L	P409121	
		Magnesium	3.17		mg/L	P409121	
	EPA 200.8 Rev. 5.4	Manganese	9.2		ug/L	P409121	
		Potassium	0.35	I	mg/L	P409121	
		Sodium	17.7		mg/L	P409121	
		Zinc	5.0	U	ug/L	P409121	
		Aluminum	116		ug/L	P409121	
		Antimony	0.050	U	ug/L	P409121	
		Arsenic	0.18	I	ug/L	P409121	
		Beryllium	0.022	I	ug/L	P409121	
		Boron**	17.6		ug/L	P409121	
		Cadmium	0.020	U	ug/L	P409121	
		Chromium	0.56	I	ug/L	P409121	
		Copper	0.40	U	ug/L	P409121	
		Lead	0.20	U	ug/L	P409121	
		Nickel	0.50	U	ug/L	P409121	
		Selenium	0.20	U	ug/L	P409121	
		Silver	0.010	U	ug/L	P409121	
		Thallium	0.10	U	ug/L	P409121	
	SM 2340B	Hardness	144		mg/L	P409121	
2301713	EPA 8270E	Acetochlor	0.25	U	ng/L	P409108	
		Alachlor	0.25	U	ng/L	P409108	
		Ametryn	0.59	U	ng/L	P409108	
		Atrazine	0.25	U	ng/L	P409108	
		Atrazine Desethyl	1.5	U	ng/L	P409108	
		Azinphos Methyl	2.0	U	ng/L	P409108	
		Azoxystrobin**	0.49	U	ng/L	P409108	
		Bromacil	0.49	U	ng/L	P409108	
		Butylate	0.39	U	ng/L	P409108	
		Caffeine**	7.4	U	ng/L	P409108	
		Carbophenothion	0.20	U	ng/L	P409108	
		Carfentrazone Ethyl**	0.098	U	ng/L	P409108	
		Chlorfenapyr**	0.17	U	ng/L	P409108	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P409108	
		Chlorpyrifos Methyl	0.049	U	ng/L	P409108	
		Coumaphos**	0.49	U	ng/L	P409108	
		Cyanazine	3.2	U	ng/L	P409108	
		Cyprodinil**	0.098	U	ng/L	P409108	
		Demeton	1.5	U	ng/L	P409108	

Field ID: 27010203

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2301713	EPA 8270E	Diazinon	0.12	U	ng/L	P409108	
		Difenoconazole**	0.59	U	ng/L	P409108	
		Dimethenamid**	0.098	U	ng/L	P409108	
		Dimethomorph**	0.17	U	ng/L	P409108	
		Disulfoton	0.49	U	ng/L	P409108	
		Dithiopyr**	0.17	U	ng/L	P409108	
		EPTC	1.2	U	ng/L	P409108	
		Ethion	0.15	U	ng/L	P409108	
		Ethoprop	0.098	U	ng/L	P409108	
		Etridiazole**	0.15	U	ng/L	P409108	
		Fenamiphos	0.49	U	ng/L	P409108	
		Fenbuconazole**	0.12	U	ng/L	P409108	
		Fipronil	0.25	U	ng/L	P409108	
		Fipronil Desulfinyl**	0.12	U	ng/L	P409108	
		Fipronil Sulfide	0.15	U	ng/L	P409108	
		Fipronil Sulfone	0.15	U	ng/L	P409108	
		Fluazifop-P-butyl**	0.098	U	ng/L	P409108	
		Fludioxonil**	0.12	U	ng/L	P409108	
		Flumioxazin**	1.7	U	ng/L	P409108	
		Flutolanil**	0.098	U	ng/L	P409108	
		Fluxapyroxad**	0.098	U	ng/L	P409108	
		Fonofos	0.20	U	ng/L	P409108	
		Hexazinone	0.49	U	ng/L	P409108	
		Imazalil**	0.74	U	ng/L	P409108	
		Iprodione**	0.59	U	ng/L	P409108	
		Loratadine**	0.098	U	ng/L	P409108	
		Malathion	0.34	U	ng/L	P409108	
		Metaxyl	0.74	U	ng/L	P409108	
		Metolachlor	0.34	U	ng/L	P409108	
		Metribuzin	2.5	U	ng/L	P409108	
		Mevinphos	1.0	U	ng/L	P409108	
		Molinate	0.29	U	ng/L	P409108	
		Myclobutanil**	0.25	U	ng/L	P409108	
		Naled**	1.5	UJ	ng/L	P409108	LCS, MS
		Napropamide**	0.39	U	ng/L	P409108	
		Norflurazon	0.49	U	ng/L	P409108	
		Oxadiazon	0.29	U	ng/L	P409108	
		Oxyfluorfen**	0.15	U	ng/L	P409108	
		Parathion Ethyl	0.25	U	ng/L	P409108	
		Parathion Methyl	0.54	U	ng/L	P409108	
		Pendimethalin	0.98	U	ng/L	P409108	
		Phenytion**	3.4	U	ng/L	P409108	
		Phorate	0.52	U	ng/L	P409108	
		Prodiamine**	0.17	U	ng/L	P409108	
		Prometon	0.88	U	ng/L	P409108	RPD

Field ID: 27010203

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2301713	EPA 8270E	Prometryn	0.20	U	ng/L	P409108	
		Pronamide**	0.15	U	ng/L	P409108	
		Propanil**	0.12	U	ng/L	P409108	
		Propargite**	1.5	U	ng/L	P409108	
		Propiconazole**	0.49	U	ng/L	P409108	
		Pyraflufen Ethyl**	0.25	U	ng/L	P409108	
		Pyridaben**	0.44	U	ng/L	P409108	
		Pyriproxyfen**	0.12	U	ng/L	P409108	
		Simazine	0.49	U	ng/L	P409108	
		Stirophos**	0.12	U	ng/L	P409108	
		Sulfentrazone**	0.49	U	ng/L	P409108	
		Tebuconazole**	0.49	U	ng/L	P409108	
		Terbufos	0.098	U	ng/L	P409108	
		Terbuthylazine	0.42	U	ng/L	P409108	
		Thiobencarb**	0.59	U	ng/L	P409108	
		Triadimefon**	0.25	U	ng/L	P409108	

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 imazapyr could not be assessed due to a high concentration of parameter in the spiked sample.

EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: MS accuracy for Flutolanil 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: DEP SOP: NU-094-1
Batch ID: P409004

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P409008

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P409121

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
Manganese	1.0	U	ug/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: P409121

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: P409417

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409420

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: P409406

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409375

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409097

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409034

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409001

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

Reference Method: EPA 8270E
Batch ID: P409108

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	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P409108

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: P409108

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	2.5	U	ng/L
Metribuzin	2.5	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	0.18	U	ng/L
Prodiatamine	0.18	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P409108

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: P408990

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P408990

Component	Result	Code	Units
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
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: EPA 8321B

Batch ID: P409043

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 2320 B-2011

Batch ID: P409140

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

Reference Method: SM 2540 C-2011

Batch ID: P409501

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P409493

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011

Batch ID: P409145

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P409765

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P409004

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P409121

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	102		P	85 - 115
Calcium	102		P	85 - 115
Iron	107		P	85 - 115
Magnesium	102		P	85 - 115
Manganese	102		P	85 - 115
Potassium	97.5		P	85 - 115
Sodium	97.7		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P409121

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.7		P	85 - 115
Antimony	97.7		P	85 - 115
Arsenic	101		P	85 - 115
Beryllium	100		P	85 - 115
Boron	98.7		P	85 - 115
Cadmium	98.8		P	85 - 115
Chromium	99.0		P	85 - 115
Copper	101		P	85 - 115
Lead	100		P	85 - 115
Nickel	100		P	85 - 115
Selenium	99.8		P	85 - 115
Silver	102		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409417

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409420

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409406

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P409375

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.7		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P409097

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P409034

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P409001

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

Reference Method: EPA 8270E
 Batch ID: P409108

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	114		P	70 - 121
Alachlor	103		P	68 - 119
Ametryn	112		P	64 - 139
Atrazine	106		P	76 - 120
Atrazine Desethyl	86.6		P	44 - 126
Azinphos Methyl	72.2		P	43 - 192
Azoxystrobin	109		P	36 - 224
Bromacil	109		P	52 - 121
Butylate	66.8		P	28 - 91.0
Caffeine	85.8		P	50 - 134
Carbophenothion	111		P	56 - 129
Carfentrazone Ethyl	125		P	60 - 141
Chlorfenapyr	103		P	56 - 115
Chlorpyrifos Ethyl	113		P	60 - 118
Chlorpyrifos Methyl	110		P	68 - 119
Coumaphos	171		P	18 - 250
Cyanazine	133		P	61 - 250
Cyprodinil	140		P	55 - 145
Demeton	96.8		P	30 - 159
Diazinon	106		P	70 - 123
Difenoconazole	108		P	49 - 204
Dimethenamid	91.0		P	64 - 115
Dimethomorph	111		P	12 - 219
Disulfoton	89.0		P	44 - 125
Dithiopyr	104		P	64 - 115
EPTC	61.1		P	28 - 86.0
Ethion	103		P	33 - 125
Ethoprop	85.4		P	64 - 116

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P409108

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Etridiazole	69.1		P	34 - 91.0
Fenamiphos	126		P	12 - 127
Fenbuconazole	145		P	59 - 151
Fipronil	110		P	67 - 129
Fipronil Desulfinyl	111		P	65 - 127
Fipronil Sulfide	95.7		P	61 - 116
Fipronil Sulfone	105		P	55 - 117
Fluazifop-P-butyl	97.3		P	62 - 127
Fludioxonil	111		P	62 - 128
Flumioxazin	248		P	33 - 250
Flutolanil	104		P	56 - 127
Fluxapyroxad	127		P	45 - 128
Fonofos	85.7		P	62 - 111
Hexazinone	114		P	46 - 139
Imazalil	88.8		P	38 - 142
Iprodione	70.6		P	47 - 135
Loratadine	87.4		P	10 - 244
Malathion	128		P	61 - 139
Metalaxyl	99.7		P	10 - 119
Metolachlor	111		P	65 - 118
Metribuzin	111		P	51 - 250
Mevinphos	89.0		P	53 - 121
Molinate	76.1		P	42 - 96.0
Myclobutanil	109		P	55 - 128
Naled	119		F	10 - 98.0
Napropamide	103		P	49 - 121
Norflurazon	119		P	61 - 126
Oxadiazon	92.9		P	59 - 116
Oxyfluorfen	117		P	64 - 137
Parathion Ethyl	106		P	70 - 112
Parathion Methyl	120		P	76 - 133
Pendimethalin	79.5		P	52 - 117
Phenytoin	113		P	10 - 199
Phorate	98.5		P	48 - 121
Prodiamine	98.2		P	26 - 142
Prometon	105		P	43 - 123
Prometryn	94.7		P	66 - 127
Pronamide	121		P	75 - 121
Propanil	118		P	45 - 150
Propargite	163		P	42 - 208
Propiconazole	99.8		P	60 - 125
Pyraflufen Ethyl	124		P	70 - 138
Pyridaben	159		P	35 - 245
Pyriproxyfen	61.7		P	30 - 149
Simazine	123		P	72 - 125
Stirophos	84.7		P	29 - 164
Sulfentrazone	136		P	21 - 139
Tebuconazole	78.7		P	10 - 115
Terbufos	102		P	60 - 123
Terbutylazine	101		P	72 - 115
Thiobencarb	112		P	31 - 139
Triadimefon	98.3		P	65 - 116

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P408990

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	81.9		P	30 - 160
2,4,5-T	74.3		P	30 - 160
Acetaminophen	68.0		P	30 - 160
Acetamiprid	98.0		P	30 - 160
Afidopyropen	78.4		P	30 - 160
Bentazon	86.8		P	30 - 160
Benzovindiflupyr	92.5		P	30 - 160
Carbamazepine	93.9		P	30 - 160
Clothianidin	106		P	30 - 160
Dinotefuran	102		P	30 - 160
Diuron	97.4		P	30 - 160
Fenuron	103		P	30 - 160
Fluridone	108		P	30 - 160
Hydrocodone	92.6		P	30 - 160
Ibuprofen	81.6		P	30 - 160
Imazapyr	104		P	30 - 160
Imidacloprid	92.8		P	30 - 160
Linuron	81.2		P	30 - 160
Mandestrobin	103		P	30 - 160
MCPP	111		P	30 - 160
Naproxen	94.5		P	30 - 160
Primidone	90.5		P	30 - 160
Pyraclostrobin	97.3		P	30 - 160
Silvex	60.0		P	30 - 160
Thiamethoxam	92.9		P	30 - 160
Tolfenpyrad	61.1		P	30 - 160
Triclopyr	76.1		P	30 - 160

Reference Method: EPA 8321B

Batch ID: P409043

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	99.1		P	40 - 150
AMPA	91.4		P	40 - 150
Endothall	136		P	40 - 150
Glufosinate	97.9		P	40 - 150
Glyphosate	91.2		P	40 - 150
Sucralose	91.7		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P409140

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.0		P	94 - 106

Reference Method: SM 4500 F-C-2011

Batch ID: P409145

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.5		P	93 - 104

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P409765

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P409121

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301666	Barium	103	101	P/P	80 - 120
2301666	Calcium	102		P	80 - 120
2301666	Iron	110	107	P/P	80 - 120
2301666	Magnesium	104		P	80 - 120
2301666	Manganese	103	100	P/P	80 - 120
2301666	Potassium	96.9		P	80 - 120
2301666	Sodium	97.4		P	80 - 120
2301666	Zinc	104	101	P/P	80 - 120
2301780	Barium	105		P	80 - 120
2301780	Calcium	106		P	80 - 120
2301780	Iron	110		P	80 - 120
2301780	Magnesium	110		P	80 - 120
2301780	Manganese	103		P	80 - 120
2301780	Potassium	101		P	80 - 120
2301780	Sodium	103		P	80 - 120
2301780	Zinc	105		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P409121

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301666	Aluminum	97.8	99.8	P/P	80 - 120
2301666	Antimony	99.7	101	P/P	80 - 120
2301666	Arsenic	102	101	P/P	80 - 120
2301666	Beryllium	101	100	P/P	80 - 120
2301666	Boron	96.0	101	P/P	80 - 120
2301666	Cadmium	98.5	100	P/P	80 - 120
2301666	Chromium	100	102	P/P	80 - 120
2301666	Copper	101	102	P/P	80 - 120
2301666	Lead	101	102	P/P	80 - 120
2301666	Nickel	100	101	P/P	80 - 120
2301666	Selenium	98.7	99.3	P/P	80 - 120
2301666	Silver	102	103	P/P	80 - 120
2301666	Thallium	109	111	P/P	80 - 120
2301780	Aluminum	101		P	80 - 120
2301780	Antimony	100		P	80 - 120
2301780	Arsenic	99.6		P	80 - 120
2301780	Beryllium	101		P	80 - 120
2301780	Boron	104		P	80 - 120
2301780	Cadmium	101		P	80 - 120
2301780	Chromium	101		P	80 - 120
2301780	Copper	102		P	80 - 120
2301780	Lead	103		P	80 - 120
2301780	Nickel	101		P	80 - 120
2301780	Selenium	96.3		P	80 - 120
2301780	Silver	103		P	80 - 120
2301780	Thallium	111		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P409417

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409417

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301653	Chloride	95.0		P	90 - 110
2301742	Chloride	98.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409420

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301653	Sulfate	93.2		P	90 - 110
2301742	Sulfate	96.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409406

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301740	Ammonia-N	95.0	96.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409375

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301510	Kjeldahl Nitrogen	101	96.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409097

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301656	NO2NO3-N	99.8	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409034

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301608	Total-P	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409001

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301741	O-Phosphate-P	100	102	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P409108

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301326	Acetochlor	106	107	P/P	65 - 124
2301326	Alachlor	96.4	98.2	P/P	61 - 121
2301326	Ametryn	152	138	P/P	52 - 216
2301326	Atrazine	102	99.3	P/P	68 - 133
2301326	Atrazine Desethyl	58.1	62.5	P/P	15 - 160
2301326	Azinphos Methyl	72.1	78.8	P/P	40 - 292
2301326	Azoxystrobin	98.6	105	P/P	12 - 242
2301326	Bromacil	101	99.7	P/P	54 - 167

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P409108

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301326	Butylate	39.5	47.7	P/P	14 - 94.0
2301326	Caffeine	115	126	P/P	10 - 226
2301326	Carbophenothion	101	106	P/P	49 - 122
2301326	Carfentrazone Ethyl	121	118	P/P	53 - 138
2301326	Chlorfenapyr	85.7	91.5	P/P	50 - 150
2301326	Chlorpyrifos Ethyl	105	109	P/P	52 - 122
2301326	Chlorpyrifos Methyl	106	109	P/P	66 - 117
2301326	Coumaphos	185	200	P/P	50 - 220
2301326	Cyanazine	120	128	P/P	43 - 245
2301326	Cyprodinil	121	128	P/P	50 - 150
2301326	Demeton	86.5	97.8	P/P	43 - 188
2301326	Diazinon	104	103	P/P	69 - 131
2301326	Difenoconazole	84.6	86.6	P/P	34 - 231
2301326	Dimethenamid	99.1	98.2	P/P	55 - 118
2301326	Dimethomorph	102	102	P/P	50 - 150
2301326	Disulfoton	93.8	104	P/P	38 - 141
2301326	Dithiopyr	101	96.5	P/P	42 - 116
2301326	EPTC	31.3	37.2	P/P	18 - 85.0
2301326	Ethion	93.8	85.9	P/P	10 - 131
2301326	Ethoprop	100	104	P/P	65 - 129
2301326	Etridiazole	52.0	56.1	P/P	50 - 150
2301326	Fenamiphos	89.1	80.6	P/P	31 - 137
2301326	Fenbuconazole	147	144	P/P	57 - 160
2301326	Fipronil	109	109	P/P	62 - 132
2301326	Fipronil Desulfanyl	106	101	P/P	57 - 131
2301326	Fipronil Sulfide	98.3	96.3	P/P	15 - 138
2301326	Fipronil Sulfone	101	100	P/P	21 - 134
2301326	Fluazifop-P-butyl	97.6	96.4	P/P	54 - 133
2301326	Fludioxonil	93.0	95.1	P/P	58 - 127
2301326	Flumioxazin	269	295	P/P	33 - 300
2301326	Fluxapyroxad	99.3	70.5	P/P	23 - 141
2301326	Fonofos	87.1	95.9	P/P	58 - 119
2301326	Hexazinone	106	106	P/P	68 - 172
2301326	Imazalil	104	89.3	P/P	48 - 283
2301326	Iprodione	61.7	60.6	P/P	38 - 140
2301326	Loratadine	75.7	76.6	P/P	50 - 150
2301326	Malathion	115	116	P/P	40 - 137
2301326	Metalaxyl	97.8	90.6	P/P	21 - 129
2301326	Metolachlor	102	98.6	P/P	55 - 122
2301326	Metribuzin	113	107	P/P	38 - 187
2301326	Mevinphos	99.9	108	P/P	54 - 134
2301326	Molinate	69.9	79.7	P/P	41 - 97.0
2301326	Myclobutanil	103	102	P/P	56 - 125
2301326	Naled	105	110	P/F	10 - 108
2301326	Napropamide	95.0	93.1	P/P	50 - 150
2301326	Norflurazon	122	116	P/P	32 - 122
2301326	Oxadiazon	83.8	80.1	P/P	40 - 119
2301326	Oxyfluorfen	126	121	P/P	61 - 153
2301326	Parathion Ethyl	92.2	97.1	P/P	59 - 130
2301326	Parathion Methyl	109	118	P/P	65 - 155
2301326	Pendimethalin	86.2	87.3	P/P	49 - 138
2301326	Phenytol	114	108	P/P	50 - 200

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P409108

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301326	Phorate	116	107	P/P	54 - 161
2301326	Prodiamine	129	126	P/P	33 - 161
2301326	Prometon	104	72.1	P/P	48 - 140
2301326	Prometryn	93.8	85.0	P/P	55 - 134
2301326	Pronamide	116	110	P/P	66 - 137
2301326	Propanil	112	115	P/P	50 - 150
2301326	Propargite	151	144	P/P	50 - 200
2301326	Propiconazole	131	128	P/P	36 - 150
2301326	Pyraflufen Ethyl	132	118	P/P	50 - 150
2301326	Pyridaben	174	194	P/P	50 - 200
2301326	Pyriproxyfen	55.1	47.2	P/P	10 - 165
2301326	Simazine	105	111	P/P	57 - 145
2301326	Stirophos	98.3	98.9	P/P	50 - 150
2301326	Sulfentrazone	103	89.4	P/P	34 - 140
2301326	Tebuconazole	75.1	46.2	P/P	10 - 127
2301326	Terbufos	118	121	P/P	59 - 138
2301326	Terbuthylazine	99.0	94.1	P/P	68 - 119
2301326	Thiobencarb	102	105	P/P	50 - 150
2301326	Triadimefon	80.7	78.1	P/P	50 - 150

Reference Method: EPA 8321B
Batch ID: P408990

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301386	2,4-D	118	135	P/P	30 - 160
2301386	2,4,5-T	80.1	103	P/P	30 - 160
2301386	Acetaminophen	103	104	P/P	30 - 160
2301386	Acetamiprid	109	128	P/P	30 - 160
2301386	Afidopyropen	70.9	83.7	P/P	30 - 160
2301386	Bentazon	38.0	66.4	P/P	30 - 160
2301386	Benzovindiflupyr	87.9	98.6	P/P	30 - 160
2301386	Carbamazepine	98.9	114	P/P	30 - 160
2301386	Clothianidin	132	158	P/P	30 - 160
2301386	Dinotefuran	123	136	P/P	30 - 160
2301386	Diuron	82.7	95.2	P/P	30 - 160
2301386	Fenuron	88.4	102	P/P	30 - 160
2301386	Fluridone	90.8	104	P/P	30 - 160
2301386	Hydrocodone	102	116	P/P	30 - 160
2301386	Ibuprofen	68.8	85.8	P/P	30 - 160
2301386	Imidacloprid	166	195	F/F	30 - 160
2301386	Linuron	67.3	75.3	P/P	30 - 160
2301386	Mandestrobin	90.5	106	P/P	30 - 160
2301386	MCPP	120	136	P/P	30 - 160
2301386	Naproxen	87.9	112	P/P	30 - 160
2301386	Primidone	105	114	P/P	30 - 160
2301386	Pyraclostrobin	86.1	104	P/P	30 - 160
2301386	Silvex	80.8	89.3	P/P	30 - 160
2301386	Thiamethoxam	150	175	P/F	30 - 160
2301386	Tolfenpyrad	54.0	62.5	P/P	30 - 160
2301386	Triclopyr	86.3	104	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P409043

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301661	Acesulfame K	100	84.0	P/P	40 - 150
2301661	AMPA	94.5	88.6	P/P	40 - 150
2301661	Endothall	159	164	F/F	40 - 150
2301661	Glufosinate	99.0	82.7	P/P	40 - 150
2301661	Glyphosate	90.4	80.7	P/P	40 - 150
2301661	Sucralose	91.2	96.4	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P409145

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301654	Fluoride	99.1	97.8	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P409765

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2301745	Organic Carbon	93.0	92.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P409004

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301673	Color (true)	1.68	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P409008

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301673	Turbidity	0.720	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P409121

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301666	Barium	2.30	Spike	P	0 - 20
2301666	Calcium	3.21	Spike	P	0 - 20
2301666	Iron	3.05	Spike	P	0 - 20
2301666	Magnesium	3.71	Spike	P	0 - 20
2301666	Manganese	2.94	Spike	P	0 - 20
2301666	Potassium	3.24	Spike	P	0 - 20
2301666	Sodium	2.03	Spike	P	0 - 20
2301666	Zinc	3.04	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P409121

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301666	Aluminum	1.99	Spike	P	0 - 20
2301666	Antimony	0.873	Spike	P	0 - 20
2301666	Arsenic	0.130	Spike	P	0 - 20
2301666	Beryllium	0.962	Spike	P	0 - 20
2301666	Boron	3.57	Spike	P	0 - 20
2301666	Cadmium	1.57	Spike	P	0 - 20
2301666	Chromium	1.72	Spike	P	0 - 20
2301666	Copper	0.838	Spike	P	0 - 20
2301666	Lead	1.05	Spike	P	0 - 20
2301666	Nickel	0.523	Spike	P	0 - 20
2301666	Selenium	0.656	Spike	P	0 - 20
2301666	Silver	0.969	Spike	P	0 - 20
2301666	Thallium	1.74	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409417

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301653	Chloride	0.275	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409420

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301653	Sulfate	0.673	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409406

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301740	Ammonia-N	1.10	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409375

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301510	Kjeldahl Nitrogen	3.59	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409097

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301656	NO2NO3-N	0.466	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409034

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301608	Total-P	0.540	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409001

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301741	O-Phosphate-P	1.87	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P409108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301326	Acetochlor	0.610	Spike	P	0 - 27
2301326	Alachlor	1.81	Spike	P	0 - 27
2301326	Ametryn	9.74	Spike	P	0 - 34
2301326	Atrazine	2.28	Spike	P	0 - 41
2301326	Atrazine Desethyl	7.37	Spike	P	0 - 38
2301326	Azinphos Methyl	8.81	Spike	P	0 - 62
2301326	Azoxystrobin	4.63	Spike	P	0 - 32
2301326	Bromacil	0.941	Spike	P	0 - 30
2301326	Butylate	18.8	Spike	P	0 - 59

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P409108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301326	Caffeine	9.40	Spike	P	0 - 60
2301326	Carbophenothion	5.19	Spike	P	0 - 25
2301326	Carfentrazone Ethyl	1.99	Spike	P	0 - 26
2301326	Chlorfenapyr	6.61	Spike	P	0 - 30
2301326	Chlorpyrifos Ethyl	3.36	Spike	P	0 - 27
2301326	Chlorpyrifos Methyl	2.68	Spike	P	0 - 26
2301326	Coumaphos	7.69	Spike	P	0 - 30
2301326	Cyanazine	6.37	Spike	P	0 - 58
2301326	Cyprodinil	4.93	Spike	P	0 - 30
2301326	Demeton	12.3	Spike	P	0 - 25
2301326	Diazinon	1.30	Spike	P	0 - 29
2301326	Difenoconazole	2.37	Spike	P	0 - 25
2301326	Dimethenamid	0.933	Spike	P	0 - 30
2301326	Dimethomorph	0.377	Spike	P	0 - 30
2301326	Disulfoton	10.2	Spike	P	0 - 33
2301326	Dithiopyr	4.75	Spike	P	0 - 22
2301326	EPTC	17.4	Spike	P	0 - 38
2301326	Ethion	8.77	Spike	P	0 - 79
2301326	Ethoprop	3.96	Spike	P	0 - 23
2301326	Etridiazole	7.49	Spike	P	0 - 30
2301326	Fenamiphos	10.0	Spike	P	0 - 58
2301326	Fenbuconazole	1.92	Spike	P	0 - 37
2301326	Fipronil	0.0491	Spike	P	0 - 33
2301326	Fipronil Desulfinyl	5.02	Spike	P	0 - 26
2301326	Fipronil Sulfide	2.00	Spike	P	0 - 37
2301326	Fipronil Sulfone	0.798	Spike	P	0 - 50
2301326	Fluazifop-P-butyl	1.19	Spike	P	0 - 24
2301326	Fludioxonil	2.29	Spike	P	0 - 26
2301326	Flumioxazin	9.19	Spike	P	0 - 37
2301326	Flutolanil	1.33	Spike	P	0 - 26
2301326	Fluxapyroxad	22.8	Spike	P	0 - 34
2301326	Fonofos	9.70	Spike	P	0 - 27
2301326	Hexazinone	0.171	Spike	P	0 - 36
2301326	Imazalil	15.4	Spike	P	0 - 65
2301326	Iprodione	1.75	Spike	P	0 - 33
2301326	Loratadine	1.15	Spike	P	0 - 30
2301326	Malathion	0.886	Spike	P	0 - 44
2301326	Metalaxyl	7.66	Spike	P	0 - 38
2301326	Metolachlor	2.58	Spike	P	0 - 36
2301326	Metribuzin	5.90	Spike	P	0 - 63
2301326	Mevinphos	8.21	Spike	P	0 - 26
2301326	Molinate	13.1	Spike	P	0 - 40
2301326	Myclobutanil	1.01	Spike	P	0 - 21
2301326	Naled	4.89	Spike	P	0 - 26
2301326	Napropamide	1.98	Spike	P	0 - 30
2301326	Norflurazon	4.46	Spike	P	0 - 24
2301326	Oxadiazon	4.62	Spike	P	0 - 27
2301326	Oxyfluorfen	4.15	Spike	P	0 - 24
2301326	Parathion Ethyl	5.16	Spike	P	0 - 28
2301326	Parathion Methyl	7.69	Spike	P	0 - 27
2301326	Pendimethalin	1.21	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P409108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301326	Phenytoin	5.16	Spike	P	0 - 30
2301326	Phorate	7.64	Spike	P	0 - 27
2301326	Prodiamine	2.78	Spike	P	0 - 52
2301326	Prometon	35.9	Spike	F	0 - 31
2301326	Prometryn	9.79	Spike	P	0 - 28
2301326	Pronamide	4.89	Spike	P	0 - 26
2301326	Propanil	2.58	Spike	P	0 - 30
2301326	Propargite	5.18	Spike	P	0 - 30
2301326	Propiconazole	2.40	Spike	P	0 - 31
2301326	Pyraflufen Ethyl	11.7	Spike	P	0 - 30
2301326	Pyridaben	11.3	Spike	P	0 - 30
2301326	Pyriproxyfen	14.5	Spike	P	0 - 50
2301326	Simazine	5.21	Spike	P	0 - 29
2301326	Stirophos	0.613	Spike	P	0 - 30
2301326	Sulfentrazone	14.5	Spike	P	0 - 33
2301326	Tebuconazole	33.5	Spike	P	0 - 44
2301326	Terbufos	2.59	Spike	P	0 - 29
2301326	Terbuthylazine	5.05	Spike	P	0 - 27
2301326	Thiobencarb	3.56	Spike	P	0 - 30
2301326	Triadimefon	3.26	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P408990

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301386	2,4-D	9.90	Spike	P	0 - 30
2301386	2,4,5-T	25.0	Spike	P	0 - 30
2301386	Acetaminophen	1.03	Spike	P	0 - 30
2301386	Acetamiprid	15.6	Spike	P	0 - 30
2301386	Afidopyropen	16.6	Spike	P	0 - 30
2301386	Bentazon	5.38	Spike	P	0 - 30
2301386	Benzovindiflupyr	11.5	Spike	P	0 - 30
2301386	Carbamazepine	13.8	Spike	P	0 - 30
2301386	Clothianidin	17.2	Spike	P	0 - 30
2301386	Dinotefuran	9.98	Spike	P	0 - 30
2301386	Diuron	14.0	Spike	P	0 - 30
2301386	Fenuron	14.1	Spike	P	0 - 30
2301386	Fluridone	13.3	Spike	P	0 - 30
2301386	Hydrocodone	12.3	Spike	P	0 - 30
2301386	Ibuprofen	21.9	Spike	P	0 - 30
2301386	Imazapyr	6.57	Spike	P	0 - 30
2301386	Imidacloprid	14.9	Spike	P	0 - 30
2301386	Linuron	11.3	Spike	P	0 - 30
2301386	Mandestrobin	15.4	Spike	P	0 - 30
2301386	MCPP	11.6	Spike	P	0 - 30
2301386	Naproxen	24.0	Spike	P	0 - 30
2301386	Primidone	9.10	Spike	P	0 - 30
2301386	Pyraclostrobin	18.9	Spike	P	0 - 30
2301386	Silvex	10.0	Spike	P	0 - 30
2301386	Thiamethoxam	13.5	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P408990

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301386	Tolfenpyrad	14.5	Spike	P	0 - 30
2301386	Triclopyr	18.4	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P409043

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301661	Acesulfame K	17.0	Spike	P	0 - 30
2301661	AMPA	6.47	Spike	P	0 - 30
2301661	Endothall	3.00	Spike	P	0 - 30
2301661	Glufosinate	17.9	Spike	P	0 - 30
2301661	Glyphosate	11.2	Spike	P	0 - 30
2301661	Sucralose	5.18	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P409140

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301654	Total Alkalinity	0.494	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P409501

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301601	TDS	4.80	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P409145

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301654	Fluoride	0.960	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P409765

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2301745	Organic Carbon	0.802	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2301711
Field Sample ID: 27010203

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	128	P	30 - 160
EPA 8321B	Acetaminophen-d4	110	P	30 - 160
EPA 8321B	Carbamazepine-d10	102	P	30 - 160
EPA 8321B	Diuron-d6	71.7	P	30 - 160
EPA 8321B	Endothall-d6	166	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	92.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	83.6	P	30 - 160
EPA 8321B	Primidone-d5	121	P	30 - 160
EPA 8321B	Sucralose-d6	114	P	30 - 160

Lab Sample ID: 2301713
Field Sample ID: 27010203

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	76.1	P	20 - 200
EPA 8270E	Simazine-d10	127	P	71 - 140
EPA 8270E	Terbufos-d10	111	P	62 - 131

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A110055

Included Lab Sample IDs: 2301707

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

Reference Method: DEP SOP: NU-094-1

Run ID: A110056

Included Lab Sample IDs: 2301705

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	100	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A110058

Included Lab Sample IDs: 2301705

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A110085

Included Lab Sample IDs: 2301706

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A110098

Included Lab Sample IDs: 2301706

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

Reference Method: SM 2320 B-2011

Run ID: A110099

Included Lab Sample IDs: 2301705

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.5	96.9	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A110099

Included Lab Sample IDs: 2301705

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A110120

Included Lab Sample IDs: 2301712

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.8	99.9	P/P	90 - 110
Antimony	101	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A110120

Included Lab Sample IDs: 2301712

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	100	100	P/P	90 - 110
Beryllium	98.0	98.3	P/P	90 - 110
Boron	104	104	P/P	90 - 110
Cadmium	101	101	P/P	90 - 110
Chromium	99.1	101	P/P	90 - 110
Copper	98.4	98.8	P/P	90 - 110
Lead	98.3	97.8	P/P	90 - 110
Nickel	98.8	99.0	P/P	90 - 110
Selenium	98.4	97.8	P/P	90 - 110
Silver	102	102	P/P	90 - 110
Thallium	104	104	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A110145

Included Lab Sample IDs: 2301712

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	103	P/P	90 - 110
Calcium	102	102	P/P	90 - 110
Iron	104	105	P/P	90 - 110
Magnesium	104	104	P/P	90 - 110
Manganese	101	101	P/P	90 - 110
Potassium	97.2	96.8	P/P	90 - 110
Sodium	97.9	97.5	P/P	90 - 110
Zinc	102	103	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A110148

Included Lab Sample IDs: 2301711

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.2	82.8	P/P	50 - 150
2,4,5-T	102	83.5	P/P	50 - 150
Acetaminophen	106	110	P/P	60 - 160
Acetamiprid	102	105	P/P	50 - 150
Afidopyropen	104	102	P/P	50 - 150
Bentazon	95.8	107	P/P	50 - 160
Benzovindiflupyr	109	103	P/P	50 - 160
Carbamazepine	96.2	96.1	P/P	60 - 150
Clothianidin	98.4	111	P/P	60 - 150
Dinotefuran	112	107	P/P	50 - 150
Diuron	106	103	P/P	60 - 160
Fenuron	116	111	P/P	60 - 150
Fluridone	118	103	P/P	60 - 160
Hydrocodone	97.4	107	P/P	60 - 150
Ibuprofen	101	78.5	P/P	50 - 160
Imazapyr	123	132	P/P	50 - 160
Imidacloprid	96.2	101	P/P	60 - 150
Linuron	113	100	P/P	60 - 150
Mandestrobin	112	114	P/P	50 - 150
MCP	102	99.8	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A110148
Included Lab Sample IDs: 2301711

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Naproxen	130	140	P/P	50 - 160
Primidone	88.9	94.3	P/P	60 - 150
Pyraclostrobin	114	109	P/P	60 - 150
Silvex	89.8	77.9	P/P	50 - 150
Thiamethoxam	98.7	102	P/P	50 - 150
Tolfenpyrad	104	104	P/P	60 - 150
Triclopyr	99.5	100	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A110153
Included Lab Sample IDs: 2301711

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	97.0	92.5	P/P	60 - 160
Glufosinate	102	100	P/P	60 - 160
Glyphosate	93.6	89.9	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A110154
Included Lab Sample IDs: 2301705

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	100	P/P	90 - 110
Sulfate	100	99.8	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A110183
Included Lab Sample IDs: 2301711

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	102	80.9	P/P	60 - 160
Endothall	139	125	P/P	60 - 160
Sucralose	97.7	104	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A110212
Included Lab Sample IDs: 2301706

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	99.0	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A110253
Included Lab Sample IDs: 2301713

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	97.9		P	80 - 120
Atrazine	98.6		P	80 - 120
Atrazine Desethyl	111		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A110253
 Included Lab Sample IDs: 2301713

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Azinphos Methyl	108		P	80 - 120
Azoxystrobin	104		P	80 - 120
Bromacil	99.7		P	80 - 120
Butylate	107		P	80 - 120
Caffeine	90.6		P	80 - 120
Carbophenothion	81.1		P	80 - 120
Carfentrazone Ethyl	93.5		P	80 - 120
Chlorfenapyr	106		P	80 - 120
Chlorpyrifos Ethyl	104		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Coumaphos	94.9		P	80 - 120
Cyanazine	107		P	80 - 120
Cyprodinil	102		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	100		P	80 - 120
Difenoconazole	104		P	80 - 120
Dimethenamid	101		P	80 - 120
Dimethomorph	105		P	80 - 120
Disulfoton	100		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	102		P	80 - 120
Ethion	101		P	80 - 120
Ethoprop	100		P	80 - 120
Etridiazole	99.6		P	80 - 120
Fenamiphos	100		P	80 - 120
Fenbuconazole	94.1		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	97.4		P	80 - 120
Fipronil Sulfide	105		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fluazifop-P-butyl	102		P	80 - 120
Fludioxonil	90.7		P	80 - 120
Flumioxazin	98.7		P	80 - 120
Flutolanil	98.5		P	80 - 120
Fluxapyroxad	95.7		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	95.3		P	80 - 120
Iprodione	101		P	80 - 120
Loratadine	113		P	80 - 120
Malathion	88.5		P	80 - 120
Metalaxyl	104		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	104		P	80 - 120
Mevinphos	105		P	80 - 120
Molinate	102		P	80 - 120
Myclobutanil	102		P	80 - 120
Naled	106		P	80 - 120
Napropamide	103		P	80 - 120
Norflurazon	95.1		P	80 - 120
Oxadiazon	103		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A110253
Included Lab Sample IDs: 2301713

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxyfluorfen	103		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	100		P	80 - 120
Pendimethalin	105		P	80 - 120
Phenytoin	96.6		P	80 - 120
Phorate	106		P	80 - 120
Prodiamine	106		P	80 - 120
Prometon	106		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	102		P	80 - 120
Propanil	98.6		P	80 - 120
Propargite	99.5		P	80 - 120
Propiconazole	97.4		P	80 - 120
Pyraflufen Ethyl	96.9		P	80 - 120
Pyridaben	102		P	80 - 120
Pyriproxyfen	114		P	80 - 120
Simazine	104		P	80 - 120
Stirophos	89.0		P	80 - 120
Sulfentrazone	96.1		P	80 - 120
Tebuconazole	99.0		P	80 - 120
Terbufos	97.4		P	80 - 120
Terbuthylazine	103		P	80 - 120
Thiobencarb	104		P	80 - 120
Triadimefon	102		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A110275
Included Lab Sample IDs: 2301706

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.3	92.9	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A110374
Included Lab Sample IDs: 2301706

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	96.1	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	99.2					1.68	
EPA 180.1 Rev. 2.0	Turbidity						0.720	
EPA 200.7 Rev. 4.4	Barium	102	103	101	105			2.30
	Calcium	102	102	106				3.21
	Iron	107	110	107	110			3.05
	Magnesium	102	104	110				3.71
	Manganese	102	103	100	103			2.94
	Potassium	97.5	96.9	101				3.24
	Sodium	97.7	97.4	103				2.03
	Zinc	101	104	101	105			3.04
EPA 200.8 Rev. 5.4	Aluminum	99.7	97.8	99.8	101			1.99
	Antimony	97.7	99.7	101	100			0.873
	Arsenic	101	102	101	99.6			0.130
	Beryllium	100	101	100	101			0.962
	Boron	98.7	96.0	101	104			3.57
	Cadmium	98.8	98.5	100	101			1.57
	Chromium	99.0	100	102	101			1.72
	Copper	101	101	102	102			0.838
	Lead	100	101	102	103			1.05
	Nickel	100	100	101	101			0.523
	Selenium	99.8	98.7	99.3	96.3			0.656
	Silver	102	102	103	103			0.969
	Thallium	103	109	111	111			1.74
EPA 300.0 Rev. 2.1	Chloride	101	95.0	98.6			0.275	
	Sulfate	96.8	93.2	96.3			0.673	
EPA 350.1 Rev. 2.0	Ammonia-N	97.4	95.0	96.2				1.10
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.7	101	96.2				3.59
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100	99.8	100				0.466
EPA 365.1 Rev. 2.0	Total-P	106	105	105				0.540
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	100	102				1.87
EPA 8270E	Acetochlor	114	106	107				0.610
	Alachlor	103	96.4	98.2				1.81
	Ametryn	112	152	138				9.74
	Atrazine	106	102	99.3				2.28
	Atrazine Desethyl	86.6	58.1	62.5				7.37
	Azinphos Methyl	72.2	72.1	78.8				8.81
	Azoxystrobin	109	98.6	105				4.63
	Bromacil	109	101	99.7				0.941
	Butylate	66.8	39.5	47.7				18.8
	Caffeine	85.8	115	126				9.40
	Carbophenothion	111	101	106				5.19
	Carfentrazone Ethyl	125	121	118				1.99
	Chlorfenapyr	103	85.7	91.5				6.61
	Chlorpyrifos Ethyl	113	105	109				3.36
	Chlorpyrifos Methyl	110	106	109				2.68
	Coumaphos	171	185	200				7.69
	Cyanazine	133	120	128				6.37
	Cyprodinil	140	121	128				4.93
	Demeton	96.8	86.5	97.8				12.3
	Diazinon	106	104	103				1.30
	Difenoconazole	108	84.6	86.6				2.37
	Dimethenamid	91.0	99.1	98.2				0.933
	Dimethomorph	111	102	102				0.377
	Disulfoton	89.0	93.8	104				10.2

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Dithiopyr	104	101	96.5		4.75
	EPTC	61.1	31.3	37.2		17.4
	Ethion	103	93.8	85.9		8.77
	Ethoprop	85.4	100	104		3.96
	Etridiazole	69.1	52.0	56.1		7.49
	Fenamiphos	126	89.1	80.6		10.0
	Fenbuconazole	145	147	144		1.92
	Fipronil	110	109	109		0.0491
	Fipronil Desulfinyl	111	106	101		5.02
	Fipronil Sulfide	95.7	98.3	96.3		2.00
	Fipronil Sulfone	105	101	100		0.798
	Fluazifop-P-butyl	97.3	97.6	96.4		1.19
	Fludioxonil	111	93.0	95.1		2.29
	Flumioxazin	248	269	295		9.19
	Flutolanil	104				1.33
	Fluxapyroxad	127	99.3	70.5		22.8
	Fonofos	85.7	87.1	95.9		9.70
	Hexazinone	114	106	106		0.171
	Imazalil	88.8	104	89.3		15.4
	Iprodione	70.6	61.7	60.6		1.75
	Loratadine	87.4	75.7	76.6		1.15
	Malathion	128	115	116		0.886
	Metalaxyl	99.7	97.8	90.6		7.66
	Metolachlor	111	102	98.6		2.58
	Metribuzin	111	113	107		5.90
	Mevinphos	89.0	99.9	108		8.21
	Molinate	76.1	69.9	79.7		13.1
	Myclobutanil	109	103	102		1.01
	Naled	119	105	110		4.89
	Napropamide	103	95.0	93.1		1.98
	Norflurazon	119	122	116		4.46
	Oxadiazon	92.9	83.8	80.1		4.62
	Oxyfluorfen	117	126	121		4.15
	Parathion Ethyl	106	92.2	97.1		5.16
	Parathion Methyl	120	109	118		7.69
	Pendimethalin	79.5	86.2	87.3		1.21
	Phenytol	113	114	108		5.16
	Phorate	98.5	116	107		7.64
	Prodiamine	98.2	129	126		2.78
	Prometon	105	104	72.1		35.9
	Prometryn	94.7	93.8	85.0		9.79
	Pronamide	121	116	110		4.89
	Propanil	118	112	115		2.58
	Propargite	163	151	144		5.18
	Propiconazole	99.8	131	128		2.40
	Pyraflufen Ethyl	124	132	118		11.7
	Pyridaben	159	174	194		11.3
	Pyriproxyfen	61.7	55.1	47.2		14.5
	Simazine	123	105	111		5.21
	Stirophos	84.7	98.3	98.9		0.613
	Sulfentrazone	136	103	89.4		14.5
	Tebuconazole	78.7	75.1	46.2		33.5
	Terbufos	102	118	121		2.59
	Terbuthylazine	101	99.0	94.1		5.05

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8270E	Thiobencarb	112	102	105		
	Triadimefon	98.3	80.7	78.1		
EPA 8321B	2,4-D	81.9	118	135		
	2,4,5-T	74.3	80.1	103		
	Acesulfame K	99.1	100	84.0		
	Acetaminophen	68.0	103	104		
	Acetamiprid	98.0	109	128		
	Afidopyropen	78.4	70.9	83.7		
	AMPA	91.4	94.5	88.6		
	Bentazon	86.8	38.0	66.4		
	Benzovindiflupyr	92.5	87.9	98.6		
	Carbamazepine	93.9	98.9	114		
	Clothianidin	106	132	158		
	Dinotefuran	102	123	136		
	Diuron	97.4	82.7	95.2		
	Endothall	136	159	164		
	Fenuron	103	88.4	102		
	Fluridone	108	90.8	104		
	Glufosinate	97.9	99.0	82.7		
	Glyphosate	91.2	90.4	80.7		
	Hydrocodone	92.6	102	116		
	Ibuprofen	81.6	68.8	85.8		
	Imazapyr	104				
	Imidacloprid	92.8	166	195		
	Linuron	81.2	67.3	75.3		
	Mandestrobin	103	90.5	106		
	MCPP	111	120	136		
	Naproxen	94.5	87.9	112		
	Primidone	90.5	105	114		
	Pyraclostrobin	97.3	86.1	104		
	Silvex	60.0	80.8	89.3		
	Sucralose	91.7	91.2	96.4		
	Thiamethoxam	92.9	150	175		
	Tolfenpyrad	61.1	54.0	62.5		
	Triclopyr	76.1	86.3	104		
SM 2320 B-2011	Total Alkalinity	99.0				0.494
SM 2540 C-2011	TDS					4.80
SM 4500 F-C-2011	Fluoride	97.5	99.1	97.8		0.960
SM 5310 B-2011	Organic Carbon	95.0	93.0	92.2		0.802

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2301705
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2301705
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2301712
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2301712
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2301705
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2301705
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2301706
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2301706

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2301706
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2301706
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2301707
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2301713
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2301711
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2301705
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2301712
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2301705
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2301705
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2301705
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2301706

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	01/26/2022			01/26/2022 15:34	Samantha L Bates	2301705
EPA 180.1 Rev. 2.0	01/26/2022			01/26/2022 14:59	Khloe J Berg	2301705
EPA 200.7 Rev. 4.4	01/26/2022	01/28/2022 10:45	Vijayalakshmi Reddy	01/31/2022 16:04	Josef B Mick	2301712
EPA 200.8 Rev. 5.4	01/26/2022	01/28/2022 10:45	Vijayalakshmi Reddy	01/28/2022 20:39	Emily M Philpot	2301712
EPA 300.0 Rev. 2.1	01/26/2022			02/03/2022 16:07	James L Waggeberby	2301705
EPA 350.1 Rev. 2.0	01/26/2022			02/03/2022 14:52	Ping Hua	2301706
EPA 351.2 Rev. 2.0	01/26/2022	02/04/2022 09:26	Samantha L Bates	02/07/2022 14:19	Alexandra J Mattheus	2301706
EPA 353.2 Rev. 2.0	01/26/2022			01/27/2022 14:33	Nathaniel J Jones	2301706
EPA 365.1 Rev. 2.0	01/26/2022	01/27/2022 17:15	Simonne.V. Calhoun	01/28/2022 12:25	Shengyu Ding	2301706
EPA 365.1 Rev. 2.0 dissolved	01/26/2022			01/26/2022 14:41	James L Waggeberby	2301707
EPA 8270E	01/26/2022	01/31/2022 08:00	Rasheda Ghaffari	02/02/2022 20:10	Michael Poppell	2301713
EPA 8321B	01/26/2022	01/27/2022 09:00	Hoor Shaik	01/31/2022 00:59	Juyoung Kim	2301711
	01/26/2022	01/31/2022 09:00	Manjita Shrestha	01/31/2022 15:22	Manjita Shrestha	2301711
	01/26/2022	01/31/2022 09:00	Manjita Shrestha	01/31/2022 23:09	Manjita Shrestha	2301711
SM 2320 B-2011	01/26/2022			01/27/2022 20:39	Dale L. Simmons	2301705
SM 2340B	01/26/2022			01/31/2022 16:04	Josef B Mick	2301712
SM 2540 C-2011	01/26/2022			01/28/2022 14:02	Yijie Li	2301705
SM 2540 D-2011	01/26/2022			01/28/2022 14:02	Yijie Li	2301705
SM 4500 F-C-2011	01/26/2022			01/27/2022 20:39	Dale L. Simmons	2301705
SM 5310 B-2011	01/26/2022			02/13/2022 00:32	Touraj Touran	2301706