

Chemical Analysis Report

NW-DIST-2020-01-31-01

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

Event Description: **Pensacola Cantonment Run**
Request ID: **RQ-2020-01-27-16**
Customer: **NW-DIST**
Project ID: **SMP**

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

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

Date Certified: 25-FEB-2020 11:54

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first name.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Jones Creek upstream of N Navy Blvd

Collection Date/Time: 01/30/2020 09:20

Field ID: G4NW0429

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153491	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P378102	
	EPA 300.0 Rev. 2.1	Chloride	11		mg Cl/L	P378303	
		Sulfate	9.7		mg SO4/L	P378306	
	SM 2120 B-2011	Color (true)	91		PCU	P378110	
	SM 2320 B-2011	Total Alkalinity	4.7		mg CaCO3/L	P378420	
	SM 2540 C-2011	TDS	71		mg/L	P378766	
	SM 2540 D-2011	TSS	2	I	mg/L	P378579	
2153492	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P378424	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P378603	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.50		mg N/L	P378412	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.063		mg N/L	P378480	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P378256	
2153493	SM 5310 B-2011	Organic Carbon	13		mg C/L	P378474	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P378117	
2153521	EPA 8321B	2,4-D	0.0020	U	ug/L	P378093	
		Acesulfame K**	0.10	U	ug/L	P378149	MS
		AMPA**	0.10	U	ug/L	P378149	
		Sucralose**	0.20		ug/L	P378149	
		Acetaminophen**	0.0080	U	ug/L	P378093	
		Acetamidiprid**	0.0020	U	ug/L	P378093	
		Endothall**	0.25	U	ug/L	P378149	MS
		Glufosinate**	0.10	U	ug/L	P378149	
		Glyphosate**	0.10	U	ug/L	P378149	
		Afidopyropen**	0.0020	UJ	ug/L	P378093	
		Bentazon	8.0E-04	U	ug/L	P378093	MS
		Benzovindiflupyr**	0.0020	UJ	ug/L	P378093	
		Carbamazepine**	8.0E-04	U	ug/L	P378093	
		Clothianidin**	0.0020	U	ug/L	P378093	
		Dinotefuran**	0.0020	U	ug/L	P378093	
		Diuron	0.0020	U	ug/L	P378093	
		Fenuron	0.016	U	ug/L	P378093	
		Fluridone**	8.0E-04	U	ug/L	P378093	
		Imazapyr**	0.0063	I	ug/L	P378093	
		Hydrocodone**	0.0020	U	ug/L	P378093	
		Ibuprofen**	0.020	U	ug/L	P378093	
		Imidacloprid	0.0020	U	ug/L	P378093	
		Linuron	0.0040	U	ug/L	P378093	
		Mandestrobin**	0.0020	UJ	ug/L	P378093	
		MCPD	0.0020	U	ug/L	P378093	
		Naproxen**	0.0080	U	ug/L	P378093	
		Primidone**	0.0040	U	ug/L	P378093	
		Pyraclostrobin**	0.0020	U	ug/L	P378093	
		Thiamethoxam**	0.0020	U	ug/L	P378093	

Field ID: G4NW0429

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153521	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P378093	
		Triclopyr**	0.0040	U	ug/L	P378093	
2153527	EPA 200.7 Rev. 4.4	Barium	10.3		ug/L	P378159	
		Calcium	6.07		mg/L	P378159	
		Iron	380		ug/L	P378159	
		Magnesium	1.15		mg/L	P378159	
		Potassium	0.34	I	mg/L	P378159	
		Sodium	6.4		mg/L	P378159	
		Zinc	11	I	ug/L	P378159	
	EPA 200.8 Rev. 5.4	Aluminum	416		ug/L	P378159	
		Antimony	0.14	I	ug/L	P378159	
		Arsenic	0.68		ug/L	P378159	
		Beryllium	0.034	I	ug/L	P378159	
		Boron**	19.1		ug/L	P378159	
		Cadmium	0.020	U	ug/L	P378159	
		Chromium	0.50	I	ug/L	P378159	
		Cobalt	0.200		ug/L	P378159	
		Copper	0.49	I	ug/L	P378159	
		Lead	0.83		ug/L	P378159	
		Manganese	11.9		ug/L	P378159	
		Molybdenum	0.15	U	ug/L	P378159	
		Nickel	0.50	U	ug/L	P378159	
		Selenium	0.20	U	ug/L	P378159	
		Silver	0.010	U	ug/L	P378159	
		Thallium	0.10	U	ug/L	P378159	
2153547	EPA 8270E	Aldrin	4.6	U	ng/L	P378488	
		Alpha-BHC	2.3	U	ng/L	P378488	
		Alpha-Chlordane	1.1	U	ng/L	P378488	
		Beta-BHC	11	UJ	ng/L	P378488	CCV
		Bifenthrin**	4.6	U	ng/L	P378488	
		Delta-BHC	9.1	UJ	ng/L	P378488	CCV
		Gamma-BHC	9.1	UJ	ng/L	P378488	CCV
		Carbophenothion	11	U	ng/L	P378488	
		Chlorothalonil	2.3	U	ng/L	P378488	
		Cis-Nonachlor**	1.1	U	ng/L	P378488	
		Cypermethrin	23	U	ng/L	P378488	
		DDD-p,p'	6.8	U	ng/L	P378488	
		DDE-p,p'	6.8	U	ng/L	P378488	
		DDT-p,p'	8.0	U	ng/L	P378488	
		Dicofol	34	U	ng/L	P378488	
		Dieldrin	4.6	U	ng/L	P378488	
		Endosulfan I	4.6	U	ng/L	P378488	
		Endosulfan II	4.6	U	ng/L	P378488	
		Endosulfan Sulfate	2.3	U	ng/L	P378488	
		Endrin	2.3	U	ng/L	P378488	

Field ID: G4NW0429

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153547	EPA 8270E	Endrin Aldehyde	2.3	U	ng/L	P378488	MS
		Endrin Ketone	2.3	U	ng/L	P378488	
		Ethalfuralin**	3.4	U	ng/L	P378488	
		Gamma-Chlordane	1.1	U	ng/L	P378488	
		Heptachlor	1.7	U	ng/L	P378488	
		Heptachlor Epoxide	2.3	U	ng/L	P378488	
		Hexachlorobenzene	2.3	U	ng/L	P378488	
		Methoxychlor	4.6	U	ng/L	P378488	
		Mirex	2.3	U	ng/L	P378488	
		Permethrin	11	U	ng/L	P378488	
		Trans-Nonachlor**	1.1	U	ng/L	P378488	
		Trifluralin	2.9	U	ng/L	P378488	
	EPA 8276	Chlordane	5.7	U	ng/L	P378488	
		Toxaphene	34	U	ng/L	P378488	

Ref. Method and Comment:

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

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 02/13/2020.

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

Sample Location: Jackson Creek downstream of Old Corry Rd

Collection Date/Time: 01/30/2020 09:40

Field ID: G4NW0412

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153488	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P378102	
	EPA 300.0 Rev. 2.1	Chloride	10		mg Cl/L	P378303	
		Sulfate	11		mg SO4/L	P378306	
	SM 2120 B-2011	Color (true)	5.0	I	PCU	P378110	
	SM 2320 B-2011	Total Alkalinity	25		mg CaCO3/L	P378420	
	SM 2540 C-2011	TDS	85		mg/L	P378766	
	SM 2540 D-2011	TSS	2	U	mg/L	P378579	
	SM 4500 F-C-2011	Fluoride	0.036	I	mg F/L	P378424	
2153489	EPA 350.1 Rev. 2.0	Ammonia-N	0.030		mg N/L	P378603	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20		mg N/L	P378412	
	EPA 353.2 Rev. 2.0	NO2NO3-N	3.0		mg N/L	P378480	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P378254	
	SM 5310 B-2011	Organic Carbon	1.2		mg C/L	P378474	
2153490	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.010		mg P/L	P378117	
2153519	EPA 8321B	Aldicarb	0.020	U	ug/L	P378093	
		Aldicarb Sulfone	0.0020	U	ug/L	P378093	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P378093	
		Carbaryl	0.0020	U	ug/L	P378093	
		Carbofuran	0.0020	U	ug/L	P378093	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P378093	
		Methiocarb	0.0020	U	ug/L	P378093	
		Methomyl	0.0020	U	ug/L	P378093	
		Oxamyl	0.0020	U	ug/L	P378093	
		Propoxur	0.0020	U	ug/L	P378093	
		2,4-D	0.0020	U	ug/L	P378093	
		Acesulfame K**	0.10	U	ug/L	P378149	MS
2153520		AMPA**	0.24	I	ug/L	P378149	
		Sucralose**	3.0		ug/L	P378149	
		Acetaminophen**	0.0080	U	ug/L	P378093	
		Acetamiprid**	0.0020	U	ug/L	P378093	
		Endothall**	0.25	U	ug/L	P378149	MS
		Glufosinate**	0.10	U	ug/L	P378149	
		Glyphosate**	0.25	I	ug/L	P378149	
		Afidopyrophen**	0.0020	UJ	ug/L	P378093	
		Bentazon	0.0043		ug/L	P378093	MS
		Benzovindiflupyr**	0.0020	UJ	ug/L	P378093	
		Carbamazepine**	0.036		ug/L	P378093	
		Clothianidin**	0.0020	U	ug/L	P378093	
		Dinotefuran**	0.0020	U	ug/L	P378093	
		Diuron	0.0020	U	ug/L	P378093	
		Fenuron	0.016	U	ug/L	P378093	
		Fluridone**	8.0E-04	U	ug/L	P378093	
		Imazapyr**	0.0047	I	ug/L	P378093	

Field ID: G4NW0412

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153520	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P378093	
		Ibuprofen**	0.020	U	ug/L	P378093	
		Imidacloprid	0.029		ug/L	P378093	
		Linuron	0.0040	U	ug/L	P378093	
		Mandestrobin**	0.0020	UJ	ug/L	P378093	
		MCP	0.0020	U	ug/L	P378093	
		Naproxen**	0.0080	U	ug/L	P378093	
		Primidone**	0.0040	U	ug/L	P378093	
		Pyraclostrobin**	0.0020	U	ug/L	P378093	
		Thiamethoxam**	0.0020	U	ug/L	P378093	
		Tolfenpyrad**	0.0020	U	ug/L	P378093	
		Triclopyr**	0.0040	U	ug/L	P378093	
2153522	EPA 8270E	Aldrin	4.4	U	ng/L	P378488	
		Alpha-BHC	2.2	U	ng/L	P378488	
		Alpha-Chlordane	2.7	I	ng/L	P378488	
		Beta-BHC	11	UJ	ng/L	P378488	CCV
		Bifenthrin**	4.4	U	ng/L	P378488	
		Delta-BHC	8.8	UJ	ng/L	P378488	CCV
		Gamma-BHC	8.8	UJ	ng/L	P378488	CCV
		Carbophenothion	11	U	ng/L	P378488	
		Chlorothalonil	2.2	U	ng/L	P378488	
		Cis-Nonachlor**	1.1	U	ng/L	P378488	
		Cypermethrin	22	U	ng/L	P378488	
		DDD-p,p'	6.6	U	ng/L	P378488	
		DDE-p,p'	6.6	U	ng/L	P378488	
		DDT-p,p'	7.7	U	ng/L	P378488	
		Dicofol	33	U	ng/L	P378488	
		Dieldrin	34		ng/L	P378488	
		Endosulfan I	4.4	U	ng/L	P378488	
		Endosulfan II	4.4	U	ng/L	P378488	
		Endosulfan Sulfate	2.2	U	ng/L	P378488	
		Endrin	2.2	U	ng/L	P378488	
		Endrin Aldehyde	2.2	U	ng/L	P378488	
		Endrin Ketone	2.2	U	ng/L	P378488	
		Ethalfuralin**	3.3	U	ng/L	P378488	
		Gamma-Chlordane	1.1	U	ng/L	P378488	
		Heptachlor	1.6	U	ng/L	P378488	MS
		Heptachlor Epoxide	16		ng/L	P378488	
		Hexachlorobenzene	2.2	U	ng/L	P378488	
		Methoxychlor	4.4	U	ng/L	P378488	
		Mirex	2.2	U	ng/L	P378488	
		Permethrin	11	U	ng/L	P378488	
		Trans-Nonachlor**	1.1	U	ng/L	P378488	
		Trifluralin	2.7	U	ng/L	P378488	
	EPA 8276	Chlordane	20	I	ng/L	P378488	

Field ID: G4NW0412

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153522	EPA 8276	Toxaphene	33	U	ng/L	P378488	
2153523	EPA 8270E	Acetochlor	0.25	U	ng/L	P378084	
		Alachlor	0.25	U	ng/L	P378084	
		Ametryn	0.59	U	ng/L	P378084	
		Atrazine	16		ng/L	P378084	
		Atrazine Desethyl	13		ng/L	P378084	
		Azinphos Methyl	2.0	U	ng/L	P378084	
		Bromacil	0.50	U	ng/L	P378084	
		Butylate	0.40	U	ng/L	P378084	
		Carbophenothion	0.50	U	ng/L	P378084	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P378084	
		Chlorpyrifos Methyl	0.050	U	ng/L	P378084	
		Cyanazine	3.2	U	ng/L	P378084	
		Demeton	1.5	U	ng/L	P378084	
		Diazinon	0.12	U	ng/L	P378084	
		Dimethenamid**	0.099	U	ng/L	P378084	
		Disulfoton	0.50	UJ	ng/L	P378084	CCV
		Dithiopyr**	0.099	U	ng/L	P378084	
		EPTC	1.2	U	ng/L	P378084	
		Ethion	0.15	U	ng/L	P378084	
		Ethoprop	0.099	U	ng/L	P378084	
		Fenamiphos	0.50	U	ng/L	P378084	
		Fipronil	7.8		ng/L	P378084	
		Fipronil Desulfinyl**	0.16	I	ng/L	P378084	
		Fipronil Sulfide	1.3	J	ng/L	P378084	
		Fipronil Sulfone	11	J	ng/L	P378084	
		Flumioxazin**	1.7	U	ng/L	P378084	
		Fonofos	0.20	U	ng/L	P378084	
		Hexazinone	0.50	U	ng/L	P378084	
		Imazalil**	0.74	U	ng/L	P378084	
		Malathion	0.35	UJ	ng/L	P378084	CCV, RPD
		Metalaxyl	0.74	U	ng/L	P378084	
		Metolachlor	0.50	U	ng/L	P378084	
		Metribuzin	3.2	UJ	ng/L	P378084	CCV
		Mevinphos	0.50	U	ng/L	P378084	
		Molinate	0.30	U	ng/L	P378084	
		Norflurazon	0.50	U	ng/L	P378084	
		Oxadiazon**	0.16	I	ng/L	P378084	
		Parathion Ethyl	0.25	U	ng/L	P378084	
		Parathion Methyl	0.55	U	ng/L	P378084	
		Pendimethalin	0.99	U	ng/L	P378084	
		Phorate	0.25	U	ng/L	P378084	
		Prodiamine**	0.34	I	ng/L	P378084	
		Prometon	3.1	I	ng/L	P378084	
		Prometryn	0.20	U	ng/L	P378084	MS

Field ID: G4NW0412

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153523	EPA 8270E	Pronamide**	0.15	U	ng/L	P378084	
		Propiconazole**	1.2	I	ng/L	P378084	
		Simazine	1.2	I	ng/L	P378084	
		Sulfentrazone**	2.5		ng/L	P378084	
		Tebuconazole**	0.50	U	ng/L	P378084	
		Terbufos	0.099	U	ng/L	P378084	
		Terbuthylazine	0.42	U	ng/L	P378084	
2153526	EPA 200.7 Rev. 4.4	Barium	34.1		ug/L	P378159	
		Calcium	12.7		mg/L	P378159	
		Iron	150		ug/L	P378159	
		Magnesium	2.65		mg/L	P378159	
		Potassium	1.5		mg/L	P378159	
		Sodium	8.1		mg/L	P378159	
		Zinc	18	I	ug/L	P378159	
	EPA 200.8 Rev. 5.4	Aluminum	89		ug/L	P378159	
		Antimony	0.19	I	ug/L	P378159	
		Arsenic	0.23		ug/L	P378159	
		Beryllium	0.022	I	ug/L	P378159	
		Boron**	42.8		ug/L	P378159	
		Cadmium	0.055	I	ug/L	P378159	
		Chromium	0.40	U	ug/L	P378159	
		Cobalt	0.417		ug/L	P378159	
		Copper	1.49		ug/L	P378159	
		Lead	0.36	I	ug/L	P378159	
		Manganese	26.2		ug/L	P378159	
		Molybdenum	0.15	U	ug/L	P378159	
		Nickel	0.55	I	ug/L	P378159	
		Selenium	0.46	I	ug/L	P378159	
		Silver	0.010	U	ug/L	P378159	
		Thallium	0.10	U	ug/L	P378159	

Ref. Method and Comment:

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

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

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

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. Reported results are J qualified for fipronil sulfide and fipronil sulfone due to the internal standard recovery exceeding control limits; Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Jackson Creek upstream of Prieto Drive

Collection Date/Time: 01/30/2020 10:10

Field ID: G4NW0505

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153524	EPA 8276	Chlordane	14	I	ng/L	P378215	
		Toxaphene	35	U	ng/L	P378215	

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes		
2153485	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P378101			
	EPA 300.0 Rev. 2.1	Chloride	8.7		mg Cl/L	P378303			
		Sulfate	4.9		mg SO4/L	P378306			
		SM 2120 B-2011	Color (true)	30	A	PCU	P378110		
	SM 2320 B-2011	Total Alkalinity	14		mg CaCO3/L	P378420			
	SM 2540 C-2011	TDS	58		mg/L	P378766			
	SM 2540 D-2011	TSS	2	U	mg/L	P378579			
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P378424			
2153486	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P378603			
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22		mg N/L	P378412			
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.46		mg N/L	P378480			
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P378254			
	SM 5310 B-2011	Organic Carbon	2.9		mg C/L	P378474			
2153487	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P378117			
2153525	EPA 200.7 Rev. 4.4	Barium	20.7		ug/L	P378159			
		Calcium	5.27		mg/L	P378159			
		Iron	510		ug/L	P378159			
		Magnesium	1.74		mg/L	P378159			
		Potassium	1.3		mg/L	P378159			
		Sodium	5.7		mg/L	P378159			
		Zinc	5.0	U	ug/L	P378159			
	EPA 200.8 Rev. 5.4	Aluminum	45		ug/L	P378159			
		Antimony	0.085	I	ug/L	P378159			
		Arsenic	0.37		ug/L	P378159			
		Beryllium	0.010	U	ug/L	P378159			
		Boron**	36.6		ug/L	P378159			
		Cadmium	0.020	U	ug/L	P378159			
		Chromium	0.40	U	ug/L	P378159			
		Cobalt	0.096		ug/L	P378159			
		Copper	0.40	U	ug/L	P378159			
		Lead	0.38	I	ug/L	P378159			
		Manganese	18.5		ug/L	P378159			
		Molybdenum	0.15	U	ug/L	P378159			
		Nickel	0.50	U	ug/L	P378159			
		Selenium	0.20	U	ug/L	P378159			
		Silver	0.010	U	ug/L	P378159			
		Thallium	0.10	U	ug/L	P378159			
		2153687	EPA 8321B	Aldicarb	0.020	U	ug/L	P378093	
				Aldicarb Sulfone	0.0020	U	ug/L	P378093	
				Aldicarb Sulfoxide	0.0020	U	ug/L	P378093	
				Carbaryl	0.0020	U	ug/L	P378093	
Carbofuran	0.0020			U	ug/L	P378093			
3-Hydroxycarbofuran	0.0020			U	ug/L	P378093			

Field ID: G5NW0155

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153687	EPA 8321B	Methiocarb	0.0020	U	ug/L	P378093	
		Methomyl	0.0020	U	ug/L	P378093	
		Oxamyl	0.0020	U	ug/L	P378093	
		Propoxur	0.0020	U	ug/L	P378093	
2153688		2,4-D	0.0088		ug/L	P378093	
		Acesulfame K**	0.10	U	ug/L	P378149	MS
		AMPA**	0.10	U	ug/L	P378149	
		Sucralose**	0.33		ug/L	P378149	
		Acetaminophen**	0.0080	U	ug/L	P378093	
		Acetamiprid**	0.0020	U	ug/L	P378093	
		Endothall**	0.25	U	ug/L	P378149	MS
		Glufosinate**	0.10	U	ug/L	P378149	
		Glyphosate**	0.10	U	ug/L	P378149	
		Afidopyropen**	0.0020	UJ	ug/L	P378093	
		Bentazon	0.0031	I	ug/L	P378093	MS
		Benzovindiflupyr**	0.0020	UJ	ug/L	P378093	
		Carbamazepine**	0.0017	I	ug/L	P378093	
		Clothianidin**	0.0020	U	ug/L	P378093	
		Dinotefuran**	0.0020	U	ug/L	P378093	
		Diuron	0.0020	U	ug/L	P378093	
		Fenuron	0.016	U	ug/L	P378093	
		Fluridone**	8.0E-04	U	ug/L	P378093	
		Imazapyr**	0.013	I	ug/L	P378093	
		Hydrocodone**	0.0020	U	ug/L	P378093	
		Ibuprofen**	0.020	U	ug/L	P378093	
		Imidacloprid	0.013		ug/L	P378093	
		Linuron	0.0040	U	ug/L	P378093	
		Mandestrobin**	0.0020	UJ	ug/L	P378093	
		MCPP	0.0020	U	ug/L	P378093	
		Naproxen**	0.0080	U	ug/L	P378093	
		Primidone**	0.0040	U	ug/L	P378093	
		Pyraclostrobin**	0.0020	U	ug/L	P378093	
		Thiamethoxam**	0.0020	U	ug/L	P378093	
		Tolfenpyrad**	0.0020	U	ug/L	P378093	
		Triclopyr**	0.0040	U	ug/L	P378093	
2153689	EPA 8270E	Aldrin	4.4	U	ng/L	P378215	
		Alpha-BHC	2.2	U	ng/L	P378215	
		Alpha-Chlordane	1.1	U	ng/L	P378215	
		Beta-BHC	11	U	ng/L	P378215	
		Bifenthrin**	4.4	U	ng/L	P378215	
		Delta-BHC	8.9	U	ng/L	P378215	
		Gamma-BHC	8.9	U	ng/L	P378215	
		Carbophenothion	11	U	ng/L	P378215	
		Chlorothalonil	2.2	UJ	ng/L	P378215	CCV, RPD
		Cis-Nonachlor**	1.1	U	ng/L	P378215	

Field ID: G5NW0155

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153689	EPA 8270E	Cypermethrin	22	U	ng/L	P378215	
		DDD-p,p'	6.7	U	ng/L	P378215	
		DDE-p,p'	6.7	U	ng/L	P378215	
		DDT-p,p'	7.8	U	ng/L	P378215	
		Dicofol	33	U	ng/L	P378215	
		Dieldrin	4.4	U	ng/L	P378215	
		Endosulfan I	4.4	U	ng/L	P378215	
		Endosulfan II	4.4	U	ng/L	P378215	
		Endosulfan Sulfate	2.2	U	ng/L	P378215	
		Endrin	2.2	U	ng/L	P378215	
		Endrin Aldehyde	2.2	U	ng/L	P378215	
		Endrin Ketone	2.2	U	ng/L	P378215	
		Ethalfuralin**	3.3	U	ng/L	P378215	
		Gamma-Chlordane	1.1	U	ng/L	P378215	
		Heptachlor	1.7	U	ng/L	P378215	
		Heptachlor Epoxide	2.2	U	ng/L	P378215	
		Hexachlorobenzene	2.2	U	ng/L	P378215	
		Methoxychlor	4.4	U	ng/L	P378215	
		Mirex	2.2	U	ng/L	P378215	
		Permethrin	11	U	ng/L	P378215	
		Trans-Nonachlor**	1.1	U	ng/L	P378215	
		Trifluralin	2.8	U	ng/L	P378215	
		Chlordane	5.6	U	ng/L	P378215	
		Toxaphene	33	U	ng/L	P378215	
2153690	EPA 8270E	Acetochlor	0.25	U	ng/L	P378084	
		Alachlor	0.25	U	ng/L	P378084	
		Ametryn	0.60	U	ng/L	P378084	
		Atrazine	6.3		ng/L	P378084	
		Atrazine Desethyl	3.1	I	ng/L	P378084	
		Azinphos Methyl	2.0	U	ng/L	P378084	
		Bromacil	4.4		ng/L	P378084	
		Butylate	0.40	U	ng/L	P378084	
		Carbophenothion	0.50	U	ng/L	P378084	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P378084	
		Chlorpyrifos Methyl	0.050	U	ng/L	P378084	
		Cyanazine	3.2	U	ng/L	P378084	
		Demeton	1.5	U	ng/L	P378084	
		Diazinon	0.12	U	ng/L	P378084	
		Dimethenamid**	0.10	U	ng/L	P378084	
		Disulfoton	0.50	UJ	ng/L	P378084	CCV
		Dithiopyr**	0.13	I	ng/L	P378084	
		EPTC	1.2	U	ng/L	P378084	
		Ethion	0.15	U	ng/L	P378084	
		Ethoprop	0.10	U	ng/L	P378084	
		Fenamiphos	0.50	U	ng/L	P378084	

Field ID: G5NW0155

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153690	EPA 8270E	Fipronil	1.1		ng/L	P378084	
		Fipronil Desulfinyl**	0.24	I	ng/L	P378084	
		Fipronil Sulfide	0.48	I	ng/L	P378084	
		Fipronil Sulfone	2.6		ng/L	P378084	
		Flumioxazin**	1.7	U	ng/L	P378084	
		Fonofos	0.20	U	ng/L	P378084	
		Hexazinone	0.62	I	ng/L	P378084	
		Imazalil**	0.75	U	ng/L	P378084	
		Malathion	0.35	UJ	ng/L	P378084	CCV, RPD
		Metalaxyl	2.6	I	ng/L	P378084	
		Metolachlor	0.72	I	ng/L	P378084	
		Metribuzin	3.2	UJ	ng/L	P378084	CCV
		Mevinphos	0.50	U	ng/L	P378084	
		Molinate	0.30	U	ng/L	P378084	
		Norflurazon	0.50	U	ng/L	P378084	
		Oxadiazon**	0.62		ng/L	P378084	
		Parathion Ethyl	0.25	U	ng/L	P378084	
		Parathion Methyl	0.55	U	ng/L	P378084	
		Pendimethalin	1.0	U	ng/L	P378084	
		Phorate	0.25	U	ng/L	P378084	
		Prodiamine**	0.17	U	ng/L	P378084	
		Prometon	0.90	U	ng/L	P378084	
		Prometryn	0.20	U	ng/L	P378084	MS
		Pronamide**	0.73		ng/L	P378084	
		Propiconazole**	0.51	I	ng/L	P378084	
		Simazine	4.4		ng/L	P378084	
		Sulfentrazone**	1.6	I	ng/L	P378084	
		Tebuconazole**	0.50	U	ng/L	P378084	
		Terbufos	0.10	U	ng/L	P378084	
		Terbuthylazine	0.42	U	ng/L	P378084	

Ref. Method and Comment:

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

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

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

EPA 8270E: MS accuracy for some parameters 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: Rest Area Run below Beaver Pond Creek

Collection Date/Time: 01/30/2020 12:15

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2153494	EPA 180.1 Rev. 2.0	Turbidity	14		NTU	P378102	
	EPA 300.0 Rev. 2.1	Chloride	9.3		mg Cl/L	P378303	
		Sulfate	4.9		mg SO4/L	P378306	
	SM 2120 B-2011	Color (true)	79		PCU	P378110	
	SM 2320 B-2011	Total Alkalinity	9.7		mg CaCO3/L	P378420	
	SM 2540 C-2011	TDS	61		mg/L	P378766	
	SM 2540 D-2011	TSS	5	I	mg/L	P378579	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P378424	
2153495	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P378603	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31		mg N/L	P378412	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.29		mg N/L	P378480	
	EPA 365.1 Rev. 2.0	Total-P	0.015		mg P/L	P378256	
	SM 5310 B-2011	Organic Carbon	6.0		mg C/L	P378474	
2153496	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P378117	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P378101

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P378102

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P378159

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378159

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
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: P378303

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P378306

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P378603

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P378412

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P378480

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P378254

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P378256

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P378117

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

Reference Method: EPA 8270E
Batch ID: P378084

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Carbophenothion	0.50	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P378084

Component	Result	Code	Units
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Flumioxazin	1.8	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.75	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P378215

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	10	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	6.0	U	ng/L
DDE-p,p'	6.0	U	ng/L
DDT-p,p'	7.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P378215

Component	Result	Code	Units
Delta-BHC	8.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfuralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8270E
Batch ID: P378488

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	10	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	6.0	U	ng/L
DDE-p,p'	6.0	U	ng/L
DDT-p,p'	7.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfuralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
 Batch ID: P378488

Component	Result	Code	Units
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
 Batch ID: P378215

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8276
 Batch ID: P378488

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
 Batch ID: P378093

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	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
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	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
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P378093

Component	Result	Code	Units
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P378149

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B-2011
Batch ID: P378110

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P378420

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

Reference Method: SM 2540 C-2011
Batch ID: P378766

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P378579

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P378424

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P378474

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P378159

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	97.5		P	85 - 115
Calcium	102		P	85 - 115
Iron	101		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	97.0		P	85 - 115
Sodium	100		P	85 - 115
Zinc	97.3		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378159

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.6		P	85 - 115
Antimony	107		P	85 - 115
Arsenic	105		P	85 - 115
Beryllium	102		P	85 - 115
Boron	104		P	85 - 115
Cadmium	107		P	85 - 115
Chromium	105		P	85 - 115
Cobalt	101		P	85 - 115
Copper	100		P	85 - 115
Lead	104		P	85 - 115
Manganese	103		P	85 - 115
Molybdenum	101		P	85 - 115
Nickel	100		P	85 - 115
Selenium	100		P	85 - 115
Silver	108		P	85 - 115
Thallium	104		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P378303

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P378306

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P378603

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P378412

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P378480

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P378254

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P378256

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P378117

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

Reference Method: EPA 8270E
 Batch ID: P378084

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	89.6	94.9	P/P	71 - 122
Alachlor	90.7	94.4	P/P	70 - 121
Ametryn	115	111	P/P	49 - 137
Atrazine	89.3	95.2	P/P	76 - 125
Atrazine Desethyl	77.5	78.9	P/P	31 - 144
Azinphos Methyl	113	118	P/P	67 - 150
Bromacil	87.8	91.7	P/P	36 - 121
Butylate	37.9	49.4	P/P	33 - 88.0
Carbophenothion	82.0	91.8	P/P	50 - 150
Chlorpyrifos Ethyl	83.1	91.5	P/P	73 - 117
Chlorpyrifos Methyl	83.0	93.0	P/P	68 - 121
Cyanazine	100	109	P/P	20 - 250
Demeton	71.6	80.7	P/P	30 - 123
Diazinon	87.7	96.3	P/P	70 - 128
Dimethenamid	89.5	96.0	P/P	66 - 122
Disulfoton	75.8	65.1	P/P	46 - 124
Dithiopyr	87.6	89.2	P/P	69 - 122
EPTC	36.3	42.0	P/P	31 - 90.0
Ethion	76.0	85.4	P/P	45 - 135
Ethoprop	67.6	78.8	P/P	59 - 118
Fenamiphos	90.5	102	P/P	30 - 136
Fipronil	94.4	102	P/P	57 - 127
Fipronil Desulfinyl	86.7	95.7	P/P	51 - 122
Fipronil Sulfide	77.2	84.9	P/P	57 - 119
Fipronil Sulfone	82.0	89.5	P/P	51 - 119
Flumioxazin	127	136	P/P	70 - 200
Fonofos	73.4	81.2	P/P	60 - 120
Hexazinone	94.3	99.6	P/P	57 - 142

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P378084

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imazalil	81.2	83.3	P/P	50 - 150
Malathion	92.6	100	P/P	67 - 128
Metalaxyl	85.6	90.8	P/P	21 - 148
Metolachlor	95.1	100	P/P	70 - 120
Metribuzin	121	124	P/P	20 - 253
Mevinphos	64.7	73.2	P/P	47 - 116
Molinate	49.2	54.9	P/P	41 - 99.0
Norflurazon	85.3	92.7	P/P	54 - 127
Oxadiazon	81.1	84.9	P/P	65 - 122
Parathion Ethyl	85.5	88.1	P/P	71 - 113
Parathion Methyl	88.5	97.4	P/P	73 - 129
Pendimethalin	86.2	88.2	P/P	63 - 130
Phorate	79.6	84.2	P/P	48 - 118
Prodiamine	77.6	84.6	P/P	20 - 144
Prometon	87.1	87.4	P/P	53 - 120
Prometryn	106	109	P/P	63 - 119
Pronamide	88.8	96.0	P/P	50 - 150
Propiconazole	93.8	100	P/P	50 - 150
Simazine	90.9	96.0	P/P	77 - 129
Sulfentrazone	81.8	88.0	P/P	50 - 150
Tebuconazole	68.9	71.8	P/P	20 - 118
Terbufos	79.8	84.0	P/P	61 - 119
Terbutylazine	87.8	90.8	P/P	75 - 119

Reference Method: EPA 8270E
 Batch ID: P378215

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	41.6	31.1	P/P	20 - 87.0
Alpha-BHC	86.1	73.3	P/P	65 - 142
Alpha-Chlordane	75.8	61.1	P/P	58 - 106
Beta-BHC	88.6	88.6	P/P	65 - 179
Bifenthrin	68.9	55.9	P/P	38 - 128
Carbophenothion	75.1	60.4	P/P	20 - 144
Chlorothalonil	40.3	36.4	P/P	20 - 214
Cis-Nonachlor	76.0	59.7	P/P	56 - 113
Cypermethrin	100	79.1	P/P	37 - 130
DDD-p,p'	101	89.7	P/P	66 - 119
DDE-p,p'	70.1	54.5	P/P	53 - 108
DDT-p,p'	77.1	63.5	P/P	57 - 133
Delta-BHC	109	113	P/P	68 - 187
Dicofol	101	94.3	P/P	66 - 123
Dieldrin	83.6	69.9	P/P	65 - 111
Endosulfan I	96.0	90.3	P/P	65 - 115
Endosulfan II	106	94.8	P/P	68 - 133
Endosulfan Sulfate	100	89.8	P/P	62 - 127
Endrin	87.0	73.4	P/P	64 - 122
Endrin Aldehyde	95.8	80.1	P/P	61 - 132
Endrin Ketone	99.7	88.7	P/P	66 - 120
Ethalfuralin	75.2	66.0	P/P	57 - 127
Gamma-BHC	92.0	90.3	P/P	71 - 158
Gamma-Chlordane	70.2	56.7	P/P	53 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P378215

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Heptachlor	66.4	51.5	P/P	45 - 96.0
Heptachlor Epoxide	83.3	72.1	P/P	64 - 109
Hexachlorobenzene	66.5	54.3	P/P	46 - 103
Methoxychlor	90.9	80.3	P/P	69 - 149
Mirex	60.5	46.1	P/P	31 - 90.0
Permethrin	74.3	57.9	P/P	41 - 108
Trans-Nonachlor	70.6	56.5	P/P	50 - 107
Trifluralin	74.0	63.5	P/P	58 - 119

Reference Method: EPA 8270E
Batch ID: P378488

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	41.7	40.6	P/P	20 - 87.0
Alpha-BHC	83.8	86.2	P/P	65 - 142
Alpha-Chlordane	85.6	83.6	P/P	58 - 106
Beta-BHC	126	125	P/P	65 - 179
Bifenthrin	75.2	73.8	P/P	38 - 128
Carbophenothion	83.8	85.0	P/P	20 - 144
Chlorothalonil	96.0	96.1	P/P	20 - 214
Cis-Nonachlor	86.5	84.4	P/P	56 - 113
Cypermethrin	81.4	82.7	P/P	37 - 130
DDD-p,p'	87.4	85.5	P/P	66 - 119
DDE-p,p'	86.5	87.5	P/P	53 - 108
DDT-p,p'	80.6	78.5	P/P	57 - 133
Delta-BHC	158	153	P/P	68 - 187
Dicofol	104	103	P/P	66 - 123
Dieldrin	95.3	91.9	P/P	65 - 111
Endosulfan I	94.3	94.4	P/P	65 - 115
Endosulfan II	94.3	91.1	P/P	68 - 133
Endosulfan Sulfate	94.3	88.9	P/P	62 - 127
Endrin	89.0	88.5	P/P	64 - 122
Endrin Aldehyde	99.3	92.5	P/P	61 - 132
Endrin Ketone	96.4	91.9	P/P	66 - 120
Ethalfuralin	76.8	76.1	P/P	57 - 127
Gamma-BHC	129	130	P/P	71 - 158
Gamma-Chlordane	80.8	79.7	P/P	53 - 106
Heptachlor	54.0	55.3	P/P	45 - 96.0
Heptachlor Epoxide	88.8	86.6	P/P	64 - 109
Hexachlorobenzene	75.4	78.0	P/P	46 - 103
Methoxychlor	89.3	86.6	P/P	69 - 149
Mirex	72.1	72.9	P/P	31 - 90.0
Permethrin	77.5	75.8	P/P	41 - 108
Trans-Nonachlor	82.1	80.5	P/P	50 - 107
Trifluralin	76.6	76.1	P/P	58 - 119

Reference Method: EPA 8276
Batch ID: P378215

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	81.9	86.2	P/P	47 - 119
Toxaphene	72.0	77.5	P/P	41 - 112

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P378488

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	87.7	89.4	P/P	47 - 119
Toxaphene	99.3	95.7	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P378093

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	136		P	30 - 160
3-Hydroxycarbofuran	69.9		P	30 - 160
Acetaminophen	77.7		P	30 - 160
Acetamiprid	71.3		P	30 - 160
Afidopyropen	72.0		P	30 - 160
Aldicarb	45.3		P	30 - 160
Aldicarb Sulfone	92.7		P	30 - 160
Aldicarb Sulfoxide	86.4		P	30 - 160
Bentazon	70.9		P	30 - 160
Benzovindiflupyr	79.9		P	30 - 160
Carbamazepine	91.0		P	30 - 160
Carbaryl	59.1		P	30 - 160
Carbofuran	67.7		P	30 - 160
Clothianidin	77.3		P	30 - 160
Dinotefuran	82.8		P	30 - 160
Diuron	90.2		P	30 - 160
Fenuron	103		P	30 - 160
Fluridone	81.9		P	30 - 160
Hydrocodone	85.3		P	30 - 160
Ibuprofen	93.6		P	30 - 160
Imazapyr	83.3		P	30 - 160
Imidacloprid	87.1		P	30 - 160
Linuron	72.7		P	30 - 160
Mandestrobin	85.3		P	30 - 160
MCPP	137		P	30 - 160
Methiocarb	64.2		P	30 - 160
Methomyl	80.9		P	30 - 160
Naproxen	82.8		P	30 - 160
Oxamyl	80.9		P	30 - 160
Primidone	81.3		P	30 - 160
Propoxur	70.6		P	30 - 160
Pyraclostrobin	82.4		P	30 - 160
Thiamethoxam	85.5		P	30 - 160
Tolfenpyrad	53.8		P	30 - 160
Triclopyr	104		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P378149

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	92.9		P	40 - 150
AMPA	127		P	40 - 150
Endothall	121		P	40 - 150
Glufosinate	118		P	40 - 150
Glyphosate	117		P	40 - 140

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P378149

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	95.5		P	40 - 150

Reference Method: SM 2120 B-2011
Batch ID: P378110

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

Reference Method: SM 2320 B-2011
Batch ID: P378420

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P378424

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.5		P	92 - 103

Reference Method: SM 5310 B-2011
Batch ID: P378474

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P378159

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2152723	Barium	97.3		P	80 - 120
2152723	Calcium	102		P	80 - 120
2152723	Iron	100		P	80 - 120
2152723	Magnesium	102		P	80 - 120
2152723	Potassium	94.7		P	80 - 120
2152723	Sodium	102		P	80 - 120
2152723	Zinc	96.4		P	80 - 120
2153526	Barium	99.9	96.4	P/P	80 - 120
2153526	Calcium	100		P	80 - 120
2153526	Iron	102	102	P/P	80 - 120
2153526	Magnesium	100	102	P/P	80 - 120
2153526	Potassium	97.0	95.8	P/P	80 - 120
2153526	Sodium	101		P	80 - 120
2153526	Zinc	98.7	95.6	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378159

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2152723	Aluminum	97.4		P	80 - 120
2152723	Antimony	108		P	80 - 120
2152723	Arsenic	109		P	80 - 120
2152723	Beryllium	102		P	80 - 120
2152723	Boron	102		P	80 - 120
2152723	Cadmium	107		P	80 - 120
2152723	Chromium	108		P	80 - 120
2152723	Cobalt	102		P	80 - 120
2152723	Copper	103		P	80 - 120
2152723	Lead	108		P	80 - 120
2152723	Manganese	105		P	80 - 120
2152723	Molybdenum	107		P	80 - 120
2152723	Nickel	101		P	80 - 120
2152723	Selenium	99.6		P	80 - 120
2152723	Silver	107		P	80 - 120
2152723	Thallium	111		P	80 - 120
2153526	Aluminum	97.2	97.5	P/P	80 - 120
2153526	Antimony	107	107	P/P	80 - 120
2153526	Arsenic	106	107	P/P	80 - 120
2153526	Beryllium	99.3	100	P/P	80 - 120
2153526	Boron	104	104	P/P	80 - 120
2153526	Cadmium	107	106	P/P	80 - 120
2153526	Chromium	107	107	P/P	80 - 120
2153526	Cobalt	100	101	P/P	80 - 120
2153526	Copper	99.9	101	P/P	80 - 120
2153526	Lead	104	104	P/P	80 - 120
2153526	Manganese	105	103	P/P	80 - 120
2153526	Molybdenum	105	105	P/P	80 - 120
2153526	Nickel	100	101	P/P	80 - 120
2153526	Selenium	99.0	97.5	P/P	80 - 120
2153526	Silver	105	104	P/P	80 - 120
2153526	Thallium	106	107	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P378303

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153485	Chloride	101		P	90 - 110
2153557	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P378306

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153485	Sulfate	102		P	90 - 110
2153557	Sulfate	99.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P378603

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153404	Ammonia-N	97.5	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P378412

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153486	Kjeldahl Nitrogen	107	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P378480

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153492	NO2NO3-N	97.0	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P378254

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153399	Total-P	104	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P378256

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153492	Total-P	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P378117

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153415	O-Phosphate-P	91.9	95.1	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P378084

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153594	Acetochlor	99.7	107	P/P	68 - 126
2153594	Alachlor	92.3	109	P/P	66 - 125

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P378084

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153594	Ametryn	111	130	P/P	31 - 182
2153594	Atrazine Desethyl	78.8	87.7	P/P	13 - 161
2153594	Azinphos Methyl	104	113	P/P	54 - 162
2153594	Butylate	50.1	54.5	P/P	16 - 92.0
2153594	Carbophenothion	84.5	86.7	P/P	50 - 150
2153594	Chlorpyrifos Ethyl	96.3	93.3	P/P	63 - 124
2153594	Chlorpyrifos Methyl	94.8	99.8	P/P	64 - 125
2153594	Cyanazine	94.2	113	P/P	13 - 245
2153594	Demeton	92.3	102	P/P	20 - 154
2153594	Diazinon	99.9	110	P/P	66 - 141
2153594	Dimethenamid	100	107	P/P	50 - 130
2153594	Disulfoton	76.2	68.4	P/P	55 - 130
2153594	Dithiopyr	93.9	106	P/P	66 - 122
2153594	EPTC	53.4	54.1	P/P	15 - 93.0
2153594	Ethion	83.2	87.1	P/P	15 - 148
2153594	Ethoprop	95.9	104	P/P	59 - 126
2153594	Fenamiphos	106	110	P/P	39 - 137
2153594	Fipronil	109	122	P/P	47 - 131
2153594	Fipronil Desulfinyl	96.9	108	P/P	43 - 121
2153594	Fipronil Sulfide	104	114	P/P	29 - 134
2153594	Fipronil Sulfone	83.3	100	P/P	19 - 131
2153594	Flumioxazin	131	148	P/P	70 - 200
2153594	Fonofos	86.9	89.7	P/P	62 - 128
2153594	Hexazinone	105	103	P/P	58 - 154
2153594	Imazalil	130	125	P/P	50 - 150
2153594	Malathion	70.6	104	P/P	54 - 135
2153594	Metalaxyl	95.8	103	P/P	46 - 136
2153594	Metolachlor	99.5	103	P/P	62 - 126
2153594	Metribuzin	181	187	P/P	44 - 277
2153594	Mevinphos	82.3	86.5	P/P	44 - 135
2153594	Molinate	68.8	74.5	P/P	31 - 104
2153594	Norflurazon	91.3	101	P/P	32 - 134
2153594	Oxadiazon	81.5	93.0	P/P	55 - 123
2153594	Parathion Ethyl	92.9	100	P/P	67 - 120
2153594	Parathion Methyl	103	114	P/P	70 - 140
2153594	Pendimethalin	92.4	105	P/P	59 - 145
2153594	Phorate	88.8	94.3	P/P	52 - 127
2153594	Prodiamine	41.9	47.7	P/P	11 - 157
2153594	Prometon	71.3	100	P/P	55 - 130
2153594	Prometryn	128	140	F/F	55 - 127
2153594	Pronamide	115	127	P/P	50 - 150
2153594	Propiconazole	96.8	112	P/P	50 - 150
2153594	Simazine	93.8	108	P/P	58 - 159
2153594	Tebuconazole	67.0	72.4	P/P	10 - 122
2153594	Terbufos	94.6	99.8	P/P	65 - 131
2153594	Terbutylazine	91.0	96.3	P/P	63 - 131

Reference Method: EPA 8270E
Batch ID: P378215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153641	Aldrin	48.4	46.1	P/P	32 - 82.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P378215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153641	Alpha-BHC	92.5	102	P/P	68 - 157
2153641	Alpha-Chlordane	62.2	62.7	P/P	54 - 108
2153641	Beta-BHC	89.4	96.6	P/P	54 - 200
2153641	Bifenthrin	74.2	71.1	P/P	49 - 124
2153641	Carbophenothion	70.6	74.0	P/P	42 - 173
2153641	Chlorothalonil	32.6	73.3	P/P	10 - 289
2153641	Cis-Nonachlor	60.2	62.0	P/P	53 - 112
2153641	Cypermethrin	100	107	P/P	43 - 141
2153641	DDD-p,p'	61.5	63.1	P/P	58 - 125
2153641	DDE-p,p'	56.9	56.7	P/P	50 - 108
2153641	DDT-p,p'	70.8	68.9	P/P	52 - 140
2153641	Delta-BHC	123	140	P/P	61 - 228
2153641	Dicofol	113	113	P/P	59 - 130
2153641	Dieldrin	64.2	67.5	P/P	57 - 121
2153641	Endosulfan I	85.9	95.4	P/P	62 - 123
2153641	Endosulfan II	84.3	92.1	P/P	48 - 163
2153641	Endosulfan Sulfate	99.2	96.7	P/P	63 - 132
2153641	Endrin	71.3	74.8	P/P	58 - 128
2153641	Endrin Aldehyde	69.4	65.5	P/P	44 - 126
2153641	Endrin Ketone	95.7	94.0	P/P	68 - 127
2153641	Ethalfuralin	68.7	65.4	P/P	55 - 131
2153641	Gamma-BHC	119	124	P/P	54 - 206
2153641	Gamma-Chlordane	59.4	59.2	P/P	52 - 105
2153641	Heptachlor	60.3	61.1	P/P	47 - 94.0
2153641	Heptachlor Epoxide	70.0	70.6	P/P	61 - 113
2153641	Hexachlorobenzene	59.9	57.0	P/P	45 - 100
2153641	Methoxychlor	79.6	81.2	P/P	63 - 153
2153641	Mirex	61.9	61.0	P/P	38 - 90.0
2153641	Permethrin	71.8	72.1	P/P	45 - 112
2153641	Trans-Nonachlor	59.0	59.9	P/P	50 - 103
2153641	Trifluralin	67.9	66.2	P/P	57 - 122

Reference Method: EPA 8270E
Batch ID: P378488

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153375	Aldrin	43.5	35.3	P/P	32 - 82.0
2153375	Alpha-BHC	77.9	96.2	P/P	68 - 157
2153375	Alpha-Chlordane	84.8	82.3	P/P	54 - 108
2153375	Beta-BHC	117	143	P/P	54 - 200
2153375	Bifenthrin	71.8	70.4	P/P	49 - 124
2153375	Carbophenothion	99.9	94.5	P/P	42 - 173
2153375	Chlorothalonil	119	122	P/P	10 - 289
2153375	Cis-Nonachlor	85.1	82.0	P/P	53 - 112
2153375	Cypermethrin	86.8	81.8	P/P	43 - 141
2153375	DDD-p,p'	88.1	83.8	P/P	58 - 125
2153375	DDE-p,p'	77.1	81.2	P/P	50 - 108
2153375	DDT-p,p'	76.8	77.9	P/P	52 - 140
2153375	Delta-BHC	155	184	P/P	61 - 228
2153375	Dicofol	116	117	P/P	59 - 130
2153375	Dieldrin	92.7	89.9	P/P	57 - 121
2153375	Endosulfan I	89.3	103	P/P	62 - 123

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P378488

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153375	Endosulfan II	99.9	94.5	P/P	48 - 163
2153375	Endosulfan Sulfate	93.5	89.8	P/P	63 - 132
2153375	Endrin	93.6	87.9	P/P	58 - 128
2153375	Endrin Aldehyde	94.7	88.2	P/P	44 - 126
2153375	Endrin Ketone	94.2	90.9	P/P	68 - 127
2153375	Ethalfuralin	75.6	75.0	P/P	55 - 131
2153375	Gamma-BHC	135	171	P/P	54 - 206
2153375	Gamma-Chlordane	80.0	77.9	P/P	52 - 105
2153375	Heptachlor	46.9	48.0	F/P	47 - 94.0
2153375	Heptachlor Epoxide	88.5	86.3	P/P	61 - 113
2153375	Hexachlorobenzene	72.5	72.1	P/P	45 - 100
2153375	Methoxychlor	90.5	88.7	P/P	63 - 153
2153375	Mirex	66.0	64.6	P/P	38 - 90.0
2153375	Permethrin	75.7	75.6	P/P	45 - 112
2153375	Trans-Nonachlor	80.6	78.5	P/P	50 - 103
2153375	Trifluralin	75.4	75.6	P/P	57 - 122

Reference Method: EPA 8276
Batch ID: P378215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2154227	Chlordane	90.6	90.9	P/P	34 - 129
2154227	Toxaphene	84.0	82.6	P/P	26 - 123

Reference Method: EPA 8276
Batch ID: P378488

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153003	Chlordane	100	102	P/P	34 - 129
2153003	Toxaphene	93.0	89.8	P/P	26 - 123

Reference Method: EPA 8321B
Batch ID: P378093

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2152481	3-Hydroxycarbofuran	85.1	77.1	P/P	30 - 160
2152481	Aldicarb	72.0	63.6	P/P	30 - 160
2152481	Aldicarb Sulfone	116	100	P/P	30 - 160
2152481	Aldicarb Sulfoxide	63.1	55.5	P/P	30 - 160
2152481	Carbaryl	64.6	52.0	P/P	30 - 160
2152481	Carbofuran	70.3	62.2	P/P	30 - 160
2152481	Methiocarb	67.3	58.7	P/P	30 - 160
2152481	Methomyl	89.3	88.3	P/P	30 - 160
2152481	Oxamyl	110	94.5	P/P	30 - 160
2152481	Propoxur	58.5	55.9	P/P	30 - 160
2153067	2,4-D	97.7	99.4	P/P	30 - 160
2153067	Acetaminophen	68.7	58.8	P/P	30 - 160
2153067	Acetamiprid	79.2	74.6	P/P	30 - 160
2153067	Afidopyropen	67.4	69.6	P/P	30 - 160
2153067	Bentazon	11.3	13.7	F/F	30 - 160
2153067	Benzovindiflupyr	73.0	66.6	P/P	30 - 160
2153067	Carbamazepine	73.1	60.5	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P378093

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153067	Clothianidin	70.1	69.3	P/P	30 - 160
2153067	Dinotefuran	92.4	83.1	P/P	30 - 160
2153067	Diuron	63.0	65.2	P/P	30 - 160
2153067	Fenuron	82.9	71.8	P/P	30 - 160
2153067	Fluridone	71.8	66.4	P/P	30 - 160
2153067	Hydrocodone	89.0	83.3	P/P	30 - 160
2153067	Ibuprofen	81.2	75.6	P/P	30 - 160
2153067	Imazapyr	69.6	68.7	P/P	30 - 160
2153067	Imidacloprid	144	130	P/P	30 - 160
2153067	Linuron	59.9	52.2	P/P	30 - 160
2153067	Mandestrobin	84.3	77.2	P/P	30 - 160
2153067	MCPD	126	110	P/P	30 - 160
2153067	Naproxen	92.2	98.1	P/P	30 - 160
2153067	Primidone	66.2	65.1	P/P	30 - 160
2153067	Pyraclostrobin	71.3	66.7	P/P	30 - 160
2153067	Thiamethoxam	110	104	P/P	30 - 160
2153067	Tolfenpyrad	51.2	48.0	P/P	30 - 160
2153067	Triclopyr	94.6	81.0	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P378149

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2152739	Acesulfame K	24.6	25.0	F/F	40 - 150
2152739	AMPA	127	127	P/P	40 - 150
2152739	Endothall	153	149	F/P	40 - 150
2152739	Glufosinate	117	108	P/P	40 - 150
2152739	Glyphosate	91.0	79.1	P/P	40 - 140
2152739	Sucralose	99.6	95.7	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P378424

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153388	Fluoride	98.1	98.8	P/P	89 - 106

Reference Method: SM 5310 B-2011
Batch ID: P378474

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2153486	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P378101

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153387	Turbidity	0.885	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P378102

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153528	Turbidity	0.0	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P378159

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153526	Barium	3.30	Spike	P	0 - 20
2153526	Calcium	0.326	Spike	P	0 - 20
2153526	Iron	0.411	Spike	P	0 - 20
2153526	Magnesium	1.06	Spike	P	0 - 20
2153526	Potassium	0.873	Spike	P	0 - 20
2153526	Sodium	1.23	Spike	P	0 - 20
2153526	Zinc	3.08	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378159

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153526	Aluminum	0.201	Spike	P	0 - 20
2153526	Antimony	0.337	Spike	P	0 - 20
2153526	Arsenic	0.670	Spike	P	0 - 20
2153526	Beryllium	0.668	Spike	P	0 - 20
2153526	Boron	0.435	Spike	P	0 - 20
2153526	Cadmium	0.577	Spike	P	0 - 20
2153526	Chromium	0.140	Spike	P	0 - 20
2153526	Cobalt	0.593	Spike	P	0 - 20
2153526	Copper	0.658	Spike	P	0 - 20
2153526	Lead	0.155	Spike	P	0 - 20
2153526	Manganese	1.20	Spike	P	0 - 20
2153526	Molybdenum	0.549	Spike	P	0 - 20
2153526	Nickel	0.726	Spike	P	0 - 20
2153526	Selenium	1.45	Spike	P	0 - 20
2153526	Silver	1.17	Spike	P	0 - 20
2153526	Thallium	0.659	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P378303

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153557	Chloride	0.999	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P378306

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153557	Sulfate	0.778	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P378603

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153404	Ammonia-N	2.02	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P378412

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153486	Kjeldahl Nitrogen	0.637	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P378480

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153492	NO2NO3-N	0.775	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P378254

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153399	Total-P	3.76	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P378256

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153492	Total-P	1.29	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P378117

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153415	O-Phosphate-P	2.09	Spike	P	0 - 20

Reference Method: EPA 8270E
 Batch ID: P378084

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153594	Acetochlor	7.38	Spike	P	0 - 30
2153594	Alachlor	16.4	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P378084

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153594	Ametryn	13.2	Spike	P	0 - 30
2153594	Atrazine	6.72	Spike	P	0 - 30
2153594	Atrazine Desethyl	7.25	Spike	P	0 - 30
2153594	Azinphos Methyl	8.33	Spike	P	0 - 30
2153594	Bromacil	9.64	Spike	P	0 - 30
2153594	Butylate	8.55	Spike	P	0 - 30
2153594	Carbophenothion	2.52	Spike	P	0 - 30
2153594	Chlorpyrifos Ethyl	3.17	Spike	P	0 - 30
2153594	Chlorpyrifos Methyl	5.22	Spike	P	0 - 30
2153594	Cyanazine	17.9	Spike	P	0 - 30
2153594	Demeton	10.5	Spike	P	0 - 30
2153594	Diazinon	9.54	Spike	P	0 - 30
2153594	Dimethenamid	6.86	Spike	P	0 - 30
2153594	Disulfoton	10.8	Spike	P	0 - 30
2153594	Dithiopyr	10.9	Spike	P	0 - 30
2153594	EPTC	1.28	Spike	P	0 - 30
2153594	Ethion	4.62	Spike	P	0 - 30
2153594	Ethoprop	7.61	Spike	P	0 - 30
2153594	Fenamiphos	3.85	Spike	P	0 - 30
2153594	Fipronil	8.65	Spike	P	0 - 30
2153594	Fipronil Desulfinyl	7.03	Spike	P	0 - 30
2153594	Fipronil Sulfide	7.50	Spike	P	0 - 30
2153594	Fipronil Sulfone	6.24	Spike	P	0 - 30
2153594	Flumioxazin	12.2	Spike	P	0 - 30
2153594	Fonofos	3.18	Spike	P	0 - 30
2153594	Hexazinone	1.58	Spike	P	0 - 30
2153594	Imazalil	4.00	Spike	P	0 - 30
2153594	Malathion	38.2	Spike	F	0 - 30
2153594	Metalaxyl	7.20	Spike	P	0 - 30
2153594	Metolachlor	3.59	Spike	P	0 - 30
2153594	Metribuzin	3.31	Spike	P	0 - 30
2153594	Mevinphos	4.93	Spike	P	0 - 30
2153594	Molinate	7.94	Spike	P	0 - 30
2153594	Norflurazon	9.58	Spike	P	0 - 30
2153594	Oxadiazon	11.0	Spike	P	0 - 30
2153594	Parathion Ethyl	7.36	Spike	P	0 - 30
2153594	Parathion Methyl	9.88	Spike	P	0 - 30
2153594	Pendimethalin	12.3	Spike	P	0 - 30
2153594	Phorate	6.01	Spike	P	0 - 30
2153594	Prodiamine	13.0	Spike	P	0 - 30
2153594	Prometon	14.7	Spike	P	0 - 30
2153594	Prometryn	8.72	Spike	P	0 - 30
2153594	Pronamide	9.37	Spike	P	0 - 30
2153594	Propiconazole	8.34	Spike	P	0 - 30
2153594	Simazine	7.62	Spike	P	0 - 30
2153594	Sulfentrazone	7.85	Spike	P	0 - 30
2153594	Tebuconazole	6.53	Spike	P	0 - 30
2153594	Terbufos	5.34	Spike	P	0 - 30
2153594	Terbutylazine	5.73	Spike	P	0 - 30
LFB	Acetochlor	5.75	LCS	P	0 - 30
LFB	Alachlor	4.00	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P378084

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Ametryn	4.16	LCS	P	0 - 30
LFB	Atrazine	6.35	LCS	P	0 - 30
LFB	Atrazine Desethyl	1.79	LCS	P	0 - 30
LFB	Azinphos Methyl	4.36	LCS	P	0 - 30
LFB	Bromacil	4.33	LCS	P	0 - 30
LFB	Butylate	26.3	LCS	P	0 - 30
LFB	Carbophenothion	11.2	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	9.64	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	11.3	LCS	P	0 - 30
LFB	Cyanazine	8.35	LCS	P	0 - 30
LFB	Demeton	12.0	LCS	P	0 - 30
LFB	Diazinon	9.38	LCS	P	0 - 30
LFB	Dimethenamid	7.05	LCS	P	0 - 30
LFB	Disulfoton	15.2	LCS	P	0 - 30
LFB	Dithiopyr	1.73	LCS	P	0 - 30
LFB	EPTC	14.6	LCS	P	0 - 30
LFB	Ethion	11.6	LCS	P	0 - 30
LFB	Ethoprop	15.3	LCS	P	0 - 30
LFB	Fenamiphos	12.3	LCS	P	0 - 30
LFB	Fipronil	7.99	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	9.83	LCS	P	0 - 30
LFB	Fipronil Sulfide	9.50	LCS	P	0 - 30
LFB	Fipronil Sulfone	8.74	LCS	P	0 - 30
LFB	Flumioxazin	7.45	LCS	P	0 - 30
LFB	Fonofos	10.1	LCS	P	0 - 30
LFB	Hexazinone	5.52	LCS	P	0 - 30
LFB	Imazalil	2.63	LCS	P	0 - 30
LFB	Malathion	7.79	LCS	P	0 - 30
LFB	Metalaxyl	5.93	LCS	P	0 - 30
LFB	Metolachlor	5.00	LCS	P	0 - 30
LFB	Metribuzin	2.24	LCS	P	0 - 30
LFB	Mevinphos	12.4	LCS	P	0 - 30
LFB	Molinate	10.9	LCS	P	0 - 30
LFB	Norflurazon	8.29	LCS	P	0 - 30
LFB	Oxadiazon	4.56	LCS	P	0 - 30
LFB	Parathion Ethyl	2.95	LCS	P	0 - 30
LFB	Parathion Methyl	9.59	LCS	P	0 - 30
LFB	Pendimethalin	2.31	LCS	P	0 - 30
LFB	Phorate	5.67	LCS	P	0 - 30
LFB	Prodiamine	8.68	LCS	P	0 - 30
LFB	Prometon	0.336	LCS	P	0 - 30
LFB	Prometryn	2.29	LCS	P	0 - 30
LFB	Pronamide	7.75	LCS	P	0 - 30
LFB	Propiconazole	6.67	LCS	P	0 - 30
LFB	Simazine	5.41	LCS	P	0 - 30
LFB	Sulfentrazone	7.22	LCS	P	0 - 30
LFB	Tebuconazole	4.03	LCS	P	0 - 30
LFB	Terbufos	5.07	LCS	P	0 - 30
LFB	Terbutylazine	3.40	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P378215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153641	Aldrin	4.90	Spike	P	0 - 30
2153641	Alpha-BHC	9.43	Spike	P	0 - 30
2153641	Alpha-Chlordane	0.796	Spike	P	0 - 30
2153641	Beta-BHC	7.73	Spike	P	0 - 30
2153641	Bifenthrin	4.29	Spike	P	0 - 30
2153641	Carbophenothion	4.69	Spike	P	0 - 30
2153641	Chlorothalonil	76.8	Spike	F	0 - 30
2153641	Cis-Nonachlor	2.90	Spike	P	0 - 30
2153641	Cypermethrin	6.52	Spike	P	0 - 30
2153641	DDD-p,p'	2.60	Spike	P	0 - 30
2153641	DDE-p,p'	0.388	Spike	P	0 - 30
2153641	DDT-p,p'	2.79	Spike	P	0 - 30
2153641	Delta-BHC	12.5	Spike	P	0 - 30
2153641	Dicofol	0.207	Spike	P	0 - 30
2153641	Dieldrin	5.11	Spike	P	0 - 30
2153641	Endosulfan I	10.5	Spike	P	0 - 30
2153641	Endosulfan II	8.84	Spike	P	0 - 30
2153641	Endosulfan Sulfate	2.52	Spike	P	0 - 30
2153641	Endrin	4.87	Spike	P	0 - 30
2153641	Endrin Aldehyde	5.85	Spike	P	0 - 30
2153641	Endrin Ketone	1.78	Spike	P	0 - 30
2153641	Ethalfuralin	4.95	Spike	P	0 - 30
2153641	Gamma-BHC	4.26	Spike	P	0 - 30
2153641	Gamma-Chlordane	0.272	Spike	P	0 - 30
2153641	Heptachlor	1.30	Spike	P	0 - 30
2153641	Heptachlor Epoxide	0.792	Spike	P	0 - 30
2153641	Hexachlorobenzene	4.94	Spike	P	0 - 30
2153641	Methoxychlor	1.97	Spike	P	0 - 30
2153641	Mirex	1.50	Spike	P	0 - 30
2153641	Permethrin	0.442	Spike	P	0 - 30
2153641	Trans-Nonachlor	1.40	Spike	P	0 - 30
2153641	Trifluralin	2.55	Spike	P	0 - 30
LFB	Aldrin	28.7	LCS	P	0 - 30
LFB	Alpha-BHC	16.1	LCS	P	0 - 30
LFB	Alpha-Chlordane	21.5	LCS	P	0 - 30
LFB	Beta-BHC	0.0356	LCS	P	0 - 30
LFB	Bifenthrin	20.7	LCS	P	0 - 30
LFB	Carbophenothion	21.7	LCS	P	0 - 30
LFB	Chlorothalonil	10.2	LCS	P	0 - 30
LFB	Cis-Nonachlor	24.0	LCS	P	0 - 30
LFB	Cypermethrin	23.7	LCS	P	0 - 30
LFB	DDD-p,p'	11.5	LCS	P	0 - 30
LFB	DDE-p,p'	25.0	LCS	P	0 - 30
LFB	DDT-p,p'	19.3	LCS	P	0 - 30
LFB	Delta-BHC	3.46	LCS	P	0 - 30
LFB	Dicofol	6.83	LCS	P	0 - 30
LFB	Dieldrin	17.9	LCS	P	0 - 30
LFB	Endosulfan I	6.12	LCS	P	0 - 30
LFB	Endosulfan II	11.1	LCS	P	0 - 30
LFB	Endosulfan Sulfate	10.9	LCS	P	0 - 30
LFB	Endrin	17.0	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P378215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endrin Aldehyde	17.9	LCS	P	0 - 30
LFB	Endrin Ketone	11.7	LCS	P	0 - 30
LFB	Ethalfuralin	13.1	LCS	P	0 - 30
LFB	Gamma-BHC	1.84	LCS	P	0 - 30
LFB	Gamma-Chlordane	21.2	LCS	P	0 - 30
LFB	Heptachlor	25.3	LCS	P	0 - 30
LFB	Heptachlor Epoxide	14.4	LCS	P	0 - 30
LFB	Hexachlorobenzene	20.1	LCS	P	0 - 30
LFB	Methoxychlor	12.3	LCS	P	0 - 30
LFB	Mirex	26.9	LCS	P	0 - 30
LFB	Permethrin	25.0	LCS	P	0 - 30
LFB	Trans-Nonachlor	22.2	LCS	P	0 - 30
LFB	Trifluralin	15.2	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P378488

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153375	Aldrin	21.0	Spike	P	0 - 30
2153375	Alpha-BHC	21.0	Spike	P	0 - 30
2153375	Alpha-Chlordane	2.92	Spike	P	0 - 30
2153375	Beta-BHC	20.1	Spike	P	0 - 30
2153375	Bifenthrin	2.00	Spike	P	0 - 30
2153375	Carbophenothion	5.54	Spike	P	0 - 30
2153375	Chlorothalonil	2.95	Spike	P	0 - 30
2153375	Cis-Nonachlor	3.66	Spike	P	0 - 30
2153375	Cypermethrin	5.97	Spike	P	0 - 30
2153375	DDD-p,p'	5.04	Spike	P	0 - 30
2153375	DDE-p,p'	5.17	Spike	P	0 - 30
2153375	DDT-p,p'	1.40	Spike	P	0 - 30
2153375	Delta-BHC	17.2	Spike	P	0 - 30
2153375	Dicofol	0.411	Spike	P	0 - 30
2153375	Dieldrin	2.96	Spike	P	0 - 30
2153375	Endosulfan I	14.1	Spike	P	0 - 30
2153375	Endosulfan II	5.59	Spike	P	0 - 30
2153375	Endosulfan Sulfate	4.10	Spike	P	0 - 30
2153375	Endrin	6.23	Spike	P	0 - 30
2153375	Endrin Aldehyde	7.10	Spike	P	0 - 30
2153375	Endrin Ketone	3.54	Spike	P	0 - 30
2153375	Ethalfuralin	0.803	Spike	P	0 - 30
2153375	Gamma-BHC	24.0	Spike	P	0 - 30
2153375	Gamma-Chlordane	2.69	Spike	P	0 - 30
2153375	Heptachlor	2.51	Spike	P	0 - 30
2153375	Heptachlor Epoxide	2.48	Spike	P	0 - 30
2153375	Hexachlorobenzene	0.582	Spike	P	0 - 30
2153375	Methoxychlor	2.08	Spike	P	0 - 30
2153375	Mirex	2.16	Spike	P	0 - 30
2153375	Permethrin	0.0861	Spike	P	0 - 30
2153375	Trans-Nonachlor	2.63	Spike	P	0 - 30
2153375	Trifluralin	0.260	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P378488

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Aldrin	2.83	LCS	P	0 - 30
LFB	Alpha-BHC	2.83	LCS	P	0 - 30
LFB	Alpha-Chlordane	2.35	LCS	P	0 - 30
LFB	Beta-BHC	0.165	LCS	P	0 - 30
LFB	Bifenthrin	1.82	LCS	P	0 - 30
LFB	Carbophenothion	1.44	LCS	P	0 - 30
LFB	Chlorothalonil	0.101	LCS	P	0 - 30
LFB	Cis-Nonachlor	2.38	LCS	P	0 - 30
LFB	Cypermethrin	1.56	LCS	P	0 - 30
LFB	DDD-p,p'	2.12	LCS	P	0 - 30
LFB	DDE-p,p'	1.15	LCS	P	0 - 30
LFB	DDT-p,p'	2.67	LCS	P	0 - 30
LFB	Delta-BHC	2.77	LCS	P	0 - 30
LFB	Dicofol	1.32	LCS	P	0 - 30
LFB	Dieldrin	3.64	LCS	P	0 - 30
LFB	Endosulfan I	0.0637	LCS	P	0 - 30
LFB	Endosulfan II	3.42	LCS	P	0 - 30
LFB	Endosulfan Sulfate	5.90	LCS	P	0 - 30
LFB	Endrin	0.665	LCS	P	0 - 30
LFB	Endrin Aldehyde	7.04	LCS	P	0 - 30
LFB	Endrin Ketone	4.75	LCS	P	0 - 30
LFB	Ethalfuralin	0.812	LCS	P	0 - 30
LFB	Gamma-BHC	1.12	LCS	P	0 - 30
LFB	Gamma-Chlordane	1.36	LCS	P	0 - 30
LFB	Heptachlor	2.51	LCS	P	0 - 30
LFB	Heptachlor Epoxide	2.47	LCS	P	0 - 30
LFB	Hexachlorobenzene	3.33	LCS	P	0 - 30
LFB	Methoxychlor	3.12	LCS	P	0 - 30
LFB	Mirex	1.09	LCS	P	0 - 30
LFB	Permethrin	2.23	LCS	P	0 - 30
LFB	Trans-Nonachlor	1.95	LCS	P	0 - 30
LFB	Trifluralin	0.660	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P378215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2154227	Chlordane	0.263	Spike	P	0 - 30
2154227	Toxaphene	1.68	Spike	P	0 - 30
LFB	Chlordane	5.13	LCS	P	0 - 30
LFB	Toxaphene	7.31	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P378488

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153003	Chlordane	2.22	Spike	P	0 - 30
2153003	Toxaphene	3.51	Spike	P	0 - 30
LFB	Chlordane	1.97	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P378488

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Toxaphene	3.73	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P378093

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2152481	3-Hydroxycarbofuran	9.88	Spike	P	0 - 30
2152481	Aldicarb	12.4	Spike	P	0 - 30
2152481	Aldicarb Sulfone	13.8	Spike	P	0 - 30
2152481	Aldicarb Sulfoxide	12.9	Spike	P	0 - 30
2152481	Carbaryl	21.6	Spike	P	0 - 30
2152481	Carbofuran	12.2	Spike	P	0 - 30
2152481	Methiocarb	13.6	Spike	P	0 - 30
2152481	Methomyl	1.14	Spike	P	0 - 30
2152481	Oxamyl	15.5	Spike	P	0 - 30
2152481	Propoxur	3.05	Spike	P	0 - 30
2153067	2,4-D	1.77	Spike	P	0 - 30
2153067	Acetaminophen	15.6	Spike	P	0 - 30
2153067	Acetamiprid	5.98	Spike	P	0 - 30
2153067	Afidopyropen	3.30	Spike	P	0 - 30
2153067	Bentazon	2.32	Spike	P	0 - 30
2153067	Benzovindiflupyr	9.07	Spike	P	0 - 30
2153067	Carbamazepine	10.1	Spike	P	0 - 30
2153067	Clothianidin	1.09	Spike	P	0 - 30
2153067	Dinotefuran	10.6	Spike	P	0 - 30
2153067	Diuron	3.48	Spike	P	0 - 30
2153067	Fenuron	14.4	Spike	P	0 - 30
2153067	Fluridone	7.41	Spike	P	0 - 30
2153067	Hydrocodone	6.58	Spike	P	0 - 30
2153067	Ibuprofen	7.15	Spike	P	0 - 30
2153067	Imazapyr	1.20	Spike	P	0 - 30
2153067	Imidacloprid	10.8	Spike	P	0 - 30
2153067	Linuron	13.8	Spike	P	0 - 30
2153067	Mandestrobin	8.84	Spike	P	0 - 30
2153067	MCP	13.9	Spike	P	0 - 30
2153067	Naproxen	6.18	Spike	P	0 - 30
2153067	Primidone	1.50	Spike	P	0 - 30
2153067	Pyraclostrobin	6.60	Spike	P	0 - 30
2153067	Thiamethoxam	5.31	Spike	P	0 - 30
2153067	Tolfenpyrad	6.44	Spike	P	0 - 30
2153067	Triclopyr	15.5	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P378149

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2152739	Acesulfame K	1.38	Spike	P	0 - 30
2152739	AMPA	0.275	Spike	P	0 - 30
2152739	Endothall	2.70	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P378149

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2152739	Glufosinate	8.06	Spike	P	0 - 30
2152739	Glyphosate	4.84	Spike	P	0 - 30
2152739	Sucralose	3.23	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P378110

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153485	Color (true)	3.33	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P378420

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153388	Total Alkalinity	0.0905	Sample	P	0 - 2.8

Reference Method: SM 2540 C-2011
Batch ID: P378766

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153392	TDS	2.18	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P378424

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153388	Fluoride	0.470	Spike	P	0 - 2.5

Reference Method: SM 5310 B-2011
Batch ID: P378474

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2153486	Organic Carbon	0.130	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2153519
Field Sample ID: G4NW0412

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	65.7	P	30 - 160

Lab Sample ID: 2153520
Field Sample ID: G4NW0412

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	114	P	30 - 160
EPA 8321B	Acetaminophen-d4	79.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	78.3	P	30 - 160
EPA 8321B	Diuron-d6	64.4	P	30 - 160
EPA 8321B	Endothall-d6	148	P	30 - 160
EPA 8321B	Endothall-d6	148	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	69.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	69.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	83.9	P	30 - 160
EPA 8321B	Primidone-d5	76.0	P	30 - 160
EPA 8321B	Sucralose-d6	98.7	P	30 - 160
EPA 8321B	Sucralose-d6	98.7	P	30 - 160

Lab Sample ID: 2153521
Field Sample ID: G4NW0429

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	113	P	30 - 160
EPA 8321B	Acetaminophen-d4	85.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	68.6	P	30 - 160
EPA 8321B	Diuron-d6	56.2	P	30 - 160
EPA 8321B	Endothall-d6	140	P	30 - 160
EPA 8321B	Endothall-d6	140	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	63.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	63.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	92.0	P	30 - 160
EPA 8321B	Primidone-d5	78.9	P	30 - 160
EPA 8321B	Sucralose-d6	96.7	P	30 - 160
EPA 8321B	Sucralose-d6	96.7	P	30 - 160

Lab Sample ID: 2153522
Field Sample ID: G4NW0412

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	85.9	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	78.6	P	34 - 106
EPA 8276	Decachlorobiphenyl	73.4	P	26 - 97.0
EPA 8276	PCNB	94.3	P	38 - 141

Lab Sample ID: 2153523
Field Sample ID: G4NW0412

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	112	P	72 - 135
EPA 8270E	Terbufos-d10	112	P	57 - 134

Quality Assurance Report Surrogates

Lab Sample ID: 2153524
Field Sample ID: G4NW0505

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	78.2	P	26 - 97.0
EPA 8276	PCNB	93.2	P	38 - 141

Lab Sample ID: 2153547
Field Sample ID: G4NW0429

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	87.3	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	64.7	P	34 - 106
EPA 8276	Decachlorobiphenyl	73.9	P	26 - 97.0
EPA 8276	PCNB	80.4	P	38 - 141

Lab Sample ID: 2153687
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	65.9	P	30 - 160

Lab Sample ID: 2153688
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	109	P	30 - 160
EPA 8321B	Acetaminophen-d4	79.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	68.7	P	30 - 160
EPA 8321B	Diuron-d6	63.9	P	30 - 160
EPA 8321B	Endothall-d6	125	P	30 - 160
EPA 8321B	Endothall-d6	125	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	87.4	P	30 - 160
EPA 8321B	Primidone-d5	71.3	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	30 - 160
EPA 8321B	Sucralose-d6	104	P	30 - 160

Lab Sample ID: 2153689
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	71.6	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	50.0	P	34 - 106
EPA 8276	Decachlorobiphenyl	63.0	P	26 - 97.0
EPA 8276	PCNB	71.1	P	38 - 141

Lab Sample ID: 2153690
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	105	P	72 - 135
EPA 8270E	Terbufos-d10	99.3	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A97257

Included Lab Sample IDs: 2153485, 2153488, 2153491, 2153494

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

Reference Method: SM 2120 B-2011

Run ID: A97258

Included Lab Sample IDs: 2153485, 2153488, 2153491, 2153494

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.2	104	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A97259

Included Lab Sample IDs: 2153487, 2153490, 2153493, 2153496

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.6	96.6	P/P	90 - 110
O-Phosphate-P	97.5	96.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A97294

Included Lab Sample IDs: 2153520, 2153521, 2153688

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	107	125	P/P	60 - 160
AMPA	125	116	P/P	60 - 160
Glufosinate	114	111	P/P	60 - 160
Glufosinate	125	114	P/P	60 - 160
Glyphosate	118	125	P/P	60 - 160
Glyphosate	125	115	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A97313

Included Lab Sample IDs: 2153520, 2153521, 2153688

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	90.4	92.3	P/P	50 - 150
2,4-D	92.3	102	P/P	50 - 150
3-Hydroxycarbofuran	124	100	P/P	60 - 150
Acetaminophen	73.6	66.6	P/P	60 - 160
Acetaminophen	90.5	73.6	P/P	60 - 160
Acetamiprid	87.6	80.2	P/P	50 - 150
Acetamiprid	97.6	87.6	P/P	50 - 150
Afidopyropen	82.9	90.4	P/P	50 - 150
Afidopyropen	90.4	92.7	P/P	50 - 150
Aldicarb	128	93.4	P/P	60 - 150
Aldicarb Sulfone	118	98.4	P/P	50 - 150
Aldicarb Sulfoxide	120	97.4	P/P	50 - 150
Bentazon	112	94.9	P/P	50 - 160
Bentazon	115	112	P/P	50 - 160
Benzovindiflupyr	105	98.8	P/P	50 - 150
Benzovindiflupyr	98.8	91.0	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A97313

Included Lab Sample IDs: 2153520, 2153521, 2153688

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbamazepine	95.2	99.3	P/P	60 - 150
Carbamazepine	99.3	91.0	P/P	60 - 150
Carbaryl	131	106	P/P	60 - 150
Carbofuran	126	108	P/P	50 - 150
Clothianidin	76.3	70.4	P/P	60 - 150
Clothianidin	83.9	76.3	P/P	60 - 150
Dinotefuran	76.5	78.5	P/P	50 - 150
Dinotefuran	78.5	71.1	P/P	50 - 150
Diuron	124	94.5	P/P	60 - 150
Diuron	94.5	111	P/P	60 - 150
Fenuron	101	99.1	P/P	60 - 150
Fenuron	115	101	P/P	60 - 150
Fluridone	102	94.9	P/P	60 - 160
Fluridone	94.9	94.3	P/P	60 - 160
Hydrocodone	105	91.0	P/P	60 - 150
Hydrocodone	91.0	87.4	P/P	60 - 150
Ibuprofen	101	90.9	P/P	50 - 160
Ibuprofen	90.9	95.2	P/P	50 - 160
Imazapyr	102	82.3	P/P	50 - 150
Imazapyr	91.5	102	P/P	50 - 150
Imidacloprid	84.7	79.3	P/P	60 - 150
Imidacloprid	95.2	84.7	P/P	60 - 150
Linuron	108	94.3	P/P	60 - 150
Linuron	94.3	92.4	P/P	60 - 150
Mandestrobin	107	104	P/P	50 - 150
Mandestrobin	112	107	P/P	50 - 150
MCPP	105	103	P/P	50 - 150
MCPP	95.2	105	P/P	50 - 150
Methiocarb	139	110	P/P	50 - 150
Methomyl	122	97.7	P/P	50 - 150
Naproxen	102	111	P/P	50 - 160
Naproxen	137	102	P/P	50 - 160
Oxamyl	128	102	P/P	50 - 150
Primidone	72.4	72.0	P/P	60 - 150
Primidone	96.3	72.4	P/P	60 - 150
Propoxur	141	109	P/P	50 - 150
Pyraclostrobin	102	102	P/P	60 - 150
Pyraclostrobin	110	102	P/P	60 - 150
Thiamethoxam	86.0	75.6	P/P	50 - 150
Thiamethoxam	91.5	86.0	P/P	50 - 150
Tolfenpyrad	105	94.9	P/P	60 - 150
Tolfenpyrad	94.9	92.7	P/P	60 - 150
Triclopyr	86.8	89.3	P/P	50 - 150
Triclopyr	89.3	102	P/P	50 - 150

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A97316

Included Lab Sample IDs: 2153525, 2153526, 2153527

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A97316

Included Lab Sample IDs: 2153525, 2153526, 2153527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	97.7	95.5	P/P	90 - 110
Iron	98.3	96.1	P/P	90 - 110
Magnesium	98.0	95.7	P/P	90 - 110
Potassium	96.2	94.7	P/P	90 - 110
Sodium	97.9	96.3	P/P	90 - 110
Zinc	99.5	99.3	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A97327

Included Lab Sample IDs: 2153485, 2153488, 2153491, 2153494

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: SM 2320 B-2011

Run ID: A97356

Included Lab Sample IDs: 2153485, 2153488, 2153491, 2153494

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

Reference Method: SM 4500 F-C-2011

Run ID: A97356

Included Lab Sample IDs: 2153485, 2153488, 2153491, 2153494

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

Reference Method: SM 5310 B-2011

Run ID: A97368

Included Lab Sample IDs: 2153486, 2153489, 2153492, 2153495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	102	P/P	90 - 110
Organic Carbon	101	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A97369

Included Lab Sample IDs: 2153486, 2153489, 2153492, 2153495

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A97378

Included Lab Sample IDs: 2153486, 2153489, 2153492, 2153495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.8	96.8	P/P	90 - 110
Total-P	98.0	97.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A97402

Included Lab Sample IDs: 2153525, 2153526, 2153527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	96.8	96.5	P/P	90 - 110
Aluminum	96.8	98.3	P/P	90 - 110
Arsenic	100	101	P/P	90 - 110
Arsenic	100	101	P/P	90 - 110
Beryllium	101	103	P/P	90 - 110
Beryllium	105	105	P/P	90 - 110
Cadmium	102	103	P/P	90 - 110
Cadmium	103	104	P/P	90 - 110
Chromium	101	101	P/P	90 - 110
Chromium	99.3	99.6	P/P	90 - 110
Cobalt	95.7	96.8	P/P	90 - 110
Cobalt	96.3	95.9	P/P	90 - 110
Copper	95.4	95.5	P/P	90 - 110
Copper	95.8	95.7	P/P	90 - 110
Lead	99.0	99.3	P/P	90 - 110
Lead	99.2	100	P/P	90 - 110
Manganese	96.8	97.0	P/P	90 - 110
Manganese	98.1	99.4	P/P	90 - 110
Molybdenum	95.0	95.3	P/P	90 - 110
Molybdenum	96.6	96.0	P/P	90 - 110
Selenium	101	100	P/P	90 - 110
Selenium	101	102	P/P	90 - 110
Thallium	98.2	98.9	P/P	90 - 110
Thallium	99.1	98.7	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A97406

Included Lab Sample IDs: 2153522, 2153547

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.1		P	80 - 120
Toxaphene	103		P	80 - 120

Reference Method: EPA 8270E

Run ID: A97413

Included Lab Sample IDs: 2153523, 2153690

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	105		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	106		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	86.1		P	80 - 120
Azinphos Methyl	108		P	80 - 120
Bromacil	106		P	80 - 120
Butylate	111		P	80 - 120
Carbophenothion	103		P	80 - 120
Chlorpyrifos Ethyl	100		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Cyanazine	83.8		P	80 - 120
Demeton	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A97413

Included Lab Sample IDs: 2153523, 2153690

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diazinon	104		P	80 - 120
Dimethenamid	106		P	80 - 120
Disulfoton	79.2*		F	80 - 120
Dithiopyr	106		P	80 - 120
EPTC	107		P	80 - 120
Ethion	95.4		P	80 - 120
Ethoprop	100		P	80 - 120
Fenamiphos	88.1		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	104		P	80 - 120
Fipronil Sulfide	98.8		P	80 - 120
Fipronil Sulfone	100		P	80 - 120
Flumioxazin	95.0		P	80 - 120
Fonofos	100		P	80 - 120
Hexazinone	92.7		P	80 - 120
Imazalil	100		P	80 - 120
Malathion	69.6*		F	80 - 120
Metalaxyl	101		P	80 - 120
Metolachlor	113		P	80 - 120
Metribuzin	77.3*		F	80 - 120
Mevinphos	103		P	80 - 120
Molinate	110		P	80 - 120
Norflurazon	104		P	80 - 120
Oxadiazon	105		P	80 - 120
Parathion Ethyl	95.3		P	80 - 120
Parathion Methyl	98.8		P	80 - 120
Pendimethalin	97.4		P	80 - 120
Phorate	101		P	80 - 120
Prodiamine	105		P	80 - 120
Prometon	112		P	80 - 120
Prometryn	113		P	80 - 120
Pronamide	106		P	80 - 120
Propiconazole	105		P	80 - 120
Simazine	102		P	80 - 120
Sulfentrazone	105		P	80 - 120
Tebuconazole	109		P	80 - 120
Terbufos	101		P	80 - 120
Terbuthylazine	105		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A97415

Included Lab Sample IDs: 2153486, 2153489, 2153492, 2153495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	107	97.8	P/P	90 - 110
Kjeldahl Nitrogen	96.7	107	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A97416

Included Lab Sample IDs: 2153486, 2153489, 2153492, 2153495

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A97426

Included Lab Sample IDs: 2153526

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	101	99.4	P/P	90 - 110
Nickel	101	101	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A97451

Included Lab Sample IDs: 2153525, 2153527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	108	108	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A97475

Included Lab Sample IDs: 2153520, 2153521, 2153688

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	72.3	76.4	P/P	60 - 160
Acesulfame K	76.4	63.2	P/P	60 - 160
Endothall	123	156	P/P	60 - 160
Endothall	156	146	P/P	60 - 160

Reference Method: EPA 8276

Run ID: A97497

Included Lab Sample IDs: 2153524, 2153689

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.0		P	80 - 120
Chlordane	96.8		P	80 - 120
Toxaphene	95.6		P	80 - 120
Toxaphene	99.5		P	80 - 120

Reference Method: EPA 8270E

Run ID: A97519

Included Lab Sample IDs: 2153689

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	103		P	80 - 120
Alpha-BHC	97.8		P	80 - 120
Alpha-Chlordane	107		P	80 - 120
Beta-BHC	99.0		P	80 - 120
Bifenthrin	99.9		P	80 - 120
Carbophenothion	110		P	80 - 120
Chlorothalonil	133*		F	80 - 120
Cis-Nonachlor	112		P	80 - 120
Cypermethrin	104		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A97519

Included Lab Sample IDs: 2153689

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDD-p,p'	112		P	80 - 120
DDE-p,p'	107		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	108		P	80 - 120
Dicofol	118		P	80 - 120
Dieldrin	105		P	80 - 120
Endosulfan I	118		P	80 - 120
Endosulfan II	116		P	80 - 120
Endosulfan Sulfate	106		P	80 - 120
Endrin	112		P	80 - 120
Endrin Aldehyde	112		P	80 - 120
Endrin Ketone	104		P	80 - 120
Ethalfuralin	101		P	80 - 120
Gamma-BHC	101		P	80 - 120
Gamma-Chlordane	109		P	80 - 120
Heptachlor	107		P	80 - 120
Heptachlor Epoxide	108		P	80 - 120
Hexachlorobenzene	97.6		P	80 - 120
Methoxychlor	99.6		P	80 - 120
Mirex	101		P	80 - 120
Permethrin	95.7		P	80 - 120
Trans-Nonachlor	108		P	80 - 120
Trifluralin	97.9		P	80 - 120

Reference Method: EPA 8270E

Run ID: A97521

Included Lab Sample IDs: 2153522, 2153547

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	88.0		P	80 - 120
Alpha-BHC	99.0		P	80 - 120
Alpha-Chlordane	99.8		P	80 - 120
Beta-BHC	122*		F	80 - 120
Bifenthrin	99.7		P	80 - 120
Carbophenothion	90.5		P	80 - 120
Chlorothalonil	98.4		P	80 - 120
Cis-Nonachlor	100		P	80 - 120
Cypermethrin	99.5		P	80 - 120
DDD-p,p'	97.4		P	80 - 120
DDE-p,p'	106		P	80 - 120
DDT-p,p'	100		P	80 - 120
Delta-BHC	126*		F	80 - 120
Dicofol	102		P	80 - 120
Dieldrin	103		P	80 - 120
Endosulfan I	101		P	80 - 120
Endosulfan II	93.2		P	80 - 120
Endosulfan Sulfate	96.3		P	80 - 120
Endrin	108		P	80 - 120
Endrin Aldehyde	96.6		P	80 - 120
Endrin Ketone	100		P	80 - 120
Ethalfuralin	97.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A97521

Included Lab Sample IDs: 2153522, 2153547

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Gamma-BHC	122*		F	80 - 120
Gamma-Chlordane	99.5		P	80 - 120
Heptachlor	82.8		P	80 - 120
Heptachlor Epoxide	100		P	80 - 120
Hexachlorobenzene	106		P	80 - 120
Methoxychlor	102		P	80 - 120
Mirex	99.0		P	80 - 120
Permethrin	97.8		P	80 - 120
Trans-Nonachlor	102		P	80 - 120
Trifluralin	98.5		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A97560

Included Lab Sample IDs: 2153525, 2153526, 2153527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	104	102	P/P	90 - 110
Boron	96.8	103	P/P	90 - 110
Nickel	98.9	99.1	P/P	90 - 110
Silver	103	102	P/P	90 - 110
Silver	104	104	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A97720

Included Lab Sample IDs: 2153520, 2153521, 2153688

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	96.0	100	P/P	60 - 160
Sucralose	96.9	96.0	P/P	60 - 160

* 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
EPA 180.1 Rev. 2.0	Turbidity							0.885
	Turbidity							0.0
EPA 200.7 Rev. 4.4	Barium	97.5		97.3	99.9	96.4		3.30
	Calcium	102		100	102			0.326
	Iron	101		100	102	102		0.411
	Magnesium	103		100	102	102		1.06
	Potassium	97.0		94.7	97.0	95.8		0.873
	Sodium	100		102	101			1.23
	Zinc	97.3		96.4	95.6	98.7		3.08
EPA 200.8 Rev. 5.4	Aluminum	99.6		97.2	97.5	97.4		0.201
	Antimony	107		107	107	108		0.337
	Arsenic	105		106	107	109		0.670
	Beryllium	102		99.3	100	102		0.668
	Boron	104		102	104	104		0.435
	Cadmium	107		107	106	107		0.577
	Chromium	105		107	107	108		0.140
	Cobalt	101		100	101	102		0.593
	Copper	100		99.9	101	103		0.658
	Lead	104		104	104	108		0.155
	Manganese	103		105	103	105		1.20
	Molybdenum	101		105	105	107		0.549
	Nickel	100		101	100	101		0.726
	Selenium	100		99.0	97.5	99.6		1.45
	Silver	108		107	105	104		1.17
	Thallium	104		106	107	111		0.659
EPA 300.0 Rev. 2.1	Chloride	103		101	101			0.999
	Sulfate	103		99.7	102			0.778
EPA 350.1 Rev. 2.0	Ammonia-N	99.1		97.5	99.8			2.02
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102		107	107			0.637
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0		97.0	98.0			0.775
EPA 365.1 Rev. 2.0	Total-P	104		104	99.4			3.76
	Total-P	104		103	104			1.29
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103		91.9	95.1			2.09
EPA 8270E	Acetochlor	89.6	94.9	99.7	107	5.75		7.38
	Alachlor	90.7	94.4	92.3	109	4.00		16.4
	Aldrin	41.6	31.1	48.4	46.1	28.7		4.90
	Aldrin	41.7	40.6	35.3	43.5	2.83		21.0
	Alpha-BHC	86.1	73.3	92.5	102	16.1		9.43
	Alpha-BHC	83.8	86.2	77.9	96.2	2.83		21.0
	Alpha-Chlordane	75.8	61.1	62.2	62.7	21.5		0.796
	Alpha-Chlordane	85.6	83.6	84.8	82.3	2.35		2.92
	Ametryn	115	111	111	130	4.16		13.2
	Atrazine	89.3	95.2			6.35		6.72
	Atrazine Desethyl	77.5	78.9	78.8	87.7	1.79		7.25
	Azinphos Methyl	113	118	104	113	4.36		8.33
	Beta-BHC	88.6	88.6	89.4	96.6	0.0356		7.73
	Beta-BHC	126	125	117	143	0.165		20.1
	Bifenthrin	68.9	55.9	74.2	71.1	20.7		4.29
	Bifenthrin	75.2	73.8	71.8	70.4	1.82		2.00
	Bromacil	87.8	91.7			4.33		9.64
	Butylate	37.9	49.4	50.1	54.5	26.3		8.55
	Carbophenothion	82.0	91.8	84.5	86.7	11.2		2.52
	Carbophenothion	75.1	60.4	70.6	74.0	21.7		4.69
	Carbophenothion	83.8	85.0	99.9	94.5	1.44		5.54

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Chlorothalonil	40.3	36.4	32.6	73.3	10.2		76.8
	Chlorothalonil	96.0	96.1	122	119	0.101		2.95
	Chlorpyrifos Ethyl	83.1	91.5	96.3	93.3	9.64		3.17
	Chlorpyrifos Methyl	83.0	93.0	94.8	99.8	11.3		5.22
	Cis-Nonachlor	76.0	59.7	60.2	62.0	24.0		2.90
	Cis-Nonachlor	86.5	84.4	82.0	85.1	2.38		3.66
	Cyanazine	100	109	94.2	113	8.35		17.9
	Cypermethrin	100	79.1	100	107	23.7		6.52
	Cypermethrin	81.4	82.7	81.8	86.8	1.56		5.97
	DDD-p,p'	101	89.7	61.5	63.1	11.5		2.60
	DDD-p,p'	87.4	85.5	83.8	88.1	2.12		5.04
	DDE-p,p'	70.1	54.5	56.9	56.7	25.0		0.388
	DDE-p,p'	86.5	87.5	81.2	77.1	1.15		5.17
	DDT-p,p'	77.1	63.5	70.8	68.9	19.3		2.79
	DDT-p,p'	80.6	78.5	77.9	76.8	2.67		1.40
	Delta-BHC	109	113	123	140	3.46		12.5
	Delta-BHC	158	153	155	184	2.77		17.2
	Demeton	71.6	80.7	92.3	102	12.0		10.5
	Diazinon	87.7	96.3	99.9	110	9.38		9.54
	Dicofol	101	94.3	113	113	6.83		0.207
	Dicofol	104	103	117	116	1.32		0.411
	Dieldrin	83.6	69.9	64.2	67.5	17.9		5.11
	Dieldrin	95.3	91.9	89.9	92.7	3.64		2.96
	Dimethenamid	89.5	96.0	100	107	7.05		6.86
	Disulfoton	75.8	65.1	76.2	68.4	15.2		10.8
	Dithiopyr	87.6	89.2	93.9	106	1.73		10.9
	Endosulfan I	96.0	90.3	85.9	95.4	6.12		10.5
	Endosulfan I	94.3	94.4	103	89.3	0.0637		14.1
	Endosulfan II	106	94.8	84.3	92.1	11.1		8.84
	Endosulfan II	94.3	91.1	94.5	99.9	3.42		5.59
	Endosulfan Sulfate	100	89.8	99.2	96.7	10.9		2.52
	Endosulfan Sulfate	94.3	88.9	89.8	93.5	5.90		4.10
	Endrin	87.0	73.4	71.3	74.8	17.0		4.87
	Endrin	89.0	88.5	87.9	93.6	0.665		6.23
	Endrin Aldehyde	95.8	80.1	69.4	65.5	17.9		5.85
	Endrin Aldehyde	99.3	92.5	88.2	94.7	7.04		7.10
	Endrin Ketone	99.7	88.7	95.7	94.0	11.7		1.78
	Endrin Ketone	96.4	91.9	90.9	94.2	4.75		3.54
	EPTC	36.3	42.0	53.4	54.1	14.6		1.28
	Ethalfuralin	75.2	66.0	68.7	65.4	13.1		4.95
	Ethalfuralin	76.8	76.1	75.6	75.0	0.812		0.803
	Ethion	76.0	85.4	83.2	87.1	11.6		4.62
	Ethoprop	67.6	78.8	95.9	104	15.3		7.61
	Fenamiphos	90.5	102	106	110	12.3		3.85
	Fipronil	94.4	102	109	122	7.99		8.65
	Fipronil Desulfinyl	86.7	95.7	96.9	108	9.83		7.03
	Fipronil Sulfide	77.2	84.9	104	114	9.50		7.50
	Fipronil Sulfone	82.0	89.5	83.3	100	8.74		6.24
	Flumioxazin	127	136	131	148	7.45		12.2
	Fonofos	73.4	81.2	86.9	89.7	10.1		3.18
	Gamma-BHC	92.0	90.3	119	124	1.84		4.26
	Gamma-BHC	129	130	135	171	1.12		24.0
	Gamma-Chlordane	70.2	56.7	59.4	59.2	21.2		0.272
	Gamma-Chlordane	80.8	79.7	80.0	77.9	1.36		2.69

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Heptachlor	66.4	51.5	60.3	61.1	25.3	1.30
	Heptachlor	54.0	55.3	46.9	48.0	2.51	2.51
	Heptachlor Epoxide	83.3	72.1	70.0	70.6	14.4	0.792
	Heptachlor Epoxide	88.8	86.6	88.5	86.3	2.47	2.48
	Hexachlorobenzene	66.5	54.3	59.9	57.0	20.1	4.94
	Hexachlorobenzene	75.4	78.0	72.5	72.1	3.33	0.582
	Hexazinone	94.3	99.6	105	103	5.52	1.58
	Imazalil	81.2	83.3	130	125	2.63	4.00
	Malathion	92.6	100	70.6	104	7.79	38.2
	Metalaxyl	85.6	90.8	95.8	103	5.93	7.20
	Methoxychlor	90.9	80.3	79.6	81.2	12.3	1.97
	Methoxychlor	89.3	86.6	90.5	88.7	3.12	2.08
	Metolachlor	95.1	100	99.5	103	5.00	3.59
	Metribuzin	121	124	181	187	2.24	3.31
	Mevinphos	64.7	73.2	82.3	86.5	12.4	4.93
	Mirex	60.5	46.1	61.9	61.0	26.9	1.50
	Mirex	72.1	72.9	66.0	64.6	1.09	2.16
	Molinate	49.2	54.9	68.8	74.5	10.9	7.94
	Norflurazon	85.3	92.7	91.3	101	8.29	9.58
	Oxadiazon	81.1	84.9	81.5	93.0	4.56	11.0
	Parathion Ethyl	85.5	88.1	92.9	100	2.95	7.36
	Parathion Methyl	88.5	97.4	103	114	9.59	9.88
	Pendimethalin	86.2	88.2	92.4	105	2.31	12.3
	Permethrin	74.3	57.9	71.8	72.1	25.0	0.442
	Permethrin	77.5	75.8	75.7	75.6	2.23	0.0861
	Phorate	79.6	84.2	88.8	94.3	5.67	6.01
	Prodiamine	77.6	84.6	41.9	47.7	8.68	13.0
	Prometon	87.1	87.4	71.3	100	0.336	14.7
	Prometryn	106	109	128	140	2.29	8.72
	Pronamide	88.8	96.0	115	127	7.75	9.37
	Propiconazole	93.8	100	96.8	112	6.67	8.34
	Simazine	90.9	96.0	93.8	108	5.41	7.62
	Sulfentrazone	81.8	88.0			7.22	7.85
	Tebuconazole	68.9	71.8	67.0	72.4	4.03	6.53
	Terbufos	79.8	84.0	94.6	99.8	5.07	5.34
	Terbuthylazine	87.8	90.8	91.0	96.3	3.40	5.73
	Trans-Nonachlor	70.6	56.5	59.0	59.9	22.2	1.40
	Trans-Nonachlor	82.1	80.5	80.6	78.5	1.95	2.63
	Trifluralin	74.0	63.5	67.9	66.2	15.2	2.55
	Trifluralin	76.6	76.1	75.4	75.6	0.660	0.260
EPA 8276	Chlordane	81.9	86.2	90.6	90.9	5.13	0.263
	Chlordane	87.7	89.4	100	102	1.97	2.22
	Toxaphene	72.0	77.5	84.0	82.6	7.31	1.68
	Toxaphene	99.3	95.7	93.0	89.8	3.73	3.51
EPA 8321B	2,4-D	136		97.7	99.4		1.77
	3-Hydroxycarbofuran	69.9		85.1	77.1		9.88
	Acesulfame K	92.9		24.6	25.0		1.38
	Acetaminophen	77.7		58.8	68.7		15.6
	Acetamiprid	71.3		79.2	74.6		5.98
	Afidopyropen	72.0		67.4	69.6		3.30
	Aldicarb	45.3		72.0	63.6		12.4
	Aldicarb Sulfone	92.7		116	100		13.8
	Aldicarb Sulfoxide	86.4		55.5	63.1		12.9
	AMPA	127		127	127		0.275

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Bentazon	70.9	13.7	11.3			2.32
	Benzovindiflupyr	79.9	73.0	66.6			9.07
	Carbamazepine	91.0	73.1	60.5			10.1
	Carbaryl	59.1	64.6	52.0			21.6
	Carbofuran	67.7	62.2	70.3			12.2
	Clothianidin	77.3	70.1	69.3			1.09
	Dinotefuran	82.8	92.4	83.1			10.6
	Diuron	90.2	63.0	65.2			3.48
	Endothall	121	153	149			2.70
	Fenuron	103	82.9	71.8			14.4
	Fluridone	81.9	66.4	71.8			7.41
	Glufosinate	118	117	108			8.06
	Glyphosate	117	91.0	79.1			4.84
	Hydrocodone	85.3	83.3	89.0			6.58
	Ibuprofen	93.6	81.2	75.6			7.15
	Imazapyr	83.3	69.6	68.7			1.20
	Imidacloprid	87.1	144	130			10.8
	Linuron	72.7	59.9	52.2			13.8
	Mandestrobin	85.3	84.3	77.2			8.84
	MCPP	137	110	126			13.9
	Methiocarb	64.2	67.3	58.7			13.6
	Methomyl	80.9	89.3	88.3			1.14
	Naproxen	82.8	98.1	92.2			6.18
	Oxamyl	80.9	110	94.5			15.5
	Primidone	81.3	66.2	65.1			1.50
	Propoxur	70.6	58.5	55.9			3.05
	Pyraclostrobin	82.4	71.3	66.7			6.60
	Sucralose	95.5	99.6	95.7			3.23
	Thiamethoxam	85.5	110	104			5.31
	Tolfenpyrad	53.8	48.0	51.2			6.44
	Triclopyr	104	94.6	81.0			15.5
SM 2120 B-2011	Color (true)	101				3.33	
SM 2320 B-2011	Total Alkalinity	103				0.0905	
SM 2540 C-2011	TDS					2.18	
SM 4500 F-C-2011	Fluoride	98.5	98.1	98.8			0.470
SM 5310 B-2011	Organic Carbon	99.8	101	101			0.130

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2153485, 2153488, 2153491, 2153494
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2153525, 2153526, 2153527
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2153525, 2153526, 2153527
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2153485, 2153488, 2153491, 2153494
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2153485, 2153488, 2153491, 2153494
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2153486, 2153489, 2153492, 2153495
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2153486, 2153489, 2153492, 2153495
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2153486, 2153489, 2153492, 2153495
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2153486, 2153489, 2153492, 2153495
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2153487, 2153490, 2153493, 2153496

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Organochlorine pesticides in water matrices by GC/MS-SIM	2153522, 2153547, 2153689
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2153523, 2153690
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2153522, 2153524, 2153547, 2153689
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2153519, 2153687
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2153520, 2153521, 2153688
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2153520, 2153521, 2153688
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2153485, 2153488, 2153491, 2153494
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2153485, 2153488, 2153491, 2153494
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2153485, 2153488, 2153491, 2153494
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2153485, 2153488, 2153491, 2153494
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2153485, 2153488, 2153491, 2153494
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2153486, 2153489, 2153492, 2153495

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	01/31/2020			01/31/2020 16:16	Yen Ta	2153485, 2153488, 2153491, 2153494
EPA 200.7 Rev. 4.4	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/04/2020 21:26	Betina Topolski	2153525
	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/04/2020 21:34	Betina Topolski	2153526
	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/04/2020 22:03	Betina Topolski	2153527
EPA 200.8 Rev. 5.4	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/07/2020 19:25	Justin Cutchin	2153526
	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/07/2020 22:42	Justin Cutchin	2153525
	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/07/2020 22:51	Justin Cutchin	2153527
	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/10/2020 21:01	Justin Cutchin	2153526
	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/11/2020 17:13	Justin Cutchin	2153525
	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/11/2020 17:20	Justin Cutchin	2153527
	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/14/2020 15:21	Justin Cutchin	2153526
	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/14/2020 18:29	Justin Cutchin	2153525
	01/31/2020	02/03/2020 14:55	Elliott D. Healy	02/14/2020 18:38	Justin Cutchin	2153527
EPA 300.0 Rev. 2.1	01/31/2020			02/04/2020 06:27	Elliott Rodriguez	2153485
	01/31/2020			02/04/2020 06:51	Elliott Rodriguez	2153488
	01/31/2020			02/04/2020 07:03	Elliott Rodriguez	2153491
	01/31/2020			02/04/2020 07:15	Elliott Rodriguez	2153494
EPA 350.1 Rev. 2.0	01/31/2020			02/10/2020 10:36	Ping Hua	2153486
	01/31/2020			02/10/2020 10:37	Ping Hua	2153489
	01/31/2020			02/10/2020 10:39	Ping Hua	2153492
	01/31/2020			02/10/2020 10:40	Ping Hua	2153495
EPA 351.2 Rev. 2.0	01/31/2020	02/06/2020 12:00	Jhamieka S. Greenwood	02/07/2020 10:00	Jhamieka S. Greenwood	2153486
	01/31/2020	02/06/2020 12:00	Jhamieka S. Greenwood	02/07/2020 10:04	Jhamieka S. Greenwood	2153489
	01/31/2020	02/06/2020 12:00	Jhamieka S. Greenwood	02/07/2020 10:09	Jhamieka S. Greenwood	2153492
	01/31/2020	02/06/2020 12:00	Jhamieka S. Greenwood	02/07/2020 10:11	Jhamieka S. Greenwood	2153495
EPA 353.2 Rev. 2.0	01/31/2020			02/06/2020 11:49	Beverly Y. Sanders	2153486
	01/31/2020			02/06/2020 11:50	Beverly Y. Sanders	2153492
	01/31/2020			02/06/2020 11:51	Beverly Y. Sanders	2153495
	01/31/2020			02/06/2020 13:18	Beverly Y. Sanders	2153489
EPA 365.1 Rev. 2.0	01/31/2020	02/04/2020 12:34	Yen Ta	02/06/2020 15:37	Benjamin T. Nordmann	2153486
	01/31/2020	02/04/2020 12:34	Yen Ta	02/06/2020 15:38	Benjamin T. Nordmann	2153489
	01/31/2020	02/04/2020 12:34	Yen Ta	02/06/2020 15:56	Benjamin T. Nordmann	2153492
	01/31/2020	02/04/2020 12:34	Yen Ta	02/06/2020 15:57	Benjamin T. Nordmann	2153495
EPA 365.1 Rev. 2.0 dissolved	01/31/2020			01/31/2020 16:36	Carlos Miranda	2153487
	01/31/2020			01/31/2020 16:37	Carlos Miranda	2153490
	01/31/2020			01/31/2020 16:38	Carlos Miranda	2153493
	01/31/2020			01/31/2020 16:43	Carlos Miranda	2153496
EPA 8270E	01/31/2020	02/03/2020 09:00	Rasheda Ghaffari	02/05/2020 19:21	Vandana T. Nagar	2153523
	01/31/2020	02/04/2020 09:00	Rasheda Ghaffari	02/07/2020 22:27	Julie Wi	2153522
	01/31/2020	02/04/2020 09:00	Rasheda Ghaffari	02/07/2020 22:59	Julie Wi	2153547

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	02/03/2020	02/03/2020 11:00	Rasheda Ghaffari	02/05/2020 18:54	Vandana T. Nagar	2153690
	02/03/2020	02/05/2020 09:00	Fe-Val Siddell	02/10/2020 19:11	Michael Poppell	2153689
EPA 8276	01/31/2020	02/04/2020 09:00	Rasheda Ghaffari	02/07/2020 10:51	Michael Poppell	2153522
	01/31/2020	02/04/2020 09:00	Rasheda Ghaffari	02/07/2020 11:46	Michael Poppell	2153547
	01/31/2020	02/05/2020 09:00	Fe-Val Siddell	02/11/2020 04:44	Michael Poppell	2153524
	02/03/2020	02/05/2020 09:00	Fe-Val Siddell	02/11/2020 11:12	Michael Poppell	2153689
EPA 8321B	01/31/2020	02/03/2020 16:30	Rebecca Ware	02/04/2020 02:13	Rebecca Ware	2153520
	01/31/2020	02/03/2020 16:30	Rebecca Ware	02/04/2020 02:24	Rebecca Ware	2153521
	01/31/2020	02/03/2020 16:30	Rebecca Ware	02/04/2020 13:40	Rebecca Ware	2153520
	01/31/2020	02/03/2020 16:30	Rebecca Ware	02/04/2020 13:54	Rebecca Ware	2153521
	01/31/2020	02/03/2020 16:30	Rebecca Ware	02/18/2020 02:56	Rebecca Ware	2153520
	01/31/2020	02/03/2020 16:30	Rebecca Ware	02/18/2020 03:08	Rebecca Ware	2153521
	01/31/2020	02/04/2020 10:00	Hoor Shaik	02/04/2020 23:12	Juyoung Kim	2153519
	01/31/2020	02/04/2020 10:00	Hoor Shaik	02/05/2020 05:33	Juyoung Kim	2153520
	01/31/2020	02/04/2020 10:00	Hoor Shaik	02/05/2020 06:08	Juyoung Kim	2153521
	02/03/2020	02/03/2020 16:30	Rebecca Ware	02/04/2020 03:17	Rebecca Ware	2153688
	02/03/2020	02/03/2020 16:30	Rebecca Ware	02/04/2020 15:08	Rebecca Ware	2153688
	02/03/2020	02/03/2020 16:30	Rebecca Ware	02/18/2020 04:06	Rebecca Ware	2153688
	02/03/2020	02/04/2020 10:00	Hoor Shaik	02/05/2020 00:21	Juyoung Kim	2153687
	02/03/2020	02/04/2020 10:00	Hoor Shaik	02/05/2020 09:01	Juyoung Kim	2153688
SM 2120 B-2011	01/31/2020			01/31/2020 16:43	Madeline Funaro	2153485
	01/31/2020			01/31/2020 16:44	Madeline Funaro	2153488
	01/31/2020			01/31/2020 16:45	Madeline Funaro	2153491, 2153494
SM 2320 B-2011	01/31/2020			02/05/2020 09:43	Dale L. Simmons	2153485
	01/31/2020			02/05/2020 09:54	Dale L. Simmons	2153488
	01/31/2020			02/05/2020 10:07	Dale L. Simmons	2153491
	01/31/2020			02/05/2020 10:19	Dale L. Simmons	2153494
SM 2540 C-2011	01/31/2020			02/04/2020 15:55	Sima Feizi	2153485, 2153488, 2153491, 2153494
SM 2540 D-2011	01/31/2020			02/04/2020 15:55	Sima Feizi	2153485, 2153488, 2153491, 2153494
SM 4500 F-C-2011	01/31/2020			02/05/2020 09:43	Dale L. Simmons	2153485
	01/31/2020			02/05/2020 09:54	Dale L. Simmons	2153488
	01/31/2020			02/05/2020 10:07	Dale L. Simmons	2153491
	01/31/2020			02/05/2020 10:19	Dale L. Simmons	2153494
SM 5310 B-2011	01/31/2020			02/06/2020 05:07	Madeline Funaro	2153486
	01/31/2020			02/06/2020 07:47	Madeline Funaro	2153489
	01/31/2020			02/06/2020 08:00	Madeline Funaro	2153492
	01/31/2020			02/06/2020 08:12	Madeline Funaro	2153495