Chemical Analysis Report

SO-DIST-2021-03-17-01

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

Event Description: **2021 SMP: Peace River**
Request ID: **RQ-2021-03-15-55**
Customer: **SO-DIST**
Project ID: **SMP**

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FLDEP South District Office
2295 Victoria Ave. Suite 364
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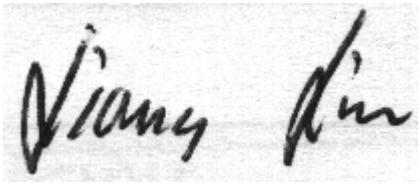
Certified by: Liang Lin, Environmental Administrator

Date Certified: 06-APR-2021 15:07



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: Alligator South @ Jones Loop Rd **Collection Date/Time: 03/16/2021 09:15**

Field ID: G2SD0033 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2231895	EPA 180.1 Rev. 2.0	Turbidity	10		NTU	P395105	
	EPA 300.0 Rev. 2.1	Chloride	190		mg Cl/L	P395299	
		Sulfate	31		mg SO4/L	P395303	
	SM 2120 B-2011	Color (true)	19	A	PCU	P395108	
	SM 2320 B-2011	Total Alkalinity	196		mg CaCO3/L	P395227	
	SM 2540 C-2011	TDS	594		mg/L	P395591	
	SM 2540 D-2011	TSS	5	I	mg/L	P395599	
	SM 4500 F-C-2011	Fluoride	0.21		mg F/L	P395233	
2231897	EPA 350.1 Rev. 2.0	Ammonia-N	0.17		mg N/L	P395448	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.72		mg N/L	P395344	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.092		mg N/L	P395126	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P395213	
	SM 5310 B-2011	Organic Carbon	8.0		mg C/L	P395520	
2231899	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.024		mg P/L	P395131	
2231932	EPA 8276	Chlordane	5.1	U	ng/L	P395393	
		Toxaphene	31	U	ng/L	P395393	
2231939	EPA 200.7 Rev. 4.4	Barium	33.4		ug/L	P395098	
		Calcium	99.5		mg/L	P395098	
		Iron	2.09E+03		ug/L	P395098	
		Magnesium	15.4		mg/L	P395098	
		Manganese	31.0		ug/L	P395098	
		Potassium	2.3		mg/L	P395098	
		Sodium	90.4		mg/L	P395098	
		Zinc	5.0	U	ug/L	P395098	
	EPA 200.8 Rev. 5.4	Aluminum	14	I	ug/L	P395098	
		Antimony	0.070	I	ug/L	P395098	
		Arsenic	1.95		ug/L	P395098	
		Boron**	43.3		ug/L	P395098	
		Cadmium	0.020	U	ug/L	P395098	
		Chromium	0.40	U	ug/L	P395098	
		Copper	0.40	U	ug/L	P395098	
		Lead	0.20	U	ug/L	P395098	
		Nickel	0.50	U	ug/L	P395098	
		Selenium	0.20	U	ug/L	P395098	
		Silver	0.010	U	ug/L	P395098	
		Thallium	0.10	U	ug/L	P395098	
	SM 2340B	Hardness	312		mg/L	P395098	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for potassium and sodium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Alligator Creek @ Boots St **Collection Date/Time: 03/16/2021 10:05**

Field ID: G2SD0044 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2231896	EPA 180.1 Rev. 2.0	Turbidity	4.1		NTU	P395105	
	EPA 300.0 Rev. 2.1	Chloride	180		mg Cl/L	P395299	
		Sulfate	47		mg SO4/L	P395303	
	SM 2120 B-2011	Color (true)	17		PCU	P395108	
	SM 2320 B-2011	Total Alkalinity	213		mg CaCO3/L	P395227	
	SM 2540 C-2011	TDS	606		mg/L	P395591	
	SM 2540 D-2011	TSS	2	I	mg/L	P395599	
	SM 4500 F-C-2011	Fluoride	0.27		mg F/L	P395233	
2231898	EPA 350.1 Rev. 2.0	Ammonia-N	0.10		mg N/L	P395449	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.57		mg N/L	P395344	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P395126	
	EPA 365.1 Rev. 2.0	Total-P	0.057		mg P/L	P395213	
	SM 5310 B-2011	Organic Carbon	7.1		mg C/L	P395520	
2231900	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.019		mg P/L	P395131	
2231933	EPA 8276	Chlordane	5.3	I	ng/L	P395393	
		Toxaphene	31	U	ng/L	P395393	
2231940	EPA 200.7 Rev. 4.4	Barium	28.4		ug/L	P395098	
		Calcium	110		mg/L	P395098	
		Iron	550		ug/L	P395098	
		Magnesium	16.0		mg/L	P395098	
		Manganese	33.8		ug/L	P395098	
		Potassium	2.8		mg/L	P395098	
		Sodium	85.0		mg/L	P395098	
		Zinc	5.0	U	ug/L	P395098	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P395098	
		Antimony	0.068	I	ug/L	P395098	
		Arsenic	3.08		ug/L	P395098	
		Boron**	65.7		ug/L	P395098	
		Cadmium	0.020	U	ug/L	P395098	
		Chromium	0.40	U	ug/L	P395098	
		Copper	0.40	U	ug/L	P395098	
		Lead	0.20	U	ug/L	P395098	
		Nickel	0.50	U	ug/L	P395098	
		Selenium	0.20	U	ug/L	P395098	
		Silver	0.010	U	ug/L	P395098	
		Thallium	0.10	U	ug/L	P395098	
	SM 2340B	Hardness	341		mg/L	P395098	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for potassium and sodium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Myrtle Slough @ Washington **Collection Date/Time: 03/16/2021 11:05**

Field ID: G3SD0180 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2231941	EPA 200.7 Rev. 4.4	Barium	35.1		ug/L	P395098	
		Calcium	90.7		mg/L	P395098	
		Iron	120	I	ug/L	P395098	
		Magnesium	54.1		mg/L	P395098	
		Manganese	22.8		ug/L	P395098	
		Potassium	18.6		mg/L	P395098	
		Sodium	374		mg/L	P395098	
		Zinc	5.0	U	ug/L	P395098	
	EPA 200.8 Rev. 5.4	Aluminum	52		ug/L	P395098	
		Antimony	0.14	I	ug/L	P395098	
		Arsenic	0.83		ug/L	P395098	
		Boron**	164		ug/L	P395098	
		Cadmium	0.020	U	ug/L	P395098	
		Chromium	0.40	U	ug/L	P395098	
		Copper	0.75	I	ug/L	P395098	
		Lead	0.20	U	ug/L	P395098	
		Nickel	0.70	I	ug/L	P395098	
		Selenium	0.23	I	ug/L	P395098	
		Silver	0.010	U	ug/L	P395098	
		Thallium	0.10	U	ug/L	P395098	
	SM 2340B	Hardness	449		mg/L	P395098	

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

Sample Location: Myrtle Slough @ Bermont **Collection Date/Time: 03/16/2021 11:40**

Field ID: G3SD0181 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2231942	EPA 200.7 Rev. 4.4	Barium	22.6		ug/L	P395098	
		Calcium	103		mg/L	P395098	
		Iron	2.91E+03		ug/L	P395098	
		Magnesium	3.03		mg/L	P395098	
		Manganese	12.1		ug/L	P395098	
		Potassium	0.63	I	mg/L	P395098	
		Sodium	15.3		mg/L	P395098	
		Zinc	5.0	U	ug/L	P395098	
	EPA 200.8 Rev. 5.4	Aluminum	28		ug/L	P395098	
		Antimony	0.059	I	ug/L	P395098	
		Arsenic	0.95		ug/L	P395098	
		Boron**	38.3		ug/L	P395098	
		Cadmium	0.020	U	ug/L	P395098	
		Chromium	1.2	I	ug/L	P395098	
		Copper	0.40	U	ug/L	P395098	
		Lead	0.20	U	ug/L	P395098	
		Nickel	0.50	U	ug/L	P395098	
		Selenium	0.20	U	ug/L	P395098	
		Silver	0.010	U	ug/L	P395098	
		Thallium	0.10	U	ug/L	P395098	
	SM 2340B	Hardness	270		mg/L	P395098	

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

Sample Location: Peace River Above Horse Creek 2 **Collection Date/Time: 03/16/2021 13:05**

Field ID: G3SD0154 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2231901	EPA 180.1 Rev. 2.0	Turbidity	9.9		NTU	P395105	
	EPA 300.0 Rev. 2.1	Chloride	29		mg Cl/L	P395299	
		Sulfate	65		mg SO4/L	P395303	
	SM 2120 B-2011	Color (true)	72		PCU	P395108	
	SM 2320 B-2011	Total Alkalinity	98		mg CaCO3/L	P395227	
	SM 2540 C-2011	TDS	272	A	mg/L	P395592	
	SM 2540 D-2011	TSS	13	A	mg/L	P395600	
	SM 4500 F-C-2011	Fluoride	0.79		mg F/L	P395233	
2231902	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P395449	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P395344	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.32		mg N/L	P395126	
	EPA 365.1 Rev. 2.0	Total-P	0.86		mg P/L	P395213	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P395520	
2231903	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.70		mg P/L	P395131	
2231929	EPA 8321B	Aldicarb	0.020	U	ug/L	P395292	
		Aldicarb Sulfone	0.0020	U	ug/L	P395292	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P395292	MS
		Carbaryl	0.0020	U	ug/L	P395292	
		Carbofuran	0.0020	U	ug/L	P395292	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P395292	
		Methiocarb	0.0020	U	ug/L	P395292	
		Methomyl	0.0020	U	ug/L	P395292	
		Oxamyl	0.0020	U	ug/L	P395292	
		Propoxur	0.0020	U	ug/L	P395292	
2231930		2,4-D	0.0061	I	ug/L	P395071	
		Acesulfame K	0.11	I	ug/L	P395125	MS
		AMPA	0.49		ug/L	P395125	
		2,4,5-T	0.0040	U	ug/L	P395071	
		Sucralose	1.5		ug/L	P395125	
		Acetaminophen	0.0080	U	ug/L	P395071	
		Endothall	0.25	U	ug/L	P395125	
		Acetamiprid	0.0020	U	ug/L	P395071	
		Glufosinate	0.10	U	ug/L	P395125	
		Glyphosate	0.62	J	ug/L	P395125	LCS
		Afidopyropen	0.0020	U	ug/L	P395071	
		Bentazon	0.0054		ug/L	P395071	
		Benzovindiflupyr	0.0020	U	ug/L	P395071	
		Carbamazepine	0.0027	I	ug/L	P395071	
		Clothianidin	0.022		ug/L	P395071	
		Dinotefuran	0.0026	I	ug/L	P395071	
		Diuron	0.0020	U	ug/L	P395071	
		Fenuron	0.016	U	ug/L	P395071	
		Fluridone	0.0018	I	ug/L	P395071	

Field ID: G3SD0154 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2231930	EPA 8321B	Imazapyr	0.037		ug/L	P395071	
		Hydrocodone	0.0020	U	ug/L	P395071	
		Ibuprofen	0.020	U	ug/L	P395071	
		Imidacloprid	0.049		ug/L	P395071	
		Linuron	0.0040	U	ug/L	P395071	
		Mandestrobin	0.0020	U	ug/L	P395071	
		MCPP	0.0020	U	ug/L	P395071	
		Naproxen	0.0080	U	ug/L	P395071	
		Primidone	0.0074	I	ug/L	P395071	
		Pyraclostrobin	0.0020	U	ug/L	P395071	
		Thiamethoxam	0.053		ug/L	P395071	
		Tolfenpyrad	0.0020	U	ug/L	P395071	
		Triclopyr	0.0040	U	ug/L	P395071	
2231934	EPA 8270E	Aldrin	0.77	U	ng/L	P395393	
		Dieldrin	0.41	U	ng/L	P395393	
		Alpha-BHC	2.1	U	ng/L	P395393	
		Kepone**	5.7	U	ng/L	P395393	
		Alpha-Chlordane	1.0	U	ng/L	P395393	
		Beta-BHC	8.3	U	ng/L	P395393	
		Beta-Cyfluthrin**	15	U	ng/L	P395393	
		Bifenthrin**	4.1	U	ng/L	P395393	
		Delta-BHC	8.3	U	ng/L	P395393	
		Gamma-BHC	8.3	U	ng/L	P395393	
		Chlorothalonil	2.1	U	ng/L	P395393	RPD
		Cis-Nonachlor**	1.0	U	ng/L	P395393	
		Cypermethrin	21	U	ng/L	P395393	
		Dacthal**	1.0	U	ng/L	P395393	
		DDD-p,p'	5.2	U	ng/L	P395393	
		DDE-p,p'	5.2	U	ng/L	P395393	
		DDT-p,p'	6.2	U	ng/L	P395393	
		Deltamethrin**	21	U	ng/L	P395393	
		Dicofol	31	U	ng/L	P395393	
		Endosulfan I	4.1	U	ng/L	P395393	
		Endosulfan II	4.1	U	ng/L	P395393	
		Endosulfan Sulfate	2.1	U	ng/L	P395393	
		Endrin	2.1	U	ng/L	P395393	
		Endrin Aldehyde	2.1	U	ng/L	P395393	
		Endrin Ketone	2.1	U	ng/L	P395393	
		Ethalfluralin**	3.1	U	ng/L	P395393	
		Gamma-Chlordane	1.0	U	ng/L	P395393	
		Dichlobenil**	2.1	U	ng/L	P395393	
		Esfenvalerate**	21	U	ng/L	P395393	
		Fenpropathrin**	10	U	ng/L	P395393	
		Heptachlor	1.5	U	ng/L	P395393	
		Heptachlor Epoxide	2.1	U	ng/L	P395393	

Field ID: G3SD0154 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2231934	EPA 8270E	Hexachlorobenzene	2.1	U	ng/L	P395393	
		Lambda-Cyhalothrin**	15	U	ng/L	P395393	
		Methoxychlor	4.1	U	ng/L	P395393	
		Mirex	2.1	U	ng/L	P395393	
		MGK-264**	3.1	U	ng/L	P395393	
		Permethrin	10	U	ng/L	P395393	
		Phenothrin**	31	U	ng/L	P395393	
		Piperonyl Butoxide**	1.5	U	ng/L	P395393	
		Prallethrin**	26	U	ng/L	P395393	
		Tau-Fluvalinate**	3.6	U	ng/L	P395393	
		Tetramethrin**	8.3	U	ng/L	P395393	
		Trans-Nonachlor**	1.0	U	ng/L	P395393	
		Triclosan Methyl**	1.0	U	ng/L	P395393	
		Trifluralin	2.6	U	ng/L	P395393	
	EPA 8276	Chlordane	5.2	U	ng/L	P395393	
		Toxaphene	31	U	ng/L	P395393	
2231935	EPA 8270E	Acetochlor	0.24	U	ng/L	P395070	
		Alachlor	0.24	U	ng/L	P395070	
		Ametryn	0.58	U	ng/L	P395070	
		Atrazine	6.7		ng/L	P395070	
		Atrazine Desethyl	1.5	U	ng/L	P395070	
		Azinphos Methyl	1.9	U	ng/L	P395070	
		Azoxystrobin**	3.6		ng/L	P395070	
		Bromacil	74		ng/L	P395070	
		Butylate	0.39	U	ng/L	P395070	
		Caffeine**	7.3	UJ	ng/L	P395070	LCS, MS
		Carbophenothion	0.48	U	ng/L	P395070	
		Carfentrazone Ethyl**	0.097	U	ng/L	P395070	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P395070	
		Chlorpyrifos Methyl	0.048	U	ng/L	P395070	
		Cyanazine	3.1	U	ng/L	P395070	
		Demeton	1.5	U	ng/L	P395070	
		Diazinon	0.12	U	ng/L	P395070	
		Difenoconazole**	0.58	U	ng/L	P395070	
		Dimethenamid**	0.097	U	ng/L	P395070	
		Disulfoton	0.48	U	ng/L	P395070	
		Dithiopyr**	0.17	U	ng/L	P395070	MS
		EPTC	1.2	U	ng/L	P395070	
		Ethion	0.15	U	ng/L	P395070	
		Ethoprop	0.097	U	ng/L	P395070	
		Fenamiphos	0.48	U	ng/L	P395070	
		Fenbuconazole**	0.16	I	ng/L	P395070	
		Fipronil	0.24	U	ng/L	P395070	
		Fipronil Desulfinyl**	0.12	U	ng/L	P395070	
		Fipronil Sulfide	0.15	U	ng/L	P395070	

Field ID: G3SD0154 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2231935	EPA 8270E	Fipronil Sulfone	0.15	U	ng/L	P395070	
		Fluazifop-P-butyl**	0.097	U	ng/L	P395070	
		Fludioxonil**	0.12	U	ng/L	P395070	
		Flumioxazin**	1.7	U	ng/L	P395070	
		Flutolanil**	0.097	U	ng/L	P395070	
		Fluxapyroxad**	0.18	I	ng/L	P395070	
		Fonofos	0.19	U	ng/L	P395070	
		Hexazinone	4.6		ng/L	P395070	
		Imazalil**	0.73	U	ng/L	P395070	
		Iprodione**	0.58	U	ng/L	P395070	
		Malathion	0.34	U	ng/L	P395070	
		Metalaxyl	9.4		ng/L	P395070	
		Metolachlor	2.6		ng/L	P395070	
		Metribuzin	3.1	U	ng/L	P395070	
		Mevinphos	1.0	U	ng/L	P395070	
		Molinate	0.29	U	ng/L	P395070	
		Myclobutanil**	0.24	U	ng/L	P395070	
		Naled**	1.5	U	ng/L	P395070	
		Norflurazon	80		ng/L	P395070	
		Oxadiazon	0.61	I	ng/L	P395480	
		Oxyfluorfen**	0.15	U	ng/L	P395070	
		Parathion Ethyl	0.24	U	ng/L	P395070	
		Parathion Methyl	0.53	U	ng/L	P395070	
		Pendimethalin	0.97	U	ng/L	P395070	
		Phorate	0.51	U	ng/L	P395070	
		Prodiamine**	0.17	U	ng/L	P395070	
		Prometon	0.87	UJ	ng/L	P395070	LCS, MS
		Prometryn	0.19	U	ng/L	P395070	
		Pronamide**	0.15	U	ng/L	P395070	
		Propiconazole**	0.48	U	ng/L	P395070	
		Pyriproxyfen**	0.12	U	ng/L	P395070	
		Simazine	7.6		ng/L	P395070	
		Sulfentrazone**	1.7	I	ng/L	P395070	
		Tebuconazole**	0.48	U	ng/L	P395070	
		Terbufos	0.097	U	ng/L	P395070	
		Terbuthylazine	0.41	U	ng/L	P395070	

Ref. Method and Comment:
EPA 8321B: 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: Peace River Estuary @ Harbour Heights **Collection Date/Time: 03/16/2021 14:30**

Field ID: G3SD0148 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2231904	EPA 180.1 Rev. 2.0	Turbidity	10		NTU	P395105	
	EPA 300.0 Rev. 2.1	Bromide	19		mg Br/L	P395413	
	SM 2320 B-2011	Total Alkalinity	88		mg CaCO3/L	P395230	
	SM 2540 D-2011	TSS	16	A	mg/L	P395604	
	SM 4500 F-C-2011	Fluoride	0.76		mg F/L	P395234	
2231905	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P395250	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P395203	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.047		mg N/L	P395206	
	EPA 365.1 Rev. 2.0	Total-P	0.53		mg P/L	P395211	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P395502	
2231906	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.32		mg P/L	P395136	

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P395105

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P395098

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P395098

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
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: P395299

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P395303

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P395413

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395250

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395448

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395449

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P395203

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P395344

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P395126

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P395206

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P395211

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P395213

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P395131

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P395136

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

Reference Method: EPA 8270E
Batch ID: P395070

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	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
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	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
Fenbuconazole	0.12	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
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P395070

Component	Result	Code	Units
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.52	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
Pyriproxyfen	0.12	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
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P395393

Component	Result	Code	Units
Aldrin	0.75	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	U	ng/L
Dichlobenil	2.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	0.40	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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P395393

Component	Result	Code	Units
Endrin Ketone	2.0	U	ng/L
Esfenvalerate	20	U	ng/L
Ethalfluralin	3.0	U	ng/L
Fenpropathrin	10	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
Kepone	5.5	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L
Methoxychlor	4.0	U	ng/L
MGK-264	3.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Piperonyl Butoxide	1.5	U	ng/L
Prallethrin	25	U	ng/L
Tau-Fluvalinate	3.5	U	ng/L
Tetramethrin	8.0	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Triclosan Methyl	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8270E
Batch ID: P395480

Component	Result	Code	Units
Oxadiazon	0.30	U	ng/L

Reference Method: EPA 8276
Batch ID: P395393

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

Reference Method: EPA 8321B
Batch ID: P395071

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P395071

Component	Result	Code	Units
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P395125

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: P395292

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: P395108

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P395227

Component	Result	Code	Units

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P395227

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

Reference Method: SM 2320 B-2011
Batch ID: P395230

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

Reference Method: SM 2540 C-2011
Batch ID: P395591

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011
Batch ID: P395592

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P395599

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P395600

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P395604

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P395233

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-2011
Batch ID: P395234

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P395502

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

Reference Method: SM 5310 B-2011
Batch ID: P395520

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: P395098

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	95.2		P	85 - 115
Calcium	101		P	85 - 115
Iron	100		P	85 - 115
Magnesium	98.1		P	85 - 115
Manganese	96.8		P	85 - 115
Potassium	97.6		P	85 - 115
Sodium	98.9		P	85 - 115
Zinc	92.6		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P395098

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	96.2		P	85 - 115
Antimony	99.6		P	85 - 115
Arsenic	99.4		P	85 - 115
Boron	96.2		P	85 - 115
Cadmium	98.1		P	85 - 115
Chromium	97.0		P	85 - 115
Copper	99.7		P	85 - 115
Lead	105		P	85 - 115
Nickel	98.1		P	85 - 115
Selenium	98.4		P	85 - 115
Silver	105		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P395299

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P395303

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P395413

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395250

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.2		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395448

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395449

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P395203

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P395344

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: P395126

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P395206

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P395211

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: P395213

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P395131

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P395136

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.5		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P395070

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	89.5	89.9	P/P	70 - 121
Alachlor	80.7	84.1	P/P	70 - 119
Ametryn	114	101	P/P	61 - 135
Atrazine	82.2	87.9	P/P	76 - 123
Atrazine Desethyl	94.2	99.5	P/P	35 - 140
Azinphos Methyl	122	112	P/P	57 - 163
Azoxystrobin	153	147	P/P	43 - 231
Bromacil	78.2	80.3	P/P	42 - 123
Butylate	38.1	49.2	P/P	34 - 92.0
Caffeine	73.9	65.5	P/F	70 - 130
Carbophenothion	80.3	80.2	P/P	61 - 121
Carfentrazone Ethyl	93.9	93.8	P/P	62 - 139
Chlorpyrifos Ethyl	78.3	78.3	P/P	67 - 121
Chlorpyrifos Methyl	83.6	81.9	P/P	67 - 120
Cyanazine	115	126	P/P	20 - 226
Demeton	68.5	69.8	P/P	35 - 125
Diazinon	84.3	84.9	P/P	70 - 122
Difenoconazole	138	128	P/P	56 - 186
Dimethenamid	84.9	79.6	P/P	67 - 119
Disulfoton	76.2	83.2	P/P	47 - 120
Dithiopyr	84.1	82.9	P/P	67 - 118
EPTC	40.7	45.8	P/P	33 - 90.0
Ethion	75.2	64.7	P/P	40 - 133
Ethoprop	77.2	82.0	P/P	61 - 121
Fenamiphos	82.2	93.1	P/P	31 - 139
Fenbuconazole	102	99.5	P/P	66 - 141
Fipronil	90.1	94.4	P/P	62 - 129
Fipronil Desulfinyl	84.2	89.0	P/P	59 - 126
Fipronil Sulfide	83.8	83.5	P/P	63 - 117
Fipronil Sulfone	78.6	77.0	P/P	57 - 117
Fluazifop-P-butyl	82.3	83.7	P/P	63 - 124
Fludioxonil	93.2	95.6	P/P	63 - 123
Flumioxazin	159	150	P/P	34 - 245
Flutolanil	83.6	80.9	P/P	56 - 131
Fluxapyroxad	78.4	75.8	P/P	57 - 117
Fonofos	76.6	80.3	P/P	61 - 116
Hexazinone	87.8	87.7	P/P	55 - 138
Imazalil	103	105	P/P	33 - 143
Iprodione	85.7	84.4	P/P	59 - 118
Malathion	89.7	88.6	P/P	62 - 138
Metalaxyl	84.8	85.8	P/P	24 - 147
Metolachlor	78.2	77.8	P/P	68 - 118
Metribuzin	82.0	91.2	P/P	20 - 239
Mevinphos	79.9	80.8	P/P	46 - 124
Molinate	52.2	57.4	P/P	46 - 100
Myclobutanil	84.8	90.3	P/P	32 - 149

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P395070

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Naled	47.4	48.7	P/P	32 - 95.0
Norflurazon	88.7	88.4	P/P	57 - 127
Oxyfluorfen	98.1	96.5	P/P	69 - 137
Parathion Ethyl	76.9	88.0	P/P	70 - 113
Parathion Methyl	86.1	91.8	P/P	71 - 130
Pendimethalin	72.2	73.0	P/P	55 - 118
Phorate	71.7	71.9	P/P	46 - 125
Prodiamine	41.5	37.5	P/P	20 - 141
Prometon	53.0	49.6	F/F	54 - 122
Prometryn	67.3	66.4	P/P	66 - 124
Pronamide	82.6	91.9	P/P	79 - 122
Propiconazole	87.2	84.6	P/P	61 - 126
Pyriproxyfen	88.1	79.2	P/P	52 - 131
Simazine	80.2	84.5	P/P	75 - 128
Sulfentrazone	79.6	79.2	P/P	20 - 132
Tebuconazole	66.6	50.9	P/P	20 - 116
Terbufos	74.9	78.0	P/P	61 - 117
Terbuthylazine	78.2	82.6	P/P	74 - 116

Reference Method: EPA 8270E
Batch ID: P395393

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	30.8	28.3	P/P	20 - 110
Alpha-BHC	86.1	87.6	P/P	58 - 130
Alpha-Chlordane	87.9	89.0	P/P	61 - 105
Beta-BHC	85.3	90.8	P/P	53 - 164
Beta-Cyfluthrin	83.4	84.2	P/P	40 - 140
Bifenthrin	93.2	90.5	P/P	44 - 122
Chlorothalonil	62.7	72.2	P/P	20 - 201
Cis-Nonachlor	88.9	90.2	P/P	60 - 110
Cypermethrin	83.1	87.5	P/P	43 - 131
Dacthal	93.5	95.5	P/P	76 - 108
DDD-p,p'	90.0	92.8	P/P	68 - 118
DDE-p,p'	89.9	89.4	P/P	56 - 107
DDT-p,p'	92.1	91.2	P/P	55 - 122
Delta-BHC	106	117	P/P	60 - 181
Deltamethrin	96.0	95.7	P/P	51 - 139
Dichlobenil	52.1	52.9	P/P	20 - 106
Dicofol	93.6	106	P/P	56 - 130
Dieldrin	74.1	73.4	P/P	58 - 112
Endosulfan I	90.1	91.2	P/P	68 - 115
Endosulfan II	99.2	98.9	P/P	69 - 133
Endosulfan Sulfate	84.4	93.5	P/P	65 - 126
Endrin	97.1	93.6	P/P	66 - 118
Endrin Aldehyde	105	112	P/P	60 - 132
Endrin Ketone	87.1	93.3	P/P	68 - 121
Esfenvalerate	80.1	81.0	P/P	42 - 116
Ethalfluralin	85.0	84.9	P/P	50 - 118
Fenpropathrin	93.2	95.0	P/P	55 - 132
Gamma-BHC	93.7	95.9	P/P	65 - 147
Gamma-Chlordane	85.1	87.1	P/P	56 - 103

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P395393

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Heptachlor	77.2	80.6	P/P	47 - 95.0
Heptachlor Epoxide	87.8	89.5	P/P	67 - 107
Hexachlorobenzene	79.8	80.2	P/P	45 - 99.0
Kepone	116	122	P/P	28 - 128
Lambda-Cyhalothrin	86.7	90.8	P/P	41 - 135
Methoxychlor	95.8	94.0	P/P	61 - 138
MGK-264	38.3	38.7	P/P	20 - 109
Mirex	75.7	75.5	P/P	36 - 92.0
Permethrin	83.9	86.4	P/P	45 - 111
Phenothrin	39.4	40.3	P/P	22 - 88.0
Piperonyl Butoxide	104	106	P/P	67 - 120
Prallethrin	42.3	45.8	P/P	28 - 92.0
Tau-Fluvalinate	96.4	99.9	P/P	38 - 145
Tetramethrin	91.4	93.6	P/P	29 - 150
Trans-Nonachlor	87.7	88.6	P/P	54 - 105
Triclosan Methyl	101	101	P/P	76 - 115
Trifluralin	83.4	84.2	P/P	53 - 111

Reference Method: EPA 8270E
Batch ID: P395480

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxadiazon	87.6	80.9	P/P	63 - 118

Reference Method: EPA 8276
Batch ID: P395393

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	105	105	P/P	56 - 117
Toxaphene	85.0	79.1	P/P	45 - 116

Reference Method: EPA 8321B
Batch ID: P395071

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	133		P	30 - 160
2,4,5-T	103		P	30 - 160
Acetaminophen	92.2		P	30 - 160
Acetamiprid	109		P	30 - 160
Afidopyropen	79.1		P	30 - 160
Bentazon	91.2		P	30 - 160
Benzovindiflupyr	92.0		P	30 - 160
Carbamazepine	105		P	30 - 160
Clothianidin	103		P	30 - 160
Dinotefuran	106		P	30 - 160
Diuron	78.3		P	30 - 160
Fenuron	107		P	30 - 160
Fluridone	101		P	30 - 160
Hydrocodone	105		P	30 - 160
Ibuprofen	102		P	30 - 160
Imazapyr	112		P	30 - 160
Imidacloprid	112		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P395071

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Linuron	85.5		P	30 - 160
Mandestrobin	96.1		P	30 - 160
MCPP	123		P	30 - 160
Naproxen	56.1		P	30 - 160
Primidone	99.7		P	30 - 160
Pyraclostrobin	89.1		P	30 - 160
Thiamethoxam	110		P	30 - 160
Tolfenpyrad	62.8		P	30 - 160
Triclopyr	107		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P395125

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	115		P	40 - 150
AMPA	104		P	40 - 150
Endothall	87.4		P	40 - 150
Glufosinate	125		P	40 - 150
Glyphosate	148		F	40 - 140
Sucralose	93.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P395292

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	95.0		P	30 - 160
Aldicarb	79.6		P	30 - 160
Aldicarb Sulfone	88.1		P	30 - 160
Aldicarb Sulfoxide	75.9		P	30 - 160
Carbaryl	76.4		P	30 - 160
Carbofuran	85.1		P	30 - 160
Methiocarb	65.2		P	30 - 160
Methomyl	78.8		P	30 - 160
Oxamyl	102		P	30 - 160
Propoxur	81.3		P	30 - 160

Reference Method: SM 2120 B-2011
Batch ID: P395108

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.0		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P395227

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.9		P	93 - 104

Reference Method: SM 2320 B-2011
Batch ID: P395230

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P395230

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P395233

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	103		P	90 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P395234

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	104		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P395502

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.5		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P395520

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.0		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P395098

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231676	Barium	99.5		P	80 - 120
2231676	Calcium	90.3		P	80 - 120
2231676	Iron	107		P	80 - 120
2231676	Magnesium	87.0		P	80 - 120
2231676	Manganese	101		P	80 - 120
2231676	Zinc	101		P	80 - 120
2232092	Barium	99.4	103	P/P	80 - 120
2232092	Calcium	105	107	P/P	80 - 120
2232092	Iron	105	107	P/P	80 - 120
2232092	Magnesium	103	105	P/P	80 - 120
2232092	Manganese	99.7	103	P/P	80 - 120
2232092	Potassium	104	106	P/P	80 - 120
2232092	Sodium	103	106	P/P	80 - 120
2232092	Zinc	98.0	102	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P395098

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231676	Aluminum	97.2		P	80 - 120
2231676	Antimony	105		P	80 - 120
2231676	Arsenic	106		P	80 - 120
2231676	Boron	99.5		P	80 - 120
2231676	Cadmium	101		P	80 - 120
2231676	Chromium	98.6		P	80 - 120
2231676	Copper	98.3		P	80 - 120
2231676	Lead	108		P	80 - 120
2231676	Nickel	93.9		P	80 - 120
2231676	Selenium	99.2		P	80 - 120
2231676	Silver	99.4		P	80 - 120
2231676	Thallium	104		P	80 - 120
2232092	Aluminum	90.8	94.0	P/P	80 - 120
2232092	Antimony	99.3	99.7	P/P	80 - 120
2232092	Arsenic	97.1	99.2	P/P	80 - 120
2232092	Boron	94.5	96.8	P/P	80 - 120
2232092	Cadmium	99.1	97.8	P/P	80 - 120
2232092	Chromium	95.9	97.2	P/P	80 - 120
2232092	Copper	98.8	99.1	P/P	80 - 120
2232092	Lead	105	106	P/P	80 - 120
2232092	Nickel	96.8	97.1	P/P	80 - 120
2232092	Selenium	94.5	96.6	P/P	80 - 120
2232092	Silver	105	105	P/P	80 - 120
2232092	Thallium	103	105	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P395299

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231861	Chloride	101		P	90 - 110
2231989	Chloride	101		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P395303

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231861	Sulfate	96.7		P	90 - 110
2231989	Sulfate	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P395413

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231575	Bromide	103	102	P/P	90 - 110
2232292	Bromide	98.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395250

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2230850	Ammonia-N	98.4	99.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395448

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231863	Ammonia-N	97.2	99.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395449

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2232017	Ammonia-N	95.6	97.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P395203

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2230710	Kjeldahl Nitrogen	107	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P395344

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231846	Kjeldahl Nitrogen	111	110	F/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P395126

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231883	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P395206

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231627	NO2NO3-N	98.8	95.2	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P395211

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231905	Total-P	97.0	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P395213

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231863	Total-P	103	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P395131

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231899	O-Phosphate-P	97.3	98.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P395136

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231980	O-Phosphate-P	97.2	98.2	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P395070

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231680	Acetochlor	73.4	79.7	P/P	66 - 122
2231680	Alachlor	67.7	79.4	P/P	65 - 122
2231680	Ametryn	47.9	50.7	P/P	45 - 173
2231680	Atrazine Desethyl	75.7	82.4	P/P	25 - 150
2231680	Azinphos Methyl	97.4	106	P/P	44 - 174
2231680	Bromacil	86.8	115	P/P	31 - 145
2231680	Butylate	45.9	59.0	P/P	15 - 97.0
2231680	Caffeine	61.9	79.8	F/P	70 - 130
2231680	Carbophenothion	70.3	74.4	P/P	42 - 129
2231680	Carfentrazone Ethyl	80.0	83.0	P/P	62 - 145
2231680	Chlorpyrifos Ethyl	62.4	71.6	P/P	60 - 124
2231680	Chlorpyrifos Methyl	75.1	77.1	P/P	66 - 119
2231680	Cyanazine	80.2	84.8	P/P	17 - 225
2231680	Demeton	61.2	66.3	P/P	36 - 142
2231680	Diazinon	73.0	79.5	P/P	70 - 128
2231680	Difenoconazole	140	141	P/P	33 - 222
2231680	Dimethenamid	64.0	67.8	P/P	54 - 125
2231680	Disulfoton	86.7	94.6	P/P	49 - 133
2231680	Dithiopyr	46.8	52.5	F/F	55 - 123
2231680	EPTC	43.5	56.5	P/P	19 - 91.0
2231680	Ethion	68.6	64.1	P/P	13 - 143
2231680	Ethoprop	83.0	89.2	P/P	49 - 144
2231680	Fenamiphos	78.8	88.4	P/P	32 - 136
2231680	Fenbuconazole	98.6	97.7	P/P	73 - 148
2231680	Fipronil	84.8	88.6	P/P	57 - 129
2231680	Fipronil Desulfinyl	76.4	79.5	P/P	49 - 127
2231680	Fipronil Sulfide	75.4	85.9	P/P	44 - 127
2231680	Fipronil Sulfone	73.2	73.3	P/P	35 - 126

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P395070

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231680	Fluazifop-P-butyl	73.4	74.0	P/P	67 - 129
2231680	Fludioxonil	84.9	89.5	P/P	61 - 126
2231680	Flumioxazin	158	162	P/P	38 - 279
2231680	Flutolanil	61.5	65.3	P/P	55 - 136
2231680	Fluxapyroxad	74.3	73.5	P/P	33 - 140
2231680	Fonofos	83.7	88.8	P/P	58 - 125
2231680	Hexazinone	91.1	94.3	P/P	57 - 148
2231680	Imazalil	111	102	P/P	10 - 221
2231680	Iprodione	79.4	87.8	P/P	32 - 140
2231680	Malathion	81.0	89.7	P/P	52 - 138
2231680	Metalaxyl	76.4	88.6	P/P	46 - 134
2231680	Metolachlor	67.2	71.0	P/P	58 - 122
2231680	Metribuzin	79.1	92.9	P/P	16 - 272
2231680	Mevinphos	96.4	106	P/P	45 - 140
2231680	Molinate	58.2	72.5	P/P	41 - 103
2231680	Myclobutanil	92.6	95.7	P/P	60 - 134
2231680	Naled	45.4	52.8	P/P	20 - 113
2231680	Norflurazon	81.0	78.2	P/P	51 - 123
2231680	Oxyfluorfen	101	106	P/P	66 - 176
2231680	Parathion Ethyl	89.8	95.4	P/P	57 - 132
2231680	Parathion Methyl	96.9	102	P/P	59 - 156
2231680	Pendimethalin	73.3	78.5	P/P	59 - 129
2231680	Phorate	76.2	83.3	P/P	47 - 136
2231680	Prodiamine	36.4	39.0	P/P	10 - 159
2231680	Prometon	53.4	53.9	F/F	59 - 127
2231680	Prometryn	74.3	82.2	P/P	59 - 129
2231680	Pronamide	79.3	92.8	P/P	65 - 145
2231680	Propiconazole	79.9	73.5	P/P	28 - 165
2231680	Pyriproxyfen	72.0	77.0	P/P	21 - 180
2231680	Simazine	67.6	71.0	P/P	63 - 147
2231680	Sulfentrazone	77.7	71.8	P/P	32 - 136
2231680	Terbufos	80.9	92.7	P/P	61 - 131
2231680	Terbuthylazine	77.3	70.2	P/P	62 - 126

Reference Method: EPA 8270E
Batch ID: P395393

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2232808	Aldrin	61.3	58.9	P/P	22 - 127
2232808	Dieldrin	77.3	75.4	P/P	52 - 123
2232808	Kepone	81.8	81.2	P/P	18 - 138
2232959	Alpha-BHC	100	98.0	P/P	53 - 147
2232959	Alpha-Chlordane	86.7	88.1	P/P	56 - 107
2232959	Beta-BHC	94.4	97.9	P/P	43 - 182
2232959	Beta-Cyfluthrin	90.1	90.3	P/P	42 - 157
2232959	Bifenthrin	89.7	89.9	P/P	52 - 124
2232959	Chlorothalonil	34.6	52.2	P/P	10 - 265
2232959	Cis-Nonachlor	87.3	89.0	P/P	55 - 112
2232959	Cypermethrin	90.5	92.7	P/P	46 - 144
2232959	Dacthal	96.5	97.3	P/P	72 - 110
2232959	DDD-p,p'	90.1	90.1	P/P	58 - 123
2232959	DDE-p,p'	85.0	84.8	P/P	52 - 106

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P395393

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2232959	DDT-p,p'	87.2	86.7	P/P	50 - 127
2232959	Delta-BHC	138	143	P/P	56 - 222
2232959	Deltamethrin	105	111	P/P	47 - 152
2232959	Dichlobenil	45.4	45.3	P/P	22 - 99.0
2232959	Dicofol	111	92.3	P/P	38 - 145
2232959	Endosulfan I	95.0	92.1	P/P	64 - 124
2232959	Endosulfan II	106	101	P/P	52 - 159
2232959	Endosulfan Sulfate	98.8	103	P/P	62 - 136
2232959	Endrin	100	94.8	P/P	57 - 126
2232959	Endrin Aldehyde	83.2	93.9	P/P	41 - 128
2232959	Endrin Ketone	96.5	99.8	P/P	67 - 129
2232959	Esfenvalerate	82.1	82.7	P/P	50 - 120
2232959	Ethalfluralin	86.6	86.9	P/P	41 - 125
2232959	Fenpropathrin	91.9	91.9	P/P	40 - 202
2232959	Gamma-BHC	102	101	P/P	58 - 180
2232959	Gamma-Chlordane	84.7	85.4	P/P	54 - 103
2232959	Heptachlor	81.0	78.7	P/P	46 - 94.0
2232959	Heptachlor Epoxide	91.9	93.0	P/P	62 - 111
2232959	Hexachlorobenzene	77.7	76.5	P/P	42 - 95.0
2232959	Lambda-Cyhalothrin	95.9	98.7	P/P	37 - 162
2232959	Methoxychlor	93.9	91.0	P/P	52 - 143
2232959	MGK-264	74.5	75.7	P/P	37 - 102
2232959	Mirex	71.4	71.3	P/P	43 - 91.0
2232959	Permethrin	84.0	85.4	P/P	48 - 113
2232959	Phenothrin	66.5	67.5	P/P	30 - 104
2232959	Piperonyl Butoxide	114	116	P/P	67 - 127
2232959	Prallethrin	63.7	67.2	P/P	28 - 102
2232959	Tau-Fluvalinate	108	110	P/P	46 - 174
2232959	Tetramethrin	116	115	P/P	28 - 176
2232959	Trans-Nonachlor	85.8	86.0	P/P	51 - 103
2232959	Triclosan Methyl	98.2	98.5	P/P	67 - 116
2232959	Trifluralin	83.4	83.0	P/P	47 - 118

Reference Method: EPA 8270E
Batch ID: P395480

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2232695	Oxadiazon	52.7	61.6	P/P	44 - 125

Reference Method: EPA 8276
Batch ID: P395393

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2232808	Chlordane	103	104	P/P	47 - 128
2232808	Toxaphene	125	128	P/P	11 - 163

Reference Method: EPA 8321B
Batch ID: P395071

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231596	2,4-D	116	124	P/P	30 - 160
2231596	2,4,5-T	98.9	103	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P395071

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231596	Acetaminophen	94.8	103	P/P	30 - 160
2231596	Acetamiprid	107	97.0	P/P	30 - 160
2231596	Afidopyropen	78.5	65.5	P/P	30 - 160
2231596	Bentazon	67.7	70.4	P/P	30 - 160
2231596	Benzovindiflupyr	89.4	92.9	P/P	30 - 160
2231596	Carbamazepine	95.3	91.9	P/P	30 - 160
2231596	Clothianidin	113	101	P/P	30 - 160
2231596	Dinotefuran	109	95.4	P/P	30 - 160
2231596	Diuron	64.9	67.1	P/P	30 - 160
2231596	Fenuron	93.9	97.0	P/P	30 - 160
2231596	Fluridone	87.5	90.0	P/P	30 - 160
2231596	Hydrocodone	108	104	P/P	30 - 160
2231596	Ibuprofen	82.1	83.6	P/P	30 - 160
2231596	Imazapyr	118	113	P/P	30 - 160
2231596	Imidacloprid	137	135	P/P	30 - 160
2231596	Linuron	74.3	73.9	P/P	30 - 160
2231596	Mandestrobin	86.6	88.4	P/P	30 - 160
2231596	MCPP	107	112	P/P	30 - 160
2231596	Naproxen	73.6	80.1	P/P	30 - 160
2231596	Primidone	101	99.6	P/P	30 - 160
2231596	Pyraclostrobin	85.7	84.9	P/P	30 - 160
2231596	Thiamethoxam	135	126	P/P	30 - 160
2231596	Tolfenpyrad	58.0	59.2	P/P	30 - 160
2231596	Triclopyr	102	103	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P395125

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231596	Acesulfame K	177	145	F/P	40 - 150
2231596	AMPA	120	127	P/P	40 - 150
2231596	Endothall	82.1	109	P/P	40 - 150
2231596	Glufosinate	134	135	P/P	40 - 150
2231596	Glyphosate	105	92.0	P/P	40 - 140
2231596	Sucralose	105	103	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P395292

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231740	3-Hydroxycarbofuran	82.0	86.2	P/P	30 - 160
2231740	Aldicarb	56.3	75.3	P/P	30 - 160
2231740	Aldicarb Sulfone	90.6	94.7	P/P	30 - 160
2231740	Aldicarb Sulfoxide	26.1	25.3	F/F	30 - 160
2231740	Carbaryl	58.4	55.1	P/P	30 - 160
2231740	Carbofuran	62.1	63.1	P/P	30 - 160
2231740	Methiocarb	58.5	57.8	P/P	30 - 160
2231740	Methomyl	57.6	61.4	P/P	30 - 160
2231740	Oxamyl	80.4	81.8	P/P	30 - 160
2231740	Propoxur	57.3	58.1	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P395233

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2232044	Fluoride	101	102	P/P	94 - 107

Reference Method: SM 4500 F-C-2011
Batch ID: P395234

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231626	Fluoride	102	103	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P395502

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2232839	Organic Carbon	93.4	94.1	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P395520

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2231897	Organic Carbon	94.3	95.5	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P395105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231882	Turbidity	14.7	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P395098

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2232092	Barium	3.82	Spike	P	0 - 20
2232092	Calcium	1.87	Spike	P	0 - 20
2232092	Iron	2.29	Spike	P	0 - 20
2232092	Magnesium	2.18	Spike	P	0 - 20
2232092	Manganese	3.34	Spike	P	0 - 20
2232092	Potassium	2.20	Spike	P	0 - 20
2232092	Sodium	1.84	Spike	P	0 - 20
2232092	Zinc	3.88	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P395098

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2232092	Aluminum	3.17	Spike	P	0 - 20
2232092	Antimony	0.398	Spike	P	0 - 20
2232092	Arsenic	2.08	Spike	P	0 - 20
2232092	Boron	2.18	Spike	P	0 - 20
2232092	Cadmium	1.39	Spike	P	0 - 20
2232092	Chromium	1.35	Spike	P	0 - 20
2232092	Copper	0.344	Spike	P	0 - 20
2232092	Lead	0.506	Spike	P	0 - 20
2232092	Nickel	0.309	Spike	P	0 - 20
2232092	Selenium	2.12	Spike	P	0 - 20
2232092	Silver	0.442	Spike	P	0 - 20
2232092	Thallium	2.07	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P395299

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231861	Chloride	0.710	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P395303

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231861	Sulfate	0.845	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P395413

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231575	Bromide	1.21	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395250

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2230850	Ammonia-N	0.847	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395448

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231863	Ammonia-N	2.44	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P395449

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2232017	Ammonia-N	1.75	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P395203

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2230710	Kjeldahl Nitrogen	4.91	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P395344

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231846	Kjeldahl Nitrogen	0.829	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P395126

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231883	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P395206

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231627	NO2NO3-N	3.01	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P395211

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231905	Total-P	2.06	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P395213

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231863	Total-P	4.09	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P395131

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231899	O-Phosphate-P	1.14	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P395136

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231980	O-Phosphate-P	0.892	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P395070

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231680	Acetochlor	8.22	Spike	P	0 - 30
2231680	Alachlor	16.0	Spike	P	0 - 30
2231680	Ametryn	5.54	Spike	P	0 - 30
2231680	Atrazine	0.740	Spike	P	0 - 30
2231680	Atrazine Desethyl	6.52	Spike	P	0 - 30
2231680	Azinphos Methyl	8.09	Spike	P	0 - 30
2231680	Azoxystrobin	4.18	Spike	P	0 - 30
2231680	Bromacil	28.0	Spike	P	0 - 30
2231680	Butylate	25.0	Spike	P	0 - 30
2231680	Caffeine	18.0	Spike	P	0 - 30
2231680	Carbophenothion	5.58	Spike	P	0 - 30
2231680	Carfentrazone Ethyl	3.69	Spike	P	0 - 30
2231680	Chlorpyrifos Ethyl	13.8	Spike	P	0 - 30
2231680	Chlorpyrifos Methyl	2.57	Spike	P	0 - 30
2231680	Cyanazine	5.59	Spike	P	0 - 30
2231680	Demeton	7.92	Spike	P	0 - 30
2231680	Diazinon	8.44	Spike	P	0 - 30
2231680	Difenoconazole	0.677	Spike	P	0 - 30
2231680	Dimethenamid	5.70	Spike	P	0 - 30
2231680	Disulfoton	8.75	Spike	P	0 - 30
2231680	Dithiopyr	11.5	Spike	P	0 - 30
2231680	EPTC	26.0	Spike	P	0 - 30
2231680	Ethion	6.78	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P395070

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231680	Ethoprop	7.22	Spike	P	0 - 30
2231680	Fenamiphos	11.5	Spike	P	0 - 30
2231680	Fenbuconazole	0.898	Spike	P	0 - 30
2231680	Fipronil	4.41	Spike	P	0 - 30
2231680	Fipronil Desulfinyl	3.56	Spike	P	0 - 30
2231680	Fipronil Sulfide	6.52	Spike	P	0 - 30
2231680	Fipronil Sulfone	0.178	Spike	P	0 - 30
2231680	Fluazifop-P-butyl	0.807	Spike	P	0 - 30
2231680	Fludioxonil	4.53	Spike	P	0 - 30
2231680	Flumioxazin	2.52	Spike	P	0 - 30
2231680	Flutolanil	4.71	Spike	P	0 - 30
2231680	Fluxapyroxad	0.856	Spike	P	0 - 30
2231680	Fonofos	5.94	Spike	P	0 - 30
2231680	Hexazinone	3.51	Spike	P	0 - 30
2231680	Imazalil	8.81	Spike	P	0 - 30
2231680	Iprodione	10.0	Spike	P	0 - 30
2231680	Malathion	10.2	Spike	P	0 - 30
2231680	Metalaxyl	14.8	Spike	P	0 - 30
2231680	Metolachlor	5.46	Spike	P	0 - 30
2231680	Metribuzin	16.1	Spike	P	0 - 30
2231680	Mevinphos	9.41	Spike	P	0 - 30
2231680	Molinate	22.0	Spike	P	0 - 30
2231680	Myclobutanil	3.32	Spike	P	0 - 30
2231680	Naled	15.1	Spike	P	0 - 30
2231680	Norflurazon	3.53	Spike	P	0 - 30
2231680	Oxyfluorfen	4.74	Spike	P	0 - 30
2231680	Parathion Ethyl	6.10	Spike	P	0 - 30
2231680	Parathion Methyl	4.80	Spike	P	0 - 30
2231680	Pendimethalin	6.93	Spike	P	0 - 30
2231680	Phorate	8.92	Spike	P	0 - 30
2231680	Prodiamine	6.91	Spike	P	0 - 30
2231680	Prometon	1.02	Spike	P	0 - 30
2231680	Prometryn	10.1	Spike	P	0 - 30
2231680	Pronamide	15.7	Spike	P	0 - 30
2231680	Propiconazole	4.92	Spike	P	0 - 30
2231680	Pyriproxyfen	6.69	Spike	P	0 - 30
2231680	Simazine	3.64	Spike	P	0 - 30
2231680	Sulfentrazone	4.32	Spike	P	0 - 30
2231680	Tebuconazole	7.20	Spike	P	0 - 30
2231680	Terbufos	13.6	Spike	P	0 - 30
2231680	Terbuthylazine	9.69	Spike	P	0 - 30
LFB	Acetochlor	0.484	LCS	P	0 - 30
LFB	Alachlor	4.15	LCS	P	0 - 30
LFB	Ametryn	12.0	LCS	P	0 - 30
LFB	Atrazine	6.69	LCS	P	0 - 30
LFB	Atrazine Desethyl	5.48	LCS	P	0 - 30
LFB	Azinphos Methyl	7.99	LCS	P	0 - 30
LFB	Azoxystrobin	4.01	LCS	P	0 - 30
LFB	Bromacil	2.59	LCS	P	0 - 30
LFB	Butylate	25.3	LCS	P	0 - 30
LFB	Caffeine	12.0	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P395070

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Carbophenothion	0.124	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	0.124	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	0.102	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	2.07	LCS	P	0 - 30
LFB	Cyanazine	8.76	LCS	P	0 - 30
LFB	Demeton	1.84	LCS	P	0 - 30
LFB	Diazinon	0.699	LCS	P	0 - 30
LFB	Difenoconazole	7.63	LCS	P	0 - 30
LFB	Dimethenamid	6.39	LCS	P	0 - 30
LFB	Disulfoton	8.72	LCS	P	0 - 30
LFB	Dithiopyr	1.39	LCS	P	0 - 30
LFB	EPTC	11.8	LCS	P	0 - 30
LFB	Ethion	14.9	LCS	P	0 - 30
LFB	Ethoprop	6.05	LCS	P	0 - 30
LFB	Fenamiphos	12.5	LCS	P	0 - 30
LFB	Fenbuconazole	2.11	LCS	P	0 - 30
LFB	Fipronil	4.64	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	5.63	LCS	P	0 - 30
LFB	Fipronil Sulfide	0.463	LCS	P	0 - 30
LFB	Fipronil Sulfone	1.95	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	1.59	LCS	P	0 - 30
LFB	Fludioxonil	2.49	LCS	P	0 - 30
LFB	Flumioxazin	5.89	LCS	P	0 - 30
LFB	Flutolanil	3.34	LCS	P	0 - 30
LFB	Fluxapyroxad	3.33	LCS	P	0 - 30
LFB	Fonofos	4.72	LCS	P	0 - 30
LFB	Hexazinone	0.0755	LCS	P	0 - 30
LFB	Imazalil	2.17	LCS	P	0 - 30
LFB	Iprodione	1.60	LCS	P	0 - 30
LFB	Malathion	1.25	LCS	P	0 - 30
LFB	Metalaxyl	1.21	LCS	P	0 - 30
LFB	Metolachlor	0.563	LCS	P	0 - 30
LFB	Metribuzin	10.6	LCS	P	0 - 30
LFB	Mevinphos	1.17	LCS	P	0 - 30
LFB	Molinate	9.56	LCS	P	0 - 30
LFB	Myclobutanil	6.26	LCS	P	0 - 30
LFB	Naled	2.71	LCS	P	0 - 30
LFB	Norflurazon	0.393	LCS	P	0 - 30
LFB	Oxyfluorfen	1.70	LCS	P	0 - 30
LFB	Parathion Ethyl	13.4	LCS	P	0 - 30
LFB	Parathion Methyl	6.36	LCS	P	0 - 30
LFB	Pendimethalin	1.20	LCS	P	0 - 30
LFB	Phorate	0.333	LCS	P	0 - 30
LFB	Prodiamine	10.3	LCS	P	0 - 30
LFB	Prometon	6.53	LCS	P	0 - 30
LFB	Prometryn	1.22	LCS	P	0 - 30
LFB	Pronamide	10.8	LCS	P	0 - 30
LFB	Propiconazole	3.02	LCS	P	0 - 30
LFB	Pyriproxyfen	10.6	LCS	P	0 - 30
LFB	Simazine	5.20	LCS	P	0 - 30
LFB	Sulfentrazone	0.515	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P395070

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Tebuconazole	26.7	LCS	P	0 - 30
LFB	Terbufos	4.08	LCS	P	0 - 30
LFB	Terbuthylazine	5.50	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P395393

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2232808	Aldrin	4.04	Spike	P	0 - 30
2232808	Dieldrin	2.42	Spike	P	0 - 30
2232808	Kepone	0.775	Spike	P	0 - 30
2232959	Alpha-BHC	2.01	Spike	P	0 - 30
2232959	Alpha-Chlordane	1.60	Spike	P	0 - 30
2232959	Beta-BHC	3.64	Spike	P	0 - 30
2232959	Beta-Cyfluthrin	0.281	Spike	P	0 - 30
2232959	Bifenthrin	0.164	Spike	P	0 - 30
2232959	Chlorothalonil	40.6	Spike	F	0 - 30
2232959	Cis-Nonachlor	1.87	Spike	P	0 - 30
2232959	Cypermethrin	2.48	Spike	P	0 - 30
2232959	Dacthal	0.864	Spike	P	0 - 30
2232959	DDD-p,p'	0.0274	Spike	P	0 - 30
2232959	DDE-p,p'	0.249	Spike	P	0 - 30
2232959	DDT-p,p'	0.552	Spike	P	0 - 30
2232959	Delta-BHC	3.06	Spike	P	0 - 30
2232959	Deltamethrin	5.17	Spike	P	0 - 30
2232959	Dichlobenil	0.270	Spike	P	0 - 30
2232959	Dicofol	18.0	Spike	P	0 - 30
2232959	Endosulfan I	3.11	Spike	P	0 - 30
2232959	Endosulfan II	4.49	Spike	P	0 - 30
2232959	Endosulfan Sulfate	3.98	Spike	P	0 - 30
2232959	Endrin	5.61	Spike	P	0 - 30
2232959	Endrin Aldehyde	12.1	Spike	P	0 - 30
2232959	Endrin Ketone	3.34	Spike	P	0 - 30
2232959	Esfenvalerate	0.805	Spike	P	0 - 30
2232959	Ethalfluralin	0.368	Spike	P	0 - 30
2232959	Fenpropathrin	0.0392	Spike	P	0 - 30
2232959	Gamma-BHC	0.523	Spike	P	0 - 30
2232959	Gamma-Chlordane	0.860	Spike	P	0 - 30
2232959	Heptachlor	2.82	Spike	P	0 - 30
2232959	Heptachlor Epoxide	1.18	Spike	P	0 - 30
2232959	Hexachlorobenzene	1.52	Spike	P	0 - 30
2232959	Lambda-Cyhalothrin	2.91	Spike	P	0 - 30
2232959	Methoxychlor	3.17	Spike	P	0 - 30
2232959	MGK-264	1.63	Spike	P	0 - 30
2232959	Mirex	0.131	Spike	P	0 - 30
2232959	Permethrin	1.66	Spike	P	0 - 30
2232959	Phenothrin	1.58	Spike	P	0 - 30
2232959	Piperonyl Butoxide	1.64	Spike	P	0 - 30
2232959	Prallethrin	5.32	Spike	P	0 - 30
2232959	Tau-Fluvalinate	1.98	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P395393

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2232959	Tetramethrin	0.850	Spike	P	0 - 30
2232959	Trans-Nonachlor	0.169	Spike	P	0 - 30
2232959	Triclosan Methyl	0.308	Spike	P	0 - 30
2232959	Trifluralin	0.486	Spike	P	0 - 30
LFB	Aldrin	8.54	LCS	P	0 - 30
LFB	Alpha-BHC	1.76	LCS	P	0 - 30
LFB	Alpha-Chlordane	1.33	LCS	P	0 - 30
LFB	Beta-BHC	6.23	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	0.951	LCS	P	0 - 30
LFB	Bifenthrin	2.89	LCS	P	0 - 30
LFB	Chlorothalonil	14.1	LCS	P	0 - 30
LFB	Cis-Nonachlor	1.43	LCS	P	0 - 30
LFB	Cypermethrin	5.21	LCS	P	0 - 30
LFB	Dacthal	2.07	LCS	P	0 - 30
LFB	DDD-p,p'	3.02	LCS	P	0 - 30
LFB	DDE-p,p'	0.635	LCS	P	0 - 30
LFB	DDT-p,p'	0.936	LCS	P	0 - 30
LFB	Delta-BHC	9.51	LCS	P	0 - 30
LFB	Deltamethrin	0.350	LCS	P	0 - 30
LFB	Dichlobenil	1.56	LCS	P	0 - 30
LFB	Dicofol	12.7	LCS	P	0 - 30
LFB	Dieldrin	0.941	LCS	P	0 - 30
LFB	Endosulfan I	1.25	LCS	P	0 - 30
LFB	Endosulfan II	0.376	LCS	P	0 - 30
LFB	Endosulfan Sulfate	10.2	LCS	P	0 - 30
LFB	Endrin	3.73	LCS	P	0 - 30
LFB	Endrin Aldehyde	5.90	LCS	P	0 - 30
LFB	Endrin Ketone	6.84	LCS	P	0 - 30
LFB	Esfenvalerate	1.09	LCS	P	0 - 30
LFB	Ethalfluralin	0.196	LCS	P	0 - 30
LFB	Fenpropathrin	1.85	LCS	P	0 - 30
LFB	Gamma-BHC	2.29	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.32	LCS	P	0 - 30
LFB	Heptachlor	4.37	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.91	LCS	P	0 - 30
LFB	Hexachlorobenzene	0.440	LCS	P	0 - 30
LFB	Kepone	5.02	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	4.69	LCS	P	0 - 30
LFB	Methoxychlor	1.95	LCS	P	0 - 30
LFB	MGK-264	0.930	LCS	P	0 - 30
LFB	Mirex	0.233	LCS	P	0 - 30
LFB	Permethrin	2.91	LCS	P	0 - 30
LFB	Phenothrin	2.14	LCS	P	0 - 30
LFB	Piperonyl Butoxide	2.59	LCS	P	0 - 30
LFB	Prallethrin	7.89	LCS	P	0 - 30
LFB	Tau-Fluvalinate	3.61	LCS	P	0 - 30
LFB	Tetramethrin	2.39	LCS	P	0 - 30
LFB	Trans-Nonachlor	0.975	LCS	P	0 - 30
LFB	Triclosan Methyl	0.410	LCS	P	0 - 30
LFB	Trifluralin	0.955	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P395480

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2232695	Oxadiazon	12.5	Spike	P	0 - 30
LFB	Oxadiazon	7.87	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P395393

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2232808	Chlordane	1.23	Spike	P	0 - 30
2232808	Toxaphene	2.31	Spike	P	0 - 30
LFB	Chlordane	0.341	LCS	P	0 - 30
LFB	Toxaphene	7.15	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P395071

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231596	2,4-D	7.04	Spike	P	0 - 30
2231596	2,4,5-T	3.76	Spike	P	0 - 30
2231596	Acetaminophen	7.94	Spike	P	0 - 30
2231596	Acetamiprid	9.90	Spike	P	0 - 30
2231596	Afidopyropen	18.0	Spike	P	0 - 30
2231596	Bentazon	3.94	Spike	P	0 - 30
2231596	Benzovindiflupyr	3.90	Spike	P	0 - 30
2231596	Carbamazepine	3.55	Spike	P	0 - 30
2231596	Clothianidin	10.8	Spike	P	0 - 30
2231596	Dinotefuran	12.9	Spike	P	0 - 30
2231596	Diuron	3.40	Spike	P	0 - 30
2231596	Fenuron	3.30	Spike	P	0 - 30
2231596	Fluridone	2.78	Spike	P	0 - 30
2231596	Hydrocodone	4.03	Spike	P	0 - 30
2231596	Ibuprofen	1.90	Spike	P	0 - 30
2231596	Imazapyr	4.41	Spike	P	0 - 30
2231596	Imidacloprid	1.59	Spike	P	0 - 30
2231596	Linuron	0.482	Spike	P	0 - 30
2231596	Mandestrobin	2.10	Spike	P	0 - 30
2231596	MCPP	5.39	Spike	P	0 - 30
2231596	Naproxen	8.42	Spike	P	0 - 30
2231596	Primidone	1.68	Spike	P	0 - 30
2231596	Pyraclostrobin	0.919	Spike	P	0 - 30
2231596	Thiamethoxam	6.85	Spike	P	0 - 30
2231596	Tolfenpyrad	2.03	Spike	P	0 - 30
2231596	Triclopyr	1.54	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P395125

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231596	Acesulfame K	19.8	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P395125

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231596	AMPA	6.11	Spike	P	0 - 30
2231596	Endothall	28.3	Spike	P	0 - 30
2231596	Glufosinate	0.981	Spike	P	0 - 30
2231596	Glyphosate	13.5	Spike	P	0 - 30
2231596	Sucralose	1.82	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P395292

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231740	3-Hydroxycarbofuran	4.92	Spike	P	0 - 30
2231740	Aldicarb	28.9	Spike	P	0 - 30
2231740	Aldicarb Sulfone	4.35	Spike	P	0 - 30
2231740	Aldicarb Sulfoxide	2.86	Spike	P	0 - 30
2231740	Carbaryl	5.71	Spike	P	0 - 30
2231740	Carbofuran	1.60	Spike	P	0 - 30
2231740	Methiocarb	1.31	Spike	P	0 - 30
2231740	Methomyl	5.15	Spike	P	0 - 30
2231740	Oxamyl	1.70	Spike	P	0 - 30
2231740	Propoxur	1.39	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P395108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231895	Color (true)	1.57	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P395227

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2232044	Total Alkalinity	0.136	Sample	P	0 - 8.1

Reference Method: SM 2320 B-2011
Batch ID: P395230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231626	Total Alkalinity	0.539	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P395591

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231707	TDS	4.44	Sample	P	0 - 10

Quality Assurance Report
Precision

Reference Method: SM 2540 C-2011
Batch ID: P395592

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231901	TDS	2.58	Sample	P	0 - 10

Reference Method: SM 2540 D-2011
Batch ID: P395600

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231901	TSS	6.25	Sample	P	0 - 10

Reference Method: SM 2540 D-2011
Batch ID: P395604

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231904	TSS	7.59	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P395233

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2232044	Fluoride	0.462	Spike	P	0 - 2.8

Reference Method: SM 4500 F-C-2011
Batch ID: P395234

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231626	Fluoride	0.448	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P395502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2232839	Organic Carbon	0.563	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P395520

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2231897	Organic Carbon	0.927	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2231929
Field Sample ID: G3SD0154

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	49.6	P	30 - 160

Lab Sample ID: 2231930
Field Sample ID: G3SD0154

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	113	P	30 - 160
EPA 8321B	Acetaminophen-d4	105	P	30 - 160
EPA 8321B	Carbamazepine-d10	80.2	P	30 - 160
EPA 8321B	Diuron-d6	69.0	P	30 - 160
EPA 8321B	Endothall-d6	119	P	40 - 160
EPA 8321B	Endothall-d6	119	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	79.5	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	79.5	P	40 - 160
EPA 8321B	Ibuprofen-d3	89.1	P	30 - 160
EPA 8321B	Primidone-d5	95.9	P	30 - 160
EPA 8321B	Sucralose-d6	99.9	P	30 - 160
EPA 8321B	Sucralose-d6	99.9	P	30 - 160

Lab Sample ID: 2231932
Field Sample ID: G2SD0033

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	72.0	P	29 - 92.0
EPA 8276	PCNB	93.6	P	43 - 134

Lab Sample ID: 2231933
Field Sample ID: G2SD0044

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	71.1	P	29 - 92.0
EPA 8276	PCNB	90.3	P	43 - 134

Lab Sample ID: 2231934
Field Sample ID: G3SD0154

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	91.6	P	40 - 123
EPA 8270E	Decachlorobiphenyl	90.2	P	47 - 111
EPA 8270E	Tetrachloro-m-xylene	69.6	P	31 - 100
EPA 8270E	Tetrachloro-m-xylene	70.3	P	33 - 102
EPA 8276	Decachlorobiphenyl	73.3	P	29 - 92.0
EPA 8276	PCNB	87.7	P	43 - 134

Lab Sample ID: 2231935
Field Sample ID: G3SD0154

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	73.5	P	20 - 200
EPA 8270E	Caffeine-d9	80.7	P	20 - 200
EPA 8270E	Simazine-d10	112	P	73 - 135
EPA 8270E	Simazine-d10	111	P	73 - 135

Quality Assurance Report
Surrogates

Lab Sample ID: 2231935
Field Sample ID: G3SD0154

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Terbufos-d10	102	P	58 - 130
EPA 8270E	Terbufos-d10	94.7	P	58 - 130

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A104110
Included Lab Sample IDs: 2231895, 2231896, 2231901, 2231904

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

Reference Method: SM 2120 B-2011
Run ID: A104111
Included Lab Sample IDs: 2231895, 2231896, 2231901

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.9	98.5	P/P	90 - 115

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A104129
Included Lab Sample IDs: 2231897, 2231898, 2231902

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A104131
Included Lab Sample IDs: 2231899, 2231900, 2231903, 2231906

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	97.4	P/P	90 - 110
O-Phosphate-P	96.0	96.3	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A104153
Included Lab Sample IDs: 2231895, 2231896, 2231901

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A104161
Included Lab Sample IDs: 2231905

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

Reference Method: SM 2320 B-2011
Run ID: A104172
Included Lab Sample IDs: 2231895, 2231896, 2231901, 2231904

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	98.6	P/P	90 - 110
Total Alkalinity	96.9	102	P/P	90 - 110
Total Alkalinity	98.6	102	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 4500 F-C-2011
Run ID: A104172
Included Lab Sample IDs: 2231895, 2231896, 2231901, 2231904

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A104179
Included Lab Sample IDs: 2231905

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A104188
Included Lab Sample IDs: 2231939, 2231940, 2231941, 2231942

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.6	98.3	P/P	90 - 110
Aluminum	98.3	96.4	P/P	90 - 110
Antimony	97.7	98.7	P/P	90 - 110
Antimony	98.7	95.9	P/P	90 - 110
Arsenic	100	98.9	P/P	90 - 110
Arsenic	98.9	96.9	P/P	90 - 110
Boron	109	96.9	P/P	90 - 110
Boron	96.6	109	P/P	90 - 110
Cadmium	98.6	99.8	P/P	90 - 110
Cadmium	99.8	97.4	P/P	90 - 110
Chromium	95.6	91.9	P/P	90 - 110
Chromium	97.4	95.6	P/P	90 - 110
Copper	96.8	93.7	P/P	90 - 110
Copper	99.3	96.8	P/P	90 - 110
Lead	106	108	P/P	90 - 110
Lead	108	106	P/P	90 - 110
Nickel	96.6	93.7	P/P	90 - 110
Nickel	99.3	96.6	P/P	90 - 110
Selenium	98.9	96.8	P/P	90 - 110
Selenium	99.7	98.9	P/P	90 - 110
Silver	101	98.9	P/P	90 - 110
Silver	101	101	P/P	90 - 110
Thallium	102	99.9	P/P	90 - 110
Thallium	103	102	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A104192
Included Lab Sample IDs: 2231930

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	99.9	112	P/P	60 - 160
AMPA	122	121	P/P	60 - 160
Endothall	122	91.1	P/P	60 - 160
Glufosinate	117	115	P/P	60 - 160
Glyphosate	108	117	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A104194
Included Lab Sample IDs: 2231897, 2231898, 2231902, 2231905

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A104231
Included Lab Sample IDs: 2231939, 2231940, 2231941, 2231942

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	97.9	98.4	P/P	90 - 110
Barium	98.4	100	P/P	90 - 110
Calcium	100	102	P/P	90 - 110
Calcium	102	103	P/P	90 - 110
Iron	102	104	P/P	90 - 110
Iron	104	104	P/P	90 - 110
Magnesium	97.9	99.6	P/P	90 - 110
Magnesium	99.6	100	P/P	90 - 110
Manganese	101	101	P/P	90 - 110
Manganese	101	101	P/P	90 - 110
Potassium	102	104	P/P	90 - 110
Potassium	104	104	P/P	90 - 110
Sodium	100	101	P/P	90 - 110
Sodium	98.6	100	P/P	90 - 110
Zinc	100	102	P/P	90 - 110
Zinc	99.6	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A104244
Included Lab Sample IDs: 2231904

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A104250
Included Lab Sample IDs: 2231905

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A104259
Included Lab Sample IDs: 2231897, 2231898, 2231902

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	97.7	P/P	90 - 110
Ammonia-N	98.9	98.8	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A104265
Included Lab Sample IDs: 2231934

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alpha-BHC	95.6		P	80 - 120
Alpha-Chlordane	99.4		P	80 - 120
Beta-BHC	94.6		P	80 - 120
Beta-Cyfluthrin	91.8		P	80 - 120
Bifenthrin	95.5		P	80 - 120
Chlorothalonil	95.7		P	80 - 120
Cis-Nonachlor	99.0		P	80 - 120
Cypermethrin	92.0		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	105		P	80 - 120
DDE-p,p'	104		P	80 - 120
DDT-p,p'	108		P	80 - 120
Delta-BHC	95.8		P	80 - 120
Deltamethrin	93.2		P	80 - 120
Dichlobenil	99.6		P	80 - 120
Dicofol	93.9		P	80 - 120
Endosulfan I	97.5		P	80 - 120
Endosulfan II	100		P	80 - 120
Endosulfan Sulfate	87.8		P	80 - 120
Endrin	97.9		P	80 - 120
Endrin Aldehyde	105		P	80 - 120
Endrin Ketone	97.0		P	80 - 120
Esfenvalerate	91.2		P	80 - 120
Ethalfluralin	98.1		P	80 - 120
Fenpropathrin	94.4		P	80 - 120
Gamma-BHC	95.6		P	80 - 120
Gamma-Chlordane	99.8		P	80 - 120
Heptachlor	95.1		P	80 - 120
Heptachlor Epoxide	98.9		P	80 - 120
Hexachlorobenzene	104		P	80 - 120
Lambda-Cyhalothrin	89.0		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	98.0		P	80 - 120
Mirex	100		P	80 - 120
Permethrin	91.3		P	80 - 120
Phenothrin	90.9		P	80 - 120
Piperonyl Butoxide	96.1		P	80 - 120
Prallethrin	87.6		P	80 - 120
Tau-Fluvalinate	94.3		P	80 - 120
Tetramethrin	95.8		P	80 - 120
Trans-Nonachlor	100		P	80 - 120
Triclosan Methyl	102		P	80 - 120
Trifluralin	97.9		P	80 - 120

Reference Method: EPA 8276
Run ID: A104269
Included Lab Sample IDs: 2231932, 2231933, 2231934

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.6		P	80 - 120
Toxaphene	100		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A104272
Included Lab Sample IDs: 2231930

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	101	99.1	P/P	60 - 160

Reference Method: SM 5310 B-2011
Run ID: A104280
Included Lab Sample IDs: 2231905

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.6	95.7	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A104292
Included Lab Sample IDs: 2231897, 2231898, 2231902

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.9	96.5	P/P	90 - 110
Organic Carbon	96.0	95.6	P/P	90 - 110
Organic Carbon	96.5	96.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A104295
Included Lab Sample IDs: 2231897, 2231898, 2231902

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.0	93.9	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A104297
Included Lab Sample IDs: 2231930

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	107	124	P/P	50 - 150
2,4,5-T	99.6	110	P/P	50 - 150
3-Hydroxycarbofuran	109	112	P/P	60 - 150
Acetaminophen	111	106	P/P	60 - 160
Acetamiprid	108	111	P/P	50 - 150
Afidopyropen	85.5	103	P/P	50 - 150
Aldicarb	115	105	P/P	60 - 150
Aldicarb Sulfone	110	108	P/P	50 - 150
Aldicarb Sulfoxide	93.9	96.6	P/P	50 - 150
Bentazon	104	92.1	P/P	50 - 160
Benzovindiflupyr	114	113	P/P	50 - 160
Carbamazepine	106	110	P/P	60 - 150
Carbaryl	112	113	P/P	60 - 150
Carbofuran	119	114	P/P	50 - 150
Clothianidin	107	115	P/P	60 - 150
Dinotefuran	113	123	P/P	50 - 150
Diuron	109	113	P/P	60 - 160
Fenuron	104	104	P/P	60 - 150
Fluridone	105	118	P/P	60 - 160
Hydrocodone	111	109	P/P	60 - 150
Ibuprofen	89.1	97.4	P/P	50 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A104297
Included Lab Sample IDs: 2231930

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazapyr	104	95.8	P/P	50 - 160
Imidacloprid	101	103	P/P	60 - 150
Linuron	102	106	P/P	60 - 150
Mandestrobin	107	113	P/P	50 - 150
MCPP	106	123	P/P	50 - 150
Methiocarb	106	102	P/P	50 - 150
Methomyl	88.1	102	P/P	50 - 150
Naproxen	99.0	93.2	P/P	50 - 160
Oxamyl	110	106	P/P	50 - 150
Primidone	98.8	104	P/P	60 - 150
Propoxur	114	110	P/P	50 - 150
Pyraclostrobin	108	114	P/P	60 - 150
Thiamethoxam	115	116	P/P	50 - 150
Tolfenpyrad	108	111	P/P	60 - 150
Triclopyr	94.6	115	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A104365
Included Lab Sample IDs: 2231935

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.8		P	80 - 120
Alachlor	93.7		P	80 - 120
Ametryn	97.2		P	80 - 120
Atrazine	95.4		P	80 - 120
Atrazine Desethyl	108		P	80 - 120
Azinphos Methyl	93.6		P	80 - 120
Azoxystrobin	84.5		P	80 - 120
Bromacil	95.7		P	80 - 120
Butylate	101		P	80 - 120
Caffeine	95.9		P	80 - 120
Carbophenothion	99.6		P	80 - 120
Carfentrazone Ethyl	93.3		P	80 - 120
Chlorpyrifos Ethyl	95.5		P	80 - 120
Chlorpyrifos Methyl	103		P	80 - 120
Cyanazine	93.1		P	80 - 120
Demeton	93.7		P	80 - 120
Diazinon	96.6		P	80 - 120
Difenoconazole	93.5		P	80 - 120
Dimethenamid	98.6		P	80 - 120
Disulfoton	96.2		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	99.3		P	80 - 120
Ethion	101		P	80 - 120
Ethoprop	99.3		P	80 - 120
Fenamiphos	98.8		P	80 - 120
Fenbuconazole	95.5		P	80 - 120
Fipronil	94.3		P	80 - 120
Fipronil Desulfinyl	97.9		P	80 - 120
Fipronil Sulfide	103		P	80 - 120
Fipronil Sulfone	92.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A104365
Included Lab Sample IDs: 2231935

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluazifop-P-butyl	95.8		P	80 - 120
Fludioxonil	95.5		P	80 - 120
Flumioxazin	90.8		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	92.7		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	95.6		P	80 - 120
Imazalil	98.6		P	80 - 120
Iprodione	94.8		P	80 - 120
Malathion	94.9		P	80 - 120
Metalaxyl	98.7		P	80 - 120
Metolachlor	99.5		P	80 - 120
Metribuzin	95.7		P	80 - 120
Mevinphos	103		P	80 - 120
Molinate	103		P	80 - 120
Myclobutanil	95.7		P	80 - 120
Naled	98.4		P	80 - 120
Norflurazon	92.1		P	80 - 120
Oxyfluorfen	99.4		P	80 - 120
Parathion Ethyl	94.1		P	80 - 120
Parathion Methyl	88.5		P	80 - 120
Pendimethalin	95.9		P	80 - 120
Phorate	96.9		P	80 - 120
Prodiamine	105		P	80 - 120
Prometon	95.4		P	80 - 120
Prometryn	98.0		P	80 - 120
Pronamide	92.2		P	80 - 120
Propiconazole	96.9		P	80 - 120
Pyriproxyfen	93.5		P	80 - 120
Simazine	91.9		P	80 - 120
Sulfentrazone	97.3		P	80 - 120
Tebuconazole	94.9		P	80 - 120
Terbufos	98.4		P	80 - 120
Terbuthylazine	98.4		P	80 - 120

Reference Method: EPA 8270E
Run ID: A104366
Included Lab Sample IDs: 2231935

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

Reference Method: EPA 8270E
Run ID: A104383
Included Lab Sample IDs: 2231934

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Dieldrin	97.3		P	80 - 120
Kepone	109		P	80 - 120

Quality Assurance Report
Calibration Verification

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision		
							LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							14.7	
EPA 200.7 Rev. 4.4	Barium	95.2		99.5	99.4	103			3.82
	Calcium	101		90.3	105	107			1.87
	Iron	100		107	105	107			2.29
	Magnesium	98.1		87.0	103	105			2.18
	Manganese	96.8		101	99.7	103			3.34
	Potassium	97.6		104	106				2.20
	Sodium	98.9		103	106				1.84
	Zinc	92.6		101	98.0	102			3.88
EPA 200.8 Rev. 5.4	Aluminum	96.2		90.8	94.0	97.2			3.17
	Antimony	99.6		99.3	99.7	105			0.398
	Arsenic	99.4		97.1	99.2	106			2.08
	Boron	96.2		94.5	96.8	99.5			2.18
	Cadmium	98.1		99.1	97.8	101			1.39
	Chromium	97.0		95.9	97.2	98.6			1.35
	Copper	99.7		98.8	99.1	98.3			0.344
	Lead	105		105	106	108			0.506
	Nickel	98.1		96.8	97.1	93.9			0.309
	Selenium	98.4		94.5	96.6	99.2			2.12
	Silver	105		105	105	99.4			0.442
	Thallium	102		103	105	104			2.07
EPA 300.0 Rev. 2.1	Bromide	101		103	102	98.9			1.21
	Chloride	101		101	101			0.710	
	Sulfate	99.8		96.7	100			0.845	
EPA 350.1 Rev. 2.0	Ammonia-N	97.2		98.4	99.6				0.847
	Ammonia-N	97.4		97.2	99.6				2.44
	Ammonia-N	98.6		95.6	97.4				1.75
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107		107	101				4.91
	Kjeldahl Nitrogen	101		111	110				0.829
EPA 353.2 Rev. 2.0	NO2NO3-N	102		104	104				0.0
	NO2NO3-N	100		98.8	95.2				3.01
EPA 365.1 Rev. 2.0	Total-P	106		97.0	100				2.06
	Total-P	104		103	107				4.09
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.8		97.3	98.7				1.14
	O-Phosphate-P	96.5		97.2	98.2				0.892
EPA 8270E	Acetochlor	89.5	89.9	73.4	79.7		0.484		8.22
	Alachlor	80.7	84.1	67.7	79.4		4.15		16.0
	Aldrin	30.8	28.3	61.3	58.9		8.54		4.04
	Alpha-BHC	86.1	87.6	100	98.0		1.76		2.01
	Alpha-Chlordane	87.9	89.0	86.7	88.1		1.33		1.60
	Ametryn	114	101	47.9	50.7		12.0		5.54
	Atrazine	82.2	87.9				6.69		0.740
	Atrazine Desethyl	94.2	99.5	75.7	82.4		5.48		6.52
	Azinphos Methyl	122	112	97.4	106		7.99		8.09
	Azoxystrobin	153	147				4.01		4.18
	Beta-BHC	85.3	90.8	94.4	97.9		6.23		3.64
	Beta-Cyfluthrin	83.4	84.2	90.1	90.3		0.951		0.281
	Bifenthrin	93.2	90.5	89.7	89.9		2.89		0.164
	Bromacil	78.2	80.3	86.8	115		2.59		28.0
	Butylate	38.1	49.2	45.9	59.0		25.3		25.0
	Caffeine	73.9	65.5	61.9	79.8		12.0		18.0
	Carbophenothion	80.3	80.2	70.3	74.4		0.124		5.58
	Carfentrazone Ethyl	93.9	93.8	80.0	83.0		0.124		3.69
	Chlorothalonil	62.7	72.2	34.6	52.2		14.1		40.6

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Chlorpyrifos Ethyl	78.3	78.3	62.4	71.6	0.102		13.8
	Chlorpyrifos Methyl	83.6	81.9	75.1	77.1	2.07		2.57
	Cis-Nonachlor	88.9	90.2	87.3	89.0	1.43		1.87
	Cyanazine	115	126	80.2	84.8	8.76		5.59
	Cypermethrin	83.1	87.5	90.5	92.7	5.21		2.48
	Dacthal	93.5	95.5	96.5	97.3	2.07		0.864
	DDD-p,p'	90.0	92.8	90.1	90.1	3.02		0.0274
	DDE-p,p'	89.9	89.4	85.0	84.8	0.635		0.249
	DDT-p,p'	92.1	91.2	87.2	86.7	0.936		0.552
	Delta-BHC	106	117	138	143	9.51		3.06
	Deltamethrin	96.0	95.7	105	111	0.350		5.17
	Demeton	68.5	69.8	61.2	66.3	1.84		7.92
	Diazinon	84.3	84.9	73.0	79.5	0.699		8.44
	Dichlobenil	52.1	52.9	45.4	45.3	1.56		0.270
	Dicofol	93.6	106	111	92.3	12.7		18.0
	Dieldrin	74.1	73.4	77.3	75.4	0.941		2.42
	Difenoconazole	138	128	140	141	7.63		0.677
	Dimethenamid	84.9	79.6	64.0	67.8	6.39		5.70
	Disulfoton	76.2	83.2	86.7	94.6	8.72		8.75
	Dithiopyr	84.1	82.9	46.8	52.5	1.39		11.5
	Endosulfan I	90.1	91.2	95.0	92.1	1.25		3.11
	Endosulfan II	99.2	98.9	106	101	0.376		4.49
	Endosulfan Sulfate	84.4	93.5	98.8	103	10.2		3.98
	Endrin	97.1	93.6	100	94.8	3.73		5.61
	Endrin Aldehyde	105	112	83.2	93.9	5.90		12.1
	Endrin Ketone	87.1	93.3	96.5	99.8	6.84		3.34
	EPTC	40.7	45.8	43.5	56.5	11.8		26.0
	Esfenvalerate	80.1	81.0	82.1	82.7	1.09		0.805
	Ethalfluralin	85.0	84.9	86.6	86.9	0.196		0.368
	Ethion	75.2	64.7	68.6	64.1	14.9		6.78
	Ethoprop	77.2	82.0	83.0	89.2	6.05		7.22
	Fenamiphos	82.2	93.1	78.8	88.4	12.5		11.5
	Fenbuconazole	102	99.5	98.6	97.7	2.11		0.898
	Fenpropathrin	93.2	95.0	91.9	91.9	1.85		0.0392
	Fipronil	90.1	94.4	84.8	88.6	4.64		4.41
	Fipronil Desulfinyl	84.2	89.0	76.4	79.5	5.63		3.56
	Fipronil Sulfide	83.8	83.5	75.4	85.9	0.463		6.52
	Fipronil Sulfone	78.6	77.0	73.2	73.3	1.95		0.178
	Fluazifop-P-butyl	82.3	83.7	73.4	74.0	1.59		0.807
	Fludioxonil	93.2	95.6	84.9	89.5	2.49		4.53
	Flumioxazin	159	150	158	162	5.89		2.52
	Flutolanil	83.6	80.9	61.5	65.3	3.34		4.71
	Fluxapyroxad	78.4	75.8	74.3	73.5	3.33		0.856
	Fonofos	76.6	80.3	83.7	88.8	4.72		5.94
	Gamma-BHC	93.7	95.9	102	101	2.29		0.523
	Gamma-Chlordane	85.1	87.1	84.7	85.4	2.32		0.860
	Heptachlor	77.2	80.6	81.0	78.7	4.37		2.82
	Heptachlor Epoxide	87.8	89.5	91.9	93.0	1.91		1.18
	Hexachlorobenzene	79.8	80.2	77.7	76.5	0.440		1.52
	Hexazinone	87.8	87.7	91.1	94.3	0.0755		3.51
	Imazalil	103	105	111	102	2.17		8.81
	Iprodione	85.7	84.4	79.4	87.8	1.60		10.0
	Kepone	116	122	81.8	81.2	5.02		0.775
	Lambda-Cyhalothrin	86.7	90.8	95.9	98.7	4.69		2.91

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Malathion	89.7	88.6	81.0	89.7	1.25		10.2
	Metalaxyl	84.8	85.8	76.4	88.6	1.21		14.8
	Methoxychlor	95.8	94.0	93.9	91.0	1.95		3.17
	Metolachlor	78.2	77.8	67.2	71.0	0.563		5.46
	Metribuzin	82.0	91.2	79.1	92.9	10.6		16.1
	Mevinphos	79.9	80.8	96.4	106	1.17		9.41
	MGK-264	38.3	38.7	74.5	75.7	0.930		1.63
	Mirex	75.7	75.5	71.4	71.3	0.233		0.131
	Molinate	52.2	57.4	58.2	72.5	9.56		22.0
	Myclobutanil	84.8	90.3	92.6	95.7	6.26		3.32
	Naled	47.4	48.7	45.4	52.8	2.71		15.1
	Norflurazon	88.7	88.4	81.0	78.2	0.393		3.53
	Oxadiazon	87.6	80.9	52.7	61.6	7.87		12.5
	Oxyfluorfen	98.1	96.5	101	106	1.70		4.74
	Parathion Ethyl	76.9	88.0	89.8	95.4	13.4		6.10
	Parathion Methyl	86.1	91.8	96.9	102	6.36		4.80
	Pendimethalin	72.2	73.0	73.3	78.5	1.20		6.93
	Permethrin	83.9	86.4	84.0	85.4	2.91		1.66
	Phenothrin	39.4	40.3	66.5	67.5	2.14		1.58
	Phorate	71.7	71.9	76.2	83.3	0.333		8.92
	Piperonyl Butoxide	104	106	114	116	2.59		1.64
	Prallethrin	42.3	45.8	63.7	67.2	7.89		5.32
	Prodiamine	41.5	37.5	36.4	39.0	10.3		6.91
	Prometon	53.0	49.6	53.4	53.9	6.53		1.02
	Prometryn	67.3	66.4	74.3	82.2	1.22		10.1
	Pronamide	82.6	91.9	79.3	92.8	10.8		15.7
	Propiconazole	87.2	84.6	79.9	73.5	3.02		4.92
	Pyriproxyfen	88.1	79.2	72.0	77.0	10.6		6.69
	Simazine	80.2	84.5	67.6	71.0	5.20		3.64
	Sulfentrazone	79.6	79.2	77.7	71.8	0.515		4.32
	Tau-Fluvalinate	96.4	99.9	108	110	3.61		1.98
	Tebuconazole	66.6	50.9			26.7		7.20
	Terbufos	74.9	78.0	80.9	92.7	4.08		13.6
	Terbuthylazine	78.2	82.6	77.3	70.2	5.50		9.69
	Tetramethrin	91.4	93.6	116	115	2.39		0.850
	Trans-Nonachlor	87.7	88.6	85.8	86.0	0.975		0.169
	Triclosan Methyl	101	101	98.2	98.5	0.410		0.308
	Trifluralin	83.4	84.2	83.4	83.0	0.955		0.486
EPA 8276	Chlordane	105	105	103	104	0.341		1.23
	Toxaphene	85.0	79.1	125	128	7.15		2.31
EPA 8321B	2,4-D	133		116	124			7.04
	2,4,5-T	103		98.9	103			3.76
	3-Hydroxycarbofuran	95.0		82.0	86.2			4.92
	Acesulfame K	115		177	145			19.8
	Acetaminophen	92.2		94.8	103			7.94
	Acetamiprid	109		107	97.0			9.90
	Afidopyropen	79.1		78.5	65.5			18.0
	Aldicarb	79.6		56.3	75.3			28.9
	Aldicarb Sulfone	88.1		90.6	94.7			4.35
	Aldicarb Sulfoxide	75.9		26.1	25.3			2.86
	AMPA	104		120	127			6.11
	Bentazon	91.2		67.7	70.4			3.94
	Benzovindiflupyr	92.0		89.4	92.9			3.90
	Carbamazepine	105		95.3	91.9			3.55

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Carbaryl	76.4	55.1	58.4			5.71
	Carbofuran	85.1	63.1	62.1			1.60
	Clothianidin	103	113	101			10.8
	Dinotefuran	106	109	95.4			12.9
	Diuron	78.3	64.9	67.1			3.40
	Endothall	87.4	82.1	109			28.3
	Fenuron	107	93.9	97.0			3.30
	Fluridone	101	87.5	90.0			2.78
	Glufosinate	125	134	135			0.981
	Glyphosate	148	105	92.0			13.5
	Hydrocodone	105	108	104			4.03
	Ibuprofen	102	82.1	83.6			1.90
	Imazapyr	112	118	113			4.41
	Imidacloprid	112	137	135			1.59
	Linuron	85.5	74.3	73.9			0.482
	Mandestrobin	96.1	86.6	88.4			2.10
	MCPP	123	107	112			5.39
	Methiocarb	65.2	57.8	58.5			1.31
	Methomyl	78.8	57.6	61.4			5.15
	Naproxen	56.1	73.6	80.1			8.42
	Oxamyl	102	80.4	81.8			1.70
	Primidone	99.7	101	99.6			1.68
	Propoxur	81.3	57.3	58.1			1.39
	Pyraclostrobin	89.1	85.7	84.9			0.919
	Sucralose	93.5	105	103			1.82
	Thiamethoxam	110	135	126			6.85
	Tolfenpyrad	62.8	58.0	59.2			2.03
	Triclopyr	107	102	103			1.54
SM 2120 B-2011	Color (true)	99.0				1.57	
SM 2320 B-2011	Total Alkalinity	99.9				0.136	
	Total Alkalinity	101				0.539	
SM 2540 C-2011	TDS					4.44	
	TDS					2.58	
SM 2540 D-2011	TSS					6.25	
	TSS					7.59	
SM 4500 F-C-2011	Fluoride	103	101	102			0.462
	Fluoride	104	102	103			0.448
SM 5310 B-2011	Organic Carbon	96.5	93.4	94.1			0.563
	Organic Carbon	95.0	94.3	95.5			0.927

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2231895, 2231896, 2231901, 2231904
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2231939, 2231940, 2231941, 2231942
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2231939, 2231940, 2231941, 2231942
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2231904
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2231895, 2231896, 2231901
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2231895, 2231896, 2231901
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2231897, 2231898, 2231902, 2231905
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2231897, 2231898, 2231902, 2231905

Reference Method Descriptions

Method	Description	Associated Samples
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2231897, 2231898, 2231902, 2231905
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2231897, 2231898, 2231902, 2231905
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2231899, 2231900, 2231903, 2231906
EPA 8270E	Dieldrin (ultra low level) in water matrices by GC/MS/MS	2231934
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2231934
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2231935
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2231932, 2231933, 2231934
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2231929
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2231930
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2231930
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2231895, 2231896, 2231901
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2231895, 2231896, 2231901, 2231904
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2231939, 2231940, 2231941, 2231942
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2231895, 2231896, 2231901
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2231895, 2231896, 2231901, 2231904
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2231895, 2231896, 2231901, 2231904
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2231897, 2231898, 2231902, 2231905

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	03/17/2021			03/17/2021 15:32	Yen Ta	2231895, 2231896, 2231901, 2231904
EPA 200.7 Rev. 4.4	03/17/2021	03/17/2021 16:35	Elliott D. Healy	03/23/2021 14:32	Betina Topolski	2231939
	03/17/2021	03/17/2021 16:35	Elliott D. Healy	03/23/2021 14:39	Betina Topolski	2231940
	03/17/2021	03/17/2021 16:35	Elliott D. Healy	03/23/2021 15:08	Betina Topolski	2231941
	03/17/2021	03/17/2021 16:35	Elliott D. Healy	03/23/2021 15:16	Betina Topolski	2231941
	03/17/2021	03/17/2021 16:35	Elliott D. Healy	03/23/2021 15:21	Betina Topolski	2231942
EPA 200.8 Rev. 5.4	03/17/2021	03/17/2021 16:35	Elliott D. Healy	03/19/2021 18:10	McKinley C Carter	2231939
	03/17/2021	03/17/2021 16:35	Elliott D. Healy	03/19/2021 18:17	McKinley C Carter	2231940
	03/17/2021	03/17/2021 16:35	Elliott D. Healy	03/19/2021 18:25	McKinley C Carter	2231941
	03/17/2021	03/17/2021 16:35	Elliott D. Healy	03/19/2021 19:09	McKinley C Carter	2231942
EPA 300.0 Rev. 2.1	03/17/2021			03/20/2021 03:14	Lipi Saha	2231895
	03/17/2021			03/20/2021 03:26	Lipi Saha	2231896
	03/17/2021			03/20/2021 03:39	Lipi Saha	2231901
	03/17/2021			03/23/2021 02:46	Lipi Saha	2231904
EPA 350.1 Rev. 2.0	03/17/2021			03/20/2021 10:56	Ping Hua	2231905
	03/17/2021			03/24/2021 17:16	Ping Hua	2231897
	03/17/2021			03/24/2021 17:38	Ping Hua	2231898
	03/17/2021			03/24/2021 17:39	Ping Hua	2231902
EPA 351.2 Rev. 2.0	03/17/2021	03/19/2021 12:22	Benjamin T. Nordmann	03/23/2021 21:13	Julia Storbeck	2231905
	03/17/2021	03/23/2021 13:04	Benjamin T. Nordmann	03/25/2021 20:49	Julia Storbeck	2231897
	03/17/2021	03/23/2021 13:04	Benjamin T. Nordmann	03/25/2021 20:51	Julia Storbeck	2231898
	03/17/2021	03/23/2021 13:04	Benjamin T. Nordmann	03/25/2021 20:52	Julia Storbeck	2231902
EPA 353.2 Rev. 2.0	03/17/2021			03/18/2021 09:04	Beverly Y. Sanders	2231897
	03/17/2021			03/18/2021 09:06	Beverly Y. Sanders	2231898
	03/17/2021			03/18/2021 09:07	Beverly Y. Sanders	2231902
	03/17/2021			03/19/2021 09:51	Beverly Y. Sanders	2231905
EPA 365.1 Rev. 2.0	03/17/2021	03/19/2021 12:46	Yen Ta	03/22/2021 11:53	Shengyu Ding	2231905
	03/17/2021	03/19/2021 12:46	Yen Ta	03/22/2021 12:31	Shengyu Ding	2231897
	03/17/2021	03/19/2021 12:46	Yen Ta	03/22/2021 12:32	Shengyu Ding	2231898
	03/17/2021	03/19/2021 12:46	Yen Ta	03/22/2021 12:33	Shengyu Ding	2231902
EPA 365.1 Rev. 2.0 dissolved	03/17/2021			03/17/2021 19:35	Patrick M. Roche	2231899
	03/17/2021			03/17/2021 19:38	Patrick M. Roche	2231900
	03/17/2021			03/17/2021 19:40	Patrick M. Roche	2231903
	03/17/2021			03/17/2021 21:28	Patrick M. Roche	2231906
EPA 8270E	03/17/2021	03/18/2021 08:00	Fe-Val Siddell	03/19/2021 16:19	Michael Poppell	2231935
	03/17/2021	03/22/2021 08:30	Rasheda Ghaffari	03/24/2021 19:30	Arthur Maknenko	2231934
	03/17/2021	03/22/2021 08:30	Rasheda Ghaffari	03/29/2021 17:08	Michael Poppell	2231934
	03/17/2021	03/23/2021 08:30	Chiran X. Ghimire	03/25/2021 21:50	Michael Poppell	2231935
EPA 8276	03/17/2021	03/22/2021 08:30	Rasheda Ghaffari	03/25/2021 02:36	Julie Wi	2231932
	03/17/2021	03/22/2021 08:30	Rasheda Ghaffari	03/25/2021 03:31	Julie Wi	2231933

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8276	03/17/2021	03/22/2021 08:30	Rasheda Ghaffari	03/25/2021 04:26	Julie Wi	2231934
EPA 8321B	03/17/2021	03/18/2021 09:00	Hoor Shaik	03/26/2021 06:31	Juyoung Kim	2231930
	03/17/2021	03/18/2021 10:30	Rebecca Ware	03/18/2021 14:49	Rebecca Ware	2231930
	03/17/2021	03/18/2021 10:30	Rebecca Ware	03/24/2021 18:06	Rebecca Ware	2231930
	03/17/2021	03/22/2021 10:00	Hoor Shaik	03/26/2021 16:21	Juyoung Kim	2231929
SM 2120 B-2011	03/17/2021			03/17/2021 16:48	Benjamin T. Nordmann	2231895, 2231896
	03/17/2021			03/17/2021 16:49	Benjamin T. Nordmann	2231901
SM 2320 B-2011	03/17/2021			03/19/2021 07:07	Dale L. Simmons	2231901
	03/17/2021			03/19/2021 09:44	Dale L. Simmons	2231895
	03/17/2021			03/19/2021 10:00	Dale L. Simmons	2231896
	03/17/2021			03/19/2021 12:39	Dale L. Simmons	2231904
SM 2340B	03/17/2021			03/23/2021 14:32	Betina Topolski	2231939
	03/17/2021			03/23/2021 14:39	Betina Topolski	2231940
	03/17/2021			03/23/2021 15:08	Betina Topolski	2231941
	03/17/2021			03/23/2021 15:21	Betina Topolski	2231942
SM 2540 C-2011	03/17/2021			03/19/2021 15:21	Yijie Li	2231895, 2231896, 2231901
SM 2540 D-2011	03/17/2021			03/19/2021 15:21	Yijie Li	2231895, 2231896, 2231901, 2231904
SM 4500 F-C-2011	03/17/2021			03/19/2021 07:07	Dale L. Simmons	2231901
	03/17/2021			03/19/2021 09:44	Dale L. Simmons	2231895
	03/17/2021			03/19/2021 10:00	Dale L. Simmons	2231896
	03/17/2021			03/19/2021 10:51	Dale L. Simmons	2231904
SM 5310 B-2011	03/17/2021			03/25/2021 10:17	Madeline Gruver	2231905
	03/17/2021			03/26/2021 03:01	Madeline Gruver	2231897
	03/17/2021			03/26/2021 07:25	Madeline Gruver	2231898
	03/17/2021			03/26/2021 07:55	Madeline Gruver	2231902