

Chemical Analysis Report

NW-DIST-2022-03-24-01

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

Event Description: **Bioassessment**
Request ID: **RQ-2022-02-14-53**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
Attn: Frank Butera

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

Date Certified: 15-APR-2022 11:07

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: Poverty Creek upstream of Poverty Creek Rd Collection Date/Time: 03/23/2022 11:30

Field ID: G4NW0427

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314374	DEP SOP: NU-094-1	Color (true)**	23	A	PCU	P411560	
	EPA 180.1 Rev. 2.0	Turbidity	34		NTU	P411562	
	EPA 300.0 Rev. 2.1	Chloride	3.1		mg Cl/L	P411779	
		Sulfate	2.8		mg SO4/L	P411782	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P411966	
	SM 2540 C-2011	TDS	23	I	mg/L	P411766	
	SM 2540 D-2011	TSS	62		mg/L	P411667	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P411970	
2314376	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P411704	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32		mg N/L	P411639	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.089		mg N/L	P411591	
	EPA 365.1 Rev. 2.0	Total-P	0.026		mg P/L	P411866	
	SM 5310 B-2011	Organic Carbon	5.5		mg C/L	P411677	
2314378	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P411557	
2314389	EPA 8321B	2,4-D	0.0028	I	ug/L	P411506	
		Acesulfame K	0.10	U	ug/L	P411448	
		2,4,5-T	0.0040	U	ug/L	P411506	
		AMPA	0.10	U	ug/L	P411448	
		Acetaminophen	0.0080	U	ug/L	P411506	
		Acetamiprid	0.0020	U	ug/L	P411506	
		Endothall	0.25	U	ug/L	P411448	
		Glufosinate	0.10	U	ug/L	P411448	
		Glyphosate	0.10	U	ug/L	P411448	
		Afidopyrophen	0.0020	U	ug/L	P411506	
		Bentazon	8.0E-04	U	ug/L	P411506	
		Sucralose	0.095		ug/L	P411448	
		Benzovindiflupyr	0.0020	U	ug/L	P411506	
		Carbamazepine	8.0E-04	U	ug/L	P411506	
		Clothianidin	0.0020	U	ug/L	P411506	
		Dinotefuran	0.0020	U	ug/L	P411506	
		Diuron	0.0020	U	ug/L	P411506	RPD
		Fenuron	0.016	U	ug/L	P411506	
		Fluridone	8.0E-04	U	ug/L	P411506	
		Imazapyr	0.0040	U	ug/L	P411506	
		Hydrocodone	0.0020	U	ug/L	P411506	
		Ibuprofen	0.020	U	ug/L	P411506	
		Imidacloprid	0.0063	I	ug/L	P411506	MS
		Linuron	0.0040	U	ug/L	P411506	
		Mandestrobin	0.0020	U	ug/L	P411506	
		MCP	0.0020	U	ug/L	P411506	
		Naproxen	0.0080	U	ug/L	P411506	
		Primidone	0.0040	U	ug/L	P411506	
		Pyraclostrobin	0.0020	U	ug/L	P411506	

Field ID: G4NW0427

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314389	EPA 8321B	Silvex	0.0040	U	ug/L	P411506	
		Thiamethoxam	0.0020	U	ug/L	P411506	MS
		Tolfenpyrad	0.0020	U	ug/L	P411506	
		Triclopyr	0.0040	U	ug/L	P411506	
2314392	EPA 8270E	Oxybenzone**	10	U	ng/L	P411574	
		Acetochlor	0.25	U	ng/L	P411574	
		Octinoxate**	20	U	ng/L	P411574	
		Alachlor	0.25	U	ng/L	P411574	
		Avobenzone**	100	U	ng/L	P411574	
		Ametryn	0.60	U	ng/L	P411574	
		Atrazine	3.8		ng/L	P411574	
		Atrazine Desethyl	1.5	U	ng/L	P411574	
		Azinphos Methyl	2.0	U	ng/L	P411574	
		Azoxystrobin**	0.50	U	ng/L	P411574	
		Bromacil	0.50	U	ng/L	P411574	
		Butylate	0.40	U	ng/L	P411574	
		Caffeine**	21	I	ng/L	P411574	
		Carbophenothion	2.5	U	ng/L	P411574	
		Carfentrazone Ethyl**	0.10	U	ng/L	P411574	
		Chlorfenapyr**	0.17	U	ng/L	P411574	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P411574	
		Chlorpyrifos Methyl	0.050	U	ng/L	P411574	
		Coumaphos**	0.50	U	ng/L	P411574	
		Cyanazine	3.2	U	ng/L	P411574	
		Cyprodinil**	0.10	U	ng/L	P411574	
		Demeton	1.5	U	ng/L	P411574	
		Diazinon	0.12	U	ng/L	P411574	
		Difenoconazole**	0.60	U	ng/L	P411574	
		Dimethenamid**	0.10	U	ng/L	P411574	
		Dimethomorph**	0.17	UJ	ng/L	P411574	MS
		Disulfoton	0.50	U	ng/L	P411574	
		Dithiopyr**	0.17	U	ng/L	P411574	
		EPTC	1.2	U	ng/L	P411574	
		Ethion	0.15	U	ng/L	P411574	
		Ethoprop	0.10	U	ng/L	P411574	
		Etridiazole**	0.15	U	ng/L	P411574	
		Fenamiphos	0.50	U	ng/L	P411574	
		Fenbuconazole**	0.12	U	ng/L	P411574	
		Fipronil	0.25	U	ng/L	P411574	
		Fipronil Desulfinyl**	0.12	UJ	ng/L	P411574	RPD
		Fipronil Sulfide	0.15	U	ng/L	P411574	
		Fipronil Sulfone	0.15	U	ng/L	P411574	
		Fluazifop-P-butyl**	0.10	U	ng/L	P411574	
		Fludioxonil**	0.12	U	ng/L	P411574	
		Flumioxazin**	1.7	U	ng/L	P411574	

Field ID: G4NW0427

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314392	EPA 8270E	Flutolanil**	0.10	U	ng/L	P411574	
		Fluxapyroxad**	0.10	U	ng/L	P411574	
		Fonofos	0.20	U	ng/L	P411574	
		Hexazinone	2.5		ng/L	P411574	
		Imazalil**	0.75	U	ng/L	P411574	
		Iprodione**	0.60	U	ng/L	P411574	
		Loratadine**	0.10	UJ	ng/L	P411574	MS
		Malathion	0.35	U	ng/L	P411574	
		Metalaxyl	0.75	U	ng/L	P411574	
		Metolachlor	0.35	U	ng/L	P411574	
		Metribuzin	2.5	U	ng/L	P411574	
		Mevinphos	1.0	U	ng/L	P411574	
		Molinate	0.30	U	ng/L	P411574	
		Myclobutanil**	0.25	U	ng/L	P411574	
		Naled**	1.5	U	ng/L	P411574	
		Napropamide**	0.40	U	ng/L	P411574	
		Norflurazon	0.50	U	ng/L	P411574	
		Oxadiazon	0.30	U	ng/L	P411574	
		Oxyfluorfen**	0.15	U	ng/L	P411574	
		Parathion Ethyl	0.25	U	ng/L	P411574	
		Parathion Methyl	0.55	U	ng/L	P411574	
		Pendimethalin	1.0	U	ng/L	P411574	
		Phenytol**	3.5	UJ	ng/L	P411574	MS
		Phorate	0.52	U	ng/L	P411574	
		Prodiamine**	0.30	U	ng/L	P411574	
		Prometon	0.90	U	ng/L	P411574	
		Prometryn	0.20	U	ng/L	P411574	
		Pronamide**	0.15	U	ng/L	P411574	
		Propanil**	0.12	U	ng/L	P411574	
		Propargite**	1.5	UJ	ng/L	P411574	MS
		Propiconazole**	0.50	U	ng/L	P411574	
		Pyraflufen Ethyl**	0.25	U	ng/L	P411574	
		Pyridaben**	0.45	U	ng/L	P411574	
		Pyriproxyfen**	0.12	U	ng/L	P411574	
		Simazine	0.50	U	ng/L	P411574	
		Stirophos**	0.12	U	ng/L	P411574	
		Sulfentrazone**	0.50	U	ng/L	P411574	
		Tebuconazole**	0.50	U	ng/L	P411574	
		Terbufos	0.10	U	ng/L	P411574	
		Terbutylazine	0.42	U	ng/L	P411574	
		Thiobencarb**	0.60	U	ng/L	P411574	
		Triadimefon**	0.25	U	ng/L	P411574	
2314396	EPA 200.7 Rev. 4.4	Calcium	0.81		mg/L	P411563	
		Iron	970		ug/L	P411563	
		Magnesium	0.53		mg/L	P411563	

Field ID: G4NW0427

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314396	EPA 200.7 Rev. 4.4	Potassium	0.39	I	mg/L	P411563	
		Sodium	1.8	I	mg/L	P411563	
		Strontium	5.5	I	ug/L	P411563	
		Tin	3.0	U	ug/L	P411563	
		Titanium	8.0		ug/L	P411563	
		Vanadium	2.0	U	ug/L	P411563	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P411563	
		Aluminum	378		ug/L	P411840	
		Antimony	0.050	U	ug/L	P411563	
		Arsenic	0.55		ug/L	P411563	
		Barium	15.4		ug/L	P411563	
		Beryllium	0.202		ug/L	P411563	
		Boron**	8.4		ug/L	P411563	
		Cadmium	0.062	I	ug/L	P411563	
		Chromium	1.8		ug/L	P411934	
		Cobalt	0.959		ug/L	P411563	
		Copper	0.55	I	ug/L	P411563	
		Lead	0.75		ug/L	P411563	
		Manganese	20.3		ug/L	P411563	
		Molybdenum	0.15	U	ug/L	P411563	
		Nickel	1.6	I	ug/L	P411563	
		Selenium	0.20	U	ug/L	P411563	
		Silver	0.010	U	ug/L	P411563	
		Thallium	0.10	U	ug/L	P411563	
	SM 2340B	Hardness	4.2		mg/L	P411563	

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 bentazon could not be assessed due to a high concentration of parameters in the spiked sample.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 200.8 Rev. 5.4: The beryllium and lead result was confirmed in the undigested sample on 03/30/2022.

Sample Location: East Branch Pine Log Creek above Bear Bay Flats Road

Collection Date/Time: 03/23/2022 12:50

Field ID: G4NW0208

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314375	DEP SOP: NU-094-1	Color (true)**	100		PCU	P411558	
	EPA 180.1 Rev. 2.0	Turbidity	2.3		NTU	P411562	
	EPA 300.0 Rev. 2.1	Chloride	4.9		mg Cl/L	P411779	
		Sulfate	0.83		mg SO4/L	P411782	
	SM 2320 B-2011	Total Alkalinity	5.6		mg CaCO3/L	P411966	
	SM 2540 C-2011	TDS	47		mg/L	P411766	
	SM 2540 D-2011	TSS	3	I	mg/L	P411667	
2314377	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P411970	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P411704	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.56		mg N/L	P411641	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P411591	
	EPA 365.1 Rev. 2.0	Total-P	0.034		mg P/L	P411684	
2314379	SM 5310 B-2011	Organic Carbon	12		mg C/L	P411677	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P411557	
2314390	EPA 8321B	2,4-D	0.0020	U	ug/L	P411506	
		Acesulfame K	0.10	U	ug/L	P411448	
		2,4,5-T	0.0040	U	ug/L	P411506	
		AMPA	0.10	U	ug/L	P411448	
		Acetaminophen	0.0080	U	ug/L	P411506	
		Acetamiprid	0.0020	U	ug/L	P411506	
		Endothall	0.25	U	ug/L	P411448	
		Glufosinate	0.10	U	ug/L	P411448	
		Glyphosate	0.10	U	ug/L	P411448	
		Afidopyropen	0.0020	U	ug/L	P411506	
		Bentazon	0.0016	I	ug/L	P411506	
		Sucralose	0.062		ug/L	P411448	
		Benzovindiflupyr	0.0020	U	ug/L	P411506	
		Carbamazepine	8.0E-04	U	ug/L	P411506	
		Clothianidin	0.0020	U	ug/L	P411506	
		Dinotefuran	0.0020	U	ug/L	P411506	
		Diuron	0.0020	U	ug/L	P411506	RPD
		Fenuron	0.016	U	ug/L	P411506	
		Fluridone	8.0E-04	U	ug/L	P411506	
		Imazapyr	0.0040	U	ug/L	P411506	
		Hydrocodone	0.0020	U	ug/L	P411506	
		Ibuprofen	0.020	U	ug/L	P411506	
		Imidacloprid	0.0020	U	ug/L	P411506	MS
		Linuron	0.0040	U	ug/L	P411506	
		Mandestrobin	0.0020	U	ug/L	P411506	
		MCPP	0.0020	U	ug/L	P411506	
		Naproxen	0.0080	U	ug/L	P411506	
		Primidone	0.0040	U	ug/L	P411506	

Field ID: G4NW0208

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314390	EPA 8321B	Pyraclostrobin	0.0020	U	ug/L	P411506	
		Silvex	0.0040	U	ug/L	P411506	
		Thiamethoxam	0.0020	U	ug/L	P411506	MS
		Tolfenpyrad	0.0020	U	ug/L	P411506	
		Triclopyr	0.0040	U	ug/L	P411506	
2314393	EPA 8270E	Oxybenzone**	10	U	ng/L	P411574	
		Acetochlor	0.25	U	ng/L	P411574	
		Octinoxate**	20	U	ng/L	P411574	
		Alachlor	0.25	U	ng/L	P411574	
		Avobenzone**	100	U	ng/L	P411574	
		Ametryn	0.60	U	ng/L	P411574	
		Atrazine	0.95	I	ng/L	P411574	
		Atrazine Desethyl	1.5	U	ng/L	P411574	
		Azinphos Methyl	2.0	U	ng/L	P411574	
		Azoxystrobin**	0.50	U	ng/L	P411574	
		Bromacil	0.50	U	ng/L	P411574	
		Butylate	0.40	U	ng/L	P411574	
		Caffeine**	36		ng/L	P411574	
		Carbophenothion	2.5	U	ng/L	P411574	
		Carfentrazone Ethyl**	0.10	U	ng/L	P411574	
		Chlorfenapyr**	0.18	U	ng/L	P411574	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P411574	
		Chlorpyrifos Methyl	0.050	U	ng/L	P411574	
		Coumaphos**	0.50	U	ng/L	P411574	
		Cyanazine	3.3	U	ng/L	P411574	
		Cyprodinil**	0.10	U	ng/L	P411574	
		Demeton	1.5	U	ng/L	P411574	
		Diazinon	0.13	U	ng/L	P411574	
		Difenoconazole**	0.60	U	ng/L	P411574	
		Dimethenamid**	0.10	U	ng/L	P411574	
		Dimethomorph**	0.18	U	ng/L	P411574	MS
		Disulfoton	0.50	U	ng/L	P411574	
		Dithiopyr**	0.18	U	ng/L	P411574	
		EPTC	1.3	U	ng/L	P411574	
		Ethion	0.15	U	ng/L	P411574	
		Ethoprop	0.10	U	ng/L	P411574	
		Etridiazole**	0.15	U	ng/L	P411574	
		Fenamiphos	0.50	U	ng/L	P411574	
		Fenbuconazole**	0.13	U	ng/L	P411574	
		Fipronil	0.25	U	ng/L	P411574	
		Fipronil Desulfinyl**	0.13	U	ng/L	P411574	RPD
		Fipronil Sulfide	0.15	U	ng/L	P411574	
		Fipronil Sulfone	0.15	U	ng/L	P411574	
		Fluazifop-P-butyl**	0.10	U	ng/L	P411574	
		Fludioxonil**	0.13	U	ng/L	P411574	

Field ID: G4NW0208

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314393	EPA 8270E	Flumioxazin**	1.8	U	ng/L	P411574	
		Flutolanil**	0.10	U	ng/L	P411574	
		Fluxapyroxad**	0.10	U	ng/L	P411574	
		Fonofos	0.20	U	ng/L	P411574	
		Hexazinone	0.50	U	ng/L	P411574	
		Imazalil**	0.75	U	ng/L	P411574	
		Iprodione**	0.60	U	ng/L	P411574	
		Loratadine**	0.10	U	ng/L	P411574	MS
		Malathion	0.35	U	ng/L	P411574	
		Metalaxyl	0.75	U	ng/L	P411574	
		Metolachlor	0.35	U	ng/L	P411574	
		Metribuzin	2.5	U	ng/L	P411574	
		Mevinphos	1.1	U	ng/L	P411574	
		Molinate	0.30	U	ng/L	P411574	
		Myclobutanil**	0.25	U	ng/L	P411574	
		Naled**	1.5	U	ng/L	P411574	
		Napropamide**	0.40	U	ng/L	P411574	
		Norflurazon	0.50	U	ng/L	P411574	
		Oxadiazon	0.30	U	ng/L	P411574	
		Oxyfluorfen**	0.15	U	ng/L	P411574	
		Parathion Ethyl	0.25	U	ng/L	P411574	
		Parathion Methyl	0.55	U	ng/L	P411574	
		Pendimethalin	1.0	U	ng/L	P411574	
		Phenytol**	3.5	U	ng/L	P411574	MS
		Phorate	0.53	U	ng/L	P411574	
		Prodiamine**	0.30	U	ng/L	P411574	
		Prometon	0.91	U	ng/L	P411574	
		Prometryn	0.20	U	ng/L	P411574	
		Pronamide**	0.15	U	ng/L	P411574	
		Propanil**	0.13	U	ng/L	P411574	
		Propargite**	1.5	U	ng/L	P411574	MS
		Propiconazole**	0.50	U	ng/L	P411574	
		Pyraflufen Ethyl**	0.25	U	ng/L	P411574	
		Pyridaben**	0.45	U	ng/L	P411574	
		Pyriproxyfen**	0.13	U	ng/L	P411574	
		Simazine	0.50	U	ng/L	P411574	
		Stirophos**	0.13	U	ng/L	P411574	
		Sulfentrazone**	0.50	U	ng/L	P411574	
		Tebuconazole**	0.50	U	ng/L	P411574	
		Terbufos	0.10	U	ng/L	P411574	
		Terbuthylazine	0.43	U	ng/L	P411574	
		Thiobencarb**	0.60	U	ng/L	P411574	
		Triadimefon**	0.25	U	ng/L	P411574	
2314397	EPA 200.7 Rev. 4.4	Calcium	2.59		mg/L	P411563	
		Iron	600		ug/L	P411563	

Field ID: G4NW0208

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314397	EPA 200.7 Rev. 4.4	Magnesium	1.24		mg/L	P411563	
		Potassium	2.1		mg/L	P411563	
		Sodium	2.2		mg/L	P411563	
		Strontium	7.5	I	ug/L	P411563	
		Tin	3.0	U	ug/L	P411563	
		Titanium	1.4	I	ug/L	P411563	
		Vanadium	2.0	U	ug/L	P411563	
		Zinc	5.0	U	ug/L	P411563	
	EPA 200.8 Rev. 5.4	Aluminum	138		ug/L	P411840	
		Antimony	0.050	U	ug/L	P411563	
		Arsenic	0.38		ug/L	P411563	
		Barium	9.29		ug/L	P411563	
		Beryllium	0.010	U	ug/L	P411563	
		Boron**	12.4		ug/L	P411563	
		Cadmium	0.020	U	ug/L	P411563	
		Chromium	0.40	U	ug/L	P411934	
		Cobalt	0.100		ug/L	P411563	
		Copper	0.40	U	ug/L	P411563	
		Lead	0.20	U	ug/L	P411563	
		Manganese	37.0		ug/L	P411563	
SM 2340B	Molybdenum	0.15	U	ug/L	P411563		
	Nickel	0.50	U	ug/L	P411563		
	Selenium	0.20	U	ug/L	P411563		
	Silver	0.010	U	ug/L	P411563		
	Thallium	0.10	U	ug/L	P411563		
	Hardness	11.6		mg/L	P411563		

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries and relative percent difference are unavailable due to analytical difficulties.

EPA 8321B: MS accuracy for bentazon could not be assessed due to a high concentration of parameters in the spiked sample.

Sample Location: FB

Collection Date/Time: 03/23/2022 11:45

Field ID: FB_03232022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314380	DEP SOP: NU-094-1	Color (true)**	2.5	U	PCU	P411558	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P411562	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P411779	
		Sulfate	0.20	U	mg SO4/L	P411782	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P411966	
	SM 2540 C-2011	TDS	15	U	mg/L	P411766	
	SM 2540 D-2011	TSS	2	U	mg/L	P411667	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P411970	
2314381	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P411704	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P441164	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P411591	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P411684	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P411677	
2314382	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P411557	
2314391	EPA 8321B	2,4-D	0.0020	U	ug/L	P411506	
		Acesulfame K	0.10	U	ug/L	P411448	
		2,4,5-T	0.0040	U	ug/L	P411506	
		AMPA	0.10	U	ug/L	P411448	
		Acetaminophen	0.0080	U	ug/L	P411506	
		Acetamiprid	0.0020	U	ug/L	P411506	
		Endothall	0.25	U	ug/L	P411448	
		Glufosinate	0.10	U	ug/L	P411448	
		Glyphosate	0.10	U	ug/L	P411448	
		Afidopyrophen	0.0020	U	ug/L	P411506	
		Bentazon	8.0E-04	U	ug/L	P411506	
		Sucralose	0.010	U	ug/L	P411448	
		Benzovindiflupyr	0.0020	U	ug/L	P411506	
		Carbamazepine	8.0E-04	U	ug/L	P411506	
		Clothianidin	0.0020	U	ug/L	P411506	
		Dinotefuran	0.0020	U	ug/L	P411506	
		Diuron	0.0020	U	ug/L	P411506	RPD
		Fenuron	0.016	U	ug/L	P411506	
		Fluridone	8.0E-04	U	ug/L	P411506	
		Imazapyr	0.0040	U	ug/L	P411506	
		Hydrocodone	0.0020	U	ug/L	P411506	
		Ibuprofen	0.020	U	ug/L	P411506	
		Imidacloprid	0.0020	U	ug/L	P411506	MS
		Linuron	0.0040	U	ug/L	P411506	
		Mandestrobin	0.0020	U	ug/L	P411506	
		MCPP	0.0020	U	ug/L	P411506	
		Naproxen	0.0080	U	ug/L	P411506	
		Primidone	0.0040	U	ug/L	P411506	
		Pyraclostrobin	0.0020	U	ug/L	P411506	

Field ID: FB_03232022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314391	EPA 8321B	Silvex	0.0040	U	ug/L	P411506	
		Thiamethoxam	0.0020	U	ug/L	P411506	MS
		Tolfenpyrad	0.0020	U	ug/L	P411506	
		Triclopyr	0.0040	U	ug/L	P411506	
2314395	EPA 8270E	Oxybenzone**	170		ng/L	P411574	
		Acetochlor	0.25	U	ng/L	P411574	
		Octinoxate**	20	U	ng/L	P411574	
		Alachlor	0.25	U	ng/L	P411574	
		Avobenzone**	99	U	ng/L	P411574	
		Ametryn	0.59	U	ng/L	P411574	
		Atrazine	0.25	U	ng/L	P411574	
		Atrazine Desethyl	1.5	U	ng/L	P411574	
		Azinphos Methyl	2.0	U	ng/L	P411574	
		Azoxystrobin**	0.49	U	ng/L	P411574	
		Bromacil	0.49	U	ng/L	P411574	
		Butylate	0.40	U	ng/L	P411574	
		Caffeine**	7.4	U	ng/L	P411574	
		Carbophenothion	2.5	U	ng/L	P411574	
		Carfentrazone Ethyl**	0.099	U	ng/L	P411574	
		Chlorfenapyr**	0.17	U	ng/L	P411574	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P411574	
		Chlorpyrifos Methyl	0.049	U	ng/L	P411574	
		Coumaphos**	0.49	U	ng/L	P411574	
		Cyanazine	3.2	U	ng/L	P411574	
		Cyprodinil**	0.099	U	ng/L	P411574	
		Demeton	1.5	U	ng/L	P411574	
		Diazinon	0.12	U	ng/L	P411574	
		Difenoconazole**	0.59	U	ng/L	P411574	
		Dimethenamid**	0.099	U	ng/L	P411574	
		Dimethomorph**	0.17	U	ng/L	P411574	MS
		Disulfoton	0.49	U	ng/L	P411574	
		Dithiopyr**	0.17	U	ng/L	P411574	
		EPTC	1.2	U	ng/L	P411574	
		Ethion	0.15	U	ng/L	P411574	
		Ethoprop	0.099	U	ng/L	P411574	
		Etridiazole**	0.15	U	ng/L	P411574	
		Fenamiphos	0.49	U	ng/L	P411574	
		Fenbuconazole**	0.12	U	ng/L	P411574	
		Fipronil	0.25	U	ng/L	P411574	
		Fipronil Desulfinyl**	0.12	U	ng/L	P411574	RPD
		Fipronil Sulfide	0.15	U	ng/L	P411574	
		Fipronil Sulfone	0.15	U	ng/L	P411574	
		Fluazifop-P-butyl**	0.099	U	ng/L	P411574	
		Fludioxonil**	0.12	U	ng/L	P411574	
		Flumioxazin**	1.7	U	ng/L	P411574	

Field ID: FB_03232022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314395	EPA 8270E	Flutolanil**	0.099	U	ng/L	P411574	
		Fluxapyroxad**	0.099	U	ng/L	P411574	
		Fonofos	0.20	U	ng/L	P411574	
		Hexazinone	0.49	U	ng/L	P411574	
		Imazalil**	0.74	U	ng/L	P411574	
		Iprodione**	0.59	U	ng/L	P411574	
		Loratadine**	0.099	U	ng/L	P411574	MS
		Malathion	0.35	U	ng/L	P411574	
		Metalaxyl	0.74	U	ng/L	P411574	
		Metolachlor	0.35	U	ng/L	P411574	
		Metribuzin	2.5	U	ng/L	P411574	
		Mevinphos	1.0	U	ng/L	P411574	
		Molinate	0.30	U	ng/L	P411574	
		Myclobutanil**	0.25	U	ng/L	P411574	
		Naled**	1.5	U	ng/L	P411574	
		Napropamide**	0.40	U	ng/L	P411574	
		Norflurazon	0.49	U	ng/L	P411574	
		Oxadiazon	0.30	U	ng/L	P411574	
		Oxyfluorfen**	0.15	U	ng/L	P411574	
		Parathion Ethyl	0.25	U	ng/L	P411574	
		Parathion Methyl	0.54	U	ng/L	P411574	
		Pendimethalin	0.99	U	ng/L	P411574	
		Phenytol**	3.5	U	ng/L	P411574	MS
		Phorate	0.52	U	ng/L	P411574	
		Prodiamine**	0.30	U	ng/L	P411574	
		Prometon	0.89	U	ng/L	P411574	
		Prometryn	0.20	U	ng/L	P411574	
		Pronamide**	0.15	U	ng/L	P411574	
		Propanil**	0.12	U	ng/L	P411574	
		Propargite**	1.5	U	ng/L	P411574	MS
		Propiconazole**	0.49	U	ng/L	P411574	
		Pyraflufen Ethyl**	0.25	U	ng/L	P411574	
		Pyridaben**	0.45	U	ng/L	P411574	
		Pyriproxyfen**	0.12	U	ng/L	P411574	
		Simazine	0.49	U	ng/L	P411574	
		Stirophos**	0.12	U	ng/L	P411574	
		Sulfentrazone**	0.49	U	ng/L	P411574	
		Tebuconazole**	0.49	U	ng/L	P411574	
		Terbufos	0.099	U	ng/L	P411574	
		Terbutylazine	0.42	U	ng/L	P411574	
		Thiobencarb**	0.59	U	ng/L	P411574	
		Triadimefon**	0.25	U	ng/L	P411574	
2314398	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P411563	
		Iron	30	U	ug/L	P411563	
		Magnesium	0.040	U	mg/L	P411563	

Field ID: FB_03232022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2314398	EPA 200.7 Rev. 4.4	Potassium	0.30	U	mg/L	P411563	
		Sodium	0.50	U	mg/L	P411563	
		Strontium	2.0	U	ug/L	P411563	
		Tin	3.0	U	ug/L	P411563	
		Titanium	0.75	U	ug/L	P411563	
		Vanadium	2.0	U	ug/L	P411563	
		Zinc	5.0	U	ug/L	P411563	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P411840	
		Antimony	0.050	U	ug/L	P411563	
		Arsenic	0.050	U	ug/L	P411563	
		Barium	0.20	U	ug/L	P411563	
		Beryllium	0.010	U	ug/L	P411563	
		Boron**	2.0	U	ug/L	P411563	
		Cadmium	0.020	U	ug/L	P411563	
		Chromium	0.40	U	ug/L	P411934	
		Cobalt	0.020	U	ug/L	P411563	
		Copper	0.76	I	ug/L	P411563	
		Lead	0.20	U	ug/L	P411563	
		Manganese	0.10	U	ug/L	P411563	
		Molybdenum	0.15	U	ug/L	P411563	
		Nickel	0.50	U	ug/L	P411563	
		Selenium	0.20	U	ug/L	P411563	
		Silver	0.010	U	ug/L	P411563	
		Thallium	0.10	U	ug/L	P411563	
	SM 2340B	Hardness	0.35	U	mg/L	P411563	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries and relative percent difference are unavailable due to analytical difficulties.

EPA 8321B: MS accuracy for bentazon could not be assessed due to a high concentration of parameters in the spiked sample.

EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 03/29/2022.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P411558

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P411560

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P411562

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P411563

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: P411563

Component	Result	Code	Units
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411840

Component	Result	Code	Units
Aluminum	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411934

Component	Result	Code	Units
Chromium	0.40	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411779

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411782

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411704

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411639

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411641

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P4411640

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411591

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P411684

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P411866

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P411557

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

Reference Method: EPA 8270E

Batch ID: P411574

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
Avobenzone	100	U	ng/L
Avobenzone	100	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	2.5	U	ng/L
Carbophenothion	2.5	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P411574

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P411574

Component	Result	Code	Units
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
Metalaxyl	0.75	U	ng/L
Metalaxyl	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
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	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
Prodiamine	0.30	U	ng/L
Prodiamine	0.30	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P411574

Component	Result	Code	Units
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: P411448

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: P411506

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P411506

Component	Result	Code	Units
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.022	I	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
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 2320 B-2011

Batch ID: P411966

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

Reference Method: SM 2540 C-2011

Batch ID: P411766

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011

Batch ID: P411667

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011

Batch ID: P411970

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P411677

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: P411558

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.8		P	85 - 115

Reference Method: DEP SOP: NU-094-1
Batch ID: P411560

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P411562

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.0		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P411563

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	111		P	85 - 115
Magnesium	111		P	85 - 115
Potassium	108		P	85 - 115
Sodium	109		P	85 - 115
Strontium	107		P	85 - 115
Tin	105		P	85 - 115
Titanium	105		P	85 - 115
Vanadium	97.6		P	85 - 115
Zinc	103		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411563

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Antimony	99.0		P	85 - 115
Arsenic	102		P	85 - 115
Barium	103		P	85 - 115
Beryllium	93.1		P	85 - 115
Boron	105		P	85 - 115
Cadmium	99.7		P	85 - 115
Cobalt	97.6		P	85 - 115
Copper	97.1		P	85 - 115
Lead	93.2		P	85 - 115
Manganese	98.4		P	85 - 115
Molybdenum	102		P	85 - 115
Nickel	99.0		P	85 - 115
Selenium	102		P	85 - 115
Silver	97.8		P	85 - 115
Thallium	98.5		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411840

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.4		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411934

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chromium	95.7		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411779

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411782

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411704

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411639

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411641

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P4411640

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411591

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P411684

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P411866

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P411557

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

Reference Method: EPA 8270E
 Batch ID: P411574

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	106		P	70 - 121
Alachlor	102		P	68 - 119
Ametryn	102		P	64 - 139
Atrazine	100		P	76 - 120
Atrazine Desethyl	66.1		P	44 - 126
Avobenzone	129		P	76 - 212
Azinphos Methyl	118		P	43 - 192
Azoxystrobin	109		P	36 - 224
Bromacil	93.7		P	52 - 121
Butylate	58.7		P	28 - 91.0
Caffeine	98.4		P	50 - 134
Carbophenothion	105		P	56 - 129
Carfentrazone Ethyl	110		P	60 - 141
Chlorfenapyr	105		P	56 - 115
Chlorpyrifos Ethyl	112		P	60 - 118
Chlorpyrifos Methyl	113		P	68 - 119
Coumaphos	104		P	18 - 250
Cyanazine	93.5		P	61 - 250
Cyprodinil	108		P	55 - 145
Demeton	93.1		P	30 - 159
Diazinon	102		P	70 - 123
Difenoconazole	118		P	49 - 204
Dimethenamid	94.1		P	64 - 115
Dimethomorph	218		P	12 - 219
Disulfoton	99.7		P	44 - 125
Dithiopyr	99.2		P	64 - 115
EPTC	57.4		P	28 - 86.0
Ethion	88.2		P	33 - 125
Ethoprop	93.0		P	64 - 116
Etridiazole	64.4		P	34 - 91.0
Fenamiphos	109		P	12 - 127
Fenbuconazole	88.2		P	59 - 151
Fipronil	102		P	67 - 129
Fipronil Desulfinyl	125		P	65 - 127

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P411574

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fipronil Sulfide	102		P	61 - 116
Fipronil Sulfone	90.5		P	55 - 117
Fluazifop-P-butyl	93.1		P	62 - 127
Fludioxonil	89.0		P	62 - 128
Flumioxazin	149		P	33 - 250
Flutolanil	78.9		P	56 - 127
Fluxapyroxad	83.6		P	45 - 128
Fonofos	85.4		P	62 - 111
Hexazinone	103		P	46 - 139
Imazalil	108		P	38 - 142
Iprodione	105		P	47 - 135
Loratadine	126		P	10 - 244
Malathion	110		P	61 - 139
Metaxyl	105		P	10 - 119
Metolachlor	103		P	65 - 118
Metribuzin	64.5		P	51 - 250
Mevinphos	82.4		P	53 - 121
Molinate	82.1		P	42 - 96.0
Myclobutanil	89.2		P	55 - 128
Naled	81.4		P	10 - 98.0
Napropamide	99.0		P	49 - 121
Norflurazon	89.7		P	61 - 126
Octinoxate	120		P	30 - 159
Oxadiazon	78.8		P	59 - 116
Oxybenzone	97.5		P	61 - 139
Oxyfluorfen	113		P	64 - 137
Parathion Ethyl	97.3		P	70 - 112
Parathion Methyl	93.7		P	76 - 133
Pendimethalin	94.4		P	52 - 117
Phenytoin	42.8		P	10 - 199
Phorate	95.9		P	48 - 121
Prodiamine	54.5		P	26 - 142
Prometon	82.0		P	43 - 123
Prometryn	104		P	66 - 127
Pronamide	92.6		P	75 - 121
Propanil	99.3		P	45 - 150
Propargite	68.1		P	42 - 208
Propiconazole	85.8		P	60 - 125
Pyraflufen Ethyl	94.9		P	70 - 138
Pyridaben	110		P	35 - 245
Pyriproxyfen	87.7		P	30 - 149
Simazine	92.9		P	72 - 125
Stirophos	82.2		P	29 - 164
Sulfentrazone	86.5		P	21 - 139
Tebuconazole	62.1		P	10 - 115
Terbufos	121		P	60 - 123
Terbutylazine	92.4		P	72 - 115
Thiobencarb	85.8		P	31 - 139
Triadimefon	93.5		P	65 - 116

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P411448

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	110		P	40 - 150
AMPA	109		P	40 - 150
Endothall	126		P	40 - 150
Glufosinate	121		P	40 - 150
Glyphosate	114		P	40 - 150
Sucralose	119		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P411506

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	47.7		P	30 - 160
2,4,5-T	40.3		P	30 - 160
Acetaminophen	90.6		P	30 - 150
Acetamiprid	75.6		P	30 - 160
Afidopyropen	45.7		P	30 - 160
Bentazon	77.9		P	30 - 150
Benzovindiflupyr	76.0		P	30 - 160
Carbamazepine	59.9		P	30 - 160
Clothianidin	98.1		P	30 - 160
Dinotefuran	90.4		P	30 - 160
Diuron	64.3		P	30 - 160
Fenuron	122		P	30 - 160
Fluridone	66.4		P	30 - 160
Hydrocodone	92.2		P	30 - 160
Ibuprofen	68.8		P	30 - 160
Imazapyr	95.6		P	30 - 160
Imidacloprid	84.8		P	30 - 160
Linuron	69.1		P	30 - 160
Mandestrobin	62.2		P	30 - 160
MCPP	58.9		P	30 - 160
Naproxen	84.3		P	30 - 160
Primidone	83.3		P	30 - 160
Pyraclostrobin	66.7		P	30 - 160
Silvex	35.4		P	30 - 160
Thiamethoxam	98.5		P	30 - 160
Tolfenpyrad	42.5		P	30 - 160
Triclopyr	43.1		P	30 - 160

Reference Method: SM 2320 B-2011

Batch ID: P411966

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.0		P	94 - 106

Reference Method: SM 4500 F-C-2011

Batch ID: P411970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	93 - 104

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P411677

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P411563

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2313904	Calcium	102		P	80 - 120
2313904	Iron	109	107	P/P	80 - 120
2313904	Magnesium	109	106	P/P	80 - 120
2313904	Potassium	106	105	P/P	80 - 120
2313904	Sodium	107	104	P/P	80 - 120
2313904	Strontium	105	103	P/P	80 - 120
2313904	Tin	102	103	P/P	80 - 120
2313904	Titanium	103	103	P/P	80 - 120
2313904	Vanadium	98.0	98.0	P/P	80 - 120
2313904	Zinc	100	101	P/P	80 - 120
2313907	Calcium	102		P	80 - 120
2313907	Iron	114		P	80 - 120
2313907	Magnesium	106		P	80 - 120
2313907	Potassium	104		P	80 - 120
2313907	Sodium	101		P	80 - 120
2313907	Strontium	104		P	80 - 120
2313907	Tin	102		P	80 - 120
2313907	Titanium	120		P	80 - 120
2313907	Vanadium	98.9		P	80 - 120
2313907	Zinc	100		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P411563

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2313904	Antimony	98.4	96.2	P/P	80 - 120
2313904	Arsenic	99.2	97.6	P/P	80 - 120
2313904	Barium	101	98.8	P/P	80 - 120
2313904	Beryllium	94.2	92.0	P/P	80 - 120
2313904	Boron	104	104	P/P	80 - 120
2313904	Cadmium	99.5	96.0	P/P	80 - 120
2313904	Cobalt	96.1	93.4	P/P	80 - 120
2313904	Copper	96.0	93.0	P/P	80 - 120
2313904	Lead	92.1	91.0	P/P	80 - 120
2313904	Manganese	98.6	95.7	P/P	80 - 120
2313904	Molybdenum	106	97.2	P/P	80 - 120
2313904	Nickel	104	95.8	P/P	80 - 120
2313904	Selenium	97.0	97.7	P/P	80 - 120
2313904	Silver	97.9	96.6	P/P	80 - 120
2313904	Thallium	98.3	97.8	P/P	80 - 120
2313907	Antimony	95.9		P	80 - 120
2313907	Arsenic	99.6		P	80 - 120
2313907	Barium	101		P	80 - 120
2313907	Beryllium	94.2		P	80 - 120
2313907	Boron	108		P	80 - 120
2313907	Cadmium	98.4		P	80 - 120
2313907	Cobalt	95.8		P	80 - 120
2313907	Copper	95.0		P	80 - 120
2313907	Lead	93.2		P	80 - 120
2313907	Manganese	101		P	80 - 120
2313907	Molybdenum	112		P	80 - 120
2313907	Nickel	109		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P411563

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2313907	Selenium	94.6		P	80 - 120
2313907	Silver	96.1		P	80 - 120
2313907	Thallium	98.3		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P411840

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314396	Aluminum	99.8	106	P/P	80 - 120
2314397	Aluminum	98.1		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P411934

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314456	Chromium	94.5		P	80 - 120
2314614	Chromium	93.7	91.1	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P411779

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314351	Chloride	98.7		P	90 - 110
2314429	Chloride	97.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P411782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314351	Sulfate	99.1		P	90 - 110
2314429	Sulfate	97.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P411704

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314430	Ammonia-N	98.4	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P411639

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314327	Kjeldahl Nitrogen	112	112	F/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P411641

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314297	Kjeldahl Nitrogen	97.6	105	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P4411640

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314204	Kjeldahl Nitrogen	113	105	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P411591

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314377	NO2NO3-N	97.5	97.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P411866

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2313564	Total-P	106	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P411557

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314322	O-Phosphate-P	98.5	98.6	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P411574

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314392	Acetochlor	105	94.2	P/P	65 - 124
2314392	Alachlor	105	87.5	P/P	61 - 121
2314392	Ametryn	101	79.1	P/P	52 - 216
2314392	Atrazine	90.4	93.4	P/P	68 - 133
2314392	Atrazine Desethyl	68.1	57.2	P/P	15 - 160
2314392	Avobenzone	90.1	89.6	P/P	59 - 206
2314392	Azinphos Methyl	106	114	P/P	40 - 292
2314392	Azoxystrobin	108	113	P/P	12 - 242
2314392	Bromacil	81.2	99.4	P/P	54 - 167
2314392	Butylate	66.3	63.8	P/P	14 - 94.0
2314392	Caffeine	99.8	96.7	P/P	10 - 226
2314392	Carbophenothion	91.5	90.8	P/P	49 - 122
2314392	Carfentrazone Ethyl	73.4	93.9	P/P	53 - 138
2314392	Chlorfenapyr	91.7	89.7	P/P	50 - 150
2314392	Chlorpyrifos Ethyl	112	109	P/P	52 - 122
2314392	Chlorpyrifos Methyl	110	89.1	P/P	66 - 117
2314392	Coumaphos	70.8	73.6	P/P	50 - 220
2314392	Cyanazine	98.2	90.7	P/P	43 - 245
2314392	Cyprodinil	86.0	86.8	P/P	50 - 150
2314392	Demeton	83.1	82.0	P/P	43 - 188
2314392	Diazinon	116	129	P/P	69 - 131
2314392	Difenoconazole	94.9	118	P/P	34 - 231
2314392	Dimethenamid	86.9	88.1	P/P	55 - 118
2314392	Dimethomorph	273	237	F/F	50 - 150
2314392	Disulfoton	93.9	91.5	P/P	38 - 141
2314392	Dithiopyr	100	90.2	P/P	42 - 116
2314392	EPTC	44.0	43.4	P/P	18 - 85.0
2314392	Ethion	32.1	44.2	P/P	10 - 131

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P411574

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314392	Ethoprop	94.2	94.8	P/P	65 - 129
2314392	Etridiazole	67.8	75.9	P/P	50 - 150
2314392	Fenamiphos	78.8	68.7	P/P	31 - 137
2314392	Fenbuconazole	113	103	P/P	57 - 160
2314392	Fipronil	90.9	104	P/P	62 - 132
2314392	Fipronil Desulfinyl	114	79.8	P/P	57 - 131
2314392	Fipronil Sulfide	96.1	88.2	P/P	15 - 138
2314392	Fipronil Sulfone	92.9	96.0	P/P	21 - 134
2314392	Fluazifop-P-butyl	91.5	99.0	P/P	54 - 133
2314392	Fludioxonil	84.6	86.7	P/P	58 - 127
2314392	Flumioxazin	179	163	P/P	33 - 300
2314392	Flutolanil	69.6	73.9	P/P	42 - 130
2314392	Fluxapyroxad	65.5	71.9	P/P	23 - 141
2314392	Fonofos	85.8	85.8	P/P	58 - 119
2314392	Hexazinone	88.4	110	P/P	68 - 172
2314392	Imazalil	68.0	89.2	P/P	48 - 283
2314392	Iprodione	94.0	99.4	P/P	38 - 140
2314392	Loratadine	168	199	F/F	50 - 150
2314392	Malathion	102	102	P/P	40 - 137
2314392	Metalaxyl	104	75.5	P/P	21 - 129
2314392	Metolachlor	95.2	103	P/P	55 - 122
2314392	Metribuzin	84.1	94.3	P/P	38 - 187
2314392	Mevinphos	73.9	89.2	P/P	54 - 134
2314392	Molinate	82.2	63.4	P/P	41 - 97.0
2314392	Myclobutanil	75.2	76.3	P/P	56 - 125
2314392	Naled	73.3	69.5	P/P	10 - 108
2314392	Napropamide	73.9	81.4	P/P	50 - 150
2314392	Norflurazon	66.9	78.5	P/P	32 - 122
2314392	Octinoxate	111	116	P/P	25 - 150
2314392	Oxadiazon	64.9	73.7	P/P	40 - 119
2314392	Oxybenzone	109	108	P/P	59 - 147
2314392	Oxyfluorfen	101	111	P/P	61 - 153
2314392	Parathion Ethyl	94.4	94.2	P/P	59 - 130
2314392	Parathion Methyl	113	87.2	P/P	65 - 155
2314392	Pendimethalin	80.9	85.5	P/P	49 - 138
2314392	Phenytol	22.2	20.8	F/F	50 - 200
2314392	Phorate	88.9	79.9	P/P	54 - 161
2314392	Prodiamine	52.6	55.2	P/P	33 - 161
2314392	Prometon	94.7	92.9	P/P	48 - 140
2314392	Prometryn	92.2	73.5	P/P	55 - 134
2314392	Pronamide	98.5	105	P/P	66 - 137
2314392	Propanil	90.9	90.7	P/P	50 - 150
2314392	Propargite	49.9	47.0	F/F	50 - 200
2314392	Propiconazole	64.8	70.4	P/P	36 - 150
2314392	Pyraflufen Ethyl	64.2	70.2	P/P	50 - 150
2314392	Pyridaben	101	108	P/P	50 - 200
2314392	Pyriproxyfen	70.0	71.9	P/P	10 - 165
2314392	Simazine	99.2	95.4	P/P	57 - 145
2314392	Stirophos	56.4	58.9	P/P	50 - 150
2314392	Sulfentrazone	76.4	102	P/P	34 - 140
2314392	Tebuconazole	48.2	38.5	P/P	10 - 127
2314392	Terbufos	122	128	P/P	59 - 138

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P411574

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314392	Terbutylazine	87.5	93.9	P/P	68 - 119
2314392	Thiobencarb	81.3	81.6	P/P	50 - 150
2314392	Triadimefon	86.3	90.2	P/P	50 - 150

Reference Method: EPA 8321B
Batch ID: P411448

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2313467	Acesulfame K	143	140	P/P	40 - 150
2313467	AMPA	75.1	102	P/P	40 - 150
2313467	Endothall	83.1	83.7	P/P	40 - 150
2313467	Glufosinate	96.8	119	P/P	40 - 150
2313467	Glyphosate	71.9	95.4	P/P	40 - 150
2313467	Sucralose	112	117	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P411506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2313467	2,4-D	85.3	78.7	P/P	30 - 160
2313467	2,4,5-T	59.9	69.4	P/P	30 - 160
2313467	Acetaminophen	107	92.2	P/P	30 - 150
2313467	Acetamiprid	104	98.0	P/P	30 - 160
2313467	Afidopyropen	78.9	66.1	P/P	30 - 160
2313467	Benzovindiflupyr	82.4	87.3	P/P	30 - 160
2313467	Carbamazepine	80.3	74.7	P/P	30 - 160
2313467	Clothianidin	128	127	P/P	30 - 160
2313467	Dinotefuran	135	130	P/P	30 - 160
2313467	Diuron	61.7	43.1	P/P	30 - 160
2313467	Fenuron	110	124	P/P	30 - 160
2313467	Fluridone	75.0	67.3	P/P	30 - 160
2313467	Hydrocodone	117	108	P/P	30 - 160
2313467	Ibuprofen	87.8	82.0	P/P	30 - 160
2313467	Imazapyr	138	134	P/P	30 - 160
2313467	Imidacloprid	235	211	F/F	30 - 160
2313467	Linuron	98.1	78.7	P/P	30 - 160
2313467	Mandestrobin	68.4	64.7	P/P	30 - 160
2313467	MCPP	88.1	77.4	P/P	30 - 160
2313467	Naproxen	75.7	68.0	P/P	30 - 160
2313467	Primidone	125	110	P/P	30 - 160
2313467	Pyraclostrobin	79.8	79.9	P/P	30 - 160
2313467	Silvex	64.0	66.3	P/P	30 - 160
2313467	Thiamethoxam	190	170	F/F	30 - 160
2313467	Tolfenpyrad	46.0	39.7	P/P	30 - 160
2313467	Triclopyr	62.6	63.9	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P411970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315428	Fluoride	98.3	98.9	P/P	92 - 107

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P411677

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2314331	Organic Carbon	97.6	98.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P411558

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314325	Color (true)	15.2	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P411560

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314374	Color (true)	13.7	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P411562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314500	Turbidity	4.36	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P411563

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2313904	Calcium	1.79	Spike	P	0 - 20
2313904	Iron	1.80	Spike	P	0 - 20
2313904	Magnesium	1.87	Spike	P	0 - 20
2313904	Potassium	1.49	Spike	P	0 - 20
2313904	Sodium	2.26	Spike	P	0 - 20
2313904	Strontium	1.35	Spike	P	0 - 20
2313904	Tin	1.05	Spike	P	0 - 20
2313904	Titanium	0.412	Spike	P	0 - 20
2313904	Vanadium	0.0728	Spike	P	0 - 20
2313904	Zinc	0.550	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411563

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2313904	Antimony	2.22	Spike	P	0 - 20
2313904	Arsenic	1.65	Spike	P	0 - 20
2313904	Barium	2.44	Spike	P	0 - 20
2313904	Beryllium	2.41	Spike	P	0 - 20
2313904	Boron	0.653	Spike	P	0 - 20
2313904	Cadmium	3.61	Spike	P	0 - 20
2313904	Cobalt	2.85	Spike	P	0 - 20
2313904	Copper	3.16	Spike	P	0 - 20
2313904	Lead	1.23	Spike	P	0 - 20
2313904	Manganese	2.60	Spike	P	0 - 20
2313904	Molybdenum	8.54	Spike	P	0 - 20
2313904	Nickel	8.42	Spike	P	0 - 20
2313904	Selenium	0.643	Spike	P	0 - 20
2313904	Silver	1.34	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411563

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2313904	Thallium	0.539	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411840

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314396	Aluminum	4.14	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P411934

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314614	Chromium	2.76	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411779

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314351	Chloride	0.00997	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314351	Sulfate	0.244	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411704

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314430	Ammonia-N	0.368	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411639

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314327	Kjeldahl Nitrogen	0.246	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411641

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314297	Kjeldahl Nitrogen	6.31	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P4411640

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314204	Kjeldahl Nitrogen	7.56	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P411591

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314377	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P411866

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2313564	Total-P	2.65	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P411557

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314322	O-Phosphate-P	0.101	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P411574

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314392	Acetochlor	11.2	Spike	P	0 - 27
2314392	Alachlor	18.3	Spike	P	0 - 27
2314392	Ametryn	24.6	Spike	P	0 - 34
2314392	Atrazine	1.58	Spike	P	0 - 41
2314392	Atrazine Desethyl	17.3	Spike	P	0 - 38
2314392	Avobenzone	0.496	Spike	P	0 - 30
2314392	Azinphos Methyl	7.50	Spike	P	0 - 62
2314392	Azoxystrobin	4.80	Spike	P	0 - 32
2314392	Bromacil	20.1	Spike	P	0 - 30
2314392	Butylate	3.72	Spike	P	0 - 59
2314392	Caffeine	2.01	Spike	P	0 - 60
2314392	Carbophenothion	0.710	Spike	P	0 - 25
2314392	Carfentrazone Ethyl	24.6	Spike	P	0 - 26
2314392	Chlorfenapyr	2.27	Spike	P	0 - 30
2314392	Chlorpyrifos Ethyl	3.24	Spike	P	0 - 27
2314392	Chlorpyrifos Methyl	21.2	Spike	P	0 - 26
2314392	Coumaphos	3.92	Spike	P	0 - 30
2314392	Cyanazine	7.94	Spike	P	0 - 58
2314392	Cyprodinil	1.02	Spike	P	0 - 30
2314392	Demeton	1.42	Spike	P	0 - 25
2314392	Diazinon	10.5	Spike	P	0 - 29
2314392	Difenoconazole	21.4	Spike	P	0 - 25
2314392	Dimethenamid	1.30	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P411574

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314392	Dimethomorph	14.0	Spike	P	0 - 30
2314392	Disulfoton	2.64	Spike	P	0 - 33
2314392	Dithiopyr	10.3	Spike	P	0 - 22
2314392	EPTC	1.51	Spike	P	0 - 38
2314392	Ethion	31.9	Spike	P	0 - 79
2314392	Ethoprop	0.589	Spike	P	0 - 23
2314392	Etridiazole	11.3	Spike	P	0 - 30
2314392	Fenamiphos	13.8	Spike	P	0 - 58
2314392	Fenbuconazole	9.36	Spike	P	0 - 37
2314392	Fipronil	13.9	Spike	P	0 - 33
2314392	Fipronil Desulfinyl	35.5	Spike	F	0 - 26
2314392	Fipronil Sulfide	8.57	Spike	P	0 - 37
2314392	Fipronil Sulfone	3.23	Spike	P	0 - 50
2314392	Fluazifop-P-butyl	7.92	Spike	P	0 - 24
2314392	Fludioxonil	2.37	Spike	P	0 - 26
2314392	Flumioxazin	9.02	Spike	P	0 - 37
2314392	Flutolanil	5.95	Spike	P	0 - 26
2314392	Fluxapyroxad	9.26	Spike	P	0 - 34
2314392	Fonofos	0.0670	Spike	P	0 - 27
2314392	Hexazinone	18.1	Spike	P	0 - 36
2314392	Imazalil	27.0	Spike	P	0 - 65
2314392	Iprodione	5.60	Spike	P	0 - 33
2314392	Loratadine	16.4	Spike	P	0 - 30
2314392	Malathion	0.456	Spike	P	0 - 44
2314392	Metalaxyl	32.1	Spike	P	0 - 38
2314392	Metolachlor	7.68	Spike	P	0 - 36
2314392	Metribuzin	11.4	Spike	P	0 - 63
2314392	Mevinphos	18.8	Spike	P	0 - 26
2314392	Molinate	25.8	Spike	P	0 - 40
2314392	Myclobutanil	1.46	Spike	P	0 - 21
2314392	Naled	5.38	Spike	P	0 - 26
2314392	Napropamide	9.72	Spike	P	0 - 30
2314392	Norflurazon	15.9	Spike	P	0 - 24
2314392	Octinoxate	4.85	Spike	P	0 - 30
2314392	Oxadiazon	12.7	Spike	P	0 - 27
2314392	Oxybenzone	0.362	Spike	P	0 - 30
2314392	Oxyfluorfen	9.26	Spike	P	0 - 24
2314392	Parathion Ethyl	0.296	Spike	P	0 - 28
2314392	Parathion Methyl	25.6	Spike	P	0 - 27
2314392	Pendimethalin	5.50	Spike	P	0 - 31
2314392	Phenytoin	6.51	Spike	P	0 - 30
2314392	Phorate	10.7	Spike	P	0 - 27
2314392	Prodiamine	4.90	Spike	P	0 - 52
2314392	Prometon	1.84	Spike	P	0 - 31
2314392	Prometryn	22.6	Spike	P	0 - 28
2314392	Pronamide	6.34	Spike	P	0 - 26
2314392	Propanil	0.270	Spike	P	0 - 30
2314392	Propargite	6.01	Spike	P	0 - 30
2314392	Propiconazole	8.24	Spike	P	0 - 31
2314392	Pyraflufen Ethyl	8.91	Spike	P	0 - 30
2314392	Pyridaben	6.53	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P411574

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314392	Pyriproxyfen	2.65	Spike	P	0 - 50
2314392	Simazine	3.91	Spike	P	0 - 29
2314392	Stirophos	4.31	Spike	P	0 - 30
2314392	Sulfentrazone	28.6	Spike	P	0 - 33
2314392	Tebuconazole	22.4	Spike	P	0 - 44
2314392	Terbufos	5.00	Spike	P	0 - 29
2314392	Terbutylazine	7.02	Spike	P	0 - 27
2314392	Thiobencarb	0.382	Spike	P	0 - 30
2314392	Triadimefon	4.37	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P411448

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2313467	Acesulfame K	2.20	Spike	P	0 - 30
2313467	AMPA	26.5	Spike	P	0 - 30
2313467	Endothall	0.772	Spike	P	0 - 30
2313467	Glufosinate	20.8	Spike	P	0 - 30
2313467	Glyphosate	23.0	Spike	P	0 - 30
2313467	Sucralose	4.19	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P411506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2313467	2,4-D	7.58	Spike	P	0 - 30
2313467	2,4,5-T	14.6	Spike	P	0 - 30
2313467	Acetaminophen	14.6	Spike	P	0 - 30
2313467	Acetamiprid	5.66	Spike	P	0 - 30
2313467	Afidopyropen	17.7	Spike	P	0 - 30
2313467	Bentazon	6.70	Spike	P	0 - 30
2313467	Benzovindiflupyr	5.82	Spike	P	0 - 30
2313467	Carbamazepine	7.23	Spike	P	0 - 30
2313467	Clothianidin	0.659	Spike	P	0 - 30
2313467	Dinotefuran	3.66	Spike	P	0 - 30
2313467	Diuron	35.5	Spike	F	0 - 30
2313467	Fenuron	12.2	Spike	P	0 - 30
2313467	Fluridone	8.64	Spike	P	0 - 30
2313467	Hydrocodone	8.08	Spike	P	0 - 30
2313467	Ibuprofen	6.90	Spike	P	0 - 30
2313467	Imazapyr	0.694	Spike	P	0 - 30
2313467	Imidacloprid	10.7	Spike	P	0 - 30
2313467	Linuron	21.9	Spike	P	0 - 30
2313467	Mandestrobin	5.53	Spike	P	0 - 30
2313467	MCPP	13.0	Spike	P	0 - 30
2313467	Naproxen	10.7	Spike	P	0 - 30
2313467	Primidone	12.8	Spike	P	0 - 30
2313467	Pyraclostrobin	0.116	Spike	P	0 - 30
2313467	Silvex	3.47	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P411506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2313467	Thiamethoxam	10.9	Spike	P	0 - 30
2313467	Tolfenpyrad	14.7	Spike	P	0 - 30
2313467	Triclopyr	2.19	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P411966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315428	Total Alkalinity	1.92	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P411766

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314429	TDS	1.10	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P411970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315428	Fluoride	0.490	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P411677

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2314331	Organic Carbon	0.259	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2314389

Field Sample ID: G4NW0427

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	64.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	93.9	P	30 - 160
EPA 8321B	Diuron-d6	64.6	P	30 - 160
EPA 8321B	Endothall-d6	84.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	44.3	P	30 - 160
EPA 8321B	Primidone-d5	111	P	30 - 160
EPA 8321B	Sucralose-d6	97.3	P	30 - 160

Lab Sample ID: 2314390

Field Sample ID: G4NW0208

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	91.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	97.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	96.2	P	30 - 160
EPA 8321B	Diuron-d6	48.3	P	30 - 160
EPA 8321B	Endothall-d6	87.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	82.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.7	P	30 - 160
EPA 8321B	Primidone-d5	141	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160

Lab Sample ID: 2314391

Field Sample ID: FB_03232022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	69.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	87.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	92.2	P	30 - 160
EPA 8321B	Diuron-d6	59.9	P	30 - 160
EPA 8321B	Endothall-d6	79.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	80.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	65.7	P	30 - 160
EPA 8321B	Primidone-d5	123	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	30 - 160

Lab Sample ID: 2314392

Field Sample ID: G4NW0427

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	60.6	P	20 - 200
EPA 8270E	Simazine-d10	99.5	P	71 - 140
EPA 8270E	Terbufos-d10	106	P	62 - 131
EPA 8270E	Terphenyl-d14	76.0	P	55 - 108

Lab Sample ID: 2314393

Field Sample ID: G4NW0208

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	54.9	P	20 - 200

Quality Assurance Report Surrogates

Lab Sample ID: 2314393
Field Sample ID: G4NW0208

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	87.6	P	71 - 140
EPA 8270E	Terbufos-d10	104	P	62 - 131
EPA 8270E	Terphenyl-d14	99.2	P	55 - 108

Lab Sample ID: 2314395
Field Sample ID: FB_03232022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	48.6	P	20 - 200
EPA 8270E	Simazine-d10	96.0	P	71 - 140
EPA 8270E	Terbufos-d10	96.1	P	62 - 131
EPA 8270E	Terphenyl-d14	86.9	P	55 - 108

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A111136

Included Lab Sample IDs: 2314378, 2314379, 2314382

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

Reference Method: DEP SOP: NU-094-1

Run ID: A111138

Included Lab Sample IDs: 2314374, 2314375, 2314380

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	85 - 115
Color (true)	99.3	100	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A111140

Included Lab Sample IDs: 2314374, 2314375, 2314380

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A111149

Included Lab Sample IDs: 2314376, 2314377, 2314381

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

Reference Method: EPA 8321B

Run ID: A111169

Included Lab Sample IDs: 2314389, 2314390, 2314391

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	104	104	P/P	60 - 160
AMPA	106	104	P/P	60 - 160
Glufosinate	103	106	P/P	60 - 160
Glufosinate	106	104	P/P	60 - 160
Glyphosate	102	106	P/P	60 - 160
Glyphosate	106	104	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A111171

Included Lab Sample IDs: 2314396, 2314397, 2314398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	103	P/P	90 - 110
Calcium	102	104	P/P	90 - 110
Iron	102	104	P/P	90 - 110
Iron	102	105	P/P	90 - 110
Magnesium	101	104	P/P	90 - 110
Magnesium	102	104	P/P	90 - 110
Potassium	104	106	P/P	90 - 110
Potassium	106	106	P/P	90 - 110
Sodium	102	104	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A111171

Included Lab Sample IDs: 2314396, 2314397, 2314398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sodium	103	103	P/P	90 - 110
Strontium	97.8	97.4	P/P	90 - 110
Strontium	98.2	98.9	P/P	90 - 110
Tin	97.5	99.0	P/P	90 - 110
Tin	98.0	96.6	P/P	90 - 110
Titanium	97.6	98.5	P/P	90 - 110
Titanium	97.6	97.0	P/P	90 - 110
Vanadium	97.0	96.4	P/P	90 - 110
Vanadium	97.1	98.0	P/P	90 - 110
Zinc	97.9	97.1	P/P	90 - 110
Zinc	99.0	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A111179

Included Lab Sample IDs: 2314389, 2314390, 2314391

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	104	96.7	P/P	60 - 160
Acesulfame K	96.7	105	P/P	60 - 160
Endothall	101	113	P/P	60 - 160
Endothall	113	116	P/P	60 - 160
Sucralose	107	115	P/P	60 - 160
Sucralose	111	107	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A111189

Included Lab Sample IDs: 2314389, 2314390, 2314391

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	91.1	87.7	P/P	50 - 150
2,4,5-T	91.0	88.2	P/P	50 - 150
Acetaminophen	114	109	P/P	60 - 160
Acetamiprid	108	97.2	P/P	50 - 150
Afidopyropen	86.9	95.3	P/P	50 - 150
Bentazon	82.2	90.4	P/P	50 - 160
Benzovindiflupyr	102	105	P/P	50 - 160
Carbamazepine	86.8	91.2	P/P	60 - 150
Clothianidin	109	100	P/P	60 - 150
Dinotefuran	113	99.1	P/P	50 - 150
Diuron	80.8	78.2	P/P	60 - 160
Fenuron	103	100	P/P	60 - 150
Fluridone	91.5	80.4	P/P	60 - 160
Hydrocodone	110	107	P/P	60 - 150
Ibuprofen	105	72.3	P/P	50 - 160
Imazapyr	92.0	111	P/P	50 - 150
Imidacloprid	108	93.3	P/P	60 - 150
Linuron	94.0	66.7	P/P	60 - 150
Mandestrobin	77.0	76.3	P/P	50 - 150
MCPP	79.8	71.3	P/P	50 - 150
Naproxen	62.5	69.3	P/P	50 - 160
Primidone	124	89.4	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A111189

Included Lab Sample IDs: 2314389, 2314390, 2314391

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	95.5	95.1	P/P	60 - 150
Silvex	66.2	89.7	P/P	50 - 150
Thiamethoxam	103	110	P/P	50 - 150
Tolfenpyrad	80.0	102	P/P	60 - 150
Triclopyr	79.1	76.7	P/P	50 - 150

Reference Method: SM 5310 B-2011

Run ID: A111201

Included Lab Sample IDs: 2314376, 2314377, 2314381

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	101	P/P	90 - 110
Organic Carbon	99.7	101	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A111208

Included Lab Sample IDs: 2314374, 2314375, 2314380

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.8	102	P/P	90 - 110
Sulfate	99.4	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A111210

Included Lab Sample IDs: 2314376, 2314377, 2314381

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.8	99.9	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A111215

Included Lab Sample IDs: 2314396, 2314397, 2314398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	94.5	95.2	P/P	90 - 110
Antimony	94.8	97.1	P/P	90 - 110
Arsenic	101	100	P/P	90 - 110
Arsenic	101	102	P/P	90 - 110
Barium	98.0	99.9	P/P	90 - 110
Barium	98.6	98.5	P/P	90 - 110
Beryllium	91.1	93.2	P/P	90 - 110
Beryllium	93.3	94.1	P/P	90 - 110
Boron	103	104	P/P	90 - 110
Boron	99.0	103	P/P	90 - 110
Cadmium	98.1	100	P/P	90 - 110
Cadmium	98.6	98.0	P/P	90 - 110
Cobalt	95.1	95.0	P/P	90 - 110
Cobalt	95.3	98.1	P/P	90 - 110
Copper	95.6	98.5	P/P	90 - 110
Copper	95.8	95.4	P/P	90 - 110
Lead	91.4	92.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A111215

Included Lab Sample IDs: 2314396, 2314397, 2314398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	92.5	91.7	P/P	90 - 110
Manganese	94.2	96.9	P/P	90 - 110
Manganese	96.9	101	P/P	90 - 110
Molybdenum	98.9	100	P/P	90 - 110
Molybdenum	99.1	98.4	P/P	90 - 110
Nickel	97.0	99.8	P/P	90 - 110
Nickel	97.1	96.8	P/P	90 - 110
Selenium	97.9	99.8	P/P	90 - 110
Selenium	99.9	100	P/P	90 - 110
Silver	96.2	96.6	P/P	90 - 110
Silver	96.4	96.1	P/P	90 - 110
Thallium	97.3	98.0	P/P	90 - 110
Thallium	97.4	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A111251

Included Lab Sample IDs: 2314377, 2314381

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: A111292

Included Lab Sample IDs: 2314396, 2314397, 2314398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	99.0	P/P	90 - 110
Aluminum	99.0	100	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A111295

Included Lab Sample IDs: 2314392, 2314393, 2314395

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.8		P	80 - 120
Alachlor	108		P	80 - 120
Ametryn	95.4		P	80 - 120
Atrazine	97.7		P	80 - 120
Atrazine Desethyl	109		P	80 - 120
Azinphos Methyl	115		P	80 - 120
Azoxystrobin	91.2		P	80 - 120
Bromacil	110		P	80 - 120
Butylate	111		P	80 - 120
Caffeine	91.5		P	80 - 120
Carfentrazone Ethyl	111		P	80 - 120
Chlorpyrifos Ethyl	109		P	80 - 120
Chlorpyrifos Methyl	108		P	80 - 120
Cyanazine	101		P	80 - 120
Cyprodinil	102		P	80 - 120
Demeton	110		P	80 - 120
Diazinon	110		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A111295

Included Lab Sample IDs: 2314392, 2314393, 2314395

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Difenoconazole	99.3		P	80 - 120
Dimethenamid	118		P	80 - 120
Dimethomorph	107		P	80 - 120
Disulfoton	103		P	80 - 120
Dithiopyr	108		P	80 - 120
EPTC	97.5		P	80 - 120
Ethion	109		P	80 - 120
Ethoprop	103		P	80 - 120
Etridiazole	97.5		P	80 - 120
Fenamiphos	116		P	80 - 120
Fenbuconazole	85.2		P	80 - 120
Fipronil	111		P	80 - 120
Fipronil Desulfinyl	110		P	80 - 120
Fipronil Sulfide	115		P	80 - 120
Fipronil Sulfone	115		P	80 - 120
Fluazifop-P-butyl	111		P	80 - 120
Fludioxonil	110		P	80 - 120
Flumioxazin	92.3		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	109		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	113		P	80 - 120
Iprodione	108		P	80 - 120
Loratadine	86.6		P	80 - 120
Malathion	99.1		P	80 - 120
Metalaxyl	118		P	80 - 120
Metolachlor	109		P	80 - 120
Metribuzin	92.0		P	80 - 120
Mevinphos	104		P	80 - 120
Molinate	108		P	80 - 120
Myclobutanil	103		P	80 - 120
Naled	109		P	80 - 120
Napropamide	115		P	80 - 120
Norflurazon	106		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	89.3		P	80 - 120
Parathion Methyl	86.6		P	80 - 120
Pendimethalin	87.9		P	80 - 120
Phenytol	99.5		P	80 - 120
Phorate	98.2		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	118		P	80 - 120
Pronamide	106		P	80 - 120
Propanil	104		P	80 - 120
Propargite	94.0		P	80 - 120
Propiconazole	105		P	80 - 120
Pyraflufen Ethyl	109		P	80 - 120
Pyridaben	107		P	80 - 120
Pyriproxyfen	103		P	80 - 120
Simazine	106		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A111295

Included Lab Sample IDs: 2314392, 2314393, 2314395

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Stirophos	109		P	80 - 120
Sulfentrazone	96.6		P	80 - 120
Tebuconazole	109		P	80 - 120
Terbufos	119		P	80 - 120
Thiobencarb	100		P	80 - 120
Triadimefon	106		P	80 - 120

Reference Method: EPA 8270E

Run ID: A111297

Included Lab Sample IDs: 2314392, 2314393, 2314395

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	96.2		P	80 - 120
Octinoxate	100		P	80 - 120
Oxybenzone	102		P	80 - 120

Reference Method: SM 2320 B-2011

Run ID: A111305

Included Lab Sample IDs: 2314374, 2314375, 2314380

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.2	96.7	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A111305

Included Lab Sample IDs: 2314374, 2314375, 2314380

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A111316

Included Lab Sample IDs: 2314376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A111324

Included Lab Sample IDs: 2314376, 2314377, 2314381

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	103	P/P	90 - 110
Kjeldahl Nitrogen	103	92.5	P/P	90 - 110
Kjeldahl Nitrogen	92.4	95.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A111351

Included Lab Sample IDs: 2314396, 2314397, 2314398

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A111351

Included Lab Sample IDs: 2314396, 2314397, 2314398

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	95.3	95.4	P/P	90 - 110
Chromium	96.6	95.3	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A111377

Included Lab Sample IDs: 2314392, 2314393, 2314395

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbophenothion	106		P	80 - 120
Chlorfenapyr	108		P	80 - 120
Coumaphos	107		P	80 - 120
Fonofos	103		P	80 - 120
Prodiamine	104		P	80 - 120
Terbutylazine	111		P	80 - 120

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	98.8					15.2	
	Color (true)	99.8					13.7	
EPA 180.1 Rev. 2.0	Turbidity	97.0					4.36	
EPA 200.7 Rev. 4.4	Calcium	105	102	102				1.79
	Iron	111	109	107	114			1.80
	Magnesium	111	109	106	106			1.87
	Potassium	108	106	105	104			1.49
	Sodium	109	107	104	101			2.26
	Strontium	107	105	103	104			1.35
	Tin	105	102	103	102			1.05
	Titanium	105	103	103	120			0.412
	Vanadium	97.6	98.0	98.0	98.9			0.0728
	Zinc	103	100	101	100			0.550
EPA 200.8 Rev. 5.4	Aluminum	98.4	98.1	99.8	106			4.14
	Antimony	99.0	98.4	96.2	95.9			2.22
	Arsenic	102	99.2	97.6	99.6			1.65
	Barium	103	101	98.8	101			2.44
	Beryllium	93.1	94.2	92.0	94.2			2.41
	Boron	105	104	104	108			0.653
	Cadmium	99.7	99.5	96.0	98.4			3.61
	Chromium	95.7	93.7	91.1	94.5			2.76
	Cobalt	97.6	96.1	93.4	95.8			2.85
	Copper	97.1	96.0	93.0	95.0			3.16
	Lead	93.2	92.1	91.0	93.2			1.23
	Manganese	98.4	98.6	95.7	101			2.60
	Molybdenum	102	106	97.2	112			8.54
	Nickel	99.0	104	95.8	109			8.42
	Selenium	102	97.0	97.7	94.6			0.643
	Silver	97.8	97.9	96.6	96.1			1.34
	Thallium	98.5	98.3	97.8	98.3			0.539
EPA 300.0 Rev. 2.1	Chloride	98.1	98.7	97.2			0.0099	
	Sulfate	99.0	99.1	97.9			0.244	
EPA 350.1 Rev. 2.0	Ammonia-N	99.0	98.4	98.0				0.368
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	112	112				0.246
	Kjeldahl Nitrogen	103	97.6	105				6.31
	Kjeldahl Nitrogen	102	113	105				7.56
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	97.5	97.5				0.0
EPA 365.1 Rev. 2.0	Total-P	101						
	Total-P	103	106	103				2.65
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.4	98.5	98.6				0.101
EPA 8270E	Acetochlor	106	105	94.2				11.2
	Alachlor	102	105	87.5				18.3
	Ametryn	102	101	79.1				24.6
	Atrazine	100	90.4	93.4				1.58
	Atrazine Desethyl	66.1	68.1	57.2				17.3
	Avobenzone	129	90.1	89.6				0.496
	Azinphos Methyl	118	106	114				7.50
	Azoxystrobin	109	108	113				4.80
	Bromacil	93.7	81.2	99.4				20.1
	Butylate	58.7	66.3	63.8				3.72
	Caffeine	98.4	99.8	96.7				2.01
	Carbophenothion	105	91.5	90.8				0.710
	Carfentrazone Ethyl	110	73.4	93.9				24.6
	Chlorfenapyr	105	91.7	89.7				2.27

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Chlorpyrifos Ethyl	112	112	109		3.24
	Chlorpyrifos Methyl	113	110	89.1		21.2
	Coumaphos	104	70.8	73.6		3.92
	Cyanazine	93.5	98.2	90.7		7.94
	Cyprodinil	108	86.0	86.8		1.02
	Demeton	93.1	83.1	82.0		1.42
	Diazinon	102	116	129		10.5
	Difenoconazole	118	94.9	118		21.4
	Dimethenamid	94.1	86.9	88.1		1.30
	Dimethomorph	218	273	237		14.0
	Disulfoton	99.7	93.9	91.5		2.64
	Dithiopyr	99.2	100	90.2		10.3
	EPTC	57.4	44.0	43.4		1.51
	Ethion	88.2	32.1	44.2		31.9
	Ethoprop	93.0	94.2	94.8		0.589
	Etridiazole	64.4	67.8	75.9		11.3
	Fenamiphos	109	78.8	68.7		13.8
	Fenbuconazole	88.2	113	103		9.36
	Fipronil	102	90.9	104		13.9
	Fipronil Desulfinyl	125	114	79.8		35.5
	Fipronil Sulfide	102	96.1	88.2		8.57
	Fipronil Sulfone	90.5	92.9	96.0		3.23
	Fluazifop-P-butyl	93.1	91.5	99.0		7.92
	Fludioxonil	89.0	84.6	86.7		2.37
	Flumioxazin	149	179	163		9.02
	Flutolanil	78.9	69.6	73.9		5.95
	Fluxapyroxad	83.6	65.5	71.9		9.26
	Fonofos	85.4	85.8	85.8		0.0670
	Hexazinone	103	88.4	110		18.1
	Imazalil	108	68.0	89.2		27.0
	Iprodione	105	94.0	99.4		5.60
	Loratadine	126	168	199		16.4
	Malathion	110	102	102		0.456
	Metalaxyl	105	104	75.5		32.1
	Metolachlor	103	95.2	103		7.68
	Metribuzin	64.5	84.1	94.3		11.4
	Mevinphos	82.4	73.9	89.2		18.8
	Molinate	82.1	82.2	63.4		25.8
	Myclobutanil	89.2	75.2	76.3		1.46
	Naled	81.4	73.3	69.5		5.38
	Napropamide	99.0	73.9	81.4		9.72
	Norflurazon	89.7	66.9	78.5		15.9
	Octinoxate	120	111	116		4.85
	Oxadiazon	78.8	64.9	73.7		12.7
	Oxybenzone	97.5	109	108		0.362
	Oxyfluorfen	113	101	111		9.26
	Parathion Ethyl	97.3	94.4	94.2		0.296
	Parathion Methyl	93.7	113	87.2		25.6
	Pendimethalin	94.4	80.9	85.5		5.50
	Phenytoin	42.8	22.2	20.8		6.51
	Phorate	95.9	88.9	79.9		10.7
	Prodiamine	54.5	52.6	55.2		4.90
	Prometon	82.0	94.7	92.9		1.84
	Prometryn	104	92.2	73.5		22.6

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Pronamide	92.6	98.5	105			6.34
	Propanil	99.3	90.9	90.7			0.270
	Propargite	68.1	49.9	47.0			6.01
	Propiconazole	85.8	64.8	70.4			8.24
	Pyraflufen Ethyl	94.9	64.2	70.2			8.91
	Pyridaben	110	101	108			6.53
	Pyriproxyfen	87.7	70.0	71.9			2.65
	Simazine	92.9	99.2	95.4			3.91
	Stirophos	82.2	56.4	58.9			4.31
	Sulfentrazone	86.5	76.4	102			28.6
	Tebuconazole	62.1	48.2	38.5			22.4
	Terbufos	121	122	128			5.00
	Terbuthylazine	92.4	87.5	93.9			7.02
	Thiobencarb	85.8	81.3	81.6			0.382
	Triadimefon	93.5	86.3	90.2			4.37
EPA 8321B	2,4-D	47.7	85.3	78.7			7.58
	2,4,5-T	40.3	59.9	69.4			14.6
	Acesulfame K	110	143	140			2.20
	Acetaminophen	90.6	107	92.2			14.6
	Acetamiprid	75.6	104	98.0			5.66
	Afidopyropen	45.7	78.9	66.1			17.7
	AMPA	109	75.1	102			26.5
	Bentazon	77.9					6.70
	Benzovindiflupyr	76.0	82.4	87.3			5.82
	Carbamazepine	59.9	80.3	74.7			7.23
	Clothianidin	98.1	128	127			0.659
	Dinotefuran	90.4	135	130			3.66
	Diuron	64.3	61.7	43.1			35.5
	Endothall	126	83.1	83.7			0.772
	Fenuron	122	110	124			12.2
	Fluridone	66.4	75.0	67.3			8.64
	Glufosinate	121	96.8	119			20.8
	Glyphosate	114	71.9	95.4			23.0
	Hydrocodone	92.2	117	108			8.08
	Ibuprofen	68.8	87.8	82.0			6.90
	Imazapyr	95.6	138	134			0.694
	Imidacloprid	84.8	235	211			10.7
	Linuron	69.1	98.1	78.7			21.9
	Mandestrobin	62.2	68.4	64.7			5.53
	MCPP	58.9	88.1	77.4			13.0
	Naproxen	84.3	75.7	68.0			10.7
	Primidone	83.3	125	110			12.8
	Pyraclostrobin	66.7	79.8	79.9			0.116
	Silvex	35.4	64.0	66.3			3.47
	Sucralose	119	112	117			4.19
	Thiamethoxam	98.5	190	170			10.9
	Tolfenpyrad	42.5	46.0	39.7			14.7
	Triclopyr	43.1	62.6	63.9			2.19
SM 2320 B-2011	Total Alkalinity	98.0				1.92	
SM 2540 C-2011	TDS					1.10	
SM 4500 F-C-2011	Fluoride	101	98.3	98.9			0.490
SM 5310 B-2011	Organic Carbon	99.4	97.6	98.2			0.259

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2314374, 2314375, 2314380
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2314374, 2314375, 2314380
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2314396, 2314397, 2314398
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2314396, 2314397, 2314398
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2314374, 2314375, 2314380
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2314374, 2314375, 2314380
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2314376, 2314377, 2314381
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2314376, 2314377, 2314381
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2314376, 2314377, 2314381
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2314376, 2314377, 2314381
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2314378, 2314379, 2314382
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2314392, 2314393, 2314395
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2314392, 2314393, 2314395
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2314389, 2314390, 2314391
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2314374, 2314375, 2314380
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2314396, 2314397, 2314398
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2314374, 2314375, 2314380
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2314374, 2314375, 2314380
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2314374, 2314375, 2314380
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2314376, 2314377, 2314381

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	03/24/2022			03/24/2022 15:52	Anna M. Plaviak	2314375
	03/24/2022			03/24/2022 15:53	Anna M. Plaviak	2314380
	03/24/2022			03/24/2022 16:09	Anna M. Plaviak	2314374
EPA 180.1 Rev. 2.0	03/24/2022			03/24/2022 14:27	Khloe J Berg	2314374
	03/24/2022			03/24/2022 14:29	Khloe J Berg	2314375
	03/24/2022			03/24/2022 14:30	Khloe J Berg	2314380
EPA 200.7 Rev. 4.4	03/24/2022	03/25/2022 10:15	Megan Whitefoot	03/25/2022 21:53	Josef B Mick	2314398
	03/24/2022	03/25/2022 10:15	Megan Whitefoot	03/26/2022 02:11	Josef B Mick	2314396
	03/24/2022	03/25/2022 10:15	Megan Whitefoot	03/26/2022 02:16	Josef B Mick	2314397
EPA 200.8 Rev. 5.4	03/24/2022	03/25/2022 10:15	Megan Whitefoot	03/29/2022 15:16	Alexander Thompson	2314398
	03/24/2022	03/25/2022 10:15	Megan Whitefoot	03/29/2022 19:20	Alexander Thompson	2314396
	03/24/2022	03/25/2022 10:15	Megan Whitefoot	03/29/2022 19:29	Alexander Thompson	2314397
	03/24/2022	04/01/2022 10:40	Megan Whitefoot	04/04/2022 13:24	Alexander Thompson	2314397
	03/24/2022	04/01/2022 10:40	Megan Whitefoot	04/04/2022 13:37	Alexander Thompson	2314396
	03/24/2022	04/01/2022 10:40	Megan Whitefoot	04/04/2022 14:27	Alexander Thompson	2314398
	03/24/2022	04/05/2022 10:26	Emily M Philpot	04/06/2022 13:40	Alexander Thompson	2314396
EPA 300.0 Rev. 2.1	03/24/2022	04/05/2022 10:26	Emily M Philpot	04/06/2022 13:46	Alexander Thompson	2314397
	03/24/2022	04/05/2022 10:26	Emily M Philpot	04/06/2022 14:44	Alexander Thompson	2314398
	03/24/2022			03/29/2022 19:07	Anna M. Plaviak	2314374
	03/24/2022			03/29/2022 19:19	Anna M. Plaviak	2314375
	03/24/2022			03/29/2022 19:31	Anna M. Plaviak	2314380
	03/24/2022			03/29/2022 12:03	Ping Hua	2314376
	03/24/2022			03/29/2022 12:04	Ping Hua	2314377
EPA 351.2 Rev. 2.0	03/24/2022			03/29/2022 12:12	Ping Hua	2314381
	03/24/2022	03/29/2022 09:23	Samantha L Bates	04/05/2022 15:27	Alexandra J Mattheus	2314376
	03/24/2022	03/29/2022 09:23	Samantha L Bates	04/05/2022 16:01	Alexandra J Mattheus	2314381
EPA 353.2 Rev. 2.0	03/24/2022	03/29/2022 09:23	Samantha L Bates	04/05/2022 16:24	Alexandra J Mattheus	2314377
	03/24/2022			03/25/2022 11:40	Beverly Y. Sanders	2314377
	03/24/2022			03/25/2022 11:49	Beverly Y. Sanders	2314376
EPA 365.1 Rev. 2.0	03/24/2022			03/25/2022 11:51	Beverly Y. Sanders	2314381
	03/24/2022	03/29/2022 16:02	Simonne.V. Calhoun	03/31/2022 12:53	James L Waggeberby	2314381
	03/24/2022	03/29/2022 16:02	Simonne.V. Calhoun	03/31/2022 12:55	James L Waggeberby	2314377
EPA 365.1 Rev. 2.0 dissolved	03/24/2022	04/04/2022 17:10	Simonne.V. Calhoun	04/05/2022 14:40	James L Waggeberby	2314376
	03/24/2022			03/24/2022 14:40	Ping Hua	2314378
	03/24/2022			03/24/2022 14:41	Ping Hua	2314379
EPA 8270E	03/24/2022			03/24/2022 14:48	Ping Hua	2314382
	03/24/2022	03/28/2022 08:30	Fe-Val Siddell	03/31/2022 19:20	Michael Poppell	2314392
	03/24/2022	03/28/2022 08:30	Fe-Val Siddell	03/31/2022 20:39	Michael Poppell	2314393
	03/24/2022	03/28/2022 08:30	Fe-Val Siddell	03/31/2022 21:05	Michael Poppell	2314395
	03/24/2022	03/28/2022 08:30	Fe-Val Siddell	04/01/2022 17:59	Lipi Saha	2314392

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	03/24/2022	03/28/2022 08:30	Fe-Val Siddell	04/01/2022 18:23	Lipi Saha	2314393
	03/24/2022	03/28/2022 08:30	Fe-Val Siddell	04/01/2022 18:48	Lipi Saha	2314395
	03/24/2022	03/28/2022 08:30	Fe-Val Siddell	04/07/2022 16:27	Michael Poppell	2314392
	03/24/2022	03/28/2022 08:30	Fe-Val Siddell	04/07/2022 17:47	Michael Poppell	2314393
	03/24/2022	03/28/2022 08:30	Fe-Val Siddell	04/07/2022 18:14	Michael Poppell	2314395
EPA 8321B	03/24/2022	03/24/2022 14:30	June Rhew	03/27/2022 07:45	Juyoung Kim	2314389
	03/24/2022	03/24/2022 14:30	June Rhew	03/27/2022 08:19	Juyoung Kim	2314390
	03/24/2022	03/24/2022 14:30	June Rhew	03/27/2022 08:54	Juyoung Kim	2314391
	03/24/2022	03/24/2022 15:00	Manjita Shrestha	03/25/2022 23:00	Manjita Shrestha	2314389
	03/24/2022	03/24/2022 15:00	Manjita Shrestha	03/25/2022 23:26	Manjita Shrestha	2314390
	03/24/2022	03/24/2022 15:00	Manjita Shrestha	03/25/2022 23:38	Manjita Shrestha	2314391
	03/24/2022	03/24/2022 15:00	Manjita Shrestha	03/26/2022 09:05	Manjita Shrestha	2314389
	03/24/2022	03/24/2022 15:00	Manjita Shrestha	03/26/2022 09:35	Manjita Shrestha	2314390
SM 2320 B-2011	03/24/2022	03/24/2022 15:00	Manjita Shrestha	03/26/2022 09:50	Manjita Shrestha	2314391
	03/24/2022			04/02/2022 01:52	Dale L. Simmons	2314374
	03/24/2022			04/02/2022 02:02	Dale L. Simmons	2314375
SM 2340B	03/24/2022			04/02/2022 02:10	Dale L. Simmons	2314380
	03/24/2022			03/25/2022 21:53	Josef B Mick	2314398
	03/24/2022			03/26/2022 02:11	Josef B Mick	2314396
	03/24/2022			03/26/2022 02:16	Josef B Mick	2314397
SM 2540 C-2011	03/24/2022			03/25/2022 16:20	Simonne.V. Calhoun	2314374, 2314375, 2314380
SM 2540 D-2011	03/24/2022			03/25/2022 16:20	Simonne.V. Calhoun	2314374, 2314375, 2314380
SM 4500 F-C-2011	03/24/2022			04/02/2022 01:52	Dale L. Simmons	2314374
	03/24/2022			04/02/2022 02:02	Dale L. Simmons	2314375
	03/24/2022			04/02/2022 02:10	Dale L. Simmons	2314380
SM 5310 B-2011	03/24/2022			03/26/2022 04:54	Khloe J Berg	2314376
	03/24/2022			03/26/2022 05:12	Khloe J Berg	2314377
	03/24/2022			03/26/2022 05:54	Khloe J Berg	2314381