

Chemical Analysis Report

WAS-SECT-2021-11-01-01

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

Event Description: **Little River Tribs.**
Request ID: **RQ-2021-10-04-13**
Customer: **WAS-SECT**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
Tallahassee, FL 32399
Attn: Curtis Musson

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

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

Date Certified: 29-NOV-2021 09:50

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: Minnow Creek At Lovewood Rd

Collection Date/Time: 11/01/2021 09:42

Field ID: G3WA0008

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287040	EPA 180.1 Rev. 2.0	Turbidity	6.1		NTU	P405885	
	EPA 300.0 Rev. 2.1	Chloride	5.7		mg Cl/L	P406039	
		Sulfate	0.55		mg SO4/L	P406042	
	SM 2120 B-2011	Color (true)	67		PCU	P405890	
	SM 2320 B-2011	Total Alkalinity	9.5		mg CaCO3/L	P406172	
	SM 2540 C-2011	TDS	37		mg/L	P406359	
	SM 2540 D-2011	TSS	6	I	mg/L	P406374	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P405988	
2287043	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P406396	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P406055	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P406050	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P405924	
	SM 5310 B-2011	Organic Carbon	7.8		mg C/L	P406058	
2287046	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P405871	
2287066	EPA 8321B	2,4-D	0.0020	U	ug/L	P405850	
		Acesulfame K	0.10	U	ug/L	P405862	
		2,4,5-T	0.0040	U	ug/L	P405850	
		AMPA	0.10	U	ug/L	P405862	
		Acetaminophen	0.0080	U	ug/L	P405850	
		Acetamiprid	0.0020	U	ug/L	P405850	
		Endothall	0.25	U	ug/L	P405862	
		Glufosinate	0.10	U	ug/L	P405862	
		Glyphosate	0.10	U	ug/L	P405862	
		Afidopyrophen	0.0020	U	ug/L	P405850	
		Bentazon	8.0E-04	U	ug/L	P405850	
		Sucralose	0.014	I	ug/L	P405862	
		Benzovindiflupyr	0.0055	I	ug/L	P405850	
		Carbamazepine	8.0E-04	U	ug/L	P405850	
		Clothianidin	0.0020	U	ug/L	P405850	
		Dinotefuran	0.0020	U	ug/L	P405850	MS
		Diuron	0.0021	I	ug/L	P405850	
		Fenuron	0.016	U	ug/L	P405850	
		Fluridone	8.0E-04	U	ug/L	P405850	
		Imazapyr	0.016		ug/L	P405850	
		Hydrocodone	0.0020	U	ug/L	P405850	
		Ibuprofen	0.020	U	ug/L	P405850	
		Imidacloprid	0.0063	I	ug/L	P405850	MS
		Linuron	0.0040	U	ug/L	P405850	
		Mandestrobin	0.0020	U	ug/L	P405850	
		MCP	0.0040	U	ug/L	P405850	
		Naproxen	0.0080	U	ug/L	P405850	
		Primidone	0.0040	U	ug/L	P405850	
		Pyraclostrobin	0.0020	U	ug/L	P405850	

Field ID: G3WA0008

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287066	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P405850	MS
		Tolfenpyrad	0.0020	U	ug/L	P405850	
		Triclopyr	0.0040	U	ug/L	P405850	
2287079	EPA 200.7 Rev. 4.4	Calcium	4.37		mg/L	P405903	
		Iron	1.35E+03		ug/L	P405903	
		Magnesium	1.47		mg/L	P405903	
		Potassium	2.0		mg/L	P405903	
		Sodium	1.7	I	mg/L	P405903	
		Strontium	10		ug/L	P405903	
		Tin	3.0	U	ug/L	P405903	
		Titanium	3.2		ug/L	P405903	
		Vanadium	2.0	U	ug/L	P405903	
		Zinc	5.0	U	ug/L	P405903	
	EPA 200.8 Rev. 5.4	Aluminum	148		ug/L	P405903	
		Antimony	0.050	U	ug/L	P405903	
		Arsenic	0.48		ug/L	P405903	
		Barium	14.7		ug/L	P405903	
		Beryllium	0.010	U	ug/L	P405903	
		Boron**	14.6		ug/L	P405903	
		Cadmium	0.020	U	ug/L	P405903	
		Chromium	0.40	U	ug/L	P405903	
		Cobalt	0.110		ug/L	P405903	
		Copper	0.40	U	ug/L	P405903	
		Lead	0.29	I	ug/L	P405903	
		Manganese	53.3		ug/L	P405903	
		Molybdenum	0.15	U	ug/L	P405903	
		Nickel	0.50	U	ug/L	P405903	
		Selenium	0.20	U	ug/L	P405903	
		Silver	0.010	U	ug/L	P405903	
		Thallium	0.10	U	ug/L	P405903	
	SM 2340B	Hardness	17.0		mg/L	P405903	

Ref. Method and Comment:

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

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Alligator Creek Upstream of SR 273

Collection Date/Time: 11/01/2021 10:29

Field ID: G3WA0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287034	EPA 180.1 Rev. 2.0	Turbidity	8.3	A	NTU	P405885	
	EPA 300.0 Rev. 2.1	Chloride	5.3		mg Cl/L	P406039	
		Sulfate	0.94		mg SO4/L	P406042	
	SM 2120 B-2011	Color (true)	100		PCU	P405890	
	SM 2320 B-2011	Total Alkalinity	7.4		mg CaCO3/L	P406172	
	SM 2540 C-2011	TDS	48		mg/L	P406359	
	SM 2540 D-2011	TSS	3	I	mg/L	P406374	
2287036	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P405988	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P406396	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.58		mg N/L	P406055	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.050		mg N/L	P406050	
	EPA 365.1 Rev. 2.0	Total-P	0.045		mg P/L	P405924	
2287038	SM 5310 B-2011	Organic Carbon	11		mg C/L	P406058	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.015		mg P/L	P405871	
2287062	EPA 8321B	Aldicarb	0.020	U	ug/L	P406048	
		Aldicarb Sulfone	0.0020	U	ug/L	P406048	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P406048	
		Carbaryl	0.0020	U	ug/L	P406048	
		Carbofuran	0.0020	U	ug/L	P406048	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P406048	
		Methiocarb	0.0020	U	ug/L	P406048	
		Methomyl	0.0020	U	ug/L	P406048	
		Oxamyl	0.0020	U	ug/L	P406048	
		Propoxur	0.0020	U	ug/L	P406048	
		2,4-D	0.0020	U	ug/L	P405850	
		Acesulfame K	0.10	U	ug/L	P405862	
		2,4,5-T	0.0040	U	ug/L	P405850	
2287064		AMPA	0.10	U	ug/L	P405862	
		Acetaminophen	0.020	I	ug/L	P405850	
		Acetamiprid	0.0020	U	ug/L	P405850	
		Endothall	0.25	U	ug/L	P405862	
		Glufosinate	0.10	U	ug/L	P405862	
		Glyphosate	0.10	U	ug/L	P405862	
		Afidopyrophen	0.0020	U	ug/L	P405850	
		Bentazon	8.0E-04	U	ug/L	P405850	
		Sucralose	0.015	I	ug/L	P405862	
		Benzovindiflupyr	0.0026	I	ug/L	P405850	
		Carbamazepine	8.0E-04	U	ug/L	P405850	
		Clothianidin	0.0020	U	ug/L	P405850	
		Dinotefuran	0.0020	UJ	ug/L	P405850	MS
		Diuron	0.0020	U	ug/L	P405850	
		Fenuron	0.016	U	ug/L	P405850	
		Fluridone	8.0E-04	U	ug/L	P405850	

Field ID: G3WA0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287064	EPA 8321B	Imazapyr	0.040		ug/L	P405850	
		Hydrocodone	0.0020	U	ug/L	P405850	
		Ibuprofen	0.020	U	ug/L	P405850	
		Imidacloprid	0.011	J	ug/L	P405850	MS
		Linuron	0.0040	U	ug/L	P405850	
		Mandestrobin	0.0020	U	ug/L	P405850	
		MCPP	0.0040	U	ug/L	P405850	
		Naproxen	0.0080	U	ug/L	P405850	
		Primidone	0.0040	U	ug/L	P405850	
		Pyraclostrobin	0.0020	U	ug/L	P405850	
		Thiamethoxam	0.0020	UJ	ug/L	P405850	MS
		Tolfenpyrad	0.0020	U	ug/L	P405850	
		Triclopyr	0.0040	U	ug/L	P405850	
2287071	EPA 8270E	Aldrin	0.67	UQ	ng/L	P406366	
		Alpha-BHC	0.10	UQ	ng/L	P406366	
		Alpha-Chlordane	0.21	UQ	ng/L	P406366	
		Beta-BHC	0.10	UQ	ng/L	P406366	
		Beta-Cyfluthrin**	1.3	UQ	ng/L	P406366	
		Bifenthrin**	0.52	UQ	ng/L	P406366	
		Chlorothalonil	2.3	IQ	ng/L	P406366	
		Cis-Nonachlor**	0.21	UQ	ng/L	P406366	
		Cypermethrin	1.6	UQ	ng/L	P406366	
		Dacthal**	0.16	UQ	ng/L	P406366	
		DDD-p,p'	0.26	UQ	ng/L	P406366	
		DDE-p,p'	0.21	UQ	ng/L	P406366	
		DDT-p,p'	0.26	UQ	ng/L	P406366	
		Delta-BHC	0.41	UQ	ng/L	P406366	
		Deltamethrin**	1.3	UQ	ng/L	P406366	
		Dichlobenil**	0.10	UQ	ng/L	P406366	
		Dicofol	1.3	UQ	ng/L	P406366	
		Dieldrin	0.41	UQ	ng/L	P406366	
		Endosulfan I	0.41	UQ	ng/L	P406366	
		Endosulfan II	0.41	UQ	ng/L	P406366	
		Endosulfan Sulfate	0.31	UQ	ng/L	P406366	MS
		Endrin	0.41	UQ	ng/L	P406366	
		Endrin Aldehyde	0.78	UQ	ng/L	P406366	
		Endrin Ketone	0.41	UQ	ng/L	P406366	
		Esfenvalerate**	0.78	UQ	ng/L	P406366	
		Ethalfuralin**	0.16	UQ	ng/L	P406366	
		Fenpropathrin**	0.26	UQ	ng/L	P406366	
		Gamma-BHC	0.13	UQ	ng/L	P406366	
		Gamma-Chlordane	0.21	UQ	ng/L	P406366	
		Heptachlor	0.21	UQ	ng/L	P406366	
		Heptachlor Epoxide	0.26	UQ	ng/L	P406366	RPD
		Hexachlorobenzene	1.0	UQ	ng/L	P406366	

Field ID: G3WA0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287071	EPA 8270E	Kepone**	5.2	UQJ	ng/L	P406366	LCS
		Lambda-Cyhalothrin**	0.78	UQ	ng/L	P406366	
		Methoprene**	0.78	UQ	ng/L	P406366	
		Methoxychlor	0.31	UQ	ng/L	P406366	
		MGK-264**	0.21	UQ	ng/L	P406366	
		Mirex	0.72	UQ	ng/L	P406366	
		Oxychlordane**	0.31	UQ	ng/L	P406366	
		Permethrin	1.7	UQ	ng/L	P406366	
		Phenothrin**	0.93	UQ	ng/L	P406366	
		Piperonyl Butoxide**	0.16	UQ	ng/L	P406366	
		Prallethrin**	2.1	UQ	ng/L	P406366	
		Tau-Fluvalinate**	0.26	UQ	ng/L	P406366	
		Tetramethrin**	0.78	UQ	ng/L	P406366	
		Trans-Nonachlor**	0.21	UQ	ng/L	P406366	
		Triclosan Methyl**	0.16	UQ	ng/L	P406366	
2287073	EPA 8270E	Trifluralin	0.21	UQ	ng/L	P406366	
		Chlordane	2.6	U	ng/L	P405844	
		Toxaphene	16	U	ng/L	P405844	
		Acetochlor	0.25	U	ng/L	P405832	
		Alachlor	0.25	U	ng/L	P405832	
		Ametryn	0.59	U	ng/L	P405832	
		Atrazine	1.1		ng/L	P405832	
		Atrazine Desethyl	1.5	UJ	ng/L	P405832	LCS, RPD
		Azinphos Methyl	2.0	UJ	ng/L	P405832	LCS, MS, RPD
		Azoxystrobin**	4.7		ng/L	P405832	
		Bromacil	0.49	U	ng/L	P405832	
		Butylate	0.39	U	ng/L	P405832	
		Caffeine**	7.4	U	ng/L	P405832	
		Carbophenothion	0.49	U	ng/L	P405832	
		Carfentrazone Ethyl**	0.099	U	ng/L	P405832	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P405832	
		Chlorpyrifos Methyl	0.049	U	ng/L	P405832	
		Cyanazine	3.2	U	ng/L	P405832	
		Demeton	1.5	U	ng/L	P405832	
		Diazinon	0.12	U	ng/L	P405832	
		Difenoconazole**	0.59	U	ng/L	P405832	
		Dimethenamid**	0.20	I	ng/L	P405832	
		Disulfoton	0.49	U	ng/L	P405832	
		Dithiopyr**	0.17	U	ng/L	P405832	
		EPTC	1.2	U	ng/L	P405832	
		Ethion	0.15	U	ng/L	P405832	
		Ethoprop	0.099	U	ng/L	P405832	
		Fenamiphos	0.49	U	ng/L	P405832	
		Fenbuconazole**	0.12	UJ	ng/L	P405832	LCS, RPD

Field ID: G3WA0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287073	EPA 8270E	Fipronil	0.25	U	ng/L	P405832	
		Fipronil Desulfinyl**	0.12	U	ng/L	P405832	
		Fipronil Sulfide	0.15	U	ng/L	P405832	
		Fipronil Sulfone	0.15	U	ng/L	P405832	
		Fluazifop-P-butyl**	0.099	U	ng/L	P405832	
		Fludioxonil**	0.12	U	ng/L	P405832	
		Flumioxazin**	1.7	U	ng/L	P405832	
		Flutolanil**	16		ng/L	P405832	
		Fluxapyroxad**	7.5	J	ng/L	P405832	LCS, RPD
		Fonofos	0.20	U	ng/L	P405832	
		Hexazinone	6.5		ng/L	P405832	
		Imazalil**	0.74	U	ng/L	P405832	
		Iprodione**	0.59	UJ	ng/L	P405832	LCS, RPD
		Malathion	0.34	U	ng/L	P405832	
		Metalaxyl	0.74	U	ng/L	P405832	
		Metolachlor	4.6		ng/L	P405832	
		Metribuzin	3.2	U	ng/L	P405832	
		Mevinphos	1.0	U	ng/L	P405832	
		Molinate	0.30	U	ng/L	P405832	
		Myclobutanil**	0.25	U	ng/L	P405832	
		Naled**	1.5	UJ	ng/L	P405832	LCS
		Norflurazon	0.49	U	ng/L	P405832	
		Oxadiazon	0.30	UJ	ng/L	P405832	LCS, RPD
		Oxyfluorfen**	0.15	U	ng/L	P405832	
		Parathion Ethyl	0.25	U	ng/L	P405832	
		Parathion Methyl	0.54	U	ng/L	P405832	
		Pendimethalin	0.99	U	ng/L	P405832	
		Phorate	0.52	U	ng/L	P405832	
		Prodiamine**	0.17	U	ng/L	P405832	
		Prometon	0.89	U	ng/L	P405832	
		Prometryn	0.20	U	ng/L	P405832	
		Pronamide**	0.15	U	ng/L	P405832	
		Propiconazole**	0.49	U	ng/L	P405832	
		Pyriproxyfen**	0.12	UJ	ng/L	P405832	LCS, RPD
		Simazine	0.49	U	ng/L	P405832	
		Sulfentrazone**	0.49	UJ	ng/L	P405832	LCS, MS, RPD
		Tebuconazole**	19	J	ng/L	P405832	RPD
		Terbufos	0.099	U	ng/L	P405832	
		Terbuthylazine	0.42	U	ng/L	P405832	
2287077	EPA 200.7 Rev. 4.4	Calcium	3.82		mg/L	P405903	
		Iron	950		ug/L	P405903	
		Magnesium	1.32		mg/L	P405903	
		Potassium	2.4		mg/L	P405903	
		Sodium	1.7	I	mg/L	P405903	

Field ID: G3WA0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287077	EPA 200.7 Rev. 4.4	Strontium	8.2		ug/L	P405903	
		Tin	3.0	U	ug/L	P405903	
		Titanium	7.6		ug/L	P405903	
		Vanadium	2.0	U	ug/L	P405903	
		Zinc	5.0	U	ug/L	P405903	
	EPA 200.8 Rev. 5.4	Aluminum	315		ug/L	P405903	
		Antimony	0.050	U	ug/L	P405903	
		Arsenic	0.46		ug/L	P405903	
		Barium	12.8		ug/L	P405903	
		Beryllium	0.013	I	ug/L	P405903	
		Boron**	16.2		ug/L	P405903	
		Cadmium	0.020	U	ug/L	P405903	
		Chromium	3.6		ug/L	P405903	
		Cobalt	0.163		ug/L	P405903	
		Copper	0.60	I	ug/L	P405903	
		Lead	0.45		ug/L	P405903	
		Manganese	39.1		ug/L	P405903	
		Molybdenum	0.90		ug/L	P405903	
		Nickel	1.5	I	ug/L	P405903	
		Selenium	0.20	U	ug/L	P405903	
		Silver	0.010	U	ug/L	P405903	
		Thallium	0.10	U	ug/L	P405903	
		Hardness	15.0		mg/L	P405903	
	SM 2340B						

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

EPA 8270E: Sample expired for preparation due to need for re-extraction. The original results were confirmed. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: MS accuracy for multiple 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.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: FB

Collection Date/Time: 11/01/2021 09:59

Field ID: FB_11012021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287049	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P405885	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P406039	
		Sulfate	0.20	U	mg SO4/L	P406042	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P405890	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P406172	
	SM 2540 C-2011	TDS	15	U	mg/L	P406359	
	SM 2540 D-2011	TSS	2	U	mg/L	P406374	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P405988	
2287050	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P406396	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P406056	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P406050	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P405926	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P406058	
2287051	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P405871	
2287069	EPA 8321B	Aldicarb	0.020	U	ug/L	P406048	
		Aldicarb Sulfone	0.0020	U	ug/L	P406048	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P406048	
		Carbaryl	0.0020	U	ug/L	P406048	
		Carbofuran	0.0020	U	ug/L	P406048	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P406048	
		Methiocarb	0.0020	U	ug/L	P406048	
		Methomyl	0.0020	U	ug/L	P406048	
		Oxamyl	0.0020	U	ug/L	P406048	
		Propoxur	0.0020	U	ug/L	P406048	
		2,4-D	0.0020	U	ug/L	P405850	
		Acesulfame K	0.10	U	ug/L	P405862	
2287070		2,4,5-T	0.0040	U	ug/L	P405850	
		AMPA	0.10	U	ug/L	P405862	
		Acetaminophen	0.0080	U	ug/L	P405850	
		Acetamiprid	0.0020	U	ug/L	P405850	
		Endothall	0.25	U	ug/L	P405862	
		Glufosinate	0.10	U	ug/L	P405862	
		Glyphosate	0.10	U	ug/L	P405862	
		Afidopyrophen	0.0020	U	ug/L	P405850	
		Bentazon	8.0E-04	U	ug/L	P405850	
		Sucralose	0.010	U	ug/L	P405862	
		Benzovindiflupyr	0.0020	U	ug/L	P405850	
		Carbamazepine	8.0E-04	U	ug/L	P405850	
		Clothianidin	0.0020	U	ug/L	P405850	
		Dinotefuran	0.0020	U	ug/L	P405850	MS
		Diuron	0.0020	U	ug/L	P405850	
		Fenuron	0.016	U	ug/L	P405850	
		Fluridone	8.0E-04	U	ug/L	P405850	

Field ID: FB_11012021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287070	EPA 8321B	Imazapyr	0.0040	U	ug/L	P405850	
		Hydrocodone	0.0020	U	ug/L	P405850	
		Ibuprofen	0.020	U	ug/L	P405850	
		Imidacloprid	0.0020	U	ug/L	P405850	MS
		Linuron	0.0040	U	ug/L	P405850	
		Mandestrobin	0.0020	U	ug/L	P405850	
		MCPP	0.0040	U	ug/L	P405850	
		Naproxen	0.0080	U	ug/L	P405850	
		Primidone	0.0040	U	ug/L	P405850	
		Pyraclostrobin	0.0020	U	ug/L	P405850	
		Thiamethoxam	0.0020	U	ug/L	P405850	MS
		Tolfenpyrad	0.0020	U	ug/L	P405850	
		Triclopyr	0.0040	U	ug/L	P405850	
2287075	EPA 8270E	Aldrin	0.68	UQ	ng/L	P406366	
		Alpha-BHC	0.10	UQ	ng/L	P406366	
		Alpha-Chlordane	0.21	UQ	ng/L	P406366	
		Beta-BHC	0.10	UQ	ng/L	P406366	
		Beta-Cyfluthrin**	1.3	UQ	ng/L	P406366	
		Bifenthrin**	0.52	UQ	ng/L	P406366	
		Chlorothalonil	0.52	UQ	ng/L	P406366	
		Cis-Nonachlor**	0.21	UQ	ng/L	P406366	
		Cypermethrin	1.6	UQ	ng/L	P406366	
		Dacthal**	0.16	UQ	ng/L	P406366	
		DDD-p,p'	0.26	UQ	ng/L	P406366	
		DDE-p,p'	0.21	UQ	ng/L	P406366	
		DDT-p,p'	0.26	UQ	ng/L	P406366	
		Delta-BHC	0.42	UQ	ng/L	P406366	
		Deltamethrin**	1.3	UQ	ng/L	P406366	
		Dichlobenil**	0.10	UQ	ng/L	P406366	
		Dicofol	1.3	UQ	ng/L	P406366	
		Dieldrin	0.42	UQ	ng/L	P406366	
		Endosulfan I	0.42	UQ	ng/L	P406366	
		Endosulfan II	0.42	UQ	ng/L	P406366	
		Endosulfan Sulfate	0.31	UQ	ng/L	P406366	MS
		Endrin	0.42	UQ	ng/L	P406366	
		Endrin Aldehyde	0.78	UQ	ng/L	P406366	
		Endrin Ketone	0.42	UQ	ng/L	P406366	
		Esfenvalerate**	0.78	UQ	ng/L	P406366	
		Ethalfuralin**	0.16	UQ	ng/L	P406366	
		Fenpropathrin**	0.26	UQ	ng/L	P406366	
		Gamma-BHC	0.13	UQ	ng/L	P406366	
		Gamma-Chlordane	0.21	UQ	ng/L	P406366	
		Heptachlor	0.21	UQ	ng/L	P406366	
		Heptachlor Epoxide	0.26	UQ	ng/L	P406366	RPD
		Hexachlorobenzene	1.0	UQ	ng/L	P406366	

Field ID: FB_11012021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287075	EPA 8270E	Kepone**	5.2	UQJ	ng/L	P406366	LCS
		Lambda-Cyhalothrin**	0.78	UQ	ng/L	P406366	
		Methoprene**	0.78	UQ	ng/L	P406366	
		Methoxychlor	0.31	UQ	ng/L	P406366	
		MGK-264**	0.21	UQ	ng/L	P406366	
		Mirex	0.73	UQ	ng/L	P406366	
		Oxychlordane**	0.31	UQ	ng/L	P406366	
		Permethrin	1.7	UQ	ng/L	P406366	
		Phenothrin**	0.94	UQ	ng/L	P406366	
		Piperonyl Butoxide**	0.16	UQ	ng/L	P406366	
		Prallethrin**	2.1	UQ	ng/L	P406366	
		Tau-Fluvalinate**	0.26	UQ	ng/L	P406366	
		Tetramethrin**	0.78	UQ	ng/L	P406366	
		Trans-Nonachlor**	0.21	UQ	ng/L	P406366	
		Triclosan Methyl**	0.16	UQ	ng/L	P406366	
2287076	EPA 8270E	Trifluralin	0.21	UQ	ng/L	P406366	
		Chlordane	2.7	U	ng/L	P405844	
		Toxaphene	16	U	ng/L	P405844	
		Acetochlor	0.24	U	ng/L	P405832	
		Alachlor	0.24	U	ng/L	P405832	
		Ametryn	0.58	U	ng/L	P405832	
		Atrazine	0.24	U	ng/L	P405832	
		Atrazine Desethyl	1.4	UJ	ng/L	P405832	LCS, RPD
		Azinphos Methyl	1.9	UJ	ng/L	P405832	LCS, MS, RPD
		Azoxystrobin**	0.48	U	ng/L	P405832	
		Bromacil	0.48	U	ng/L	P405832	
		Butylate	0.39	U	ng/L	P405832	
		Caffeine**	7.2	U	ng/L	P405832	
		Carbophenothion	0.48	U	ng/L	P405832	
		Carfentrazone Ethyl**	0.096	U	ng/L	P405832	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P405832	
		Chlorpyrifos Methyl	0.048	U	ng/L	P405832	
		Cyanazine	3.1	U	ng/L	P405832	
		Demeton	1.4	U	ng/L	P405832	
		Diazinon	0.12	U	ng/L	P405832	
		Difenoconazole**	0.58	U	ng/L	P405832	
		Dimethenamid**	0.096	U	ng/L	P405832	
		Disulfoton	0.48	U	ng/L	P405832	
		Dithiopyr**	0.17	U	ng/L	P405832	
		EPTC	1.2	U	ng/L	P405832	
		Ethion	0.14	U	ng/L	P405832	
		Ethoprop	0.096	U	ng/L	P405832	
		Fenamiphos	0.48	U	ng/L	P405832	
		Fenbuconazole**	0.12	UJ	ng/L	P405832	LCS, RPD

Field ID: FB_11012021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287076	EPA 8270E	Fipronil	0.24	U	ng/L	P405832	
		Fipronil Desulfinyll**	0.12	U	ng/L	P405832	
		Fipronil Sulfide	0.14	U	ng/L	P405832	
		Fipronil Sulfone	0.14	U	ng/L	P405832	
		Fluazifop-P-butyl**	0.096	U	ng/L	P405832	
		Fludioxonil**	0.12	U	ng/L	P405832	
		Flumioxazin**	1.7	U	ng/L	P405832	
		Flutolanil**	0.096	U	ng/L	P405832	
		Fluxapyroxad**	0.096	UJ	ng/L	P405832	LCS, RPD
		Fonofos	0.19	U	ng/L	P405832	
		Hexazinone	0.48	U	ng/L	P405832	
		Imazalil**	0.72	U	ng/L	P405832	
		Iprodione**	0.58	UJ	ng/L	P405832	LCS, RPD
		Malathion	0.34	U	ng/L	P405832	
		Metalaxyl	0.72	U	ng/L	P405832	
		Metolachlor	0.34	U	ng/L	P405832	
		Metribuzin	3.1	U	ng/L	P405832	
		Mevinphos	1.0	U	ng/L	P405832	
		Molinate	0.29	U	ng/L	P405832	
		Myclobutanil**	0.24	U	ng/L	P405832	
		Naled**	1.4	UJ	ng/L	P405832	LCS
		Norflurazon	0.48	U	ng/L	P405832	
		Oxadiazon	0.29	UJ	ng/L	P405832	LCS, RPD
		Oxyfluorfen**	0.14	U	ng/L	P405832	
		Parathion Ethyl	0.24	U	ng/L	P405832	
		Parathion Methyl	0.53	U	ng/L	P405832	
		Pendimethalin	0.96	U	ng/L	P405832	
		Phorate	0.51	U	ng/L	P405832	
		Prodiamine**	0.17	U	ng/L	P405832	
		Prometon	0.87	U	ng/L	P405832	
		Prometryn	0.19	U	ng/L	P405832	
		Pronamide**	0.14	U	ng/L	P405832	
		Propiconazole**	0.48	U	ng/L	P405832	
		Pyriproxyfen**	0.12	UJ	ng/L	P405832	LCS, RPD
		Simazine	0.48	U	ng/L	P405832	
		Sulfentrazone**	0.48	UJ	ng/L	P405832	LCS, MS, RPD
		Tebuconazole**	0.48	UJ	ng/L	P405832	RPD
		Terbufos	0.096	U	ng/L	P405832	
		Terbutylazine	0.41	U	ng/L	P405832	
2287082	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P405903	
		Iron	30	U	ug/L	P405903	
		Magnesium	0.040	U	mg/L	P405903	
		Potassium	0.30	U	mg/L	P405903	
		Sodium	0.50	U	mg/L	P405903	

Field ID: FB_11012021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287082	EPA 200.7 Rev. 4.4	Strontium	2.0	U	ug/L	P405903	
		Tin	3.0	U	ug/L	P405903	
		Titanium	0.75	U	ug/L	P405903	
		Vanadium	2.0	U	ug/L	P405903	
		Zinc	5.0	U	ug/L	P405903	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P405903	
		Antimony	0.050	U	ug/L	P405903	
		Arsenic	0.050	U	ug/L	P405903	
		Barium	0.20	U	ug/L	P405903	
		Beryllium	0.010	U	ug/L	P405903	
		Boron**	2.0	U	ug/L	P405903	
		Cadmium	0.020	U	ug/L	P405903	
		Chromium	0.40	U	ug/L	P405903	
		Cobalt	0.020	U	ug/L	P405903	
		Copper	0.40	U	ug/L	P405903	
		Lead	0.20	U	ug/L	P405903	
		Manganese	0.10	U	ug/L	P405903	
		Molybdenum	0.15	U	ug/L	P405903	
		Nickel	0.50	U	ug/L	P405903	
		Selenium	0.20	U	ug/L	P405903	
		Silver	0.010	U	ug/L	P405903	
		Thallium	0.10	U	ug/L	P405903	
		Hardness	0.35	U	mg/L	P405903	
	SM 2340B						

Ref. Method and Comment:

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

EPA 8270E: Sample expired for preparation due to need for re-extraction. The original results were confirmed. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: MS accuracy for multiple 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.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Scurlock Creek at Pilgrim Rd

Collection Date/Time: 11/01/2021 11:16

Field ID: G3WA0009

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287041	EPA 180.1 Rev. 2.0	Turbidity	3.4		NTU	P405885	
	EPA 300.0 Rev. 2.1	Chloride	4.0		mg Cl/L	P406039	
		Sulfate	0.85		mg SO4/L	P406042	
	SM 2120 B-2011	Color (true)	96		PCU	P405890	
	SM 2320 B-2011	Total Alkalinity	5.0		mg CaCO3/L	P406172	
	SM 2540 C-2011	TDS	36		mg/L	P406359	
	SM 2540 D-2011	TSS	3	I	mg/L	P406374	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P405988	
2287044	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P406396	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P406055	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P406050	
	EPA 365.1 Rev. 2.0	Total-P	0.032		mg P/L	P405926	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P406058	
2287047	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P405871	
2287067	EPA 8321B	2,4-D	0.0020	U	ug/L	P405850	
		Acesulfame K	0.10	U	ug/L	P405862	
		2,4,5-T	0.0040	U	ug/L	P405850	
		AMPA	0.10	U	ug/L	P405862	
		Acetaminophen	0.0080	U	ug/L	P405850	
		Acetamiprid	0.0020	U	ug/L	P405850	
		Endothall	0.25	U	ug/L	P405862	
		Glufosinate	0.10	U	ug/L	P405862	
		Glyphosate	0.10	U	ug/L	P405862	
		Afidopyropen	0.0020	U	ug/L	P405850	
		Bentazon	8.0E-04	U	ug/L	P405850	
		Sucralose	0.037	I	ug/L	P405862	
		Benzovindiflupyr	0.0020	U	ug/L	P405850	
		Carbamazepine	8.0E-04	U	ug/L	P405850	
		Clothianidin	0.0020	U	ug/L	P405850	
		Dinotefuran	0.0020	U	ug/L	P405850	MS
		Diuron	0.0020	U	ug/L	P405850	
		Fenuron	0.016	U	ug/L	P405850	
		Fluridone	8.0E-04	U	ug/L	P405850	
		Imazapyr	0.013	I	ug/L	P405850	
		Hydrocodone	0.0020	U	ug/L	P405850	
		Ibuprofen	0.020	U	ug/L	P405850	
		Imidacloprid	0.0021	I	ug/L	P405850	MS
		Linuron	0.0040	U	ug/L	P405850	
		Mandestrobin	0.0020	U	ug/L	P405850	
		MCPP	0.0040	U	ug/L	P405850	
		Naproxen	0.0080	U	ug/L	P405850	
		Primidone	0.0040	U	ug/L	P405850	
		Pyraclostrobin	0.0020	U	ug/L	P405850	

Field ID: G3WA0009

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287067	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P405850	MS
		Tolfenpyrad	0.0020	U	ug/L	P405850	
		Triclopyr	0.0040	U	ug/L	P405850	
2287080	EPA 200.7 Rev. 4.4	Calcium	3.45		mg/L	P405903	
		Iron	830		ug/L	P405903	
		Magnesium	0.89		mg/L	P405903	
		Potassium	1.5		mg/L	P405903	
		Sodium	1.5	I	mg/L	P405903	
		Strontium	6.7	I	ug/L	P405903	
		Tin	3.0	U	ug/L	P405903	
		Titanium	3.3		ug/L	P405903	
		Vanadium	2.0	U	ug/L	P405903	
		Zinc	5.0	U	ug/L	P405903	
	EPA 200.8 Rev. 5.4	Aluminum	257		ug/L	P405903	
		Antimony	0.050	U	ug/L	P405903	
		Arsenic	0.38		ug/L	P405903	
		Barium	12.2		ug/L	P405903	
		Beryllium	0.012	I	ug/L	P405903	
		Boron**	15.3		ug/L	P405903	
		Cadmium	0.020	U	ug/L	P405903	
		Chromium	0.45	I	ug/L	P405903	
		Cobalt	0.192		ug/L	P405903	
		Copper	0.49	I	ug/L	P405903	
		Lead	0.36	I	ug/L	P405903	
		Manganese	75.1		ug/L	P405903	
		Molybdenum	0.15	U	ug/L	P405903	
		Nickel	0.50	U	ug/L	P405903	
		Selenium	0.20	U	ug/L	P405903	
		Silver	0.010	U	ug/L	P405903	
		Thallium	0.10	U	ug/L	P405903	
	SM 2340B	Hardness	12.3		mg/L	P405903	

Ref. Method and Comment:

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

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Pine Barn Creek at Woodrest Rd

Collection Date/Time: 11/01/2021 11:41

Field ID: G3WA0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287042	EPA 180.1 Rev. 2.0	Turbidity	13		NTU	P405885	
	EPA 300.0 Rev. 2.1	Chloride	6.3		mg Cl/L	P406039	
		Sulfate	0.53		mg SO4/L	P406042	
	SM 2120 B-2011	Color (true)	140		PCU	P405890	
	SM 2320 B-2011	Total Alkalinity	13		mg CaCO3/L	P406172	
	SM 2540 C-2011	TDS	44	I	mg/L	P406359	
	SM 2540 D-2011	TSS	24	I	mg/L	P406374	
	SM 4500 F-C-2011	Fluoride	0.055	I	mg F/L	P405988	
2287045	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P406396	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P406055	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P406050	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P405926	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P406058	
2287048	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.018		mg P/L	P405871	
2287068	EPA 8321B	2,4-D	0.0053	I	ug/L	P405850	
		Acesulfame K	0.10	U	ug/L	P405862	
		2,4,5-T	0.0040	U	ug/L	P405850	
		AMPA	0.10	U	ug/L	P405862	
		Acetaminophen	0.074		ug/L	P405850	
		Acetamiprid	0.0020	U	ug/L	P405850	
		Endothall	0.25	U	ug/L	P405862	
		Glufosinate	0.10	U	ug/L	P405862	
		Glyphosate	0.10	U	ug/L	P405862	
		Afidopyropen	0.0020	U	ug/L	P405850	
		Bentazon	8.0E-04	U	ug/L	P405850	
		Sucralose	0.010	U	ug/L	P405862	
		Benzovindiflupyr	0.034		ug/L	P405850	
		Carbamazepine	0.0013	I	ug/L	P405850	
		Clothianidin	0.0020	U	ug/L	P405850	
		Dinotefuran	0.0020	U	ug/L	P405850	MS
		Diuron	0.0020	U	ug/L	P405850	
		Fenuron	0.016	U	ug/L	P405850	
		Fluridone	8.0E-04	U	ug/L	P405850	
		Imazapyr	0.0040	U	ug/L	P405850	
		Hydrocodone	0.0020	U	ug/L	P405850	
		Ibuprofen	0.020	U	ug/L	P405850	
		Imidacloprid	0.038		ug/L	P405850	MS
		Linuron	0.0040	U	ug/L	P405850	
		Mandestrobin	0.0020	U	ug/L	P405850	
		MCP	0.0040	U	ug/L	P405850	
		Naproxen	0.0080	U	ug/L	P405850	
		Primidone	0.0040	U	ug/L	P405850	
		Pyraclostrobin	0.0020	U	ug/L	P405850	

Field ID: G3WA0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287068	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P405850	MS
		Tolfenpyrad	0.0020	U	ug/L	P405850	
		Triclopyr	0.0040	U	ug/L	P405850	
2287081	EPA 200.7 Rev. 4.4	Calcium	4.22		mg/L	P405903	
		Iron	5.11E+03		ug/L	P405903	
		Magnesium	1.64		mg/L	P405903	
		Potassium	7.7		mg/L	P405903	
		Sodium	1.4	I	mg/L	P405903	
		Strontium	9.3		ug/L	P405903	
		Tin	3.0	U	ug/L	P405903	
		Titanium	3.6		ug/L	P405903	
		Vanadium	2.0	U	ug/L	P405903	
		Zinc	5.0	U	ug/L	P405903	
	EPA 200.8 Rev. 5.4	Aluminum	287		ug/L	P405903	
		Antimony	0.050	U	ug/L	P405903	
		Arsenic	1.03		ug/L	P405903	
		Barium	18.0		ug/L	P405903	
		Beryllium	0.010	U	ug/L	P405903	
		Boron**	21.1		ug/L	P405903	
		Cadmium	0.020	U	ug/L	P405903	
		Chromium	0.42	I	ug/L	P405903	
		Cobalt	1.20		ug/L	P405903	
		Copper	0.41	I	ug/L	P405903	
		Lead	0.59		ug/L	P405903	
		Manganese	485		ug/L	P405903	
		Molybdenum	0.15	U	ug/L	P405903	
		Nickel	0.50	U	ug/L	P405903	
		Selenium	0.20	U	ug/L	P405903	
		Silver	0.010	U	ug/L	P405903	
		Thallium	0.10	U	ug/L	P405903	
	SM 2340B	Hardness	17.3		mg/L	P405903	

Ref. Method and Comment:

SM 2540 C-2011: The PQL was elevated because of sample matrix interference.

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The PQL was elevated because of sample matrix interference.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample. The lead result was confirmed in the undigested sample on 11/10/2021.

Sample Location: Unnamed Creek at Woodrest Rd

Collection Date/Time: 11/01/2021 12:21

Field ID: G3WA0010

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287035	EPA 180.1 Rev. 2.0	Turbidity	9.1		NTU	P405885	
	EPA 300.0 Rev. 2.1	Chloride	4.1		mg Cl/L	P406039	
		Sulfate	0.47	I	mg SO4/L	P406042	
	SM 2120 B-2011	Color (true)	120		PCU	P405890	
	SM 2320 B-2011	Total Alkalinity	3.2		mg CaCO3/L	P406172	
	SM 2540 C-2011	TDS	44		mg/L	P406359	
	SM 2540 D-2011	TSS	5	I	mg/L	P406374	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P405988	
2287037	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P406396	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.60		mg N/L	P406055	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.054		mg N/L	P406050	
	EPA 365.1 Rev. 2.0	Total-P	0.039		mg P/L	P405924	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P406058	
2287039	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P405871	
2287063	EPA 8321B	Aldicarb	0.020	U	ug/L	P406048	
		Aldicarb Sulfone	0.0020	U	ug/L	P406048	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P406048	
		Carbaryl	0.0020	U	ug/L	P406048	
		Carbofuran	0.0020	U	ug/L	P406048	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P406048	
		Methiocarb	0.0020	U	ug/L	P406048	
		Methomyl	0.0020	U	ug/L	P406048	
		Oxamyl	0.0020	U	ug/L	P406048	
		Propoxur	0.0020	U	ug/L	P406048	
2287065		2,4-D	0.0020	U	ug/L	P405850	
		Acesulfame K	0.10	U	ug/L	P405862	
		2,4,5-T	0.0040	U	ug/L	P405850	
		AMPA	0.10	U	ug/L	P405862	
		Acetaminophen	0.028	I	ug/L	P405850	
		Acetamiprid	0.0020	U	ug/L	P405850	
		Endothall	0.25	U	ug/L	P405862	
		Glufosinate	0.10	U	ug/L	P405862	
		Glyphosate	0.10	U	ug/L	P405862	
		Afidopyropen	0.0020	U	ug/L	P405850	
		Bentazon	0.0012	I	ug/L	P405850	
		Sucralose	0.032	I	ug/L	P405862	
		Benzovindiflupyr	0.0020	U	ug/L	P405850	
		Carbamazepine	8.0E-04	U	ug/L	P405850	
		Clothianidin	0.0020	U	ug/L	P405850	
		Dinotefuran	0.0020	U	ug/L	P405850	MS
		Diuron	0.0020	U	ug/L	P405850	
		Fenuron	0.016	U	ug/L	P405850	
		Fluridone	8.0E-04	U	ug/L	P405850	

Field ID: G3WA0010

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287065	EPA 8321B	Imazapyr	0.054		ug/L	P405850	
		Hydrocodone	0.0020	U	ug/L	P405850	
		Ibuprofen	0.020	U	ug/L	P405850	
		Imidacloprid	0.0077	I	ug/L	P405850	MS
		Linuron	0.0040	U	ug/L	P405850	
		Mandestrobin	0.0020	U	ug/L	P405850	
		MCP	0.0040	U	ug/L	P405850	
		Naproxen	0.0080	U	ug/L	P405850	
		Primidone	0.0040	U	ug/L	P405850	
		Pyraclostrobin	0.0020	U	ug/L	P405850	
		Thiamethoxam	0.0020	U	ug/L	P405850	MS
		Tolfenpyrad	0.0020	U	ug/L	P405850	
		Triclopyr	0.0040	U	ug/L	P405850	
2287072	EPA 8270E	Aldrin	0.69	UQ	ng/L	P406366	
		Alpha-BHC	0.11	UQ	ng/L	P406366	
		Alpha-Chlordane	0.21	UQ	ng/L	P406366	
		Beta-BHC	0.11	UQ	ng/L	P406366	
		Beta-Cyfluthrin**	1.3	UQ	ng/L	P406366	
		Bifenthrin**	0.53	UQ	ng/L	P406366	
		Chlorothalonil	2.0	IQ	ng/L	P406366	
		Cis-Nonachlor**	0.21	UQ	ng/L	P406366	
		Cypermethrin	1.6	UQ	ng/L	P406366	
		Dacthal**	0.16	UQ	ng/L	P406366	
		DDD-p,p'	0.27	UQ	ng/L	P406366	
		DDE-p,p'	0.21	UQ	ng/L	P406366	
		DDT-p,p'	0.27	UQ	ng/L	P406366	
		Delta-BHC	0.42	UQ	ng/L	P406366	
		Deltamethrin**	1.3	UQ	ng/L	P406366	
		Dichlobenil**	0.11	UQ	ng/L	P406366	
		Dicofol	1.3	UQ	ng/L	P406366	
		Dieldrin	0.42	UQ	ng/L	P406366	
		Endosulfan I	0.42	UQ	ng/L	P406366	
		Endosulfan II	0.42	UQ	ng/L	P406366	
		Endosulfan Sulfate	0.32	UQ	ng/L	P406366	MS
		Endrin	0.42	UQ	ng/L	P406366	
		Endrin Aldehyde	0.80	UQ	ng/L	P406366	
		Endrin Ketone	0.42	UQ	ng/L	P406366	
		Esfenvalerate**	0.80	UQ	ng/L	P406366	
		Ethalfuralin**	0.16	UQ	ng/L	P406366	
		Fenpropathrin**	0.27	UQ	ng/L	P406366	
		Gamma-BHC	0.13	UQ	ng/L	P406366	
		Gamma-Chlordane	0.21	UQ	ng/L	P406366	
		Heptachlor	0.21	UQ	ng/L	P406366	
		Heptachlor Epoxide	0.27	UQ	ng/L	P406366	RPD
		Hexachlorobenzene	1.1	UQ	ng/L	P406366	

Field ID: G3WA0010

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287072	EPA 8270E	Kepone**	5.3	UQJ	ng/L	P406366	LCS
		Lambda-Cyhalothrin**	0.80	UQ	ng/L	P406366	
		Methoprene**	0.80	UQ	ng/L	P406366	
		Methoxychlor	0.32	UQ	ng/L	P406366	
		MGK-264**	0.21	UQ	ng/L	P406366	
		Mirex	0.74	UQ	ng/L	P406366	
		Oxychlordane**	0.32	UQ	ng/L	P406366	
		Permethrin	1.7	UQ	ng/L	P406366	
		Phenothrin**	0.96	UQ	ng/L	P406366	
		Piperonyl Butoxide**	0.16	UQ	ng/L	P406366	
		Prallethrin**	2.1	UQ	ng/L	P406366	
		Tau-Fluvalinate**	0.27	UQ	ng/L	P406366	
		Tetramethrin**	0.80	UQ	ng/L	P406366	
		Trans-Nonachlor**	0.21	UQ	ng/L	P406366	
		Triclosan Methyl**	0.16	UQ	ng/L	P406366	
2287074	EPA 8270E	Trifluralin	0.21	UQ	ng/L	P406366	
		Chlordane	2.7	U	ng/L	P405844	
		Toxaphene	16	U	ng/L	P405844	
		Acetochlor	0.24	U	ng/L	P405832	
		Alachlor	0.24	U	ng/L	P405832	
		Ametryn	0.59	U	ng/L	P405832	
		Atrazine	1.4		ng/L	P405832	
		Atrazine Desethyl	1.5	UJ	ng/L	P405832	LCS, RPD
		Azinphos Methyl	2.0	UJ	ng/L	P405832	LCS, MS, RPD
		Azoxystrobin**	1.7	I	ng/L	P405832	
		Bromacil	0.49	U	ng/L	P405832	
		Butylate	0.39	U	ng/L	P405832	
		Caffeine**	7.3	U	ng/L	P405832	
		Carbophenothion	0.49	U	ng/L	P405832	
		Carfentrazone Ethyl**	0.098	U	ng/L	P405832	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P405832	
		Chlorpyrifos Methyl	0.049	U	ng/L	P405832	
		Cyanazine	3.2	U	ng/L	P405832	
		Demeton	1.5	U	ng/L	P405832	
		Diazinon	0.12	U	ng/L	P405832	
		Difenoconazole**	0.59	U	ng/L	P405832	
		Dimethenamid**	0.22	I	ng/L	P405832	
		Disulfoton	0.49	U	ng/L	P405832	
		Dithiopyr**	0.17	U	ng/L	P405832	
		EPTC	1.2	U	ng/L	P405832	
		Ethion	0.15	U	ng/L	P405832	
		Ethoprop	0.098	U	ng/L	P405832	
		Fenamiphos	0.49	U	ng/L	P405832	
		Fenbuconazole**	0.12	UJ	ng/L	P405832	LCS, RPD

Field ID: G3WA0010

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287074	EPA 8270E	Fipronil	0.24	U	ng/L	P405832	
		Fipronil Desulfinyl**	0.12	U	ng/L	P405832	
		Fipronil Sulfide	0.15	U	ng/L	P405832	
		Fipronil Sulfone	0.15	U	ng/L	P405832	
		Fluazifop-P-butyl**	0.098	U	ng/L	P405832	
		Fludioxonil**	0.12	U	ng/L	P405832	
		Flumioxazin**	1.8	I	ng/L	P405832	
		Flutolanil**	12		ng/L	P405832	
		Fluxapyroxad**	8.8	J	ng/L	P405832	LCS, RPD
		Fonofos	0.20	U	ng/L	P405832	
		Hexazinone	0.49	U	ng/L	P405832	
		Imazalil**	0.73	U	ng/L	P405832	
		Iprodione**	0.59	UJ	ng/L	P405832	LCS, RPD
		Malathion	0.34	U	ng/L	P405832	
		Metalaxyl	0.73	U	ng/L	P405832	
		Metolachlor	2.5		ng/L	P405832	
		Metribuzin	3.2	U	ng/L	P405832	
		Mevinphos	1.0	U	ng/L	P405832	
		Molinate	0.29	U	ng/L	P405832	
		Myclobutanil**	0.24	U	ng/L	P405832	
		Naled**	1.5	UJ	ng/L	P405832	LCS
		Norflurazon	0.49	U	ng/L	P405832	
		Oxadiazon	0.29	UJ	ng/L	P405832	LCS, RPD
		Oxyfluorfen**	0.15	U	ng/L	P405832	
		Parathion Ethyl	0.24	U	ng/L	P405832	
		Parathion Methyl	0.54	U	ng/L	P405832	
		Pendimethalin	6.5		ng/L	P405832	
		Phorate	0.51	U	ng/L	P405832	
		Prodiamine**	0.17	U	ng/L	P405832	
		Prometon	0.88	U	ng/L	P405832	
		Prometryn	0.20	U	ng/L	P405832	
		Pronamide**	0.15	U	ng/L	P405832	
		Propiconazole**	0.49	U	ng/L	P405832	
		Pyriproxyfen**	0.12	UJ	ng/L	P405832	LCS, RPD
		Simazine	0.49	U	ng/L	P405832	
		Sulfentrazone**	0.49	UJ	ng/L	P405832	LCS, MS, RPD
		Tebuconazole**	15	J	ng/L	P405832	RPD
		Terbufos	0.098	U	ng/L	P405832	
		Terbuthylazine	0.42	U	ng/L	P405832	
2287078	EPA 200.7 Rev. 4.4	Calcium	2.24		mg/L	P405903	
		Iron	930		ug/L	P405903	
		Magnesium	1.02		mg/L	P405903	
		Potassium	1.7		mg/L	P405903	
		Sodium	1.4	I	mg/L	P405903	

Field ID: G3WA0010

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287078	EPA 200.7 Rev. 4.4	Strontium	6.6	I	ug/L	P405903	
		Tin	3.0	U	ug/L	P405903	
		Titanium	7.8		ug/L	P405903	
		Vanadium	2.0	U	ug/L	P405903	
		Zinc	5.0	U	ug/L	P405903	
	EPA 200.8 Rev. 5.4	Aluminum	375		ug/L	P405903	
		Antimony	0.050	U	ug/L	P405903	
		Arsenic	0.47		ug/L	P405903	
		Barium	12.4		ug/L	P405903	
		Beryllium	0.011	I	ug/L	P405903	
		Boron**	15.6		ug/L	P405903	
		Cadmium	0.020	U	ug/L	P405903	
		Chromium	0.69	I	ug/L	P405903	
		Cobalt	0.150		ug/L	P405903	
		Copper	0.51	I	ug/L	P405903	
		Lead	0.49		ug/L	P405903	
		Manganese	53.3		ug/L	P405903	
		Molybdenum	0.15	U	ug/L	P405903	
		Nickel	0.50	U	ug/L	P405903	
		Selenium	0.20	U	ug/L	P405903	
		Silver	0.010	U	ug/L	P405903	
		Thallium	0.10	U	ug/L	P405903	
	SM 2340B	Hardness	9.8		mg/L	P405903	

Ref. Method and Comment:

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

EPA 8270E: Sample expired for preparation due to need for re-extraction. The original results were confirmed. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: MS accuracy for multiple 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.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P405885

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P405903

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P405903

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406039

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406042

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

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Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P406396

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406055

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406056

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406050

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405924

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405926

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P405871

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

Reference Method: EPA 8270E
Batch ID: P405832

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L

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Reference Method: EPA 8270E

Batch ID: P405832

Component	Result	Code	Units
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L

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Reference Method: EPA 8270E

Batch ID: P405832

Component	Result	Code	Units
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L

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Reference Method: EPA 8270E

Batch ID: P405832

Component	Result	Code	Units
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E

Batch ID: P406366

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.10	U	ng/L

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P406366

Component	Result	Code	Units
Dichlobenil	0.10	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L

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Reference Method: EPA 8270E

Batch ID: P406366

Component	Result	Code	Units
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P405844

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B

Batch ID: P405850

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	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	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L

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Reference Method: EPA 8321B
Batch ID: P405850

Component	Result	Code	Units
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P405862

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

Reference Method: EPA 8321B
Batch ID: P406048

Component	Result	Code	Units
3-Hydroxycarbofuran	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
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: SM 2120 B-2011
Batch ID: P405890

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P406172

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

Reference Method: SM 2540 C-2011
Batch ID: P406359

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P406374

Component	Result	Code	Units
TSS	2	U	mg/L

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Reference Method: SM 4500 F-C-2011
Batch ID: P405988

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P406058

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: P405903

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	105		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	102		P	85 - 115
Sodium	101		P	85 - 115
Strontium	100		P	85 - 115
Tin	107		P	85 - 115
Titanium	104		P	85 - 115
Vanadium	104		P	85 - 115
Zinc	106		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P405903

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	104		P	85 - 115
Antimony	110		P	85 - 115
Arsenic	103		P	85 - 115
Barium	110		P	85 - 115
Beryllium	105		P	85 - 115
Boron	103		P	85 - 115
Cadmium	104		P	85 - 115
Chromium	104		P	85 - 115
Cobalt	103		P	85 - 115
Copper	98.9		P	85 - 115
Lead	98.1		P	85 - 115
Manganese	103		P	85 - 115
Molybdenum	105		P	85 - 115
Nickel	99.8		P	85 - 115
Selenium	106		P	85 - 115
Silver	101		P	85 - 115
Thallium	105		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406039

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406042

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P406396

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P406055

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P406056

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P406050

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: P405924

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P405926

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P405871

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.7		P	90 - 110

Reference Method: EPA 8270E

Batch ID: P405832

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	86.1	80.5	P/P	70 - 121
Alachlor	79.4	76.0	P/P	70 - 119
Ametryn	77.2	78.4	P/P	61 - 135
Atrazine	82.2	91.1	P/P	76 - 123
Atrazine Desethyl	26.0	63.7	F/P	35 - 140
Azinphos Methyl	47.8	119	F/P	57 - 163
Azoxystrobin	82.4	84.9	P/P	43 - 231
Bromacil	58.7	68.7	P/P	42 - 123
Butylate	65.9	64.7	P/P	34 - 92.0
Caffeine	90.1	99.7	P/P	70 - 130
Carbophenothion	86.8	96.6	P/P	61 - 121
Carfentrazone Ethyl	67.6	73.9	P/P	62 - 139
Chlorpyrifos Ethyl	68.9	81.2	P/P	67 - 121
Chlorpyrifos Methyl	103	105	P/P	67 - 120
Cyanazine	70.9	85.1	P/P	20 - 226
Demeton	87.0	83.8	P/P	35 - 125

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Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P405832

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Diazinon	82.4	84.3	P/P	70 - 122
Difenoconazole	78.1	73.2	P/P	56 - 186
Dimethenamid	73.3	88.7	P/P	67 - 119
Disulfoton	93.7	98.9	P/P	47 - 120
Dithiopyr	72.0	73.0	P/P	67 - 118
EPTC	64.1	61.4	P/P	33 - 90.0
Ethion	74.4	89.9	P/P	40 - 133
Ethoprop	94.5	93.6	P/P	61 - 121
Fenamiphos	100	106	P/P	31 - 139
Fenbuconazole	65.6	104	F/P	66 - 141
Fipronil	76.8	80.0	P/P	62 - 129
Fipronil Desulfinyl	80.5	80.8	P/P	59 - 126
Fipronil Sulfide	88.4	95.8	P/P	63 - 117
Fipronil Sulfone	83.8	92.5	P/P	57 - 117
Fluazifop-P-butyl	63.5	70.9	P/P	63 - 124
Fludioxonil	69.7	73.0	P/P	63 - 123
Flumioxazin	108	132	P/P	34 - 245
Flutolanil	56.8	60.0	P/P	56 - 131
Fluxapyroxad	47.8	102	F/P	57 - 117
Fonofos	90.8	90.9	P/P	61 - 116
Hexazinone	89.8	98.4	P/P	55 - 138
Imazalil	83.7	79.9	P/P	33 - 143
Iprodione	54.4	105	F/P	59 - 118
Malathion	84.7	98.5	P/P	62 - 138
Metalaxyl	71.7	72.6	P/P	24 - 147
Metolachlor	84.7	80.1	P/P	68 - 118
Metribuzin	88.5	96.4	P/P	20 - 239
Mevinphos	82.1	96.1	P/P	46 - 124
Molinate	73.6	71.9	P/P	46 - 100
Myclobutanil	65.9	69.9	P/P	32 - 149
Naled	27.9	26.0	F/F	32 - 95.0
Norflurazon	88.9	104	P/P	57 - 127
Oxadiazon	56.2	88.0	F/P	63 - 118
Oxyfluorfen	80.8	85.9	P/P	69 - 137
Parathion Ethyl	81.6	98.7	P/P	70 - 113
Parathion Methyl	116	118	P/P	71 - 130
Pendimethalin	96.7	88.3	P/P	55 - 118
Phorate	79.0	94.8	P/P	46 - 125
Prodiamine	124	115	P/P	20 - 141
Prometon	70.4	72.2	P/P	54 - 122
Prometryn	72.3	68.4	P/P	66 - 124
Pronamide	80.4	81.7	P/P	79 - 122
Propiconazole	102	98.2	P/P	61 - 126
Pyriproxyfen	30.0	83.6	F/P	52 - 131
Simazine	75.6	84.0	P/P	75 - 128
Sulfentrazone	105	142	P/F	20 - 132
Tebuconazole	44.0	73.4	P/P	20 - 116
Terbufos	114	108	P/P	61 - 117
Terbuthylazine	76.7	80.9	P/P	74 - 116

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P406366

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	57.5	55.5	P/P	20 - 83.0
Alpha-BHC	92.5	89.1	P/P	74 - 108
Alpha-Chlordane	73.2	77.4	P/P	53 - 109
Beta-BHC	102	100	P/P	64 - 139
Beta-Cyfluthrin	92.8	85.7	P/P	27 - 171
Bifenthrin	61.3	55.6	P/P	20 - 124
Chlorothalonil	160	154	P/P	20 - 182
Cis-Nonachlor	79.5	71.2	P/P	46 - 110
Cypermethrin	80.0	79.9	P/P	35 - 160
Dacthal	92.1	94.1	P/P	70 - 115
DDD-p,p'	78.6	79.5	P/P	51 - 108
DDE-p,p'	79.0	82.3	P/P	51 - 104
DDT-p,p'	82.3	94.2	P/P	52 - 107
Delta-BHC	113	113	P/P	73 - 146
Deltamethrin	75.2	73.3	P/P	20 - 190
Dichlobenil	91.9	95.0	P/P	30 - 100
Dicofol	75.0	74.8	P/P	52 - 110
Dieldrin	81.9	81.7	P/P	57 - 111
Endosulfan I	82.9	85.4	P/P	61 - 106
Endosulfan II	85.8	87.7	P/P	57 - 122
Endosulfan Sulfate	91.2	90.1	P/P	58 - 122
Endrin	71.9	70.7	P/P	34 - 125
Endrin Aldehyde	73.2	64.5	P/P	40 - 120
Endrin Ketone	94.4	104	P/P	51 - 138
Esfenvalerate	79.1	71.6	P/P	20 - 193
Ethalfuralin	70.8	74.9	P/P	51 - 99.0
Fenpropathrin	79.9	71.7	P/P	40 - 116
Gamma-BHC	92.2	91.4	P/P	74 - 116
Gamma-Chlordane	73.4	73.7	P/P	49 - 105
Heptachlor	63.8	63.3	P/P	45 - 98.0
Heptachlor Epoxide	81.4	79.7	P/P	61 - 106
Hexachlorobenzene	71.3	71.4	P/P	41 - 96.0
Kepone	19.5	28.4	F/P	27 - 179
Lambda-Cyhalothrin	84.4	77.9	P/P	20 - 199
Methoprene	63.3	57.5	P/P	20 - 134
Methoxychlor	81.6	83.9	P/P	61 - 111
MGK-264	87.0	92.7	P/P	20 - 124
Mirex	57.9	54.7	P/P	20 - 199
Oxychlordane	70.5	70.9	P/P	39 - 112
Permethrin	81.0	72.4	P/P	31 - 155
Phenothrin	58.0	52.2	P/P	20 - 100
Piperonyl Butoxide	91.3	89.1	P/P	20 - 144
Prallethrin	78.2	75.7	P/P	20 - 103
Tau-Fluvalinate	67.5	60.7	P/P	24 - 133
Tetramethrin	88.7	87.7	P/P	20 - 116
Trans-Nonachlor	74.1	74.3	P/P	49 - 105
Triclosan Methyl	83.3	85.8	P/P	60 - 111
Trifluralin	68.8	69.8	P/P	53 - 97.0

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8276

Batch ID: P405844

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	70.3	86.2	P/P	56 - 117
Toxaphene	69.3	82.1	P/P	45 - 116

Reference Method: EPA 8321B

Batch ID: P405850

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	102		P	40 - 150
2,4,5-T	92.0		P	40 - 150
Acetaminophen	93.3		P	30 - 150
Acetamiprid	104		P	40 - 150
Afidopyropen	75.4		P	40 - 150
Bentazon	98.1		P	30 - 150
Benzovindiflupyr	96.4		P	40 - 150
Carbamazepine	107		P	40 - 150
Clothianidin	115		P	40 - 150
Dinotefuran	104		P	40 - 150
Diuron	105		P	40 - 150
Fenuron	102		P	40 - 150
Fluridone	97.4		P	40 - 150
Hydrocodone	94.0		P	40 - 150
Ibuprofen	65.9		P	40 - 150
Imazapyr	95.0		P	40 - 150
Imidacloprid	105		P	40 - 150
Linuron	96.2		P	40 - 150
Mandestrobin	101		P	40 - 150
MCPP	116		P	40 - 150
Naproxen	90.1		P	40 - 150
Primidone	102		P	40 - 150
Pyraclostrobin	86.6		P	40 - 150
Thiamethoxam	112		P	40 - 150
Tolfenpyrad	54.2		P	30 - 150
Triclopyr	89.6		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P405862

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	89.0		P	40 - 150
AMPA	103		P	40 - 160
Endothall	72.2		P	40 - 150
Glufosinate	104		P	40 - 160
Glyphosate	109		P	40 - 160
Sucralose	89.7		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P406048

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	93.8		P	40 - 150
Aldicarb	92.4		P	30 - 150
Aldicarb Sulfone	98.2		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P406048

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldicarb Sulfoxide	107		P	40 - 150
Carbaryl	89.0		P	40 - 150
Carbofuran	88.5		P	40 - 150
Methiocarb	86.5		P	40 - 150
Methomyl	98.3		P	40 - 150
Oxamyl	100		P	40 - 150
Propoxur	87.1		P	40 - 150

Reference Method: SM 2120 B-2011

Batch ID: P405890

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

Reference Method: SM 2320 B-2011

Batch ID: P406172

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.3		P	94 - 106

Reference Method: SM 4500 F-C-2011

Batch ID: P405988

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	93 - 104

Reference Method: SM 5310 B-2011

Batch ID: P406058

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

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P405903

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287116	Calcium	105		P	80 - 120
2287116	Iron	109		P	80 - 120
2287116	Magnesium	110		P	80 - 120
2287116	Potassium	101		P	80 - 120
2287116	Sodium	102		P	80 - 120
2287116	Strontium	104		P	80 - 120
2287116	Tin	110		P	80 - 120
2287116	Titanium	108		P	80 - 120
2287116	Vanadium	110		P	80 - 120
2287116	Zinc	112		P	80 - 120
2287480	Calcium	107		P	80 - 120
2287480	Iron	105	102	P/P	80 - 120
2287480	Magnesium	103		P	80 - 120
2287480	Potassium	102	99.7	P/P	80 - 120
2287480	Sodium	105		P	80 - 120
2287480	Strontium	99.0	99.3	P/P	80 - 120
2287480	Tin	103	106	P/P	80 - 120
2287480	Titanium	105	106	P/P	80 - 120
2287480	Vanadium	104	105	P/P	80 - 120
2287480	Zinc	103	104	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P405903

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287116	Aluminum	104		P	80 - 120
2287116	Antimony	114		P	80 - 120
2287116	Arsenic	99.6		P	80 - 120
2287116	Barium	109		P	80 - 120
2287116	Beryllium	107		P	80 - 120
2287116	Boron	105		P	80 - 120
2287116	Cadmium	107		P	80 - 120
2287116	Chromium	109		P	80 - 120
2287116	Cobalt	100		P	80 - 120
2287116	Copper	95.0		P	80 - 120
2287116	Lead	98.0		P	80 - 120
2287116	Molybdenum	107		P	80 - 120
2287116	Nickel	95.5		P	80 - 120
2287116	Selenium	98.7		P	80 - 120
2287116	Silver	101		P	80 - 120
2287116	Thallium	108		P	80 - 120
2287480	Aluminum	100	100	P/P	80 - 120
2287480	Antimony	111	111	P/P	80 - 120
2287480	Arsenic	102	101	P/P	80 - 120
2287480	Barium	109	109	P/P	80 - 120
2287480	Beryllium	103	105	P/P	80 - 120
2287480	Boron	99.4	99.2	P/P	80 - 120
2287480	Cadmium	105	104	P/P	80 - 120
2287480	Chromium	103	103	P/P	80 - 120
2287480	Cobalt	102	101	P/P	80 - 120
2287480	Copper	95.9	95.2	P/P	80 - 120
2287480	Lead	97.8	98.3	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P405903

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287480	Manganese	104	105	P/P	80 - 120
2287480	Molybdenum	107	108	P/P	80 - 120
2287480	Nickel	96.3	95.7	P/P	80 - 120
2287480	Selenium	101	101	P/P	80 - 120
2287480	Silver	100	99.8	P/P	80 - 120
2287480	Thallium	107	108	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406039

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287089	Chloride	100		P	90 - 110
2287474	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406042

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287089	Sulfate	103		P	90 - 110
2287474	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P406396

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287036	Ammonia-N	98.4	98.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406055

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2286609	Kjeldahl Nitrogen	100	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406056

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287102	Kjeldahl Nitrogen	95.6	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406050

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287043	NO2NO3-N	96.8	96.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405924

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2286698	Total-P	107	108	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P405926

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287044	Total-P	110	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P405871

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287038	O-Phosphate-P	95.8	95.9	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P405832

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2286196	Acetochlor	81.7	76.1	P/P	66 - 122
2286196	Alachlor	84.1	77.4	P/P	65 - 122
2286196	Ametryn	76.3	70.2	P/P	45 - 173
2286196	Atrazine	90.6	83.2	P/P	70 - 134
2286196	Atrazine Desethyl	45.8	38.5	P/P	25 - 150
2286196	Azinphos Methyl	239	292	F/F	44 - 174
2286196	Azoxystrobin	88.8	82.7	P/P	10 - 268
2286196	Butylate	58.3	53.0	P/P	15 - 97.0
2286196	Carbophenothion	99.6	93.4	P/P	42 - 129
2286196	Carfentrazone Ethyl	72.5	68.8	P/P	62 - 145
2286196	Chlorpyrifos Ethyl	100	91.9	P/P	60 - 124
2286196	Chlorpyrifos Methyl	108	103	P/P	66 - 119
2286196	Cyanazine	86.6	76.5	P/P	17 - 225
2286196	Demeton	95.3	89.2	P/P	36 - 142
2286196	Diazinon	83.8	82.4	P/P	70 - 128
2286196	Difenoconazole	73.0	68.6	P/P	33 - 222
2286196	Dimethenamid	67.5	63.5	P/P	54 - 125
2286196	Disulfoton	99.8	98.8	P/P	49 - 133
2286196	Dithiopyr	75.1	70.8	P/P	55 - 123
2286196	EPTC	56.0	55.4	P/P	19 - 91.0
2286196	Ethion	98.0	85.2	P/P	13 - 143
2286196	Ethoprop	95.4	93.5	P/P	49 - 144
2286196	Fenamiphos	98.4	97.5	P/P	32 - 136
2286196	Fenbuconazole	109	113	P/P	73 - 148
2286196	Fipronil	81.4	75.5	P/P	57 - 129
2286196	Fipronil Desulfinyl	79.9	75.0	P/P	49 - 127
2286196	Fipronil Sulfide	94.9	92.6	P/P	44 - 127
2286196	Fipronil Sulfone	93.0	87.0	P/P	35 - 126
2286196	Fluazifop-P-butyl	103	99.5	P/P	67 - 129
2286196	Fludioxonil	73.7	67.5	P/P	61 - 126
2286196	Flumioxazin	137	131	P/P	38 - 279
2286196	Flutolanil	56.6	56.0	P/P	55 - 136
2286196	Fluxapyroxad	90.8	87.3	P/P	33 - 140
2286196	Fonofos	93.7	90.3	P/P	58 - 125
2286196	Hexazinone	102	97.8	P/P	57 - 148
2286196	Imazalil	72.6	67.4	P/P	10 - 221
2286196	Iprodione	96.7	90.9	P/P	32 - 140
2286196	Malathion	137	132	P/P	52 - 138
2286196	Metalaxyl	91.3	91.2	P/P	46 - 134
2286196	Metolachlor	77.8	75.1	P/P	58 - 122

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P405832

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2286196	Metribuzin	95.2	92.1	P/P	16 - 272
2286196	Mevinphos	105	91.7	P/P	45 - 140
2286196	Molinate	71.6	69.1	P/P	41 - 103
2286196	Myclobutanil	66.6	62.7	P/P	60 - 134
2286196	Naled	30.3	28.3	P/P	20 - 113
2286196	Oxadiazon	63.3	58.3	P/P	44 - 125
2286196	Oxyfluorfen	93.9	87.6	P/P	66 - 176
2286196	Parathion Ethyl	93.0	89.3	P/P	57 - 132
2286196	Parathion Methyl	118	110	P/P	59 - 156
2286196	Pendimethalin	103	100	P/P	59 - 129
2286196	Phorate	105	97.3	P/P	47 - 136
2286196	Prodiamine	140	133	P/P	10 - 159
2286196	Prometon	76.7	72.2	P/P	59 - 127
2286196	Prometryn	73.5	67.3	P/P	59 - 129
2286196	Pronamide	84.1	78.0	P/P	65 - 145
2286196	Propiconazole	95.8	91.4	P/P	28 - 165
2286196	Pyriproxyfen	34.1	33.9	P/P	21 - 180
2286196	Simazine	85.6	80.3	P/P	63 - 147
2286196	Sulfentrazone	155	135	F/P	32 - 136
2286196	Tebuconazole	70.1	67.5	P/P	10 - 117
2286196	Terbufos	117	114	P/P	61 - 131
2286196	Terbutylazine	82.0	77.3	P/P	62 - 126

Reference Method: EPA 8270E

Batch ID: P406366

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2288460	Aldrin	51.1	57.1	P/P	10 - 94.0
2288460	Alpha-BHC	79.2	91.4	P/P	71 - 108
2288460	Alpha-Chlordane	62.5	79.5	P/P	42 - 115
2288460	Beta-BHC	69.6	93.3	P/P	56 - 161
2288460	Beta-Cyfluthrin	76.0	101	P/P	46 - 190
2288460	Bifenthrin	58.6	70.7	P/P	19 - 126
2288460	Chlorothalonil	143	201	P/P	10 - 262
2288460	Cis-Nonachlor	54.0	66.6	P/P	44 - 112
2288460	Cypermethrin	64.7	82.1	P/P	40 - 178
2288460	Dacthal	77.9	95.8	P/P	60 - 119
2288460	DDD-p,p'	57.3	72.5	P/P	40 - 114
2288460	DDE-p,p'	71.5	86.3	P/P	22 - 125
2288460	DDT-p,p'	69.9	83.0	P/P	39 - 110
2288460	Delta-BHC	81.3	105	P/P	64 - 174
2288460	Deltamethrin	32.4	52.3	P/P	10 - 227
2288460	Dichlobenil	64.3	81.4	P/P	20 - 99.0
2288460	Dicofol	62.3	77.8	P/P	43 - 115
2288460	Dieldrin	53.5	79.3	P/P	31 - 131
2288460	Endosulfan I	74.0	90.0	P/P	52 - 110
2288460	Endosulfan II	78.0	97.1	P/P	53 - 127
2288460	Endosulfan Sulfate	33.8	74.5	F/P	44 - 135
2288460	Endrin	60.5	74.6	P/P	36 - 122
2288460	Endrin Aldehyde	40.6	61.6	P/P	23 - 115
2288460	Endrin Ketone	76.4	93.9	P/P	46 - 147
2288460	Esfenvalerate	65.4	87.0	P/P	25 - 217

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P406366

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2288460	Ethalfuralin	64.6	79.9	P/P	46 - 99.0
2288460	Fenpropathrin	63.0	77.4	P/P	42 - 121
2288460	Gamma-BHC	68.6	77.2	P/P	63 - 131
2288460	Gamma-Chlordane	61.5	77.2	P/P	40 - 108
2288460	Heptachlor	55.4	62.5	P/P	38 - 98.0
2288460	Heptachlor Epoxide	67.3	86.6	P/P	39 - 124
2288460	Hexachlorobenzene	59.0	68.3	P/P	37 - 96.0
2288460	Kepone	17.5	20.0	P/P	10 - 216
2288460	Lambda-Cyhalothrin	69.8	102	P/P	21 - 220
2288460	Methoprene	55.6	67.5	P/P	19 - 112
2288460	Methoxychlor	67.7	86.2	P/P	56 - 118
2288460	MGK-264	74.8	90.1	P/P	28 - 125
2288460	Mirex	53.1	61.9	P/P	10 - 203
2288460	Oxychlordane	62.7	73.5	P/P	46 - 92.0
2288460	Permethrin	72.0	87.9	P/P	42 - 173
2288460	Phenothrin	55.4	68.8	P/P	10 - 140
2288460	Piperonyl Butoxide	76.3	90.7	P/P	10 - 158
2288460	Prallethrin	57.7	72.4	P/P	19 - 119
2288460	Tau-Fluvalinate	61.1	73.1	P/P	27 - 164
2288460	Tetramethrin	78.0	94.0	P/P	16 - 130
2288460	Trans-Nonachlor	63.4	80.7	P/P	43 - 105
2288460	Triclosan Methyl	73.1	90.0	P/P	50 - 113
2288460	Trifluralin	61.2	73.4	P/P	48 - 98.0

Reference Method: EPA 8276

Batch ID: P405844

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2286752	Chlordane	86.7	103	P/P	47 - 128
2286752	Toxaphene	82.3	93.3	P/P	11 - 163

Reference Method: EPA 8321B

Batch ID: P405850

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287064	2,4-D	109	111	P/P	40 - 150
2287064	2,4,5-T	112	101	P/P	40 - 150
2287064	Acetaminophen	136	95.9	P/P	30 - 150
2287064	Acetamiprid	119	103	P/P	40 - 150
2287064	Afidopyropen	95.8	82.4	P/P	40 - 150
2287064	Bentazon	65.3	58.8	P/P	30 - 150
2287064	Benzovindiflupyr	89.8	85.7	P/P	40 - 150
2287064	Carbamazepine	114	111	P/P	40 - 150
2287064	Clothianidin	123	92.2	P/P	40 - 150
2287064	Dinotefuran	152	134	F/P	40 - 150
2287064	Diuron	79.8	88.3	P/P	40 - 150
2287064	Fenuron	90.7	85.0	P/P	40 - 150
2287064	Fluridone	89.4	82.1	P/P	40 - 150
2287064	Hydrocodone	110	99.3	P/P	40 - 150
2287064	Ibuprofen	87.7	71.3	P/P	40 - 150
2287064	Imazapyr	118	125	P/P	40 - 150
2287064	Imidacloprid	194	181	F/F	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P405850

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287064	Linuron	80.4	76.7	P/P	40 - 150
2287064	Mandestrobin	97.8	84.5	P/P	40 - 150
2287064	MCP	122	131	P/P	40 - 150
2287064	Naproxen	109	89.3	P/P	40 - 150
2287064	Primidone	110	114	P/P	40 - 150
2287064	Pyraclostrobin	81.3	81.4	P/P	40 - 150
2287064	Thiamethoxam	170	158	F/F	40 - 150
2287064	Tolfenpyrad	54.4	49.9	P/P	30 - 150
2287064	Triclopyr	107	108	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P405862

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287064	Acesulfame K	123	133	P/P	40 - 150
2287064	AMPA	89.9	87.7	P/P	40 - 160
2287064	Endothall	84.6	81.3	P/P	40 - 150
2287064	Glufosinate	96.6	97.9	P/P	40 - 160
2287064	Glyphosate	99.6	101	P/P	40 - 160
2287064	Sucralose	89.0	87.5	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P406048

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287062	3-Hydroxycarbofuran	101	85.0	P/P	40 - 150
2287062	Aldicarb	78.2	77.2	P/P	30 - 150
2287062	Aldicarb Sulfone	118	96.3	P/P	40 - 150
2287062	Aldicarb Sulfoxide	62.4	46.1	P/P	40 - 150
2287062	Carbaryl	62.5	66.0	P/P	40 - 150
2287062	Carbofuran	76.5	71.8	P/P	40 - 150
2287062	Methiocarb	77.2	67.8	P/P	40 - 150
2287062	Methomyl	93.2	83.8	P/P	40 - 150
2287062	Oxamyl	94.9	88.3	P/P	40 - 150
2287062	Propoxur	76.6	67.0	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P405988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287474	Fluoride	99.5	100	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P406058

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287036	Organic Carbon	96.2	96.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P405885

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287034	Turbidity	0.120	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P405903

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287480	Calcium	0.0248	Spike	P	0 - 20
2287480	Iron	2.88	Spike	P	0 - 20
2287480	Magnesium	2.27	Spike	P	0 - 20
2287480	Potassium	1.57	Spike	P	0 - 20
2287480	Sodium	0.820	Spike	P	0 - 20
2287480	Strontium	0.268	Spike	P	0 - 20
2287480	Tin	2.16	Spike	P	0 - 20
2287480	Titanium	0.650	Spike	P	0 - 20
2287480	Vanadium	0.656	Spike	P	0 - 20
2287480	Zinc	0.956	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P405903

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287480	Aluminum	0.0731	Spike	P	0 - 20
2287480	Antimony	0.371	Spike	P	0 - 20
2287480	Arsenic	0.751	Spike	P	0 - 20
2287480	Barium	0.108	Spike	P	0 - 20
2287480	Beryllium	1.43	Spike	P	0 - 20
2287480	Boron	0.174	Spike	P	0 - 20
2287480	Cadmium	1.25	Spike	P	0 - 20
2287480	Chromium	0.0890	Spike	P	0 - 20
2287480	Cobalt	0.912	Spike	P	0 - 20
2287480	Copper	0.763	Spike	P	0 - 20
2287480	Lead	0.504	Spike	P	0 - 20
2287480	Manganese	0.407	Spike	P	0 - 20
2287480	Molybdenum	0.535	Spike	P	0 - 20
2287480	Nickel	0.616	Spike	P	0 - 20
2287480	Selenium	0.569	Spike	P	0 - 20
2287480	Silver	0.473	Spike	P	0 - 20
2287480	Thallium	0.656	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P406039

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287089	Chloride	1.37	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406042

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287089	Sulfate	1.98	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P406396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287036	Ammonia-N	0.0	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406055

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2286609	Kjeldahl Nitrogen	0.844	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287102	Kjeldahl Nitrogen	5.79	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287043	NO2NO3-N	0.499	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2286698	Total-P	0.966	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P405926

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287044	Total-P	2.63	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P405871

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287038	O-Phosphate-P	0.0900	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P405832

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2286196	Acetochlor	7.08	Spike	P	0 - 30
2286196	Alachlor	8.31	Spike	P	0 - 30
2286196	Ametryn	8.34	Spike	P	0 - 30
2286196	Atrazine	7.51	Spike	P	0 - 30
2286196	Atrazine Desethyl	17.3	Spike	P	0 - 30
2286196	Azinphos Methyl	19.8	Spike	P	0 - 30
2286196	Azoxystrobin	7.11	Spike	P	0 - 30
2286196	Bromacil	5.57	Spike	P	0 - 30
2286196	Butylate	9.47	Spike	P	0 - 30
2286196	Caffeine	1.71	Spike	P	0 - 30
2286196	Carbophenothion	6.36	Spike	P	0 - 30
2286196	Carfentrazone Ethyl	5.26	Spike	P	0 - 30
2286196	Chlorpyrifos Ethyl	8.63	Spike	P	0 - 30
2286196	Chlorpyrifos Methyl	5.51	Spike	P	0 - 30
2286196	Cyanazine	12.5	Spike	P	0 - 30
2286196	Demeton	6.59	Spike	P	0 - 30
2286196	Diazinon	1.65	Spike	P	0 - 30
2286196	Difenoconazole	6.25	Spike	P	0 - 30
2286196	Dimethenamid	6.12	Spike	P	0 - 30
2286196	Disulfoton	0.968	Spike	P	0 - 30
2286196	Dithiopyr	5.94	Spike	P	0 - 30
2286196	EPTC	1.09	Spike	P	0 - 30
2286196	Ethion	14.0	Spike	P	0 - 30
2286196	Ethoprop	2.06	Spike	P	0 - 30
2286196	Fenamiphos	0.921	Spike	P	0 - 30
2286196	Fenbuconazole	3.44	Spike	P	0 - 30
2286196	Fipronil	7.49	Spike	P	0 - 30
2286196	Fipronil Desulfinyl	6.41	Spike	P	0 - 30
2286196	Fipronil Sulfide	2.39	Spike	P	0 - 30
2286196	Fipronil Sulfone	6.69	Spike	P	0 - 30
2286196	Fluazifop-P-butyl	2.99	Spike	P	0 - 30
2286196	Fludioxonil	8.76	Spike	P	0 - 30
2286196	Flumioxazin	4.61	Spike	P	0 - 30
2286196	Flutolanil	0.981	Spike	P	0 - 30
2286196	Fluxapyroxad	3.94	Spike	P	0 - 30
2286196	Fonofos	3.61	Spike	P	0 - 30
2286196	Hexazinone	4.61	Spike	P	0 - 30
2286196	Imazalil	7.32	Spike	P	0 - 30
2286196	Iprodione	6.18	Spike	P	0 - 30
2286196	Malathion	4.25	Spike	P	0 - 30
2286196	Metalaxyl	0.105	Spike	P	0 - 30
2286196	Metolachlor	3.54	Spike	P	0 - 30
2286196	Metribuzin	3.26	Spike	P	0 - 30
2286196	Mevinphos	13.5	Spike	P	0 - 30
2286196	Molinate	3.42	Spike	P	0 - 30
2286196	Myclobutanil	6.06	Spike	P	0 - 30
2286196	Naled	6.89	Spike	P	0 - 30
2286196	Norflurazon	6.75	Spike	P	0 - 30
2286196	Oxadiazon	8.36	Spike	P	0 - 30
2286196	Oxyfluorfen	6.94	Spike	P	0 - 30
2286196	Parathion Ethyl	4.01	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P405832

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2286196	Parathion Methyl	6.71	Spike	P	0 - 30
2286196	Pendimethalin	2.29	Spike	P	0 - 30
2286196	Phorate	7.20	Spike	P	0 - 30
2286196	Prodiamine	5.34	Spike	P	0 - 30
2286196	Prometon	6.01	Spike	P	0 - 30
2286196	Prometryn	8.80	Spike	P	0 - 30
2286196	Pronamide	7.60	Spike	P	0 - 30
2286196	Propiconazole	4.70	Spike	P	0 - 30
2286196	Pyriproxyfen	0.476	Spike	P	0 - 30
2286196	Simazine	6.34	Spike	P	0 - 30
2286196	Sulfentrazone	13.3	Spike	P	0 - 30
2286196	Tebuconazole	3.84	Spike	P	0 - 30
2286196	Terbufos	2.97	Spike	P	0 - 30
2286196	Terbuthylazine	5.93	Spike	P	0 - 30
LFB	Acetochlor	6.73	LCS	P	0 - 30
LFB	Alachlor	4.37	LCS	P	0 - 30
LFB	Ametryn	1.53	LCS	P	0 - 30
LFB	Atrazine	10.3	LCS	P	0 - 30
LFB	Atrazine Desethyl	84.1	LCS	F	0 - 30
LFB	Azinphos Methyl	85.1	LCS	F	0 - 30
LFB	Azoxystrobin	2.97	LCS	P	0 - 30
LFB	Bromacil	15.7	LCS	P	0 - 30
LFB	Butylate	1.75	LCS	P	0 - 30
LFB	Caffeine	10.1	LCS	P	0 - 30
LFB	Carbophenothion	10.8	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	8.88	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	16.4	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	2.13	LCS	P	0 - 30
LFB	Cyanazine	18.2	LCS	P	0 - 30
LFB	Demeton	3.80	LCS	P	0 - 30
LFB	Diazinon	2.28	LCS	P	0 - 30
LFB	Difenoconazole	6.49	LCS	P	0 - 30
LFB	Dimethenamid	19.1	LCS	P	0 - 30
LFB	Disulfoton	5.48	LCS	P	0 - 30
LFB	Dithiopyr	1.32	LCS	P	0 - 30
LFB	EPTC	4.21	LCS	P	0 - 30
LFB	Ethion	18.9	LCS	P	0 - 30
LFB	Ethoprop	0.966	LCS	P	0 - 30
LFB	Fenamiphos	5.60	LCS	P	0 - 30
LFB	Fenbuconazole	45.3	LCS	F	0 - 30
LFB	Fipronil	3.98	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	0.350	LCS	P	0 - 30
LFB	Fipronil Sulfide	8.05	LCS	P	0 - 30
LFB	Fipronil Sulfone	9.83	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	11.0	LCS	P	0 - 30
LFB	Fludioxonil	4.60	LCS	P	0 - 30
LFB	Flumioxazin	19.9	LCS	P	0 - 30
LFB	Flutolanil	5.50	LCS	P	0 - 30
LFB	Fluxapyroxad	72.0	LCS	F	0 - 30
LFB	Fonofos	0.176	LCS	P	0 - 30
LFB	Hexazinone	9.09	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P405832

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Imazalil	4.66	LCS	P	0 - 30
LFB	Iprodione	63.4	LCS	F	0 - 30
LFB	Malathion	15.0	LCS	P	0 - 30
LFB	Metalaxyl	1.26	LCS	P	0 - 30
LFB	Metolachlor	5.61	LCS	P	0 - 30
LFB	Metribuzin	8.59	LCS	P	0 - 30
LFB	Mevinphos	15.7	LCS	P	0 - 30
LFB	Molinate	2.36	LCS	P	0 - 30
LFB	Myclobutanil	5.87	LCS	P	0 - 30
LFB	Naled	6.98	LCS	P	0 - 30
LFB	Norflurazon	16.2	LCS	P	0 - 30
LFB	Oxadiazon	44.2	LCS	F	0 - 30
LFB	Oxyfluorfen	6.14	LCS	P	0 - 30
LFB	Parathion Ethyl	19.0	LCS	P	0 - 30
LFB	Parathion Methyl	1.50	LCS	P	0 - 30
LFB	Pendimethalin	9.09	LCS	P	0 - 30
LFB	Phorate	18.1	LCS	P	0 - 30
LFB	Prodiamine	7.83	LCS	P	0 - 30
LFB	Prometon	2.44	LCS	P	0 - 30
LFB	Prometryn	5.58	LCS	P	0 - 30
LFB	Pronamide	1.57	LCS	P	0 - 30
LFB	Propiconazole	3.39	LCS	P	0 - 30
LFB	Pyriproxyfen	94.5	LCS	F	0 - 30
LFB	Simazine	10.6	LCS	P	0 - 30
LFB	Sulfentrazone	30.2	LCS	F	0 - 30
LFB	Tebuconazole	50.1	LCS	F	0 - 30
LFB	Terbufos	5.18	LCS	P	0 - 30
LFB	Terbutylazine	5.24	LCS	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P406366

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2288460	Aldrin	11.3	Spike	P	0 - 37
2288460	Alpha-BHC	14.4	Spike	P	0 - 16
2288460	Alpha-Chlordane	23.9	Spike	P	0 - 28
2288460	Beta-BHC	29.1	Spike	P	0 - 32
2288460	Beta-Cyfluthrin	28.2	Spike	P	0 - 41
2288460	Bifenthrin	18.7	Spike	P	0 - 36
2288460	Chlorothalonil	32.4	Spike	P	0 - 54
2288460	Cis-Nonachlor	20.9	Spike	P	0 - 33
2288460	Cypermethrin	23.7	Spike	P	0 - 38
2288460	Dacthal	20.6	Spike	P	0 - 23
2288460	DDD-p,p'	23.4	Spike	P	0 - 35
2288460	DDE-p,p'	18.8	Spike	P	0 - 27
2288460	DDT-p,p'	17.1	Spike	P	0 - 31
2288460	Delta-BHC	25.3	Spike	P	0 - 30
2288460	Deltamethrin	47.0	Spike	P	0 - 76
2288460	Dichlobenil	23.5	Spike	P	0 - 33
2288460	Dicofol	22.1	Spike	P	0 - 24

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P406366

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2288460	Dieldrin	22.5	Spike	P	0 - 35
2288460	Endosulfan I	19.5	Spike	P	0 - 25
2288460	Endosulfan II	21.9	Spike	P	0 - 31
2288460	Endosulfan Sulfate	21.0	Spike	P	0 - 38
2288460	Endrin	20.8	Spike	P	0 - 53
2288460	Endrin Aldehyde	41.1	Spike	P	0 - 81
2288460	Endrin Ketone	20.6	Spike	P	0 - 33
2288460	Esfenvalerate	28.3	Spike	P	0 - 46
2288460	Ethalfuralin	21.2	Spike	P	0 - 22
2288460	Fenpropathrin	20.5	Spike	P	0 - 29
2288460	Gamma-BHC	11.9	Spike	P	0 - 17
2288460	Gamma-Chlordane	22.5	Spike	P	0 - 28
2288460	Heptachlor	12.2	Spike	P	0 - 28
2288460	Heptachlor Epoxide	25.1	Spike	F	0 - 23
2288460	Hexachlorobenzene	14.6	Spike	P	0 - 22
2288460	Kepone	13.1	Spike	P	0 - 61
2288460	Lambda-Cyhalothrin	37.7	Spike	P	0 - 52
2288460	Methoprene	19.4	Spike	P	0 - 38
2288460	Methoxychlor	24.1	Spike	P	0 - 29
2288460	MGK-264	18.6	Spike	P	0 - 41
2288460	Mirex	15.3	Spike	P	0 - 39
2288460	Oxychlordane	15.9	Spike	P	0 - 33
2288460	Permethrin	19.9	Spike	P	0 - 39
2288460	Phenothrin	21.6	Spike	P	0 - 52
2288460	Piperonyl Butoxide	17.3	Spike	P	0 - 91
2288460	Prallethrin	22.6	Spike	P	0 - 34
2288460	Tau-Fluvalinate	17.8	Spike	P	0 - 41
2288460	Tetramethrin	18.6	Spike	P	0 - 43
2288460	Trans-Nonachlor	24.0	Spike	P	0 - 31
2288460	Triclosan Methyl	20.7	Spike	P	0 - 24
2288460	Trifluralin	18.2	Spike	P	0 - 23
LFB	Aldrin	3.48	LCS	P	0 - 61
LFB	Alpha-BHC	3.72	LCS	P	0 - 15
LFB	Alpha-Chlordane	5.51	LCS	P	0 - 23
LFB	Beta-BHC	1.71	LCS	P	0 - 24
LFB	Beta-Cyfluthrin	8.04	LCS	P	0 - 39
LFB	Bifenthrin	9.78	LCS	P	0 - 48
LFB	Chlorothalonil	4.32	LCS	P	0 - 32
LFB	Cis-Nonachlor	10.9	LCS	P	0 - 32
LFB	Cypermethrin	0.217	LCS	P	0 - 34
LFB	Dacthal	2.14	LCS	P	0 - 19
LFB	DDD-p,p'	1.24	LCS	P	0 - 28
LFB	DDE-p,p'	4.16	LCS	P	0 - 24
LFB	DDT-p,p'	13.5	LCS	P	0 - 22
LFB	Delta-BHC	0.168	LCS	P	0 - 20
LFB	Deltamethrin	2.56	LCS	P	0 - 47
LFB	Dichlobenil	3.37	LCS	P	0 - 22
LFB	Dicofol	0.291	LCS	P	0 - 21
LFB	Dieldrin	0.284	LCS	P	0 - 21
LFB	Endosulfan I	2.92	LCS	P	0 - 20
LFB	Endosulfan II	2.10	LCS	P	0 - 22

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P406366

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endosulfan Sulfate	1.24	LCS	P	0 - 25
LFB	Endrin	1.70	LCS	P	0 - 20
LFB	Endrin Aldehyde	12.6	LCS	P	0 - 33
LFB	Endrin Ketone	9.28	LCS	P	0 - 20
LFB	Esfenvalerate	9.94	LCS	P	0 - 42
LFB	Ethalfuralin	5.58	LCS	P	0 - 20
LFB	Fenpropathrin	10.7	LCS	P	0 - 29
LFB	Gamma-BHC	0.906	LCS	P	0 - 16
LFB	Gamma-Chlordane	0.389	LCS	P	0 - 23
LFB	Heptachlor	0.838	LCS	P	0 - 27
LFB	Heptachlor Epoxide	2.06	LCS	P	0 - 20
LFB	Hexachlorobenzene	0.163	LCS	P	0 - 24
LFB	Kepone	37.2	LCS	P	0 - 80
LFB	Lambda-Cyhalothrin	7.99	LCS	P	0 - 42
LFB	Methoprene	9.59	LCS	P	0 - 48
LFB	Methoxychlor	2.75	LCS	P	0 - 22
LFB	MGK-264	6.30	LCS	P	0 - 54
LFB	Mirex	5.56	LCS	P	0 - 32
LFB	Oxychlordane	0.475	LCS	P	0 - 21
LFB	Permethrin	11.2	LCS	P	0 - 36
LFB	Phenothrin	10.4	LCS	P	0 - 60
LFB	Piperonyl Butoxide	2.42	LCS	P	0 - 36
LFB	Prallethrin	3.26	LCS	P	0 - 41
LFB	Tau-Fluvalinate	10.5	LCS	P	0 - 40
LFB	Tetramethrin	1.18	LCS	P	0 - 66
LFB	Trans-Nonachlor	0.240	LCS	P	0 - 25
LFB	Triclosan Methyl	3.01	LCS	P	0 - 19
LFB	Trifluralin	1.36	LCS	P	0 - 21

Reference Method: EPA 8276

Batch ID: P405844

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2286752	Chlordane	17.5	Spike	P	0 - 30
2286752	Toxaphene	12.6	Spike	P	0 - 30
LFB	Chlordane	20.3	LCS	P	0 - 30
LFB	Toxaphene	17.0	LCS	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P405850

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287064	2,4-D	2.28	Spike	P	0 - 30
2287064	2,4,5-T	10.1	Spike	P	0 - 30
2287064	Acetaminophen	28.5	Spike	P	0 - 30
2287064	Acetamiprid	14.8	Spike	P	0 - 30
2287064	Afidopyropen	15.1	Spike	P	0 - 30
2287064	Bentazon	10.4	Spike	P	0 - 30
2287064	Benzovindiflupyr	4.47	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P405850

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287064	Carbamazepine	2.41	Spike	P	0 - 30
2287064	Clothianidin	28.7	Spike	P	0 - 30
2287064	Dinotefuran	12.3	Spike	P	0 - 30
2287064	Diuron	10.2	Spike	P	0 - 30
2287064	Fenuron	6.50	Spike	P	0 - 30
2287064	Fluridone	8.49	Spike	P	0 - 30
2287064	Hydrocodone	10.6	Spike	P	0 - 30
2287064	Ibuprofen	20.6	Spike	P	0 - 30
2287064	Imazapyr	4.12	Spike	P	0 - 30
2287064	Imidacloprid	6.28	Spike	P	0 - 30
2287064	Linuron	4.63	Spike	P	0 - 30
2287064	Mandestrobin	14.6	Spike	P	0 - 30
2287064	MCPP	7.27	Spike	P	0 - 30
2287064	Naproxen	20.2	Spike	P	0 - 30
2287064	Primidone	3.57	Spike	P	0 - 30
2287064	Pyraclostrobin	0.0843	Spike	P	0 - 30
2287064	Thiamethoxam	7.20	Spike	P	0 - 30
2287064	Tolfenpyrad	8.63	Spike	P	0 - 30
2287064	Triclopyr	0.852	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P405862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287064	Acesulfame K	7.60	Spike	P	0 - 30
2287064	AMPA	2.52	Spike	P	0 - 30
2287064	Endothall	3.95	Spike	P	0 - 30
2287064	Glufosinate	1.32	Spike	P	0 - 30
2287064	Glyphosate	1.21	Spike	P	0 - 30
2287064	Sucralose	1.73	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P406048

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287062	3-Hydroxycarbofuran	17.4	Spike	P	0 - 30
2287062	Aldicarb	1.27	Spike	P	0 - 30
2287062	Aldicarb Sulfone	20.4	Spike	P	0 - 30
2287062	Aldicarb Sulfoxide	30.0	Spike	P	0 - 30
2287062	Carbaryl	5.35	Spike	P	0 - 30
2287062	Carbofuran	6.36	Spike	P	0 - 30
2287062	Methiocarb	12.9	Spike	P	0 - 30
2287062	Methomyl	10.6	Spike	P	0 - 30
2287062	Oxamyl	7.16	Spike	P	0 - 30
2287062	Propoxur	13.5	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
Batch ID: P405890

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287101	Color (true)	2.59	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P406172

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287474	Total Alkalinity	1.35	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P406359

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287891	TDS	8.08	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P405988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287474	Fluoride	0.476	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P406058

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287036	Organic Carbon	0.0659	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2287062
Field Sample ID: G3WA0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	72.2	P	30 - 160

Lab Sample ID: 2287063
Field Sample ID: G3WA0010

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	68.0	P	30 - 160

Lab Sample ID: 2287064
Field Sample ID: G3WA0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	128	P	30 - 160
EPA 8321B	Acetaminophen-d4	131	P	30 - 160
EPA 8321B	Carbamazepine-d10	121	P	30 - 160
EPA 8321B	Diuron-d6	99.7	P	30 - 160
EPA 8321B	Endothall-d6	69.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.5	P	30 - 160
EPA 8321B	Primidone-d5	108	P	30 - 160
EPA 8321B	Sucralose-d6	81.4	P	30 - 160

Lab Sample ID: 2287065
Field Sample ID: G3WA0010

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	129	P	30 - 160
EPA 8321B	Carbamazepine-d10	111	P	30 - 160
EPA 8321B	Diuron-d6	84.9	P	30 - 160
EPA 8321B	Endothall-d6	68.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.8	P	30 - 160
EPA 8321B	Primidone-d5	150	P	30 - 160
EPA 8321B	Sucralose-d6	81.8	P	30 - 160

Lab Sample ID: 2287066
Field Sample ID: G3WA0008

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	107	P	30 - 160
EPA 8321B	Acetaminophen-d4	124	P	30 - 160
EPA 8321B	Carbamazepine-d10	115	P	30 - 160
EPA 8321B	Diuron-d6	95.3	P	30 - 160
EPA 8321B	Endothall-d6	64.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	96.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	65.6	P	30 - 160
EPA 8321B	Primidone-d5	127	P	30 - 160
EPA 8321B	Sucralose-d6	82.5	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2287067

Field Sample ID: G3WA0009

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	103	P	30 - 160
EPA 8321B	Acetaminophen-d4	122	P	30 - 160
EPA 8321B	Carbamazepine-d10	110	P	30 - 160
EPA 8321B	Diuron-d6	91.1	P	30 - 160
EPA 8321B	Endothall-d6	69.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	89.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	56.0	P	30 - 160
EPA 8321B	Primidone-d5	112	P	30 - 160
EPA 8321B	Sucralose-d6	78.5	P	30 - 160

Lab Sample ID: 2287068

Field Sample ID: G3WA0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	114	P	30 - 160
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	91.6	P	30 - 160
EPA 8321B	Diuron-d6	69.2	P	30 - 160
EPA 8321B	Endothall-d6	56.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	60.5	P	30 - 160
EPA 8321B	Primidone-d5	94.2	P	30 - 160
EPA 8321B	Sucralose-d6	77.5	P	30 - 160

Lab Sample ID: 2287069

Field Sample ID: FB_11012021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	88.9	P	30 - 160

Lab Sample ID: 2287070

Field Sample ID: FB_11012021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	110	P	30 - 160
EPA 8321B	Diuron-d6	109	P	30 - 160
EPA 8321B	Endothall-d6	68.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	112	P	30 - 160
EPA 8321B	Ibuprofen-d3	69.9	P	30 - 160
EPA 8321B	Primidone-d5	119	P	30 - 160
EPA 8321B	Sucralose-d6	77.9	P	30 - 160

Lab Sample ID: 2287071

Field Sample ID: G3WA0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	45.0	P	29 - 123
EPA 8270E	Decachlorobiphenyl	75.7	P	29 - 123
EPA 8270E	Tetrachloro-m-xylene	39.0	P	24 - 97.0
EPA 8270E	Tetrachloro-m-xylene	52.7	P	24 - 97.0

Quality Assurance Report Surrogates

Lab Sample ID: 2287071
Field Sample ID: G3WA0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	48.8	P	29 - 92.0
EPA 8276	PCNB	54.8	P	43 - 134

Lab Sample ID: 2287072
Field Sample ID: G3WA0010

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	67.4	P	29 - 123
EPA 8270E	Decachlorobiphenyl	72.9	P	29 - 123
EPA 8270E	Tetrachloro-m-xylene	62.5	P	24 - 97.0
EPA 8270E	Tetrachloro-m-xylene	47.6	P	24 - 97.0
EPA 8276	Decachlorobiphenyl	73.2	P	29 - 92.0
EPA 8276	PCNB	85.2	P	43 - 134

Lab Sample ID: 2287073
Field Sample ID: G3WA0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	52.3	P	20 - 200
EPA 8270E	Simazine-d10	100	P	73 - 135
EPA 8270E	Terbufos-d10	113	P	58 - 130

Lab Sample ID: 2287074
Field Sample ID: G3WA0010

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	52.9	P	20 - 200
EPA 8270E	Simazine-d10	104	P	73 - 135
EPA 8270E	Terbufos-d10	113	P	58 - 130

Lab Sample ID: 2287075
Field Sample ID: FB_11012021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	75.1	P	29 - 123
EPA 8270E	Decachlorobiphenyl	83.9	P	29 - 123
EPA 8270E	Tetrachloro-m-xylene	68.7	P	24 - 97.0
EPA 8270E	Tetrachloro-m-xylene	85.3	P	24 - 97.0
EPA 8276	Decachlorobiphenyl	78.3	P	29 - 92.0
EPA 8276	PCNB	79.3	P	43 - 134

Lab Sample ID: 2287076
Field Sample ID: FB_11012021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	48.3	P	20 - 200
EPA 8270E	Simazine-d10	85.3	P	73 - 135
EPA 8270E	Terbufos-d10	97.5	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A108663

Included Lab Sample IDs: 2287038, 2287039, 2287046, 2287047, 2287048, 2287051

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A108665

Included Lab Sample IDs: 2287034, 2287035, 2287040, 2287041, 2287042, 2287049

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

Reference Method: SM 2120 B-2011

Run ID: A108666

Included Lab Sample IDs: 2287034, 2287035, 2287040, 2287041, 2287042, 2287049

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A108702

Included Lab Sample IDs: 2287077, 2287078, 2287079, 2287080, 2287081, 2287082

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	107	104	P/P	90 - 110
Calcium	108	107	P/P	90 - 110
Iron	104	102	P/P	90 - 110
Iron	105	104	P/P	90 - 110
Magnesium	107	104	P/P	90 - 110
Magnesium	108	107	P/P	90 - 110
Potassium	100	97.9	P/P	90 - 110
Potassium	101	100	P/P	90 - 110
Sodium	104	102	P/P	90 - 110
Sodium	105	104	P/P	90 - 110
Strontium	102	105	P/P	90 - 110
Strontium	104	102	P/P	90 - 110
Tin	105	104	P/P	90 - 110
Tin	105	105	P/P	90 - 110
Titanium	101	102	P/P	90 - 110
Titanium	101	101	P/P	90 - 110
Vanadium	104	104	P/P	90 - 110
Vanadium	105	104	P/P	90 - 110
Zinc	107	106	P/P	90 - 110
Zinc	108	107	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A108707

Included Lab Sample IDs: 2287034, 2287035, 2287040, 2287041, 2287042, 2287049

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A108724

Included Lab Sample IDs: 2287045

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

Reference Method: EPA 8321B

Run ID: A108725

Included Lab Sample IDs: 2287064, 2287065, 2287066, 2287067, 2287068, 2287070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	100	94.5	P/P	60 - 160
AMPA	94.5	101	P/P	60 - 160
Glufosinate	101	99.7	P/P	60 - 160
Glufosinate	96.9	101	P/P	60 - 160
Glyphosate	108	109	P/P	60 - 160
Glyphosate	109	108	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A108728

Included Lab Sample IDs: 2287064, 2287065, 2287066, 2287067, 2287068, 2287070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	100	94.6	P/P	60 - 160
Acesulfame K	97.7	100	P/P	60 - 160
Endothall	73.2	69.9	P/P	60 - 160
Endothall	77.5	73.2	P/P	60 - 160
Sucralose	91.8	87.1	P/P	60 - 160
Sucralose	93.2	91.8	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A108733

Included Lab Sample IDs: 2287034, 2287035, 2287040, 2287041, 2287042, 2287049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	99.8	P/P	90 - 110
Sulfate	101	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A108740

Included Lab Sample IDs: 2287036, 2287037, 2287043, 2287044, 2287045, 2287050

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	99.5	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A108741

Included Lab Sample IDs: 2287036, 2287037, 2287043, 2287044, 2287045, 2287050

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.6	98.6	P/P	90 - 110
Organic Carbon	98.8	98.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A108758

Included Lab Sample IDs: 2287036, 2287037, 2287043, 2287044, 2287050

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.8	99.0	P/P	90 - 110
Total-P	98.8	97.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A108761

Included Lab Sample IDs: 2287077, 2287078, 2287079, 2287080, 2287081, 2287082

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	99.6	P/P	90 - 110
Aluminum	99.6	98.9	P/P	90 - 110
Antimony	103	104	P/P	90 - 110
Antimony	104	105	P/P	90 - 110
Arsenic	96.0	95.9	P/P	90 - 110
Arsenic	99.7	96.0	P/P	90 - 110
Barium	101	102	P/P	90 - 110
Barium	103	101	P/P	90 - 110
Beryllium	102	99.9	P/P	90 - 110
Beryllium	99.9	101	P/P	90 - 110
Boron	100	100	P/P	90 - 110
Boron	103	100	P/P	90 - 110
Cadmium	102	103	P/P	90 - 110
Cadmium	102	102	P/P	90 - 110
Chromium	101	104	P/P	90 - 110
Chromium	102	101	P/P	90 - 110
Copper	92.6	91.3	P/P	90 - 110
Copper	97.4	92.6	P/P	90 - 110
Lead	91.8	93.0	P/P	90 - 110
Lead	93.9	91.8	P/P	90 - 110
Manganese	99.0	99.1	P/P	90 - 110
Manganese	99.1	99.8	P/P	90 - 110
Molybdenum	100	101	P/P	90 - 110
Molybdenum	102	100	P/P	90 - 110
Nickel	92.5	90.1	P/P	90 - 110
Nickel	97.2	92.5	P/P	90 - 110
Selenium	102	100	P/P	90 - 110
Selenium	102	102	P/P	90 - 110
Silver	90.1	90.9	P/P	90 - 110
Silver	91.3	90.1	P/P	90 - 110
Thallium	100	97.7	P/P	90 - 110
Thallium	97.7	98.3	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A108777

Included Lab Sample IDs: 2287064, 2287065, 2287066, 2287067, 2287068, 2287070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	111	86.0	P/P	50 - 150
2,4-D	86.0	86.2	P/P	50 - 150
2,4,5-T	101	107	P/P	50 - 150
2,4,5-T	95.5	101	P/P	50 - 150
Acetaminophen	77.4	90.3	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A108777

Included Lab Sample IDs: 2287064, 2287065, 2287066, 2287067, 2287068, 2287070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	90.3	91.4	P/P	60 - 160
Acetamiprid	105	112	P/P	50 - 150
Acetamiprid	112	109	P/P	50 - 150
Afidopyropen	111	103	P/P	50 - 150
Afidopyropen	98.4	111	P/P	50 - 150
Bentazon	113	88.7	P/P	50 - 160
Bentazon	117	113	P/P	50 - 160
Benzovindiflupyr	110	116	P/P	50 - 150
Benzovindiflupyr	116	110	P/P	50 - 150
Carbamazepine	107	114	P/P	60 - 150
Carbamazepine	114	120	P/P	60 - 150
Clothianidin	129	120	P/P	60 - 150
Clothianidin	89.4	129	P/P	60 - 150
Dinotefuran	102	116	P/P	50 - 150
Dinotefuran	111	102	P/P	50 - 150
Diuron	113	119	P/P	60 - 160
Diuron	119	115	P/P	60 - 160
Fenuron	103	110	P/P	60 - 150
Fenuron	110	108	P/P	60 - 150
Fluridone	109	109	P/P	60 - 160
Fluridone	109	107	P/P	60 - 160
Hydrocodone	106	112	P/P	60 - 150
Hydrocodone	112	103	P/P	60 - 150
Ibuprofen	71.8	75.4	P/P	50 - 160
Ibuprofen	81.9	71.8	P/P	50 - 160
Imazapyr	111	108	P/P	50 - 150
Imazapyr	112	111	P/P	50 - 150
Imidacloprid	108	114	P/P	60 - 150
Imidacloprid	97.7	108	P/P	60 - 150
Linuron	114	116	P/P	60 - 150
Linuron	91.3	114	P/P	60 - 150
Mandestrobin	102	103	P/P	50 - 150
Mandestrobin	103	105	P/P	50 - 150
MCPP	88.8	99.9	P/P	50 - 150
MCPP	96.6	88.8	P/P	50 - 150
Naproxen	112	112	P/P	50 - 160
Naproxen	95.7	112	P/P	50 - 160
Primidone	113	108	P/P	60 - 150
Primidone	83.0	113	P/P	60 - 150
Pyraclostrobin	105	114	P/P	60 - 150
Pyraclostrobin	114	106	P/P	60 - 150
Thiamethoxam	106	118	P/P	50 - 150
Thiamethoxam	118	125	P/P	50 - 150
Tolfenpyrad	104	106	P/P	60 - 150
Tolfenpyrad	98.8	104	P/P	60 - 150
Triclopyr	105	109	P/P	50 - 150
Triclopyr	106	105	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A108784

Included Lab Sample IDs: 2287036, 2287037, 2287043, 2287044, 2287045, 2287050

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	99.0	P/P	90 - 110
Kjeldahl Nitrogen	98.6	102	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A108794

Included Lab Sample IDs: 2287034, 2287035, 2287040, 2287041, 2287042, 2287049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.6	99.9	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A108850

Included Lab Sample IDs: 2287071, 2287072, 2287075

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.1		P	80 - 120
Toxaphene	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A108853

Included Lab Sample IDs: 2287077, 2287078, 2287079, 2287080, 2287081, 2287082

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cobalt	95.0	92.9	P/P	90 - 110
Cobalt	99.4	95.0	P/P	90 - 110
Manganese	91.4	90.2	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A108877

Included Lab Sample IDs: 2287062, 2287063, 2287069

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	108	107	P/P	60 - 150
Aldicarb	104	81.8	P/P	60 - 150
Aldicarb Sulfone	102	107	P/P	50 - 150
Aldicarb Sulfoxide	102	112	P/P	50 - 150
Carbaryl	101	114	P/P	60 - 150
Carbofuran	97.0	105	P/P	50 - 150
Methiocarb	97.6	103	P/P	50 - 150
Methomyl	104	99.8	P/P	50 - 150
Oxamyl	104	107	P/P	50 - 150
Propoxur	107	109	P/P	50 - 150

Reference Method: EPA 8270E

Run ID: A108895

Included Lab Sample IDs: 2287073, 2287074, 2287076

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	102		P	80 - 120
Ametryn	99.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A108895

Included Lab Sample IDs: 2287073, 2287074, 2287076

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	102		P	80 - 120
Atrazine Desethyl	101		P	80 - 120
Azinphos Methyl	108		P	80 - 120
Azoxystrobin	96.7		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	96.2		P	80 - 120
Caffeine	101		P	80 - 120
Carbophenothion	112		P	80 - 120
Carfentrazone Ethyl	98.7		P	80 - 120
Chlorpyrifos Ethyl	105		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Cyanazine	104		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	103		P	80 - 120
Difenoconazole	105		P	80 - 120
Dimethenamid	103		P	80 - 120
Disulfoton	102		P	80 - 120
Dithiopyr	97.6		P	80 - 120
EPTC	103		P	80 - 120
Ethion	106		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	107		P	80 - 120
Fenbuconazole	110		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	108		P	80 - 120
Fipronil Sulfone	109		P	80 - 120
Fluazifop-P-butyl	108		P	80 - 120
Fludioxonil	100		P	80 - 120
Flumioxazin	105		P	80 - 120
Flutolanil	103		P	80 - 120
Fluxapyroxad	106		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	99.9		P	80 - 120
Imazalil	107		P	80 - 120
Iprodione	107		P	80 - 120
Malathion	93.2		P	80 - 120
Metalaxyl	98.8		P	80 - 120
Metolachlor	100		P	80 - 120
Metribuzin	106		P	80 - 120
Mevinphos	106		P	80 - 120
Molinate	101		P	80 - 120
Myclobutanil	107		P	80 - 120
Naled	105		P	80 - 120
Norflurazon	116		P	80 - 120
Oxadiazon	102		P	80 - 120
Oxyfluorfen	106		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	97.5		P	80 - 120
Pendimethalin	99.5		P	80 - 120
Phorate	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A108895

Included Lab Sample IDs: 2287073, 2287074, 2287076

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Prodiamine	107		P	80 - 120
Prometon	98.5		P	80 - 120
Prometryn	105		P	80 - 120
Pronamide	94.1		P	80 - 120
Propiconazole	110		P	80 - 120
Pyriproxyfen	105		P	80 - 120
Simazine	107		P	80 - 120
Sulfentrazone	104		P	80 - 120
Tebuconazole	106		P	80 - 120
Terbufos	101		P	80 - 120
Terbuthylazine	103		P	80 - 120

Reference Method: EPA 8270E

Run ID: A108898

Included Lab Sample IDs: 2287073, 2287074

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	102		P	80 - 120
Azoxystrobin	99.7		P	80 - 120
Flutolanil	100		P	80 - 120
Fluxapyroxad	101		P	80 - 120
Hexazinone	108		P	80 - 120
Metolachlor	105		P	80 - 120
Pendimethalin	102		P	80 - 120
Tebuconazole	105		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A108931

Included Lab Sample IDs: 2287036, 2287037, 2287043, 2287044, 2287045, 2287050

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.7	97.7	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A109033

Included Lab Sample IDs: 2287071, 2287072, 2287075

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Alpha-BHC	98.5		P	80 - 120
Alpha-Chlordane	98.6		P	80 - 120
Beta-BHC	88.6		P	80 - 120
Beta-Cyfluthrin	92.0		P	80 - 120
Bifenthrin	97.9		P	80 - 120
Chlorothalonil	82.7		P	80 - 120
Cis-Nonachlor	96.6		P	80 - 120
Cypermethrin	98.9		P	80 - 120
Dacthal	95.2		P	80 - 120
DDD-p,p'	96.4		P	80 - 120
DDE-p,p'	103		P	80 - 120
DDT-p,p'	95.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A109033

Included Lab Sample IDs: 2287071, 2287072, 2287075

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Delta-BHC	85.8		P	80 - 120
Deltamethrin	96.0		P	80 - 120
Dichlobenil	100		P	80 - 120
Dicofol	106		P	80 - 120
Dieldrin	99.3		P	80 - 120
Endosulfan I	93.0		P	80 - 120
Endosulfan II	92.9		P	80 - 120
Endosulfan Sulfate	105		P	80 - 120
Endrin	98.8		P	80 - 120
Endrin Aldehyde	89.4		P	80 - 120
Endrin Ketone	97.8		P	80 - 120
Esfenvalerate	92.7		P	80 - 120
Ethalfuralin	104		P	80 - 120
Fenpropathrin	96.2		P	80 - 120
Gamma-BHC	95.0		P	80 - 120
Gamma-Chlordane	97.8		P	80 - 120
Heptachlor	98.3		P	80 - 120
Heptachlor Epoxide	98.5		P	80 - 120
Hexachlorobenzene	103		P	80 - 120
Kepone	92.0		P	80 - 120
Lambda-Cyhalothrin	91.0		P	80 - 120
Methoprene	95.6		P	80 - 120
Methoxychlor	97.3		P	80 - 120
MGK-264	97.8		P	80 - 120
Mirex	99.0		P	80 - 120
Oxychlordane	92.9		P	80 - 120
Permethrin	96.3		P	80 - 120
Phenothrin	96.6		P	80 - 120
Piperonyl Butoxide	97.5		P	80 - 120
Prallethrin	89.5		P	80 - 120
Tau-Fluvalinate	92.0		P	80 - 120
Tetramethrin	95.4		P	80 - 120
Trans-Nonachlor	95.7		P	80 - 120
Triclosan Methyl	98.0		P	80 - 120
Trifluralin	99.3		P	80 - 120

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

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							0.120	
EPA 200.7 Rev. 4.4	Calcium	105		105	107				0.0248
	Iron	105		109	105	102			2.88
	Magnesium	102		110	103				2.27
	Potassium	102		101	102	99.7			1.57
	Sodium	101		102	105				0.820
	Strontium	100		104	99.0	99.3			0.268
	Tin	107		110	103	106			2.16
	Titanium	104		108	105	106			0.650
	Vanadium	104		110	104	105			0.656
	Zinc	106		112	103	104			0.956
EPA 200.8 Rev. 5.4	Aluminum	104		100	100	104			0.0731
	Antimony	110		111	111	114			0.371
	Arsenic	103		102	101	99.6			0.751
	Barium	110		109	109	109			0.108
	Beryllium	105		103	105	107			1.43
	Boron	103		99.4	99.2	105			0.174
	Cadmium	104		105	104	107			1.25
	Chromium	104		103	103	109			0.0890
	Cobalt	103		102	101	100			0.912
	Copper	98.9		95.9	95.2	95.0			0.763
	Lead	98.1		97.8	98.3	98.0			0.504
	Manganese	103		104	105				0.407
	Molybdenum	105		107	108	107			0.535
	Nickel	99.8		96.3	95.7	95.5			0.616
	Selenium	106		101	101	98.7			0.569
	Silver	101		100	99.8	101			0.473
	Thallium	105		107	108	108			0.656
EPA 300.0 Rev. 2.1	Chloride	102		100	101			1.37	
	Sulfate	103		103	102			1.98	
EPA 350.1 Rev. 2.0	Ammonia-N	96.8		98.4	98.4				0.0
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102		100	101				0.844
	Kjeldahl Nitrogen	103		95.6	102				5.79
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0		96.8	96.3				0.499
EPA 365.1 Rev. 2.0	Total-P	106		107	108				0.966
	Total-P	103		110	107				2.63
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.7		95.8	95.9				0.0900
EPA 8270E	Acetochlor	86.1	80.5	81.7	76.1	6.73			7.08
	Alachlor	79.4	76.0	84.1	77.4	4.37			8.31
	Aldrin	57.5	55.5	51.1	57.1	3.48			11.3
	Alpha-BHC	92.5	89.1	79.2	91.4	3.72			14.4
	Alpha-Chlordane	73.2	77.4	62.5	79.5	5.51			23.9
	Ametryn	77.2	78.4	76.3	70.2	1.53			8.34
	Atrazine	82.2	91.1	90.6	83.2	10.3			7.51
	Atrazine Desethyl	26.0	63.7	45.8	38.5	84.1			17.3
	Azinphos Methyl	47.8	119	239	292	85.1			19.8
	Azoxystrobin	82.4	84.9	88.8	82.7	2.97			7.11
	Beta-BHC	102	100	69.6	93.3	1.71			29.1
	Beta-Cyfluthrin	92.8	85.7	76.0	101	8.04			28.2
	Bifenthrin	61.3	55.6	58.6	70.7	9.78			18.7
	Bromacil	58.7	68.7			15.7			5.57
	Butylate	65.9	64.7	58.3	53.0	1.75			9.47
	Caffeine	90.1	99.7			10.1			1.71
	Carbophenothion	86.8	96.6	99.6	93.4	10.8			6.36

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Carfentrazone Ethyl	67.6	73.9	72.5	68.8	8.88	5.26
	Chlorothalonil	160	154	143	201	4.32	32.4
	Chlorpyrifos Ethyl	68.9	81.2	100	91.9	16.4	8.63
	Chlorpyrifos Methyl	103	105	108	103	2.13	5.51
	Cis-Nonachlor	79.5	71.2	54.0	66.6	10.9	20.9
	Cyanazine	70.9	85.1	86.6	76.5	18.2	12.5
	Cypermethrin	80.0	79.9	64.7	82.1	0.217	23.7
	Dacthal	92.1	94.1	77.9	95.8	2.14	20.6
	DDD-p,p'	78.6	79.5	57.3	72.5	1.24	23.4
	DDE-p,p'	79.0	82.3	71.5	86.3	4.16	18.8
	DDT-p,p'	82.3	94.2	69.9	83.0	13.5	17.1
	Delta-BHC	113	113	81.3	105	0.168	25.3
	Deltamethrin	75.2	73.3	32.4	52.3	2.56	47.0
	Demeton	87.0	83.8	95.3	89.2	3.80	6.59
	Diazinon	82.4	84.3	83.8	82.4	2.28	1.65
	Dichlobenil	91.9	95.0	64.3	81.4	3.37	23.5
	Dicofol	75.0	74.8	62.3	77.8	0.291	22.1
	Dieldrin	81.9	81.7	53.5	79.3	0.284	22.5
	Difenoconazole	78.1	73.2	73.0	68.6	6.49	6.25
	Dimethenamid	73.3	88.7	67.5	63.5	19.1	6.12
	Disulfoton	93.7	98.9	99.8	98.8	5.48	0.968
	Dithiopyr	72.0	73.0	75.1	70.8	1.32	5.94
	Endosulfan I	82.9	85.4	74.0	90.0	2.92	19.5
	Endosulfan II	85.8	87.7	78.0	97.1	2.10	21.9
	Endosulfan Sulfate	91.2	90.1	33.8	74.5	1.24	21.0
	Endrin	71.9	70.7	60.5	74.6	1.70	20.8
	Endrin Aldehyde	73.2	64.5	40.6	61.6	12.6	41.1
	Endrin Ketone	94.4	104	76.4	93.9	9.28	20.6
	EPTC	64.1	61.4	56.0	55.4	4.21	1.09
	Esfenvalerate	79.1	71.6	65.4	87.0	9.94	28.3
	Ethalfuralin	70.8	74.9	64.6	79.9	5.58	21.2
	Ethion	74.4	89.9	98.0	85.2	18.9	14.0
	Ethoprop	94.5	93.6	95.4	93.5	0.966	2.06
	Fenamiphos	100	106	98.4	97.5	5.60	0.921
	Fenbuconazole	65.6	104	109	113	45.3	3.44
	Fenpropathrin	79.9	71.7	63.0	77.4	10.7	20.5
	Fipronil	76.8	80.0	81.4	75.5	3.98	7.49
	Fipronil Desulfinyl	80.5	80.8	79.9	75.0	0.350	6.41
	Fipronil Sulfide	88.4	95.8	94.9	92.6	8.05	2.39
	Fipronil Sulfone	83.8	92.5	93.0	87.0	9.83	6.69
	Fluazifop-P-butyl	63.5	70.9	103	99.5	11.0	2.99
	Fludioxonil	69.7	73.0	73.7	67.5	4.60	8.76
	Flumioxazin	108	132	137	131	19.9	4.61
	Flutolanil	56.8	60.0	56.6	56.0	5.50	0.981
	Fluxapyroxad	47.8	102	90.8	87.3	72.0	3.94
	Fonofos	90.8	90.9	93.7	90.3	0.176	3.61
	Gamma-BHC	92.2	91.4	68.6	77.2	0.906	11.9
	Gamma-Chlordane	73.4	73.7	61.5	77.2	0.389	22.5
	Heptachlor	63.8	63.3	55.4	62.5	0.838	12.2
	Heptachlor Epoxide	81.4	79.7	67.3	86.6	2.06	25.1
	Hexachlorobenzene	71.3	71.4	59.0	68.3	0.163	14.6
	Hexazinone	89.8	98.4	102	97.8	9.09	4.61
	Imazalil	83.7	79.9	72.6	67.4	4.66	7.32
	Iprodione	54.4	105	96.7	90.9	63.4	6.18

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Kepone	19.5	28.4	17.5	20.0	37.2	13.1
	Lambda-Cyhalothrin	84.4	77.9	69.8	102	7.99	37.7
	Malathion	84.7	98.5	137	132	15.0	4.25
	Metalaxyl	71.7	72.6	91.3	91.2	1.26	0.105
	Methoprene	63.3	57.5	55.6	67.5	9.59	19.4
	Methoxychlor	81.6	83.9	67.7	86.2	2.75	24.1
	Metolachlor	84.7	80.1	77.8	75.1	5.61	3.54
	Metribuzin	88.5	96.4	95.2	92.1	8.59	3.26
	Mevinphos	82.1	96.1	105	91.7	15.7	13.5
	MGK-264	87.0	92.7	74.8	90.1	6.30	18.6
	Mirex	57.9	54.7	53.1	61.9	5.56	15.3
	Molinate	73.6	71.9	71.6	69.1	2.36	3.42
	Myclobutanil	65.9	69.9	66.6	62.7	5.87	6.06
	Naled	27.9	26.0	30.3	28.3	6.98	6.89
	Norflurazon	88.9	104			16.2	6.75
	Oxadiazon	56.2	88.0	63.3	58.3	44.2	8.36
	Oxychlordane	70.5	70.9	62.7	73.5	0.475	15.9
	Oxyfluorfen	80.8	85.9	93.9	87.6	6.14	6.94
	Parathion Ethyl	81.6	98.7	93.0	89.3	19.0	4.01
	Parathion Methyl	116	118	118	110	1.50	6.71
	Pendimethalin	96.7	88.3	103	100	9.09	2.29
	Permethrin	81.0	72.4	72.0	87.9	11.2	19.9
	Phenothrin	58.0	52.2	55.4	68.8	10.4	21.6
	Phorate	79.0	94.8	105	97.3	18.1	7.20
	Piperonyl Butoxide	91.3	89.1	76.3	90.7	2.42	17.3
	Prallethrin	78.2	75.7	57.7	72.4	3.26	22.6
	Prodiamine	124	115	140	133	7.83	5.34
	Prometon	70.4	72.2	76.7	72.2	2.44	6.01
	Prometryn	72.3	68.4	73.5	67.3	5.58	8.80
	Pronamide	80.4	81.7	84.1	78.0	1.57	7.60
	Propiconazole	102	98.2	95.8	91.4	3.39	4.70
	Pyriproxyfen	30.0	83.6	34.1	33.9	94.5	0.476
	Simazine	75.6	84.0	85.6	80.3	10.6	6.34
	Sulfentrazone	105	142	155	135	30.2	13.3
	Tau-Fluvalinate	67.5	60.7	61.1	73.1	10.5	17.8
	Tebuconazole	44.0	73.4	70.1	67.5	50.1	3.84
	Terbufos	114	108	117	114	5.18	2.97
	Terbuthylazine	76.7	80.9	82.0	77.3	5.24	5.93
	Tetramethrin	88.7	87.7	78.0	94.0	1.18	18.6
	Trans-Nonachlor	74.1	74.3	63.4	80.7	0.240	24.0
	Triclosan Methyl	83.3	85.8	73.1	90.0	3.01	20.7
	Trifluralin	68.8	69.8	61.2	73.4	1.36	18.2
EPA 8276	Chlordane	70.3	86.2	86.7	103	20.3	17.5
	Toxaphene	69.3	82.1	82.3	93.3	17.0	12.6
EPA 8321B	2,4-D	102		111	109		2.28
	2,4,5-T	92.0		101	112		10.1
	3-Hydroxycarbofuran	93.8		101	85.0		17.4
	Acesulfame K	89.0		123	133		7.60
	Acetaminophen	93.3		136	95.9		28.5
	Acetamiprid	104		119	103		14.8
	Afidopyropen	75.4		95.8	82.4		15.1
	Aldicarb	92.4		78.2	77.2		1.27
	Aldicarb Sulfone	98.2		118	96.3		20.4
	Aldicarb Sulfoxide	107		62.4	46.1		30.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	AMPA	103	89.9	87.7		2.52
	Bentazon	98.1	58.8	65.3		10.4
	Benzovindiflupyr	96.4	89.8	85.7		4.47
	Carbamazepine	107	114	111		2.41
	Carbaryl	89.0	62.5	66.0		5.35
	Carbofuran	88.5	76.5	71.8		6.36
	Clothianidin	115	123	92.2		28.7
	Dinotefuran	104	152	134		12.3
	Diuron	105	79.8	88.3		10.2
	Endothall	72.2	84.6	81.3		3.95
	Fenuron	102	90.7	85.0		6.50
	Fluridone	97.4	89.4	82.1		8.49
	Glufosinate	104	96.6	97.9		1.32
	Glyphosate	109	99.6	101		1.21
	Hydrocodone	94.0	110	99.3		10.6
	Ibuprofen	65.9	71.3	87.7		20.6
	Imazapyr	95.0	125	118		4.12
	Imidacloprid	105	194	181		6.28
	Linuron	96.2	80.4	76.7		4.63
	Mandestrobin	101	97.8	84.5		14.6
	MCPP	116	131	122		7.27
	Methiocarb	86.5	77.2	67.8		12.9
	Methomyl	98.3	93.2	83.8		10.6
	Naproxen	90.1	89.3	109		20.2
	Oxamyl	100	94.9	88.3		7.16
	Primidone	102	110	114		3.57
	Propoxur	87.1	76.6	67.0		13.5
	Pyraclostrobin	86.6	81.4	81.3		0.0843
	Sucralose	89.7	89.0	87.5		1.73
	Thiamethoxam	112	170	158		7.20
	Tolfenpyrad	54.2	49.9	54.4		8.63
	Triclopyr	89.6	108	107		0.852
SM 2120 B-2011	Color (true)	101			2.59	
SM 2320 B-2011	Total Alkalinity	98.3			1.35	
SM 2540 C-2011	TDS				8.08	
SM 4500 F-C-2011	Fluoride	100	99.5	100		0.476
SM 5310 B-2011	Organic Carbon	99.4	96.2	96.3		0.0659

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2287034, 2287035, 2287040, 2287041, 2287042, 2287049
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2287077, 2287078, 2287079, 2287080, 2287081, 2287082
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2287077, 2287078, 2287079, 2287080, 2287081, 2287082
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2287034, 2287035, 2287040, 2287041, 2287042, 2287049
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2287034, 2287035, 2287040, 2287041, 2287042, 2287049
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2287036, 2287037, 2287043, 2287044, 2287045, 2287050

Reference Method Descriptions

Method	Description	Associated Samples
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2287036, 2287037, 2287043, 2287044, 2287045, 2287050
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2287036, 2287037, 2287043, 2287044, 2287045, 2287050
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2287036, 2287037, 2287043, 2287044, 2287045, 2287050
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2287038, 2287039, 2287046, 2287047, 2287048, 2287051
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2287071, 2287072, 2287075
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2287073, 2287074, 2287076
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2287071, 2287072, 2287075
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2287062, 2287063, 2287069
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2287064, 2287065, 2287066, 2287067, 2287068, 2287070
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2287034, 2287035, 2287040, 2287041, 2287042, 2287049
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2287034, 2287035, 2287040, 2287041, 2287042, 2287049
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2287077, 2287078, 2287079, 2287080, 2287081, 2287082
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2287034, 2287035, 2287040, 2287041, 2287042, 2287049
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2287034, 2287035, 2287040, 2287041, 2287042, 2287049
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2287034, 2287035, 2287040, 2287041, 2287042, 2287049
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2287036, 2287037, 2287043, 2287044, 2287045, 2287050

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	11/01/2021			11/02/2021 16:49	Khloe J Berg	2287034, 2287035, 2287040, 2287041, 2287042, 2287049
EPA 200.7 Rev. 4.4	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/03/2021 20:41	Josef B Mick	2287082
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/03/2021 21:26	Josef B Mick	2287077
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/03/2021 22:04	Josef B Mick	2287078
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/03/2021 22:09	Josef B Mick	2287079
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/03/2021 22:17	Josef B Mick	2287080
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/03/2021 22:23	Josef B Mick	2287081
EPA 200.8 Rev. 5.4	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/05/2021 18:43	Alexander Thompson	2287082
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/05/2021 19:31	Alexander Thompson	2287077
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/05/2021 20:39	Alexander Thompson	2287078
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/05/2021 20:48	Alexander Thompson	2287079
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/05/2021 20:58	Alexander Thompson	2287080
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/05/2021 21:08	Alexander Thompson	2287081
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/10/2021 13:25	Alexander Thompson	2287082
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/10/2021 13:52	Alexander Thompson	2287077
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/10/2021 14:39	Alexander Thompson	2287078
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/10/2021 14:46	Alexander Thompson	2287079
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/10/2021 14:52	Alexander Thompson	2287080
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/10/2021 14:59	Alexander Thompson	2287081
	11/01/2021	11/03/2021 10:30	Emily M Philpot	11/10/2021 15:06	Alexander Thompson	2287081
EPA 300.0 Rev. 2.1	11/01/2021			11/04/2021 05:04	Roberta Tatti	2287034
	11/01/2021			11/04/2021 05:17	Roberta Tatti	2287035
	11/01/2021			11/04/2021 05:28	Roberta Tatti	2287040
	11/01/2021			11/04/2021 05:41	Roberta Tatti	2287041
	11/01/2021			11/04/2021 05:53	Roberta Tatti	2287042
	11/01/2021			11/04/2021 06:05	Roberta Tatti	2287049
EPA 350.1 Rev. 2.0	11/01/2021			11/16/2021 11:35	Ping Hua	2287036
	11/01/2021			11/16/2021 11:44	Ping Hua	2287037
	11/01/2021			11/16/2021 11:45	Ping Hua	2287043
	11/01/2021			11/16/2021 11:47	Ping Hua	2287044
	11/01/2021			11/16/2021 11:48	Ping Hua	2287045
	11/01/2021			11/16/2021 11:49	Ping Hua	2287050
EPA 351.2 Rev. 2.0	11/01/2021	11/05/2021 12:13	Benjamin T. Nordmann	11/08/2021 13:23	Alexandra J Mattheus	2287036
	11/01/2021	11/05/2021 12:13	Benjamin T. Nordmann	11/08/2021 13:25	Alexandra J Mattheus	2287037
	11/01/2021	11/05/2021 12:13	Benjamin T. Nordmann	11/08/2021 13:26	Alexandra J Mattheus	2287043
	11/01/2021	11/05/2021 12:13	Benjamin T. Nordmann	11/08/2021 13:28	Alexandra J Mattheus	2287044
	11/01/2021	11/05/2021 12:13	Benjamin T. Nordmann	11/08/2021 13:33	Alexandra J Mattheus	2287045
	11/01/2021	11/05/2021 12:13	Benjamin T. Nordmann	11/08/2021 13:38	Alexandra J Mattheus	2287050
EPA 353.2 Rev. 2.0	11/01/2021			11/05/2021 09:44	Beverly Y. Sanders	2287043

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 353.2 Rev. 2.0	11/01/2021			11/05/2021 09:51	Beverly Y. Sanders	2287036
	11/01/2021			11/05/2021 09:52	Beverly Y. Sanders	2287037
	11/01/2021			11/05/2021 09:54	Beverly Y. Sanders	2287044
	11/01/2021			11/05/2021 09:55	Beverly Y. Sanders	2287045
	11/01/2021			11/05/2021 09:56	Beverly Y. Sanders	2287050
EPA 365.1 Rev. 2.0	11/01/2021	11/03/2021 16:35	Simonne.V. Calhoun	11/04/2021 15:05	Lipi Saha	2287045
	11/01/2021	11/03/2021 16:35	Simonne.V. Calhoun	11/05/2021 15:57	Sarah A Nixon	2287036
	11/01/2021	11/03/2021 16:35	Simonne.V. Calhoun	11/05/2021 15:58	Sarah A Nixon	2287037
	11/01/2021	11/03/2021 16:35	Simonne.V. Calhoun	11/05/2021 15:59	Sarah A Nixon	2287043
	11/01/2021	11/03/2021 16:35	Simonne.V. Calhoun	11/05/2021 16:17	Sarah A Nixon	2287050
EPA 365.1 Rev. 2.0 dissolved	11/01/2021	11/03/2021 16:35	Simonne.V. Calhoun	11/05/2021 16:19	Sarah A Nixon	2287044
	11/01/2021			11/02/2021 14:51	James L Waggeberby	2287038
	11/01/2021			11/02/2021 14:54	James L Waggeberby	2287039
	11/01/2021			11/02/2021 14:55	James L Waggeberby	2287046, 2287047
	11/01/2021			11/02/2021 14:56	James L Waggeberby	2287048
EPA 8270E	11/01/2021			11/02/2021 14:57	James L Waggeberby	2287051
	11/01/2021	11/02/2021 10:00	Fe-Val Siddell	11/06/2021 16:54	Michael Poppell	2287073
	11/01/2021	11/02/2021 10:00	Fe-Val Siddell	11/06/2021 17:19	Michael Poppell	2287074
	11/01/2021	11/02/2021 10:00	Fe-Val Siddell	11/06/2021 17:45	Michael Poppell	2287076
	11/01/2021	11/02/2021 10:00	Fe-Val Siddell	11/11/2021 20:57	Michael Poppell	2287073
	11/01/2021	11/02/2021 10:00	Fe-Val Siddell	11/11/2021 21:22	Michael Poppell	2287074
	11/01/2021	11/17/2021 08:00	Fe-Val Siddell	11/19/2021 01:18	Julie Wi	2287071
	11/01/2021	11/17/2021 08:00	Fe-Val Siddell	11/19/2021 01:49	Julie Wi	2287072
EPA 8276	11/01/2021	11/17/2021 08:00	Fe-Val Siddell	11/19/2021 02:20	Julie Wi	2287075
	11/01/2021	11/02/2021 09:00	Julie Wi	11/10/2021 15:51	Michael Poppell	2287071
	11/01/2021	11/02/2021 09:00	Julie Wi	11/10/2021 16:46	Michael Poppell	2287072
	11/01/2021	11/02/2021 09:00	Julie Wi	11/10/2021 17:41	Michael Poppell	2287075
EPA 8321B	11/01/2021	11/03/2021 09:00	Hoor Shaik	11/04/2021 20:30	Juyoung Kim	2287064
	11/01/2021	11/03/2021 09:00	Hoor Shaik	11/04/2021 21:05	Juyoung Kim	2287065
	11/01/2021	11/03/2021 09:00	Hoor Shaik	11/04/2021 21:40	Juyoung Kim	2287066
	11/01/2021	11/03/2021 09:00	Hoor Shaik	11/04/2021 22:14	Juyoung Kim	2287067
	11/01/2021	11/03/2021 09:00	Hoor Shaik	11/04/2021 23:23	Juyoung Kim	2287068
	11/01/2021	11/03/2021 09:00	Hoor Shaik	11/04/2021 23:58	Juyoung Kim	2287070
	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/03/2021 13:10	Juyoung Kim	2287064
	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/03/2021 13:21	Juyoung Kim	2287065
	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/03/2021 13:31	Juyoung Kim	2287066
	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/03/2021 13:42	Juyoung Kim	2287067
	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/03/2021 13:53	Juyoung Kim	2287068
	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/03/2021 14:14	Juyoung Kim	2287070
	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/04/2021 18:39	Manjita Shrestha	2287064

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/04/2021 18:54	Manjita Shrestha	2287065
	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/04/2021 19:09	Manjita Shrestha	2287066
	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/04/2021 19:24	Manjita Shrestha	2287067
	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/04/2021 19:53	Manjita Shrestha	2287068
	11/01/2021	11/03/2021 11:50	Juyoung Kim	11/04/2021 20:08	Manjita Shrestha	2287070
	11/01/2021	11/08/2021 09:00	Hoor Shaik	11/09/2021 00:20	Juyoung Kim	2287062
	11/01/2021	11/08/2021 09:00	Hoor Shaik	11/09/2021 00:55	Juyoung Kim	2287063
	11/01/2021	11/08/2021 09:00	Hoor Shaik	11/09/2021 01:29	Juyoung Kim	2287069
	11/01/2021			11/02/2021 16:11	Sarah A Nixon	2287034, 2287035
SM 2120 B-2011	11/01/2021			11/02/2021 16:12	Sarah A Nixon	2287040
	11/01/2021			11/02/2021 16:13	Sarah A Nixon	2287041, 2287042
	11/01/2021			11/02/2021 16:14	Sarah A Nixon	2287049
	11/01/2021			11/06/2021 01:02	Dale L. Simmons	2287034
SM 2320 B-2011	11/01/2021			11/06/2021 01:08	Dale L. Simmons	2287035
	11/01/2021			11/06/2021 01:16	Dale L. Simmons	2287040
	11/01/2021			11/06/2021 01:23	Dale L. Simmons	2287041
	11/01/2021			11/06/2021 01:32	Dale L. Simmons	2287042
	11/01/2021			11/06/2021 01:37	Dale L. Simmons	2287049
SM 2340B	11/01/2021			11/03/2021 20:41	Josef B Mick	2287082
	11/01/2021			11/03/2021 21:26	Josef B Mick	2287077
	11/01/2021			11/03/2021 22:04	Josef B Mick	2287078
	11/01/2021			11/03/2021 22:09	Josef B Mick	2287079
	11/01/2021			11/03/2021 22:17	Josef B Mick	2287080
	11/01/2021			11/03/2021 22:23	Josef B Mick	2287081
SM 2540 C-2011	11/01/2021			11/05/2021 15:08	Yijie Li	2287034, 2287035, 2287040, 2287041, 2287042, 2287049
SM 2540 D-2011	11/01/2021			11/05/2021 15:35	Yijie Li	2287034, 2287035, 2287040, 2287041, 2287042, 2287049
SM 4500 F-C-2011	11/01/2021			11/03/2021 18:00	Dale L. Simmons	2287034
	11/01/2021			11/03/2021 18:09	Dale L. Simmons	2287035
	11/01/2021			11/03/2021 18:20	Dale L. Simmons	2287040
	11/01/2021			11/03/2021 18:29	Dale L. Simmons	2287041
	11/01/2021			11/03/2021 18:41	Dale L. Simmons	2287042
	11/01/2021			11/03/2021 18:49	Dale L. Simmons	2287049
SM 5310 B-2011	11/01/2021			11/03/2021 18:55	Khloe J Berg	2287036
	11/01/2021			11/03/2021 19:39	Khloe J Berg	2287037
	11/01/2021			11/03/2021 20:39	Khloe J Berg	2287043
	11/01/2021			11/03/2021 20:49	Khloe J Berg	2287044
	11/01/2021			11/03/2021 21:00	Khloe J Berg	2287045
	11/01/2021			11/03/2021 21:11	Khloe J Berg	2287050