Chemical Analysis Report

BSSP-2022-05-11-01

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

Event Description: **Reference Stream Sampling**
Request ID: **RQ-2022-03-28-10**
Customer: **BSSP**
Project ID: **SCIREF**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400
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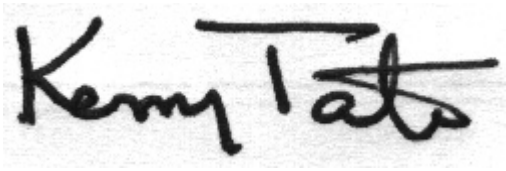
Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 06-JUN-2022 13:03



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: Steinhatchee @ Canal Rd **Collection Date/Time: 05/10/2022 10:40**

Field ID: STEINCANAL Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326110	DEP SOP: NU-094-1	Color (true)**	360		PCU	P413698	
	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P413737	
	EPA 300.0 Rev. 2.1	Chloride	7.0		mg Cl/L	P414104	
		Sulfate	8.4		mg SO4/L	P414108	
	SM 2320 B-2011	Total Alkalinity	124		mg CaCO3/L	P413916	
	SM 2540 C-2011	TDS	230		mg/L	P414209	
	SM 2540 D-2011	TSS	3	I	mg/L	P414169	
	SM 4500-F- C-2011	Fluoride	0.12		mg F/L	P413918	
2326112	EPA 350.1 Rev. 2.0	Ammonia-N	0.041		mg N/L	P413964	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.96		mg N/L	P414010	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P414227	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P413990	
	SM 5310 B-2011	Organic Carbon	30		mg C/L	P413877	
2326114	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.076		mg P/L	P413696	
2326124	EPA 8321B	Acesulfame K	0.10	U	ug/L	P413677	
		2,4-D	0.0020	U	ug/L	P413773	
		AMPA	0.10	U	ug/L	P413677	
		2,4,5-T	0.0040	U	ug/L	P413773	
		Acetaminophen	0.0080	U	ug/L	P413773	
		Endothall	2.5	U	ug/L	P413677	
		Acetamiprid	0.0020	U	ug/L	P413773	
		Glufosinate	0.10	U	ug/L	P413677	
		Glyphosate	0.10	U	ug/L	P413677	
		Afidopyropen	0.0020	U	ug/L	P413773	
		Sucralose	0.010	U	ug/L	P413677	
		Bentazon	8.0E-04	U	ug/L	P413773	
		Benzovindiflupyr	0.0020	U	ug/L	P413773	MS
		Carbamazepine	8.0E-04	U	ug/L	P413773	
		Clothianidin	0.0020	U	ug/L	P413773	
		Dinotefuran	0.0020	U	ug/L	P413773	
		Diuron	0.0020	U	ug/L	P413773	
		Fenuron	0.032	U	ug/L	P413773	
		Fluridone	8.0E-04	U	ug/L	P413773	
		Imazapyr	0.026		ug/L	P413773	
		Hydrocodone	0.0020	U	ug/L	P413773	
		Ibuprofen	0.020	U	ug/L	P413773	
		Imidacloprid	0.0020	U	ug/L	P413773	
		Linuron	0.0040	U	ug/L	P413773	
		Mandestrobin	0.0020	U	ug/L	P413773	
		MCPP	0.0040	U	ug/L	P413773	
		Naproxen	0.0080	U	ug/L	P413773	
		Primidone	0.0040	U	ug/L	P413773	
		Pyraclostrobin	0.0020	U	ug/L	P413773	MS

Field ID: STEINCANAL Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326124	EPA 8321B	Silvex	0.0040	U	ug/L	P413773	
		Thiamethoxam	0.0020	U	ug/L	P413773	
		Tolfenpyrad	0.0020	U	ug/L	P413773	MS
		Triclopyr	0.0040	U	ug/L	P413773	
2326126	EPA 200.7 Rev. 4.4	Barium	9.2		ug/L	P413783	
		Calcium	51.5		mg/L	P413783	
		Iron	740		ug/L	P413783	
		Magnesium	6.35		mg/L	P413783	
		Potassium	0.30	U	mg/L	P413783	
		Sodium	3.7		mg/L	P413783	
		Zinc	5.0	U	ug/L	P413783	
	EPA 200.8 Rev. 5.4	Aluminum	170		ug/L	P413783	
		Antimony	0.050	U	ug/L	P413783	
		Arsenic	0.23		ug/L	P413783	
		Beryllium	0.016	I	ug/L	P413783	
		Boron**	12.7		ug/L	P413783	
		Cadmium	0.020	U	ug/L	P413783	
		Chromium	0.64	I	ug/L	P413783	
		Copper	0.40	U	ug/L	P413783	
		Lead	0.20	U	ug/L	P413783	
		Nickel	0.50	U	ug/L	P413783	
		Selenium	0.20	U	ug/L	P413783	
		Silver	0.010	U	ug/L	P413783	
		Thallium	0.10	U	ug/L	P413783	
2326128	EPA 8270E	Acetochlor	0.25	U	ng/L	P414025	
		Alachlor	0.25	U	ng/L	P414025	
		Ametryn	0.60	U	ng/L	P414025	
		Atrazine	0.45	I	ng/L	P414025	
		Atrazine Desethyl	1.5	U	ng/L	P414025	
		Azinphos Methyl	2.0	U	ng/L	P414025	
		Azoxystrobin**	0.50	U	ng/L	P414025	
		Bromacil	0.50	U	ng/L	P414025	
		Butylate	0.40	U	ng/L	P414025	
		Caffeine**	18	I	ng/L	P414025	
		Carbophenothion	0.20	U	ng/L	P414025	
		Carfentrazone Ethyl**	0.10	U	ng/L	P414025	
		Chlorfenapyr**	0.18	U	ng/L	P414025	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P414025	
		Chlorpyrifos Methyl	0.050	U	ng/L	P414025	
		Coumaphos**	0.50	U	ng/L	P414025	
		Cyanazine	3.3	U	ng/L	P414025	
		Cyprodinil**	0.10	U	ng/L	P414025	
		Demeton	1.5	U	ng/L	P414025	
		Diazinon	0.13	U	ng/L	P414025	
		Difenoconazole**	0.60	U	ng/L	P414025	

Field ID: STEINCANAL Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326128	EPA 8270E	Dimethenamid**	0.10	U	ng/L	P414025	
		Dimethomorph**	0.18	U	ng/L	P414025	
		Disulfoton	0.50	U	ng/L	P414025	
		Dithiopyr**	0.18	U	ng/L	P414025	MS
		EPTC	1.3	UJ	ng/L	P414025	RPD
		Ethion	0.15	U	ng/L	P414025	
		Ethoprop	0.10	U	ng/L	P414025	
		Etridiazole**	0.15	UJ	ng/L	P414025	MS, RPD
		Fenamiphos	0.50	U	ng/L	P414025	
		Fenbuconazole**	0.13	U	ng/L	P414025	
		Fipronil	0.25	U	ng/L	P414025	
		Fipronil Desulfinyl**	0.13	U	ng/L	P414025	
		Fipronil Sulfide	0.15	U	ng/L	P414025	
		Fipronil Sulfone	0.15	U	ng/L	P414025	
		Fluazifop-P-butyl**	0.10	U	ng/L	P414025	
		Fludioxonil**	0.13	U	ng/L	P414025	
		Flumioxazin**	1.8	U	ng/L	P414025	
		Flutolanil**	0.10	U	ng/L	P414025	
		Fluxapyroxad**	0.10	U	ng/L	P414025	
		Fonofos	0.20	U	ng/L	P414025	
		Hexazinone	0.50	U	ng/L	P414025	
		Imazalil**	0.75	U	ng/L	P414025	
		Iprodione**	0.60	U	ng/L	P414025	
		Loratadine**	0.10	U	ng/L	P414025	
		Malathion	0.35	U	ng/L	P414025	
		Metalaxyl	0.75	U	ng/L	P414025	
		Metolachlor	0.35	U	ng/L	P414025	
		Metribuzin	2.5	U	ng/L	P414025	
		Mevinphos	1.1	U	ng/L	P414025	
		Molinate	0.30	U	ng/L	P414025	
		Myclobutanil**	0.25	U	ng/L	P414025	
		Naled**	1.5	U	ng/L	P414025	
		Napropamide**	0.40	U	ng/L	P414025	
		Norflurazon	0.50	U	ng/L	P414025	
		Oxadiazon	0.30	U	ng/L	P414025	
		Oxyfluorfen**	0.15	U	ng/L	P414025	
		Parathion Ethyl	0.25	U	ng/L	P414025	
		Parathion Methyl	0.55	U	ng/L	P414025	
		Pendimethalin	1.0	U	ng/L	P414025	
		Phenytoin**	3.5	U	ng/L	P414025	MS
		Phorate	0.53	U	ng/L	P414025	
		Prodiamine**	0.18	U	ng/L	P414025	
		Prometon	0.91	U	ng/L	P414025	
		Prometryn	0.20	U	ng/L	P414025	MS
		Pronamide**	0.15	U	ng/L	P414025	

Field ID: STEINCANAL Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326128	EPA 8270E	Propanil**	0.13	U	ng/L	P414025	
		Propargite**	1.5	U	ng/L	P414025	MS
		Propiconazole**	0.50	U	ng/L	P414025	
		Pyraflufen Ethyl**	0.25	U	ng/L	P414025	
		Pyridaben**	0.45	U	ng/L	P414025	
		Pyriproxyfen**	0.13	U	ng/L	P414025	
		Simazine	0.50	U	ng/L	P414025	
		Stirophos**	0.13	U	ng/L	P414025	MS
		Sulfentrazone**	0.50	U	ng/L	P414025	
		Tebuconazole**	0.50	U	ng/L	P414025	
		Terbufos	0.10	U	ng/L	P414025	
		Terbuthylazine	0.43	U	ng/L	P414025	
		Thiobencarb**	0.60	U	ng/L	P414025	
		Triadimefon**	0.25	U	ng/L	P414025	

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: MDL for Endothall elevated due to matrix interference.
EPA 8270E: Insufficient sample available to perform duplicate matrix spikes. MS accuracy for atrazine and simazine not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Rocky Creek @ Woods Rd **Collection Date/Time: 05/10/2022 14:38**

Field ID: Rocky Wds Rd Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326111	DEP SOP: NU-094-1	Color (true)**	63		PCU	P413698	
	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P413737	
	EPA 300.0 Rev. 2.1	Chloride	5.9		mg Cl/L	P414104	
		Sulfate	7.3		mg SO4/L	P414108	
	SM 2320 B-2011	Total Alkalinity	195		mg CaCO3/L	P413916	
	SM 2540 C-2011	TDS	227		mg/L	P414209	
	SM 2540 D-2011	TSS	2	I	mg/L	P414169	
	SM 4500-F- C-2011	Fluoride	0.18		mg F/L	P413918	
2326113	EPA 350.1 Rev. 2.0	Ammonia-N	0.038		mg N/L	P413964	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20		mg N/L	P414075	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.034		mg N/L	P414179	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P413990	
	SM 5310 B-2011	Organic Carbon	5.5		mg C/L	P413877	
2326115	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.13		mg P/L	P413696	
2326125	EPA 8321B	2,4-D	0.0020	U	ug/L	P413773	
		Acesulfame K	0.10	U	ug/L	P413677	
		2,4,5-T	0.0040	U	ug/L	P413773	
		AMPA	0.10	U	ug/L	P413677	
		Acetaminophen	0.0080	U	ug/L	P413773	
		Acetamiprid	0.0020	U	ug/L	P413773	
		Endothall	0.25	U	ug/L	P413677	
		Glufosinate	0.10	U	ug/L	P413677	
		Glyphosate	0.10	U	ug/L	P413677	
		Afidopyropen	0.0020	U	ug/L	P413773	
		Bentazon	8.0E-04	U	ug/L	P413773	
		Sucralose	0.040		ug/L	P413677	
		Benzovindiflupyr	0.0020	U	ug/L	P413773	MS
		Carbamazepine	8.0E-04	U	ug/L	P413773	
		Clothianidin	0.0020	U	ug/L	P413773	
		Dinotefuran	0.0020	U	ug/L	P413773	
		Diuron	0.0020	U	ug/L	P413773	
		Fenuron	0.032	U	ug/L	P413773	
		Fluridone	8.0E-04	U	ug/L	P413773	
		Imazapyr	0.011	I	ug/L	P413773	
		Hydrocodone	0.0020	U	ug/L	P413773	
		Ibuprofen	0.020	U	ug/L	P413773	
		Imidacloprid	0.0020	U	ug/L	P413773	
		Linuron	0.0040	U	ug/L	P413773	
		Mandestrobin	0.0020	U	ug/L	P413773	
		MCPP	0.0040	U	ug/L	P413773	
		Naproxen	0.0080	U	ug/L	P413773	
		Primidone	0.0040	U	ug/L	P413773	
		Pyraclostrobin	0.0020	U	ug/L	P413773	MS

Field ID: Rocky Wds Rd Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326125	EPA 8321B	Silvex	0.0040	U	ug/L	P413773	
		Thiamethoxam	0.0020	U	ug/L	P413773	
		Tolfenpyrad	0.0020	U	ug/L	P413773	MS
		Triclopyr	0.0040	U	ug/L	P413773	
2326127	EPA 200.7 Rev. 4.4	Barium	5.6		ug/L	P413783	
		Calcium	52.8		mg/L	P413783	
		Iron	910		ug/L	P413783	
		Magnesium	18.8		mg/L	P413783	
		Potassium	0.30	U	mg/L	P413783	
		Sodium	3.3		mg/L	P413783	
		Zinc	5.0	U	ug/L	P413783	
	EPA 200.8 Rev. 5.4	Aluminum	28		ug/L	P413783	
		Antimony	0.050	U	ug/L	P413783	
		Arsenic	0.47		ug/L	P413783	
		Beryllium	0.010	U	ug/L	P413783	
		Boron**	13.7		ug/L	P413783	
		Cadmium	0.020	U	ug/L	P413783	
		Chromium	0.40	I	ug/L	P413783	
		Copper	0.40	U	ug/L	P413783	
		Lead	0.20	U	ug/L	P413783	
		Nickel	0.50	U	ug/L	P413783	
		Selenium	0.20	U	ug/L	P413783	
		Silver	0.010	U	ug/L	P413783	
		Thallium	0.10	U	ug/L	P413783	
2326129	EPA 8270E	Acetochlor	0.24	U	ng/L	P414025	
		Alachlor	0.24	U	ng/L	P414025	
		Ametryn	0.59	U	ng/L	P414025	
		Atrazine	0.24	U	ng/L	P414025	
		Atrazine Desethyl	1.5	U	ng/L	P414025	
		Azinphos Methyl	2.0	U	ng/L	P414025	
		Azoxystrobin**	0.49	U	ng/L	P414025	
		Bromacil	0.49	U	ng/L	P414025	
		Butylate	0.39	U	ng/L	P414025	
		Caffeine**	7.3	U	ng/L	P414025	
		Carbophenothion	0.20	U	ng/L	P414025	
		Carfentrazone Ethyl**	0.098	U	ng/L	P414025	
		Chlorfenapyr**	0.17	U	ng/L	P414025	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P414025	
		Chlorpyrifos Methyl	0.049	U	ng/L	P414025	
		Coumaphos**	0.49	U	ng/L	P414025	
		Cyanazine	3.2	U	ng/L	P414025	
		Cyprodinil**	0.098	U	ng/L	P414025	
		Demeton	1.5	U	ng/L	P414025	
		Diazinon	0.12	U	ng/L	P414025	
		Difenoconazole**	0.59	U	ng/L	P414025	

Field ID: Rocky Wds Rd Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326129	EPA 8270E	Dimethenamid**	0.098	U	ng/L	P414025	
		Dimethomorph**	0.17	U	ng/L	P414025	
		Disulfoton	0.49	U	ng/L	P414025	
		Dithiopyr**	0.17	U	ng/L	P414025	MS
		EPTC	1.2	UJ	ng/L	P414025	RPD
		Ethion	0.15	U	ng/L	P414025	
		Ethoprop	0.098	U	ng/L	P414025	
		Etridiazole**	0.15	UJ	ng/L	P414025	MS, RPD
		Fenamiphos	0.49	U	ng/L	P414025	
		Fenbuconazole**	0.12	U	ng/L	P414025	
		Fipronil	0.24	U	ng/L	P414025	
		Fipronil Desulfinyl**	0.12	U	ng/L	P414025	
		Fipronil Sulfide	0.15	U	ng/L	P414025	
		Fipronil Sulfone	0.15	U	ng/L	P414025	
		Fluazifop-P-butyl**	0.098	U	ng/L	P414025	
		Fludioxonil**	0.12	U	ng/L	P414025	
		Flumioxazin**	1.7	U	ng/L	P414025	
		Flutolanil**	0.098	U	ng/L	P414025	
		Fluxapyroxad**	0.098	U	ng/L	P414025	
		Fonofos	0.20	U	ng/L	P414025	
		Hexazinone	0.49	U	ng/L	P414025	
		Imazalil**	0.73	U	ng/L	P414025	
		Iprodione**	0.59	U	ng/L	P414025	
		Loratadine**	0.098	U	ng/L	P414025	
		Malathion	0.34	U	ng/L	P414025	
		Metalaxyl	0.73	U	ng/L	P414025	
		Metolachlor	0.34	U	ng/L	P414025	
		Metribuzin	2.4	U	ng/L	P414025	
		Mevinphos	1.0	U	ng/L	P414025	
		Molinate	0.29	U	ng/L	P414025	
		Myclobutanil**	0.24	U	ng/L	P414025	
		Naled**	1.5	U	ng/L	P414025	
		Napropamide**	0.39	U	ng/L	P414025	
		Norflurazon	0.49	U	ng/L	P414025	
		Oxadiazon	0.29	U	ng/L	P414025	
		Oxyfluorfen**	0.15	U	ng/L	P414025	
		Parathion Ethyl	0.24	U	ng/L	P414025	
		Parathion Methyl	0.54	U	ng/L	P414025	
		Pendimethalin	0.98	U	ng/L	P414025	
		Phenytoin**	3.4	U	ng/L	P414025	MS
		Phorate	0.51	U	ng/L	P414025	
		Prodiamine**	0.17	U	ng/L	P414025	
		Prometon	0.88	U	ng/L	P414025	
		Prometryn	0.20	U	ng/L	P414025	MS
		Pronamide**	0.15	U	ng/L	P414025	

Field ID: Rocky Wds Rd Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326129	EPA 8270E	Propanil**	0.12	U	ng/L	P414025	
		Propargite**	1.5	U	ng/L	P414025	MS
		Propiconazole**	0.49	U	ng/L	P414025	
		Pyraflufen Ethyl**	0.24	U	ng/L	P414025	
		Pyridaben**	0.44	U	ng/L	P414025	
		Pyriproxyfen**	0.12	U	ng/L	P414025	
		Simazine	0.49	U	ng/L	P414025	
		Stirophos**	0.12	U	ng/L	P414025	MS
		Sulfentrazone**	0.49	U	ng/L	P414025	
		Tebuconazole**	0.49	U	ng/L	P414025	
		Terbufos	0.098	U	ng/L	P414025	
		Terbuthylazine	0.42	U	ng/L	P414025	
		Thiobencarb**	0.59	U	ng/L	P414025	
		Triadimefon**	0.24	U	ng/L	P414025	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8270E: Insufficient sample available to perform duplicate matrix spikes. MS accuracy for atrazine and simazine not assessed due to high content of these parameters 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: P413698

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413737

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P413783

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P413783

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: P414104

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414108

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: P413964

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414010

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414075

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414179

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414227

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413990

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413696

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

Reference Method: EPA 8270E
Batch ID: P414025

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P414025

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P414025

Component	Result	Code	Units
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
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
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P414025

Component	Result	Code	Units
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
Phenytoin	3.5	U	ng/L
Phenytoin	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	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
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: P413677

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P413677

Component	Result	Code	Units
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: P413773

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

Reference Method: SM 2320 B-2011
Batch ID: P413916

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

Reference Method: SM 2540 C-2011
Batch ID: P414209

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P414169

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P413918

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P413877

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: P413698

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.9		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.3		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P413783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	109		P	85 - 115
Calcium	107		P	85 - 115
Iron	108		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	106		P	85 - 115
Sodium	110		P	85 - 115
Zinc	106		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P413783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	99.3		P	85 - 115
Arsenic	98.8		P	85 - 115
Beryllium	94.2		P	85 - 115
Boron	102		P	85 - 115
Cadmium	97.8		P	85 - 115
Chromium	96.0		P	85 - 115
Copper	96.8		P	85 - 115
Lead	94.0		P	85 - 115
Nickel	98.6		P	85 - 115
Selenium	99.4		P	85 - 115
Silver	98.7		P	85 - 115
Thallium	95.3		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414104

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414108

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.6		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413964

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414010

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: P414075

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: P414179

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	97.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414227

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413990

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.2		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P414025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	96.4	90.7	P/P	70 - 121
Alachlor	82.6	86.9	P/P	68 - 119
Ametryn	83.6	90.2	P/P	64 - 139
Atrazine	93.6	95.2	P/P	76 - 120
Atrazine Desethyl	67.3	69.5	P/P	44 - 126
Azinphos Methyl	106	104	P/P	43 - 192
Azoxystrobin	109	101	P/P	36 - 224
Bromacil	71.5	74.2	P/P	52 - 121
Butylate	43.8	60.7	P/P	28 - 91.0
Caffeine	59.0	70.5	P/P	50 - 134

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P414025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbophenothion	82.8	94.4	P/P	56 - 129
Carfentrazone Ethyl	80.9	97.0	P/P	60 - 141
Chlorfenapyr	78.9	93.5	P/P	56 - 115
Chlorpyrifos Ethyl	78.1	94.2	P/P	60 - 118
Chlorpyrifos Methyl	94.8	95.0	P/P	68 - 119
Coumaphos	84.1	111	P/P	18 - 250
Cyanazine	88.7	96.9	P/P	61 - 250
Cyprodinil	83.5	90.3	P/P	55 - 145
Demeton	71.3	69.9	P/P	30 - 159
Diazinon	92.5	89.8	P/P	70 - 123
Difenoconazole	124	131	P/P	49 - 204
Dimethenamid	73.3	75.4	P/P	64 - 115
Dimethomorph	101	86.9	P/P	12 - 219
Disulfoton	79.4	87.8	P/P	44 - 125
Dithiopyr	78.3	85.7	P/P	64 - 115
EPTC	29.5	50.5	P/P	28 - 86.0
Ethion	58.2	84.6	P/P	33 - 125
Ethoprop	73.7	84.5	P/P	64 - 116
Etridiazole	35.2	53.3	P/P	34 - 91.0
Fenamiphos	83.9	96.7	P/P	12 - 127
Fenbuconazole	69.7	91.6	P/P	59 - 151
Fipronil	83.8	100	P/P	67 - 129
Fipronil Desulfinyl	103	112	P/P	65 - 127
Fipronil Sulfide	82.0	103	P/P	61 - 116
Fipronil Sulfone	72.8	91.6	P/P	55 - 117
Fluazifop-P-butyl	112	113	P/P	62 - 127
Fludioxonil	92.1	95.2	P/P	62 - 128
Flumioxazin	139	130	P/P	33 - 250
Flutolanil	74.7	83.2	P/P	56 - 127
Fluxapyroxad	70.3	80.7	P/P	45 - 128
Fonofos	83.0	84.0	P/P	62 - 111
Hexazinone	79.0	87.4	P/P	46 - 139
Imazalil	66.6	74.4	P/P	38 - 142
Iprodione	80.1	89.1	P/P	47 - 135
Loratadine	89.6	69.7	P/P	10 - 244
Malathion	103	118	P/P	61 - 139
Metalaxyl	81.5	89.2	P/P	10 - 119
Metolachlor	81.5	85.3	P/P	65 - 118
Metribuzin	98.9	95.2	P/P	51 - 250
Mevinphos	83.4	99.3	P/P	53 - 121
Molinate	45.9	69.8	P/P	42 - 96.0
Myclobutanil	86.0	88.8	P/P	55 - 128
Naled	72.5	91.1	P/P	10 - 98.0
Napropamide	73.5	84.7	P/P	49 - 121
Norflurazon	108	115	P/P	61 - 126
Oxadiazon	74.5	75.3	P/P	59 - 116
Oxyfluorfen	102	104	P/P	64 - 137
Parathion Ethyl	85.0	86.3	P/P	70 - 112
Parathion Methyl	108	98.7	P/P	76 - 133
Pendimethalin	82.6	73.7	P/P	52 - 117
Phenytoin	27.0	35.1	P/P	10 - 199
Phorate	83.0	76.7	P/P	48 - 121

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P414025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prodiamine	49.3	40.2	P/P	26 - 142
Prometon	72.7	78.7	P/P	43 - 123
Prometryn	81.6	88.4	P/P	66 - 127
Pronamide	94.1	95.0	P/P	75 - 121
Propanil	128	135	P/P	45 - 150
Propargite	50.7	67.7	P/P	42 - 208
Propiconazole	103	119	P/P	60 - 125
Pyraflufen Ethyl	109	106	P/P	70 - 138
Pyridaben	124	138	P/P	35 - 245
Pyriproxyfen	67.7	82.9	P/P	30 - 149
Simazine	102	103	P/P	72 - 125
Stirophos	67.5	87.8	P/P	29 - 164
Sulfentrazone	53.5	59.0	P/P	21 - 139
Tebuconazole	35.5	56.6	P/P	10 - 115
Terbufos	98.6	101	P/P	60 - 123
Terbuthylazine	90.1	88.5	P/P	72 - 115
Thiobencarb	76.1	75.7	P/P	31 - 139
Triadimefon	80.4	79.5	P/P	65 - 116

Reference Method: EPA 8321B
Batch ID: P413677

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	124		P	40 - 150
AMPA	88.0		P	40 - 150
Endothall	112		P	40 - 150
Glufosinate	98.6		P	40 - 150
Glyphosate	98.4		P	40 - 150
Sucralose	115		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P413773

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	56.6		P	40 - 150
2,4,5-T	41.1		P	40 - 150
Acetaminophen	56.6		P	30 - 150
Acetamiprid	87.5		P	40 - 150
Afidopyropen	56.1		P	30 - 150
Bentazon	108		P	30 - 150
Benzovindiflupyr	89.8		P	40 - 150
Carbamazepine	79.4		P	40 - 150
Clothianidin	85.4		P	40 - 150
Dinotefuran	92.8		P	40 - 150
Diuron	81.6		P	40 - 150
Fenuron	101		P	40 - 150
Fluridone	73.3		P	40 - 150
Hydrocodone	86.4		P	40 - 150
Ibuprofen	60.7		P	40 - 150
Imazapyr	80.7		P	40 - 150
Imidacloprid	84.3		P	40 - 150
Linuron	67.2		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P413773

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mandestrobin	73.1		P	40 - 150
MCPP	60.3		P	40 - 150
Naproxen	56.2		P	40 - 150
Primidone	90.4		P	40 - 150
Pyraclostrobin	70.2		P	40 - 150
Silvex	40.5		P	40 - 150
Thiamethoxam	89.5		P	40 - 150
Tolfenpyrad	45.9		P	30 - 150
Triclopyr	46.6		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P413916

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.2		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P413918

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.5		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P413877

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	92.4		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P413783

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326127	Barium	105	103	P/P	80 - 120
2326127	Calcium	106		P	80 - 120
2326127	Iron	107	102	P/P	80 - 120
2326127	Magnesium	105		P	80 - 120
2326127	Potassium	112	109	P/P	80 - 120
2326127	Sodium	110	107	P/P	80 - 120
2326127	Zinc	99.6	98.4	P/P	80 - 120
2326343	Barium	103		P	80 - 120
2326343	Calcium	93.0		P	80 - 120
2326343	Iron	102		P	80 - 120
2326343	Magnesium	95.5		P	80 - 120
2326343	Potassium	92.8		P	80 - 120
2326343	Sodium	94.2		P	80 - 120
2326343	Zinc	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P413783

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326127	Aluminum	100	102	P/P	80 - 120
2326127	Antimony	100	99.4	P/P	80 - 120
2326127	Arsenic	98.1	99.1	P/P	80 - 120
2326127	Beryllium	93.3	92.1	P/P	80 - 120
2326127	Boron	103	105	P/P	80 - 120
2326127	Cadmium	99.9	98.8	P/P	80 - 120
2326127	Chromium	97.3	98.5	P/P	80 - 120
2326127	Copper	93.3	93.0	P/P	80 - 120
2326127	Lead	94.2	93.6	P/P	80 - 120
2326127	Nickel	95.7	96.1	P/P	80 - 120
2326127	Selenium	98.4	99.2	P/P	80 - 120
2326127	Silver	97.4	97.3	P/P	80 - 120
2326127	Thallium	97.8	97.1	P/P	80 - 120
2326343	Aluminum	101		P	75 - 125
2326343	Antimony	102		P	75 - 125
2326343	Arsenic	101		P	75 - 125
2326343	Beryllium	92.6		P	75 - 125
2326343	Boron	103		P	75 - 125
2326343	Cadmium	102		P	75 - 125
2326343	Chromium	98.4		P	75 - 125
2326343	Copper	96.8		P	75 - 125
2326343	Lead	96.2		P	75 - 125
2326343	Nickel	96.8		P	75 - 125
2326343	Selenium	101		P	75 - 125
2326343	Silver	95.3		P	75 - 125
2326343	Thallium	99.4		P	75 - 125

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414104

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326039	Chloride	98.5		P	90 - 110
2326080	Chloride	99.6		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414108

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326039	Sulfate	95.6		P	90 - 110
2326080	Sulfate	97.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413964

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326065	Ammonia-N	97.2	96.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414010

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326065	Kjeldahl Nitrogen	104	108	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414075

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325442	Kjeldahl Nitrogen	111	106	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414179

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325607	NO2NO3-N	96.0	96.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414227

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326583	NO2NO3-N	96.8	96.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413990

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326082	Total-P	105	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326163	O-Phosphate-P	97.3	99.5	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P414025

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325768	Acetochlor	104		P	65 - 124
2325768	Alachlor	112		P	61 - 121
2325768	Ametryn	102		P	52 - 216

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P414025

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325768	Atrazine Desethyl	56.5		P	15 - 160
2325768	Azinphos Methyl	92.5		P	40 - 292
2325768	Azoxystrobin	126		P	12 - 242
2325768	Bromacil	92.6		P	54 - 167
2325768	Butylate	33.7		P	14 - 94.0
2325768	Caffeine	68.6		P	10 - 226
2325768	Carbophenothion	82.9		P	49 - 122
2325768	Carfentrazone Ethyl	80.9		P	53 - 138
2325768	Chlorfenapyr	63.1		P	50 - 150
2325768	Chlorpyrifos Ethyl	73.2		P	52 - 122
2325768	Chlorpyrifos Methyl	85.6		P	66 - 117
2325768	Coumaphos	88.2		P	50 - 220
2325768	Cyanazine	84.9		P	43 - 245
2325768	Cyprodinil	90.2		P	50 - 150
2325768	Demeton	80.5		P	43 - 188
2325768	Diazinon	93.9		P	69 - 131
2325768	Difenoconazole	137		P	34 - 231
2325768	Dimethenamid	76.5		P	55 - 118
2325768	Dimethomorph	121		P	50 - 150
2325768	Disulfoton	80.4		P	38 - 141
2325768	Dithiopyr	23.2		F	42 - 116
2325768	EPTC	30.4		P	18 - 85.0
2325768	Ethion	42.3		P	10 - 131
2325768	Ethoprop	85.5		P	65 - 129
2325768	Etridiazole	48.6		F	50 - 150
2325768	Fenamiphos	44.9		P	31 - 137
2325768	Fenbuconazole	88.9		P	57 - 160
2325768	Fipronil	81.8		P	62 - 132
2325768	Fipronil Desulfinyl	98.6		P	57 - 131
2325768	Fipronil Sulfide	65.0		P	15 - 138
2325768	Fipronil Sulfone	60.7		P	21 - 134
2325768	Fluazifop-P-butyl	89.8		P	54 - 133
2325768	Fludioxonil	81.0		P	58 - 127
2325768	Flumioxazin	127		P	33 - 300
2325768	Flutolanil	62.3		P	42 - 130
2325768	Fluxapyroxad	70.9		P	23 - 141
2325768	Fonofos	78.3		P	58 - 119
2325768	Hexazinone	83.9		P	68 - 172
2325768	Imazalil	77.4		P	48 - 283
2325768	Iprodione	71.2		P	38 - 140
2325768	Loratadine	103		P	50 - 150
2325768	Malathion	76.7		P	40 - 137
2325768	Metalaxyl	78.7		P	21 - 129
2325768	Metolachlor	77.7		P	55 - 122
2325768	Metribuzin	92.4		P	38 - 187
2325768	Mevinphos	90.6		P	54 - 134
2325768	Molinate	57.5		P	41 - 97.0
2325768	Myclobutanil	72.8		P	56 - 125
2325768	Naled	86.0		P	10 - 108
2325768	Napropamide	55.3		P	50 - 150
2325768	Norflurazon	67.2		P	32 - 122
2325768	Oxadiazon	63.0		P	40 - 119

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P414025

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325768	Oxyfluorfen	101		P	61 - 153
2325768	Parathion Ethyl	82.7		P	59 - 130
2325768	Parathion Methyl	113		P	65 - 155
2325768	Pendimethalin	93.4		P	49 - 138
2325768	Phenytoin	38.2		F	50 - 200
2325768	Phorate	78.3		P	54 - 161
2325768	Prodiamine	49.6		P	33 - 161
2325768	Prometon	69.3		P	48 - 140
2325768	Prometryn	44.2		F	55 - 134
2325768	Pronamide	93.4		P	66 - 137
2325768	Propanil	119		P	50 - 150
2325768	Propargite	45.1		F	50 - 200
2325768	Propiconazole	64.5		P	36 - 150
2325768	Pyraflufen Ethyl	67.3		P	50 - 150
2325768	Pyridaben	107		P	50 - 200
2325768	Pyriproxyfen	73.0		P	10 - 165
2325768	Stirophos	20.1		F	50 - 150
2325768	Sulfentrazone	55.9		P	34 - 140
2325768	Tebuconazole	30.0		P	10 - 127
2325768	Terbufos	95.6		P	59 - 138
2325768	Terbuthylazine	91.0		P	68 - 119
2325768	Thiobencarb	58.9		P	50 - 150
2325768	Triadimefon	58.2		P	50 - 150

Reference Method: EPA 8321B
Batch ID: P413677

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326011	Acesulfame K	90.0	92.6	P/P	40 - 150
2326011	AMPA	86.7	92.8	P/P	40 - 150
2326011	Endothall	103	108	P/P	40 - 150
2326011	Glufosinate	99.4	99.4	P/P	40 - 150
2326011	Glyphosate	95.5	94.6	P/P	40 - 150
2326011	Sucralose	97.3	103	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P413773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325881	2,4-D	63.6	61.6	P/P	40 - 150
2325881	2,4,5-T	44.0	40.8	P/P	40 - 150
2325881	Acetaminophen	31.0	31.2	P/P	30 - 150
2325881	Acetamiprid	77.4	77.7	P/P	40 - 150
2325881	Afidopyropen	42.7	42.8	P/P	30 - 150
2325881	Bentazon	150	144	P/P	30 - 150
2325881	Benzovindiflupyr	14.7	17.5	F/F	40 - 150
2325881	Carbamazepine	50.0	50.4	P/P	40 - 150
2325881	Clothianidin	52.0	52.4	P/P	40 - 150
2325881	Dinotefuran	92.5	97.8	P/P	40 - 150
2325881	Diuron	47.6	46.6	P/P	40 - 150
2325881	Fenuron	87.8	74.4	P/P	40 - 150
2325881	Fluridone	49.7	51.0	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P413773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325881	Hydrocodone	79.6	84.3	P/P	40 - 150
2325881	Ibuprofen	51.6	44.2	P/P	40 - 150
2325881	Imazapyr	77.1	73.2	P/P	40 - 150
2325881	Imidacloprid	89.5	93.4	P/P	40 - 150
2325881	Linuron	41.9	43.0	P/P	40 - 150
2325881	Mandestrobin	50.5	50.6	P/P	40 - 150
2325881	MCPP	73.9	68.2	P/P	40 - 150
2325881	Naproxen	57.4	63.4	P/P	40 - 150
2325881	Primidone	56.0	61.8	P/P	40 - 150
2325881	Pyraclostrobin	15.4	17.0	F/F	40 - 150
2325881	Silvex	40.6	40.8	P/P	40 - 150
2325881	Thiamethoxam	81.1	83.8	P/P	40 - 150
2325881	Tolfenpyrad	1.19	0.933	F/F	30 - 150
2325881	Triclopyr	46.5	45.9	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P413918

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326041	Fluoride	96.8	96.0	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P413877

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326178	Organic Carbon	89.0	91.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P413698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326080	Color (true)	1.22	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326144	Turbidity	2.31	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P413783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326127	Barium	1.85	Spike	P	0 - 20
2326127	Calcium	1.76	Spike	P	0 - 20
2326127	Iron	3.75	Spike	P	0 - 20
2326127	Magnesium	3.31	Spike	P	0 - 20
2326127	Potassium	3.29	Spike	P	0 - 20
2326127	Sodium	1.29	Spike	P	0 - 20
2326127	Zinc	1.24	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P413783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326127	Aluminum	1.49	Spike	P	0 - 20
2326127	Antimony	0.901	Spike	P	0 - 20
2326127	Arsenic	1.03	Spike	P	0 - 20
2326127	Beryllium	1.35	Spike	P	0 - 20
2326127	Boron	1.88	Spike	P	0 - 20
2326127	Cadmium	1.07	Spike	P	0 - 20
2326127	Chromium	1.21	Spike	P	0 - 20
2326127	Copper	0.272	Spike	P	0 - 20
2326127	Lead	0.628	Spike	P	0 - 20
2326127	Nickel	0.408	Spike	P	0 - 20
2326127	Selenium	0.814	Spike	P	0 - 20
2326127	Silver	0.0748	Spike	P	0 - 20
2326127	Thallium	0.664	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414104

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326039	Chloride	1.76	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326039	Sulfate	0.117	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413964

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326065	Ammonia-N	0.649	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414010

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326065	Kjeldahl Nitrogen	2.85	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414075

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325442	Kjeldahl Nitrogen	3.38	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414179

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325607	NO2NO3-N	0.519	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414227

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326583	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413990

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326082	Total-P	0.732	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P413696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326163	O-Phosphate-P	2.24	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P414025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Acetochlor	6.12	LCS	P	0 - 24
LFB	Alachlor	5.07	LCS	P	0 - 26
LFB	Ametryn	7.56	LCS	P	0 - 25
LFB	Atrazine	1.69	LCS	P	0 - 29
LFB	Atrazine Desethyl	3.25	LCS	P	0 - 62
LFB	Azinphos Methyl	1.40	LCS	P	0 - 76
LFB	Azoxystrobin	6.94	LCS	P	0 - 47
LFB	Bromacil	3.65	LCS	P	0 - 39
LFB	Butylate	32.4	LCS	P	0 - 35
LFB	Caffeine	17.7	LCS	P	0 - 27
LFB	Carbophenothion	13.0	LCS	P	0 - 28
LFB	Carfentrazone Ethyl	18.1	LCS	P	0 - 21
LFB	Chlorfenapyr	17.0	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	18.7	LCS	P	0 - 23
LFB	Chlorpyrifos Methyl	0.209	LCS	P	0 - 30
LFB	Coumaphos	28.0	LCS	P	0 - 30
LFB	Cyanazine	8.90	LCS	P	0 - 77
LFB	Cyprodinil	7.79	LCS	P	0 - 30
LFB	Demeton	1.94	LCS	P	0 - 48
LFB	Diazinon	3.03	LCS	P	0 - 25
LFB	Difenoconazole	6.12	LCS	P	0 - 37
LFB	Dimethenamid	2.86	LCS	P	0 - 21
LFB	Dimethomorph	15.1	LCS	P	0 - 30
LFB	Disulfoton	10.0	LCS	P	0 - 51
LFB	Dithiopyr	8.95	LCS	P	0 - 21
LFB	EPTC	52.4	LCS	F	0 - 41
LFB	Ethion	36.9	LCS	P	0 - 63
LFB	Ethoprop	13.7	LCS	P	0 - 38
LFB	Etridiazole	40.9	LCS	F	0 - 30
LFB	Fenamiphos	14.2	LCS	P	0 - 91
LFB	Fenbuconazole	27.1	LCS	P	0 - 36
LFB	Fipronil	17.8	LCS	P	0 - 32
LFB	Fipronil Desulfinyl	8.14	LCS	P	0 - 23
LFB	Fipronil Sulfide	22.5	LCS	P	0 - 31
LFB	Fipronil Sulfone	22.9	LCS	P	0 - 32
LFB	Fluazifop-P-butyl	0.426	LCS	P	0 - 23
LFB	Fludioxonil	3.30	LCS	P	0 - 23
LFB	Flumioxazin	6.69	LCS	P	0 - 39
LFB	Flutolanil	10.8	LCS	P	0 - 27
LFB	Fluxapyroxad	13.8	LCS	P	0 - 38
LFB	Fonofos	1.18	LCS	P	0 - 28
LFB	Hexazinone	10.2	LCS	P	0 - 63
LFB	Imazalil	11.2	LCS	P	0 - 58
LFB	Iprodione	10.7	LCS	P	0 - 42
LFB	Loratadine	25.0	LCS	P	0 - 30
LFB	Malathion	13.7	LCS	P	0 - 23
LFB	Metalaxyl	9.03	LCS	P	0 - 100
LFB	Metolachlor	4.53	LCS	P	0 - 27
LFB	Metribuzin	3.81	LCS	P	0 - 79
LFB	Mevinphos	17.4	LCS	P	0 - 58
LFB	Molinate	41.3	LCS	P	0 - 42

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P414025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Myclobutanil	3.24	LCS	P	0 - 27
LFB	Naled	22.8	LCS	P	0 - 32
LFB	Napropamide	14.2	LCS	P	0 - 30
LFB	Norflurazon	5.98	LCS	P	0 - 25
LFB	Oxadiazon	1.04	LCS	P	0 - 30
LFB	Oxyfluorfen	1.99	LCS	P	0 - 22
LFB	Parathion Ethyl	1.51	LCS	P	0 - 32
LFB	Parathion Methyl	9.10	LCS	P	0 - 30
LFB	Pendimethalin	11.4	LCS	P	0 - 39
LFB	Phenytoin	25.8	LCS	P	0 - 30
LFB	Phorate	7.84	LCS	P	0 - 41
LFB	Prodiamine	20.5	LCS	P	0 - 70
LFB	Prometon	7.89	LCS	P	0 - 47
LFB	Prometryn	8.04	LCS	P	0 - 30
LFB	Pronamide	0.911	LCS	P	0 - 25
LFB	Propanil	4.96	LCS	P	0 - 30
LFB	Propargite	28.8	LCS	P	0 - 30
LFB	Propiconazole	14.6	LCS	P	0 - 25
LFB	Pyraflufen Ethyl	2.30	LCS	P	0 - 30
LFB	Pyridaben	11.4	LCS	P	0 - 30
LFB	Pyriproxyfen	20.1	LCS	P	0 - 53
LFB	Simazine	1.22	LCS	P	0 - 25
LFB	Stirophos	26.1	LCS	P	0 - 30
LFB	Sulfentrazone	9.82	LCS	P	0 - 45
LFB	Tebuconazole	45.8	LCS	P	0 - 51
LFB	Terbufos	2.44	LCS	P	0 - 36
LFB	Terbuthylazine	1.74	LCS	P	0 - 24
LFB	Thiobencarb	0.493	LCS	P	0 - 30
LFB	Triadimefon	1.13	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P413677

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326011	Acesulfame K	2.85	Spike	P	0 - 30
2326011	AMPA	6.81	Spike	P	0 - 30
2326011	Endothall	5.04	Spike	P	0 - 30
2326011	Glufosinate	0.0354	Spike	P	0 - 30
2326011	Glyphosate	0.875	Spike	P	0 - 30
2326011	Sucralose	5.36	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P413773

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325881	2,4-D	3.19	Spike	P	0 - 30
2325881	2,4,5-T	7.43	Spike	P	0 - 30
2325881	Acetaminophen	0.586	Spike	P	0 - 30
2325881	Acetamiprid	0.398	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P413773

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325881	Afidopyropen	0.306	Spike	P	0 - 30
2325881	Bentazon	3.88	Spike	P	0 - 30
2325881	Benzovindiflupyr	17.5	Spike	P	0 - 30
2325881	Carbamazepine	0.862	Spike	P	0 - 30
2325881	Clothianidin	0.751	Spike	P	0 - 30
2325881	Dinotefuran	5.61	Spike	P	0 - 30
2325881	Diuron	1.94	Spike	P	0 - 30
2325881	Fenuron	16.6	Spike	P	0 - 30
2325881	Fluridone	1.85	Spike	P	0 - 30
2325881	Hydrocodone	5.73	Spike	P	0 - 30
2325881	Ibuprofen	15.4	Spike	P	0 - 30
2325881	Imazapyr	4.85	Spike	P	0 - 30
2325881	Imidacloprid	4.25	Spike	P	0 - 30
2325881	Linuron	2.69	Spike	P	0 - 30
2325881	Mandestrobin	0.0299	Spike	P	0 - 30
2325881	MCPP	7.97	Spike	P	0 - 30
2325881	Naproxen	9.83	Spike	P	0 - 30
2325881	Primidone	9.92	Spike	P	0 - 30
2325881	Pyraclostrobin	9.84	Spike	P	0 - 30
2325881	Silvex	0.586	Spike	P	0 - 30
2325881	Thiamethoxam	3.29	Spike	P	0 - 30
2325881	Tolfenpyrad	24.5	Spike	P	0 - 30
2325881	Triclopyr	1.16	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P413916

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326041	Total Alkalinity	0.113	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P414209

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326039	TDS	5.88	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P413918

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326041	Fluoride	0.480	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P413877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326178	Organic Carbon	1.55	Spike	P	0 - 20

Quality Assurance Report
Precision

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2326124
Field Sample ID: STEINCANAL

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	83.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	47.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	66.8	P	30 - 160
EPA 8321B	Diuron-d6	62.3	P	30 - 160
EPA 8321B	Endothall-d6	99.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	101	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.4	P	30 - 160
EPA 8321B	Primidone-d5	72.6	P	30 - 160
EPA 8321B	Sucralose-d6	113	P	30 - 160

Lab Sample ID: 2326125
Field Sample ID: Rocky Wds Rd

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	59.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	53.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	83.1	P	30 - 160
EPA 8321B	Diuron-d6	75.1	P	30 - 160
EPA 8321B	Endothall-d6	110	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	104	P	30 - 160
EPA 8321B	Ibuprofen-d3	62.6	P	30 - 160
EPA 8321B	Primidone-d5	78.4	P	30 - 160
EPA 8321B	Sucralose-d6	116	P	30 - 160

Lab Sample ID: 2326128
Field Sample ID: STEINCANAL

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	65.4	P	20 - 200
EPA 8270E	Simazine-d10	103	P	71 - 140
EPA 8270E	Terbufos-d10	62.3	P	62 - 131

Lab Sample ID: 2326129
Field Sample ID: Rocky Wds Rd

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	75.4	P	20 - 200
EPA 8270E	Simazine-d10	86.4	P	71 - 140
EPA 8270E	Terbufos-d10	67.1	P	62 - 131

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A112063
Included Lab Sample IDs: 2326114, 2326115

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.8	99.0	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1
Run ID: A112064
Included Lab Sample IDs: 2326110, 2326111

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A112080
Included Lab Sample IDs: 2326110, 2326111

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

Reference Method: EPA 8321B
Run ID: A112145
Included Lab Sample IDs: 2326124, 2326125

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	103	103	P/P	60 - 160
Sucralose	90.7	91.3	P/P	60 - 160

Reference Method: SM 5310 B-2011
Run ID: A112165
Included Lab Sample IDs: 2326112, 2326113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.7	94.2	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A112166
Included Lab Sample IDs: 2326124, 2326125

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	95.8	92.8	P/P	60 - 160
Endothall	110	102	P/P	60 - 160
Glufosinate	97.8	84.6	P/P	60 - 160
Glyphosate	90.1	85.4	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A112175
Included Lab Sample IDs: 2326124

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endothall	105	104	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A112188
Included Lab Sample IDs: 2326126, 2326127

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	102	P/P	90 - 110
Aluminum	102	104	P/P	90 - 110
Antimony	97.5	98.2	P/P	90 - 110
Antimony	98.2	97.6	P/P	90 - 110
Arsenic	97.6	98.2	P/P	90 - 110
Arsenic	99.7	97.6	P/P	90 - 110
Beryllium	94.1	93.0	P/P	90 - 110
Boron	104	103	P/P	90 - 110
Boron	98.5	104	P/P	90 - 110
Cadmium	97.7	98.9	P/P	90 - 110
Cadmium	98.9	98.1	P/P	90 - 110
Chromium	96.2	97.1	P/P	90 - 110
Chromium	97.1	97.1	P/P	90 - 110
Copper	97.2	97.5	P/P	90 - 110
Copper	97.5	97.2	P/P	90 - 110
Lead	96.7	96.3	P/P	90 - 110
Lead	96.8	96.7	P/P	90 - 110
Nickel	97.6	97.4	P/P	90 - 110
Nickel	98.2	97.6	P/P	90 - 110
Selenium	98.4	98.5	P/P	90 - 110
Selenium	98.5	98.1	P/P	90 - 110
Silver	98.6	98.7	P/P	90 - 110
Silver	98.7	98.8	P/P	90 - 110
Thallium	92.1	92.9	P/P	90 - 110
Thallium	92.9	91.7	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A112189
Included Lab Sample IDs: 2326110, 2326111

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.5	96.9	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A112189
Included Lab Sample IDs: 2326110, 2326111

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A112198
Included Lab Sample IDs: 2326110, 2326111

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A112204
Included Lab Sample IDs: 2326112, 2326113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	98.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A112213
Included Lab Sample IDs: 2326126

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	99.3	98.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A112214
Included Lab Sample IDs: 2326126, 2326127

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	103	105	P/P	90 - 110
Calcium	99.0	101	P/P	90 - 110
Iron	99.0	101	P/P	90 - 110
Magnesium	98.5	100	P/P	90 - 110
Potassium	98.6	99.6	P/P	90 - 110
Sodium	99.2	100	P/P	90 - 110
Zinc	101	103	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A112222
Included Lab Sample IDs: 2326124, 2326125

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	97.0	89.8	P/P	50 - 150
2,4,5-T	88.6	92.7	P/P	50 - 150
Acetaminophen	104	100	P/P	60 - 160
Acetamiprid	114	108	P/P	50 - 150
Afidopyropen	98.7	100	P/P	50 - 150
Bentazon	99.2	104	P/P	50 - 160
Benzovindiflupyr	111	112	P/P	50 - 150
Carbamazepine	106	97.3	P/P	60 - 150
Clothianidin	101	114	P/P	60 - 150
Dinotefuran	99.7	101	P/P	50 - 150
Diuron	97.0	97.9	P/P	60 - 160
Fenuron	96.8	94.7	P/P	60 - 150
Fluridone	104	100	P/P	60 - 160
Hydrocodone	104	106	P/P	60 - 150
Ibuprofen	91.0	87.8	P/P	50 - 160
Imazapyr	91.6	91.8	P/P	50 - 150
Imidacloprid	99.0	91.5	P/P	60 - 150
Linuron	98.7	95.8	P/P	60 - 150
Mandestrobin	101	102	P/P	50 - 150
MCPP	94.8	89.3	P/P	50 - 150
Naproxen	120	111	P/P	50 - 160
Primidone	104	98.6	P/P	60 - 150
Pyraclostrobin	104	102	P/P	60 - 150
Silvex	88.4	93.4	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A112222
Included Lab Sample IDs: 2326124, 2326125

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Thiamethoxam	98.0	96.7	P/P	50 - 150
Tolfenpyrad	111	107	P/P	60 - 150
Triclopyr	91.6	92.3	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A112285
Included Lab Sample IDs: 2326112, 2326113

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A112294
Included Lab Sample IDs: 2326113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	94.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A112329
Included Lab Sample IDs: 2326112

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112339
Included Lab Sample IDs: 2326112

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

Reference Method: EPA 8270E
Run ID: A112410
Included Lab Sample IDs: 2326128, 2326129

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	98.2		P	80 - 120
Ametryn	95.3		P	80 - 120
Atrazine	94.2		P	80 - 120
Atrazine Desethyl	111		P	80 - 120
Azinphos Methyl	113		P	80 - 120
Azoxystrobin	96.5		P	80 - 120
Bromacil	95.9		P	80 - 120
Butylate	94.4		P	80 - 120
Caffeine	92.6		P	80 - 120
Carbophenothion	108		P	80 - 120
Carfentrazone Ethyl	106		P	80 - 120
Chlorfenapyr	111		P	80 - 120
Chlorpyrifos Ethyl	108		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112410
Included Lab Sample IDs: 2326128, 2326129

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorpyrifos Methyl	107		P	80 - 120
Coumaphos	113		P	80 - 120
Cyanazine	102		P	80 - 120
Cyprodinil	100		P	80 - 120
Demeton	112		P	80 - 120
Diazinon	99.1		P	80 - 120
Difenoconazole	116		P	80 - 120
Dimethenamid	101		P	80 - 120
Dimethomorph	95.7		P	80 - 120
Disulfoton	104		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	102		P	80 - 120
Ethion	114		P	80 - 120
Ethoprop	111		P	80 - 120
Etridiazole	99.0		P	80 - 120
Fenamiphos	112		P	80 - 120
Fenbuconazole	101		P	80 - 120
Fipronil	107		P	80 - 120
Fipronil Desulfinyl	108		P	80 - 120
Fipronil Sulfide	115		P	80 - 120
Fipronil Sulfone	106		P	80 - 120
Fluazifop-P-butyl	114		P	80 - 120
Fludioxonil	108		P	80 - 120
Flumioxazin	107		P	80 - 120
Flutolanil	97.4		P	80 - 120
Fluxapyroxad	95.4		P	80 - 120
Fonofos	110		P	80 - 120
Hexazinone	99.3		P	80 - 120
Imazalil	113		P	80 - 120
Iprodione	111		P	80 - 120
Loratadine	97.3		P	80 - 120
Malathion	109		P	80 - 120
Metalaxyl	90.3		P	80 - 120
Metolachlor	97.4		P	80 - 120
Metribuzin	100		P	80 - 120
Mevinphos	119		P	80 - 120
Molinate	98.2		P	80 - 120
Myclobutanil	112		P	80 - 120
Naled	117		P	80 - 120
Napropamide	109		P	80 - 120
Norflurazon	98.4		P	80 - 120
Oxadiazon	101		P	80 - 120
Oxyfluorfen	108		P	80 - 120
Parathion Ethyl	97.9		P	80 - 120
Parathion Methyl	95.1		P	80 - 120
Pendimethalin	89.3		P	80 - 120
Phenytoin	119		P	80 - 120
Phorate	111		P	80 - 120
Prodiamine	111		P	80 - 120
Prometon	97.4		P	80 - 120
Prometryn	94.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112410
Included Lab Sample IDs: 2326128, 2326129

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pronamide	93.9		P	80 - 120
Propanil	100		P	80 - 120
Propargite	105		P	80 - 120
Propiconazole	94.7		P	80 - 120
Pyraflufen Ethyl	99.0		P	80 - 120
Pyridaben	113		P	80 - 120
Pyriproxyfen	97.1		P	80 - 120
Simazine	113		P	80 - 120
Stirophos	107		P	80 - 120
Sulfentrazone	109		P	80 - 120
Tebuconazole	109		P	80 - 120
Terbufos	110		P	80 - 120
Terbuthylazine	101		P	80 - 120
Thiobencarb	91.2		P	80 - 120
Triadimefon	96.7		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112419
Included Lab Sample IDs: 2326113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.1	100	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			Precision		
							LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	99.9						1.22	
EPA 180.1 Rev. 2.0	Turbidity	97.3						2.31	
EPA 200.7 Rev. 4.4	Barium	109		105	103	103			1.85
	Calcium	107		106	93.0				1.76
	Iron	108		107	102	102			3.75
	Magnesium	104		105	95.5				3.31
	Potassium	106		112	109	92.8			3.29
	Sodium	110		110	107	94.2			1.29
	Zinc	106		99.6	98.4	101			1.24
EPA 200.8 Rev. 5.4	Aluminum	100		100	102	101			1.49
	Antimony	99.3		100	99.4	102			0.901
	Arsenic	98.8		98.1	99.1	101			1.03
	Beryllium	94.2		93.3	92.1	92.6			1.35
	Boron	102		103	105	103			1.88
	Cadmium	97.8		99.9	98.8	102			1.07
	Chromium	96.0		97.3	98.5	98.4			1.21
	Copper	96.8		93.3	93.0	96.8			0.272
	Lead	94.0		94.2	93.6	96.2			0.628
	Nickel	98.6		95.7	96.1	96.8			0.408
	Selenium	99.4		98.4	99.2	101			0.814
	Silver	98.7		97.4	97.3	95.3			0.0748
	Thallium	95.3		97.8	97.1	99.4			0.664
EPA 300.0 Rev. 2.1	Chloride	98.5		98.5	99.6			1.76	
	Sulfate	97.6		95.6	97.0			0.117	
EPA 350.1 Rev. 2.0	Ammonia-N	97.0		97.2	96.4				0.649
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103		104	108				2.85
	Kjeldahl Nitrogen	102		111	106				3.38
EPA 353.2 Rev. 2.0	NO2NO3-N	97.0		96.0	96.5				0.519
	NO2NO3-N	99.5		96.8	96.8				0.0
EPA 365.1 Rev. 2.0	Total-P	101		105	104				0.732
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.2		97.3	99.5				2.24
EPA 8270E	Acetochlor	90.7	96.4	104			6.12		
	Alachlor	86.9	82.6	112			5.07		
	Ametryn	90.2	83.6	102			7.56		
	Atrazine	95.2	93.6				1.69		
	Atrazine Desethyl	69.5	67.3	56.5			3.25		
	Azinphos Methyl	104	106	92.5			1.40		
	Azoxystrobin	101	109	126			6.94		
	Bromacil	74.2	71.5	92.6			3.65		
	Butylate	43.8	60.7	33.7			32.4		
	Caffeine	59.0	70.5	68.6			17.7		
	Carbophenothion	82.8	94.4	82.9			13.0		
	Carfentrazone Ethyl	80.9	97.0	80.9			18.1		
	Chlorfenapyr	78.9	93.5	63.1			17.0		
	Chlorpyrifos Ethyl	78.1	94.2	73.2			18.7		
	Chlorpyrifos Methyl	94.8	95.0	85.6			0.209		
	Coumaphos	84.1	111	88.2			28.0		
	Cyanazine	88.7	96.9	84.9			8.90		
	Cyprodinil	83.5	90.3	90.2			7.79		
	Demeton	71.3	69.9	80.5			1.94		
	Diazinon	92.5	89.8	93.9			3.03		
	Difenoconazole	124	131	137			6.12		
	Dimethenamid	73.3	75.4	76.5			2.86		
	Dimethomorph	101	86.9	121			15.1		

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery	Precision		
					LCS	SMP	MS
EPA 8270E	Disulfoton	79.4	87.8	80.4	10.0		
	Dithiopyr	78.3	85.7	23.2	8.95		
	EPTC	29.5	50.5	30.4	52.4		
	Ethion	58.2	84.6	42.3	36.9		
	Ethoprop	73.7	84.5	85.5	13.7		
	Etridiazole	35.2	53.3	48.6	40.9		
	Fenamiphos	83.9	96.7	44.9	14.2		
	Fenbuconazole	69.7	91.6	88.9	27.1		
	Fipronil	83.8	100	81.8	17.8		
	Fipronil Desulfinyl	103	112	98.6	8.14		
	Fipronil Sulfide	82.0	103	65.0	22.5		
	Fipronil Sulfone	72.8	91.6	60.7	22.9		
	Fluazifop-P-butyl	112	113	89.8	0.426		
	Fludioxonil	92.1	95.2	81.0	3.30		
	Flumioxazin	139	130	127	6.69		
	Flutolanil	74.7	83.2	62.3	10.8		
	Fluxapyroxad	70.3	80.7	70.9	13.8		
	Fonofos	83.0	84.0	78.3	1.18		
	Hexazinone	79.0	87.4	83.9	10.2		
	Imazalil	66.6	74.4	77.4	11.2		
	Iprodione	80.1	89.1	71.2	10.7		
	Loratadine	89.6	69.7	103	25.0		
	Malathion	103	118	76.7	13.7		
	Metalaxyl	81.5	89.2	78.7	9.03		
	Metolachlor	81.5	85.3	77.7	4.53		
	Metribuzin	98.9	95.2	92.4	3.81		
	Mevinphos	83.4	99.3	90.6	17.4		
	Molinate	45.9	69.8	57.5	41.3		
	Myclobutanil	86.0	88.8	72.8	3.24		
	Naled	72.5	91.1	86.0	22.8		
	Napropamide	73.5	84.7	55.3	14.2		
	Norflurazon	108	115	67.2	5.98		
	Oxadiazon	74.5	75.3	63.0	1.04		
	Oxyfluorfen	102	104	101	1.99		
	Parathion Ethyl	85.0	86.3	82.7	1.51		
	Parathion Methyl	108	98.7	113	9.10		
	Pendimethalin	82.6	73.7	93.4	11.4		
	Phenytoin	27.0	35.1	38.2	25.8		
	Phorate	83.0	76.7	78.3	7.84		
	Prodiamine	49.3	40.2	49.6	20.5		
	Prometon	72.7	78.7	69.3	7.89		
	Prometryn	81.6	88.4	44.2	8.04		
	Pronamide	94.1	95.0	93.4	0.911		
	Propanil	128	135	119	4.96		
	Propargite	50.7	67.7	45.1	28.8		
	Propiconazole	103	119	64.5	14.6		
	Pyraflufen Ethyl	109	106	67.3	2.30		
	Pyridaben	124	138	107	11.4		
	Pyriproxyfen	67.7	82.9	73.0	20.1		
	Simazine	102	103		1.22		
	Stirophos	67.5	87.8	20.1	26.1		
	Sulfentrazone	53.5	59.0	55.9	9.82		
	Tebuconazole	35.5	56.6	30.0	45.8		
	Terbufos	98.6	101	95.6	2.44		

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Terbuthylazine	90.1	88.5	91.0		1.74		
	Thiobencarb	76.1	75.7	58.9		0.493		
	Triadimefon	80.4	79.5	58.2		1.13		
EPA 8321B	2,4-D	56.6		63.6	61.6			3.19
	2,4,5-T	41.1		44.0	40.8			7.43
	Acesulfame K	124		90.0	92.6			2.85
	Acetaminophen	56.6		31.0	31.2			0.586
	Acetamiprid	87.5		77.4	77.7			0.398
	Afidopyropen	56.1		42.7	42.8			0.306
	AMPA	88.0		86.7	92.8			6.81
	Bentazon	108		150	144			3.88
	Benzovindiflupyr	89.8		14.7	17.5			17.5
	Carbamazepine	79.4		50.0	50.4			0.862
	Clothianidin	85.4		52.0	52.4			0.751
	Dinotefuran	92.8		92.5	97.8			5.61
	Diuron	81.6		47.6	46.6			1.94
	Endothall	112		103	108			5.04
	Fenuron	101		87.8	74.4			16.6
	Fluridone	73.3		49.7	51.0			1.85
	Glufosinate	98.6		99.4	99.4			0.0354
	Glyphosate	98.4		95.5	94.6			0.875
	Hydrocodone	86.4		79.6	84.3			5.73
	Ibuprofen	60.7		51.6	44.2			15.4
	Imazapyr	80.7		77.1	73.2			4.85
	Imidacloprid	84.3		89.5	93.4			4.25
	Linuron	67.2		41.9	43.0			2.69
	Mandestrobin	73.1		50.5	50.6			0.0299
	MCPP	60.3		73.9	68.2			7.97
	Naproxen	56.2		57.4	63.4			9.83
	Primidone	90.4		56.0	61.8			9.92
	Pyraclostrobin	70.2		15.4	17.0			9.84
	Silvex	40.5		40.6	40.8			0.586
	Sucralose	115		97.3	103			5.36
	Thiamethoxam	89.5		81.1	83.8			3.29
	Tolfenpyrad	45.9		1.19	0.933			24.5
	Triclopyr	46.6		46.5	45.9			1.16
SM 2320 B-2011	Total Alkalinity	98.2					0.113	
SM 2540 C-2011	TDS						5.88	
SM 4500-F- C-2011	Fluoride	97.5		96.8	96.0			0.480
SM 5310 B-2011	Organic Carbon	92.4		89.0	91.6			1.55

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2326110, 2326111
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2326110, 2326111
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2326126, 2326127
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2326126, 2326127
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2326110, 2326111
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2326110, 2326111
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2326112, 2326113

Reference Method Descriptions

Method	Description	Associated Samples
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2326112, 2326113
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2326112, 2326113
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2326112, 2326113
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2326114, 2326115
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2326128, 2326129
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2326124, 2326125
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2326110, 2326111
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2326110, 2326111
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2326110, 2326111
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2326110, 2326111
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2326112, 2326113

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	05/11/2022			05/11/2022 11:26	Anna M. Plaviak	2326111
	05/11/2022			05/11/2022 11:28	Anna M. Plaviak	2326110
EPA 180.1 Rev. 2.0	05/11/2022			05/11/2022 11:03	Khloe J Berg	2326110
	05/11/2022			05/11/2022 11:05	Khloe J Berg	2326111
EPA 200.7 Rev. 4.4	05/11/2022	05/13/2022 10:25	Megan Whitefoot	05/17/2022 17:57	McKinley C Carter	2326126
	05/11/2022	05/13/2022 10:25	Megan Whitefoot	05/17/2022 18:05	McKinley C Carter	2326127
EPA 200.8 Rev. 5.4	05/11/2022	05/13/2022 10:25	Megan Whitefoot	05/16/2022 15:51	Emily M Philpot	2326127
	05/11/2022	05/13/2022 10:25	Megan Whitefoot	05/16/2022 17:22	Emily M Philpot	2326126
	05/11/2022	05/13/2022 10:25	Megan Whitefoot	05/17/2022 15:29	Alexander Thompson	2326126
EPA 300.0 Rev. 2.1	05/11/2022			05/18/2022 21:06	Anna M. Plaviak	2326110
	05/11/2022			05/18/2022 21:18	Anna M. Plaviak	2326111
EPA 350.1 Rev. 2.0	05/11/2022			05/17/2022 13:02	Ping Hua	2326112
	05/11/2022			05/17/2022 13:03	Ping Hua	2326113
EPA 351.2 Rev. 2.0	05/11/2022	05/19/2022 15:17	Samantha L Bates	05/23/2022 11:53	Alexandra J Mattheus	2326112
	05/11/2022	05/25/2022 11:36	Samantha L Bates	05/25/2022 12:37	Alexandra J Mattheus	2326113
EPA 353.2 Rev. 2.0	05/11/2022			05/20/2022 13:58	Nathaniel J Jones	2326113
	05/11/2022			05/23/2022 10:05	Beverly Y. Sanders	2326112
EPA 365.1 Rev. 2.0	05/11/2022	05/18/2022 16:09	Simonne.V. Calhoun	05/19/2022 18:24	Sarah A Nixon	2326112
	05/11/2022	05/18/2022 16:09	Simonne.V. Calhoun	05/19/2022 18:25	Sarah A Nixon	2326113
EPA 365.1 Rev. 2.0 dissolved	05/11/2022			05/11/2022 11:28	James L Waggerby	2326114
	05/11/2022			05/11/2022 11:29	James L Waggerby	2326115
EPA 8270E	05/11/2022	05/16/2022 08:00	Rasheda Ghaffari	05/19/2022 20:03	Vandana T. Nagar	2326128
	05/11/2022	05/16/2022 08:00	Rasheda Ghaffari	05/19/2022 20:29	Vandana T. Nagar	2326129
EPA 8321B	05/11/2022	05/13/2022 09:00	Manjita Shrestha	05/13/2022 18:12	Manjita Shrestha	2326124
	05/11/2022	05/13/2022 09:00	Manjita Shrestha	05/13/2022 18:25	Manjita Shrestha	2326125
	05/11/2022	05/13/2022 09:00	Manjita Shrestha	05/14/2022 14:28	Manjita Shrestha	2326124
	05/11/2022	05/13/2022 09:00	Manjita Shrestha	05/14/2022 14:43	Manjita Shrestha	2326125
	05/11/2022	05/13/2022 09:00	Manjita Shrestha	05/16/2022 09:54	Manjita Shrestha	2326124
	05/11/2022	05/13/2022 09:30	June Rhew	05/18/2022 07:49	Juyoung Kim	2326124
	05/11/2022	05/13/2022 09:30	June Rhew	05/18/2022 08:24	Juyoung Kim	2326125
SM 2320 B-2011	05/11/2022			05/17/2022 01:16	Dale L. Simmons	2326110
	05/11/2022			05/17/2022 01:30	Dale L. Simmons	2326111
SM 2540 C-2011	05/11/2022			05/13/2022 15:08	Yijie Li	2326110, 2326111
SM 2540 D-2011	05/11/2022			05/13/2022 15:08	Yijie Li	2326110, 2326111
SM 4500-F- C-2011	05/11/2022			05/17/2022 01:16	Dale L. Simmons	2326110
	05/11/2022			05/17/2022 01:30	Dale L. Simmons	2326111
SM 5310 B-2011	05/11/2022			05/14/2022 00:41	Khloe J Berg	2326112
	05/11/2022			05/14/2022 00:56	Khloe J Berg	2326113