

Chemical Analysis Report

NE-DIST-2020-02-06-02

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

Event Description: **ICW Boat 2020**
Request ID: **RQ-2020-02-03-15**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
Attn: Jeremy Parrish

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: Liang Lin, Environmental Administrator

Date Certified: 02-MAR-2020 14:07

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored background.

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: Hopkins CR at Kings Rd.

Collection Date/Time: 02/05/2020 09:55

Field ID: 20030758

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2155135	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P378459	
	EPA 300.0 Rev. 2.1	Bromide	42		mg Br/L	P378844	
	SM 2320 B-2011	Total Alkalinity	114		mg CaCO3/L	P378743	
	SM 2540 D-2011	TSS	4	I	mg/L	P379043	
	SM 4500 F-C-2011	Fluoride	0.81		mg F/L	P378746	
2155136	EPA 350.1 Rev. 2.0	Ammonia-N	0.040		mg N/L	P378887	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.47		mg N/L	P378759	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.054		mg N/L	P379223	
	EPA 365.1 Rev. 2.0	Total-P	0.067		mg P/L	P378812	
	SM 5310 B-2011	Organic Carbon	7.5		mg C/L	P378685	
2155137	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.043		mg P/L	P378451	
2155170	EPA 200.7 Rev. 4.4	Iron	99	I	ug/L	P378793	
		Manganese	11	I	ug/L	P378793	
		Zinc	15	U	ug/L	P378793	
	EPA 200.8 Rev. 5.4	Aluminum	175		ug/L	P378793	
		Antimony	0.21	I	ug/L	P378793	
		Arsenic	2.02		ug/L	P378793	
		Cadmium	0.080	U	ug/L	P378793	
		Chromium	1.6	U	ug/L	P378793	
		Copper	1.6	U	ug/L	P378793	
		Lead	0.80	U	ug/L	P378793	
		Nickel	2.0	U	ug/L	P378793	
		Selenium	0.80	U	ug/L	P378793	
		Silver	0.040	U	ug/L	P378793	
		Thallium	0.40	U	ug/L	P378793	

Sample Location: ICW @ CM 15 Duval CO

Collection Date/Time: 02/05/2020 10:20

Field ID: 27010114

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2155126	EPA 180.1 Rev. 2.0	Turbidity	5.9		NTU	P378458	
	EPA 300.0 Rev. 2.1	Bromide	40		mg Br/L	P378844	
	SM 2320 B-2011	Total Alkalinity	104		mg CaCO3/L	P378743	
	SM 2540 D-2011	TSS	10	A	mg/L	P379043	
	SM 4500 F-C-2011	Fluoride	0.77		mg F/L	P378746	
2155127	EPA 350.1 Rev. 2.0	Ammonia-N	0.028		mg N/L	P378887	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.52		mg N/L	P379035	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P379223	
	EPA 365.1 Rev. 2.0	Total-P	0.071		mg P/L	P378812	
	SM 5310 B-2011	Organic Carbon	7.7		mg C/L	P378685	
2155128	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.042		mg P/L	P378451	
2155163	EPA 8321B	Aldicarb	0.020	U	ug/L	P378510	RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P378510	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P378510	
		Carbaryl	0.0020	U	ug/L	P378510	
		Carbofuran	0.0020	U	ug/L	P378510	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P378510	
		Methiocarb	0.0020	U	ug/L	P378510	
		Methomyl	0.0020	U	ug/L	P378510	
		Oxamyl	0.0020	U	ug/L	P378510	
		Propoxur	0.0020	U	ug/L	P378510	MS
		2,4-D	0.010		ug/L	P378510	
		Acesulfame K**	0.10	UJ	ug/L	P378544	MS, SUR
		AMPA**	0.10	UJ	ug/L	P378544	SUR
2155164		Sucralose**	0.16		ug/L	P378544	
		Acetaminophen**	0.0080	U	ug/L	P378510	
		Acetamiprid**	0.0020	U	ug/L	P378510	
		Endothal**	0.25	UJ	ug/L	P378544	SUR
		Glufosinate**	0.10	UJ	ug/L	P378544	SUR
		Glyphosate**	0.10	UJ	ug/L	P378544	SUR
		Afidopyropen**	0.0020	UJ	ug/L	P378510	
		Bentazon	0.0078		ug/L	P378510	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P378510	
		Carbamazepine**	9.7E-04	I	ug/L	P378510	
		Clothianidin**	0.0020	U	ug/L	P378510	
		Dinotefuran**	0.0020	U	ug/L	P378510	
		Diuron	0.010		ug/L	P378510	
		Fenuron	0.016	U	ug/L	P378510	
		Fluridone**	0.0032	I	ug/L	P378510	
		Imazapyr**	0.045		ug/L	P378510	
		Hydrocodone**	0.0020	U	ug/L	P378510	
		Ibuprofen**	0.020	U	ug/L	P378510	
		Imidacloprid	0.24		ug/L	P378510	

Field ID: 27010114

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2155164	EPA 8321B	Linuron	0.0040	U	ug/L	P378510	
		Mandestrobin**	0.0020	UJ	ug/L	P378510	
		MCP	0.0020	U	ug/L	P378510	
		Naproxen**	0.0080	U	ug/L	P378510	
		Primidone**	0.0040	U	ug/L	P378510	
		Pyraclostrobin**	0.0020	U	ug/L	P378510	
		Thiamethoxam**	0.0020	U	ug/L	P378510	
		Tolfenpyrad**	0.0020	U	ug/L	P378510	
		Triclopyr**	0.0040	U	ug/L	P378510	
2155165	EPA 8270E	Aldrin	4.1	U	ng/L	P378791	
		Alpha-BHC	2.0	U	ng/L	P378791	
		Alpha-Chlordane	1.0	U	ng/L	P378791	
		Beta-BHC	10	U	ng/L	P378791	
		Bifenthrin**	4.1	U	ng/L	P378791	
		Delta-BHC	8.1	U	ng/L	P378791	
		Gamma-BHC	8.1	U	ng/L	P378791	
		Carbophenothion	10	U	ng/L	P378791	
		Chlorothalonil	2.0	U	ng/L	P378791	
		Cis-Nonachlor**	1.0	U	ng/L	P378791	
		Cypermethrin	20	U	ng/L	P378791	
		DDD-p,p'	6.1	U	ng/L	P378791	
		DDE-p,p'	6.1	U	ng/L	P378791	
		DDT-p,p'	7.1	U	ng/L	P378791	
		Dicofol	30	U	ng/L	P378791	MS
		Dieldrin	4.1	U	ng/L	P378791	
		Endosulfan I	4.1	U	ng/L	P378791	
		Endosulfan II	4.1	U	ng/L	P378791	
		Endosulfan Sulfate	2.0	U	ng/L	P378791	
		Endrin	2.0	U	ng/L	P378791	
		Endrin Aldehyde	2.0	U	ng/L	P378791	
		Endrin Ketone	2.0	U	ng/L	P378791	
		Ethalfuralin**	3.0	U	ng/L	P378791	
		Gamma-Chlordane	1.0	U	ng/L	P378791	
		Heptachlor	1.5	U	ng/L	P378791	
		Heptachlor Epoxide	2.0	U	ng/L	P378791	
		Hexachlorobenzene	2.0	U	ng/L	P378791	
		Methoxychlor	4.1	U	ng/L	P378791	
		Mirex	2.0	U	ng/L	P378791	
		Permethrin	10	U	ng/L	P378791	
		Trans-Nonachlor**	1.0	U	ng/L	P378791	
		Trifluralin	2.5	U	ng/L	P378791	
	EPA 8276	Chlordane	5.1	U	ng/L	P378791	
		Toxaphene	30	U	ng/L	P378791	
2155166	EPA 8270E	Acetochlor	0.26	U	ng/L	P378502	
		Alachlor	0.26	U	ng/L	P378502	

Field ID: 27010114

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2155166	EPA 8270E	Ametryn	0.62	U	ng/L	P378502	
		Atrazine	5.3		ng/L	P378502	MS
		Atrazine Desethyl	1.6	U	ng/L	P378502	
		Azinphos Methyl	2.1	U	ng/L	P378502	
		Bromacil	0.52	U	ng/L	P378502	
		Butylate	0.41	U	ng/L	P378502	
		Carbophenothion	0.52	U	ng/L	P378502	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P378502	
		Chlorpyrifos Methyl	0.052	U	ng/L	P378502	
		Cyanazine	3.4	UJ	ng/L	P378502	CCV
		Demeton	1.6	U	ng/L	P378502	
		Diazinon	0.13	U	ng/L	P378502	
		Dimethenamid**	0.10	U	ng/L	P378502	
		Disulfoton	0.52	U	ng/L	P378502	
		Dithiopyr**	0.10	U	ng/L	P378502	
		EPTC	1.3	U	ng/L	P378502	
		Ethion	0.16	U	ng/L	P378502	
		Ethoprop	0.10	U	ng/L	P378502	
		Fenamiphos	0.52	U	ng/L	P378502	
		Fipronil	0.26	U	ng/L	P378502	
		Fipronil Desulfinyl**	0.13	U	ng/L	P378502	MS
		Fipronil Sulfide	0.16	U	ng/L	P378502	MS
		Fipronil Sulfone	0.22	I	ng/L	P378502	
		Flumioxazin**	1.8	U	ng/L	P378502	MS
		Fonofos	0.21	U	ng/L	P378502	
		Hexazinone	0.52	U	ng/L	P378502	
		Imazalil**	0.78	U	ng/L	P378502	
		Malathion	0.36	U	ng/L	P378502	
		Metalaxyl	0.83	I	ng/L	P378502	MS, RPD
		Metolachlor	7.3		ng/L	P378502	
		Metribuzin	36		ng/L	P378502	
		Mevinphos	0.52	U	ng/L	P378502	
		Molinate	0.31	U	ng/L	P378502	MS
		Norflurazon	0.52	U	ng/L	P378502	
		Oxadiazon**	0.52		ng/L	P378502	
		Parathion Ethyl	0.26	U	ng/L	P378502	
		Parathion Methyl	0.57	U	ng/L	P378502	
		Pendimethalin	1.0	U	ng/L	P378502	
		Phorate	0.26	U	ng/L	P378502	
		Prodiamine**	0.18	UJ	ng/L	P378502	RPD
		Prometon	0.93	U	ng/L	P378502	
		Prometryn	0.21	U	ng/L	P378502	
		Pronamide**	0.16	U	ng/L	P378502	
		Propiconazole**	0.52	U	ng/L	P378502	
		Simazine	3.7		ng/L	P378502	

Field ID: 27010114

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2155166	EPA 8270E	Sulfentrazone**	1.2	I	ng/L	P378502	RPD
		Tebuconazole**	5.2		ng/L	P378502	
		Terbufos	0.10	U	ng/L	P378502	
		Terbuthylazine	0.44	U	ng/L	P378502	
2155167	EPA 200.7 Rev. 4.4	Iron	190	I	ug/L	P378793	
		Manganese	8.0	I	ug/L	P378793	
		Zinc	15	U	ug/L	P378793	
	EPA 200.8 Rev. 5.4	Aluminum	289		ug/L	P378793	
		Antimony	0.20	U	ug/L	P378793	
		Arsenic	2.05		ug/L	P378793	
		Cadmium	0.080	U	ug/L	P378793	
		Chromium	1.6	U	ug/L	P378793	
		Copper	1.6	U	ug/L	P378793	
		Lead	0.80	U	ug/L	P378793	
		Nickel	2.0	U	ug/L	P378793	
		Selenium	0.80	U	ug/L	P378793	
		Silver	0.040	U	ug/L	P378793	
		Thallium	0.40	U	ug/L	P378793	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8321B: Results confirmed in sample duplicate. Refer to the Lab Analysis Report for an explanation of QC Codes.

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

Sample Location: Sisters Creek at Heckscher Dr.

Collection Date/Time: 02/05/2020 10:55

Field ID: 20030491

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2155138	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P378459	
	EPA 300.0 Rev. 2.1	Bromide	39		mg Br/L	P378844	
	SM 2320 B-2011	Total Alkalinity	102		mg CaCO3/L	P378743	
	SM 2540 D-2011	TSS	8	I	mg/L	P379043	
	SM 4500 F-C-2011	Fluoride	0.75		mg F/L	P378746	
2155139	EPA 350.1 Rev. 2.0	Ammonia-N	0.030		mg N/L	P378887	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.45		mg N/L	P378759	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P379223	
	EPA 365.1 Rev. 2.0	Total-P	0.080		mg P/L	P378812	
	SM 5310 B-2011	Organic Carbon	7.9		mg C/L	P378685	
2155140	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.046		mg P/L	P378451	

Sample Location: Cedar CR Blanding Blvd. BR RT 21

Collection Date/Time: 02/05/2020 12:30

Field ID: 20030083

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2155129	EPA 180.1 Rev. 2.0	Turbidity	4.3	A	NTU	P378459	
	EPA 300.0 Rev. 2.1	Bromide	9.5		mg Br/L	P378844	
	SM 2320 B-2011	Total Alkalinity	109		mg CaCO3/L	P378558	
	SM 2540 D-2011	TSS	5	I	mg/L	P379040	
	SM 4500 F-C-2011	Fluoride	0.27		mg F/L	P378834	
2155131	EPA 350.1 Rev. 2.0	Ammonia-N	0.066		mg N/L	P378887	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P378759	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.28		mg N/L	P379223	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P378812	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P378683	
2155133	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.047		mg P/L	P378451	
2155168	EPA 200.7 Rev. 4.4	Iron	220		ug/L	P378666	
		Manganese	43.9		ug/L	P378666	
		Zinc	15	I	ug/L	P378666	
	EPA 200.8 Rev. 5.4	Aluminum	72		ug/L	P378666	
		Antimony	0.25		ug/L	P378666	
		Arsenic	1.75		ug/L	P378666	
		Cadmium	0.020	U	ug/L	P378666	
		Chromium	0.40	U	ug/L	P378666	
		Copper	2.11		ug/L	P378666	
		Lead	1.22		ug/L	P378666	
		Nickel	0.60	I	ug/L	P378666	
		Selenium	0.20	U	ug/L	P378666	
		Silver	0.010	U	ug/L	P378666	
		Thallium	0.10	U	ug/L	P378666	

Ref. Method and Comment:

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

Sample Location: Ortega R BR Roosevelt Blvd.

Collection Date/Time: 02/05/2020 12:45

Field ID: 20030077

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2155130	EPA 180.1 Rev. 2.0	Turbidity	3.8		NTU	P378459	
	EPA 300.0 Rev. 2.1	Bromide	11		mg Br/L	P378844	
	SM 2320 B-2011	Total Alkalinity	86		mg CaCO3/L	P378558	
	SM 2540 D-2011	TSS	10	I	mg/L	P379040	
	SM 4500 F-C-2011	Fluoride	0.27		mg F/L	P378746	
2155132	EPA 350.1 Rev. 2.0	Ammonia-N	0.026		mg N/L	P378887	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.74		mg N/L	P378759	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.29		mg N/L	P379223	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P378812	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P378683	
2155134	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.056		mg P/L	P378451	
2155169	EPA 200.7 Rev. 4.4	Iron	170		ug/L	P378666	
		Manganese	13.0		ug/L	P378666	
		Zinc	8.1	I	ug/L	P378666	
	EPA 200.8 Rev. 5.4	Aluminum	96		ug/L	P378666	
		Antimony	0.13	I	ug/L	P378666	
		Arsenic	1.55		ug/L	P378666	
		Cadmium	0.020	U	ug/L	P378666	
		Chromium	0.40	U	ug/L	P378666	
		Copper	2.71		ug/L	P378666	
		Lead	0.48		ug/L	P378666	
		Nickel	0.50	U	ug/L	P378666	
		Selenium	0.20	I	ug/L	P378666	
		Silver	0.010	U	ug/L	P378666	
		Thallium	0.10	U	ug/L	P378666	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P378458

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P378459

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P378666

Component	Result	Code	Units
Iron	30	U	ug/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P378793

Component	Result	Code	Units
Iron	30	U	ug/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378666

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378793

Component	Result	Code	Units
Aluminum	17	I	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.65	I	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378793

Component	Result	Code	Units
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: P378844

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P378887

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P378759

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P379035

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P379223

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P378812

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P378451

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

Reference Method: EPA 8270E
Batch ID: P378502

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P378502

Component	Result	Code	Units
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Carbophenothion	0.50	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Flumioxazin	1.8	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P378791

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	10	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	6.0	U	ng/L
DDE-p,p'	6.0	U	ng/L
DDT-p,p'	7.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfuralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P378791

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

Reference Method: EPA 8321B
Batch ID: P378510

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyrophen	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P378510

Component	Result	Code	Units
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P378544

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

Reference Method: SM 2320 B-2011
Batch ID: P378558

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

Reference Method: SM 2320 B-2011
Batch ID: P378743

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P379040

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P379043

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P378746

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-2011
Batch ID: P378834

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P378683

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

Reference Method: SM 5310 B-2011
Batch ID: P378685

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: P378666

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	108		P	85 - 115
Manganese	105		P	85 - 115
Zinc	103		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P378793

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	107		P	85 - 115
Manganese	108		P	85 - 115
Zinc	105		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378666

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	106		P	85 - 115
Arsenic	103		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	98.2		P	85 - 115
Copper	101		P	85 - 115
Lead	98.6		P	85 - 115
Nickel	100		P	85 - 115
Selenium	101		P	85 - 115
Silver	104		P	85 - 115
Thallium	96.8		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378793

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	104		P	85 - 115
Antimony	102		P	85 - 115
Arsenic	102		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	103		P	85 - 115
Copper	101		P	85 - 115
Lead	96.1		P	85 - 115
Nickel	101		P	85 - 115
Selenium	104		P	85 - 115
Silver	104		P	85 - 115
Thallium	91.9		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P378844

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P378887

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P378759

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: P379035

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P379223

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P378812

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P378451

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

Reference Method: EPA 8270E
Batch ID: P378502

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	93.2	92.0	P/P	71 - 122
Alachlor	98.5	93.3	P/P	70 - 121
Ametryn	103	96.2	P/P	49 - 137
Atrazine	95.7	93.1	P/P	76 - 125
Atrazine Desethyl	91.8	81.7	P/P	31 - 144
Azinphos Methyl	121	115	P/P	67 - 150
Bromacil	88.3	93.9	P/P	36 - 121
Butylate	70.1	73.3	P/P	33 - 88.0
Carbophenothion	88.1	91.1	P/P	50 - 150
Chlorpyrifos Ethyl	96.3	98.9	P/P	73 - 117
Chlorpyrifos Methyl	94.7	93.1	P/P	68 - 121
Cyanazine	116	105	P/P	20 - 250
Demeton	75.0	83.1	P/P	30 - 123
Diazinon	96.0	92.4	P/P	70 - 128
Dimethenamid	94.1	93.7	P/P	66 - 122
Disulfoton	72.9	89.4	P/P	46 - 124

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P378502

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dithiopyr	88.7	88.7	P/P	69 - 122
EPTC	49.8	41.1	P/P	31 - 90.0
Ethion	87.9	87.2	P/P	45 - 135
Ethoprop	82.5	79.8	P/P	59 - 118
Fenamiphos	98.2	103	P/P	30 - 136
Fipronil	108	109	P/P	57 - 127
Fipronil Desulfinyl	92.2	96.4	P/P	51 - 122
Fipronil Sulfide	90.1	95.9	P/P	57 - 119
Fipronil Sulfone	86.9	93.8	P/P	51 - 119
Flumioxazin	116	127	P/P	70 - 200
Fonofos	83.3	86.4	P/P	60 - 120
Hexazinone	88.1	93.0	P/P	57 - 142
Imazalil	82.7	94.6	P/P	50 - 150
Malathion	97.2	82.0	P/P	67 - 128
Metalaxyl	89.0	91.7	P/P	21 - 148
Metolachlor	96.3	83.5	P/P	70 - 120
Metribuzin	173	156	P/P	20 - 253
Mevinphos	79.9	79.1	P/P	47 - 116
Molinate	61.6	58.1	P/P	41 - 99.0
Norflurazon	93.3	96.7	P/P	54 - 127
Oxadiazon	81.1	80.0	P/P	65 - 122
Parathion Ethyl	85.2	91.3	P/P	71 - 113
Parathion Methyl	92.8	92.5	P/P	73 - 129
Pendimethalin	87.5	82.9	P/P	63 - 130
Phorate	83.5	87.3	P/P	48 - 118
Prodiamine	55.4	85.6	P/P	20 - 144
Prometon	90.9	92.4	P/P	53 - 120
Prometryn	106	98.9	P/P	63 - 119
Pronamide	91.3	96.8	P/P	50 - 150
Propiconazole	101	103	P/P	50 - 150
Simazine	99.6	99.1	P/P	77 - 129
Sulfentrazone	86.2	78.3	P/P	50 - 150
Tebuconazole	69.7	83.4	P/P	20 - 118
Terbufos	83.3	89.8	P/P	61 - 119
Terbuthylazine	87.8	93.6	P/P	75 - 119

Reference Method: EPA 8270E
Batch ID: P378791

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	64.4	60.9	P/P	20 - 87.0
Alpha-BHC	98.2	101	P/P	65 - 142
Alpha-Chlordane	93.9	94.1	P/P	58 - 106
Beta-BHC	115	113	P/P	65 - 179
Bifenthrin	90.8	95.3	P/P	38 - 128
Carbophenothion	59.2	63.6	P/P	20 - 144
Chlorothalonil	96.4	71.8	P/P	20 - 214
Cis-Nonachlor	94.7	94.2	P/P	56 - 113
Cypermethrin	99.0	101	P/P	37 - 130
DDD-p,p'	102	104	P/P	66 - 119
DDE-p,p'	90.6	91.1	P/P	53 - 108
DDT-p,p'	86.6	86.0	P/P	57 - 133

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P378791

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Delta-BHC	131	124	P/P	68 - 187
Dicofol	95.8	92.2	P/P	66 - 123
Dieldrin	101	102	P/P	65 - 111
Endosulfan I	111	106	P/P	65 - 115
Endosulfan II	115	109	P/P	68 - 133
Endosulfan Sulfate	100	102	P/P	62 - 127
Endrin	101	101	P/P	64 - 122
Endrin Aldehyde	102	99.2	P/P	61 - 132
Endrin Ketone	100	103	P/P	66 - 120
Ethalfuralin	91.2	88.7	P/P	57 - 127
Gamma-BHC	116	113	P/P	71 - 158
Gamma-Chlordane	91.4	91.9	P/P	53 - 106
Heptachlor	88.4	89.0	P/P	45 - 96.0
Heptachlor Epoxide	98.7	97.8	P/P	64 - 109
Hexachlorobenzene	89.8	88.0	P/P	46 - 103
Methoxychlor	97.7	98.2	P/P	69 - 149
Mirex	78.0	78.1	P/P	31 - 90.0
Permethrin	90.8	91.3	P/P	41 - 108
Trans-Nonachlor	88.8	89.8	P/P	50 - 107
Trifluralin	91.4	91.1	P/P	58 - 119

Reference Method: EPA 8276
Batch ID: P378791

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	77.0	75.9	P/P	47 - 119
Toxaphene	83.1	85.4	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P378510

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	142		P	30 - 160
3-Hydroxycarbofuran	81.4		P	30 - 160
Acetaminophen	84.7		P	30 - 160
Acetamiprid	77.6		P	30 - 160
Afidopyropen	85.3		P	30 - 160
Aldicarb	108		P	30 - 160
Aldicarb Sulfone	91.6		P	30 - 160
Aldicarb Sulfoxide	98.2		P	30 - 160
Bentazon	75.0		P	30 - 160
Benzovindiflupyr	76.7		P	30 - 160
Carbamazepine	88.8		P	30 - 160
Carbaryl	74.3		P	30 - 160
Carbofuran	84.3		P	30 - 160
Clothianidin	82.4		P	30 - 160
Dinotefuran	80.6		P	30 - 160
Diuron	85.3		P	30 - 160
Fenuron	101		P	30 - 160
Fluridone	92.1		P	30 - 160
Hydrocodone	86.9		P	30 - 160
Ibuprofen	86.7		P	30 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P378510

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imazapyr	86.4		P	30 - 160
Imidacloprid	88.8		P	30 - 160
Linuron	69.3		P	30 - 160
Mandestrobin	83.5		P	30 - 160
MCPP	139		P	30 - 160
Methiocarb	62.7		P	30 - 160
Methomyl	66.6		P	30 - 160
Naproxen	104		P	30 - 160
Oxamyl	87.5		P	30 - 160
Primidone	78.4		P	30 - 160
Propoxur	61.2		P	30 - 160
Pyraclostrobin	73.6		P	30 - 160
Thiamethoxam	84.4		P	30 - 160
Tolfenpyrad	48.9		P	30 - 160
Triclopyr	110		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P378544

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	87.8		P	40 - 150
AMPA	88.7		P	40 - 150
Endothall	96.9		P	40 - 150
Glufosinate	137		P	40 - 150
Glyphosate	115		P	40 - 140
Sucralose	99.1		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P378558

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

Reference Method: SM 2320 B-2011
Batch ID: P378743

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P378746

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

Reference Method: SM 4500 F-C-2011
Batch ID: P378834

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	92 - 103

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P378683

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.0		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P378685

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P378666

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2156164	Iron	105		P	80 - 120
2156164	Manganese	103		P	80 - 120
2156164	Zinc	103		P	80 - 120
2156185	Iron	103	104	P/P	80 - 120
2156185	Manganese	99.7	102	P/P	80 - 120
2156185	Zinc	98.0	100	P/P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P378793

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2156139	Iron	103	102	P/P	70 - 130
2156139	Manganese	102	104	P/P	70 - 130
2156139	Zinc	103	104	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378666

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2156164	Aluminum	101		P	80 - 120
2156164	Antimony	107		P	80 - 120
2156164	Arsenic	108		P	80 - 120
2156164	Cadmium	104		P	80 - 120
2156164	Chromium	99.8		P	80 - 120
2156164	Copper	102		P	80 - 120
2156164	Lead	99.3		P	80 - 120
2156164	Nickel	100		P	80 - 120
2156164	Selenium	104		P	80 - 120
2156164	Silver	103		P	80 - 120
2156164	Thallium	96.5		P	80 - 120
2156185	Aluminum	98.4	101	P/P	80 - 120
2156185	Antimony	106	108	P/P	80 - 120
2156185	Arsenic	103	106	P/P	80 - 120
2156185	Cadmium	103	105	P/P	80 - 120
2156185	Chromium	97.6	99.9	P/P	80 - 120
2156185	Copper	99.4	102	P/P	80 - 120
2156185	Lead	97.6	98.5	P/P	80 - 120
2156185	Nickel	98.3	98.5	P/P	80 - 120
2156185	Selenium	101	103	P/P	80 - 120
2156185	Silver	103	104	P/P	80 - 120
2156185	Thallium	95.0	97.0	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378793

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2156139	Aluminum	111	116	P/P	70 - 130
2156139	Antimony	104	106	P/P	70 - 130
2156139	Arsenic	108	109	P/P	70 - 130
2156139	Cadmium	102	102	P/P	70 - 130
2156139	Chromium	104	107	P/P	70 - 130
2156139	Copper	98.7	101	P/P	70 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378793

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2156139	Lead	98.0	98.9	P/P	70 - 130
2156139	Nickel	101	102	P/P	70 - 130
2156139	Selenium	107	108	P/P	70 - 130
2156139	Silver	95.9	96.9	P/P	70 - 130
2156139	Thallium	90.9	94.1	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P378844

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2154804	Bromide	101		P	90 - 110
2155120	Bromide	100	99.7	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P378887

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2154621	Ammonia-N	105	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P378759

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2155132	Kjeldahl Nitrogen	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P379035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2155074	Kjeldahl Nitrogen	99.3	97.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P379223

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2155075	NO2NO3-N	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P378812

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2154805	Total-P	106	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P378451

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2155128	O-Phosphate-P	95.9	96.1	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P378502

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2155154	Acetochlor	93.0	118	P/P	68 - 126
2155154	Alachlor	88.1	116	P/P	66 - 125
2155154	Ametryn	93.7	121	P/P	31 - 182
2155154	Atrazine	101	142	P/F	68 - 137
2155154	Atrazine Desethyl	77.1	99.0	P/P	13 - 161
2155154	Azinphos Methyl	86.8	101	P/P	54 - 162
2155154	Bromacil	75.8	74.8	P/P	34 - 144
2155154	Butylate	17.3	18.7	P/P	16 - 92.0
2155154	Carbophenothion	86.8	109	P/P	50 - 150
2155154	Chlorpyrifos Ethyl	89.7	114	P/P	63 - 124
2155154	Chlorpyrifos Methyl	78.7	98.6	P/P	64 - 125
2155154	Cyanazine	97.7	124	P/P	13 - 245
2155154	Demeton	63.5	74.5	P/P	20 - 154
2155154	Diazinon	91.5	119	P/P	66 - 141
2155154	Dimethenamid	95.2	120	P/P	50 - 130
2155154	Disulfoton	69.9	85.9	P/P	55 - 130
2155154	Dithiopyr	92.0	121	P/P	66 - 122
2155154	EPTC	18.5	16.4	P/P	15 - 93.0
2155154	Ethion	95.2	120	P/P	15 - 148
2155154	Ethoprop	72.9	92.1	P/P	59 - 126
2155154	Fenamiphos	64.1	56.0	P/P	39 - 137
2155154	Fipronil Desulfinyl	99.8	131	P/F	43 - 121
2155154	Fipronil Sulfide	96.5	144	P/F	29 - 134
2155154	Flumioxazin	167	214	P/F	70 - 200
2155154	Fonofos	67.2	82.5	P/P	62 - 128
2155154	Hexazinone	99.3	133	P/P	58 - 154
2155154	Imazalil	105	101	P/P	50 - 150
2155154	Malathion	100	78.5	P/P	54 - 135
2155154	Metalaxyl	91.5	138	P/F	46 - 136
2155154	Metolachlor	93.3	119	P/P	62 - 126
2155154	Metribuzin	92.4	123	P/P	44 - 277
2155154	Mevinphos	61.2	69.2	P/P	44 - 135
2155154	Molinate	30.8	32.0	F/P	31 - 104
2155154	Norflurazon	89.6	111	P/P	32 - 134
2155154	Oxadiazon	90.2	116	P/P	55 - 123
2155154	Parathion Ethyl	89.6	118	P/P	67 - 120
2155154	Parathion Methyl	93.6	120	P/P	70 - 140
2155154	Pendimethalin	84.9	114	P/P	59 - 145
2155154	Phorate	74.1	91.9	P/P	52 - 127
2155154	Prodiamine	107	134	P/P	11 - 157
2155154	Prometon	91.6	121	P/P	55 - 130
2155154	Prometryn	94.3	119	P/P	55 - 127
2155154	Pronamide	99.5	133	P/P	50 - 150
2155154	Propiconazole	86.6	111	P/P	50 - 150
2155154	Simazine	96.2	134	P/P	58 - 159
2155154	Sulfentrazone	83.5	135	P/P	50 - 150
2155154	Tebuconazole	62.4	81.7	P/P	10 - 122
2155154	Terbufos	75.9	92.1	P/P	65 - 131
2155154	Terbutylazine	95.9	122	P/P	63 - 131

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P378791

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2154581	Aldrin	78.4	78.5	P/P	32 - 82.0
2154581	Alpha-BHC	94.4	94.0	P/P	68 - 157
2154581	Alpha-Chlordane	87.1	87.0	P/P	54 - 108
2154581	Beta-BHC	109	106	P/P	54 - 200
2154581	Bifenthrin	111	114	P/P	49 - 124
2154581	Carbophenothion	111	112	P/P	42 - 173
2154581	Chlorothalonil	175	152	P/P	10 - 289
2154581	Cis-Nonachlor	88.7	87.8	P/P	53 - 112
2154581	Cypermethrin	117	118	P/P	43 - 141
2154581	DDD-p,p'	93.3	94.0	P/P	58 - 125
2154581	DDE-p,p'	88.2	88.5	P/P	50 - 108
2154581	DDT-p,p'	83.5	82.8	P/P	52 - 140
2154581	Delta-BHC	190	172	P/P	61 - 228
2154581	Dicofol	43.8	42.4	F/F	59 - 130
2154581	Dieldrin	91.4	92.8	P/P	57 - 121
2154581	Endosulfan I	107	113	P/P	62 - 123
2154581	Endosulfan II	106	102	P/P	48 - 163
2154581	Endosulfan Sulfate	106	104	P/P	63 - 132
2154581	Endrin	91.5	89.6	P/P	58 - 128
2154581	Endrin Aldehyde	97.0	97.0	P/P	44 - 126
2154581	Endrin Ketone	109	106	P/P	68 - 127
2154581	Ethalfuralin	85.7	85.7	P/P	55 - 131
2154581	Gamma-BHC	110	112	P/P	54 - 206
2154581	Gamma-Chlordane	86.1	86.3	P/P	52 - 105
2154581	Heptachlor	81.4	79.7	P/P	47 - 94.0
2154581	Heptachlor Epoxide	89.6	88.7	P/P	61 - 113
2154581	Hexachlorobenzene	74.9	76.6	P/P	45 - 100
2154581	Methoxychlor	103	103	P/P	63 - 153
2154581	Mirex	79.9	81.8	P/P	38 - 90.0
2154581	Permethrin	97.1	98.7	P/P	45 - 112
2154581	Trans-Nonachlor	81.2	81.6	P/P	50 - 103
2154581	Trifluralin	82.7	84.2	P/P	57 - 122

Reference Method: EPA 8276
Batch ID: P378791

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2154874	Chlordane	94.6	94.1	P/P	34 - 129
2154874	Toxaphene	99.3	94.3	P/P	26 - 123

Reference Method: EPA 8321B
Batch ID: P378510

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2154577	3-Hydroxycarbofuran	61.6	79.4	P/P	30 - 160
2154577	Aldicarb	75.7	50.4	P/P	30 - 160
2154577	Aldicarb Sulfone	83.9	91.5	P/P	30 - 160
2154577	Aldicarb Sulfoxide	48.1	37.4	P/P	30 - 160
2154577	Carbaryl	54.9	55.5	P/P	30 - 160
2154577	Carbofuran	62.4	64.0	P/P	30 - 160
2154577	Methiocarb	62.4	57.4	P/P	30 - 160
2154577	Methomyl	54.7	63.7	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P378510

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2154577	Oxamyl	61.9	73.7	P/P	30 - 160
2154577	Propoxur	19.7	20.7	F/F	30 - 160
2155318	2,4-D	144	145	P/P	30 - 160
2155318	Acetaminophen	83.1	95.2	P/P	30 - 160
2155318	Acetamiprid	92.6	88.9	P/P	30 - 160
2155318	Afidopyropen	92.8	84.1	P/P	30 - 160
2155318	Benzovindiflupyr	75.8	77.5	P/P	30 - 160
2155318	Carbamazepine	82.8	74.9	P/P	30 - 160
2155318	Clothianidin	102	100	P/P	30 - 160
2155318	Dinotefuran	99.9	100	P/P	30 - 160
2155318	Diuron	77.0	73.1	P/P	30 - 160
2155318	Fenuron	91.6	90.0	P/P	30 - 160
2155318	Fluridone	74.7	84.1	P/P	30 - 160
2155318	Hydrocodone	100	100	P/P	30 - 160
2155318	Ibuprofen	81.6	85.4	P/P	30 - 160
2155318	Imazapyr	106	113	P/P	30 - 160
2155318	Imidacloprid	137	132	P/P	30 - 160
2155318	Linuron	59.4	51.7	P/P	30 - 160
2155318	Mandestrobin	82.1	83.6	P/P	30 - 160
2155318	MCP	117	136	P/P	30 - 160
2155318	Naproxen	108	103	P/P	30 - 160
2155318	Primidone	87.0	87.2	P/P	30 - 160
2155318	Pyraclostrobin	78.9	80.1	P/P	30 - 160
2155318	Thiamethoxam	122	126	P/P	30 - 160
2155318	Tolfenpyrad	51.4	52.7	P/P	30 - 160
2155318	Triclopyr	111	109	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P378544

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2154942	Acesulfame K	36.5	40.2	F/P	40 - 150
2154942	AMPA	102	91.2	P/P	40 - 150
2154942	Endothall	92.8	95.5	P/P	40 - 150
2154942	Glufosinate	121	125	P/P	40 - 150
2154942	Glyphosate	112	118	P/P	40 - 140
2154942	Sucralose	57.2	60.4	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P378746

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2155130	Fluoride	98.6	99.2	P/P	89 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P378834

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2155347	Fluoride	98.0	97.4	P/P	89 - 106

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P378683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2155131	Organic Carbon	101	99.9	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P378685

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2155236	Organic Carbon	98.6	98.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P378458

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155057	Turbidity	0.983	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P378459

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155129	Turbidity	3.26	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P378666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2156185	Iron	0.442	Spike	P	0 - 20
2156185	Manganese	2.25	Spike	P	0 - 20
2156185	Zinc	2.28	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P378793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2156139	Iron	0.244	Spike	P	0 - 20
2156139	Manganese	1.84	Spike	P	0 - 20
2156139	Zinc	0.487	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2156185	Aluminum	2.72	Spike	P	0 - 20
2156185	Antimony	1.81	Spike	P	0 - 20
2156185	Arsenic	2.36	Spike	P	0 - 20
2156185	Cadmium	2.04	Spike	P	0 - 20
2156185	Chromium	2.25	Spike	P	0 - 20
2156185	Copper	2.51	Spike	P	0 - 20
2156185	Lead	0.946	Spike	P	0 - 20
2156185	Nickel	0.206	Spike	P	0 - 20
2156185	Selenium	1.58	Spike	P	0 - 20
2156185	Silver	1.17	Spike	P	0 - 20
2156185	Thallium	2.11	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2156139	Aluminum	3.78	Spike	P	0 - 20
2156139	Antimony	1.77	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P378793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2156139	Arsenic	1.08	Spike	P	0 - 20
2156139	Cadmium	0.0453	Spike	P	0 - 20
2156139	Chromium	2.97	Spike	P	0 - 20
2156139	Copper	1.79	Spike	P	0 - 20
2156139	Lead	0.913	Spike	P	0 - 20
2156139	Nickel	1.17	Spike	P	0 - 20
2156139	Selenium	1.24	Spike	P	0 - 20
2156139	Silver	1.04	Spike	P	0 - 20
2156139	Thallium	3.43	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P378844

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155120	Bromide	0.584	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P378887

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2154621	Ammonia-N	0.265	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P378759

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155132	Kjeldahl Nitrogen	0.452	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P379035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155074	Kjeldahl Nitrogen	1.22	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P379223

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155075	NO2NO3-N	0.425	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P378812

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2154805	Total-P	0.634	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P378451

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155128	O-Phosphate-P	0.145	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P378502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155154	Acetochlor	23.7	Spike	P	0 - 30
2155154	Alachlor	27.1	Spike	P	0 - 30
2155154	Ametryn	25.2	Spike	P	0 - 30
2155154	Atrazine	23.2	Spike	P	0 - 30
2155154	Atrazine Desethyl	19.2	Spike	P	0 - 30
2155154	Azinphos Methyl	15.4	Spike	P	0 - 30
2155154	Bromacil	1.37	Spike	P	0 - 30
2155154	Butylate	7.64	Spike	P	0 - 30
2155154	Carbophenothion	22.3	Spike	P	0 - 30
2155154	Chlorpyrifos Ethyl	23.9	Spike	P	0 - 30
2155154	Chlorpyrifos Methyl	22.4	Spike	P	0 - 30
2155154	Cyanazine	23.5	Spike	P	0 - 30
2155154	Demeton	15.9	Spike	P	0 - 30
2155154	Diazinon	26.2	Spike	P	0 - 30
2155154	Dimethenamid	23.2	Spike	P	0 - 30
2155154	Disulfoton	20.5	Spike	P	0 - 30
2155154	Dithiopyr	26.2	Spike	P	0 - 30
2155154	EPTC	11.9	Spike	P	0 - 30
2155154	Ethion	23.2	Spike	P	0 - 30
2155154	Ethoprop	23.3	Spike	P	0 - 30
2155154	Fenamiphos	13.5	Spike	P	0 - 30
2155154	Fipronil	19.5	Spike	P	0 - 30
2155154	Fipronil Desulfinyl	27.2	Spike	P	0 - 30
2155154	Fipronil Sulfide	22.4	Spike	P	0 - 30
2155154	Fipronil Sulfone	16.5	Spike	P	0 - 30
2155154	Flumioxazin	24.8	Spike	P	0 - 30
2155154	Fonofos	20.5	Spike	P	0 - 30
2155154	Hexazinone	28.9	Spike	P	0 - 30
2155154	Imazalil	4.20	Spike	P	0 - 30
2155154	Malathion	24.5	Spike	P	0 - 30
2155154	Metalaxyl	40.2	Spike	F	0 - 30
2155154	Metolachlor	24.6	Spike	P	0 - 30
2155154	Metribuzin	28.6	Spike	P	0 - 30
2155154	Mevinphos	12.3	Spike	P	0 - 30
2155154	Molinate	3.92	Spike	P	0 - 30
2155154	Norflurazon	21.1	Spike	P	0 - 30
2155154	Oxadiazon	24.9	Spike	P	0 - 30
2155154	Parathion Ethyl	27.7	Spike	P	0 - 30
2155154	Parathion Methyl	24.8	Spike	P	0 - 30
2155154	Pendimethalin	29.1	Spike	P	0 - 30
2155154	Phorate	21.4	Spike	P	0 - 30
2155154	Prodiamine	22.7	Spike	P	0 - 30
2155154	Prometon	27.4	Spike	P	0 - 30
2155154	Prometryn	22.9	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P378502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155154	Pronamide	28.5	Spike	P	0 - 30
2155154	Propiconazole	24.6	Spike	P	0 - 30
2155154	Simazine	26.3	Spike	P	0 - 30
2155154	Sulfentrazone	30.9	Spike	F	0 - 30
2155154	Tebuconazole	26.8	Spike	P	0 - 30
2155154	Terbufos	19.2	Spike	P	0 - 30
2155154	Terbutylazine	24.0	Spike	P	0 - 30
LFB	Acetochlor	1.34	LCS	P	0 - 30
LFB	Alachlor	5.46	LCS	P	0 - 30
LFB	Ametryn	6.55	LCS	P	0 - 30
LFB	Atrazine	2.75	LCS	P	0 - 30
LFB	Atrazine Desethyl	11.6	LCS	P	0 - 30
LFB	Azinphos Methyl	5.33	LCS	P	0 - 30
LFB	Bromacil	6.21	LCS	P	0 - 30
LFB	Butylate	4.45	LCS	P	0 - 30
LFB	Carbophenothion	3.35	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	2.63	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	1.71	LCS	P	0 - 30
LFB	Cyanazine	10.0	LCS	P	0 - 30
LFB	Demeton	10.2	LCS	P	0 - 30
LFB	Diazinon	3.76	LCS	P	0 - 30
LFB	Dimethenamid	0.370	LCS	P	0 - 30
LFB	Disulfoton	20.3	LCS	P	0 - 30
LFB	Dithiopyr	0.0683	LCS	P	0 - 30
LFB	EPTC	19.1	LCS	P	0 - 30
LFB	Ethion	0.830	LCS	P	0 - 30
LFB	Ethoprop	3.40	LCS	P	0 - 30
LFB	Fenamiphos	4.54	LCS	P	0 - 30
LFB	Fipronil	1.19	LCS	P	0 - 30
LFB	Fipronil Desulfanyl	4.40	LCS	P	0 - 30
LFB	Fipronil Sulfide	6.26	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.73	LCS	P	0 - 30
LFB	Flumioxazin	8.81	LCS	P	0 - 30
LFB	Fonofos	3.70	LCS	P	0 - 30
LFB	Hexazinone	5.44	LCS	P	0 - 30
LFB	Imazalil	13.5	LCS	P	0 - 30
LFB	Malathion	17.0	LCS	P	0 - 30
LFB	Metalaxyl	2.93	LCS	P	0 - 30
LFB	Metolachlor	14.2	LCS	P	0 - 30
LFB	Metribuzin	9.99	LCS	P	0 - 30
LFB	Mevinphos	1.08	LCS	P	0 - 30
LFB	Molinate	5.79	LCS	P	0 - 30
LFB	Norflurazon	3.57	LCS	P	0 - 30
LFB	Oxadiazon	1.36	LCS	P	0 - 30
LFB	Parathion Ethyl	7.01	LCS	P	0 - 30
LFB	Parathion Methyl	0.426	LCS	P	0 - 30
LFB	Pendimethalin	5.47	LCS	P	0 - 30
LFB	Phorate	4.46	LCS	P	0 - 30
LFB	Prodiamine	42.8	LCS	F	0 - 30
LFB	Prometon	1.71	LCS	P	0 - 30
LFB	Prometryn	7.05	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P378502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Pronamide	5.88	LCS	P	0 - 30
LFB	Propiconazole	2.80	LCS	P	0 - 30
LFB	Simazine	0.498	LCS	P	0 - 30
LFB	Sulfentrazone	9.66	LCS	P	0 - 30
LFB	Tebuconazole	17.9	LCS	P	0 - 30
LFB	Terbufos	7.54	LCS	P	0 - 30
LFB	Terbutylazine	6.47	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P378791

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2154581	Aldrin	0.0525	Spike	P	0 - 30
2154581	Alpha-BHC	0.435	Spike	P	0 - 30
2154581	Alpha-Chlordane	0.124	Spike	P	0 - 30
2154581	Beta-BHC	2.47	Spike	P	0 - 30
2154581	Bifenthrin	1.95	Spike	P	0 - 30
2154581	Carbophenothion	0.753	Spike	P	0 - 30
2154581	Chlorothalonil	13.8	Spike	P	0 - 30
2154581	Cis-Nonachlor	0.945	Spike	P	0 - 30
2154581	Cypermethrin	1.27	Spike	P	0 - 30
2154581	DDD-p,p'	0.809	Spike	P	0 - 30
2154581	DDE-p,p'	0.355	Spike	P	0 - 30
2154581	DDT-p,p'	0.858	Spike	P	0 - 30
2154581	Delta-BHC	9.80	Spike	P	0 - 30
2154581	Dicofol	3.10	Spike	P	0 - 30
2154581	Dieldrin	1.53	Spike	P	0 - 30
2154581	Endosulfan I	5.56	Spike	P	0 - 30
2154581	Endosulfan II	3.44	Spike	P	0 - 30
2154581	Endosulfan Sulfate	1.99	Spike	P	0 - 30
2154581	Endrin	2.10	Spike	P	0 - 30
2154581	Endrin Aldehyde	0.0321	Spike	P	0 - 30
2154581	Endrin Ketone	3.00	Spike	P	0 - 30
2154581	Ethalfuralin	0.0309	Spike	P	0 - 30
2154581	Gamma-BHC	2.11	Spike	P	0 - 30
2154581	Gamma-Chlordane	0.306	Spike	P	0 - 30
2154581	Heptachlor	2.19	Spike	P	0 - 30
2154581	Heptachlor Epoxide	1.00	Spike	P	0 - 30
2154581	Hexachlorobenzene	2.13	Spike	P	0 - 30
2154581	Methoxychlor	0.653	Spike	P	0 - 30
2154581	Mirex	2.39	Spike	P	0 - 30
2154581	Permethrin	1.62	Spike	P	0 - 30
2154581	Trans-Nonachlor	0.509	Spike	P	0 - 30
2154581	Trifluralin	1.76	Spike	P	0 - 30
LFB	Aldrin	5.57	LCS	P	0 - 30
LFB	Alpha-BHC	3.06	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.232	LCS	P	0 - 30
LFB	Beta-BHC	1.96	LCS	P	0 - 30
LFB	Bifenthrin	4.86	LCS	P	0 - 30
LFB	Carbophenothion	7.16	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P378791

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlorothalonil	29.2	LCS	P	0 - 30
LFB	Cis-Nonachlor	0.574	LCS	P	0 - 30
LFB	Cypermethrin	2.06	LCS	P	0 - 30
LFB	DDD-p,p'	1.85	LCS	P	0 - 30
LFB	DDE-p,p'	0.555	LCS	P	0 - 30
LFB	DDT-p,p'	0.746	LCS	P	0 - 30
LFB	Delta-BHC	5.80	LCS	P	0 - 30
LFB	Dicofol	3.82	LCS	P	0 - 30
LFB	Dieldrin	0.840	LCS	P	0 - 30
LFB	Endosulfan I	4.76	LCS	P	0 - 30
LFB	Endosulfan II	5.80	LCS	P	0 - 30
LFB	Endosulfan Sulfate	2.05	LCS	P	0 - 30
LFB	Endrin	0.307	LCS	P	0 - 30
LFB	Endrin Aldehyde	2.49	LCS	P	0 - 30
LFB	Endrin Ketone	2.35	LCS	P	0 - 30
LFB	Ethalfuralin	2.75	LCS	P	0 - 30
LFB	Gamma-BHC	1.89	LCS	P	0 - 30
LFB	Gamma-Chlordane	0.541	LCS	P	0 - 30
LFB	Heptachlor	0.738	LCS	P	0 - 30
LFB	Heptachlor Epoxide	0.909	LCS	P	0 - 30
LFB	Hexachlorobenzene	2.00	LCS	P	0 - 30
LFB	Methoxychlor	0.420	LCS	P	0 - 30
LFB	Mirex	0.0466	LCS	P	0 - 30
LFB	Permethrin	0.551	LCS	P	0 - 30
LFB	Trans-Nonachlor	1.17	LCS	P	0 - 30
LFB	Trifluralin	0.276	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P378791

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2154874	Chlordane	0.520	Spike	P	0 - 30
2154874	Toxaphene	5.13	Spike	P	0 - 30
LFB	Chlordane	1.33	LCS	P	0 - 30
LFB	Toxaphene	2.69	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P378510

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2154577	3-Hydroxycarbofuran	25.2	Spike	P	0 - 30
2154577	Aldicarb	40.0	Spike	F	0 - 30
2154577	Aldicarb Sulfone	8.73	Spike	P	0 - 30
2154577	Aldicarb Sulfoxide	25.0	Spike	P	0 - 30
2154577	Carbaryl	1.11	Spike	P	0 - 30
2154577	Carbofuran	2.53	Spike	P	0 - 30
2154577	Methiocarb	8.30	Spike	P	0 - 30
2154577	Methomyl	15.3	Spike	P	0 - 30
2154577	Oxamyl	17.4	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P378510

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2154577	Propoxur	1.92	Spike	P	0 - 30
2155318	2,4-D	0.649	Spike	P	0 - 30
2155318	Acetaminophen	9.93	Spike	P	0 - 30
2155318	Acetamiprid	4.06	Spike	P	0 - 30
2155318	Afidopyropen	9.86	Spike	P	0 - 30
2155318	Bentazon	6.15	Spike	P	0 - 30
2155318	Benzovindiflupyr	2.30	Spike	P	0 - 30
2155318	Carbamazepine	6.82	Spike	P	0 - 30
2155318	Clothianidin	1.74	Spike	P	0 - 30
2155318	Dinotefuran	0.224	Spike	P	0 - 30
2155318	Diuron	4.68	Spike	P	0 - 30
2155318	Fenuron	1.78	Spike	P	0 - 30
2155318	Fluridone	9.87	Spike	P	0 - 30
2155318	Hydrocodone	0.161	Spike	P	0 - 30
2155318	Ibuprofen	4.51	Spike	P	0 - 30
2155318	Imazapyr	3.86	Spike	P	0 - 30
2155318	Imidacloprid	4.14	Spike	P	0 - 30
2155318	Linuron	13.8	Spike	P	0 - 30
2155318	Mandestrobin	1.78	Spike	P	0 - 30
2155318	MCPP	15.7	Spike	P	0 - 30
2155318	Naproxen	4.60	Spike	P	0 - 30
2155318	Primidone	0.257	Spike	P	0 - 30
2155318	Pyraclostrobin	1.46	Spike	P	0 - 30
2155318	Thiamethoxam	3.12	Spike	P	0 - 30
2155318	Tolfenpyrad	2.40	Spike	P	0 - 30
2155318	Triclopyr	1.80	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P378544

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2154942	Acesulfame K	9.74	Spike	P	0 - 30
2154942	AMPA	11.2	Spike	P	0 - 30
2154942	Endothall	2.94	Spike	P	0 - 30
2154942	Glufosinate	3.12	Spike	P	0 - 30
2154942	Glyphosate	5.30	Spike	P	0 - 30
2154942	Sucralose	4.99	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P378558

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155347	Total Alkalinity	0.0387	Sample	P	0 - 2.8

Reference Method: SM 2320 B-2011
Batch ID: P378743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
--------------------------	-----------	-----------	-------------------	-----------	----------------

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P378743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155224	Total Alkalinity	0.0612	Sample	P	0 - 2.8

Reference Method: SM 2540 D-2011
Batch ID: P379043

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155126	TSS	0.0	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P378746

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155130	Fluoride	0.506	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-2011
Batch ID: P378834

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155347	Fluoride	0.514	Spike	P	0 - 2.5

Reference Method: SM 5310 B-2011
Batch ID: P378683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155131	Organic Carbon	0.592	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P378685

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2155236	Organic Carbon	0.0451	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2155163
Field Sample ID: 27010114

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	57.1	P	30 - 160

Lab Sample ID: 2155164
Field Sample ID: 27010114

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	90.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	110	P	30 - 160
EPA 8321B	Diuron-d6	82.3	P	30 - 160
EPA 8321B	Endothall-d6	270	F	30 - 160
EPA 8321B	Endothall-d6	270	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	0.0	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	0.0	F	30 - 160
EPA 8321B	Ibuprofen-d3	86.8	P	30 - 160
EPA 8321B	Primidone-d5	117	P	30 - 160
EPA 8321B	Sucralose-d6	30.0	P	30 - 160
EPA 8321B	Sucralose-d6	30.0	P	30 - 160

Lab Sample ID: 2155165
Field Sample ID: 27010114

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	105	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	88.3	P	34 - 106
EPA 8276	Decachlorobiphenyl	94.9	P	26 - 97.0
EPA 8276	PCNB	105	P	38 - 141

Lab Sample ID: 2155166
Field Sample ID: 27010114

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	105	P	72 - 135
EPA 8270E	Terbufos-d10	91.1	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A97361

Included Lab Sample IDs: 2155128, 2155133, 2155134, 2155137, 2155140

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.9	96.1	P/P	90 - 110
O-Phosphate-P	97.5	99.9	P/P	90 - 110
O-Phosphate-P	98.3	98.1	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A97366

Included Lab Sample IDs: 2155126, 2155129, 2155130, 2155135, 2155138

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105
Turbidity	99.5	100	P/P	95 - 105

Reference Method: SM 2320 B-2011

Run ID: A97407

Included Lab Sample IDs: 2155129, 2155130

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	105	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A97440

Included Lab Sample IDs: 2155127, 2155131, 2155132, 2155136, 2155139

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	103	P/P	90 - 110
Organic Carbon	98.8	102	P/P	90 - 110
Organic Carbon	99.4	98.8	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A97465

Included Lab Sample IDs: 2155126, 2155135, 2155138

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	103	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A97465

Included Lab Sample IDs: 2155126, 2155130, 2155135, 2155138

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	95.4	P/P	90 - 110
Fluoride	95.4	100	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A97493

Included Lab Sample IDs: 2155168, 2155169

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	104	104	P/P	90 - 110
Manganese	103	105	P/P	90 - 110
Zinc	103	104	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A97496

Included Lab Sample IDs: 2155129

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A97501

Included Lab Sample IDs: 2155126, 2155129, 2155130, 2155135, 2155138

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	101	100	P/P	90 - 110
Bromide	99.3	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A97523

Included Lab Sample IDs: 2155131, 2155132, 2155136, 2155139

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A97525

Included Lab Sample IDs: 2155127, 2155131, 2155132, 2155136, 2155139

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

Reference Method: EPA 8321B

Run ID: A97533

Included Lab Sample IDs: 2155164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	99.7	96.5	P/P	50 - 150
3-Hydroxycarbofuran	100	100	P/P	60 - 150
Acetaminophen	86.4	112	P/P	60 - 160
Acetamiprid	88.4	107	P/P	50 - 150
Afidopyropen	103	105	P/P	50 - 150
Aldicarb	140	127	P/P	60 - 150
Aldicarb Sulfone	96.4	104	P/P	50 - 150
Aldicarb Sulfoxide	100	94.8	P/P	50 - 150
Bentazon	110	105	P/P	50 - 160
Benzovindiflupyr	105	102	P/P	50 - 150
Carbamazepine	105	110	P/P	60 - 150
Carbaryl	106	99.2	P/P	60 - 150
Carbofuran	115	135	P/P	50 - 150
Clothianidin	108	106	P/P	60 - 150
Dinotefuran	101	109	P/P	50 - 150
Diuron	89.7	121	P/P	60 - 150
Fenuron	88.0	105	P/P	60 - 150
Fluridone	103	99.4	P/P	60 - 160
Hydrocodone	104	106	P/P	60 - 150
Ibuprofen	77.9	106	P/P	50 - 160
Imazapyr	96.1	96.3	P/P	50 - 150
Imidacloprid	102	115	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A97533

Included Lab Sample IDs: 2155164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Linuron	91.1	102	P/P	60 - 150
Mandestrobin	105	103	P/P	50 - 150
MCPP	100	90.7	P/P	50 - 150
Methiocarb	95.2	89.1	P/P	50 - 150
Methomyl	95.4	95.4	P/P	50 - 150
Naproxen	110	116	P/P	50 - 160
Oxamyl	95.6	91.6	P/P	50 - 150
Primidone	91.5	98.4	P/P	60 - 150
Propoxur	103	104	P/P	50 - 150
Pyraclostrobin	102	104	P/P	60 - 150
Thiamethoxam	104	108	P/P	50 - 150
Tolfenpyrad	92.8	99.2	P/P	60 - 150
Triclopyr	92.0	91.4	P/P	50 - 150

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A97558

Included Lab Sample IDs: 2155167, 2155170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	103	107	P/P	90 - 110
Manganese	105	107	P/P	90 - 110
Zinc	104	104	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A97575

Included Lab Sample IDs: 2155166

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.9		P	80 - 120
Alachlor	102		P	80 - 120
Ametryn	104		P	80 - 120
Atrazine	90.5		P	80 - 120
Atrazine Desethyl	87.0		P	80 - 120
Azinphos Methyl	109		P	80 - 120
Bromacil	97.5		P	80 - 120
Butylate	97.5		P	80 - 120
Carbophenothion	97.6		P	80 - 120
Chlorpyrifos Ethyl	103		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Cyanazine	78.5*		F	80 - 120
Demeton	100		P	80 - 120
Diazinon	101		P	80 - 120
Dimethenamid	98.1		P	80 - 120
Disulfoton	85.7		P	80 - 120
Dithiopyr	97.3		P	80 - 120
EPTC	99.1		P	80 - 120
Ethion	100		P	80 - 120
Ethoprop	107		P	80 - 120
Fenamiphos	101		P	80 - 120
Fipronil	98.6		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A97575
Included Lab Sample IDs: 2155166

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil Sulfide	94.8		P	80 - 120
Fipronil Sulfone	94.6		P	80 - 120
Flumioxazin	91.2		P	80 - 120
Fonofos	94.9		P	80 - 120
Hexazinone	100		P	80 - 120
Imazalil	92.7		P	80 - 120
Malathion	94.1		P	80 - 120
Metalaxyl	98.0		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	83.4		P	80 - 120
Mevinphos	93.6		P	80 - 120
Molinate	100		P	80 - 120
Norflurazon	92.1		P	80 - 120
Oxadiazon	105		P	80 - 120
Parathion Ethyl	92.7		P	80 - 120
Parathion Methyl	90.8		P	80 - 120
Pendimethalin	94.0		P	80 - 120
Phorate	98.6		P	80 - 120
Prodiamine	106		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	108		P	80 - 120
Pronamide	89.7		P	80 - 120
Propiconazole	101		P	80 - 120
Simazine	93.4		P	80 - 120
Sulfentrazone	97.1		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	101		P	80 - 120
Terbutylazine	97.0		P	80 - 120

Reference Method: EPA 8276
Run ID: A97589
Included Lab Sample IDs: 2155165

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.3		P	80 - 120
Toxaphene	106		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A97594
Included Lab Sample IDs: 2155127, 2155131, 2155132, 2155136, 2155139

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.0	102	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A97597
Included Lab Sample IDs: 2155164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	108	88.6	P/P	60 - 160
Glufosinate	136	123	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A97597
Included Lab Sample IDs: 2155164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	112	106	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A97601
Included Lab Sample IDs: 2155164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	93.0	68.8	P/P	60 - 160
Endothall	93.9	96.8	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A97615
Included Lab Sample IDs: 2155127

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.8	98.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A97623
Included Lab Sample IDs: 2155127, 2155131, 2155132, 2155136, 2155139

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	104	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A97626
Included Lab Sample IDs: 2155165

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	112		P	80 - 120
Alpha-BHC	113		P	80 - 120
Alpha-Chlordane	112		P	80 - 120
Beta-BHC	113		P	80 - 120
Bifenthrin	112		P	80 - 120
Carbophenothion	118		P	80 - 120
Chlorothalonil	115		P	80 - 120
Cis-Nonachlor	110		P	80 - 120
Cypermethrin	115		P	80 - 120
DDD-p,p'	113		P	80 - 120
DDE-p,p'	113		P	80 - 120
DDT-p,p'	109		P	80 - 120
Delta-BHC	115		P	80 - 120
Dicofol	106		P	80 - 120
Dieldrin	116		P	80 - 120
Endosulfan I	119		P	80 - 120
Endosulfan II	117		P	80 - 120
Endosulfan Sulfate	109		P	80 - 120
Endrin	105		P	80 - 120
Endrin Aldehyde	110		P	80 - 120
Endrin Ketone	110		P	80 - 120
Ethalfuralin	110		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A97626

Included Lab Sample IDs: 2155165

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Gamma-BHC	116		P	80 - 120
Gamma-Chlordane	112		P	80 - 120
Heptachlor	117		P	80 - 120
Heptachlor Epoxide	112		P	80 - 120
Hexachlorobenzene	112		P	80 - 120
Methoxychlor	109		P	80 - 120
Mirex	110		P	80 - 120
Permethrin	107		P	80 - 120
Trans-Nonachlor	112		P	80 - 120
Trifluralin	114		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A97637

Included Lab Sample IDs: 2155168, 2155169

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	101	P/P	90 - 110
Antimony	103	103	P/P	90 - 110
Arsenic	98.9	102	P/P	90 - 110
Cadmium	97.4	96.3	P/P	90 - 110
Chromium	95.4	100	P/P	90 - 110
Copper	96.6	101	P/P	90 - 110
Lead	96.2	92.6	P/P	90 - 110
Selenium	97.0	100	P/P	90 - 110
Silver	99.0	98.6	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A97713

Included Lab Sample IDs: 2155168, 2155169

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Nickel	96.8	93.0	P/P	90 - 110
Thallium	98.3	92.3	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A97747

Included Lab Sample IDs: 2155167, 2155170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	107	110	P/P	90 - 110
Antimony	100	99.7	P/P	90 - 110
Arsenic	99.8	99.8	P/P	90 - 110
Cadmium	98.6	97.7	P/P	90 - 110
Chromium	102	105	P/P	90 - 110
Copper	98.5	97.7	P/P	90 - 110
Lead	93.2	92.2	P/P	90 - 110
Nickel	99.1	99.3	P/P	90 - 110
Selenium	100	101	P/P	90 - 110
Silver	99.8	99.0	P/P	90 - 110
Thallium	95.6	92.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A97805

Included Lab Sample IDs: 2155164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	103	108	P/P	60 - 160

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							0.983	
	Turbidity							3.26	
EPA 200.7 Rev. 4.4	Iron	108		105	103	104			0.442
	Iron	107		103	102				0.244
	Manganese	105		103	99.7	102			2.25
	Manganese	108		102	104				1.84
	Zinc	103		103	98.0	100			2.28
	Zinc	105		103	104				0.487
EPA 200.8 Rev. 5.4	Aluminum	102		98.4	101	101			2.72
	Aluminum	104		111	116				3.78
	Antimony	106		106	108	107			1.81
	Antimony	102		104	106				1.77
	Arsenic	103		103	106	108			2.36
	Arsenic	102		108	109				1.08
	Cadmium	102		103	105	104			2.04
	Cadmium	101		102	102				0.0453
	Chromium	98.2		97.6	99.9	99.8			2.25
	Chromium	103		104	107				2.97
	Copper	101		99.4	102	102			2.51
	Copper	101		98.7	101				1.79
	Lead	98.6		97.6	98.5	99.3			0.946
	Lead	96.1		98.0	98.9				0.913
	Nickel	100		98.3	98.5	100			0.206
	Nickel	101		101	102				1.17
	Selenium	101		101	103	104			1.58
	Selenium	104		107	108				1.24
	Silver	104		103	104	103			1.17
	Silver	104		95.9	96.9				1.04
	Thallium	96.8		95.0	97.0	96.5			2.11
	Thallium	91.9		90.9	94.1				3.43
EPA 300.0 Rev. 2.1	Bromide	102		100	99.7	101			0.584
EPA 350.1 Rev. 2.0	Ammonia-N	99.8		105	105				0.265
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102		102	102				0.452
	Kjeldahl Nitrogen	101		99.3	97.9				1.22
EPA 353.2 Rev. 2.0	NO2NO3-N	102		103	103				0.425
EPA 365.1 Rev. 2.0	Total-P	105		106	106				0.634
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101		95.9	96.1				0.145
EPA 8270E	Acetochlor	93.2	92.0	93.0	118		1.34		23.7
	Alachlor	98.5	93.3	88.1	116		5.46		27.1
	Aldrin	64.4	60.9	78.4	78.5		5.57		0.0525
	Alpha-BHC	98.2	101	94.4	94.0		3.06		0.435
	Alpha-Chlordane	93.9	94.1	87.1	87.0		0.232		0.124
	Ametryn	103	96.2	93.7	121		6.55		25.2
	Atrazine	95.7	93.1	101	142		2.75		23.2
	Atrazine Desethyl	91.8	81.7	77.1	99.0		11.6		19.2
	Azinphos Methyl	121	115	86.8	101		5.33		15.4
	Beta-BHC	115	113	109	106		1.96		2.47
	Bifenthrin	90.8	95.3	111	114		4.86		1.95
	Bromacil	88.3	93.9	75.8	74.8		6.21		1.37
	Butylate	70.1	73.3	17.3	18.7		4.45		7.64
	Carbophenothion	88.1	91.1	86.8	109		3.35		22.3
	Carbophenothion	59.2	63.6	111	112		7.16		0.753
	Chlorothalonil	96.4	71.8	175	152		29.2		13.8
	Chlorpyrifos Ethyl	96.3	98.9	89.7	114		2.63		23.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Chlorpyrifos Methyl	94.7	93.1	78.7	98.6	1.71		22.4
	Cis-Nonachlor	94.7	94.2	88.7	87.8	0.574		0.945
	Cyanazine	116	105	97.7	124	10.0		23.5
	Cypermethrin	99.0	101	117	118	2.06		1.27
	DDD-p,p'	102	104	93.3	94.0	1.85		0.809
	DDE-p,p'	90.6	91.1	88.2	88.5	0.555		0.355
	DDT-p,p'	86.6	86.0	83.5	82.8	0.746		0.858
	Delta-BHC	131	124	190	172	5.80		9.80
	Demeton	75.0	83.1	63.5	74.5	10.2		15.9
	Diazinon	96.0	92.4	91.5	119	3.76		26.2
	Dicofol	95.8	92.2	43.8	42.4	3.82		3.10
	Dieldrin	101	102	91.4	92.8	0.840		1.53
	Dimethenamid	94.1	93.7	95.2	120	0.370		23.2
	Disulfoton	72.9	89.4	69.9	85.9	20.3		20.5
	Dithiopyr	88.7	88.7	92.0	121	0.0683		26.2
	Endosulfan I	111	106	107	113	4.76		5.56
	Endosulfan II	115	109	106	102	5.80		3.44
	Endosulfan Sulfate	100	102	106	104	2.05		1.99
	Endrin	101	101	91.5	89.6	0.307		2.10
	Endrin Aldehyde	102	99.2	97.0	97.0	2.49		0.0321
	Endrin Ketone	100	103	109	106	2.35		3.00
	EPTC	49.8	41.1	18.5	16.4	19.1		11.9
	Ethalfuralin	91.2	88.7	85.7	85.7	2.75		0.0309
	Ethion	87.9	87.2	95.2	120	0.830		23.2
	Ethoprop	82.5	79.8	72.9	92.1	3.40		23.3
	Fenamiphos	98.2	103	64.1	56.0	4.54		13.5
	Fipronil	108	109			1.19		19.5
	Fipronil Desulfinyl	92.2	96.4	99.8	131	4.40		27.2
	Fipronil Sulfide	90.1	95.9	96.5	144	6.26		22.4
	Fipronil Sulfone	86.9	93.8			7.73		16.5
	Flumioxazin	116	127	167	214	8.81		24.8
	Fonofos	83.3	86.4	67.2	82.5	3.70		20.5
	Gamma-BHC	116	113	110	112	1.89		2.11
	Gamma-Chlordane	91.4	91.9	86.1	86.3	0.541		0.306
	Heptachlor	88.4	89.0	81.4	79.7	0.738		2.19
	Heptachlor Epoxide	98.7	97.8	89.6	88.7	0.909		1.00
	Hexachlorobenzene	89.8	88.0	74.9	76.6	2.00		2.13
	Hexazinone	88.1	93.0	99.3	133	5.44		28.9
	Imazalil	82.7	94.6	105	101	13.5		4.20
	Malathion	97.2	82.0	100	78.5	17.0		24.5
	Metalaxyl	89.0	91.7	91.5	138	2.93		40.2
	Methoxychlor	97.7	98.2	103	103	0.420		0.653
	Metolachlor	96.3	83.5	93.3	119	14.2		24.6
	Metribuzin	173	156	92.4	123	9.99		28.6
	Mevinphos	79.9	79.1	61.2	69.2	1.08		12.3
	Mirex	78.0	78.1	79.9	81.8	0.0466		2.39
	Molinate	61.6	58.1	30.8	32.0	5.79		3.92
	Norflurazon	93.3	96.7	89.6	111	3.57		21.1
	Oxadiazon	81.1	80.0	90.2	116	1.36		24.9
	Parathion Ethyl	85.2	91.3	89.6	118	7.01		27.7
	Parathion Methyl	92.8	92.5	93.6	120	0.426		24.8
	Pendimethalin	87.5	82.9	84.9	114	5.47		29.1
	Permethrin	90.8	91.3	97.1	98.7	0.551		1.62
	Phorate	83.5	87.3	74.1	91.9	4.46		21.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Prodiamine	55.4	85.6	107	134	42.8		22.7
	Prometon	90.9	92.4	91.6	121	1.71		27.4
	Prometryn	106	98.9	94.3	119	7.05		22.9
	Pronamide	91.3	96.8	99.5	133	5.88		28.5
	Propiconazole	101	103	86.6	111	2.80		24.6
	Simazine	99.6	99.1	96.2	134	0.498		26.3
	Sulfentrazone	86.2	78.3	83.5	135	9.66		30.9
	Tebuconazole	69.7	83.4	62.4	81.7	17.9		26.8
	Terbufos	83.3	89.8	75.9	92.1	7.54		19.2
	Terbuthylazine	87.8	93.6	95.9	122	6.47		24.0
	Trans-Nonachlor	88.8	89.8	81.2	81.6	1.17		0.509
	Trifluralin	91.4	91.1	82.7	84.2	0.276		1.76
	Chlordane	75.9	77.0	94.6	94.1	1.33		0.520
EPA 8276	Toxaphene	83.1	85.4	99.3	94.3	2.69		5.13
EPA 8321B	2,4-D	142		144	145			0.649
	3-Hydroxycarbofuran	81.4		61.6	79.4			25.2
	Acesulfame K	87.8		36.5	40.2			9.74
	Acetaminophen	84.7		83.1	95.2			9.93
	Acetamiprid	77.6		92.6	88.9			4.06
	Afidopyropen	85.3		92.8	84.1			9.86
	Aldicarb	108		75.7	50.4			40.0
	Aldicarb Sulfone	91.6		83.9	91.5			8.73
	Aldicarb Sulfoxide	98.2		48.1	37.4			25.0
	AMPA	88.7		102	91.2			11.2
	Bentazon	75.0						6.15
	Benzovindiflupyr	76.7		75.8	77.5			2.30
	Carbamazepine	88.8		82.8	74.9			6.82
	Carbaryl	74.3		54.9	55.5			1.11
	Carbofuran	84.3		62.4	64.0			2.53
	Clothianidin	82.4		102	100			1.74
	Dinotefuran	80.6		99.9	100			0.224
	Diuron	85.3		77.0	73.1			4.68
	Endothall	96.9		92.8	95.5			2.94
	Fenuron	101		91.6	90.0			1.78
	Fluridone	92.1		74.7	84.1			9.87
	Glufosinate	137		121	125			3.12
	Glyphosate	115		112	118			5.30
	Hydrocodone	86.9		100	100			0.161
	Ibuprofen	86.7		81.6	85.4			4.51
	Imazapyr	86.4		106	113			3.86
	Imidacloprid	88.8		137	132			4.14
	Linuron	69.3		59.4	51.7			13.8
	Mandestrobin	83.5		82.1	83.6			1.78
	MCPP	139		117	136			15.7
	Methiocarb	62.7		62.4	57.4			8.30
	Methomyl	66.6		54.7	63.7			15.3
	Naproxen	104		108	103			4.60
	Oxamyl	87.5		61.9	73.7			17.4
	Primidone	78.4		87.0	87.2			0.257
	Propoxur	61.2		19.7	20.7			1.92
	Pyraclostrobin	73.6		78.9	80.1			1.46
	Sucralose	99.1		60.4	57.2			4.99
	Thiamethoxam	84.4		122	126			3.12
	Tolfenpyrad	48.9		51.4	52.7			2.40

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Triclopyr	110	111	109			1.80
SM 2320 B-2011	Total Alkalinity	103				0.0387	
	Total Alkalinity	102				0.0612	
SM 2540 D-2011	TSS					0.0	
SM 4500 F-C-2011	Fluoride	98.5	98.6	99.2			0.506
	Fluoride	98.2	98.0	97.4			0.514
SM 5310 B-2011	Organic Carbon	98.0	101	99.9			0.592
	Organic Carbon	98.0	98.6	98.7			0.0451

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2155126, 2155129, 2155130, 2155135, 2155138
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2155167, 2155168, 2155169, 2155170
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2155167, 2155168, 2155169, 2155170
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2155126, 2155129, 2155130, 2155135, 2155138
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2155127, 2155131, 2155132, 2155136, 2155139
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2155127, 2155131, 2155132, 2155136, 2155139
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2155127, 2155131, 2155132, 2155136, 2155139
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2155127, 2155131, 2155132, 2155136, 2155139
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2155128, 2155133, 2155134, 2155137, 2155140
EPA 8270E	Organochlorine pesticides in water matrices by GC/MS-SIM	2155165
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2155166
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2155165
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2155163
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2155164
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2155164
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2155126, 2155129, 2155130, 2155135, 2155138
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2155126, 2155129, 2155130, 2155135, 2155138
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2155126, 2155129, 2155130, 2155135, 2155138
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2155127, 2155131, 2155132, 2155136, 2155139

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	02/06/2020			02/06/2020 16:32	Yen Ta	2155126, 2155129, 2155130, 2155135, 2155138
EPA 200.7 Rev. 4.4	02/06/2020	02/11/2020 14:00	Elliott D. Healy	02/12/2020 15:51	Betina Topolski	2155168
	02/06/2020	02/11/2020 14:00	Elliott D. Healy	02/12/2020 15:59	Betina Topolski	2155169
	02/06/2020	02/12/2020 16:00	Elliott D. Healy	02/14/2020 17:26	Betina Topolski	2155167
	02/06/2020	02/12/2020 16:00	Elliott D. Healy	02/14/2020 17:34	Betina Topolski	2155170
EPA 200.8 Rev. 5.4	02/06/2020	02/11/2020 14:00	Elliott D. Healy	02/18/2020 23:37	Justin Cutchin	2155168
	02/06/2020	02/11/2020 14:00	Elliott D. Healy	02/18/2020 23:46	Justin Cutchin	2155169
	02/06/2020	02/11/2020 14:00	Elliott D. Healy	02/21/2020 01:20	Justin Cutchin	2155168
	02/06/2020	02/11/2020 14:00	Elliott D. Healy	02/21/2020 01:27	Justin Cutchin	2155169
	02/06/2020	02/12/2020 16:00	Elliott D. Healy	02/21/2020 18:36	Justin Cutchin	2155167
	02/06/2020	02/12/2020 16:00	Elliott D. Healy	02/21/2020 18:43	Justin Cutchin	2155170
	02/06/2020					
EPA 300.0 Rev. 2.1	02/06/2020			02/12/2020 07:52	Elliott Rodriguez	2155126
	02/06/2020			02/12/2020 08:09	Elliott Rodriguez	2155129
	02/06/2020			02/12/2020 09:01	Elliott Rodriguez	2155130
	02/06/2020			02/12/2020 09:18	Elliott Rodriguez	2155135
	02/06/2020			02/12/2020 09:35	Elliott Rodriguez	2155138
EPA 350.1 Rev. 2.0	02/06/2020			02/13/2020 11:15	Ping Hua	2155127
	02/06/2020			02/13/2020 11:17	Ping Hua	2155131
	02/06/2020			02/13/2020 11:18	Ping Hua	2155132
	02/06/2020			02/13/2020 11:20	Ping Hua	2155136
	02/06/2020			02/13/2020 11:21	Ping Hua	2155139
EPA 351.2 Rev. 2.0	02/06/2020	02/12/2020 12:30	Elliott Rodriguez	02/13/2020 14:25	Julia Storbeck	2155132
	02/06/2020	02/12/2020 12:30	Elliott Rodriguez	02/13/2020 14:30	Julia Storbeck	2155131
	02/06/2020	02/12/2020 12:30	Elliott Rodriguez	02/13/2020 14:32	Julia Storbeck	2155136
	02/06/2020	02/12/2020 12:30	Elliott Rodriguez	02/13/2020 14:33	Julia Storbeck	2155139
	02/06/2020	02/17/2020 14:52	Sima Feizi	02/18/2020 12:00	Jhamieka S. Greenwood	2155127
EPA 353.2 Rev. 2.0	02/06/2020			02/18/2020 12:43	Beverly Y. Sanders	2155127
	02/06/2020			02/18/2020 12:44	Beverly Y. Sanders	2155131
	02/06/2020			02/18/2020 12:45	Beverly Y. Sanders	2155132
	02/06/2020			02/18/2020 12:46	Beverly Y. Sanders	2155136
	02/06/2020			02/18/2020 12:47	Beverly Y. Sanders	2155139
EPA 365.1 Rev. 2.0	02/06/2020	02/12/2020 14:34	Yen Ta	02/17/2020 15:24	Benjamin T. Nordmann	2155127
	02/06/2020	02/12/2020 14:34	Yen Ta	02/17/2020 15:25	Benjamin T. Nordmann	2155131
	02/06/2020	02/12/2020 14:34	Yen Ta	02/17/2020 15:26	Benjamin T. Nordmann	2155132
	02/06/2020	02/12/2020 14:34	Yen Ta	02/17/2020 15:27	Benjamin T. Nordmann	2155136
	02/06/2020	02/12/2020 14:34	Yen Ta	02/17/2020 15:28	Benjamin T. Nordmann	2155139
EPA 365.1 Rev. 2.0 dissolved	02/06/2020			02/06/2020 14:42	Carlos Miranda	2155128
	02/06/2020			02/06/2020 15:08	Carlos Miranda	2155137
	02/06/2020			02/06/2020 15:09	Carlos Miranda	2155140

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0 dissolved	02/06/2020			02/06/2020 15:28	Carlos Miranda	2155133
	02/06/2020			02/06/2020 15:29	Carlos Miranda	2155134
EPA 8270E	02/06/2020	02/07/2020 08:00	Fe-Val Siddell	02/11/2020 18:18	Vandana T. Nagar	2155166
	02/06/2020	02/10/2020 08:30	Rasheda Ghaffari	02/15/2020 00:35	Michael Poppell	2155165
EPA 8276	02/06/2020	02/10/2020 08:30	Rasheda Ghaffari	02/16/2020 07:28	Julie Wi	2155165
EPA 8321B	02/06/2020	02/10/2020 11:45	Rebecca Ware	02/10/2020 16:44	Rebecca Ware	2155164
	02/06/2020	02/10/2020 11:45	Rebecca Ware	02/11/2020 13:13	Rebecca Ware	2155164
	02/06/2020	02/10/2020 11:45	Rebecca Ware	02/22/2020 14:02	Rebecca Ware	2155164
	02/06/2020	02/11/2020 10:00	Hoor Shaik	02/14/2020 03:29	Juyoung Kim	2155163
	02/06/2020	02/11/2020 10:00	Hoor Shaik	02/14/2020 07:32	Juyoung Kim	2155164
	02/06/2020			02/08/2020 16:52	Dale L. Simmons	2155129
SM 2320 B-2011	02/06/2020			02/08/2020 17:34	Dale L. Simmons	2155130
	02/06/2020			02/11/2020 00:22	Dale L. Simmons	2155126
	02/06/2020			02/11/2020 00:33	Dale L. Simmons	2155135
	02/06/2020			02/11/2020 00:46	Dale L. Simmons	2155138
	02/06/2020			02/11/2020 15:30	Sima Feizi	2155126, 2155129, 2155130, 2155135, 2155138
SM 2540 D-2011	02/06/2020			02/10/2020 22:22	Dale L. Simmons	2155130
	02/06/2020			02/10/2020 23:21	Dale L. Simmons	2155126
	02/06/2020			02/10/2020 23:26	Dale L. Simmons	2155135
	02/06/2020			02/10/2020 23:30	Dale L. Simmons	2155138
	02/06/2020			02/13/2020 01:50	Dale L. Simmons	2155129
SM 4500 F-C-2011	02/06/2020			02/10/2020 18:34	Madeline Funaro	2155131
	02/06/2020			02/10/2020 23:31	Madeline Funaro	2155132
	02/06/2020			02/11/2020 07:54	Madeline Funaro	2155127
	02/06/2020			02/11/2020 08:06	Madeline Funaro	2155136
	02/06/2020			02/11/2020 08:31	Madeline Funaro	2155139
SM 5310 B-2011	02/06/2020					
	02/06/2020					
	02/06/2020					
	02/06/2020					
	02/06/2020					