Chemical Analysis Report

SE-DIST-2022-09-20-01

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Lake Clarke LVI and Lox Creek**
Request ID: **RQ-2022-09-05-30**
Customer: **SE-DIST**
Project ID: **SMP**

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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant Date Certified: 11-OCT-2022 10:17

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: Tidal Creek to Lox **Collection Date/Time: 09/19/2022 13:45**

Field ID: G2SE0027 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357476	EPA 180.1 Rev. 2.0	Turbidity	5.2		NTU	P419881	
	SM 2320 B-2011	Total Alkalinity	145		mg CaCO3/L	P420276	
	SM 2540 D-2011	TSS	10	I	mg/L	P420243	
	SM 4500-F- C-2011	Fluoride	0.66		mg F/L	P420469	
2357477	EPA 350.1 Rev. 2.0	Ammonia-N	0.029		mg N/L	P420108	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.60		mg N/L	P420076	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.051		mg N/L	P420298	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P419931	
	SM 5310 B-2011	Organic Carbon	7.2		mg C/L	P420035	

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

Sample Location: Lake Clarke East of Wagner Circle **Collection Date/Time: 09/19/2022 11:50**

Field ID: G3SE0066 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357474	DEP SOP: NU-094-1	Color (true)	38		PCU	P419859	
	EPA 180.1 Rev. 2.0	Turbidity	4.1		NTU	P419881	
	EPA 300.0 Rev. 2.1	Chloride	32		mg Cl/L	P420090	
		Sulfate	11		mg SO4/L	P420095	
	SM 2320 B-2011	Total Alkalinity	123		mg CaCO3/L	P420276	
	SM 2540 C-2011	TDS	179		mg/L	P420294	
	SM 2540 D-2011	TSS	7	I	mg/L	P420239	
	SM 4500-F- C-2011	Fluoride	0.091	I	mg F/L	P420215	
2357475	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P420247	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P420073	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P420155	
	EPA 365.1 Rev. 2.0	Total-P	0.092		mg P/L	P419947	
	SM 5310 B-2011	Organic Carbon	9.2		mg C/L	P419945	
2357490	EPA 8321B	2,4-D	0.10		ug/L	P419841	
		Acesulfame K	0.19	I	ug/L	P419829	
		2,4,5-T	0.0040	U	ug/L	P419841	
		AMPA	1.6		ug/L	P419829	
		Acetaminophen	0.0080	U	ug/L	P419841	
		Acetamiprid	0.0020	U	ug/L	P419841	
		Endothall	0.25	U	ug/L	P419829	MS
		Glufosinate	0.10	U	ug/L	P419829	
		Glyphosate	2.0		ug/L	P419829	
		Afidopyropen	0.0020	U	ug/L	P419841	
		Bentazon	0.069		ug/L	P419841	
		Sucralose	0.60		ug/L	P419829	
		Benzovindiflupyr	0.0020	U	ug/L	P419841	
		Carbamazepine	0.0026	I	ug/L	P419841	
		Clothianidin	0.0020	U	ug/L	P419841	
		Dinotefuran	0.0061	I	ug/L	P419841	
		Diuron	0.014		ug/L	P419841	
		Fenuron	0.017	I	ug/L	P419841	
		Fluridone	0.031		ug/L	P419841	
		Imazapyr	0.27		ug/L	P419841	
		Hydrocodone	0.0020	U	ug/L	P419841	
		Ibuprofen	0.020	U	ug/L	P419841	
		Imidacloprid	0.039		ug/L	P419841	
		Linuron	0.0040	U	ug/L	P419841	
		Mandestrobin	0.0020	U	ug/L	P419841	
		MCPP	0.0023	I	ug/L	P419841	
		Naproxen	0.0080	U	ug/L	P419841	
		Primidone	0.0043	I	ug/L	P419841	
		Pyraclostrobin	0.0020	U	ug/L	P419841	
		Silvex	0.0040	U	ug/L	P419841	
		Thiamethoxam	0.0020	U	ug/L	P419841	

Field ID: G3SE0066 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357490	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P419841	
		Triclopyr	0.0040	U	ug/L	P419841	
2357495	EPA 200.7 Rev. 4.4	Calcium	51.6		mg/L	P419879	
		Iron	69	I	ug/L	P419879	
		Magnesium	2.51		mg/L	P419879	
		Potassium	2.2		mg/L	P419879	
		Sodium	19.2		mg/L	P419879	
		Strontium	466		ug/L	P419879	
		Tin	3.0	U	ug/L	P419879	
		Titanium	0.85	I	ug/L	P419879	
		Vanadium	2.5	I	ug/L	P419879	
		Zinc	5.0	U	ug/L	P419879	
	EPA 200.8 Rev. 5.4	Aluminum	28		ug/L	P419879	
		Antimony	0.27		ug/L	P419879	
		Arsenic	1.77		ug/L	P419879	
		Barium	9.95		ug/L	P419879	
		Beryllium	0.010	U	ug/L	P419879	
		Boron	36.1		ug/L	P419879	
		Cadmium	0.020	U	ug/L	P419879	
		Chromium	0.46	I	ug/L	P419879	
		Cobalt	0.040	I	ug/L	P419879	
		Copper	0.72	I	ug/L	P419879	
		Lead	0.20	U	ug/L	P419879	
		Manganese	9.90		ug/L	P419879	
		Molybdenum	0.85		ug/L	P419879	
		Nickel	0.50	U	ug/L	P419879	
		Selenium	0.20	U	ug/L	P419879	
		Silver	0.010	U	ug/L	P419879	
		Thallium	0.10	U	ug/L	P419879	
	SM 2340 B-2011	Hardness	139		mg/L	P419879	
2357502	EPA 8270E	Oxybenzone**	9.6	U	ng/L	P419914	
		Acetochlor	0.24	U	ng/L	P419914	
		Octinoxate**	19	U	ng/L	P419914	MS
		Alachlor	0.24	U	ng/L	P419914	
		Avobenzone**	96	U	ng/L	P419914	
		Ametryn	0.58	U	ng/L	P419914	
		Atrazine	32		ng/L	P419914	
		PBDE-47**	3.8	U	ng/L	P419914	RPD
		Atrazine Desethyl	2.0	I	ng/L	P419914	
		PBDE-99**	4.8	U	ng/L	P419914	MS, RPD
		Azinphos Methyl	1.9	U	ng/L	P419914	
		Tri-o-cresyl Phosphate**	5.8	U	ng/L	P419914	
		Azoxystrobin	0.49	I	ng/L	P419914	
		Bromacil	0.48	U	ng/L	P419914	

Field ID: G3SE0066 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357502	EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P419914	MS, RPD
		Butylate	0.38	U	ng/L	P419914	
		Dechlorane Plus**	29	U	ng/L	P419914	MS, RPD
		Caffeine**	53		ng/L	P419914	
		Carbophenothion	0.19	U	ng/L	P419914	
		Carfentrazone Ethyl	0.096	U	ng/L	P419914	
		Chlorfenapyr	0.17	U	ng/L	P419914	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P419914	
		Chlorpyrifos Methyl	0.048	U	ng/L	P419914	
		Coumaphos	0.48	U	ng/L	P419914	
		Cyanazine	3.1	U	ng/L	P419914	
		Cyprodinil	0.096	U	ng/L	P419914	
		Demeton	1.4	U	ng/L	P419914	
		Diazinon	0.12	U	ng/L	P419914	
		Difenoconazole	0.58	U	ng/L	P419914	
		Dimethenamid	0.096	U	ng/L	P419914	
		Dimethomorph	0.17	U	ng/L	P419914	MS, RPD
		Disulfoton	0.48	U	ng/L	P419914	
		Dithiopyr	0.18	I	ng/L	P419914	
		EPTC	1.2	U	ng/L	P419914	
		Ethion	0.14	U	ng/L	P419914	
		Ethoprop	0.096	U	ng/L	P419914	
		Etridiazole	0.14	U	ng/L	P419914	
		Fenamiphos	0.48	U	ng/L	P419914	
		Fenbuconazole	0.12	U	ng/L	P419914	
		Fipronil	1.1		ng/L	P419914	
		Fipronil Desulfinyl**	0.76		ng/L	P419914	
		Fipronil Sulfide	0.66		ng/L	P419914	
		Fipronil Sulfone	1.4		ng/L	P419914	
		Fluazifop-P-butyl	0.096	U	ng/L	P419914	
		Fludioxonil	0.12	U	ng/L	P419914	
		Flumioxazin	1.7	U	ng/L	P419914	
		Flutolanil	0.096	U	ng/L	P419914	
		Fluxapyroxad	0.17	I	ng/L	P419914	
		Fonofos	0.19	U	ng/L	P419914	
		Hexazinone	1.5	I	ng/L	P419914	
		Imazalil	0.72	U	ng/L	P419914	
		Iprodione	0.58	U	ng/L	P419914	
		Loratadine**	0.096	U	ng/L	P419914	MS, RPD
		Malathion	0.34	U	ng/L	P419914	
		Metalaxyl	0.72	U	ng/L	P419914	
		Metolachlor	0.85	I	ng/L	P419914	
		Metribuzin	2.4	U	ng/L	P419914	
		Mevinphos	1.0	U	ng/L	P419914	

Field ID: G3SE0066 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357502	EPA 8270E	Molinate	0.29	U	ng/L	P419914	
		Myclobutanil	0.53	I	ng/L	P419914	
		Naled	1.4	U	ng/L	P419914	RPD
		Napropamide	0.38	U	ng/L	P419914	
		Norflurazon	0.48	U	ng/L	P419914	
		Oxadiazon	22		ng/L	P419914	
		Oxyfluorfen	0.14	U	ng/L	P419914	
		Parathion Ethyl	0.24	U	ng/L	P419914	
		Parathion Methyl	0.53	U	ng/L	P419914	
		Pendimethalin	0.96	U	ng/L	P419914	
		Phenytoin**	3.4	U	ng/L	P419914	MS, RPD
		Phorate	0.51	U	ng/L	P419914	
		Prodiamine	0.17	U	ng/L	P419914	
		Prometon	0.87	U	ng/L	P419914	
		Prometryn	0.19	U	ng/L	P419914	
		Pronamide	0.14	U	ng/L	P419914	
		Propanil	0.12	U	ng/L	P419914	
		Propargite	1.4	U	ng/L	P419914	
		Propiconazole	1.4	I	ng/L	P419914	
		Pyraflufen Ethyl	0.24	U	ng/L	P419914	
		Pyridaben	0.43	U	ng/L	P419914	
		Pyriproxyfen	0.12	U	ng/L	P419914	
		Simazine	0.48	U	ng/L	P419914	
		Stirophos	0.12	U	ng/L	P419914	
		Sulfentrazone	7.7		ng/L	P419914	
		Tebuconazole	1.3	I	ng/L	P419914	
		Terbufos	0.096	U	ng/L	P419914	
		Terbuthylazine	0.41	U	ng/L	P419914	
		Thiobencarb	0.58	U	ng/L	P419914	
		Triadimefon	0.49	I	ng/L	P419914	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.
EPA 8270E: MS accuracy for atrazine and myclobutanil not assessed due to high content of these parameters in the sample spiked.

Sample Location: Lake Clarke East of Edgewater Circle **Collection Date/Time: 09/19/2022 12:10**

Field ID: G3SE0065 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357471	DEP SOP: NU-094-1	Color (true)	38	A	PCU	P419859	
	EPA 180.1 Rev. 2.0	Turbidity	4.3		NTU	P419881	
	EPA 300.0 Rev. 2.1	Chloride	34		mg Cl/L	P420090	
		Sulfate	12		mg SO4/L	P420095	
	SM 2320 B-2011	Total Alkalinity	130		mg CaCO3/L	P420276	
	SM 2540 C-2011	TDS	204	A	mg/L	P420294	
	SM 2540 D-2011	TSS	8	I A	mg/L	P420239	
	SM 4500-F- C-2011	Fluoride	0.10		mg F/L	P420215	
2357472	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P420247	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P420074	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.020		mg N/L	P420155	
	EPA 365.1 Rev. 2.0	Total-P	0.076		mg P/L	P419947	
	SM 5310 B-2011	Organic Carbon	9.4		mg C/L	P419945	
2357473	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P419844	
2357489	EPA 8321B	2,4-D	0.18		ug/L	P419841	
		Acesulfame K	0.19	I	ug/L	P419829	
		2,4,5-T	0.0040	U	ug/L	P419841	
		AMPA	1.8		ug/L	P419829	
		Acetaminophen	0.0080	U	ug/L	P419841	
		Acetamiprid	0.0020	U	ug/L	P419841	
		Endothall	0.25	U	ug/L	P419829	MS
		Glufosinate	0.10	U	ug/L	P419829	
		Glyphosate	3.1		ug/L	P419829	
		Afidopyropen	0.0020	U	ug/L	P419841	
		Bentazon	0.12		ug/L	P419841	
		Sucralose	0.54		ug/L	P419829	
		Benzovindiflupyr	0.0020	U	ug/L	P419841	
		Carbamazepine	0.0030	I	ug/L	P419841	
		Clothianidin	0.0020	U	ug/L	P419841	
		Dinotefuran	0.0070	I	ug/L	P419841	
		Diuron	0.0089		ug/L	P419841	
		Fenuron	0.016	U	ug/L	P419841	
		Fluridone	0.030		ug/L	P419841	
		Imazapyr	0.41		ug/L	P419841	
		Hydrocodone	0.0020	U	ug/L	P419841	
		Ibuprofen	0.020	U	ug/L	P419841	
		Imidacloprid	0.039		ug/L	P419841	
		Linuron	0.0040	U	ug/L	P419841	
		Mandestrobin	0.0020	U	ug/L	P419841	
		MCPP	0.0025	I	ug/L	P419841	
		Naproxen	0.0080	U	ug/L	P419841	
		Primidone	0.0047	I	ug/L	P419841	
		Pyraclostrobin	0.0020	U	ug/L	P419841	

Field ID: G3SE0065 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357489	EPA 8321B	Silvex	0.0040	U	ug/L	P419841	
		Thiamethoxam	0.0020	U	ug/L	P419841	
		Tolfenpyrad	0.0020	U	ug/L	P419841	
		Triclopyr	0.0040	U	ug/L	P419841	
2357494	EPA 200.7 Rev. 4.4	Calcium	56.9		mg/L	P419879	
		Iron	67	I	ug/L	P419879	
		Magnesium	2.82		mg/L	P419879	
		Potassium	2.4		mg/L	P419879	
		Sodium	21.0		mg/L	P419879	
		Strontium	538		ug/L	P419879	
		Tin	3.0	U	ug/L	P419879	
		Titanium	0.90	I	ug/L	P419879	
		Vanadium	2.5	I	ug/L	P419879	
		Zinc	5.0	U	ug/L	P419879	
	EPA 200.8 Rev. 5.4	Aluminum	21		ug/L	P419879	
		Antimony	0.28		ug/L	P419879	
		Arsenic	1.67		ug/L	P419879	
		Barium	11.7		ug/L	P419879	
		Beryllium	0.010	U	ug/L	P419879	
		Boron	38.5		ug/L	P419879	
		Cadmium	0.020	U	ug/L	P419879	
		Chromium	0.42	I	ug/L	P419879	
		Cobalt	0.046	I	ug/L	P419879	
		Copper	0.73	I	ug/L	P419879	
		Lead	0.20	U	ug/L	P419879	
		Manganese	10.3		ug/L	P419879	
		Molybdenum	0.90		ug/L	P419879	
		Nickel	0.50	U	ug/L	P419879	
		Selenium	0.20	U	ug/L	P419879	
		Silver	0.010	U	ug/L	P419879	
		Thallium	0.10	U	ug/L	P419879	
	SM 2340 B-2011	Hardness	154		mg/L	P419879	
2357501	EPA 8270E	Oxybenzone**	10	U	ng/L	P419914	
		Acetochlor	0.25	U	ng/L	P419914	
		Octinoxate**	20	U	ng/L	P419914	MS
		Alachlor	0.25	U	ng/L	P419914	
		Avobenzone**	100	U	ng/L	P419914	
		Ametryn	0.60	U	ng/L	P419914	
		Atrazine	24		ng/L	P419914	
		PBDE-47**	4.0	U	ng/L	P419914	RPD
		Atrazine Desethyl	2.0	I	ng/L	P419914	
		PBDE-99**	5.0	U	ng/L	P419914	MS, RPD
		Azinphos Methyl	2.0	U	ng/L	P419914	
		Tri-o-cresyl Phosphate**	6.0	U	ng/L	P419914	
		Azoxystrobin	0.60	I	ng/L	P419914	

Field ID: G3SE0065 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357501	EPA 8270E	Bromacil	0.50	U	ng/L	P419914	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P419914	MS, RPD
		Butylate	0.40	U	ng/L	P419914	
		Dechlorane Plus**	30	U	ng/L	P419914	MS, RPD
		Caffeine**	53		ng/L	P419914	
		Carbophenothion	0.20	U	ng/L	P419914	
		Carfentrazone Ethyl	0.10	U	ng/L	P419914	
		Chlorfenapyr	0.17	U	ng/L	P419914	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P419914	
		Chlorpyrifos Methyl	0.050	U	ng/L	P419914	
		Coumaphos	0.50	U	ng/L	P419914	
		Cyanazine	3.2	U	ng/L	P419914	
		Cyprodinil	0.10	U	ng/L	P419914	
		Demeton	1.5	U	ng/L	P419914	
		Diazinon	0.12	U	ng/L	P419914	
		Difenoconazole	0.60	U	ng/L	P419914	
		Dimethenamid	0.10	U	ng/L	P419914	
		Dimethomorph	0.17	U	ng/L	P419914	MS, RPD
		Disulfoton	0.50	U	ng/L	P419914	
		Dithiopyr	0.17	U	ng/L	P419914	
		EPTC	1.2	U	ng/L	P419914	
		Ethion	0.15	U	ng/L	P419914	
		Ethoprop	0.10	U	ng/L	P419914	
		Etridiazole	0.15	U	ng/L	P419914	
		Fenamiphos	0.50	U	ng/L	P419914	
		Fenbuconazole	0.12	U	ng/L	P419914	
		Fipronil	2.0		ng/L	P419914	
		Fipronil Desulfinyl**	1.0		ng/L	P419914	
		Fipronil Sulfide	0.79		ng/L	P419914	
		Fipronil Sulfone	1.5		ng/L	P419914	
		Fluazifop-P-butyl	0.10	U	ng/L	P419914	
		Fludioxonil	0.12	U	ng/L	P419914	
		Flumioxazin	1.7	U	ng/L	P419914	
		Flutolanil	0.11	I	ng/L	P419914	
		Fluxapyroxad	0.25	I	ng/L	P419914	
		Fonofos	0.20	U	ng/L	P419914	
		Hexazinone	1.7	I	ng/L	P419914	
		Imazalil	0.75	U	ng/L	P419914	
		Iprodione	0.60	U	ng/L	P419914	
		Loratadine**	0.10	U	ng/L	P419914	MS, RPD
		Malathion	0.35	U	ng/L	P419914	
		Metalaxyl	0.75	U	ng/L	P419914	
		Metolachlor	0.69	I	ng/L	P419914	
		Metribuzin	2.5	U	ng/L	P419914	

Field ID: G3SE0065 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357501	EPA 8270E	Mevinphos	1.0	U	ng/L	P419914	
		Molinate	0.30	U	ng/L	P419914	
		Myclobutanil	0.72	I	ng/L	P419914	
		Naled	1.5	U	ng/L	P419914	RPD
		Napropamide	0.40	U	ng/L	P419914	
		Norflurazon	0.50	U	ng/L	P419914	
		Oxadiazon	41		ng/L	P419914	
		Oxyfluorfen	0.15	U	ng/L	P419914	
		Parathion Ethyl	0.25	U	ng/L	P419914	
		Parathion Methyl	0.55	U	ng/L	P419914	
		Pendimethalin	1.0	U	ng/L	P419914	
		Phenytoin**	3.5	U	ng/L	P419914	MS, RPD
		Phorate	0.52	U	ng/L	P419914	
		Prodiamine	0.17	U	ng/L	P419914	
		Prometon	0.90	U	ng/L	P419914	
		Prometryn	0.20	U	ng/L	P419914	
		Pronamide	0.15	U	ng/L	P419914	
		Propanil	0.12	U	ng/L	P419914	
		Propargite	1.5	U	ng/L	P419914	
		Propiconazole	1.9	I	ng/L	P419914	
		Pyraflufen Ethyl	0.25	U	ng/L	P419914	
		Pyridaben	0.45	U	ng/L	P419914	
		Pyriproxyfen	0.12	U	ng/L	P419914	
		Simazine	0.50	U	ng/L	P419914	
		Stirophos	0.12	U	ng/L	P419914	
		Sulfentrazone	6.0		ng/L	P419914	
		Tebuconazole	1.0	I	ng/L	P419914	
		Terbufos	0.10	U	ng/L	P419914	
		Terbuthylazine	0.42	U	ng/L	P419914	
		Thiobencarb	0.60	U	ng/L	P419914	
		Triadimefon	0.32	I	ng/L	P419914	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.
EPA 8270E: MS accuracy for atrazine and myclobutanil not assessed due to high content of these parameters in the sample spiked.

Sample Location: FB **Collection Date/Time: 09/19/2022 12:20**

Field ID: FB_09192022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357478	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P419859	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P419881	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P420090	
		Sulfate	0.20	U	mg SO4/L	P420095	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P420276	
	SM 2540 C-2011	TDS	15	U	mg/L	P420294	
	SM 2540 D-2011	TSS	2	U	mg/L	P420239	
	SM 4500-F- C-2011	Fluoride	0.036	I	mg F/L	P420215	
2357479	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P420247	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P420074	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P420155	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P419947	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P419945	
2357480	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P419844	
2357491	EPA 8321B	2,4-D	0.0020	U	ug/L	P419841	
		Acesulfame K	0.10	U	ug/L	P419829	
		2,4,5-T	0.0040	U	ug/L	P419841	
		AMPA	0.10	U	ug/L	P419829	
		Acetaminophen	0.0080	U	ug/L	P419841	
		Acetamiprid	0.0020	U	ug/L	P419841	
		Endothall	0.25	U	ug/L	P419829	MS
		Glufosinate	0.10	U	ug/L	P419829	
		Glyphosate	0.10	U	ug/L	P419829	
		Afidopyropen	0.0020	U	ug/L	P419841	
		Bentazon	8.0E-04	U	ug/L	P419841	
		Sucralose	0.010	U	ug/L	P419829	
		Benzovindiflupyr	0.0020	U	ug/L	P419841	
		Carbamazepine	8.0E-04	U	ug/L	P419841	
		Clothianidin	0.0020	U	ug/L	P419841	
		Dinotefuran	0.0020	U	ug/L	P419841	
		Diuron	0.0020	U	ug/L	P419841	
		Fenuron	0.016	U	ug/L	P419841	
		Fluridone	8.0E-04	U	ug/L	P419841	
		Imazapyr	0.0040	U	ug/L	P419841	
		Hydrocodone	0.0020	U	ug/L	P419841	
		Ibuprofen	0.020	U	ug/L	P419841	
		Imidacloprid	0.0020	U	ug/L	P419841	
		Linuron	0.0040	U	ug/L	P419841	
		Mandestrobin	0.0020	U	ug/L	P419841	
		MCPP	0.0020	U	ug/L	P419841	
		Naproxen	0.0080	U	ug/L	P419841	
		Primidone	0.0040	U	ug/L	P419841	
		Pyraclostrobin	0.0020	U	ug/L	P419841	

Field ID: FB_09192022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357491	EPA 8321B	Silvex	0.0040	U	ug/L	P419841	
		Thiamethoxam	0.0020	U	ug/L	P419841	
		Tolfenpyrad	0.0020	U	ug/L	P419841	
		Triclopyr	0.0040	U	ug/L	P419841	
2357496	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P419879	
		Iron	30	U	ug/L	P419879	
		Magnesium	0.040	U	mg/L	P419879	
		Potassium	0.30	U	mg/L	P419879	
		Sodium	0.50	U	mg/L	P419879	
		Strontium	2.0	U	ug/L	P419879	
		Tin	3.0	U	ug/L	P419879	
		Titanium	0.75	U	ug/L	P419879	
		Vanadium	2.0	U	ug/L	P419879	
		Zinc	5.0	U	ug/L	P419879	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P419879	
		Antimony	0.050	U	ug/L	P419879	
		Arsenic	0.050	U	ug/L	P419879	
		Barium	0.20	U	ug/L	P419879	
		Beryllium	0.010	U	ug/L	P419879	
		Boron	99.1		ug/L	P419879	
		Cadmium	0.020	U	ug/L	P419879	
		Chromium	0.40	U	ug/L	P419879	
		Cobalt	0.020	U	ug/L	P419879	
		Copper	0.40	U	ug/L	P419879	
		Lead	0.20	U	ug/L	P419879	
		Manganese	0.10	U	ug/L	P419879	
		Molybdenum	0.15	U	ug/L	P419879	
		Nickel	0.50	U	ug/L	P419879	
		Selenium	0.20	U	ug/L	P419879	
		Silver	0.010	U	ug/L	P419879	
		Thallium	0.10	U	ug/L	P419879	
2357503	EPA 8270E	Oxybenzone**	9.5	U	ng/L	P419914	
		Acetochlor	0.24	U	ng/L	P419914	
		Octinoxate**	19	U	ng/L	P419914	MS
		Alachlor	0.24	U	ng/L	P419914	
		Avobenzone**	95	U	ng/L	P419914	
		Ametryn	0.57	U	ng/L	P419914	
		Atrazine	0.24	U	ng/L	P419914	
		PBDE-47**	3.8	U	ng/L	P419914	RPD
		Atrazine Desethyl	1.4	U	ng/L	P419914	
		PBDE-99**	4.8	U	ng/L	P419914	MS, RPD
		Azinphos Methyl	1.9	U	ng/L	P419914	
		Tri-o-cresyl Phosphate**	5.7	U	ng/L	P419914	
		Azoxystrobin	0.48	U	ng/L	P419914	
		Bromacil	0.48	U	ng/L	P419914	

Field ID: FB_09192022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357503	EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	11	U	ng/L	P419914	MS, RPD
		Butylate	0.38	U	ng/L	P419914	
		Dechlorane Plus**	29	U	ng/L	P419914	MS, RPD
		Caffeine**	7.1	U	ng/L	P419914	
		Carbophenothion	0.19	U	ng/L	P419914	
		Carfentrazone Ethyl	0.095	U	ng/L	P419914	
		Chlorfenapyr	0.17	U	ng/L	P419914	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P419914	
		Chlorpyrifos Methyl	0.048	U	ng/L	P419914	
		Coumaphos	0.48	U	ng/L	P419914	
		Cyanazine	3.1	U	ng/L	P419914	
		Cyprodinil	0.095	U	ng/L	P419914	
		Demeton	1.4	U	ng/L	P419914	
		Diazinon	0.12	U	ng/L	P419914	
		Difenoconazole	0.57	U	ng/L	P419914	
		Dimethenamid	0.095	U	ng/L	P419914	
		Dimethomorph	0.17	U	ng/L	P419914	MS, RPD
		Disulfoton	0.48	U	ng/L	P419914	
		Dithiopyr	0.17	U	ng/L	P419914	
		EPTC	1.2	U	ng/L	P419914	
		Ethion	0.14	U	ng/L	P419914	
		Ethoprop	0.095	U	ng/L	P419914	
		Etridiazole	0.14	U	ng/L	P419914	
		Fenamiphos	0.48	U	ng/L	P419914	
		Fenbuconazole	0.12	U	ng/L	P419914	
		Fipronil	0.24	U	ng/L	P419914	
		Fipronil Desulfinyl**	0.12	U	ng/L	P419914	
		Fipronil Sulfide	0.14	U	ng/L	P419914	
		Fipronil Sulfone	0.14	U	ng/L	P419914	
		Fluazifop-P-butyl	0.095	U	ng/L	P419914	
		Fludioxonil	0.12	U	ng/L	P419914	
		Flumioxazin	1.7	U	ng/L	P419914	
		Flutolanil	0.095	U	ng/L	P419914	
		Fluxapyroxad	0.095	U	ng/L	P419914	
		Fonofos	0.19	U	ng/L	P419914	
		Hexazinone	0.48	U	ng/L	P419914	
		Imazalil	0.71	U	ng/L	P419914	
		Iprodione	0.57	U	ng/L	P419914	
		Loratadine**	0.095	U	ng/L	P419914	MS, RPD
		Malathion	0.33	U	ng/L	P419914	
		Metalaxyl	0.71	U	ng/L	P419914	
		Metolachlor	0.33	U	ng/L	P419914	
		Metribuzin	2.4	U	ng/L	P419914	
		Mevinphos	1.0	U	ng/L	P419914	

Field ID: FB_09192022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357503	EPA 8270E	Molinate	0.29	U	ng/L	P419914	
		Myclobutanil	0.24	U	ng/L	P419914	
		Naled	1.4	U	ng/L	P419914	RPD
		Napropamide	0.38	U	ng/L	P419914	
		Norflurazon	0.48	U	ng/L	P419914	
		Oxadiazon	0.29	U	ng/L	P419914	
		Oxyfluorfen	0.14	U	ng/L	P419914	
		Parathion Ethyl	0.24	U	ng/L	P419914	
		Parathion Methyl	0.52	U	ng/L	P419914	
		Pendimethalin	0.95	U	ng/L	P419914	
		Phenytoin**	3.3	U	ng/L	P419914	MS, RPD
		Phorate	0.50	U	ng/L	P419914	
		Prodiamine	0.17	U	ng/L	P419914	
		Prometon	0.86	U	ng/L	P419914	
		Prometryn	0.19	U	ng/L	P419914	
		Pronamide	0.14	U	ng/L	P419914	
		Propanil	0.12	U	ng/L	P419914	
		Propargite	1.4	U	ng/L	P419914	
		Propiconazole	0.48	U	ng/L	P419914	
		Pyraflufen Ethyl	0.24	U	ng/L	P419914	
		Pyridaben	0.43	U	ng/L	P419914	
		Pyriproxyfen	0.12	U	ng/L	P419914	
		Simazine	0.48	U	ng/L	P419914	
		Stirophos	0.12	U	ng/L	P419914	
		Sulfentrazone	0.48	U	ng/L	P419914	
		Tebuconazole	0.48	U	ng/L	P419914	
		Terbufos	0.095	U	ng/L	P419914	
		Terbuthylazine	0.41	U	ng/L	P419914	
		Thiobencarb	0.57	U	ng/L	P419914	
		Triadimefon	0.24	U	ng/L	P419914	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: The result was confirmed on 10/05/2022.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MS accuracy for some analytes could not be assessed due to a high concentration of parameters in the spiked sample.
EPA 200.8 Rev. 5.4: The boron result was confirmed in the undigested sample on 09/26/2022.
EPA 8270E: MS accuracy for atrazine and myclobutanil not assessed due to high content of these parameters in the sample spiked.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P419859

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P419881

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P419879

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: P419879

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P420090

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P420095

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420108

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420247

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420073

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420074

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420076

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420155

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420298

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419931

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419947

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P419844

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

Reference Method: EPA 8270E
Batch ID: P419914

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
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	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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P419914

Component	Result	Code	Units
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	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
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P419914

Component	Result	Code	Units
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
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P419914

Component	Result	Code	Units
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
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8321B
Batch ID: P419829

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: P419841

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P419841

Component	Result	Code	Units
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	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: P420276

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

Reference Method: SM 2540 C-2011
Batch ID: P420294

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P420239

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P420243

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P420215

Component	Result	Code	Units

Quality Assurance Report
Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P420215

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P420469

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P419945

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

Reference Method: SM 5310 B-2011
Batch ID: P420035

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: P419859

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P419881

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P419879

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	107		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	98.8		P	85 - 115
Sodium	101		P	85 - 115
Strontium	104		P	85 - 115
Tin	104		P	85 - 115
Titanium	106		P	85 - 115
Vanadium	104		P	85 - 115
Zinc	103		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P419879

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	105		P	85 - 115
Arsenic	102		P	85 - 115
Barium	105		P	85 - 115
Beryllium	98.0		P	85 - 115
Boron	104		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	105		P	85 - 115
Cobalt	96.8		P	85 - 115
Copper	99.7		P	85 - 115
Lead	99.4		P	85 - 115
Manganese	105		P	85 - 115
Molybdenum	99.2		P	85 - 115
Nickel	99.6		P	85 - 115
Selenium	101		P	85 - 115
Silver	87.5		P	85 - 115
Thallium	98.6		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P420090

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P420095

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420108

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420247

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420073

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420074

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	107		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420076

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420155

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	103		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420298

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	103		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419931

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419947

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P419844

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

Reference Method: EPA 8270E
Batch ID: P419914

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	130		P	50 - 150
Acetochlor	97.9		P	70 - 121
Alachlor	84.9		P	68 - 119
Ametryn	86.4		P	64 - 139
Atrazine	96.7		P	76 - 120
Atrazine Desethyl	69.5		P	44 - 126
Avobenzone	79.1		P	76 - 212
Azinphos Methyl	129		P	43 - 192
Azoxystrobin	110		P	36 - 224
Bromacil	86.7		P	52 - 121
Butylate	62.5		P	28 - 91.0
Caffeine	64.5		P	50 - 134
Carbophenothion	101		P	56 - 129
Carfentrazone Ethyl	101		P	60 - 141
Chlorfenapyr	96.6		P	56 - 115
Chlorpyrifos Ethyl	97.4		P	60 - 118
Chlorpyrifos Methyl	97.7		P	68 - 119
Coumaphos	101		P	18 - 250
Cyanazine	170		P	61 - 250
Cyprodinil	89.7		P	55 - 145
Dechlorane Plus	145		P	50 - 150
Demeton	80.1		P	30 - 159
Diazinon	94.3		P	70 - 123
Difenoconazole	124		P	49 - 204
Dimethenamid	79.5		P	64 - 115
Dimethomorph	107		P	12 - 219
Disulfoton	90.5		P	44 - 125
Dithiopyr	94.5		P	64 - 115
EPTC	59.3		P	28 - 86.0
Ethion	84.1		P	33 - 125
Ethoprop	87.9		P	64 - 116
Etridiazole	63.6		P	34 - 91.0
Fenamiphos	112		P	12 - 127
Fenbuconazole	96.3		P	59 - 151
Fipronil	88.2		P	67 - 129
Fipronil Desulfinyl	103		P	65 - 127
Fipronil Sulfide	77.6		P	61 - 116
Fipronil Sulfone	74.8		P	55 - 117
Fluazifop-P-butyl	98.1		P	62 - 127
Fludioxonil	86.8		P	62 - 128

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P419914

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Flumioxazin	129		P	33 - 250
Flutolanil	90.1		P	56 - 127
Fluxapyroxad	83.0		P	45 - 128
Fonofos	85.1		P	62 - 111
Hexazinone	93.7		P	46 - 139
Imazalil	76.5		P	38 - 142
Iprodione	91.2		P	47 - 135
Loratadine	110		P	10 - 244
Malathion	104		P	61 - 139
Metalaxyl	84.7		P	10 - 119
Metolachlor	91.5		P	65 - 118
Metribuzin	92.0		P	51 - 250
Mevinphos	78.3		P	53 - 121
Molinate	71.6		P	42 - 96.0
Myclobutanil	91.6		P	55 - 128
Naled	96.5		P	10 - 98.0
Napropamide	84.5		P	49 - 121
Norflurazon	86.3		P	61 - 126
Octinoxate	125		P	30 - 159
Oxadiazon	78.2		P	59 - 116
Oxybenzone	91.6		P	61 - 139
Oxyfluorfen	133		P	64 - 137
Parathion Ethyl	94.3		P	70 - 112
Parathion Methyl	105		P	76 - 133
PBDE-47	109		P	50 - 150
PBDE-99	124		P	50 - 150
Pendimethalin	81.6		P	52 - 117
Phenytoin	24.4		P	10 - 199
Phorate	81.1		P	48 - 121
Prodiamine	67.9		P	26 - 142
Prometon	80.7		P	43 - 123
Prometryn	87.5		P	66 - 127
Pronamide	101		P	75 - 121
Propanil	80.5		P	45 - 150
Propargite	81.0		P	42 - 208
Propiconazole	89.6		P	60 - 125
Pyraflufen Ethyl	87.7		P	70 - 138
Pyridaben	102		P	35 - 245
Pyriproxyfen	87.0		P	30 - 149
Simazine	100		P	72 - 125
Stirophos	83.0		P	29 - 164
Sulfentrazone	88.0		P	21 - 139
Tebuconazole	59.6		P	10 - 115
Terbufos	108		P	60 - 123
Terbuthylazine	90.8		P	72 - 115
Thiobencarb	85.6		P	31 - 139
Tri-o-cresyl Phosphate	112		P	50 - 150
Triadimefon	86.7		P	65 - 116

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P419829

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	104		P	40 - 150
AMPA	103		P	40 - 150
Endothall	90.7		P	40 - 150
Glufosinate	94.8		P	40 - 150
Glyphosate	94.1		P	40 - 150
Sucralose	100		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P419841

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	71.6		P	30 - 160
2,4,5-T	65.9		P	30 - 160
Acetaminophen	99.5		P	30 - 150
Acetamiprid	86.2		P	30 - 160
Afidopyropen	71.1		P	30 - 160
Bentazon	90.7		P	30 - 150
Benzovindiflupyr	84.4		P	30 - 160
Carbamazepine	87.7		P	30 - 160
Clothianidin	98.6		P	30 - 160
Dinotefuran	105		P	30 - 160
Diuron	58.8		P	30 - 160
Fenuron	107		P	30 - 160
Fluridone	92.4		P	30 - 160
Hydrocodone	96.5		P	30 - 160
Ibuprofen	84.4		P	30 - 160
Imazapyr	91.7		P	30 - 160
Imidacloprid	93.3		P	30 - 160
Linuron	91.9		P	30 - 160
Mandestrobin	95.2		P	30 - 160
MCPP	78.9		P	30 - 160
Naproxen	81.2		P	30 - 160
Primidone	95.1		P	30 - 160
Pyraclostrobin	82.2		P	30 - 160
Silvex	61.4		P	30 - 160
Thiamethoxam	92.7		P	30 - 160
Tolfenpyrad	64.9		P	30 - 160
Triclopyr	64.4		P	30 - 160

Reference Method: SM 2320 B-2011
Batch ID: P420276

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.7		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P420215

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.9		P	94 - 104

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P420469

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P419945

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.6		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P420035

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.4		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P419879

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357110	Calcium	102		P	80 - 120
2357110	Iron	107	111	P/P	80 - 120
2357110	Magnesium	102	110	P/P	80 - 120
2357110	Potassium	99.7	108	P/P	80 - 120
2357110	Sodium	101		P	80 - 120
2357110	Strontium	103	108	P/P	80 - 120
2357110	Tin	102	106	P/P	80 - 120
2357110	Titanium	106	111	P/P	80 - 120
2357110	Vanadium	104	107	P/P	80 - 120
2357110	Zinc	102	105	P/P	80 - 120
2357111	Calcium	99.5		P	80 - 120
2357111	Iron	112		P	80 - 120
2357111	Magnesium	113		P	80 - 120
2357111	Potassium	108		P	80 - 120
2357111	Sodium	99.3		P	80 - 120
2357111	Strontium	110		P	80 - 120
2357111	Tin	106		P	80 - 120
2357111	Titanium	110		P	80 - 120
2357111	Vanadium	109		P	80 - 120
2357111	Zinc	104		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P419879

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357110	Aluminum	102	98.2	P/P	80 - 120
2357110	Antimony	111	105	P/P	80 - 120
2357110	Arsenic	110	104	P/P	80 - 120
2357110	Barium	108	103	P/P	80 - 120
2357110	Beryllium	104	98.8	P/P	80 - 120
2357110	Boron	106	99.3	P/P	80 - 120
2357110	Cadmium	107	101	P/P	80 - 120
2357110	Chromium	110	105	P/P	80 - 120
2357110	Cobalt	101	97.3	P/P	80 - 120
2357110	Copper	104	99.8	P/P	80 - 120
2357110	Lead	103	99.4	P/P	80 - 120
2357110	Manganese	109	104	P/P	80 - 120
2357110	Molybdenum	105	100	P/P	80 - 120
2357110	Nickel	104	100	P/P	80 - 120
2357110	Selenium	104	101	P/P	80 - 120
2357110	Silver	88.9	85.9	P/P	80 - 120
2357110	Thallium	104	99.6	P/P	80 - 120
2357111	Aluminum	101		P	80 - 120
2357111	Antimony	108		P	80 - 120
2357111	Arsenic	106		P	80 - 120
2357111	Barium	106		P	80 - 120
2357111	Beryllium	98.6		P	80 - 120
2357111	Boron	102		P	80 - 120
2357111	Cadmium	104		P	80 - 120
2357111	Chromium	106		P	80 - 120
2357111	Cobalt	98.5		P	80 - 120
2357111	Copper	103		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P419879

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357111	Lead	101		P	80 - 120
2357111	Manganese	105		P	80 - 120
2357111	Molybdenum	102		P	80 - 120
2357111	Nickel	102		P	80 - 120
2357111	Selenium	102		P	80 - 120
2357111	Silver	87.6		P	80 - 120
2357111	Thallium	102		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P420090

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357378	Chloride	105		P	90 - 110
2357457	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P420095

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357378	Sulfate	102		P	90 - 110
2357457	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420108

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358021	Ammonia-N	94.2	96.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357504	Ammonia-N	99.6	96.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420076

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358510	Kjeldahl Nitrogen	105	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420155

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357472	NO2NO3-N	103	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420298

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357773	NO2NO3-N	104	101	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419931

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357477	Total-P	96.3	95.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419947

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357504	Total-P	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P419844

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357507	O-Phosphate-P	98.3	98.1	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P419914

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358210	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	170	125	F/P	50 - 150
2358210	Acetochlor	92.9	103	P/P	65 - 124
2358210	Alachlor	72.1	88.9	P/P	61 - 121
2358210	Ametryn	99.1	120	P/P	52 - 216
2358210	Atrazine Desethyl	73.6	55.3	P/P	15 - 160
2358210	Avobenzone	85.0	70.4	P/P	59 - 206
2358210	Azinphos Methyl	113	114	P/P	40 - 292
2358210	Azoxystrobin	91.6	124	P/P	12 - 242
2358210	Bromacil	74.6	86.6	P/P	54 - 167
2358210	Butylate	43.2	48.7	P/P	14 - 94.0
2358210	Caffeine	74.3	70.6	P/P	10 - 226
2358210	Carbophenothion	82.7	95.6	P/P	49 - 122
2358210	Carfentrazone Ethyl	79.0	93.4	P/P	53 - 138
2358210	Chlorfenapyr	66.8	79.0	P/P	50 - 150
2358210	Chlorpyrifos Ethyl	82.8	92.4	P/P	52 - 122
2358210	Chlorpyrifos Methyl	82.4	91.7	P/P	66 - 117
2358210	Coumaphos	77.5	84.6	P/P	50 - 220
2358210	Cyanazine	151	166	P/P	43 - 245
2358210	Cyprodinil	69.8	88.9	P/P	50 - 150
2358210	Dechlorane Plus	165	121	F/P	50 - 150
2358210	Demeton	89.4	93.0	P/P	43 - 188
2358210	Diazinon	92.6	107	P/P	69 - 131
2358210	Difenoconazole	94.4	90.5	P/P	34 - 231
2358210	Dimethenamid	74.3	80.5	P/P	55 - 118
2358210	Dimethomorph	118	181	P/F	50 - 150
2358210	Disulfoton	73.6	76.8	P/P	38 - 141
2358210	Dithiopyr	76.8	97.2	P/P	42 - 116
2358210	EPTC	48.1	51.2	P/P	18 - 85.0
2358210	Ethion	72.6	61.1	P/P	10 - 131
2358210	Ethoprop	86.8	92.0	P/P	65 - 129
2358210	Etridiazole	55.8	53.9	P/P	50 - 150
2358210	Fenamiphos	82.8	93.3	P/P	31 - 137
2358210	Fenbuconazole	79.4	89.0	P/P	57 - 160
2358210	Fipronil	81.3	99.4	P/P	62 - 132

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P419914

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2358210	Fipronil Desulfinyl	85.6	103	P/P	57 - 131
2358210	Fipronil Sulfide	68.0	90.7	P/P	15 - 138
2358210	Fipronil Sulfone	54.9	87.5	P/P	21 - 134
2358210	Fluazifop-P-butyl	81.1	98.0	P/P	54 - 133
2358210	Fludioxonil	83.4	95.1	P/P	58 - 127
2358210	Flumioxazin	116	121	P/P	33 - 300
2358210	Flutolanil	70.3	84.6	P/P	42 - 130
2358210	Fluxapyroxad	66.3	65.2	P/P	23 - 141
2358210	Fonofos	73.4	83.8	P/P	58 - 119
2358210	Hexazinone	93.0	89.6	P/P	68 - 172
2358210	Imazalil	85.8	77.8	P/P	48 - 283
2358210	Iprodione	73.8	85.2	P/P	38 - 140
2358210	Loratadine	115	198	P/F	50 - 150
2358210	Malathion	85.8	94.9	P/P	40 - 137
2358210	Metalaxyl	75.6	85.4	P/P	21 - 129
2358210	Metolachlor	83.9	94.4	P/P	55 - 122
2358210	Metribuzin	96.0	101	P/P	38 - 187
2358210	Mevinphos	72.9	82.9	P/P	54 - 134
2358210	Molinate	64.4	64.2	P/P	41 - 97.0
2358210	Naled	35.4	103	P/P	10 - 108
2358210	Napropamide	61.4	72.2	P/P	50 - 150
2358210	Norflurazon	72.0	83.2	P/P	32 - 122
2358210	Octinoxate	194	146	F/P	25 - 150
2358210	Oxadiazon	70.5	78.9	P/P	40 - 119
2358210	Oxybenzone	126	101	P/P	59 - 147
2358210	Oxyfluorfen	127	133	P/P	61 - 153
2358210	Parathion Ethyl	92.6	89.0	P/P	59 - 130
2358210	Parathion Methyl	117	107	P/P	65 - 155
2358210	PBDE-47	143	98.6	P/P	50 - 150
2358210	PBDE-99	158	107	F/P	50 - 150
2358210	Pendimethalin	81.5	83.0	P/P	49 - 138
2358210	Phenytoin	32.9	17.9	F/F	50 - 200
2358210	Phorate	74.1	75.4	P/P	54 - 161
2358210	Prodiamine	59.5	82.8	P/P	33 - 161
2358210	Prometon	70.7	66.2	P/P	48 - 140
2358210	Prometryn	75.5	85.8	P/P	55 - 134
2358210	Pronamide	83.4	91.6	P/P	66 - 137
2358210	Propanil	74.0	81.8	P/P	50 - 150
2358210	Propargite	51.1	51.5	P/P	50 - 200
2358210	Propiconazole	68.2	86.9	P/P	36 - 150
2358210	Pyraflufen Ethyl	62.3	74.5	P/P	50 - 150
2358210	Pyridaben	62.3	79.4	P/P	50 - 200
2358210	Pyriproxyfen	87.1	73.5	P/P	10 - 165
2358210	Simazine	92.8	103	P/P	57 - 145
2358210	Stirophos	54.2	59.3	P/P	50 - 150
2358210	Sulfentrazone	71.3	87.7	P/P	34 - 140
2358210	Tebuconazole	45.2	37.4	P/P	10 - 127
2358210	Terbufos	103	112	P/P	59 - 138
2358210	Terbuthylazine	88.1	95.0	P/P	68 - 119
2358210	Thiobencarb	67.3	80.5	P/P	50 - 150
2358210	Tri-o-cresyl Phosphate	145	111	P/P	50 - 150
2358210	Triadimefon	80.0	93.0	P/P	50 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P419829

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357422	Acesulfame K	72.8	72.3	P/P	40 - 150
2357422	AMPA	82.2	81.7	P/P	40 - 150
2357422	Endothall	159	153	F/F	40 - 150
2357422	Glufosinate	68.7	68.8	P/P	40 - 150
2357422	Glyphosate	90.2	96.1	P/P	40 - 150
2357422	Sucralose	97.2	101	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P419841

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2356890	2,4-D	97.8	107	P/P	30 - 160
2356890	2,4,5-T	86.4	83.7	P/P	30 - 160
2356890	Acetaminophen	119	119	P/P	30 - 150
2356890	Acetamiprid	60.8	60.4	P/P	30 - 160
2356890	Afidopyropen	89.0	82.7	P/P	30 - 160
2356890	Benzovindiflupyr	79.8	79.4	P/P	30 - 160
2356890	Carbamazepine	69.7	70.2	P/P	30 - 160
2356890	Clothianidin	111	119	P/P	30 - 160
2356890	Dinotefuran	114	116	P/P	30 - 160
2356890	Diuron	51.9	50.9	P/P	30 - 160
2356890	Fenuron	96.6	94.4	P/P	30 - 160
2356890	Fluridone	96.5	88.1	P/P	30 - 160
2356890	Hydrocodone	100	101	P/P	30 - 160
2356890	Ibuprofen	81.4	92.6	P/P	30 - 160
2356890	Linuron	78.6	73.5	P/P	30 - 160
2356890	Mandestrobin	91.4	97.4	P/P	30 - 160
2356890	MCPP	89.3	96.1	P/P	30 - 160
2356890	Naproxen	102	95.2	P/P	30 - 160
2356890	Primidone	103	120	P/P	30 - 160
2356890	Pyraclostrobin	91.0	91.2	P/P	30 - 160
2356890	Silvex	85.6	89.3	P/P	30 - 160
2356890	Thiamethoxam	140	141	P/P	30 - 160
2356890	Tolfenpyrad	64.7	67.5	P/P	30 - 160
2356890	Triclopyr	79.8	94.7	P/P	30 - 160

Reference Method: SM 4500-F- C-2011
Batch ID: P420215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357236	Fluoride	100	99.8	P/P	94 - 104

Reference Method: SM 4500-F- C-2011
Batch ID: P420469

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357646	Fluoride	100	100	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P419945

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P419945

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357534	Organic Carbon	97.9	97.3	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P420035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357647	Organic Carbon	95.5	94.0	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P419859

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357471	Color (true)	1.67	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P419881

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357375	Turbidity	4.92	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P419879

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357110	Calcium	4.22	Spike	P	0 - 20
2357110	Iron	4.03	Spike	P	0 - 20
2357110	Magnesium	4.17	Spike	P	0 - 20
2357110	Potassium	4.17	Spike	P	0 - 20
2357110	Sodium	4.07	Spike	P	0 - 20
2357110	Strontium	4.34	Spike	P	0 - 20
2357110	Tin	3.46	Spike	P	0 - 20
2357110	Titanium	4.39	Spike	P	0 - 20
2357110	Vanadium	2.95	Spike	P	0 - 20
2357110	Zinc	2.86	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P419879

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357110	Aluminum	3.75	Spike	P	0 - 20
2357110	Antimony	5.16	Spike	P	0 - 20
2357110	Arsenic	5.14	Spike	P	0 - 20
2357110	Barium	4.23	Spike	P	0 - 20
2357110	Beryllium	4.82	Spike	P	0 - 20
2357110	Boron	4.64	Spike	P	0 - 20
2357110	Cadmium	5.92	Spike	P	0 - 20
2357110	Chromium	4.17	Spike	P	0 - 20
2357110	Cobalt	4.06	Spike	P	0 - 20
2357110	Copper	4.12	Spike	P	0 - 20
2357110	Lead	3.05	Spike	P	0 - 20
2357110	Manganese	3.88	Spike	P	0 - 20
2357110	Molybdenum	4.96	Spike	P	0 - 20
2357110	Nickel	4.29	Spike	P	0 - 20
2357110	Selenium	2.98	Spike	P	0 - 20
2357110	Silver	3.45	Spike	P	0 - 20
2357110	Thallium	4.19	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P420090

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357378	Chloride	0.473	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P420095

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357378	Sulfate	0.755	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358021	Ammonia-N	1.98	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P420247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357504	Ammonia-N	2.89	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420073

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357731	Kjeldahl Nitrogen	2.49	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420074

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357445	Kjeldahl Nitrogen	12.5	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P420076

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358510	Kjeldahl Nitrogen	1.75	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420155

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357472	NO2NO3-N	1.32	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P420298

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357773	NO2NO3-N	2.36	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419931

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357477	Total-P	0.529	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419947

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357504	Total-P	0.732	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P419844

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357507	O-Phosphate-P	0.204	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P419914

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358210	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	30.1	Spike	F	0 - 30
2358210	Acetochlor	10.7	Spike	P	0 - 27
2358210	Alachlor	20.9	Spike	P	0 - 27
2358210	Ametryn	19.0	Spike	P	0 - 34
2358210	Atrazine	2.97	Spike	P	0 - 41
2358210	Atrazine Desethyl	15.6	Spike	P	0 - 38
2358210	Avobenzone	18.8	Spike	P	0 - 30
2358210	Azinphos Methyl	1.03	Spike	P	0 - 62
2358210	Azoxystrobin	17.6	Spike	P	0 - 32
2358210	Bromacil	14.8	Spike	P	0 - 30
2358210	Butylate	12.1	Spike	P	0 - 59
2358210	Caffeine	4.66	Spike	P	0 - 60
2358210	Carbophenothion	14.5	Spike	P	0 - 25
2358210	Carfentrazone Ethyl	16.7	Spike	P	0 - 26
2358210	Chlorfenapyr	16.8	Spike	P	0 - 30
2358210	Chlorpyrifos Ethyl	10.9	Spike	P	0 - 27
2358210	Chlorpyrifos Methyl	10.6	Spike	P	0 - 26
2358210	Coumaphos	8.75	Spike	P	0 - 30
2358210	Cyanazine	8.98	Spike	P	0 - 58
2358210	Cyprodinil	24.1	Spike	P	0 - 30
2358210	Dechlorane Plus	31.3	Spike	F	0 - 30
2358210	Demeton	3.94	Spike	P	0 - 25
2358210	Diazinon	14.6	Spike	P	0 - 29

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P419914

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358210	Difenoconazole	4.22	Spike	P	0 - 25
2358210	Dimethenamid	7.89	Spike	P	0 - 30
2358210	Dimethomorph	42.4	Spike	F	0 - 30
2358210	Disulfoton	4.20	Spike	P	0 - 33
2358210	Dithiopyr	21.5	Spike	P	0 - 22
2358210	EPTC	6.29	Spike	P	0 - 38
2358210	Ethion	17.2	Spike	P	0 - 79
2358210	Ethoprop	5.80	Spike	P	0 - 23
2358210	Etridiazole	3.52	Spike	P	0 - 30
2358210	Fenamiphos	11.8	Spike	P	0 - 58
2358210	Fenbuconazole	11.5	Spike	P	0 - 37
2358210	Fipronil	19.9	Spike	P	0 - 33
2358210	Fipronil Desulfinyl	16.0	Spike	P	0 - 26
2358210	Fipronil Sulfide	24.9	Spike	P	0 - 37
2358210	Fipronil Sulfone	28.6	Spike	P	0 - 50
2358210	Fluazifop-P-butyl	18.9	Spike	P	0 - 24
2358210	Fludioxonil	13.2	Spike	P	0 - 26
2358210	Flumioxazin	3.40	Spike	P	0 - 37
2358210	Flutolanil	15.8	Spike	P	0 - 26
2358210	Fluxapyroxad	1.66	Spike	P	0 - 34
2358210	Fonofos	13.2	Spike	P	0 - 27
2358210	Hexazinone	3.76	Spike	P	0 - 36
2358210	Imazalil	9.76	Spike	P	0 - 65
2358210	Iprodione	14.3	Spike	P	0 - 33
2358210	Loratadine	53.3	Spike	F	0 - 30
2358210	Malathion	10.2	Spike	P	0 - 44
2358210	Metalaxyl	10.5	Spike	P	0 - 38
2358210	Metolachlor	11.8	Spike	P	0 - 36
2358210	Metribuzin	4.92	Spike	P	0 - 63
2358210	Mevinphos	12.9	Spike	P	0 - 26
2358210	Molinate	0.316	Spike	P	0 - 40
2358210	Myclobutanil	6.60	Spike	P	0 - 21
2358210	Naled	97.7	Spike	F	0 - 26
2358210	Napropamide	16.1	Spike	P	0 - 30
2358210	Norflurazon	14.5	Spike	P	0 - 24
2358210	Octinoxate	27.8	Spike	P	0 - 30
2358210	Oxadiazon	11.2	Spike	P	0 - 27
2358210	Oxybenzone	21.9	Spike	P	0 - 30
2358210	Oxyfluorfen	4.97	Spike	P	0 - 24
2358210	Parathion Ethyl	4.05	Spike	P	0 - 28
2358210	Parathion Methyl	8.28	Spike	P	0 - 27
2358210	PBDE-47	36.5	Spike	F	0 - 30
2358210	PBDE-99	38.1	Spike	F	0 - 30
2358210	Pendimethalin	1.90	Spike	P	0 - 31
2358210	Phenytoin	59.0	Spike	F	0 - 30
2358210	Phorate	1.62	Spike	P	0 - 27
2358210	Prodiamine	32.7	Spike	P	0 - 52
2358210	Prometon	6.63	Spike	P	0 - 31
2358210	Prometryn	12.7	Spike	P	0 - 28
2358210	Pronamide	9.41	Spike	P	0 - 26
2358210	Propanil	10.0	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P419914

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2358210	Propargite	0.770	Spike	P	0 - 30
2358210	Propiconazole	15.0	Spike	P	0 - 31
2358210	Pyraflufen Ethyl	17.9	Spike	P	0 - 30
2358210	Pyridaben	20.1	Spike	P	0 - 30
2358210	Pyriproxyfen	16.9	Spike	P	0 - 50
2358210	Simazine	10.5	Spike	P	0 - 29
2358210	Stirophos	9.02	Spike	P	0 - 30
2358210	Sulfentrazone	19.1	Spike	P	0 - 33
2358210	Tebuconazole	15.4	Spike	P	0 - 44
2358210	Terbufos	7.63	Spike	P	0 - 29
2358210	Terbuthylazine	7.55	Spike	P	0 - 27
2358210	Thiobencarb	17.8	Spike	P	0 - 30
2358210	Tri-o-cresyl Phosphate	27.1	Spike	P	0 - 30
2358210	Triadimefon	15.1	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P419829

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357422	Acesulfame K	0.742	Spike	P	0 - 30
2357422	AMPA	0.595	Spike	P	0 - 30
2357422	Endothall	3.89	Spike	P	0 - 30
2357422	Glufosinate	0.111	Spike	P	0 - 30
2357422	Glyphosate	6.25	Spike	P	0 - 30
2357422	Sucralose	3.99	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P419841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2356890	2,4-D	6.97	Spike	P	0 - 30
2356890	2,4,5-T	3.17	Spike	P	0 - 30
2356890	Acetaminophen	0.0925	Spike	P	0 - 30
2356890	Acetamiprid	0.694	Spike	P	0 - 30
2356890	Afidopyropen	7.44	Spike	P	0 - 30
2356890	Bentazon	1.63	Spike	P	0 - 30
2356890	Benzovindiflupyr	0.440	Spike	P	0 - 30
2356890	Carbamazepine	0.686	Spike	P	0 - 30
2356890	Clothianidin	6.91	Spike	P	0 - 30
2356890	Dinotefuran	0.974	Spike	P	0 - 30
2356890	Diuron	1.96	Spike	P	0 - 30
2356890	Fenuron	2.20	Spike	P	0 - 30
2356890	Fluridone	7.75	Spike	P	0 - 30
2356890	Hydrocodone	0.537	Spike	P	0 - 30
2356890	Ibuprofen	12.9	Spike	P	0 - 30
2356890	Imazapyr	3.93	Spike	P	0 - 30
2356890	Imidacloprid	0.550	Spike	P	0 - 30
2356890	Linuron	6.80	Spike	P	0 - 30
2356890	Mandestrobin	6.27	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P419841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2356890	MCPP	7.32	Spike	P	0 - 30
2356890	Naproxen	7.02	Spike	P	0 - 30
2356890	Primidone	15.9	Spike	P	0 - 30
2356890	Pyraclostrobin	0.318	Spike	P	0 - 30
2356890	Silvex	4.30	Spike	P	0 - 30
2356890	Thiamethoxam	0.00712	Spike	P	0 - 30
2356890	Tolfenpyrad	4.15	Spike	P	0 - 30
2356890	Triclopyr	17.1	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P420276

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357377	Total Alkalinity	1.48	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P420294

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357471	TDS	1.47	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P420215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357236	Fluoride	0.479	Spike	P	0 - 1.6

Reference Method: SM 4500-F- C-2011
Batch ID: P420469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357646	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P419945

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357534	Organic Carbon	0.512	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P420035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357647	Organic Carbon	1.11	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: 2357489
Field Sample ID: G3SE0065

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	108	P	30 - 160
EPA 8321B	Acetaminophen-d4	126	P	30 - 160
EPA 8321B	Carbamazepine-d10	65.6	P	30 - 160
EPA 8321B	Diuron-d6	57.3	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	109	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	109	P	30 - 160
EPA 8321B	Ibuprofen-d3	104	P	30 - 160
EPA 8321B	Primidone-d5	117	P	30 - 160
EPA 8321B	Sucralose-d6	92.4	P	30 - 160

Lab Sample ID: 2357490
Field Sample ID: G3SE0066

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	95.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	104	P	30 - 160
EPA 8321B	Carbamazepine-d10	63.2	P	30 - 160
EPA 8321B	Diuron-d6	54.8	P	30 - 160
EPA 8321B	Endothall-d6	106	P	30 - 160
EPA 8321B	Endothall-d6	106	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	74.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	74.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	97.5	P	30 - 160
EPA 8321B	Primidone-d5	96.8	P	30 - 160
EPA 8321B	Sucralose-d6	94.1	P	30 - 160

Lab Sample ID: 2357491
Field Sample ID: FB_09192022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	99.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	102	P	30 - 160
EPA 8321B	Carbamazepine-d10	77.7	P	30 - 160
EPA 8321B	Diuron-d6	83.2	P	30 - 160
EPA 8321B	Endothall-d6	90.0	P	30 - 160
EPA 8321B	Endothall-d6	90.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	104	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	104	P	30 - 160
EPA 8321B	Ibuprofen-d3	89.3	P	30 - 160
EPA 8321B	Primidone-d5	96.0	P	30 - 160
EPA 8321B	Sucralose-d6	99.5	P	30 - 160

Lab Sample ID: 2357501
Field Sample ID: G3SE0065

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	54.7	P	20 - 200
EPA 8270E	Simazine-d10	104	P	71 - 140
EPA 8270E	Terbufos-d10	125	P	62 - 131
EPA 8270E	Terphenyl-d14	82.1	P	52 - 141

Quality Assurance Report
Surrogates

Lab Sample ID: 2357502
Field Sample ID: G3SE0066

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	63.2	P	20 - 200
EPA 8270E	Simazine-d10	108	P	71 - 140
EPA 8270E	Terbufos-d10	123	P	62 - 131
EPA 8270E	Terphenyl-d14	72.5	P	52 - 141

Lab Sample ID: 2357503
Field Sample ID: FB_09192022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	67.2	P	20 - 200
EPA 8270E	Simazine-d10	97.6	P	71 - 140
EPA 8270E	Terbufos-d10	95.8	P	62 - 131
EPA 8270E	Terphenyl-d14	97.2	P	52 - 141

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A114827
Included Lab Sample IDs: 2357473, 2357480

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	97.2	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1
Run ID: A114831
Included Lab Sample IDs: 2357471, 2357474, 2357478

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	103	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A114837
Included Lab Sample IDs: 2357471, 2357474, 2357476, 2357478

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A114857
Included Lab Sample IDs: 2357471, 2357474, 2357478

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

Reference Method: EPA 8321B
Run ID: A114858
Included Lab Sample IDs: 2357489, 2357490, 2357491

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	105	113	P/P	60 - 160
Endothall	95.2	98.8	P/P	60 - 160
Glufosinate	95.0	95.8	P/P	60 - 160
Glyphosate	99.3	107	P/P	60 - 160

Reference Method: SM 5310 B-2011
Run ID: A114868
Included Lab Sample IDs: 2357472, 2357475, 2357479

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.4	96.0	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A114873
Included Lab Sample IDs: 2357489, 2357490, 2357491

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	105	113	P/P	60 - 160
Sucralose	106	103	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-2011
Run ID: A114912
Included Lab Sample IDs: 2357477

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.6	95.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A114913
Included Lab Sample IDs: 2357472, 2357475

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	99.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A114914
Included Lab Sample IDs: 2357477

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	103	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A114916
Included Lab Sample IDs: 2357489, 2357490, 2357491

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	111	89.8	P/P	50 - 150
2,4,5-T	112	95.9	P/P	50 - 150
Acetaminophen	110	109	P/P	60 - 160
Acetamiprid	103	102	P/P	50 - 150
Afidopyropen	112	116	P/P	50 - 150
Bentazon	102	113	P/P	50 - 160
Bentazon	99.2	113	P/P	50 - 160
Benzovindiflupyr	119	118	P/P	50 - 160
Carbamazepine	107	110	P/P	60 - 150
Clothianidin	104	110	P/P	60 - 150
Dinotefuran	112	113	P/P	50 - 150
Diuron	113	110	P/P	60 - 160
Fenuron	106	105	P/P	60 - 150
Fluridone	110	107	P/P	60 - 160
Hydrocodone	117	111	P/P	60 - 150
Ibuprofen	142	112	P/P	50 - 160
Imazapyr	99.0	106	P/P	50 - 150
Imidacloprid	100	105	P/P	60 - 150
Linuron	109	115	P/P	60 - 150
Mandestrobin	111	112	P/P	50 - 150
MCPP	101	99.2	P/P	50 - 150
Naproxen	86.5	79.4	P/P	50 - 160
Primidone	106	111	P/P	60 - 150
Pyraclostrobin	109	107	P/P	60 - 150
Silvex	104	104	P/P	50 - 150
Thiamethoxam	111	109	P/P	50 - 150
Tolfenpyrad	118	107	P/P	60 - 150
Triclopyr	106	116	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A114921
Included Lab Sample IDs: 2357479

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	95.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A114930
Included Lab Sample IDs: 2357494, 2357495, 2357496

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.2	101	P/P	90 - 110
Aluminum	99.5	99.3	P/P	90 - 110
Antimony	101	102	P/P	90 - 110
Antimony	99.6	99.9	P/P	90 - 110
Arsenic	102	100	P/P	90 - 110
Arsenic	99.4	100	P/P	90 - 110
Barium	100	99.9	P/P	90 - 110
Barium	97.7	98.8	P/P	90 - 110
Beryllium	100	100	P/P	90 - 110
Beryllium	101	99.8	P/P	90 - 110
Boron	96.9	97.9	P/P	90 - 110
Boron	97.2	97.8	P/P	90 - 110
Cadmium	101	102	P/P	90 - 110
Cadmium	98.9	99.6	P/P	90 - 110
Chromium	100	101	P/P	90 - 110
Chromium	99.6	99.7	P/P	90 - 110
Cobalt	91.8	93.2	P/P	90 - 110
Cobalt	93.9	93.5	P/P	90 - 110
Copper	95.9	96.8	P/P	90 - 110
Copper	97.5	96.4	P/P	90 - 110
Manganese	98.7	99.2	P/P	90 - 110
Manganese	98.8	101	P/P	90 - 110
Molybdenum	97.2	98.4	P/P	90 - 110
Molybdenum	99.2	98.9	P/P	90 - 110
Nickel	95.3	96.9	P/P	90 - 110
Nickel	97.3	96.4	P/P	90 - 110
Selenium	101	99.1	P/P	90 - 110
Selenium	101	100	P/P	90 - 110
Thallium	96.0	97.2	P/P	90 - 110
Thallium	97.3	96.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A114942
Included Lab Sample IDs: 2357477

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.6	98.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A114948
Included Lab Sample IDs: 2357494, 2357495, 2357496

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	95.4	96.0	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A114948
Included Lab Sample IDs: 2357494, 2357495, 2357496

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	96.4	95.9	P/P	90 - 110
Silver	100	100	P/P	90 - 110
Silver	99.9	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A114957
Included Lab Sample IDs: 2357472, 2357475, 2357479

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A114974
Included Lab Sample IDs: 2357472, 2357475, 2357479

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	108	P/P	90 - 110
Kjeldahl Nitrogen	105	109	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A114980
Included Lab Sample IDs: 2357471, 2357474, 2357478

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	97.1	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A114988
Included Lab Sample IDs: 2357501, 2357502, 2357503

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.9		P	80 - 120
Alachlor	93.6		P	80 - 120
Ametryn	95.4		P	80 - 120
Atrazine	103		P	80 - 120
Atrazine Desethyl	100		P	80 - 120
Azinphos Methyl	94.5		P	80 - 120
Azoxystrobin	98.2		P	80 - 120
Bromacil	99.9		P	80 - 120
Butylate	103		P	80 - 120
Caffeine	87.3		P	80 - 120
Carbophenothion	96.9		P	80 - 120
Carfentrazone Ethyl	90.9		P	80 - 120
Chlorfenapyr	94.1		P	80 - 120
Chlorpyrifos Ethyl	98.8		P	80 - 120
Chlorpyrifos Methyl	105		P	80 - 120
Coumaphos	97.6		P	80 - 120
Cyanazine	89.6		P	80 - 120
Cyprodinil	90.2		P	80 - 120
Demeton	97.1		P	80 - 120
Diazinon	95.1		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A114988
Included Lab Sample IDs: 2357501, 2357502, 2357503

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Difenoconazole	94.9		P	80 - 120
Dimethenamid	103		P	80 - 120
Dimethomorph	96.8		P	80 - 120
Disulfoton	91.7		P	80 - 120
Dithiopyr	99.1		P	80 - 120
EPTC	98.6		P	80 - 120
Ethion	94.7		P	80 - 120
Ethoprop	96.9		P	80 - 120
Etridiazole	93.5		P	80 - 120
Fenamiphos	106		P	80 - 120
Fenbuconazole	99.8		P	80 - 120
Fipronil	93.8		P	80 - 120
Fipronil Desulfinyl	102		P	80 - 120
Fipronil Sulfide	90.9		P	80 - 120
Fipronil Sulfone	89.2		P	80 - 120
Fluazifop-P-butyl	92.4		P	80 - 120
Fludioxonil	93.6		P	80 - 120
Flumioxazin	89.8		P	80 - 120
Flutolanil	98.5		P	80 - 120
Fluxapyroxad	93.5		P	80 - 120
Fonofos	98.8		P	80 - 120
Hexazinone	98.9		P	80 - 120
Imazalil	92.5		P	80 - 120
Iprodione	90.4		P	80 - 120
Loratadine	98.9		P	80 - 120
Malathion	102		P	80 - 120
Metalaxyl	94.6		P	80 - 120
Metolachlor	94.1		P	80 - 120
Metribuzin	96.4		P	80 - 120
Mevinphos	102		P	80 - 120
Molinate	98.0		P	80 - 120
Myclobutanil	93.2		P	80 - 120
Naled	116		P	80 - 120
Napropamide	97.3		P	80 - 120
Norflurazon	98.0		P	80 - 120
Oxadiazon	92.7		P	80 - 120
Oxyfluorfen	88.8		P	80 - 120
Parathion Ethyl	99.2		P	80 - 120
Parathion Methyl	107		P	80 - 120
Pendimethalin	99.2		P	80 - 120
Phenytoin	98.1		P	80 - 120
Phorate	97.4		P	80 - 120
Prodiamine	84.2		P	80 - 120
Prometon	103		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	98.1		P	80 - 120
Propanil	92.8		P	80 - 120
Propargite	95.7		P	80 - 120
Propiconazole	102		P	80 - 120
Pyraflufen Ethyl	95.4		P	80 - 120
Pyridaben	90.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A114988
Included Lab Sample IDs: 2357501, 2357502, 2357503

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyriproxyfen	94.9		P	80 - 120
Simazine	99.9		P	80 - 120
Stirophos	101		P	80 - 120
Sulfentrazone	100		P	80 - 120
Tebuconazole	94.9		P	80 - 120
Terbufos	98.8		P	80 - 120
Terbuthylazine	98.6		P	80 - 120
Thiobencarb	96.7		P	80 - 120
Triadimefon	92.1		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A114997
Included Lab Sample IDs: 2357472, 2357475, 2357479

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

Reference Method: SM 2320 B-2011
Run ID: A115007
Included Lab Sample IDs: 2357471, 2357474, 2357476, 2357478

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.5	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A115023
Included Lab Sample IDs: 2357477

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	104	97.5	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A115037
Included Lab Sample IDs: 2357494, 2357495, 2357496

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	102	P/P	90 - 110
Calcium	102	103	P/P	90 - 110
Calcium	105	105	P/P	90 - 110
Iron	101	103	P/P	90 - 110
Iron	103	102	P/P	90 - 110
Iron	104	104	P/P	90 - 110
Magnesium	101	99.6	P/P	90 - 110
Magnesium	101	102	P/P	90 - 110
Magnesium	98.5	101	P/P	90 - 110
Potassium	97.9	98.0	P/P	90 - 110
Potassium	98.0	97.1	P/P	90 - 110
Potassium	98.7	99.9	P/P	90 - 110
Sodium	100	99.1	P/P	90 - 110
Sodium	102	103	P/P	90 - 110
Sodium	99.1	101	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A115037
Included Lab Sample IDs: 2357494, 2357495, 2357496

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Strontium	95.7	97.7	P/P	90 - 110
Strontium	97.5	97.2	P/P	90 - 110
Strontium	97.7	94.8	P/P	90 - 110
Tin	96.9	99.9	P/P	90 - 110
Tin	98.8	97.2	P/P	90 - 110
Tin	99.9	95.9	P/P	90 - 110
Titanium	97.3	99.2	P/P	90 - 110
Titanium	99.2	95.8	P/P	90 - 110
Titanium	99.4	97.9	P/P	90 - 110
Vanadium	96.1	98.8	P/P	90 - 110
Vanadium	98.2	97.0	P/P	90 - 110
Vanadium	98.8	95.9	P/P	90 - 110
Zinc	93.7	96.3	P/P	90 - 110
Zinc	96.3	94.9	P/P	90 - 110
Zinc	97.2	94.2	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A115061
Included Lab Sample IDs: 2357501

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxadiazon	109		P	80 - 120

Reference Method: EPA 8270E
Run ID: A115073
Included Lab Sample IDs: 2357501, 2357502, 2357503

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	99.0		P	80 - 120
Avobenzone	95.3		P	80 - 120
Dechlorane Plus	96.4		P	80 - 120
Octinoxate	95.6		P	80 - 120
Oxybenzone	94.3		P	80 - 120
PBDE-47	96.5		P	80 - 120
PBDE-99	97.1		P	80 - 120
Tri-o-cresyl Phosphate	96.5		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A115082
Included Lab Sample IDs: 2357477

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	104	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A115129
Included Lab Sample IDs: 2357476

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

Quality Assurance Report
Calibration Verification

* 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)	100					1.67	
EPA 180.1 Rev. 2.0	Turbidity	100					4.92	
EPA 200.7 Rev. 4.4	Calcium	104	102	99.5				4.22
	Iron	107	107	111	112			4.03
	Magnesium	105	102	110	113			4.17
	Potassium	98.8	99.7	108	108			4.17
	Sodium	101	101	99.3				4.07
	Strontium	104	103	108	110			4.34
	Tin	104	102	106	106			3.46
	Titanium	106	106	111	110			4.39
	Vanadium	104	104	107	109			2.95
	Zinc	103	102	105	104			2.86
EPA 200.8 Rev. 5.4	Aluminum	102	102	98.2	101			3.75
	Antimony	105	111	105	108			5.16
	Arsenic	102	110	104	106			5.14
	Barium	105	108	103	106			4.23
	Beryllium	98.0	104	98.8	98.6			4.82
	Boron	104	106	99.3	102			4.64
	Cadmium	102	107	101	104			5.92
	Chromium	105	110	105	106			4.17
	Cobalt	96.8	101	97.3	98.5			4.06
	Copper	99.7	104	99.8	103			4.12
	Lead	99.4	103	99.4	101			3.05
	Manganese	105	109	104	105			3.88
	Molybdenum	99.2	105	100	102			4.96
	Nickel	99.6	104	100	102			4.29
	Selenium	101	104	101	102			2.98
	Silver	87.5	88.9	85.9	87.6			3.45
	Thallium	98.6	104	99.6	102			4.19
EPA 300.0 Rev. 2.1	Chloride	105	105	102			0.473	
	Sulfate	104	102	101			0.755	
EPA 350.1 Rev. 2.0	Ammonia-N	98.4	94.2	96.8				1.98
	Ammonia-N	97.4	99.6	96.6				2.89
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102						2.49
	Kjeldahl Nitrogen	107						12.5
	Kjeldahl Nitrogen	97.4	105	107				1.75
EPA 353.2 Rev. 2.0	NO2NO3-N	103	103	105				1.32
	NO2NO3-N	103	104	101				2.36
EPA 365.1 Rev. 2.0	Total-P	107	96.3	95.7				0.529
	Total-P	100	101	102				0.732
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.5	98.3	98.1				0.204
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	130	170	125				30.1
	Acetochlor	97.9	92.9	103				10.7
	Alachlor	84.9	72.1	88.9				20.9
	Ametryn	86.4	99.1	120				19.0
	Atrazine	96.7						2.97
	Atrazine Desethyl	69.5	73.6	55.3				15.6
	Avobenzone	79.1	85.0	70.4				18.8
	Azinphos Methyl	129	113	114				1.03
	Azoxystrobin	110	91.6	124				17.6
	Bromacil	86.7	74.6	86.6				14.8
	Butylate	62.5	43.2	48.7				12.1

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Caffeine	64.5	74.3	70.6			4.66
	Carbophenothion	101	82.7	95.6			14.5
	Carfentrazone Ethyl	101	79.0	93.4			16.7
	Chlorfenapyr	96.6	66.8	79.0			16.8
	Chlorpyrifos Ethyl	97.4	82.8	92.4			10.9
	Chlorpyrifos Methyl	97.7	82.4	91.7			10.6
	Coumaphos	101	77.5	84.6			8.75
	Cyanazine	170	151	166			8.98
	Cyprodinil	89.7	69.8	88.9			24.1
	Dechlorane Plus	145	165	121			31.3
	Demeton	80.1	89.4	93.0			3.94
	Diazinon	94.3	92.6	107			14.6
	Difenoconazole	124	94.4	90.5			4.22
	Dimethenamid	79.5	74.3	80.5			7.89
	Dimethomorph	107	118	181			42.4
	Disulfoton	90.5	73.6	76.8			4.20
	Dithiopyr	94.5	76.8	97.2			21.5
	EPTC	59.3	48.1	51.2			6.29
	Ethion	84.1	72.6	61.1			17.2
	Ethoprop	87.9	86.8	92.0			5.80
	Etridiazole	63.6	55.8	53.9			3.52
	Fenamiphos	112	82.8	93.3			11.8
	Fenbuconazole	96.3	79.4	89.0			11.5
	Fipronil	88.2	81.3	99.4			19.9
	Fipronil Desulfinyl	103	85.6	103			16.0
	Fipronil Sulfide	77.6	68.0	90.7			24.9
	Fipronil Sulfone	74.8	54.9	87.5			28.6
	Fluazifop-P-butyl	98.1	81.1	98.0			18.9
	Fludioxonil	86.8	83.4	95.1			13.2
	Flumioxazin	129	116	121			3.40
	Flutolanil	90.1	70.3	84.6			15.8
	Fluxapyroxad	83.0	66.3	65.2			1.66
	Fonofos	85.1	73.4	83.8			13.2
	Hexazinone	93.7	93.0	89.6			3.76
	Imazalil	76.5	85.8	77.8			9.76
	Iprodione	91.2	73.8	85.2			14.3
	Loratadine	110	115	198			53.3
	Malathion	104	85.8	94.9			10.2
	Metalaxyl	84.7	75.6	85.4			10.5
	Metolachlor	91.5	83.9	94.4			11.8
	Metribuzin	92.0	96.0	101			4.92
	Mevinphos	78.3	72.9	82.9			12.9
	Molinate	71.6	64.4	64.2			0.316
	Myclobutanil	91.6					6.60
	Naled	96.5	35.4	103			97.7
	Napropamide	84.5	61.4	72.2			16.1
	Norflurazon	86.3	72.0	83.2			14.5
	Octinoxate	125	194	146			27.8
	Oxadiazon	78.2	70.5	78.9			11.2
	Oxybenzone	91.6	126	101			21.9
	Oxyfluorfen	133	127	133			4.97
	Parathion Ethyl	94.3	92.6	89.0			4.05
	Parathion Methyl	105	117	107			8.28
	PBDE-47	109	143	98.6			36.5

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	PBDE-99	124	158	107			38.1
	Pendimethalin	81.6	81.5	83.0			1.90
	Phenytoin	24.4	32.9	17.9			59.0
	Phorate	81.1	74.1	75.4			1.62
	Prodiamine	67.9	59.5	82.8			32.7
	Prometon	80.7	70.7	66.2			6.63
	Prometryn	87.5	75.5	85.8			12.7
	Pronamide	101	83.4	91.6			9.41
	Propanil	80.5	74.0	81.8			10.0
	Propargite	81.0	51.1	51.5			0.770
	Propiconazole	89.6	68.2	86.9			15.0
	Pyraflufen Ethyl	87.7	62.3	74.5			17.9
	Pyridaben	102	62.3	79.4			20.1
	Pyriproxyfen	87.0	87.1	73.5			16.9
	Simazine	100	92.8	103			10.5
	Stirophos	83.0	54.2	59.3			9.02
	Sulfentrazone	88.0	71.3	87.7			19.1
	Tebuconazole	59.6	45.2	37.4			15.4
	Terbufos	108	103	112			7.63
	Terbuthylazine	90.8	88.1	95.0			7.55
	Thiobencarb	85.6	67.3	80.5			17.8
	Tri-o-cresyl Phosphate	112	145	111			27.1
	Triadimefon	86.7	80.0	93.0			15.1
EPA 8321B	2,4-D	71.6	97.8	107			6.97
	2,4,5-T	65.9	86.4	83.7			3.17
	Acesulfame K	104	72.8	72.3			0.742
	Acetaminophen	99.5	119	119			0.0925
	Acetamiprid	86.2	60.8	60.4			0.694
	Afidopyropen	71.1	89.0	82.7			7.44
	AMPA	103	82.2	81.7			0.595
	Bentazon	90.7					1.63
	Benzovindiflupyr	84.4	79.8	79.4			0.440
	Carbamazepine	87.7	69.7	70.2			0.686
	Clothianidin	98.6	111	119			6.91
	Dinotefuran	105	114	116			0.974
	Diuron	58.8	51.9	50.9			1.96
	Endothall	90.7	159	153			3.89
	Fenuron	107	96.6	94.4			2.20
	Fluridone	92.4	96.5	88.1			7.75
	Glufosinate	94.8	68.7	68.8			0.111
	Glyphosate	94.1	90.2	96.1			6.25
	Hydrocodone	96.5	100	101			0.537
	Ibuprofen	84.4	81.4	92.6			12.9
	Imazapyr	91.7					3.93
	Imidacloprid	93.3					0.550
	Linuron	91.9	78.6	73.5			6.80
	Mandestrobin	95.2	91.4	97.4			6.27
	MCPP	78.9	89.3	96.1			7.32
	Naproxen	81.2	102	95.2			7.02
	Primidone	95.1	103	120			15.9
	Pyraclostrobin	82.2	91.0	91.2			0.318
	Silvex	61.4	85.6	89.3			4.30
	Sucralose	100	97.2	101			3.99
	Thiamethoxam	92.7	140	141			0.0071

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Tolfenpyrad	64.9	64.7	67.5			4.15
	Triclopyr	64.4	79.8	94.7			17.1
SM 2320 B-2011	Total Alkalinity	95.7				1.48	
SM 2540 C-2011	TDS					1.47	
SM 4500-F- C-2011	Fluoride	99.9	100	99.8			0.479
	Fluoride	100	100	100			0.0
SM 5310 B-2011	Organic Carbon	96.6	97.9	97.3			0.512
	Organic Carbon	96.4	95.5	94.0			1.11

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2357471, 2357474, 2357478
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2357471, 2357474, 2357476, 2357478
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2357494, 2357495, 2357496
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2357494, 2357495, 2357496
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2357471, 2357474, 2357478
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2357471, 2357474, 2357478
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2357472, 2357475, 2357477, 2357479
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2357472, 2357475, 2357477, 2357479
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2357472, 2357475, 2357477, 2357479
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2357472, 2357475, 2357477, 2357479
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2357473, 2357480
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2357501, 2357502, 2357503
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2357501, 2357502, 2357503
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2357489, 2357490, 2357491
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2357471, 2357474, 2357476, 2357478
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2357494, 2357495
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2357471, 2357474, 2357478
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2357471, 2357474, 2357476, 2357478
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2357471, 2357474, 2357476, 2357478
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2357472, 2357475, 2357477, 2357479

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	09/20/2022			09/20/2022 15:01	Anna M. Plaviak	2357471, 2357474
	09/20/2022			09/20/2022 15:02	Anna M. Plaviak	2357478
EPA 180.1 Rev. 2.0	09/20/2022			09/20/2022 13:33	Chandler E Cox	2357471
	09/20/2022			09/20/2022 13:34	Chandler E Cox	2357474
	09/20/2022			09/20/2022 13:35	Chandler E Cox	2357476
	09/20/2022			09/20/2022 13:37	Chandler E Cox	2357478
EPA 200.7 Rev. 4.4	09/20/2022	09/21/2022 10:05	Megan Whitefoot	09/29/2022 18:13	McKinley C Carter	2357496
	09/20/2022	09/21/2022 10:05	Megan Whitefoot	09/29/2022 22:01	McKinley C Carter	2357494
	09/20/2022	09/21/2022 10:05	Megan Whitefoot	09/29/2022 22:38	McKinley C Carter	2357495
EPA 200.8 Rev. 5.4	09/20/2022	09/21/2022 10:05	Megan Whitefoot	09/23/2022 21:01	Emily M Philpot	2357496
	09/20/2022	09/21/2022 10:05	Megan Whitefoot	09/24/2022 02:38	Emily M Philpot	2357494
	09/20/2022	09/21/2022 10:05	Megan Whitefoot	09/24/2022 02:48	Emily M Philpot	2357495
	09/20/2022	09/21/2022 10:05	Megan Whitefoot	09/26/2022 16:08	Emily M Philpot	2357496
	09/20/2022	09/21/2022 10:05	Megan Whitefoot	09/26/2022 19:02	Emily M Philpot	2357494
	09/20/2022	09/21/2022 10:05	Megan Whitefoot	09/26/2022 19:08	Emily M Philpot	2357495
EPA 300.0 Rev. 2.1	09/20/2022			09/23/2022 14:08	Anna M. Plaviak	2357471
	09/20/2022			09/23/2022 14:24	Anna M. Plaviak	2357474
	09/20/2022			09/23/2022 14:39	Anna M. Plaviak	2357478
EPA 350.1 Rev. 2.0	09/20/2022			09/26/2022 11:44	Judith K. Clark	2357477
	09/20/2022			09/28/2022 12:57	Ping Hua	2357472
	09/20/2022			09/28/2022 12:58	Ping Hua	2357475
	09/20/2022			09/28/2022 13:02	Ping Hua	2357479
EPA 351.2 Rev. 2.0	09/20/2022	09/26/2022 10:38	Alexandra J Mattheus	09/27/2022 10:42	Alexandra J Mattheus	2357475
	09/20/2022	09/26/2022 10:38	Alexandra J Mattheus	09/27/2022 11:17	Alexandra J Mattheus	2357472
	09/20/2022	09/26/2022 10:38	Alexandra J Mattheus	09/27/2022 11:18	Alexandra J Mattheus	2357479
	09/20/2022	09/26/2022 13:48	Alexandra J Mattheus	10/03/2022 10:05	Samantha L Bates	2357477
EPA 353.2 Rev. 2.0	09/20/2022			09/27/2022 10:44	Judith K. Clark	2357472
	09/20/2022			09/27/2022 10:50	Judith K. Clark	2357475
	09/20/2022			09/27/2022 10:51	Judith K. Clark	2357479
	09/20/2022			09/28/2022 16:55	Touraj Touran	2357477
EPA 365.1 Rev. 2.0	09/20/2022	09/22/2022 14:19	Adam P Silver	09/22/2022 18:48	Simonne.V. Calhoun	2357472
	09/20/2022	09/22/2022 14:19	Adam P Silver	09/22/2022 18:49	Simonne.V. Calhoun	2357475
	09/20/2022	09/22/2022 14:19	Adam P Silver	09/23/2022 12:18	James L Waggerby	2357477
	09/20/2022	09/22/2022 14:19	Adam P Silver	09/23/2022 14:26	James L Waggerby	2357479
EPA 365.1 Rev. 2.0 dissolved	09/20/2022			09/20/2022 14:21	Elise M. Gillis	2357473, 2357480
EPA 8270E	09/20/2022	09/22/2022 10:00	Rasheda Ghaffari	09/25/2022 22:38	Michael Poppell	2357501
	09/20/2022	09/22/2022 10:00	Rasheda Ghaffari	09/25/2022 23:04	Michael Poppell	2357502
	09/20/2022	09/22/2022 10:00	Rasheda Ghaffari	09/25/2022 23:30	Michael Poppell	2357503
	09/20/2022	09/22/2022 10:00	Rasheda Ghaffari	09/30/2022 17:17	Michael Poppell	2357501
	09/20/2022	09/22/2022 10:00	Rasheda Ghaffari	09/30/2022 18:50	Lipi Saha	2357501

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	09/20/2022	09/22/2022 10:00	Rasheda Ghaffari	09/30/2022 19:10	Lipi Saha	2357502
	09/20/2022	09/22/2022 10:00	Rasheda Ghaffari	09/30/2022 19:29	Lipi Saha	2357503
EPA 8321B	09/20/2022	09/21/2022 08:45	June Rhew	09/22/2022 20:54	Juyoung Kim	2357489
	09/20/2022	09/21/2022 08:45	June Rhew	09/22/2022 21:15	Juyoung Kim	2357490
	09/20/2022	09/21/2022 08:45	June Rhew	09/22/2022 21:36	Juyoung Kim	2357491
	09/20/2022	09/21/2022 08:45	June Rhew	09/23/2022 11:35	Juyoung Kim	2357489
	09/20/2022	09/21/2022 11:00	Umesh Chiluwal	09/21/2022 11:29	Umesh Chiluwal	2357489
	09/20/2022	09/21/2022 11:00	Umesh Chiluwal	09/21/2022 11:42	Umesh Chiluwal	2357490
	09/20/2022	09/21/2022 11:00	Umesh Chiluwal	09/21/2022 11:55	Umesh Chiluwal	2357491
	09/20/2022	09/21/2022 11:00	Umesh Chiluwal	09/21/2022 18:28	Umesh Chiluwal	2357489
	09/20/2022	09/21/2022 11:00	Umesh Chiluwal	09/21/2022 18:43	Umesh Chiluwal	2357490
	09/20/2022	09/21/2022 11:00	Umesh Chiluwal	09/21/2022 18:58	Umesh Chiluwal	2357491
SM 2320 B-2011	09/20/2022			09/28/2022 23:56	Adam P Silver	2357471
	09/20/2022			09/29/2022 00:06	Adam P Silver	2357474
	09/20/2022			09/29/2022 00:16	Adam P Silver	2357476
	09/20/2022			09/29/2022 00:23	Adam P Silver	2357478
SM 2340 B-2011	09/20/2022			09/29/2022 22:01	McKinley C Carter	2357494
	09/20/2022			09/29/2022 22:38	McKinley C Carter	2357495
SM 2540 C-2011	09/20/2022			09/21/2022 15:39	Yijie Li	2357471, 2357474, 2357478
SM 2540 D-2011	09/20/2022			09/21/2022 15:39	Yijie Li	2357471, 2357474, 2357476, 2357478
SM 4500-F- C-2011	09/20/2022			09/28/2022 03:20	Adam P Silver	2357471
	09/20/2022			09/28/2022 03:32	Adam P Silver	2357474
	09/20/2022			09/28/2022 03:40	Adam P Silver	2357478
	09/20/2022			10/05/2022 05:29	Adam P Silver	2357476
SM 5310 B-2011	09/20/2022			09/22/2022 01:44	Khloe J Berg	2357472
	09/20/2022			09/22/2022 01:58	Khloe J Berg	2357475
	09/20/2022			09/22/2022 02:11	Khloe J Berg	2357479
	09/20/2022			09/23/2022 08:17	Khloe J Berg	2357477