

Chemical Analysis Report

CEN-DIST-2023-01-10-02

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

Event Description: **Unnamed Ditch x2**
Request ID: **RQ-2023-01-09-53**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Matthew Bearden

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

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

Date Certified: 01-FEB-2023 14:00



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: Unnamed Ditch @ 30m west of Riverside Dr

Collection Date/Time: 01/09/2023 13:30

Field ID: G5CE0120

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379343	DEP SOP: NU-094-1	Color (true)	58		PCU	P424359	
	EPA 180.1 Rev. 2.0	Turbidity	1.8	A	NTU	P424363	
	EPA 300.0 Rev. 2.1	Chloride	81		mg Cl/L	P424624	
		Sulfate	17		mg SO4/L	P424627	
	SM 2320 B-2011	Total Alkalinity	219		mg CaCO3/L	P424709	
	SM 2540 C-2015	TDS	398		mg/L	P424910	
	SM 2540 D-2015	TSS	3	I	mg/L	P424819	
2379345	SM 4500-F- C-2011	Fluoride	0.23		mg F/L	P425151	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.078		mg N/L	P424798	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.80		mg N/L	P424510	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.21		mg N/L	P424607	
	EPA 365.1 Rev. 2.0	Total-P	0.20		mg P/L	P424435	
2379347	SM 5310 B-2011	Organic Carbon	15		mg C/L	P424546	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.16		mg P/L	P424365	
2379353	EPA 8321B	2,4-D	0.0025	I	ug/L	P424452	
		Acesulfame K	0.10	U	ug/L	P424336	
		2,4,5-T	0.0040	U	ug/L	P424452	
		AMPA	0.10	U	ug/L	P424336	
		Acetaminophen	0.0080	U	ug/L	P424452	
		Acetamiprid	0.0020	U	ug/L	P424452	
		Endothall	0.25	U	ug/L	P424336	
		Glufosinate	0.10	U	ug/L	P424336	
		Glyphosate	0.10	U	ug/L	P424336	
		Afidopyropen	0.0020	U	ug/L	P424452	
		Bentazon	0.67		ug/L	P424452	
		Sucralose	1.5		ug/L	P424336	
		Benzovindiflupyr	0.0020	U	ug/L	P424452	
		Carbamazepine	0.0022	I	ug/L	P424452	
		Clothianidin	0.014		ug/L	P424452	
		Dinotefuran	0.0049	I	ug/L	P424452	
		Diuron	0.0020	U	ug/L	P424452	
		Fenuron	0.032	U	ug/L	P424452	
		Fluridone	0.0047		ug/L	P424452	
		Imazapyr	0.064		ug/L	P424452	
		Hydrocodone	0.0020	U	ug/L	P424452	
		Ibuprofen	0.080	U	ug/L	P424452	
		Imidacloprid	0.018		ug/L	P424452	MS
		Linuron	0.0040	U	ug/L	P424452	
		Mandestrobin	0.0020	U	ug/L	P424452	
		MCPP	0.0058	I	ug/L	P424452	
		Naproxen	0.0080	U	ug/L	P424452	
		Primidone	0.0087	I	ug/L	P424452	
		Pyraclostrobin	0.0020	U	ug/L	P424452	

Field ID: G5CE0120

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379353	EPA 8321B	Silvex	0.0040	U	ug/L	P424452	
		Thiamethoxam	0.0020	U	ug/L	P424452	
		Tolfenpyrad	0.0020	U	ug/L	P424452	
		Triclopyr	0.0040	U	ug/L	P424452	
2379355	EPA 200.7 Rev. 4.4	Calcium	106		mg/L	P424418	
		Cobalt	1.0	U	ug/L	P424418	
		Iron	150		ug/L	P424418	
		Magnesium	4.06		mg/L	P424418	
		Manganese	8.1		ug/L	P424418	
		Potassium	3.2		mg/L	P424418	
		Sodium	49.2		mg/L	P424418	
		Strontium	550		ug/L	P424418	
		Tin	4.4	I	ug/L	P424418	
		Titanium	1.3	I	ug/L	P424418	
		Vanadium	2.5	I	ug/L	P424418	
		Zinc	5.0	U	ug/L	P424418	
	EPA 200.8 Rev. 5.4	Aluminum	70		ug/L	P424418	
		Antimony	0.10	I	ug/L	P424418	
		Arsenic	0.84		ug/L	P424418	
		Barium	11.5		ug/L	P424418	
		Beryllium	0.010	U	ug/L	P424418	
		Boron	61.6		ug/L	P424418	MS
		Cadmium	0.020	U	ug/L	P424418	
		Chromium	0.55	I	ug/L	P424418	
		Copper	0.52	I	ug/L	P424418	
		Lead	0.20	U	ug/L	P424418	
		Molybdenum	0.43	I	ug/L	P424418	
		Nickel	0.59	I	ug/L	P424418	
2379357	SM 2340 B-2011	Selenium	0.32	I	ug/L	P424418	
		Silver	0.010	U	ug/L	P424418	
		Thallium	0.10	U	ug/L	P424418	
		Hardness	282		mg/L	P424418	
	EPA 8270E	Oxybenzone**	9.7	U	ng/L	P424368	
		Acetochlor	0.24	U	ng/L	P424368	
		Octinoxate**	19	U	ng/L	P424368	
		Alachlor	0.24	U	ng/L	P424368	
		Avobenzone**	97	U	ng/L	P424368	
		Ametryn	1.0	I	ng/L	P424368	
		Atrazine	38		ng/L	P424368	
		PBDE-47**	3.9	U	ng/L	P424368	
		Atrazine Desethyl	4.8	I	ng/L	P424368	
		PBDE-99**	4.9	U	ng/L	P424368	
		Azinphos Methyl	1.9	U	ng/L	P424368	
		Tri-o-cresyl Phosphate**	5.8	U	ng/L	P424368	
		Azoxystrobin	0.49	U	ng/L	P424368	

Field ID: G5CE0120

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379357	EPA 8270E	Bromacil	0.49	U	ng/L	P424368	MS
		2-Ethylhexyl	12	U	ng/L	P424368	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.39	U	ng/L	P424368	
		Dechlorane Plus**	29	U	ng/L	P424368	
		Caffeine**	7.3	U	ng/L	P424368	
		Carbophenothion	0.19	U	ng/L	P424368	
		Carfentrazone Ethyl	0.097	U	ng/L	P424368	
		Chlorfenapyr	0.17	U	ng/L	P424368	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P424368	
		Chlorpyrifos Methyl	0.049	U	ng/L	P424368	
		Coumaphos	0.49	U	ng/L	P424368	
		Cyanazine	3.2	U	ng/L	P424368	
		Cyprodinil	0.097	U	ng/L	P424368	
		Demeton	1.5	U	ng/L	P424368	
		Diazinon	0.12	U	ng/L	P424368	
		Difenoconazole	0.58	U	ng/L	P424368	
		Dimethenamid	0.097	U	ng/L	P424368	
		Dimethomorph	0.17	U	ng/L	P424368	
		Disulfoton	0.49	U	ng/L	P424368	
		Dithiopyr	0.61	U	ng/L	P424368	
		EPTC	1.2	U	ng/L	P424368	
		Ethion	0.15	U	ng/L	P424368	
		Ethoprop	0.097	U	ng/L	P424368	
		Etridiazole	0.15	U	ng/L	P424368	
		Fenamiphos	0.49	U	ng/L	P424368	
		Fenbuconazole	0.12	U	ng/L	P424368	
		Fipronil	0.24	U	ng/L	P424368	
		Fipronil Desulfinyl**	0.12	U	ng/L	P424368	
		Fipronil Sulfide	1.4		ng/L	P424368	
		Fipronil Sulfone	2.6		ng/L	P424368	
		Fluazifop-P-butyl	0.097	U	ng/L	P424368	
		Fludioxonil	0.12	U	ng/L	P424368	
		Flumioxazin	4.4	U	ng/L	P424368	
		Flutolanil	0.097	U	ng/L	P424368	
		Fluxapyroxad	0.097	U	ng/L	P424368	
		Fonofos	0.19	U	ng/L	P424368	
		Hexazinone	0.81	I	ng/L	P424368	
		Imazalil	0.73	U	ng/L	P424368	
		Iprodione	0.58	U	ng/L	P424368	MS
		Loratadine**	0.34	U	ng/L	P424368	
		Malathion	0.34	U	ng/L	P424368	
		Metalaxyl	0.73	U	ng/L	P424368	
		Metolachlor	0.34	U	ng/L	P424368	
		Metribuzin	1.5	U	ng/L	P424368	

Field ID: G5CE0120

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379357	EPA 8270E	Mevinphos	1.0	U	ng/L	P424368	
		Molinate	0.29	U	ng/L	P424368	
		Myclobutanil	0.24	U	ng/L	P424368	
		Naled	1.5	U	ng/L	P424368	
		Napropamide	0.39	U	ng/L	P424368	
		Norflurazon	0.49	U	ng/L	P424368	
		Oxadiazon	0.29	U	ng/L	P424368	
		Oxyfluorfen	0.15	U	ng/L	P424368	
		Parathion Ethyl	0.24	U	ng/L	P424368	
		Parathion Methyl	0.53	U	ng/L	P424368	MS
		Pendimethalin	0.97	U	ng/L	P424368	
		Phenytoin**	3.4	U	ng/L	P424368	
		Phorate	0.51	UJ	ng/L	P424368	LCS, MS
		Prodiamine	0.17	U	ng/L	P424368	
		Prometon	0.87	U	ng/L	P424368	
		Prometryn	0.19	U	ng/L	P424368	
		Pronamide	0.15	U	ng/L	P424368	
		Propanil	0.12	U	ng/L	P424368	
		Propargite	1.5	U	ng/L	P424368	
		Propiconazole	0.83	I	ng/L	P424368	
		Pyraflufen Ethyl	0.24	U	ng/L	P424368	
		Pyridaben	0.44	U	ng/L	P424368	
		Pyriproxyfen	0.12	U	ng/L	P424368	
		Simazine	14		ng/L	P424368	
		Stirophos	0.12	U	ng/L	P424368	
		Sulfentrazone	32		ng/L	P424368	
		Tebuconazole	0.52	I	ng/L	P424368	
		Terbufos	0.097	U	ng/L	P424368	MS
		Terbuthylazine	0.41	U	ng/L	P424368	
		Thiobencarb	0.58	U	ng/L	P424368	
		Triadimefon	0.24	U	ng/L	P424368	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium, potassium and sodium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

EPA 8270E: MS accuracy for ametryn, atrazine, and hexazinone not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Unnamed Ditches N Coco Palm Dr.

Collection Date/Time: 01/09/2023 11:45

Field ID: G5CE0154

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379344	DEP SOP: NU-094-1	Color (true)	60		PCU	P424359	
	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P424363	
	EPA 300.0 Rev. 2.1	Chloride	76		mg Cl/L	P424624	
		Sulfate	17		mg SO4/L	P424627	
	SM 2320 B-2011	Total Alkalinity	227		mg CaCO3/L	P424709	
	SM 2540 C-2015	TDS	427		mg/L	P424910	
	SM 2540 D-2015	TSS	3	I	mg/L	P424819	
2379346	SM 4500-F- C-2011	Fluoride	0.24		mg F/L	P425151	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.082		mg N/L	P424798	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P424510	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.20		mg N/L	P424607	
	EPA 365.1 Rev. 2.0	Total-P	0.19		mg P/L	P424435	
2379348	SM 5310 B-2011	Organic Carbon	16		mg C/L	P424546	
2379354	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.16		mg P/L	P424365	
	EPA 8321B	2,4-D	0.0030	I	ug/L	P424452	
		Acesulfame K	0.10	U	ug/L	P424336	
		2,4,5-T	0.0040	U	ug/L	P424452	
		AMPA	0.10	U	ug/L	P424336	
		Acetaminophen	0.0080	U	ug/L	P424452	
		Acetamiprid	0.0020	U	ug/L	P424452	
		Endothall	0.25	U	ug/L	P424336	
		Glufosinate	0.10	U	ug/L	P424336	
		Glyphosate	0.10	U	ug/L	P424336	
		Afidopyropen	0.0020	U	ug/L	P424452	
		Bentazon	0.73		ug/L	P424452	
		Sucralose	1.4		ug/L	P424336	
		Benzovindiflupyr	0.0020	U	ug/L	P424452	
		Carbamazepine	0.0021	I	ug/L	P424452	
		Clothianidin	0.013		ug/L	P424452	
		Dinotefuran	0.0037	I	ug/L	P424452	
		Diuron	0.0020	U	ug/L	P424452	
		Fenuron	0.032	U	ug/L	P424452	
		Fluridone	0.0053		ug/L	P424452	
		Imazapyr	0.061		ug/L	P424452	
		Hydrocodone	0.0020	U	ug/L	P424452	
		Ibuprofen	0.080	U	ug/L	P424452	
		Imidacloprid	0.021		ug/L	P424452	MS
		Linuron	0.0040	U	ug/L	P424452	
		Mandestrobin	0.0020	U	ug/L	P424452	
		MCP	0.0067	I	ug/L	P424452	
		Naproxen	0.0080	U	ug/L	P424452	
		Primidone	0.0091	I	ug/L	P424452	
		Pyraclostrobin	0.0020	U	ug/L	P424452	

Field ID: G5CE0154

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379354	EPA 8321B	Silvex	0.0040	U	ug/L	P424452	
		Thiamethoxam	0.0020	U	ug/L	P424452	
		Tolfenpyrad	0.0020	U	ug/L	P424452	
		Triclopyr	0.0040	U	ug/L	P424452	
2379356	EPA 200.7 Rev. 4.4	Calcium	106		mg/L	P424418	
		Cobalt	1.0	U	ug/L	P424418	
		Iron	100	I	ug/L	P424418	
		Magnesium	3.91		mg/L	P424418	
		Manganese	8.4		ug/L	P424418	
		Potassium	3.2		mg/L	P424418	
		Sodium	46.9		mg/L	P424418	
		Strontium	559		ug/L	P424418	
		Tin	4.3	I	ug/L	P424418	
		Titanium	1.2	I	ug/L	P424418	
		Vanadium	2.6	I	ug/L	P424418	
		Zinc	5.0	U	ug/L	P424418	
	EPA 200.8 Rev. 5.4	Aluminum	56		ug/L	P424418	
		Antimony	0.10	I	ug/L	P424418	
		Arsenic	0.86		ug/L	P424418	
		Barium	11.7		ug/L	P424418	
		Beryllium	0.010	U	ug/L	P424418	
		Boron	63.8		ug/L	P424418	MS
		Cadmium	0.020	U	ug/L	P424418	
		Chromium	0.58	I	ug/L	P424418	
		Copper	0.46	I	ug/L	P424418	
		Lead	0.20	U	ug/L	P424418	
		Molybdenum	0.39	I	ug/L	P424418	
		Nickel	0.61	I	ug/L	P424418	
		Selenium	0.27	I	ug/L	P424418	
		Silver	0.010	U	ug/L	P424418	
		Thallium	0.10	U	ug/L	P424418	
	SM 2340 B-2011	Hardness	282		mg/L	P424418	
2379358	EPA 8270E	Oxybenzone**	9.6	U	ng/L	P424368	
		Acetochlor	0.24	U	ng/L	P424368	
		Octinoxate**	19	U	ng/L	P424368	
		Alachlor	0.24	U	ng/L	P424368	
		Avobenzone**	96	U	ng/L	P424368	
		Ametryn	0.91	I	ng/L	P424368	
		Atrazine	35		ng/L	P424368	
		PBDE-47**	3.8	U	ng/L	P424368	
		Atrazine Desethyl	3.4	I	ng/L	P424368	
		PBDE-99**	4.8	U	ng/L	P424368	
		Azinphos Methyl	1.9	U	ng/L	P424368	
		Tri-o-cresyl Phosphate**	5.8	U	ng/L	P424368	
		Azoxystrobin	0.48	U	ng/L	P424368	

Field ID: G5CE0154

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379358	EPA 8270E	Bromacil	0.48	U	ng/L	P424368	
		2-Ethylhexyl	12	U	ng/L	P424368	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.38	U	ng/L	P424368	
		Dechlorane Plus**	29	U	ng/L	P424368	
		Caffeine**	7.2	U	ng/L	P424368	
		Carbophenothion	0.19	U	ng/L	P424368	
		Carfentrazone Ethyl	0.096	U	ng/L	P424368	
		Chlorfenapyr	0.17	U	ng/L	P424368	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P424368	
		Chlorpyrifos Methyl	0.048	U	ng/L	P424368	
		Coumaphos	0.48	U	ng/L	P424368	
		Cyanazine	3.1	U	ng/L	P424368	MS
		Cyprodinil	0.096	U	ng/L	P424368	
		Demeton	1.4	U	ng/L	P424368	
		Diazinon	0.12	U	ng/L	P424368	
		Difenoconazole	0.58	U	ng/L	P424368	
		Dimethenamid	0.096	U	ng/L	P424368	
		Dimethomorph	0.17	U	ng/L	P424368	
		Disulfoton	0.48	U	ng/L	P424368	
		Dithiopyr	0.60	U	ng/L	P424368	
		EPTC	1.2	U	ng/L	P424368	
		Ethion	0.14	U	ng/L	P424368	
		Ethoprop	0.096	U	ng/L	P424368	
		Etridiazole	0.14	U	ng/L	P424368	
		Fenamiphos	0.48	U	ng/L	P424368	
		Fenbuconazole	0.12	U	ng/L	P424368	
		Fipronil	0.24	U	ng/L	P424368	
		Fipronil Desulfinyl**	0.12	U	ng/L	P424368	
		Fipronil Sulfide	1.1		ng/L	P424368	
		Fipronil Sulfone	2.5		ng/L	P424368	
		Fluazifop-P-butyl	0.096	U	ng/L	P424368	
		Fludioxonil	0.12	U	ng/L	P424368	
		Flumioxazin	4.3	U	ng/L	P424368	
		Flutolanil	0.096	U	ng/L	P424368	
		Fluxapyroxad	0.096	U	ng/L	P424368	
		Fonofos	0.19	U	ng/L	P424368	
		Hexazinone	0.77	I	ng/L	P424368	
		Imazalil	0.72	U	ng/L	P424368	
		Iprodione	0.58	U	ng/L	P424368	MS
		Loratadine**	0.34	U	ng/L	P424368	
		Malathion	0.34	U	ng/L	P424368	
		Metalaxyl	0.72	U	ng/L	P424368	
		Metolachlor	0.34	U	ng/L	P424368	
		Metribuzin	1.4	U	ng/L	P424368	

Field ID: G5CE0154

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2379358	EPA 8270E	Mevinphos	1.0	U	ng/L	P424368	
		Molinate	0.29	U	ng/L	P424368	
		Myclobutanil	0.24	U	ng/L	P424368	
		Naled	1.4	U	ng/L	P424368	
		Napropamide	0.38	U	ng/L	P424368	
		Norflurazon	0.48	U	ng/L	P424368	
		Oxadiazon	0.29	U	ng/L	P424368	
		Oxyfluorfen	0.14	U	ng/L	P424368	
		Parathion Ethyl	0.24	U	ng/L	P424368	
		Parathion Methyl	0.53	U	ng/L	P424368	MS
		Pendimethalin	0.96	U	ng/L	P424368	
		Phenytoin**	3.4	U	ng/L	P424368	
		Phorate	0.51	UJ	ng/L	P424368	LCS, MS
		Prodiamine	0.17	U	ng/L	P424368	
		Prometon	0.87	U	ng/L	P424368	
		Prometryn	0.19	U	ng/L	P424368	
		Pronamide	0.14	U	ng/L	P424368	
		Propanil	0.12	U	ng/L	P424368	
		Propargite	1.4	U	ng/L	P424368	
		Propiconazole	0.74	I	ng/L	P424368	
		Pyraflufen Ethyl	0.24	U	ng/L	P424368	
		Pyridaben	0.43	U	ng/L	P424368	
		Pyriproxyfen	0.12	U	ng/L	P424368	
		Simazine	13		ng/L	P424368	
		Stirophos	0.12	U	ng/L	P424368	
		Sulfentrazone	27		ng/L	P424368	
		Tebuconazole	0.51	I	ng/L	P424368	
		Terbufos	0.096	U	ng/L	P424368	MS
		Terbuthylazine	0.41	U	ng/L	P424368	
		Thiobencarb	0.58	U	ng/L	P424368	
		Triadimefon	0.24	U	ng/L	P424368	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium, potassium and sodium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

EPA 8270E: MS accuracy for ametryn, atrazine, and hexazinone not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P424359

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P424363

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P424418

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Cobalt	1.0	U	ug/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
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: P424418

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
Copper	0.40	U	ug/L
Lead	0.20	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: P424624

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: P424627

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P424798

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P424510

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P424607

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P424435

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P424365

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

Reference Method: EPA 8270E
Batch ID: P424368

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P424368

Component	Result	Code	Units
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
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	0.62	U	ng/L
Dithiopyr	0.62	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P424368

Component	Result	Code	Units
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	4.5	U	ng/L
Flumioxazin	4.5	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.35	U	ng/L
Loratadine	0.35	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.75	U	ng/L
Metaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	1.5	U	ng/L
Metribuzin	1.5	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P424368

Component	Result	Code	Units
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
Phenytol	3.5	U	ng/L
Phenytol	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiatone	0.18	U	ng/L
Prodiatone	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
Pronatone	0.15	U	ng/L
Pronatone	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
Sulfentrazole	0.50	U	ng/L
Sulfentrazole	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
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P424368

Component	Result	Code	Units
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: P424336

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: P424452

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	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: P424709

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P424709

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-2015
Batch ID: P424910

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P424819

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P425151

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P424546

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: P424359

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P424363

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P424418

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Cobalt	101		P	85 - 115
Iron	105		P	85 - 115
Magnesium	101		P	85 - 115
Manganese	102		P	85 - 115
Potassium	103		P	85 - 115
Sodium	106		P	85 - 115
Strontium	106		P	85 - 115
Tin	103		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	101		P	85 - 115
Zinc	99.7		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P424418

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Antimony	106		P	85 - 115
Arsenic	104		P	85 - 115
Barium	105		P	85 - 115
Beryllium	95.8		P	85 - 115
Boron	102		P	85 - 115
Cadmium	105		P	85 - 115
Chromium	101		P	85 - 115
Copper	102		P	85 - 115
Lead	97.5		P	85 - 115
Molybdenum	103		P	85 - 115
Nickel	104		P	85 - 115
Selenium	103		P	85 - 115
Silver	104		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P424624

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.7		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P424627

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P424798

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P424510

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P424607

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P424435

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P424365

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

Reference Method: EPA 8270E
Batch ID: P424368

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	105		P	42 - 162
Acetochlor	79.3		P	69 - 123
Alachlor	70.9		P	65 - 118
Ametryn	109		P	58 - 141
Atrazine	88.1		P	73 - 118
Atrazine Desethyl	52.3		P	32 - 125
Avobenzone	134		P	40 - 203
Azinphos Methyl	122		P	36 - 197
Azoxystrobin	98.4		P	58 - 226
Bromacil	79.3		P	48 - 120
Butylate	56.5		P	27 - 85.0
Caffeine	99.7		P	40 - 137
Carbophenothion	98.7		P	54 - 132
Carfentrazone Ethyl	82.7		P	60 - 142
Chlorfenapyr	63.8		P	53 - 117
Chlorpyrifos Ethyl	86.0		P	59 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P424368

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	91.5		P	66 - 119
Coumaphos	140		P	11 - 234
Cyanazine	245		P	61 - 248
Cyprodinil	107		P	50 - 147
Dechlorane Plus	121		P	47 - 182
Demeton	102		P	30 - 138
Diazinon	84.2		P	67 - 126
Difenoconazole	138		P	38 - 205
Dimethenamid	95.0		P	57 - 111
Dimethomorph	117		P	16 - 212
Disulfoton	83.5		P	46 - 126
Dithiopyr	70.1		P	62 - 115
EPTC	54.2		P	28 - 80.0
Ethion	68.4		P	24 - 122
Ethoprop	97.4		P	62 - 113
Etridiazole	48.4		P	28 - 92.0
Fenamiphos	90.1		P	57 - 128
Fenbuconazole	136		P	52 - 155
Fipronil	69.0		P	63 - 130
Fipronil Desulfinyl	64.9		P	61 - 130
Fipronil Sulfide	91.1		P	56 - 117
Fipronil Sulfone	116		P	52 - 118
Fluazifop-P-butyl	93.4		P	61 - 128
Fludioxonil	81.2		P	59 - 129
Flumioxazin	72.5		P	30 - 250
Flutolanil	78.7		P	53 - 127
Fluxapyroxad	119		P	42 - 132
Fonofos	87.2		P	61 - 110
Hexazinone	94.0		P	46 - 139
Imazalil	101		P	40 - 139
Iprodione	126		P	40 - 146
Loratadine	95.6		P	10 - 224
Malathion	99.1		P	61 - 135
Metaxyl	96.0		P	58 - 121
Metolachlor	79.3		P	64 - 118
Metribuzin	88.7		P	45 - 245
Mevinphos	95.3		P	49 - 118
Molinate	75.3		P	42 - 92.0
Myclobutanil	84.4		P	55 - 127
Naled	99.5		P	10 - 114
Napropamide	56.8		P	39 - 121
Norflurazon	93.4		P	55 - 129
Octinoxate	98.3		P	26 - 166
Oxadiazon	91.4		P	54 - 115
Oxybenzone	95.6		P	49 - 135
Oxyfluorfen	80.0		P	64 - 139
Parathion Ethyl	95.5		P	70 - 111
Parathion Methyl	131		P	76 - 136
PBDE-47	104		P	41 - 148
PBDE-99	105		P	38 - 147
Pendimethalin	76.1		P	52 - 118
Phenytol	44.4		P	10 - 162

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P424368

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Phorate	132		F	40 - 122
Prodiamine	75.1		P	26 - 141
Prometon	96.8		P	54 - 122
Prometryn	98.6		P	61 - 128
Pronamide	74.1		P	72 - 121
Propanil	95.4		P	45 - 144
Propargite	82.4		P	10 - 199
Propiconazole	83.4		P	56 - 127
Pyraflufen Ethyl	84.1		P	56 - 140
Pyridaben	101		P	26 - 211
Pyriproxyfen	93.8		P	33 - 194
Simazine	91.6		P	67 - 121
Stirophos	97.2		P	20 - 142
Sulfentrazone	93.1		P	21 - 144
Tebuconazole	86.3		P	10 - 122
Terbufos	97.2		P	60 - 129
Terbuthylazine	88.9		P	69 - 113
Thiobencarb	111		P	51 - 120
Tri-o-cresyl Phosphate	105		P	49 - 150
Triadimefon	68.1		P	56 - 114

Reference Method: EPA 8321B

Batch ID: P424336

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	103		P	40 - 150
AMPA	107		P	40 - 150
Endothall	123		P	40 - 150
Glufosinate	126		P	40 - 150
Glyphosate	105		P	40 - 150
Sucralose	107		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P424452

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	105		P	40 - 150
2,4,5-T	84.4		P	40 - 150
Acetaminophen	88.7		P	30 - 150
Acetamiprid	98.6		P	40 - 150
Afidopyropen	73.3		P	30 - 150
Bentazon	85.6		P	30 - 150
Benzovindiflupyr	92.3		P	40 - 150
Carbamazepine	83.0		P	40 - 150
Clothianidin	98.6		P	40 - 150
Dinotefuran	98.0		P	40 - 150
Diuron	89.9		P	40 - 150
Fenuron	108		P	40 - 150
Fluridone	98.1		P	40 - 150
Hydrocodone	94.3		P	40 - 150
Ibuprofen	108		P	40 - 150
Imazapyr	93.9		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P424452

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imidacloprid	103		P	40 - 150
Linuron	74.5		P	40 - 150
Mandestrobin	107		P	40 - 150
MCPP	105		P	40 - 150
Naproxen	86.8		P	40 - 150
Primidone	95.2		P	40 - 150
Pyraclostrobin	70.5		P	40 - 150
Silvex	82.8		P	40 - 150
Thiamethoxam	96.9		P	40 - 150
Tolfenpyrad	33.5		P	30 - 150
Triclopyr	84.6		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P424709

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.1		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P424910

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

Reference Method: SM 2540 D-2015
Batch ID: P424819

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	98.1		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P425151

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.8		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P424546

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P424418

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379193	Calcium	102		P	80 - 120
2379193	Cobalt	102	102	P/P	80 - 120
2379193	Iron	104	108	P/P	80 - 120
2379193	Magnesium	103		P	80 - 120
2379193	Manganese	103	105	P/P	80 - 120
2379193	Potassium	100	107	P/P	80 - 120
2379193	Sodium	107		P	80 - 120
2379193	Strontium	104	107	P/P	80 - 120
2379193	Tin	99.9	100	P/P	80 - 120
2379193	Titanium	103	105	P/P	80 - 120
2379193	Vanadium	105	107	P/P	80 - 120
2379193	Zinc	98.9	102	P/P	80 - 120
2379387	Cobalt	102		P	80 - 120
2379387	Iron	100		P	80 - 120
2379387	Manganese	105		P	80 - 120
2379387	Strontium	103		P	80 - 120
2379387	Tin	102		P	80 - 120
2379387	Titanium	109		P	80 - 120
2379387	Vanadium	112		P	80 - 120
2379387	Zinc	113		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P424418

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379193	Aluminum	103	101	P/P	80 - 120
2379193	Antimony	108	107	P/P	80 - 120
2379193	Arsenic	107	105	P/P	80 - 120
2379193	Barium	107	103	P/P	80 - 120
2379193	Beryllium	97.3	97.1	P/P	80 - 120
2379193	Boron	102	103	P/P	80 - 120
2379193	Cadmium	106	109	P/P	80 - 120
2379193	Chromium	102	100	P/P	80 - 120
2379193	Copper	100	99.6	P/P	80 - 120
2379193	Lead	98.6	99.1	P/P	80 - 120
2379193	Molybdenum	105	104	P/P	80 - 120
2379193	Nickel	104	104	P/P	80 - 120
2379193	Selenium	101	99.3	P/P	80 - 120
2379193	Silver	103	101	P/P	80 - 120
2379193	Thallium	105	106	P/P	80 - 120
2379387	Aluminum	108		P	80 - 120
2379387	Antimony	113		P	80 - 120
2379387	Arsenic	120		P	80 - 120
2379387	Barium	113		P	80 - 120
2379387	Beryllium	80.1		P	80 - 120
2379387	Boron	60.8		F	80 - 120
2379387	Cadmium	101		P	80 - 120
2379387	Chromium	101		P	80 - 120
2379387	Copper	81.0		P	80 - 120
2379387	Lead	106		P	80 - 120
2379387	Molybdenum	113		P	80 - 120
2379387	Nickel	91.3		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P424418

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379387	Selenium	116		P	80 - 120
2379387	Silver	88.6		P	80 - 120
2379387	Thallium	105		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P424624

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379138	Chloride	95.1		P	90 - 110
2379142	Chloride	95.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P424627

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379138	Sulfate	98.2		P	90 - 110
2379142	Sulfate	97.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P424798

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379539	Ammonia-N	98.4	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P424510

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379346	Kjeldahl Nitrogen	103	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P424607

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379345	NO2NO3-N	98.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P424435

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379304	Total-P	107	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P424365

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379228	O-Phosphate-P	99.3	98.8	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P424368

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

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P424368

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379192	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.6	100	P/P	26 - 165
2379192	Acetochlor	71.6	85.5	P/P	67 - 124
2379192	Alachlor	68.3	83.7	P/P	60 - 120
2379192	Atrazine Desethyl	56.6	61.7	P/P	15 - 122
2379192	Avobenzone	113	114	P/P	37 - 178
2379192	Azinphos Methyl	126	123	P/P	40 - 292
2379192	Azoxystrobin	105	111	P/P	35 - 220
2379192	Bromacil	85.0	80.4	P/P	45 - 127
2379192	Butylate	55.8	52.0	P/P	20 - 83.0
2379192	Caffeine	99.3	95.7	P/P	10 - 194
2379192	Carbophenothion	108	108	P/P	57 - 127
2379192	Carfentrazone Ethyl	82.0	81.0	P/P	51 - 141
2379192	Chlorfenapyr	70.9	71.8	P/P	46 - 111
2379192	Chlorpyrifos Ethyl	72.8	79.7	P/P	52 - 120
2379192	Chlorpyrifos Methyl	89.0	108	P/P	63 - 119
2379192	Coumaphos	155	139	P/P	10 - 228
2379192	Cyanazine	260	232	F/P	59 - 241
2379192	Cyprodinil	113	133	P/P	47 - 146
2379192	Dechlorane Plus	79.1	74.8	P/P	50 - 150
2379192	Demeton	129	124	P/P	40 - 136
2379192	Diazinon	84.1	102	P/P	69 - 132
2379192	Difenoconazole	176	142	P/P	57 - 258
2379192	Dimethenamid	96.8	92.6	P/P	54 - 110
2379192	Dimethomorph	116	146	P/P	28 - 210
2379192	Disulfoton	88.5	96.4	P/P	43 - 133
2379192	Dithiopyr	70.4	83.8	P/P	39 - 116
2379192	EPTC	50.0	48.2	P/P	20 - 78.0
2379192	Ethion	71.2	69.3	P/P	17 - 119
2379192	Ethoprop	110	117	P/P	66 - 120
2379192	Etridiazole	49.2	36.0	P/P	28 - 96.0
2379192	Fenamiphos	87.9	97.7	P/P	41 - 126
2379192	Fenbuconazole	148	128	P/P	42 - 169
2379192	Fipronil	79.0	87.4	P/P	61 - 132
2379192	Fipronil Desulfinyl	63.1	88.0	P/P	56 - 132
2379192	Fipronil Sulfide	116	109	P/P	48 - 119
2379192	Fipronil Sulfone	117	108	P/P	42 - 131
2379192	Fluazifop-P-butyl	107	102	P/P	53 - 131
2379192	Fludioxonil	93.0	97.2	P/P	56 - 127
2379192	Flumioxazin	97.5	108	P/P	19 - 300
2379192	Flutolanil	85.2	92.3	P/P	41 - 127
2379192	Fluxapyroxad	137	162	P/P	42 - 172
2379192	Fonofos	89.4	109	P/P	59 - 113
2379192	Imazalil	152	118	P/P	21 - 283
2379192	Iprodione	148	172	P/F	43 - 150
2379192	Loratadine	106	111	P/P	23 - 201
2379192	Malathion	98.8	97.0	P/P	58 - 136
2379192	Metalaxyl	94.7	97.5	P/P	55 - 120
2379192	Metolachlor	81.6	79.6	P/P	57 - 121
2379192	Metribuzin	102	109	P/P	58 - 294
2379192	Mevinphos	112	119	P/P	50 - 126
2379192	Molinate	86.3	75.3	P/P	42 - 93.0
2379192	Myclobutanil	96.2	101	P/P	55 - 125

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P424368

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379192	Naled	105	126	P/P	18 - 200
2379192	Napropamide	64.3	73.1	P/P	39 - 110
2379192	Norflurazon	114	121	P/P	48 - 128
2379192	Octinoxate	77.7	84.3	P/P	21 - 159
2379192	Oxadiazon	93.5	87.8	P/P	43 - 112
2379192	Oxybenzone	76.8	87.1	P/P	41 - 142
2379192	Oxyfluorfen	94.3	108	P/P	64 - 153
2379192	Parathion Ethyl	100	113	P/P	69 - 114
2379192	Parathion Methyl	150	154	F/F	79 - 139
2379192	PBDE-47	83.2	88.8	P/P	27 - 144
2379192	PBDE-99	85.0	89.6	P/P	18 - 150
2379192	Pendimethalin	101	118	P/P	50 - 139
2379192	Phenytoin	45.1	43.2	P/P	10 - 146
2379192	Phorate	162	136	F/P	54 - 161
2379192	Prodiamine	91.4	85.1	P/P	30 - 161
2379192	Prometon	109	133	P/P	45 - 134
2379192	Prometryn	110	133	P/P	45 - 137
2379192	Pronamide	81.2	87.4	P/P	65 - 133
2379192	Propanil	98.5	89.1	P/P	49 - 142
2379192	Propargite	79.1	89.8	P/P	10 - 203
2379192	Propiconazole	113	119	P/P	38 - 146
2379192	Pyraflufen Ethyl	78.5	98.3	P/P	34 - 153
2379192	Pyridaben	99.9	107	P/P	12 - 192
2379192	Pyriproxyfen	86.5	100	P/P	33 - 180
2379192	Simazine	112	104	P/P	51 - 157
2379192	Stirophos	98.8	99.7	P/P	10 - 128
2379192	Sulfentrazone	151	112	P/P	53 - 186
2379192	Tebuconazole	86.2	95.0	P/P	10 - 133
2379192	Terbufos	115	142	P/F	65 - 139
2379192	Terbuthylazine	96.5	104	P/P	66 - 117
2379192	Thiobencarb	117	98.4	P/P	51 - 119
2379192	Tri-o-cresyl Phosphate	82.9	90.4	P/P	31 - 144
2379192	Triadimefon	57.7	59.0	P/P	48 - 119

Reference Method: EPA 8321B

Batch ID: P424336

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2378951	Acesulfame K	96.0	99.2	P/P	40 - 150
2378951	AMPA	106	113	P/P	40 - 150
2378951	Endothall	128	127	P/P	40 - 150
2378951	Glufosinate	108	122	P/P	40 - 150
2378951	Glyphosate	104	105	P/P	40 - 150
2378951	Sucralose	97.8	91.6	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P424452

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2378952	2,4-D	91.6	106	P/P	40 - 150
2378952	2,4,5-T	100	99.6	P/P	40 - 150
2378952	Acetaminophen	97.6	94.5	P/P	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P424452

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2378952	Acetamiprid	77.5	88.5	P/P	40 - 150
2378952	Afidopyropen	78.2	95.4	P/P	30 - 150
2378952	Benzovindiflupyr	90.0	92.5	P/P	40 - 150
2378952	Carbamazepine	61.0	63.5	P/P	40 - 150
2378952	Clothianidin	97.3	100	P/P	40 - 150
2378952	Dinotefuran	91.6	93.7	P/P	40 - 150
2378952	Diuron	58.1	58.8	P/P	40 - 150
2378952	Fenuron	72.6	75.5	P/P	40 - 150
2378952	Fluridone	91.7	83.9	P/P	40 - 150
2378952	Hydrocodone	81.4	82.5	P/P	40 - 150
2378952	Ibuprofen	81.5	89.5	P/P	40 - 150
2378952	Imidacloprid	145	154	P/F	40 - 150
2378952	Linuron	62.0	59.6	P/P	40 - 150
2378952	Mandestrobin	94.9	97.3	P/P	40 - 150
2378952	MCP	117	114	P/P	40 - 150
2378952	Naproxen	82.3	79.4	P/P	40 - 150
2378952	Primidone	99.6	98.4	P/P	40 - 150
2378952	Pyraclostrobin	75.4	79.6	P/P	40 - 150
2378952	Silvex	78.3	84.8	P/P	40 - 150
2378952	Thiamethoxam	96.3	97.3	P/P	40 - 150
2378952	Tolfenpyrad	49.6	49.0	P/P	30 - 150
2378952	Triclopyr	101	109	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P425151

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379229	Fluoride	98.8	99.4	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P424546

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2379689	Organic Carbon	100		P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P424359

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379221	Color (true)	1.61	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P424363

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379343	Turbidity	0.545	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P424418

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379193	Calcium	2.95	Spike	P	0 - 20
2379193	Cobalt	0.701	Spike	P	0 - 20
2379193	Iron	3.31	Spike	P	0 - 20
2379193	Magnesium	3.53	Spike	P	0 - 20
2379193	Manganese	1.65	Spike	P	0 - 20
2379193	Potassium	3.72	Spike	P	0 - 20
2379193	Sodium	2.03	Spike	P	0 - 20
2379193	Strontium	2.11	Spike	P	0 - 20
2379193	Tin	0.595	Spike	P	0 - 20
2379193	Titanium	2.03	Spike	P	0 - 20
2379193	Vanadium	1.74	Spike	P	0 - 20
2379193	Zinc	3.21	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P424418

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379193	Aluminum	1.37	Spike	P	0 - 20
2379193	Antimony	0.631	Spike	P	0 - 20
2379193	Arsenic	1.69	Spike	P	0 - 20
2379193	Barium	2.72	Spike	P	0 - 20
2379193	Beryllium	0.150	Spike	P	0 - 20
2379193	Boron	1.05	Spike	P	0 - 20
2379193	Cadmium	2.58	Spike	P	0 - 20
2379193	Chromium	1.66	Spike	P	0 - 20
2379193	Copper	0.865	Spike	P	0 - 20
2379193	Lead	0.519	Spike	P	0 - 20
2379193	Molybdenum	0.584	Spike	P	0 - 20
2379193	Nickel	0.367	Spike	P	0 - 20
2379193	Selenium	1.88	Spike	P	0 - 20
2379193	Silver	1.05	Spike	P	0 - 20
2379193	Thallium	0.842	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P424624

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379138	Chloride	0.271	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P424627

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379138	Sulfate	1.34	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P424798

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379539	Ammonia-N	1.69	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P424510

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379346	Kjeldahl Nitrogen	0.548	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P424607

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379345	NO2NO3-N	0.478	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P424435

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379304	Total-P	0.0218	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P424365

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379228	O-Phosphate-P	0.332	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P424368

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379192	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	4.60	Spike	P	0 - 37
2379192	Acetochlor	17.7	Spike	P	0 - 28

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P424368

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379192	Alachlor	20.2	Spike	P	0 - 30
2379192	Ametryn	27.8	Spike	P	0 - 32
2379192	Atrazine	3.14	Spike	P	0 - 41
2379192	Atrazine Desethyl	4.52	Spike	P	0 - 36
2379192	Avobenzone	1.00	Spike	P	0 - 36
2379192	Azinphos Methyl	3.02	Spike	P	0 - 75
2379192	Azoxystrobin	3.90	Spike	P	0 - 39
2379192	Bromacil	4.34	Spike	P	0 - 33
2379192	Butylate	6.94	Spike	P	0 - 44
2379192	Caffeine	3.45	Spike	P	0 - 74
2379192	Carbophenothion	0.330	Spike	P	0 - 25
2379192	Carfentrazone Ethyl	1.31	Spike	P	0 - 27
2379192	Chlorfenapyr	1.23	Spike	P	0 - 24
2379192	Chlorpyrifos Ethyl	9.03	Spike	P	0 - 26
2379192	Chlorpyrifos Methyl	19.4	Spike	P	0 - 26
2379192	Coumaphos	11.4	Spike	P	0 - 28
2379192	Cyanazine	11.5	Spike	P	0 - 48
2379192	Cyprodinil	16.8	Spike	P	0 - 29
2379192	Dechlorane Plus	5.60	Spike	P	0 - 30
2379192	Demeton	3.94	Spike	P	0 - 33
2379192	Diazinon	19.2	Spike	P	0 - 29
2379192	Difenoconazole	21.1	Spike	P	0 - 34
2379192	Dimethenamid	4.14	Spike	P	0 - 39
2379192	Dimethomorph	22.7	Spike	P	0 - 51
2379192	Disulfoton	8.50	Spike	P	0 - 30
2379192	Dithiopyr	17.3	Spike	P	0 - 26
2379192	EPTC	3.66	Spike	P	0 - 43
2379192	Ethion	2.72	Spike	P	0 - 79
2379192	Ethoprop	5.68	Spike	P	0 - 29
2379192	Etridiazole	31.0	Spike	P	0 - 33
2379192	Fenamiphos	10.5	Spike	P	0 - 40
2379192	Fenbuconazole	14.5	Spike	P	0 - 74
2379192	Fipronil	9.32	Spike	P	0 - 29
2379192	Fipronil Desulfanyl	30.9	Spike	P	0 - 32
2379192	Fipronil Sulfide	5.40	Spike	P	0 - 30
2379192	Fipronil Sulfone	6.60	Spike	P	0 - 33
2379192	Fluazifop-P-butyl	4.79	Spike	P	0 - 38
2379192	Fludioxonil	4.36	Spike	P	0 - 29
2379192	Flumioxazin	10.6	Spike	P	0 - 51
2379192	Flutolanil	7.79	Spike	P	0 - 25
2379192	Fluxapyroxad	15.4	Spike	P	0 - 45
2379192	Fonofos	19.7	Spike	P	0 - 27
2379192	Hexazinone	2.27	Spike	P	0 - 30
2379192	Imazalil	25.3	Spike	P	0 - 100
2379192	Iprodione	15.0	Spike	P	0 - 33
2379192	Loratadine	4.53	Spike	P	0 - 56
2379192	Malathion	1.87	Spike	P	0 - 37
2379192	Metalaxyl	2.72	Spike	P	0 - 40
2379192	Metolachlor	1.60	Spike	P	0 - 29
2379192	Metribuzin	6.08	Spike	P	0 - 45
2379192	Mevinphos	5.90	Spike	P	0 - 29

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P424368

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379192	Molinate	13.7	Spike	P	0 - 33
2379192	Myclobutanil	4.81	Spike	P	0 - 26
2379192	Naled	17.7	Spike	P	0 - 37
2379192	Napropamide	12.8	Spike	P	0 - 44
2379192	Norflurazon	5.49	Spike	P	0 - 30
2379192	Octinoxate	8.04	Spike	P	0 - 45
2379192	Oxadiazon	5.56	Spike	P	0 - 28
2379192	Oxybenzone	12.5	Spike	P	0 - 46
2379192	Oxyfluorfen	13.6	Spike	P	0 - 28
2379192	Parathion Ethyl	11.6	Spike	P	0 - 31
2379192	Parathion Methyl	2.59	Spike	P	0 - 29
2379192	PBDE-47	6.56	Spike	P	0 - 36
2379192	PBDE-99	5.22	Spike	P	0 - 40
2379192	Pendimethalin	15.8	Spike	P	0 - 33
2379192	Phenytoin	4.13	Spike	P	0 - 100
2379192	Phorate	17.9	Spike	P	0 - 36
2379192	Prodiamine	7.16	Spike	P	0 - 71
2379192	Prometon	19.8	Spike	P	0 - 36
2379192	Prometryn	19.0	Spike	P	0 - 28
2379192	Pronamide	7.34	Spike	P	0 - 24
2379192	Propanil	10.1	Spike	P	0 - 28
2379192	Propargite	12.7	Spike	P	0 - 43
2379192	Propiconazole	4.72	Spike	P	0 - 33
2379192	Pyraflufen Ethyl	22.4	Spike	P	0 - 29
2379192	Pyridaben	6.02	Spike	P	0 - 30
2379192	Pyriproxyfen	14.7	Spike	P	0 - 79
2379192	Simazine	5.18	Spike	P	0 - 29
2379192	Stirophos	0.902	Spike	P	0 - 61
2379192	Sulfentrazone	18.0	Spike	P	0 - 33
2379192	Tebuconazole	7.15	Spike	P	0 - 69
2379192	Terbufos	20.7	Spike	P	0 - 29
2379192	Terbuthylazine	7.47	Spike	P	0 - 32
2379192	Thiobencarb	17.6	Spike	P	0 - 26
2379192	Tri-o-cresyl Phosphate	8.59	Spike	P	0 - 33
2379192	Triadimefon	1.82	Spike	P	0 - 28

Reference Method: EPA 8321B

Batch ID: P424336

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2378951	Acesulfame K	3.32	Spike	P	0 - 30
2378951	AMPA	6.64	Spike	P	0 - 30
2378951	Endothall	1.07	Spike	P	0 - 30
2378951	Glufosinate	12.0	Spike	P	0 - 30
2378951	Glyphosate	1.09	Spike	P	0 - 30
2378951	Sucralose	6.14	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P424452

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2378952	2,4-D	12.9	Spike	P	0 - 30
2378952	2,4,5-T	0.720	Spike	P	0 - 30
2378952	Acetaminophen	3.23	Spike	P	0 - 30
2378952	Acetamiprid	13.2	Spike	P	0 - 30
2378952	Afidopyropen	19.8	Spike	P	0 - 30
2378952	Bentazon	12.3	Spike	P	0 - 30
2378952	Benzovindiflupyr	2.71	Spike	P	0 - 30
2378952	Carbamazepine	3.99	Spike	P	0 - 30
2378952	Clothianidin	2.87	Spike	P	0 - 30
2378952	Dinotefuran	2.29	Spike	P	0 - 30
2378952	Diuron	1.12	Spike	P	0 - 30
2378952	Fenuron	4.03	Spike	P	0 - 30
2378952	Fluridone	5.90	Spike	P	0 - 30
2378952	Hydrocodone	1.27	Spike	P	0 - 30
2378952	Ibuprofen	9.38	Spike	P	0 - 30
2378952	Imazapyr	0.581	Spike	P	0 - 30
2378952	Imidacloprid	4.99	Spike	P	0 - 30
2378952	Linuron	3.99	Spike	P	0 - 30
2378952	Mandestrobin	2.50	Spike	P	0 - 30
2378952	MCP	3.17	Spike	P	0 - 30
2378952	Naproxen	3.55	Spike	P	0 - 30
2378952	Primidone	1.13	Spike	P	0 - 30
2378952	Pyraclostrobin	5.42	Spike	P	0 - 30
2378952	Silvex	7.89	Spike	P	0 - 30
2378952	Thiamethoxam	0.952	Spike	P	0 - 30
2378952	Tolfenpyrad	1.33	Spike	P	0 - 30
2378952	Triclopyr	7.52	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P424709

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379739	Total Alkalinity	1.55	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015

Batch ID: P424910

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2378760	TDS	0.342	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011

Batch ID: P425151

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379229	Fluoride	0.487	Spike	P	0 - 1.6

Quality Assurance Report Precision

Reference Method: SM 5310 B-2011
Batch ID: P424546

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2379689	Organic Carbon	0.385	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2379353
Field Sample ID: G5CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	111	P	30 - 160
EPA 8321B	Acetaminophen-d4	95.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	64.1	P	30 - 160
EPA 8321B	Diuron-d6	50.1	P	30 - 160
EPA 8321B	Endothall-d6	102	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	86.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	86.5	P	30 - 160
EPA 8321B	Primidone-d5	86.7	P	30 - 160
EPA 8321B	Sucralose-d6	61.3	P	30 - 160

Lab Sample ID: 2379354
Field Sample ID: G5CE0154

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	106	P	30 - 160
EPA 8321B	Acetaminophen-d4	93.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	68.8	P	30 - 160
EPA 8321B	Diuron-d6	60.6	P	30 - 160
EPA 8321B	Endothall-d6	109	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	89.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	82.8	P	30 - 160
EPA 8321B	Primidone-d5	89.6	P	30 - 160
EPA 8321B	Sucralose-d6	56.8	P	30 - 160

Lab Sample ID: 2379357
Field Sample ID: G5CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	90.8	P	20 - 200
EPA 8270E	Simazine-d10	114	P	62 - 142
EPA 8270E	Terbufos-d10	100	P	58 - 132
EPA 8270E	Terphenyl-d14	106	P	52 - 137

Lab Sample ID: 2379358
Field Sample ID: G5CE0154

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	73.0	P	20 - 200
EPA 8270E	Simazine-d10	93.6	P	62 - 142
EPA 8270E	Terbufos-d10	105	P	58 - 132
EPA 8270E	Terphenyl-d14	105	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A116827

Included Lab Sample IDs: 2379343, 2379344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A116828

Included Lab Sample IDs: 2379343, 2379344

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A116831

Included Lab Sample IDs: 2379347, 2379348

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.1	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A116833

Included Lab Sample IDs: 2379343, 2379344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.8	99.0	P/P	90 - 110
Sulfate	98.9	99.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A116891

Included Lab Sample IDs: 2379345, 2379346

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

Reference Method: SM 5310 B-2011

Run ID: A116895

Included Lab Sample IDs: 2379345, 2379346

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.0	99.5	P/P	90 - 110
Organic Carbon	99.5	98.8	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A116897

Included Lab Sample IDs: 2379353, 2379354

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	108	108	P/P	60 - 160
Endothall	104	107	P/P	60 - 160
Glufosinate	93.8	100	P/P	60 - 160
Glyphosate	86.2	99.0	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A116918

Included Lab Sample IDs: 2379353, 2379354

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	103	103	P/P	50 - 150
2,4,5-T	124	106	P/P	50 - 150
Acetaminophen	115	113	P/P	60 - 160
Acetamiprid	139	141	P/P	50 - 150
Afidopyropen	138	140	P/P	50 - 150
Benzovindiflupyr	123	129	P/P	50 - 150
Carbamazepine	115	126	P/P	60 - 150
Clothianidin	120	117	P/P	60 - 150
Dinotefuran	114	123	P/P	50 - 150
Diuron	144	142	P/P	60 - 160
Fenuron	115	115	P/P	60 - 150
Fluridone	123	122	P/P	60 - 160
Hydrocodone	119	121	P/P	60 - 150
Ibuprofen	123	119	P/P	50 - 160
Imazapyr	108	110	P/P	50 - 150
Imidacloprid	122	120	P/P	60 - 150
Linuron	108	112	P/P	60 - 150
Mandestrobin	136	132	P/P	50 - 150
MCPP	113	116	P/P	50 - 150
Naproxen	146	87.9	P/P	50 - 160
Primidone	107	109	P/P	60 - 150
Pyraclostrobin	115	118	P/P	60 - 150
Silvex	117	118	P/P	50 - 150
Thiamethoxam	128	121	P/P	50 - 150
Tolfenpyrad	109	110	P/P	60 - 150
Triclopyr	102	113	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A116920

Included Lab Sample IDs: 2379345, 2379346

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	93.5	106	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A116932

Included Lab Sample IDs: 2379357, 2379358

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	100		P	80 - 120
Avobenzone	100		P	80 - 120
Dechlorane Plus	99.7		P	80 - 120
Octinoxate	99.3		P	80 - 120
Oxybenzone	101		P	80 - 120
PBDE-47	98.3		P	80 - 120
PBDE-99	102		P	80 - 120
Tri-o-cresyl Phosphate	99.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A116935

Included Lab Sample IDs: 2379353, 2379354

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bentazon	110	116	P/P	50 - 160

Reference Method: EPA 8321B

Run ID: A116950

Included Lab Sample IDs: 2379353, 2379354

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	84.8	87.6	P/P	60 - 160
Sucralose	89.9	66.9	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A116954

Included Lab Sample IDs: 2379345, 2379346

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

Reference Method: SM 2320 B-2011

Run ID: A116966

Included Lab Sample IDs: 2379343, 2379344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.5	97.3	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A116990

Included Lab Sample IDs: 2379355, 2379356

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	90 - 110
Cobalt	96.4	96.0	P/P	90 - 110
Iron	105	105	P/P	90 - 110
Magnesium	104	104	P/P	90 - 110
Manganese	98.8	99.6	P/P	90 - 110
Potassium	106	104	P/P	90 - 110
Sodium	108	108	P/P	90 - 110
Strontium	100	102	P/P	90 - 110
Tin	95.9	94.8	P/P	90 - 110
Titanium	97.0	97.6	P/P	90 - 110
Vanadium	97.6	97.2	P/P	90 - 110
Zinc	94.7	92.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A117008

Included Lab Sample IDs: 2379345, 2379346

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	99.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A117034

Included Lab Sample IDs: 2379357, 2379358

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.1		P	80 - 120
Alachlor	88.7		P	80 - 120
Ametryn	120		P	80 - 120
Atrazine	98.5		P	80 - 120
Atrazine Desethyl	80.9		P	80 - 120
Azinphos Methyl	81.8		P	80 - 120
Azoxystrobin	96.8		P	80 - 120
Bromacil	114		P	80 - 120
Butylate	83.6		P	80 - 120
Caffeine	99.9		P	80 - 120
Carbophenothion	90.5		P	80 - 120
Carfentrazone Ethyl	85.4		P	80 - 120
Chlorfenapyr	87.7		P	80 - 120
Chlorpyrifos Ethyl	116		P	80 - 120
Chlorpyrifos Methyl	120		P	80 - 120
Coumaphos	95.1		P	80 - 120
Cyanazine	99.7		P	80 - 120
Cyprodinil	91.9		P	80 - 120
Demeton	112		P	80 - 120
Diazinon	102		P	80 - 120
Difenoconazole	90.5		P	80 - 120
Dimethenamid	112		P	80 - 120
Dimethomorph	107		P	80 - 120
Disulfoton	84.0		P	80 - 120
Dithiopyr	94.1		P	80 - 120
EPTC	95.9		P	80 - 120
Ethion	85.7		P	80 - 120
Ethoprop	118		P	80 - 120
Etridiazole	95.6		P	80 - 120
Fenamiphos	120		P	80 - 120
Fenbuconazole	103		P	80 - 120
Fipronil	87.3		P	80 - 120
Fipronil Desulfinyl	92.7		P	80 - 120
Fipronil Sulfide	99.1		P	80 - 120
Fipronil Sulfone	88.9		P	80 - 120
Fluazifop-P-butyl	91.3		P	80 - 120
Fludioxonil	95.9		P	80 - 120
Flumioxazin	90.3		P	80 - 120
Flutolanil	120		P	80 - 120
Fluxapyroxad	87.0		P	80 - 120
Fonofos	95.9		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	98.2		P	80 - 120
Iprodione	100		P	80 - 120
Loratadine	90.7		P	80 - 120
Malathion	114		P	80 - 120
Metalaxyl	93.5		P	80 - 120
Metolachlor	117		P	80 - 120
Metribuzin	88.3		P	80 - 120
Mevinphos	91.5		P	80 - 120
Molinate	105		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A117034

Included Lab Sample IDs: 2379357, 2379358

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	92.9		P	80 - 120
Naled	103		P	80 - 120
Napropamide	113		P	80 - 120
Norflurazon	85.5		P	80 - 120
Oxadiazon	105		P	80 - 120
Oxyfluorfen	87.5		P	80 - 120
Parathion Ethyl	113		P	80 - 120
Parathion Methyl	82.6		P	80 - 120
Pendimethalin	89.1		P	80 - 120
Phenytol	89.1		P	80 - 120
Phorate	107		P	80 - 120
Prodiamine	108		P	80 - 120
Prometon	120		P	80 - 120
Prometryn	96.0		P	80 - 120
Pronamide	91.3		P	80 - 120
Propanil	106		P	80 - 120
Propargite	82.4		P	80 - 120
Propiconazole	95.0		P	80 - 120
Pyraflufen Ethyl	86.9		P	80 - 120
Pyridaben	98.3		P	80 - 120
Pyriproxyfen	95.3		P	80 - 120
Simazine	102		P	80 - 120
Stirophos	93.9		P	80 - 120
Sulfentrazone	98.8		P	80 - 120
Tebuconazole	88.0		P	80 - 120
Terbufos	96.6		P	80 - 120
Terbuthylazine	101		P	80 - 120
Thiobencarb	102		P	80 - 120
Triadimefon	95.6		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A117050

Included Lab Sample IDs: 2379355, 2379356

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	104	99.9	P/P	90 - 110
Antimony	106	107	P/P	90 - 110
Arsenic	101	103	P/P	90 - 110
Barium	106	102	P/P	90 - 110
Beryllium	97.4	98.2	P/P	90 - 110
Boron	93.7	97.1	P/P	90 - 110
Cadmium	104	106	P/P	90 - 110
Chromium	98.7	92.9	P/P	90 - 110
Copper	98.9	94.8	P/P	90 - 110
Lead	94.2	95.5	P/P	90 - 110
Molybdenum	97.9	101	P/P	90 - 110
Nickel	92.0	92.6	P/P	90 - 110
Selenium	106	103	P/P	90 - 110
Silver	99.3	102	P/P	90 - 110
Thallium	101	101	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A117157

Included Lab Sample IDs: 2379343, 2379344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	104	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	101					1.61	
EPA 180.1 Rev. 2.0	Turbidity	101					0.545	
EPA 200.7 Rev. 4.4	Calcium	101	102					2.95
	Cobalt	101	102	102	102			0.701
	Iron	105	104	108	100			3.31
	Magnesium	101	103					3.53
	Manganese	102	103	105	105			1.65
	Potassium	103	100	107				3.72
	Sodium	106	107					2.03
	Strontium	106	104	107	103			2.11
	Tin	103	99.9	100	102			0.595
	Titanium	101	103	105	109			2.03
	Vanadium	101	105	107	112			1.74
	Zinc	99.7	98.9	102	113			3.21
EPA 200.8 Rev. 5.4	Aluminum	103	103	101	108			1.37
	Antimony	106	113	108	107			0.631
	Arsenic	104	120	107	105			1.69
	Barium	105	113	107	103			2.72
	Beryllium	95.8	80.1	97.3	97.1			0.150
	Boron	102	102	103	60.8			1.05
	Cadmium	105	101	106	109			2.58
	Chromium	101	102	100	101			1.66
	Copper	102	81.0	100	99.6			0.865
	Lead	97.5	98.6	99.1	106			0.519
	Molybdenum	103	105	104	113			0.584
	Nickel	104	104	104	91.3			0.367
	Selenium	103	116	101	99.3			1.88
	Silver	104	88.6	103	101			1.05
	Thallium	102	105	106	105			0.842
EPA 300.0 Rev. 2.1	Chloride	98.7	95.1	95.2			0.271	
	Sulfate	99.0	98.2	97.6			1.34	
EPA 350.1 Rev. 2.0	Ammonia-N	99.6	98.4	100				1.69
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	103	103				0.548
EPA 353.2 Rev. 2.0	NO2NO3-N	104	98.2					0.478
EPA 365.1 Rev. 2.0	Total-P	105	107	107				0.0218
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.8	99.3	98.8				0.332
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	105	95.6	100				4.60
	Acetochlor	79.3	71.6	85.5				17.7
	Alachlor	70.9	68.3	83.7				20.2
	Ametryn	109						27.8
	Atrazine	88.1						3.14
	Atrazine Desethyl	52.3	56.6	61.7				4.52
	Avobenzone	134	113	114				1.00
	Azinphos Methyl	122	126	123				3.02
	Azoxystrobin	98.4	105	111				3.90
	Bromacil	79.3	85.0	80.4				4.34
	Butylate	56.5	55.8	52.0				6.94
	Caffeine	99.7	99.3	95.7				3.45
	Carbophenothion	98.7	108	108				0.330
	Carfentrazone Ethyl	82.7	82.0	81.0				1.31
	Chlorfenapyr	63.8	70.9	71.8				1.23
	Chlorpyrifos Ethyl	86.0	72.8	79.7				9.03

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Chlorpyrifos Methyl	91.5	89.0	108			19.4
	Coumaphos	140	155	139			11.4
	Cyanazine	245	260	232			11.5
	Cyprodinil	107	113	133			16.8
	Dechlorane Plus	121	79.1	74.8			5.60
	Demeton	102	129	124			3.94
	Diazinon	84.2	84.1	102			19.2
	Difenoconazole	138	176	142			21.1
	Dimethenamid	95.0	96.8	92.6			4.14
	Dimethomorph	117	116	146			22.7
	Disulfoton	83.5	88.5	96.4			8.50
	Dithiopyr	70.1	70.4	83.8			17.3
	EPTC	54.2	50.0	48.2			3.66
	Ethion	68.4	71.2	69.3			2.72
	Ethoprop	97.4	110	117			5.68
	Etridiazole	48.4	49.2	36.0			31.0
	Fenamiphos	90.1	87.9	97.7			10.5
	Fenbuconazole	136	148	128			14.5
	Fipronil	69.0	79.0	87.4			9.32
	Fipronil Desulfinyl	64.9	63.1	88.0			30.9
	Fipronil Sulfide	91.1	116	109			5.40
	Fipronil Sulfone	116	117	108			6.60
	Fluazifop-P-butyl	93.4	107	102			4.79
	Fludioxonil	81.2	93.0	97.2			4.36
	Flumioxazin	72.5	97.5	108			10.6
	Flutolanil	78.7	85.2	92.3			7.79
	Fluxapyroxad	119	137	162			15.4
	Fonofos	87.2	89.4	109			19.7
	Hexazinone	94.0					2.27
	Imazalil	101	152	118			25.3
	Iprodione	126	148	172			15.0
	Loratadine	95.6	106	111			4.53
	Malathion	99.1	98.8	97.0			1.87
	Metalaxyl	96.0	94.7	97.5			2.72
	Metolachlor	79.3	81.6	79.6			1.60
	Metribuzin	88.7	102	109			6.08
	Mevinphos	95.3	112	119			5.90
	Molinate	75.3	86.3	75.3			13.7
	Myclobutanil	84.4	96.2	101			4.81
	Naled	99.5	105	126			17.7
	Napropamide	56.8	64.3	73.1			12.8
	Norflurazon	93.4	114	121			5.49
	Octinoxate	98.3	77.7	84.3			8.04
	Oxadiazon	91.4	93.5	87.8			5.56
	Oxybenzone	95.6	76.8	87.1			12.5
	Oxyfluorfen	80.0	94.3	108			13.6
	Parathion Ethyl	95.5	100	113			11.6
	Parathion Methyl	131	150	154			2.59
	PBDE-47	104	83.2	88.8			6.56
	PBDE-99	105	85.0	89.6			5.22
	Pendimethalin	76.1	101	118			15.8
	Phenytol	44.4	45.1	43.2			4.13
	Phorate	132	162	136			17.9
	Prodiamine	75.1	91.4	85.1			7.16

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Prometon	96.8	109	133			19.8
	Prometryn	98.6	110	133			19.0
	Pronamide	74.1	81.2	87.4			7.34
	Propanil	95.4	98.5	89.1			10.1
	Propargite	82.4	79.1	89.8			12.7
	Propiconazole	83.4	113	119			4.72
	Pyraflufen Ethyl	84.1	78.5	98.3			22.4
	Pyridaben	101	99.9	107			6.02
	Pyriproxyfen	93.8	86.5	100			14.7
	Simazine	91.6	112	104			5.18
	Stirophos	97.2	98.8	99.7			0.902
	Sulfentrazone	93.1	151	112			18.0
	Tebuconazole	86.3	86.2	95.0			7.15
	Terbufos	97.2	115	142			20.7
	Terbuthylazine	88.9	96.5	104			7.47
	Thiobencarb	111	117	98.4			17.6
	Tri-o-cresyl Phosphate	105	82.9	90.4			8.59
	Triadimefon	68.1	57.7	59.0			1.82
EPA 8321B	2,4-D	105	91.6	106			12.9
	2,4,5-T	84.4	100	99.6			0.720
	Acesulfame K	103	96.0	99.2			3.32
	Acetaminophen	88.7	97.6	94.5			3.23
	Acetamiprid	98.6	77.5	88.5			13.2
	Afidopyropen	73.3	78.2	95.4			19.8
	AMPA	107	106	113			6.64
	Bentazon	85.6					12.3
	Benzovindiflupyr	92.3	90.0	92.5			2.71
	Carbamazepine	83.0	61.0	63.5			3.99
	Clothianidin	98.6	97.3	100			2.87
	Dinotefuran	98.0	91.6	93.7			2.29
	Diuron	89.9	58.1	58.8			1.12
	Endothall	123	128	127			1.07
	Fenuron	108	72.6	75.5			4.03
	Fluridone	98.1	91.7	83.9			5.90
	Glufosinate	126	108	122			12.0
	Glyphosate	105	104	105			1.09
	Hydrocodone	94.3	81.4	82.5			1.27
	Ibuprofen	108	81.5	89.5			9.38
	Imazapyr	93.9					0.581
	Imidacloprid	103	145	154			4.99
	Linuron	74.5	62.0	59.6			3.99
	Mandestrobin	107	94.9	97.3			2.50
	MCPP	105	117	114			3.17
	Naproxen	86.8	82.3	79.4			3.55
	Primidone	95.2	99.6	98.4			1.13
	Pyraclostrobin	70.5	75.4	79.6			5.42
	Silvex	82.8	78.3	84.8			7.89
	Sucralose	107	97.8	91.6			6.14
	Thiamethoxam	96.9	96.3	97.3			0.952
	Tolfenpyrad	33.5	49.6	49.0			1.33
	Triclopyr	84.6	101	109			7.52
SM 2320 B-2011	Total Alkalinity	96.1				1.55	
SM 2540 C-2015	TDS	105				0.342	
SM 2540 D-2015	TSS	98.1					

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 4500-F- C-2011	Fluoride	99.8	98.8	99.4		0.487
SM 5310 B-2011	Organic Carbon	97.8	100			0.385

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2379343, 2379344
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2379343, 2379344
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2379355, 2379356
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2379355, 2379356
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2379343, 2379344
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2379343, 2379344
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2379345, 2379346
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2379345, 2379346
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2379345, 2379346
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2379345, 2379346
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2379347, 2379348
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2379357, 2379358
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2379357, 2379358
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2379353, 2379354
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2379343, 2379344
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2379355, 2379356
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2379343, 2379344
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2379343, 2379344
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2379343, 2379344
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2379345, 2379346

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	01/10/2023			01/10/2023 15:23	Samantha L Bates	2379343, 2379344
EPA 180.1 Rev. 2.0	01/10/2023			01/10/2023 14:55	Khloe J Berg	2379343
	01/10/2023			01/10/2023 14:56	Khloe J Berg	2379344
EPA 200.7 Rev. 4.4	01/10/2023	01/11/2023 11:40	George D Taylor	01/19/2023 17:32	McKinley C Carter	2379355
	01/10/2023	01/11/2023 11:40	George D Taylor	01/19/2023 17:40	McKinley C Carter	2379356
EPA 200.8 Rev. 5.4	01/10/2023	01/11/2023 11:40	George D Taylor	01/23/2023 18:53	Megan Whitefoot	2379355
	01/10/2023	01/11/2023 11:40	George D Taylor	01/23/2023 19:02	Megan Whitefoot	2379356
EPA 300.0 Rev. 2.1	01/10/2023			01/13/2023 18:25	Anna M. Plaviak	2379343
	01/10/2023			01/13/2023 18:40	Anna M. Plaviak	2379344
EPA 350.1 Rev. 2.0	01/10/2023			01/20/2023 11:03	Ping Hua	2379345
	01/10/2023			01/20/2023 11:05	Ping Hua	2379346
EPA 351.2 Rev. 2.0	01/10/2023	01/13/2023 12:30	Simonne.V. Calhoun	01/18/2023 12:34	Samantha L Bates	2379345
	01/10/2023	01/13/2023 12:30	Simonne.V. Calhoun	01/18/2023 12:35	Samantha L Bates	2379346
EPA 353.2 Rev. 2.0	01/10/2023			01/17/2023 11:00	Beverly Y. Sanders	2379345
	01/10/2023			01/17/2023 11:09	Beverly Y. Sanders	2379346
EPA 365.1 Rev. 2.0	01/10/2023	01/12/2023 15:28	Adam P Silver	01/13/2023 09:23	James L Waggeberby	2379345
	01/10/2023	01/12/2023 15:28	Adam P Silver	01/13/2023 09:27	James L Waggeberby	2379346
EPA 365.1 Rev. 2.0 dissolved	01/10/2023			01/10/2023 16:53	Elise M. Gillis	2379347
	01/10/2023			01/10/2023 16:54	Elise M. Gillis	2379348
EPA 8270E	01/10/2023	01/14/2023 08:00	Fe-Val Siddell	01/18/2023 00:03	Arthur Maknenko	2379357
	01/10/2023	01/14/2023 08:00	Fe-Val Siddell	01/18/2023 00:28	Arthur Maknenko	2379358
	01/10/2023	01/14/2023 08:00	Fe-Val Siddell	01/18/2023 16:26	Michael Poppell	2379357
	01/10/2023	01/14/2023 08:00	Fe-Val Siddell	01/18/2023 16:56	Michael Poppell	2379358
EPA 8321B	01/10/2023	01/12/2023 09:30	June Rhew	01/12/2023 14:57	Manjita Shrestha	2379353
	01/10/2023	01/12/2023 09:30	June Rhew	01/12/2023 15:10	Manjita Shrestha	2379354
	01/10/2023	01/12/2023 09:30	June Rhew	01/13/2023 03:06	Manjita Shrestha	2379353
	01/10/2023	01/12/2023 09:30	June Rhew	01/13/2023 03:21	Manjita Shrestha	2379354
	01/10/2023	01/13/2023 09:00	June Rhew	01/13/2023 19:24	Juyoung Kim	2379353
	01/10/2023	01/13/2023 09:00	June Rhew	01/13/2023 19:43	Juyoung Kim	2379354
	01/10/2023	01/13/2023 09:00	June Rhew	01/17/2023 20:22	Juyoung Kim	2379353
	01/10/2023	01/13/2023 09:00	June Rhew	01/17/2023 20:40	Juyoung Kim	2379354
SM 2320 B-2011	01/10/2023			01/19/2023 07:22	Adam P Silver	2379343
	01/10/2023			01/19/2023 07:37	Adam P Silver	2379344
SM 2340 B-2011	01/10/2023			01/19/2023 17:32	McKinley C Carter	2379355
	01/10/2023			01/19/2023 17:40	McKinley C Carter	2379356
SM 2540 C-2015	01/10/2023			01/13/2023 16:42	Yijie Li	2379343, 2379344
SM 2540 D-2015	01/10/2023			01/13/2023 16:42	Yijie Li	2379343, 2379344
SM 4500-F- C-2011	01/10/2023			01/28/2023 09:42	Dale L. Simmons	2379343
	01/10/2023			01/28/2023 09:48	Dale L. Simmons	2379344
SM 5310 B-2011	01/10/2023			01/13/2023 01:58	Khloe J Berg	2379345

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2011	01/10/2023			01/13/2023 02:42	Khloe J Berg	2379346