Chemical Analysis Report

NE-DIST-2020-04-02-02

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

Event Description: **LSJR East 2020**
Request ID: **RQ-2020-03-30-18**
Customer: **NE-DIST**
Project ID: **SMP**

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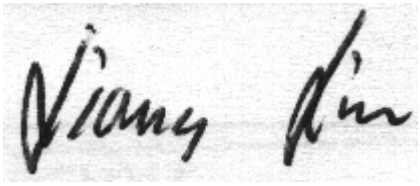
Date Certified: 24-APR-2020 10:21



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: Little Pottsburg Creek at Emerson **Collection Date/Time: 04/01/2020 09:15**

Field ID: 20030070 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2169459	EPA 300.0 Rev. 2.1	Chloride	30		mg Cl/L	P381995	
		Sulfate	38		mg SO4/L	P382001	
	SM 2320 B-2011	Total Alkalinity	135		mg CaCO3/L	P381989	
	SM 2540 C-2011	TDS	280		mg/L	P382050	
	SM 2540 D-2011	TSS	3	I	mg/L	P382053	
	SM 4500 F-C-2011	Fluoride	0.17		mg F/L	P381927	MS, RPD
2169460	EPA 350.1 Rev. 2.0	Ammonia-N	0.13		mg N/L	P381829	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.95		mg N/L	P381800	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.24		mg N/L	P381733	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P381805	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P381851	
2169477	EPA 8321B	2,4-D	0.27		ug/L	P381729	
		Acesulfame K**	0.10	U	ug/L	P381772	MS
		AMPA**	0.93		ug/L	P381772	
		Sucralose**	0.47		ug/L	P381772	
		Acetaminophen**	0.22		ug/L	P381729	
		Acetamiprid**	0.0020	U	ug/L	P381729	
		Endothall**	0.25	U	ug/L	P381772	
		Glufosinate**	0.10	U	ug/L	P381772	
		Glyphosate**	3.9		ug/L	P381772	
		Afidopyropen**	0.0020	UJ	ug/L	P381729	
		Bentazon	0.013		ug/L	P381729	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P381729	
		Carbamazepine**	8.0E-04	U	ug/L	P381729	
		Clothianidin**	0.0051	I	ug/L	P381729	
		Dinotefuran**	0.0036	I	ug/L	P381729	
		Diuron	0.063		ug/L	P381729	
		Fenuron	0.016	U	ug/L	P381729	
		Fluridone**	0.012		ug/L	P381729	
		Imazapyr**	1.2		ug/L	P381729	
		Hydrocodone**	0.0020	U	ug/L	P381729	
		Ibuprofen**	0.10		ug/L	P381729	
		Imidacloprid	0.031		ug/L	P381729	
		Linuron	0.0040	U	ug/L	P381729	
		Mandestrobin**	0.0020	UJ	ug/L	P381729	
		MCPP	0.087		ug/L	P381729	
		Naproxen**	0.024	I	ug/L	P381729	
		Primidone**	0.0040	U	ug/L	P381729	
		Pyraclostrobin**	0.0020	U	ug/L	P381729	
		Thiamethoxam**	0.0020	U	ug/L	P381729	
		Tolfenpyrad**	0.0020	U	ug/L	P381729	
		Triclopyr**	0.0040	U	ug/L	P381729	
2169484	EPA 200.7 Rev. 4.4	Barium	36.9		ug/L	P381941	
		Calcium	59.6		mg/L	P381941	

Field ID: 20030070 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2169484	EPA 200.7 Rev. 4.4	Iron	1.15E+03		ug/L	P381941	
		Magnesium	8.67		mg/L	P381941	
		Potassium	3.3		mg/L	P381941	
		Sodium	18.7		mg/L	P381941	
		Zinc	13	I	ug/L	P381941	
	EPA 200.8 Rev. 5.4	Aluminum	33		ug/L	P381941	
		Antimony	0.30		ug/L	P381941	
		Arsenic	0.97		ug/L	P381941	
		Boron**	46.4		ug/L	P381941	
		Cadmium	0.020	U	ug/L	P381941	
		Chromium	0.55	I	ug/L	P381941	
		Copper	4.50		ug/L	P381941	
		Lead	0.45		ug/L	P381941	
		Nickel	0.94	I	ug/L	P381941	
		Selenium	0.20	U	ug/L	P381941	
		Silver	0.010	U	ug/L	P381941	
		Thallium	0.10	U	ug/L	P381941	
	SM 2340B	Hardness	185		mg/L	P381941	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Miller CR @ Schumacher **Collection Date/Time: 04/01/2020 09:45**

Field ID: 20030794 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2169461	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P381995	
		Sulfate	38		mg SO4/L	P382001	
	SM 2320 B-2011	Total Alkalinity	65		mg CaCO3/L	P381989	
	SM 2540 C-2011	TDS	179		mg/L	P382050	
	SM 2540 D-2011	TSS	7	I	mg/L	P382053	
	SM 4500 F-C-2011	Fluoride	0.10		mg F/L	P381927	MS, RPD
2169464	EPA 350.1 Rev. 2.0	Ammonia-N	0.080		mg N/L	P381827	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.96		mg N/L	P381800	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.022		mg N/L	P381734	
	EPA 365.1 Rev. 2.0	Total-P	0.22		mg P/L	P381805	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P381851	
2169478	EPA 8321B	2,4-D	0.036		ug/L	P381729	
		Acesulfame K**	0.10	U	ug/L	P381772	MS
		AMPA**	0.10	U	ug/L	P381772	
		Sucralose**	0.082		ug/L	P381772	
		Acetaminophen**	0.083		ug/L	P381729	
		Acetamiprid**	0.0020	U	ug/L	P381729	
		Endothall**	0.25	U	ug/L	P381772	
		Glufosinate**	0.10	U	ug/L	P381772	
		Glyphosate**	0.62		ug/L	P381772	
		Afidopyropen**	0.0020	UJ	ug/L	P381729	
		Bentazon	0.0089		ug/L	P381729	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P381729	
		Carbamazepine**	8.0E-04	U	ug/L	P381729	
		Clothianidin**	0.0020	U	ug/L	P381729	
		Dinotefuran**	0.0020	U	ug/L	P381729	
		Diuron	0.0035	I	ug/L	P381729	
		Fenuron	0.016	U	ug/L	P381729	
		Fluridone**	8.0E-04	U	ug/L	P381729	
		Imazapyr**	0.011	I	ug/L	P381729	
		Hydrocodone**	0.0020	U	ug/L	P381729	
		Ibuprofen**	0.020	U	ug/L	P381729	
		Imidacloprid	0.040		ug/L	P381729	
		Linuron	0.0040	U	ug/L	P381729	
		Mandestrobin**	0.0020	UJ	ug/L	P381729	
		MCPP	0.036		ug/L	P381729	
		Naproxen**	0.044		ug/L	P381729	
		Primidone**	0.0040	U	ug/L	P381729	
		Pyraclostrobin**	0.0020	U	ug/L	P381729	
		Thiamethoxam**	0.0020	U	ug/L	P381729	
		Tolfenpyrad**	0.0020	U	ug/L	P381729	
		Triclopyr**	0.0040	U	ug/L	P381729	

Field ID: 20030794 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Newcastle CR @ Ft Caroline Hills RD **Collection Date/Time: 04/01/2020 10:40**

Field ID: 20030872 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2169462	EPA 300.0 Rev. 2.1	Chloride	36		mg Cl/L	P381995	
		Sulfate	32		mg SO4/L	P382001	
	SM 2320 B-2011	Total Alkalinity	37	A	mg CaCO3/L	P381989	
	SM 2540 C-2011	TDS	152		mg/L	P382050	
	SM 2540 D-2011	TSS	2	U	mg/L	P382053	
	SM 4500 F-C-2011	Fluoride	0.036	I	mg F/L	P381927	MS, RPD
2169465	EPA 350.1 Rev. 2.0	Ammonia-N	0.089		mg N/L	P381827	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25		mg N/L	P381800	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P381734	
	EPA 365.1 Rev. 2.0	Total-P	0.036		mg P/L	P381806	
	SM 5310 B-2011	Organic Carbon	3.0		mg C/L	P381851	
2169479	EPA 8321B	2,4-D	0.15		ug/L	P381729	
		Acesulfame K**	0.10	U	ug/L	P381772	MS
		AMPA**	0.12	I	ug/L	P381772	
		Sucralose**	0.031	I	ug/L	P381772	
		Acetaminophen**	0.0080	U	ug/L	P381729	
		Acetamiprid**	0.0020	U	ug/L	P381729	
		Endothall**	0.40	I	ug/L	P381772	
		Glufosinate**	0.10	U	ug/L	P381772	
		Glyphosate**	0.22	I	ug/L	P381772	
		Afidopyropen**	0.0020	UJ	ug/L	P381729	
		Bentazon	0.069		ug/L	P381729	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P381729	
		Carbamazepine**	8.0E-04	U	ug/L	P381729	
		Clothianidin**	0.0020	U	ug/L	P381729	
		Dinotefuran**	0.0020	U	ug/L	P381729	
		Diuron	0.0024	I	ug/L	P381729	
		Fenuron	0.016	U	ug/L	P381729	
		Fluridone**	8.0E-04	U	ug/L	P381729	
		Imazapyr**	0.018		ug/L	P381729	
		Hydrocodone**	0.0020	U	ug/L	P381729	
		Ibuprofen**	0.020	U	ug/L	P381729	
		Imidacloprid	0.020		ug/L	P381729	
		Linuron	0.0040	U	ug/L	P381729	
		Mandestrobin**	0.0020	UJ	ug/L	P381729	
		MCPP	0.044		ug/L	P381729	
		Naproxen**	0.0080	U	ug/L	P381729	
		Primidone**	0.0040	U	ug/L	P381729	
		Pyraclostrobin**	0.0020	U	ug/L	P381729	
		Thiamethoxam**	0.0020	U	ug/L	P381729	
		Tolfenpyrad**	0.0020	U	ug/L	P381729	
		Triclopyr**	0.0040	U	ug/L	P381729	

Field ID: 20030872 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Greenfield Creek @ Queens Harbour Blvd. **Collection Date/Time: 04/01/2020 11:30**

Field ID: 20030809 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2169467	EPA 300.0 Rev. 2.1	Chloride	1.7E+03		mg Cl/L	P381996	
		Sulfate	280		mg SO4/L	P382002	
	SM 2320 B-2011	Total Alkalinity	94		mg CaCO3/L	P381989	
	SM 2540 C-2011	TDS	3.15E+03		mg/L	P382050	
	SM 2540 D-2011	TSS	6	I	mg/L	P382053	
	SM 4500 F-C-2011	Fluoride	0.21		mg F/L	P381927	MS, RPD
2169468	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P381828	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P381774	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.095		mg N/L	P381918	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P381807	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P381851	
2169481	EPA 8321B	2,4-D	0.025		ug/L	P381861	
		Acesulfame K**	1.0	U	ug/L	P381772	MS
		AMPA**	0.10	U	ug/L	P381772	
		Sucralose**	0.72		ug/L	P381772	
		Acetaminophen**	0.0080	U	ug/L	P381861	
		Acetamiprid**	0.0020	U	ug/L	P381861	
		Endothall**	2.5	U	ug/L	P381772	
		Glufosinate**	0.10	U	ug/L	P381772	
		Glyphosate**	0.10	U	ug/L	P381772	
		Afidopyropen**	0.0020	UJ	ug/L	P381861	
		Bentazon	0.096		ug/L	P381861	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P381861	
		Carbamazepine**	8.0E-04	U	ug/L	P381861	
		Clothianidin**	0.0020	U	ug/L	P381861	
		Dinotefuran**	0.0020	U	ug/L	P381861	
		Diuron	0.0066	I	ug/L	P381861	MS
		Fenuron	0.016	U	ug/L	P381861	
		Fluridone**	0.14		ug/L	P381861	MS
		Imazapyr**	0.39		ug/L	P381861	
		Hydrocodone**	0.0020	U	ug/L	P381861	
		Ibuprofen**	0.020	U	ug/L	P381861	
		Imidacloprid	0.0046	I	ug/L	P381861	
		Linuron	0.0040	U	ug/L	P381861	
		Mandestrobin**	0.0020	UJ	ug/L	P381861	
		MCPP	0.0056	I	ug/L	P381861	
		Naproxen**	0.0080	U	ug/L	P381861	RPD
		Primidone**	0.0040	U	ug/L	P381861	
		Pyraclostrobin**	0.0020	U	ug/L	P381861	
		Thiamethoxam**	0.0020	U	ug/L	P381861	
		Tolfenpyrad**	0.0020	U	ug/L	P381861	
		Triclopyr**	0.0040	U	ug/L	P381861	

Field ID: 20030809 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8321B: MDL for some parameters elevated due to matrix interference.

Sample Location: Drainage Ditch Parental Home Rd **Collection Date/Time: 04/01/2020 12:15**

Field ID: 20030071 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2169463	EPA 300.0 Rev. 2.1	Chloride	31	A	mg Cl/L	P381996	
		Sulfate	21	A	mg SO4/L	P382002	
	SM 2320 B-2011	Total Alkalinity	92		mg CaCO3/L	P381989	
	SM 2540 C-2011	TDS	206	A	mg/L	P382050	
	SM 2540 D-2011	TSS	5	I A	mg/L	P382053	
	SM 4500 F-C-2011	Fluoride	0.12		mg F/L	P381927	MS, RPD
2169466	EPA 350.1 Rev. 2.0	Ammonia-N	0.028		mg N/L	P381827	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.97		mg N/L	P381800	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P381734	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P381806	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P381851	
2169480	EPA 8321B	2,4-D	0.25		ug/L	P381861	
		Acesulfame K**	0.10	U	ug/L	P381772	MS
		AMPA**	0.82		ug/L	P381772	
		Sucralose**	0.16		ug/L	P381772	
		Acetaminophen**	0.26		ug/L	P381861	
		Acetamiprid**	0.0020	U	ug/L	P381861	
		Endothall**	0.25	U	ug/L	P381772	
		Glufosinate**	0.10	U	ug/L	P381772	
		Glyphosate**	5.3		ug/L	P381772	
		Afidopyropen**	0.0020	UJ	ug/L	P381861	
		Bentazon	0.15		ug/L	P381861	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P381861	
		Carbamazepine**	8.0E-04	U	ug/L	P381861	
		Clothianidin**	0.0020	U	ug/L	P381861	
		Dinotefuran**	0.0020	U	ug/L	P381861	
		Diuron	0.068	J	ug/L	P381861	MS
		Fenuron	0.016	U	ug/L	P381861	
		Fluridone**	8.0E-04	UJ	ug/L	P381861	MS
		Imazapyr**	1.5		ug/L	P381861	
		Hydrocodone**	0.0020	U	ug/L	P381861	
		Ibuprofen**	0.020	U	ug/L	P381861	
		Imidacloprid	0.033		ug/L	P381861	
		Linuron	0.0040	U	ug/L	P381861	
		Mandestrobin**	0.0020	UJ	ug/L	P381861	
		MCPP	0.035		ug/L	P381861	
		Naproxen**	0.0080	UJ	ug/L	P381861	RPD
		Primidone**	0.0040	U	ug/L	P381861	
		Pyraclostrobin**	0.0020	U	ug/L	P381861	
		Thiamethoxam**	0.0060	I	ug/L	P381861	
		Tolfenpyrad**	0.0020	U	ug/L	P381861	
		Triclopyr**	0.0040	U	ug/L	P381861	

Field ID: 20030071 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Big Pottsburg CR Bowden Rd **Collection Date/Time: 04/01/2020 12:45**

Field ID: 20030068 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2169457	EPA 300.0 Rev. 2.1	Chloride	35		mg Cl/L	P381995	
		Sulfate	32		mg SO4/L	P382001	
	SM 2320 B-2011	Total Alkalinity	91		mg CaCO3/L	P381989	
	SM 2540 C-2011	TDS	210		mg/L	P382050	
	SM 2540 D-2011	TSS	8	I	mg/L	P382053	
	SM 4500 F-C-2011	Fluoride	0.13		mg F/L	P381927	MS, RPD
2169458	EPA 350.1 Rev. 2.0	Ammonia-N	0.039		mg N/L	P381829	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.69		mg N/L	P381800	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.054		mg N/L	P381733	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P381805	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P381851	
2169475	EPA 8321B	Aldicarb	0.020	U	ug/L	P381729	
		Aldicarb Sulfone	0.0020	U	ug/L	P381729	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P381729	MS
		Carbaryl	0.0020	U	ug/L	P381729	
		Carbofuran	0.0020	U	ug/L	P381729	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P381729	
		Methiocarb	0.0020	U	ug/L	P381729	
		Methomyl	0.0020	U	ug/L	P381729	
		Oxamyl	0.0020	U	ug/L	P381729	
		Propoxur	0.0020	U	ug/L	P381729	
2169476		2,4-D	0.15		ug/L	P381729	
		Acesulfame K**	0.10	U	ug/L	P381772	MS
		AMPA**	0.92		ug/L	P381772	
		Sucralose**	0.19		ug/L	P381772	
		Acetaminophen**	0.0080	U	ug/L	P381729	
		Acetamiprid**	0.0020	U	ug/L	P381729	
		Endothall**	0.25	U	ug/L	P381772	
		Glufosinate**	0.10	U	ug/L	P381772	
		Glyphosate**	1.7		ug/L	P381772	
		Afidopyropen**	0.0020	UJ	ug/L	P381729	
		Bentazon	0.027		ug/L	P381729	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P381729	
		Carbamazepine**	8.0E-04	U	ug/L	P381729	
		Clothianidin**	0.0020	U	ug/L	P381729	
		Dinotefuran**	0.0020	U	ug/L	P381729	
		Diuron	0.031		ug/L	P381729	
		Fenuron	0.016	U	ug/L	P381729	
		Fluridone**	0.029		ug/L	P381729	
		Imazapyr**	0.44		ug/L	P381729	
		Hydrocodone**	0.0020	U	ug/L	P381729	
		Ibuprofen**	0.020	U	ug/L	P381729	
		Imidacloprid	0.0099		ug/L	P381729	
		Linuron	0.0040	U	ug/L	P381729	

Field ID: 20030068 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2169476	EPA 8321B	Mandestrobin**	0.0020	UJ	ug/L	P381729	
		MCPP	0.0040	I	ug/L	P381729	
		Naproxen**	0.0080	U	ug/L	P381729	
		Primidone**	0.0040	U	ug/L	P381729	
		Pyraclostrobin**	0.0020	U	ug/L	P381729	
		Thiamethoxam**	0.0020	U	ug/L	P381729	
		Tolfenpyrad**	0.0020	U	ug/L	P381729	
		Triclopyr**	0.0040	U	ug/L	P381729	
2169482	EPA 8270E	Aldrin	4.5	U	ng/L	P381648	
		Alpha-BHC	2.2	U	ng/L	P381648	
		Alpha-Chlordane	1.1	U	ng/L	P381648	
		Beta-BHC	11	U	ng/L	P381648	
		Beta-Cyfluthrin**	17	U	ng/L	P381648	MS
		Bifenthrin**	4.5	U	ng/L	P381648	
		Delta-BHC	8.9	U	ng/L	P381648	
		Gamma-BHC	8.9	U	ng/L	P381648	
		Chlorothalonil	2.2	UJ	ng/L	P381648	CCV
		Cis-Nonachlor**	1.1	U	ng/L	P381648	
		Cypermethrin	22	U	ng/L	P381648	
		Dacthal**	1.1	U	ng/L	P381648	
		DDD-p,p'	6.7	U	ng/L	P381648	
		DDE-p,p'	6.7	U	ng/L	P381648	
		DDT-p,p'	7.8	U	ng/L	P381648	
		Dicofol	33	UJ	ng/L	P381648	CCV, LCS, MS
		Dieldrin	4.5	U	ng/L	P381648	
		Endosulfan I	4.5	U	ng/L	P381648	
		Endosulfan II	4.5	U	ng/L	P381648	
		Endosulfan Sulfate	2.2	U	ng/L	P381648	MS
		Endrin	2.2	U	ng/L	P381648	
		Endrin Aldehyde	2.2	U	ng/L	P381648	
		Endrin Ketone	2.2	U	ng/L	P381648	
		Ethalfluralin**	3.3	U	ng/L	P381648	
		Gamma-Chlordane	1.1	U	ng/L	P381648	
		Heptachlor	1.7	U	ng/L	P381648	
		Heptachlor Epoxide	2.2	U	ng/L	P381648	
		Hexachlorobenzene	2.2	U	ng/L	P381648	
		Lambda-Cyhalothrin**	17	U	ng/L	P381648	MS
		Methoxychlor	4.5	U	ng/L	P381648	
		Mirex	2.2	U	ng/L	P381648	
		Permethrin	11	U	ng/L	P381648	
		Phenothrin**	33	UJ	ng/L	P381648	LCS
		Prallethrin**	33	U	ng/L	P381648	
		Trans-Nonachlor**	1.1	U	ng/L	P381648	
		Trifluralin	2.8	U	ng/L	P381648	

Field ID: 20030068 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2169482	EPA 8276	Chlordane	6.2	I	ng/L	P381648	
		Toxaphene	33	U	ng/L	P381648	
2169483	EPA 8270E	Acetochlor	0.24	U	ng/L	P381834	
		Alachlor	0.24	U	ng/L	P381834	
		Ametryn	2.4		ng/L	P381834	
		Atrazine	310		ng/L	P381834	
		Atrazine Desethyl	24		ng/L	P381834	
		Azinphos Methyl	1.9	UJ	ng/L	P381834	CCV, LCS
		Bromacil	0.47	U	ng/L	P381834	
		Butylate	0.38	U	ng/L	P381834	
		Carbophenothion	0.47	U	ng/L	P381834	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P381834	
		Chlorpyrifos Methyl	0.047	U	ng/L	P381834	
		Cyanazine	3.1	U	ng/L	P381834	
		Demeton	1.4	U	ng/L	P381834	
		Diazinon	0.12	U	ng/L	P381834	
		Dimethenamid**	0.094	U	ng/L	P381834	
		Disulfoton	0.47	U	ng/L	P381834	
		Dithiopyr**	0.49		ng/L	P381834	
		EPTC	1.2	U	ng/L	P381834	
		Ethion	0.14	U	ng/L	P381834	
		Ethoprop	0.094	U	ng/L	P381834	MS
		Fenamiphos	0.47	U	ng/L	P381834	
		Fipronil	0.32	I	ng/L	P381834	
		Fipronil Desulfinyl**	1.2		ng/L	P381834	
		Fipronil Sulfide	1.1		ng/L	P381834	
		Fipronil Sulfone	1.9		ng/L	P381834	
		Flumioxazin**	1.6	U	ng/L	P381834	MS
		Fonofos	0.19	U	ng/L	P381834	
		Hexazinone	0.91	I	ng/L	P381834	
		Imazalil**	0.71	U	ng/L	P381834	
		Malathion	0.33	U	ng/L	P381834	
		Metalaxyl	0.71	U	ng/L	P381834	
		Metolachlor	1.2	I	ng/L	P381834	
		Metribuzin	3.1	U	ng/L	P381834	
		Mevinphos	0.47	U	ng/L	P381834	
		Molinate	0.28	U	ng/L	P381834	
		Naled**	1.4	U	ng/L	P381834	
		Norflurazon	0.47	U	ng/L	P381834	
		Oxadiazon**	1.6	Q	ng/L	P382124	
		Parathion Ethyl	0.24	U	ng/L	P381834	
		Parathion Methyl	0.52	U	ng/L	P381834	
		Pendimethalin	4.4		ng/L	P381834	
		Phorate	0.24	U	ng/L	P381834	
		Prodiamine**	0.55	I	ng/L	P381834	

Field ID: 20030068 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2169483	EPA 8270E	Prometon	4.2		ng/L	P381834	
		Prometryn	0.19	U	ng/L	P381834	
		Pronamide**	0.14	U	ng/L	P381834	
		Propiconazole**	3.6		ng/L	P381834	
		Simazine	47		ng/L	P381834	
		Sulfentrazone**	3.7		ng/L	P381834	
		Tebuconazole**	0.47	U	ng/L	P381834	
		Terbufos	0.094	U	ng/L	P381834	
		Terbuthylazine	0.40	U	ng/L	P381834	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: Sample expired for preparation for oxadiazon due to need for re-extraction. Insufficient sample available to perform matrix spikes in re-extraction. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P381941

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P381941

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: P381995

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381996

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P382001

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P382002

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381827

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381828

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381829

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381774

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381800

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381733

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381734

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381918

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381805

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
Batch ID: P381806

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381807

Component	Result	Code	Units
Total-P	0.005	U	mg P/L

Reference Method: EPA 8270E
Batch ID: P381648

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L
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'	6.0	U	ng/L
DDE-p,p'	6.0	U	ng/L
DDT-p,p'	7.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfluralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Prallethrin	30	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P381834

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P382124

Component	Result	Code	Units
Oxadiazon	0.10	U	ng/L

Reference Method: EPA 8276
Batch ID: P381648

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

Reference Method: EPA 8321B
Batch ID: P381729

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P381772

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: P381861

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	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: SM 2320 B-2011
Batch ID: P381989

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

Reference Method: SM 2540 C-2011
Batch ID: P382050

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P382053

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P381927

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P381851

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: P381941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	97.1		P	85 - 115
Calcium	100		P	85 - 115
Iron	102		P	85 - 115
Magnesium	101		P	85 - 115
Potassium	97.5		P	85 - 115
Sodium	99.6		P	85 - 115
Zinc	98.3		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P381941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	91.8		P	85 - 115
Antimony	95.9		P	85 - 115
Arsenic	97.3		P	85 - 115
Boron	94.7		P	85 - 115
Cadmium	95.8		P	85 - 115
Chromium	92.3		P	85 - 115
Copper	92.5		P	85 - 115
Lead	93.1		P	85 - 115
Nickel	91.3		P	85 - 115
Selenium	91.8		P	85 - 115
Silver	95.5		P	85 - 115
Thallium	95.6		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381995

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381996

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P382001

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P382002

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381827

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381828

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381829

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381774

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381800

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381733

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381734

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	94.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381918

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381805

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381806

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381807

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

Reference Method: EPA 8270E
Batch ID: P381648

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	40.3	39.6	P/P	20 - 87.0
Alpha-BHC	95.0	87.8	P/P	65 - 142
Alpha-Chlordane	90.0	87.2	P/P	58 - 106
Beta-BHC	105	109	P/P	65 - 179
Beta-Cyfluthrin	110	113	P/P	50 - 150
Bifenthrin	86.8	86.1	P/P	38 - 128
Chlorothalonil	157	128	P/P	20 - 214
Cis-Nonachlor	96.6	90.9	P/P	56 - 113
Cypermethrin	100	91.9	P/P	37 - 130
Dacthal	95.7	93.1	P/P	50 - 150
DDD-p,p'	108	96.9	P/P	66 - 119
DDE-p,p'	87.1	91.5	P/P	53 - 108
DDT-p,p'	86.8	87.1	P/P	57 - 133
Delta-BHC	129	105	P/P	68 - 187
Dicofol	132	115	F/P	66 - 123
Dieldrin	97.1	94.5	P/P	65 - 111
Endosulfan I	105	105	P/P	65 - 115
Endosulfan II	113	113	P/P	68 - 133
Endosulfan Sulfate	118	95.2	P/P	62 - 127
Endrin	97.2	97.1	P/P	64 - 122
Endrin Aldehyde	109	110	P/P	61 - 132
Endrin Ketone	110	102	P/P	66 - 120
Ethalfluralin	80.8	79.7	P/P	57 - 127
Gamma-BHC	109	99.7	P/P	71 - 158
Gamma-Chlordane	83.2	83.1	P/P	53 - 106
Heptachlor	74.8	72.7	P/P	45 - 96.0
Heptachlor Epoxide	92.2	90.7	P/P	64 - 109
Hexachlorobenzene	76.5	75.3	P/P	46 - 103
Lambda-Cyhalothrin	113	114	P/P	50 - 150
Methoxychlor	93.1	96.1	P/P	69 - 149
Mirex	66.9	67.6	P/P	31 - 90.0
Permethrin	82.2	81.6	P/P	41 - 108
Phenothrin	45.8	45.9	F/F	50 - 150
Prallethrin	55.9	48.3	P/P	40 - 140
Trans-Nonachlor	88.6	86.7	P/P	50 - 107
Trifluralin	80.6	80.5	P/P	58 - 119

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P381834

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	109	98.3	P/P	71 - 122
Alachlor	106	97.5	P/P	70 - 121
Ametryn	114	111	P/P	49 - 137
Atrazine	116	109	P/P	76 - 125
Atrazine Desethyl	80.6	77.4	P/P	31 - 144
Azinphos Methyl	153	116	F/P	67 - 150
Bromacil	100	88.5	P/P	36 - 121
Butylate	75.8	69.7	P/P	33 - 88.0
Carbophenothion	93.4	90.1	P/P	50 - 150
Chlorpyrifos Ethyl	101	95.8	P/P	73 - 117
Chlorpyrifos Methyl	95.3	87.6	P/P	68 - 121
Cyanazine	129	114	P/P	20 - 250
Demeton	78.5	74.7	P/P	30 - 123
Diazinon	110	97.6	P/P	70 - 128
Dimethenamid	106	98.9	P/P	66 - 122
Disulfoton	78.1	74.6	P/P	46 - 124
Dithiopyr	104	96.6	P/P	69 - 122
EPTC	85.4	77.2	P/P	31 - 90.0
Ethion	103	95.1	P/P	45 - 135
Ethoprop	105	96.8	P/P	59 - 118
Fenamiphos	98.2	92.1	P/P	30 - 136
Fipronil	106	99.4	P/P	57 - 127
Fipronil Desulfinyl	113	104	P/P	51 - 122
Fipronil Sulfide	94.3	91.9	P/P	57 - 119
Fipronil Sulfone	90.7	89.5	P/P	51 - 119
Flumioxazin	159	136	P/P	70 - 200
Fonofos	91.6	80.6	P/P	60 - 120
Hexazinone	128	111	P/P	57 - 142
Imazalil	94.0	102	P/P	50 - 150
Malathion	112	105	P/P	67 - 128
Metalaxyl	111	103	P/P	21 - 148
Metolachlor	99.0	92.0	P/P	70 - 120
Metribuzin	104	105	P/P	20 - 253
Mevinphos	90.6	85.5	P/P	47 - 116
Molinate	91.3	82.3	P/P	41 - 99.0
Naled	71.4	64.6	P/P	40 - 130
Norflurazon	102	95.5	P/P	54 - 127
Parathion Ethyl	110	98.3	P/P	71 - 113
Parathion Methyl	106	97.7	P/P	73 - 129
Pendimethalin	95.7	85.2	P/P	63 - 130
Phorate	92.9	85.9	P/P	48 - 118
Prodiamine	76.3	73.1	P/P	20 - 144
Prometon	105	96.6	P/P	53 - 120
Prometryn	110	99.3	P/P	63 - 119
Pronamide	118	108	P/P	50 - 150
Propiconazole	102	99.7	P/P	50 - 150
Simazine	123	111	P/P	77 - 129
Sulfentrazone	88.8	90.4	P/P	50 - 150
Tebuconazole	65.4	71.4	P/P	20 - 118
Terbufos	98.4	86.3	P/P	61 - 119
Terbuthylazine	108	102	P/P	75 - 119

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P382124

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxadiazon	106	91.1	P/P	65 - 122

Reference Method: EPA 8276
Batch ID: P381648

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	88.4	90.1	P/P	47 - 119
Toxaphene	78.6	77.6	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P381729

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	115		P	30 - 160
3-Hydroxycarbofuran	91.3		P	30 - 160
Acetaminophen	66.6		P	30 - 160
Acetamiprid	94.2		P	30 - 160
Afidopyropen	92.7		P	30 - 160
Aldicarb	64.8		P	30 - 160
Aldicarb Sulfone	75.5		P	30 - 160
Aldicarb Sulfoxide	82.2		P	30 - 160
Bentazon	54.3		P	30 - 160
Benzovindiflupyr	78.1		P	30 - 160
Carbamazepine	110		P	30 - 160
Carbaryl	71.0		P	30 - 160
Carbofuran	57.0		P	30 - 160
Clothianidin	79.8		P	30 - 160
Dinotefuran	71.5		P	30 - 160
Diuron	94.1		P	30 - 160
Fenuron	100		P	30 - 160
Fluridone	82.1		P	30 - 160
Hydrocodone	82.5		P	30 - 160
Ibuprofen	72.8		P	30 - 160
Imazapyr	73.8		P	30 - 160
Imidacloprid	107		P	30 - 160
Linuron	64.4		P	30 - 160
Mandestrobin	80.0		P	30 - 160
MCPP	124		P	30 - 160
Methiocarb	59.5		P	30 - 160
Methomyl	73.5		P	30 - 160
Naproxen	69.1		P	30 - 160
Oxamyl	75.5		P	30 - 160
Primidone	91.9		P	30 - 160
Propoxur	55.3		P	30 - 160
Pyraclostrobin	77.8		P	30 - 160
Thiamethoxam	90.2		P	30 - 160
Tolfenpyrad	52.5		P	30 - 160
Triclopyr	98.0		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P381772

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	102		P	40 - 150
AMPA	88.5		P	40 - 150
Endothall	92.0		P	40 - 150
Glufosinate	101		P	40 - 150
Glyphosate	95.7		P	40 - 140
Sucralose	99.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P381861

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	75.5		P	30 - 160
Acetaminophen	76.5		P	30 - 150
Acetamiprid	88.8		P	30 - 160
Afidopyropen	78.3		P	30 - 160
Bentazon	74.3		P	30 - 150
Benzovindiflupyr	57.4		P	30 - 160
Carbamazepine	60.6		P	30 - 160
Clothianidin	93.5		P	30 - 160
Dinotefuran	85.9		P	30 - 160
Diuron	59.0		P	30 - 160
Fenuron	99.0		P	30 - 160
Fluridone	56.9		P	30 - 160
Hydrocodone	84.2		P	30 - 160
Ibuprofen	57.7		P	30 - 160
Imazapyr	92.9		P	30 - 160
Imidacloprid	92.2		P	30 - 160
Linuron	55.2		P	30 - 160
Mandestrobin	62.8		P	30 - 160
MCPP	72.8		P	30 - 160
Naproxen	71.9		P	30 - 160
Primidone	95.9		P	30 - 160
Pyraclostrobin	57.9		P	30 - 160
Thiamethoxam	91.3		P	30 - 160
Tolfenpyrad	38.5		P	30 - 160
Triclopyr	76.2		P	30 - 160

Reference Method: SM 2320 B-2011
Batch ID: P381989

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 107

Reference Method: SM 4500 F-C-2011
Batch ID: P381927

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	103		P	92 - 104

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P381851

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P381941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169376	Barium	94.6	96.5	P/P	80 - 120
2169376	Calcium	103		P	80 - 120
2169376	Iron	103	104	P/P	80 - 120
2169376	Magnesium	102		P	80 - 120
2169376	Potassium	98.2	97.4	P/P	80 - 120
2169376	Sodium	101		P	80 - 120
2169376	Zinc	94.7	95.6	P/P	80 - 120
2169385	Barium	92.6		P	80 - 120
2169385	Iron	98.2		P	80 - 120
2169385	Magnesium	103		P	80 - 120
2169385	Potassium	92.9		P	80 - 120
2169385	Sodium	99.7		P	80 - 120
2169385	Zinc	95.1		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P381941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169376	Aluminum	94.3	95.1	P/P	80 - 120
2169376	Antimony	96.3	98.3	P/P	80 - 120
2169376	Arsenic	96.1	99.1	P/P	80 - 120
2169376	Boron	98.6	97.3	P/P	80 - 120
2169376	Cadmium	95.5	98.9	P/P	80 - 120
2169376	Chromium	96.2	99.1	P/P	80 - 120
2169376	Copper	95.9	93.3	P/P	80 - 120
2169376	Lead	94.0	95.3	P/P	80 - 120
2169376	Nickel	92.5	93.7	P/P	80 - 120
2169376	Selenium	90.2	92.4	P/P	80 - 120
2169376	Silver	93.8	95.1	P/P	80 - 120
2169376	Thallium	97.7	101	P/P	80 - 120
2169385	Aluminum	88.8		P	80 - 120
2169385	Antimony	99.0		P	80 - 120
2169385	Arsenic	99.4		P	80 - 120
2169385	Boron	96.0		P	80 - 120
2169385	Cadmium	97.0		P	80 - 120
2169385	Chromium	97.2		P	80 - 120
2169385	Copper	92.0		P	80 - 120
2169385	Lead	95.0		P	80 - 120
2169385	Nickel	93.2		P	80 - 120
2169385	Selenium	92.3		P	80 - 120
2169385	Silver	93.6		P	80 - 120
2169385	Thallium	99.6		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381995

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169345	Chloride	97.5		P	90 - 110
2169413	Chloride	101		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381996

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169463	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P382001

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169345	Sulfate	98.8		P	90 - 110
2169413	Sulfate	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P382002

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169463	Sulfate	99.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381827

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169503	Ammonia-N	98.8	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381828

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169351	Ammonia-N	104	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381829

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169458	Ammonia-N	103	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381774

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169468	Kjeldahl Nitrogen	99.8	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381800

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169464	Kjeldahl Nitrogen	104	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381733

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169437	NO2NO3-N	94.0	95.0	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381734

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169464	NO2NO3-N	92.3	93.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381918

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169619	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381805

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169401	Total-P	104	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381806

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169465	Total-P	103	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381807

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169468	Total-P	107	104	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P381648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2168844	Aldrin	67.5	70.2	P/P	32 - 82.0
2168844	Alpha-BHC	103	106	P/P	68 - 157
2168844	Alpha-Chlordane	88.4	93.9	P/P	54 - 108
2168844	Beta-BHC	116	113	P/P	54 - 200
2168844	Beta-Cyfluthrin	154	163	F/F	50 - 150
2168844	Bifenthrin	97.8	105	P/P	49 - 124
2168844	Chlorothalonil	235	284	P/P	10 - 289
2168844	Cis-Nonachlor	95.0	103	P/P	53 - 112
2168844	Cypermethrin	128	134	P/P	43 - 141
2168844	Dacthal	95.7	99.0	P/P	50 - 150
2168844	DDD-p,p'	103	109	P/P	58 - 125
2168844	DDE-p,p'	84.0	85.9	P/P	50 - 108
2168844	DDT-p,p'	84.2	81.3	P/P	52 - 140
2168844	Delta-BHC	182	196	P/P	61 - 228
2168844	Dicofol	137	125	F/P	59 - 130
2168844	Dieldrin	94.6	98.8	P/P	57 - 121
2168844	Endosulfan I	118	119	P/P	62 - 123
2168844	Endosulfan II	124	141	P/P	48 - 163
2168844	Endosulfan Sulfate	124	141	P/F	63 - 132
2168844	Endrin	98.0	103	P/P	58 - 128
2168844	Endrin Aldehyde	82.2	82.7	P/P	44 - 126
2168844	Endrin Ketone	118	124	P/P	68 - 127

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P381648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2168844	Ethalfluralin	82.0	79.4	P/P	55 - 131
2168844	Gamma-BHC	121	127	P/P	54 - 206
2168844	Gamma-Chlordane	84.4	88.5	P/P	52 - 105
2168844	Heptachlor	73.5	80.7	P/P	47 - 94.0
2168844	Heptachlor Epoxide	91.0	96.1	P/P	61 - 113
2168844	Hexachlorobenzene	78.8	76.8	P/P	45 - 100
2168844	Lambda-Cyhalothrin	169	183	F/F	50 - 150
2168844	Methoxychlor	91.6	89.4	P/P	63 - 153
2168844	Mirex	75.8	76.4	P/P	38 - 90.0
2168844	Permethrin	91.6	92.1	P/P	45 - 112
2168844	Phenothrin	87.3	89.5	P/P	50 - 150
2168844	Prallethrin	84.7	90.8	P/P	40 - 140
2168844	Trans-Nonachlor	87.7	92.6	P/P	50 - 103
2168844	Trifluralin	83.1	82.4	P/P	57 - 122

Reference Method: EPA 8270E
Batch ID: P381834

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169317	Acetochlor	95.8	94.6	P/P	68 - 126
2169317	Alachlor	99.6	94.5	P/P	66 - 125
2169317	Ametryn	125	111	P/P	31 - 182
2169317	Atrazine	102	113	P/P	68 - 137
2169317	Atrazine Desethyl	103	95.3	P/P	13 - 161
2169317	Azinphos Methyl	159	159	P/P	54 - 162
2169317	Bromacil	102	101	P/P	34 - 144
2169317	Butylate	63.3	74.5	P/P	16 - 92.0
2169317	Carbophenothion	82.7	81.5	P/P	50 - 150
2169317	Chlorpyrifos Ethyl	94.6	88.5	P/P	63 - 124
2169317	Chlorpyrifos Methyl	95.7	94.8	P/P	64 - 125
2169317	Cyanazine	131	132	P/P	13 - 245
2169317	Demeton	117	119	P/P	20 - 154
2169317	Diazinon	107	109	P/P	66 - 141
2169317	Dimethenamid	92.2	90.3	P/P	50 - 130
2169317	Disulfoton	111	85.1	P/P	55 - 130
2169317	Dithiopyr	84.3	81.4	P/P	66 - 122
2169317	EPTC	79.9	84.2	P/P	15 - 93.0
2169317	Ethion	82.7	88.8	P/P	15 - 148
2169317	Ethoprop	141	139	F/F	59 - 126
2169317	Fenamiphos	77.3	76.1	P/P	39 - 137
2169317	Fipronil	92.8	92.4	P/P	47 - 131
2169317	Fipronil Desulfinyl	94.7	91.4	P/P	43 - 121
2169317	Fipronil Sulfide	84.5	83.2	P/P	29 - 134
2169317	Fipronil Sulfone	71.5	71.0	P/P	19 - 131
2169317	Flumioxazin	200	207	P/F	70 - 200
2169317	Fonofos	114	106	P/P	62 - 128
2169317	Hexazinone	118	123	P/P	58 - 154
2169317	Imazalil	83.8	89.6	P/P	50 - 150
2169317	Malathion	105	106	P/P	54 - 135
2169317	Metalaxyl	98.1	95.8	P/P	46 - 136
2169317	Metolachlor	83.3	82.8	P/P	62 - 126
2169317	Metribuzin	143	142	P/P	44 - 277

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P381834

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169317	Mevinphos	131	131	P/P	44 - 135
2169317	Molinate	87.5	95.7	P/P	31 - 104
2169317	Naled	81.5	72.7	P/P	40 - 130
2169317	Norflurazon	83.5	84.3	P/P	32 - 134
2169317	Parathion Ethyl	111	111	P/P	67 - 120
2169317	Parathion Methyl	132	135	P/P	70 - 140
2169317	Pendimethalin	107	105	P/P	59 - 145
2169317	Phorate	121	115	P/P	52 - 127
2169317	Prodiamine	37.8	33.0	P/P	11 - 157
2169317	Prometon	93.1	93.0	P/P	55 - 130
2169317	Prometryn	98.8	92.2	P/P	55 - 127
2169317	Pronamide	148	150	P/P	50 - 150
2169317	Propiconazole	83.7	84.8	P/P	50 - 150
2169317	Simazine	152	146	P/P	58 - 159
2169317	Sulfentrazone	75.8	72.0	P/P	50 - 150
2169317	Tebuconazole	33.2	33.3	P/P	10 - 122
2169317	Terbufos	123	123	P/P	65 - 131
2169317	Terbuthylazine	105	106	P/P	63 - 131

Reference Method: EPA 8276
Batch ID: P381648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169482	Chlordane	96.9	95.0	P/P	34 - 129
2169482	Toxaphene	72.2	71.7	P/P	26 - 123

Reference Method: EPA 8321B
Batch ID: P381729

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2168838	3-Hydroxycarbofuran	75.5	79.3	P/P	30 - 160
2168838	Aldicarb	42.8	50.2	P/P	30 - 160
2168838	Aldicarb Sulfone	88.9	87.9	P/P	30 - 160
2168838	Aldicarb Sulfoxide	27.5	26.0	F/F	30 - 160
2168838	Carbaryl	56.6	57.9	P/P	30 - 160
2168838	Carbofuran	40.6	39.2	P/P	30 - 160
2168838	Methiocarb	54.4	49.1	P/P	30 - 160
2168838	Methomyl	55.6	58.4	P/P	30 - 160
2168838	Oxamyl	72.3	65.7	P/P	30 - 160
2168838	Propoxur	38.2	36.0	P/P	30 - 160
2169069	2,4-D	119	111	P/P	30 - 160
2169069	Acetaminophen	101	88.6	P/P	30 - 160
2169069	Acetamiprid	90.9	81.2	P/P	30 - 160
2169069	Afidopyropen	110	96.1	P/P	30 - 160
2169069	Benzovindiflupyr	87.2	75.0	P/P	30 - 160
2169069	Carbamazepine	91.1	80.7	P/P	30 - 160
2169069	Clothianidin	82.2	78.3	P/P	30 - 160
2169069	Dinotefuran	92.8	92.5	P/P	30 - 160
2169069	Diuron	96.4	83.4	P/P	30 - 160
2169069	Fenuron	66.4	58.8	P/P	30 - 160
2169069	Fluridone	89.5	73.5	P/P	30 - 160
2169069	Hydrocodone	86.6	76.6	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P381729

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169069	Ibuprofen	73.9	63.1	P/P	30 - 160
2169069	Imazapyr	110	89.1	P/P	30 - 160
2169069	Imidacloprid	144	125	P/P	30 - 160
2169069	Linuron	66.7	53.9	P/P	30 - 160
2169069	Mandestrobin	91.1	78.4	P/P	30 - 160
2169069	MCPP	127	111	P/P	30 - 160
2169069	Naproxen	80.9	66.9	P/P	30 - 160
2169069	Primidone	82.2	70.3	P/P	30 - 160
2169069	Pyraclostrobin	90.5	80.8	P/P	30 - 160
2169069	Thiamethoxam	116	100	P/P	30 - 160
2169069	Tolfenpyrad	60.3	51.6	P/P	30 - 160
2169069	Triclopyr	118	102	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P381772

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169045	Acesulfame K	18.8	18.0	F/F	40 - 150
2169045	AMPA	59.9	56.5	P/P	40 - 150
2169045	Endothall	98.6	111	P/P	40 - 150
2169045	Glufosinate	93.7	89.1	P/P	40 - 150
2169045	Glyphosate	100	84.2	P/P	40 - 140
2169045	Sucralose	95.5	87.1	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P381861

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169480	Acetamiprid	59.8	55.0	P/P	30 - 160
2169480	Afidopyropen	63.9	78.5	P/P	30 - 160
2169480	Benzovindiflupyr	44.1	41.7	P/P	30 - 160
2169480	Carbamazepine	44.4	45.6	P/P	30 - 160
2169480	Clothianidin	86.3	81.4	P/P	30 - 160
2169480	Dinotefuran	81.0	81.1	P/P	30 - 160
2169480	Diuron	28.8	24.5	F/F	30 - 160
2169480	Fenuron	60.4	58.2	P/P	30 - 160
2169480	Fluridone	27.1	28.1	F/F	30 - 160
2169480	Hydrocodone	36.5	32.2	P/P	30 - 160
2169480	Ibuprofen	44.4	45.2	P/P	30 - 160
2169480	Imidacloprid	80.6	78.4	P/P	30 - 160
2169480	Linuron	33.1	33.4	P/P	30 - 160
2169480	Mandestrobin	33.7	33.1	P/P	30 - 160
2169480	MCPP	57.3	54.9	P/P	30 - 160
2169480	Naproxen	58.3	94.3	P/P	30 - 160
2169480	Primidone	78.6	83.6	P/P	30 - 160
2169480	Pyraclostrobin	46.5	46.7	P/P	30 - 160
2169480	Thiamethoxam	80.9	79.4	P/P	30 - 160
2169480	Tolfenpyrad	42.4	46.0	P/P	30 - 160
2169480	Triclopyr	61.8	62.4	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P381927

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169176	Fluoride	106	103	F/P	91 - 105

Reference Method: SM 5310 B-2011
Batch ID: P381851

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2169460	Organic Carbon	97.2	96.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P381941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169376	Barium	1.87	Spike	P	0 - 20
2169376	Calcium	0.664	Spike	P	0 - 20
2169376	Iron	0.391	Spike	P	0 - 20
2169376	Magnesium	0.769	Spike	P	0 - 20
2169376	Potassium	0.629	Spike	P	0 - 20
2169376	Sodium	0.133	Spike	P	0 - 20
2169376	Zinc	1.02	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P381941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169376	Aluminum	0.712	Spike	P	0 - 20
2169376	Antimony	2.03	Spike	P	0 - 20
2169376	Arsenic	3.03	Spike	P	0 - 20
2169376	Boron	1.15	Spike	P	0 - 20
2169376	Cadmium	3.49	Spike	P	0 - 20
2169376	Chromium	2.78	Spike	P	0 - 20
2169376	Copper	2.75	Spike	P	0 - 20
2169376	Lead	1.35	Spike	P	0 - 20
2169376	Nickel	1.31	Spike	P	0 - 20
2169376	Selenium	2.41	Spike	P	0 - 20
2169376	Silver	1.35	Spike	P	0 - 20
2169376	Thallium	3.08	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381995

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169345	Chloride	0.102	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P381996

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169463	Chloride	1.18	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P382001

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169345	Sulfate	0.192	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P382002

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169463	Sulfate	1.51	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381827

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169503	Ammonia-N	1.52	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381828

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169351	Ammonia-N	0.393	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P381829

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169458	Ammonia-N	1.04	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169468	Kjeldahl Nitrogen	3.32	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P381800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169464	Kjeldahl Nitrogen	0.380	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169437	NO2NO3-N	0.602	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381734

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169464	NO2NO3-N	1.44	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P381918

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169619	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381805

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169401	Total-P	2.16	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381806

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169465	Total-P	2.23	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P381807

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169468	Total-P	2.96	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P381648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2168844	Aldrin	3.94	Spike	P	0 - 30
2168844	Alpha-BHC	3.58	Spike	P	0 - 30
2168844	Alpha-Chlordane	5.99	Spike	P	0 - 30
2168844	Beta-BHC	2.71	Spike	P	0 - 30
2168844	Beta-Cyfluthrin	5.72	Spike	P	0 - 30
2168844	Bifenthrin	6.68	Spike	P	0 - 30
2168844	Chlorothalonil	18.8	Spike	P	0 - 30
2168844	Cis-Nonachlor	8.44	Spike	P	0 - 30
2168844	Cypermethrin	5.07	Spike	P	0 - 30
2168844	Dacthal	3.35	Spike	P	0 - 30
2168844	DDD-p,p'	6.13	Spike	P	0 - 30
2168844	DDE-p,p'	2.27	Spike	P	0 - 30
2168844	DDT-p,p'	3.49	Spike	P	0 - 30
2168844	Delta-BHC	7.11	Spike	P	0 - 30
2168844	Dicofol	8.98	Spike	P	0 - 30
2168844	Dieldrin	4.41	Spike	P	0 - 30
2168844	Endosulfan I	0.881	Spike	P	0 - 30
2168844	Endosulfan II	12.5	Spike	P	0 - 30
2168844	Endosulfan Sulfate	12.9	Spike	P	0 - 30
2168844	Endrin	5.22	Spike	P	0 - 30
2168844	Endrin Aldehyde	0.618	Spike	P	0 - 30
2168844	Endrin Ketone	5.33	Spike	P	0 - 30
2168844	Ethalfluralin	3.28	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P381648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2168844	Gamma-BHC	4.97	Spike	P	0 - 30
2168844	Gamma-Chlordane	4.71	Spike	P	0 - 30
2168844	Heptachlor	9.36	Spike	P	0 - 30
2168844	Heptachlor Epoxide	5.43	Spike	P	0 - 30
2168844	Hexachlorobenzene	2.56	Spike	P	0 - 30
2168844	Lambda-Cyhalothrin	7.93	Spike	P	0 - 30
2168844	Methoxychlor	2.41	Spike	P	0 - 30
2168844	Mirex	0.696	Spike	P	0 - 30
2168844	Permethrin	0.570	Spike	P	0 - 30
2168844	Phenothrin	2.45	Spike	P	0 - 30
2168844	Prallethrin	6.94	Spike	P	0 - 30
2168844	Trans-Nonachlor	5.51	Spike	P	0 - 30
2168844	Trifluralin	0.840	Spike	P	0 - 30
LFB	Aldrin	1.72	LCS	P	0 - 30
LFB	Alpha-BHC	7.82	LCS	P	0 - 30
LFB	Alpha-Chlordane	3.23	LCS	P	0 - 30
LFB	Beta-BHC	4.22	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	2.35	LCS	P	0 - 30
LFB	Bifenthrin	0.807	LCS	P	0 - 30
LFB	Chlorothalonil	20.5	LCS	P	0 - 30
LFB	Cis-Nonachlor	6.05	LCS	P	0 - 30
LFB	Cypermethrin	8.94	LCS	P	0 - 30
LFB	Dacthal	2.70	LCS	P	0 - 30
LFB	DDD-p,p'	10.7	LCS	P	0 - 30
LFB	DDE-p,p'	4.90	LCS	P	0 - 30
LFB	DDT-p,p'	0.274	LCS	P	0 - 30
LFB	Delta-BHC	20.0	LCS	P	0 - 30
LFB	Dicofol	14.0	LCS	P	0 - 30
LFB	Dieldrin	2.75	LCS	P	0 - 30
LFB	Endosulfan I	0.292	LCS	P	0 - 30
LFB	Endosulfan II	0.718	LCS	P	0 - 30
LFB	Endosulfan Sulfate	21.1	LCS	P	0 - 30
LFB	Endrin	0.0855	LCS	P	0 - 30
LFB	Endrin Aldehyde	0.442	LCS	P	0 - 30
LFB	Endrin Ketone	7.64	LCS	P	0 - 30
LFB	Ethalfluralin	1.32	LCS	P	0 - 30
LFB	Gamma-BHC	8.92	LCS	P	0 - 30
LFB	Gamma-Chlordane	0.106	LCS	P	0 - 30
LFB	Heptachlor	2.83	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.66	LCS	P	0 - 30
LFB	Hexachlorobenzene	1.63	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	0.540	LCS	P	0 - 30
LFB	Methoxychlor	3.21	LCS	P	0 - 30
LFB	Mirex	0.946	LCS	P	0 - 30
LFB	Permethrin	0.769	LCS	P	0 - 30
LFB	Phenothrin	0.205	LCS	P	0 - 30
LFB	Prallethrin	14.5	LCS	P	0 - 30
LFB	Trans-Nonachlor	2.21	LCS	P	0 - 30
LFB	Trifluralin	0.0437	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P381834

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169317	Acetochlor	1.23	Spike	P	0 - 30
2169317	Alachlor	5.26	Spike	P	0 - 30
2169317	Ametryn	11.5	Spike	P	0 - 30
2169317	Atrazine	2.30	Spike	P	0 - 30
2169317	Atrazine Desethyl	7.83	Spike	P	0 - 30
2169317	Azinphos Methyl	0.357	Spike	P	0 - 30
2169317	Bromacil	0.312	Spike	P	0 - 30
2169317	Butylate	16.3	Spike	P	0 - 30
2169317	Carbophenothion	1.49	Spike	P	0 - 30
2169317	Chlorpyrifos Ethyl	6.65	Spike	P	0 - 30
2169317	Chlorpyrifos Methyl	0.971	Spike	P	0 - 30
2169317	Cyanazine	0.583	Spike	P	0 - 30
2169317	Demeton	1.68	Spike	P	0 - 30
2169317	Diazinon	1.86	Spike	P	0 - 30
2169317	Dimethenamid	2.09	Spike	P	0 - 30
2169317	Disulfoton	26.1	Spike	P	0 - 30
2169317	Dithiopyr	3.31	Spike	P	0 - 30
2169317	EPTC	5.18	Spike	P	0 - 30
2169317	Ethion	7.17	Spike	P	0 - 30
2169317	Ethoprop	1.38	Spike	P	0 - 30
2169317	Fenamiphos	1.65	Spike	P	0 - 30
2169317	Fipronil	0.446	Spike	P	0 - 30
2169317	Fipronil Desulfinyl	3.26	Spike	P	0 - 30
2169317	Fipronil Sulfide	1.21	Spike	P	0 - 30
2169317	Fipronil Sulfone	0.338	Spike	P	0 - 30
2169317	Flumioxazin	3.65	Spike	P	0 - 30
2169317	Fonofos	7.30	Spike	P	0 - 30
2169317	Hexazinone	3.79	Spike	P	0 - 30
2169317	Imazalil	6.71	Spike	P	0 - 30
2169317	Malathion	1.11	Spike	P	0 - 30
2169317	Metalaxyl	2.32	Spike	P	0 - 30
2169317	Metolachlor	0.604	Spike	P	0 - 30
2169317	Metribuzin	0.973	Spike	P	0 - 30
2169317	Mevinphos	0.483	Spike	P	0 - 30
2169317	Molinate	8.97	Spike	P	0 - 30
2169317	Naled	11.4	Spike	P	0 - 30
2169317	Norflurazon	0.978	Spike	P	0 - 30
2169317	Parathion Ethyl	0.180	Spike	P	0 - 30
2169317	Parathion Methyl	2.25	Spike	P	0 - 30
2169317	Pendimethalin	1.46	Spike	P	0 - 30
2169317	Phorate	4.88	Spike	P	0 - 30
2169317	Prodiamine	13.6	Spike	P	0 - 30
2169317	Prometon	0.0734	Spike	P	0 - 30
2169317	Prometryn	6.91	Spike	P	0 - 30
2169317	Pronamide	1.31	Spike	P	0 - 30
2169317	Propiconazole	1.00	Spike	P	0 - 30
2169317	Simazine	3.85	Spike	P	0 - 30
2169317	Sulfentrazone	5.14	Spike	P	0 - 30
2169317	Tebuconazole	0.298	Spike	P	0 - 30
2169317	Terbufos	0.0356	Spike	P	0 - 30
2169317	Terbuthylazine	1.67	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P381834

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Acetochlor	9.88	LCS	P	0 - 30
LFB	Alachlor	8.70	LCS	P	0 - 30
LFB	Ametryn	2.59	LCS	P	0 - 30
LFB	Atrazine	6.65	LCS	P	0 - 30
LFB	Atrazine Desethyl	3.99	LCS	P	0 - 30
LFB	Azinphos Methyl	27.5	LCS	P	0 - 30
LFB	Bromacil	12.7	LCS	P	0 - 30
LFB	Butylate	8.42	LCS	P	0 - 30
LFB	Carbophenothion	3.60	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.96	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	8.38	LCS	P	0 - 30
LFB	Cyanazine	12.8	LCS	P	0 - 30
LFB	Demeton	4.95	LCS	P	0 - 30
LFB	Diazinon	12.0	LCS	P	0 - 30
LFB	Dimethenamid	6.99	LCS	P	0 - 30
LFB	Disulfoton	4.56	LCS	P	0 - 30
LFB	Dithiopyr	7.71	LCS	P	0 - 30
LFB	EPTC	10.2	LCS	P	0 - 30
LFB	Ethion	7.54	LCS	P	0 - 30
LFB	Ethoprop	7.85	LCS	P	0 - 30
LFB	Fenamiphos	6.41	LCS	P	0 - 30
LFB	Fipronil	6.32	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	7.83	LCS	P	0 - 30
LFB	Fipronil Sulfide	2.54	LCS	P	0 - 30
LFB	Fipronil Sulfone	1.32	LCS	P	0 - 30
LFB	Flumioxazin	15.9	LCS	P	0 - 30
LFB	Fonofos	12.8	LCS	P	0 - 30
LFB	Hexazinone	14.2	LCS	P	0 - 30
LFB	Imazalil	8.18	LCS	P	0 - 30
LFB	Malathion	6.21	LCS	P	0 - 30
LFB	Metalaxyl	7.93	LCS	P	0 - 30
LFB	Metolachlor	7.35	LCS	P	0 - 30
LFB	Metribuzin	0.791	LCS	P	0 - 30
LFB	Mevinphos	5.82	LCS	P	0 - 30
LFB	Molinate	10.4	LCS	P	0 - 30
LFB	Naled	9.93	LCS	P	0 - 30
LFB	Norflurazon	6.13	LCS	P	0 - 30
LFB	Parathion Ethyl	11.2	LCS	P	0 - 30
LFB	Parathion Methyl	8.44	LCS	P	0 - 30
LFB	Pendimethalin	11.6	LCS	P	0 - 30
LFB	Phorate	7.83	LCS	P	0 - 30
LFB	Prodiamine	4.32	LCS	P	0 - 30
LFB	Prometon	8.14	LCS	P	0 - 30
LFB	Prometryn	10.1	LCS	P	0 - 30
LFB	Pronamide	9.04	LCS	P	0 - 30
LFB	Propiconazole	2.11	LCS	P	0 - 30
LFB	Simazine	10.7	LCS	P	0 - 30
LFB	Sulfentrazone	1.82	LCS	P	0 - 30
LFB	Tebuconazole	8.79	LCS	P	0 - 30
LFB	Terbufos	13.2	LCS	P	0 - 30
LFB	Terbuthylazine	5.40	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P382124

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Oxadiazon	15.0	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P381648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169482	Chlordane	1.85	Spike	P	0 - 30
2169482	Toxaphene	0.667	Spike	P	0 - 30
LFB	Chlordane	1.88	LCS	P	0 - 30
LFB	Toxaphene	1.32	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P381729

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2168838	3-Hydroxycarbofuran	4.94	Spike	P	0 - 30
2168838	Aldicarb	16.0	Spike	P	0 - 30
2168838	Aldicarb Sulfone	1.11	Spike	P	0 - 30
2168838	Aldicarb Sulfoxide	5.65	Spike	P	0 - 30
2168838	Carbaryl	2.17	Spike	P	0 - 30
2168838	Carbofuran	3.45	Spike	P	0 - 30
2168838	Methiocarb	10.2	Spike	P	0 - 30
2168838	Methomyl	4.89	Spike	P	0 - 30
2168838	Oxamyl	9.53	Spike	P	0 - 30
2168838	Propoxur	5.95	Spike	P	0 - 30
2169069	2,4-D	5.17	Spike	P	0 - 30
2169069	Acetaminophen	12.7	Spike	P	0 - 30
2169069	Acetamiprid	11.2	Spike	P	0 - 30
2169069	Afidopyropen	13.5	Spike	P	0 - 30
2169069	Bentazon	6.74	Spike	P	0 - 30
2169069	Benzovindiflupyr	15.1	Spike	P	0 - 30
2169069	Carbamazepine	12.1	Spike	P	0 - 30
2169069	Clothianidin	4.66	Spike	P	0 - 30
2169069	Dinotefuran	0.228	Spike	P	0 - 30
2169069	Diuron	14.4	Spike	P	0 - 30
2169069	Fenuron	12.1	Spike	P	0 - 30
2169069	Fluridone	15.7	Spike	P	0 - 30
2169069	Hydrocodone	12.3	Spike	P	0 - 30
2169069	Ibuprofen	15.8	Spike	P	0 - 30
2169069	Imazapyr	15.7	Spike	P	0 - 30
2169069	Imidacloprid	13.4	Spike	P	0 - 30
2169069	Linuron	21.3	Spike	P	0 - 30
2169069	Mandestrobin	15.0	Spike	P	0 - 30
2169069	MCPP	13.9	Spike	P	0 - 30
2169069	Naproxen	19.0	Spike	P	0 - 30
2169069	Primidone	15.6	Spike	P	0 - 30
2169069	Pyraclostrobin	11.3	Spike	P	0 - 30
2169069	Thiamethoxam	13.4	Spike	P	0 - 30
2169069	Tolfenpyrad	15.6	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P381729

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169069	Triclopyr	14.2	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P381772

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169045	Acesulfame K	4.28	Spike	P	0 - 30
2169045	AMPA	3.91	Spike	P	0 - 30
2169045	Endothall	11.7	Spike	P	0 - 30
2169045	Glufosinate	5.02	Spike	P	0 - 30
2169045	Glyphosate	15.5	Spike	P	0 - 30
2169045	Sucralose	9.15	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P381861

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169480	2,4-D	1.11	Spike	P	0 - 30
2169480	Acetaminophen	2.84	Spike	P	0 - 30
2169480	Acetamiprid	8.32	Spike	P	0 - 30
2169480	Afidopyropen	20.6	Spike	P	0 - 30
2169480	Bentazon	1.64	Spike	P	0 - 30
2169480	Benzovindiflupyr	5.50	Spike	P	0 - 30
2169480	Carbamazepine	2.64	Spike	P	0 - 30
2169480	Clothianidin	5.88	Spike	P	0 - 30
2169480	Dinotefuran	0.213	Spike	P	0 - 30
2169480	Diuron	3.80	Spike	P	0 - 30
2169480	Fenuron	3.70	Spike	P	0 - 30
2169480	Fluridone	3.28	Spike	P	0 - 30
2169480	Hydrocodone	12.5	Spike	P	0 - 30
2169480	Ibuprofen	1.70	Spike	P	0 - 30
2169480	Imazapyr	4.18	Spike	P	0 - 30
2169480	Imidacloprid	1.77	Spike	P	0 - 30
2169480	Linuron	0.862	Spike	P	0 - 30
2169480	Mandestrobin	1.78	Spike	P	0 - 30
2169480	MCPP	2.45	Spike	P	0 - 30
2169480	Naproxen	47.1	Spike	F	0 - 30
2169480	Primidone	6.11	Spike	P	0 - 30
2169480	Pyraclostrobin	0.362	Spike	P	0 - 30
2169480	Thiamethoxam	1.80	Spike	P	0 - 30
2169480	Tolfenpyrad	8.02	Spike	P	0 - 30
2169480	Triclopyr	0.973	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P381989

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169462	Total Alkalinity	1.88	Sample	P	0 - 3.3

Quality Assurance Report
Precision

Reference Method: SM 2540 C-2011
Batch ID: P382050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169463	TDS	1.45	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P381927

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169176	Fluoride	2.85	Spike	F	0 - 2.0

Reference Method: SM 5310 B-2011
Batch ID: P381851

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2169460	Organic Carbon	0.299	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2169475
Field Sample ID: 20030068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	74.7	P	30 - 160

Lab Sample ID: 2169476
Field Sample ID: 20030068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	103	P	30 - 160
EPA 8321B	Acetaminophen-d4	105	P	30 - 160
EPA 8321B	Carbamazepine-d10	93.6	P	30 - 160
EPA 8321B	Diuron-d6	97.6	P	30 - 160
EPA 8321B	Endothall-d6	136	P	30 - 160
EPA 8321B	Endothall-d6	136	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	84.7	P	30 - 160
EPA 8321B	Primidone-d5	88.5	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160

Lab Sample ID: 2169477
Field Sample ID: 20030070

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	83.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	96.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.6	P	30 - 160
EPA 8321B	Diuron-d6	79.7	P	30 - 160
EPA 8321B	Endothall-d6	124	P	30 - 160
EPA 8321B	Endothall-d6	124	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	62.9	P	30 - 160
EPA 8321B	Primidone-d5	78.2	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	30 - 160

Lab Sample ID: 2169478
Field Sample ID: 20030794

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	89.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	95.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	77.5	P	30 - 160
EPA 8321B	Diuron-d6	89.9	P	30 - 160
EPA 8321B	Endothall-d6	116	P	30 - 160
EPA 8321B	Endothall-d6	116	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	59.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	59.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.0	P	30 - 160
EPA 8321B	Primidone-d5	88.3	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2169479
Field Sample ID: 20030872

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	120	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	116	P	30 - 160
EPA 8321B	Diuron-d6	113	P	30 - 160
EPA 8321B	Endothall-d6	98.9	P	30 - 160
EPA 8321B	Endothall-d6	98.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	90.3	P	30 - 160
EPA 8321B	Primidone-d5	110	P	30 - 160
EPA 8321B	Sucralose-d6	92.5	P	30 - 160
EPA 8321B	Sucralose-d6	92.5	P	30 - 160

Lab Sample ID: 2169480
Field Sample ID: 20030071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	68.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	96.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	43.1	P	30 - 160
EPA 8321B	Diuron-d6	54.3	P	30 - 160
EPA 8321B	Endothall-d6	123	P	30 - 160
EPA 8321B	Endothall-d6	123	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	86.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	86.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.4	P	30 - 160
EPA 8321B	Primidone-d5	111	P	30 - 160
EPA 8321B	Sucralose-d6	97.1	P	30 - 160
EPA 8321B	Sucralose-d6	97.1	P	30 - 160

Lab Sample ID: 2169481
Field Sample ID: 20030809

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	73.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	105	P	30 - 160
EPA 8321B	Carbamazepine-d10	70.2	P	30 - 160
EPA 8321B	Diuron-d6	68.7	P	30 - 160
EPA 8321B	Endothall-d6	158	P	30 - 160
EPA 8321B	Endothall-d6	158	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	42.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	42.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	60.4	P	30 - 160
EPA 8321B	Primidone-d5	107	P	30 - 160
EPA 8321B	Sucralose-d6	106	P	30 - 160
EPA 8321B	Sucralose-d6	106	P	30 - 160

Lab Sample ID: 2169482
Field Sample ID: 20030068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	83.1	P	44 - 112

Quality Assurance Report
Surrogates

Lab Sample ID: 2169482
Field Sample ID: 20030068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Tetrachloro-m-xylene	65.9	P	34 - 106
EPA 8276	Decachlorobiphenyl	64.7	P	26 - 97.0
EPA 8276	PCNB	93.0	P	38 - 141

Lab Sample ID: 2169483
Field Sample ID: 20030068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	101	P	72 - 135
EPA 8270E	Simazine-d10	120	P	72 - 135
EPA 8270E	Terbufos-d10	94.4	P	57 - 134
EPA 8270E	Terbufos-d10	108	P	57 - 134

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A98609
Included Lab Sample IDs: 2169458, 2169460, 2169464, 2169465, 2169466

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	95.5	94.5	P/P	90 - 110
NO2NO3-N	96.0	95.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A98658
Included Lab Sample IDs: 2169458, 2169460, 2169464, 2169465, 2169466, 2169468

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

Reference Method: SM 5310 B-2011
Run ID: A98666
Included Lab Sample IDs: 2169458, 2169460, 2169464, 2169465, 2169466, 2169468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	96.3	P/P	90 - 110
Organic Carbon	96.2	97.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A98668
Included Lab Sample IDs: 2169458, 2169460

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A98669
Included Lab Sample IDs: 2169458, 2169460, 2169464, 2169465, 2169466, 2169468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.6	97.6	P/P	90 - 110
Kjeldahl Nitrogen	96.8	91.2	P/P	90 - 110
Kjeldahl Nitrogen	97.6	96.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A98670
Included Lab Sample IDs: 2169464

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A98672
Included Lab Sample IDs: 2169468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	103	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A98673
Included Lab Sample IDs: 2169465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.2	99.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A98686
Included Lab Sample IDs: 2169457, 2169459, 2169461, 2169462, 2169463, 2169467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	102	P/P	90 - 110
Chloride	102	103	P/P	90 - 110
Sulfate	103	103	P/P	90 - 110
Sulfate	103	104	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A98689
Included Lab Sample IDs: 2169476, 2169477, 2169478, 2169479

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	95.5	93.8	P/P	50 - 150
3-Hydroxycarbofuran	97.0	97.1	P/P	60 - 150
Acetaminophen	93.0	86.3	P/P	60 - 160
Acetamiprid	96.5	91.3	P/P	50 - 150
Afidopyropen	99.8	90.1	P/P	50 - 150
Aldicarb	88.5	68.0	P/P	60 - 150
Aldicarb Sulfone	84.2	82.9	P/P	50 - 150
Aldicarb Sulfoxide	83.5	82.5	P/P	50 - 150
Bentazon	71.0	96.5	P/P	50 - 160
Benzovindiflupyr	110	104	P/P	50 - 150
Carbamazepine	99.6	92.2	P/P	60 - 150
Carbaryl	94.2	100	P/P	60 - 150
Carbofuran	106	106	P/P	50 - 150
Clothianidin	96.0	80.9	P/P	60 - 150
Dinotefuran	87.8	78.0	P/P	50 - 150
Diuron	98.4	99.0	P/P	60 - 160
Fenuron	88.3	77.0	P/P	60 - 150
Fluridone	110	97.3	P/P	60 - 160
Hydrocodone	107	95.4	P/P	60 - 150
Ibuprofen	99.0	69.1	P/P	50 - 160
Imazapyr	98.1	91.9	P/P	50 - 150
Imidacloprid	102	86.8	P/P	60 - 150
Linuron	105	89.1	P/P	60 - 150
Mandestrobin	112	98.7	P/P	50 - 150
MCPP	91.9	96.3	P/P	50 - 150
Methiocarb	97.1	93.2	P/P	50 - 150
Methomyl	86.9	83.2	P/P	50 - 150
Naproxen	134	89.2	P/P	50 - 160
Oxamyl	80.3	79.3	P/P	50 - 150
Primidone	86.1	86.4	P/P	60 - 150
Propoxur	101	103	P/P	50 - 150
Pyraclostrobin	116	108	P/P	60 - 150
Thiamethoxam	96.6	81.9	P/P	50 - 150
Tolfenpyrad	116	102	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A98689
Included Lab Sample IDs: 2169476, 2169477, 2169478, 2169479

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclopyr	96.9	85.1	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A98692
Included Lab Sample IDs: 2169468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A98694
Included Lab Sample IDs: 2169457, 2169459, 2169461, 2169462, 2169463, 2169467

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

Reference Method: EPA 8321B
Run ID: A98699
Included Lab Sample IDs: 2169476, 2169477, 2169478, 2169479, 2169480, 2169481

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	103	104	P/P	60 - 160
Acesulfame K	118	111	P/P	60 - 160
Endothall	102	100	P/P	60 - 160
Endothall	86.8	103	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A98702
Included Lab Sample IDs: 2169476, 2169477, 2169478, 2169479, 2169480, 2169481

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	83.8	79.0	P/P	40 - 200
Glufosinate	109	103	P/P	40 - 200
Glyphosate	97.0	103	P/P	40 - 200

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A98709
Included Lab Sample IDs: 2169466

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A98721
Included Lab Sample IDs: 2169484

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.0	96.9	P/P	90 - 110
Arsenic	98.0	97.2	P/P	90 - 110
Boron	103	103	P/P	90 - 110
Cadmium	96.1	95.7	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A98721
Included Lab Sample IDs: 2169484

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	93.7	91.6	P/P	90 - 110
Copper	94.2	91.7	P/P	90 - 110
Lead	96.9	96.7	P/P	90 - 110
Nickel	93.3	93.0	P/P	90 - 110
Selenium	95.1	93.3	P/P	90 - 110
Silver	92.9	93.4	P/P	90 - 110
Thallium	93.0	91.8	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A98727
Included Lab Sample IDs: 2169457, 2169459, 2169461, 2169462, 2169463, 2169467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.6	99.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A98738
Included Lab Sample IDs: 2169484

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	96.2	95.0	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A98759
Included Lab Sample IDs: 2169482

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	100		P	80 - 120
Alpha-BHC	94.8		P	80 - 120
Alpha-Chlordane	100		P	80 - 120
Beta-BHC	104		P	80 - 120
Beta-Cyfluthrin	84.7		P	80 - 120
Bifenthrin	96.2		P	80 - 120
Chlorothalonil	79.2*		F	80 - 120
Cis-Nonachlor	101		P	80 - 120
Cypermethrin	88.3		P	80 - 120
Dacthal	98.8		P	80 - 120
DDD-p,p'	101		P	80 - 120
DDE-p,p'	99.5		P	80 - 120
DDT-p,p'	99.0		P	80 - 120
Delta-BHC	88.4		P	80 - 120
Dicofol	70.2*		F	80 - 120
Dieldrin	100		P	80 - 120
Endosulfan I	90.7		P	80 - 120
Endosulfan II	91.8		P	80 - 120
Endosulfan Sulfate	92.2		P	80 - 120
Endrin	100		P	80 - 120
Endrin Aldehyde	104		P	80 - 120
Endrin Ketone	95.1		P	80 - 120
Ethalfluralin	98.2		P	80 - 120
Gamma-BHC	99.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A98759
Included Lab Sample IDs: 2169482

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Gamma-Chlordane	98.6		P	80 - 120
Heptachlor	98.1		P	80 - 120
Heptachlor Epoxide	100		P	80 - 120
Hexachlorobenzene	101		P	80 - 120
Lambda-Cyhalothrin	82.0		P	80 - 120
Methoxychlor	96.9		P	80 - 120
Mirex	98.3		P	80 - 120
Permethrin	91.6		P	80 - 120
Phenothrin	91.8		P	80 - 120
Prallethrin	96.3		P	80 - 120
Trans-Nonachlor	101		P	80 - 120
Trifluralin	97.0		P	80 - 120

Reference Method: EPA 8276
Run ID: A98760
Included Lab Sample IDs: 2169482

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	105		P	80 - 120
Toxaphene	100		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A98761
Included Lab Sample IDs: 2169484

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	103	102	P/P	90 - 110
Calcium	99.7	102	P/P	90 - 110
Iron	103	105	P/P	90 - 110
Magnesium	101	104	P/P	90 - 110
Potassium	99.5	102	P/P	90 - 110
Sodium	98.2	101	P/P	90 - 110
Zinc	101	101	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A98762
Included Lab Sample IDs: 2169483

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.9		P	80 - 120
Alachlor	99.2		P	80 - 120
Ametryn	101		P	80 - 120
Atrazine Desethyl	102		P	80 - 120
Azinphos Methyl	128*		F	80 - 120
Bromacil	101		P	80 - 120
Butylate	91.0		P	80 - 120
Carbophenothion	97.3		P	80 - 120
Chlorpyrifos Ethyl	98.0		P	80 - 120
Chlorpyrifos Methyl	98.2		P	80 - 120
Cyanazine	100		P	80 - 120
Demeton	95.2		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A98762
Included Lab Sample IDs: 2169483

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diazinon	98.1		P	80 - 120
Dimethenamid	99.1		P	80 - 120
Disulfoton	114		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	95.2		P	80 - 120
Ethion	97.2		P	80 - 120
Ethoprop	100		P	80 - 120
Fenamiphos	96.1		P	80 - 120
Fipronil	99.0		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	98.9		P	80 - 120
Fipronil Sulfone	98.0		P	80 - 120
Flumioxazin	94.6		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	101		P	80 - 120
Malathion	97.6		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	94.7		P	80 - 120
Metribuzin	99.8		P	80 - 120
Mevinphos	101		P	80 - 120
Molinate	95.7		P	80 - 120
Naled	100		P	80 - 120
Norflurazon	100		P	80 - 120
Parathion Ethyl	95.6		P	80 - 120
Parathion Methyl	94.8		P	80 - 120
Pendimethalin	97.2		P	80 - 120
Phorate	98.2		P	80 - 120
Prodiamine	95.8		P	80 - 120
Prometon	98.4		P	80 - 120
Prometryn	98.3		P	80 - 120
Pronamide	97.5		P	80 - 120
Propiconazole	101		P	80 - 120
Simazine	97.4		P	80 - 120
Sulfentrazone	96.5		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	98.9		P	80 - 120
Terbuthylazine	97.4		P	80 - 120

Reference Method: EPA 8321B
Run ID: A98781
Included Lab Sample IDs: 2169477, 2169480, 2169481

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	117	84.3	P/P	50 - 150
Acetaminophen	95.6	107	P/P	60 - 160
Acetamiprid	101	99.7	P/P	60 - 160
Afidopyropen	92.5	76.3	P/P	50 - 150
Bentazon	101	100	P/P	50 - 160
Benzovindiflupyr	75.3	71.0	P/P	60 - 150
Carbamazepine	100	92.6	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A98781
Included Lab Sample IDs: 2169477, 2169480, 2169481

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Clothianidin	99.6	103	P/P	50 - 150
Dinotefuran	102	92.9	P/P	50 - 150
Diuron	111	91.1	P/P	60 - 150
Fenuron	103	103	P/P	60 - 150
Fluridone	90.3	80.4	P/P	60 - 160
Hydrocodone	101	89.6	P/P	60 - 150
Ibuprofen	77.2	80.7	P/P	50 - 160
Imazapyr	87.3	89.2	P/P	50 - 150
Imazapyr	89.8	96.2	P/P	50 - 150
Imidacloprid	102	104	P/P	60 - 150
Linuron	96.9	82.6	P/P	60 - 150
Mandestrobin	83.0	71.2	P/P	50 - 150
MCPP	92.8	83.1	P/P	50 - 150
Naproxen	97.2	117	P/P	50 - 160
Primidone	100	97.7	P/P	60 - 150
Pyraclostrobin	81.1	76.0	P/P	60 - 150
Thiamethoxam	95.1	108	P/P	60 - 150
Tolfenpyrad	71.0	70.3	P/P	50 - 150
Triclopyr	99.3	75.5	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A98790
Included Lab Sample IDs: 2169476, 2169477, 2169478, 2169479, 2169480, 2169481

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	102	98.1	P/P	60 - 160

Reference Method: EPA 8270E
Run ID: A98805
Included Lab Sample IDs: 2169483

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

Reference Method: EPA 8270E
Run ID: A98818
Included Lab Sample IDs: 2169483

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

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision		
							LCS	SMP	MS
EPA 200.7 Rev. 4.4	Barium	97.1		94.6	96.5	92.6			1.87
	Calcium	100		103					0.664
	Iron	102		103	104	98.2			0.391
	Magnesium	101		102	103				0.769
	Potassium	97.5		98.2	97.4	92.9			0.629
	Sodium	99.6		101	99.7				0.133
	Zinc	98.3		94.7	95.6	95.1			1.02
EPA 200.8 Rev. 5.4	Aluminum	91.8		88.8	94.3	95.1			0.712
	Antimony	95.9		99.0	96.3	98.3			2.03
	Arsenic	97.3		99.4	96.1	99.1			3.03
	Boron	94.7		96.0	98.6	97.3			1.15
	Cadmium	95.8		97.0	95.5	98.9			3.49
	Chromium	92.3		97.2	96.2	99.1			2.78
	Copper	92.5		92.0	95.9	93.3			2.75
	Lead	93.1		95.0	94.0	95.3			1.35
	Nickel	91.3		93.2	92.5	93.7			1.31
	Selenium	91.8		92.3	90.2	92.4			2.41
	Silver	95.5		93.6	93.8	95.1			1.35
	Thallium	95.6		99.6	97.7	101			3.08
EPA 300.0 Rev. 2.1	Chloride	98.3		97.5	101			0.102	
	Chloride	101		100				1.18	
	Sulfate	99.2		98.8	101			0.192	
	Sulfate	102		99.7				1.51	
EPA 350.1 Rev. 2.0	Ammonia-N	104		98.8	101				1.52
	Ammonia-N	104		104	104				0.393
	Ammonia-N	101		103	101				1.04
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.4		99.8	104				3.32
	Kjeldahl Nitrogen	102		104	104				0.380
EPA 353.2 Rev. 2.0	NO2NO3-N	96.0		94.0	95.0				0.602
	NO2NO3-N	94.0		92.3	93.8				1.44
	NO2NO3-N	99.5		102	102				0.0
EPA 365.1 Rev. 2.0	Total-P	104		104	106				2.16
	Total-P	103		103	101				2.23
	Total-P	104		107	104				2.96
EPA 8270E	Acetochlor	109	98.3	94.6	95.8		9.88		1.23
	Alachlor	106	97.5	94.5	99.6		8.70		5.26
	Aldrin	40.3	39.6	67.5	70.2		1.72		3.94
	Alpha-BHC	95.0	87.8	103	106		7.82		3.58
	Alpha-Chlordane	90.0	87.2	88.4	93.9		3.23		5.99
	Ametryn	114	111	125	111		2.59		11.5
	Atrazine	116	109	102	113		6.65		2.30
	Atrazine Desethyl	80.6	77.4	103	95.3		3.99		7.83
	Azinphos Methyl	153	116	159	159		27.5		0.357
	Beta-BHC	105	109	116	113		4.22		2.71
	Beta-Cyfluthrin	110	113	154	163		2.35		5.72
	Bifenthrin	86.8	86.1	97.8	105		0.807		6.68
	Bromacil	100	88.5	102	101		12.7		0.312
	Butylate	75.8	69.7	63.3	74.5		8.42		16.3
	Carbophenothion	93.4	90.1	82.7	81.5		3.60		1.49
	Chlorothalonil	157	128	235	284		20.5		18.8
	Chlorpyrifos Ethyl	101	95.8	88.5	94.6		4.96		6.65
	Chlorpyrifos Methyl	95.3	87.6	94.8	95.7		8.38		0.971
	Cis-Nonachlor	96.6	90.9	95.0	103		6.05		8.44
	Cyanazine	129	114	132	131		12.8		0.583

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Cypermethrin	100	91.9	128	134	8.94		5.07
	Dacthal	95.7	93.1	95.7	99.0	2.70		3.35
	DDD-p,p'	108	96.9	103	109	10.7		6.13
	DDE-p,p'	87.1	91.5	84.0	85.9	4.90		2.27
	DDT-p,p'	86.8	87.1	84.2	81.3	0.274		3.49
	Delta-BHC	129	105	182	196	20.0		7.11
	Demeton	78.5	74.7	119	117	4.95		1.68
	Diazinon	110	97.6	109	107	12.0		1.86
	Dicofol	132	115	137	125	14.0		8.98
	Dieldrin	97.1	94.5	94.6	98.8	2.75		4.41
	Dimethenamid	106	98.9	90.3	92.2	6.99		2.09
	Disulfoton	78.1	74.6	85.1	111	4.56		26.1
	Dithiopyr	104	96.6	81.4	84.3	7.71		3.31
	Endosulfan I	105	105	118	119	0.292		0.881
	Endosulfan II	113	113	124	141	0.718		12.5
	Endosulfan Sulfate	118	95.2	124	141	21.1		12.9
	Endrin	97.2	97.1	98.0	103	0.0855		5.22
	Endrin Aldehyde	109	110	82.2	82.7	0.442		0.618
	Endrin Ketone	110	102	118	124	7.64		5.33
	EPTC	85.4	77.2	84.2	79.9	10.2		5.18
	Ethalfluralin	80.8	79.7	82.0	79.4	1.32		3.28
	Ethion	103	95.1	88.8	82.7	7.54		7.17
	Ethoprop	105	96.8	139	141	7.85		1.38
	Fenamiphos	98.2	92.1	76.1	77.3	6.41		1.65
	Fipronil	106	99.4	92.8	92.4	6.32		0.446
	Fipronil Desulfinyl	113	104	94.7	91.4	7.83		3.26
	Fipronil Sulfide	94.3	91.9	84.5	83.2	2.54		1.21
	Fipronil Sulfone	90.7	89.5	71.5	71.0	1.32		0.338
	Flumioxazin	159	136	200	207	15.9		3.65
	Fonofos	91.6	80.6	114	106	12.8		7.30
	Gamma-BHC	109	99.7	121	127	8.92		4.97
	Gamma-Chlordane	83.2	83.1	84.4	88.5	0.106		4.71
	Heptachlor	74.8	72.7	73.5	80.7	2.83		9.36
	Heptachlor Epoxide	92.2	90.7	91.0	96.1	1.66		5.43
	Hexachlorobenzene	76.5	75.3	78.8	76.8	1.63		2.56
	Hexazinone	128	111	118	123	14.2		3.79
	Imazalil	94.0	102	83.8	89.6	8.18		6.71
	Lambda-Cyhalothrin	113	114	169	183	0.540		7.93
	Malathion	112	105	105	106	6.21		1.11
	Metalaxyl	111	103	98.1	95.8	7.93		2.32
	Methoxychlor	93.1	96.1	91.6	89.4	3.21		2.41
	Metolachlor	99.0	92.0	83.3	82.8	7.35		0.604
	Metribuzin	104	105	143	142	0.791		0.973
	Mevinphos	90.6	85.5	131	131	5.82		0.483
	Mirex	66.9	67.6	75.8	76.4	0.946		0.696
	Molinate	91.3	82.3	87.5	95.7	10.4		8.97
	Naled	71.4	64.6	81.5	72.7	9.93		11.4
	Norflurazon	102	95.5	83.5	84.3	6.13		0.978
	Oxadiazon	106	91.1			15.0		
	Parathion Ethyl	110	98.3	111	111	11.2		0.180
	Parathion Methyl	106	97.7	132	135	8.44		2.25
	Pendimethalin	95.7	85.2	107	105	11.6		1.46
	Permethrin	82.2	81.6	91.6	92.1	0.769		0.570
	Phenothrin	45.8	45.9	87.3	89.5	0.205		2.45

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Phorate	92.9	85.9	121	115	7.83		4.88
	Prallethrin	55.9	48.3	84.7	90.8	14.5		6.94
	Prodiamine	76.3	73.1	37.8	33.0	4.32		13.6
	Prometon	105	96.6	93.1	93.0	8.14		0.0734
	Prometryn	110	99.3	98.8	92.2	10.1		6.91
	Pronamide	118	108	148	150	9.04		1.31
	Propiconazole	102	99.7	83.7	84.8	2.11		1.00
	Simazine	123	111	152	146	10.7		3.85
	Sulfentrazone	88.8	90.4	75.8	72.0	1.82		5.14
	Tebuconazole	65.4	71.4	33.2	33.3	8.79		0.298
	Terbufos	98.4	86.3	123	123	13.2		0.0356
	Terbuthylazine	108	102	105	106	5.40		1.67
	Trans-Nonachlor	88.6	86.7	87.7	92.6	2.21		5.51
	Trifluralin	80.6	80.5	83.1	82.4	0.0437		0.840
EPA 8276	Chlordane	88.4	90.1	96.9	95.0	1.88		1.85
	Toxaphene	78.6	77.6	72.2	71.7	1.32		0.667
EPA 8321B	2,4-D	115		119	111			5.17
	2,4-D	75.5						1.11
	3-Hydroxycarbofuran	91.3		75.5	79.3			4.94
	Acesulfame K	102		18.8	18.0			4.28
	Acetaminophen	66.6		101	88.6			12.7
	Acetaminophen	76.5						2.84
	Acetamiprid	94.2		90.9	81.2			11.2
	Acetamiprid	88.8		59.8	55.0			8.32
	Afidopyropen	92.7		110	96.1			13.5
	Afidopyropen	78.3		63.9	78.5			20.6
	Aldicarb	64.8		42.8	50.2			16.0
	Aldicarb Sulfone	75.5		88.9	87.9			1.11
	Aldicarb Sulfoxide	82.2		27.5	26.0			5.65
	AMPA	88.5		59.9	56.5			3.91
	Bentazon	54.3						6.74
	Bentazon	74.3						1.64
	Benzovindiflupyr	78.1		87.2	75.0			15.1
	Benzovindiflupyr	57.4		44.1	41.7			5.50
	Carbamazepine	110		91.1	80.7			12.1
	Carbamazepine	60.6		44.4	45.6			2.64
	Carbaryl	71.0		56.6	57.9			2.17
	Carbofuran	57.0		40.6	39.2			3.45
	Clothianidin	79.8		82.2	78.3			4.66
	Clothianidin	93.5		86.3	81.4			5.88
	Dinotefuran	71.5		92.8	92.5			0.228
	Dinotefuran	85.9		81.0	81.1			0.213
	Diuron	94.1		96.4	83.4			14.4
	Diuron	59.0		28.8	24.5			3.80
	Endothall	92.0		98.6	111			11.7
	Fenuron	100		66.4	58.8			12.1
	Fenuron	99.0		60.4	58.2			3.70
	Fluridone	82.1		89.5	73.5			15.7
	Fluridone	56.9		27.1	28.1			3.28
	Glufosinate	101		93.7	89.1			5.02
	Glyphosate	95.7		100	84.2			15.5
	Hydrocodone	82.5		86.6	76.6			12.3
	Hydrocodone	84.2		36.5	32.2			12.5
	Ibuprofen	72.8		73.9	63.1			15.8

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Ibuprofen	57.7	44.4	45.2			1.70
	Imazapyr	73.8	110	89.1			15.7
	Imazapyr	92.9					4.18
	Imidacloprid	107	144	125			13.4
	Imidacloprid	92.2	80.6	78.4			1.77
	Linuron	64.4	66.7	53.9			21.3
	Linuron	55.2	33.1	33.4			0.862
	Mandestrobin	80.0	91.1	78.4			15.0
	Mandestrobin	62.8	33.7	33.1			1.78
	MCPP	124	127	111			13.9
	MCPP	72.8	57.3	54.9			2.45
	Methiocarb	59.5	54.4	49.1			10.2
	Methomyl	73.5	55.6	58.4			4.89
	Naproxen	69.1	80.9	66.9			19.0
	Naproxen	71.9	58.3	94.3			47.1
	Oxamyl	75.5	72.3	65.7			9.53
	Primidone	91.9	82.2	70.3			15.6
	Primidone	95.9	78.6	83.6			6.11
	Propoxur	55.3	38.2	36.0			5.95
	Pyraclostrobin	77.8	90.5	80.8			11.3
	Pyraclostrobin	57.9	46.5	46.7			0.362
	Sucralose	99.4	95.5	87.1			9.15
	Thiamethoxam	90.2	116	100			13.4
	Thiamethoxam	91.3	80.9	79.4			1.80
	Tolfenpyrad	52.5	60.3	51.6			15.6
	Tolfenpyrad	38.5	42.4	46.0			8.02
	Triclopyr	98.0	118	102			14.2
	Triclopyr	76.2	61.8	62.4			0.973
SM 2320 B-2011	Total Alkalinity	101				1.88	
SM 2540 C-2011	TDS					1.45	
SM 4500 F-C-2011	Fluoride	103	106	103			2.85
SM 5310 B-2011	Organic Carbon	97.2	97.2	96.6			0.299

Reference Method Descriptions

Method	Description	Associated Samples
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2169484
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2169484
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2169457, 2169459, 2169461, 2169462, 2169463, 2169467
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2169457, 2169459, 2169461, 2169462, 2169463, 2169467
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2169458, 2169460, 2169464, 2169465, 2169466, 2169468
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2169458, 2169460, 2169464, 2169465, 2169466, 2169468
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2169458, 2169460, 2169464, 2169465, 2169466, 2169468
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2169458, 2169460, 2169464, 2169465, 2169466, 2169468
EPA 8270E	Organochlorine pesticides in water matrices by GC/MS-SIM	2169482
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2169483

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2169482
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2169475
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2169476, 2169477, 2169478, 2169479, 2169480, 2169481
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2169476, 2169477, 2169478, 2169479, 2169480, 2169481
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2169457, 2169459, 2169461, 2169462, 2169463, 2169467
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2169484
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2169457, 2169459, 2169461, 2169462, 2169463, 2169467
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2169457, 2169459, 2169461, 2169462, 2169463, 2169467
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2169457, 2169459, 2169461, 2169462, 2169463, 2169467
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2169458, 2169460, 2169464, 2169465, 2169466, 2169468

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 200.7 Rev. 4.4	04/02/2020	04/08/2020 16:30	Alexander Thompson	04/13/2020 16:42	Betina Topolski	2169484
EPA 200.8 Rev. 5.4	04/02/2020	04/08/2020 16:30	Alexander Thompson	04/10/2020 06:12	Alexander Thompson	2169484
	04/02/2020	04/08/2020 16:30	Alexander Thompson	04/10/2020 22:09	Alexander Thompson	2169484
EPA 300.0 Rev. 2.1	04/02/2020			04/10/2020 03:12	Jhamieka S. Greenwood	2169457
	04/02/2020			04/10/2020 03:25	Jhamieka S. Greenwood	2169459
	04/02/2020			04/10/2020 03:38	Jhamieka S. Greenwood	2169461
	04/02/2020			04/10/2020 03:51	Jhamieka S. Greenwood	2169462
	04/02/2020			04/10/2020 05:10	Jhamieka S. Greenwood	2169463
	04/02/2020			04/10/2020 05:36	Jhamieka S. Greenwood	2169467
EPA 350.1 Rev. 2.0	04/02/2020			04/04/2020 12:58	Ping Hua	2169465
	04/02/2020			04/04/2020 13:03	Ping Hua	2169464
	04/02/2020			04/04/2020 13:04	Ping Hua	2169466
	04/02/2020			04/04/2020 13:18	Ping Hua	2169468
	04/02/2020			04/04/2020 13:37	Ping Hua	2169458
	04/02/2020			04/04/2020 13:57	Ping Hua	2169460
EPA 351.2 Rev. 2.0	04/02/2020	04/03/2020 09:20	Sima Feizi	04/06/2020 11:17	Jhamieka S. Greenwood	2169468
	04/02/2020	04/03/2020 09:20	Sima Feizi	04/06/2020 11:34	Jhamieka S. Greenwood	2169464
	04/02/2020	04/03/2020 09:20	Sima Feizi	04/06/2020 11:38	Jhamieka S. Greenwood	2169458
	04/02/2020	04/03/2020 09:20	Sima Feizi	04/06/2020 11:43	Jhamieka S. Greenwood	2169460
	04/02/2020	04/03/2020 09:20	Sima Feizi	04/06/2020 11:45	Jhamieka S. Greenwood	2169465
	04/02/2020	04/03/2020 09:20	Sima Feizi	04/06/2020 11:47	Jhamieka S. Greenwood	2169466
EPA 353.2 Rev. 2.0	04/02/2020			04/02/2020 15:41	Lauren Lees	2169458
	04/02/2020			04/02/2020 15:43	Lauren Lees	2169460
	04/02/2020			04/02/2020 15:50	Lauren Lees	2169464
	04/02/2020			04/02/2020 15:56	Lauren Lees	2169465
	04/02/2020			04/02/2020 15:57	Lauren Lees	2169466
	04/02/2020			04/07/2020 14:45	Virginia P. Brown	2169468
EPA 365.1 Rev. 2.0	04/02/2020	04/03/2020 14:45	Yen Ta	04/06/2020 09:37	Lipi Saha	2169458
	04/02/2020	04/03/2020 14:45	Yen Ta	04/06/2020 09:38	Lipi Saha	2169460
	04/02/2020	04/03/2020 14:45	Yen Ta	04/06/2020 12:00	Lipi Saha	2169464
	04/02/2020	04/03/2020 14:45	Yen Ta	04/06/2020 13:00	Lipi Saha	2169468
	04/02/2020	04/03/2020 14:45	Yen Ta	04/06/2020 15:13	Lipi Saha	2169465
	04/02/2020	04/03/2020 14:45	Yen Ta	04/08/2020 13:40	Lipi Saha	2169466
EPA 8270E	04/02/2020	04/06/2020 08:30	Rasheda Ghaffari	04/08/2020 21:52	Michael Poppell	2169482
	04/02/2020	04/07/2020 08:00	Fe-Val Siddell	04/09/2020 22:02	Marek Topolski	2169483
	04/02/2020	04/07/2020 08:00	Fe-Val Siddell	04/15/2020 16:00	Marek Topolski	2169483
	04/02/2020	04/15/2020 09:30	Rasheda Ghaffari	04/16/2020 18:20	Marek Topolski	2169483
EPA 8276	04/02/2020	04/06/2020 08:30	Rasheda Ghaffari	04/14/2020 02:29	Arthur Maknenko	2169482
EPA 8321B	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/03/2020 16:15	Rebecca Ware	2169476
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/03/2020 16:29	Rebecca Ware	2169477

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Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/03/2020 16:43	Rebecca Ware	2169478
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/03/2020 16:57	Rebecca Ware	2169479
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/03/2020 17:10	Rebecca Ware	2169480
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/06/2020 10:48	Rebecca Ware	2169481
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/06/2020 18:10	Rebecca Ware	2169476
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/06/2020 18:21	Rebecca Ware	2169477
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/06/2020 18:31	Rebecca Ware	2169478
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/06/2020 18:42	Rebecca Ware	2169479
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/06/2020 18:53	Rebecca Ware	2169480
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/06/2020 19:03	Rebecca Ware	2169481
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/14/2020 21:59	Rebecca Ware	2169476
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/14/2020 22:11	Rebecca Ware	2169477
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/14/2020 22:23	Rebecca Ware	2169478
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/14/2020 22:35	Rebecca Ware	2169479
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/14/2020 22:46	Rebecca Ware	2169480
	04/02/2020	04/03/2020 11:30	Rebecca Ware	04/14/2020 22:58	Rebecca Ware	2169481
	04/02/2020	04/06/2020 09:00	Hoor Shaik	04/08/2020 09:04	Juyoung Kim	2169475
	04/02/2020	04/06/2020 09:00	Hoor Shaik	04/08/2020 17:44	Juyoung Kim	2169476
	04/02/2020	04/06/2020 09:00	Hoor Shaik	04/08/2020 18:18	Juyoung Kim	2169477
	04/02/2020	04/06/2020 09:00	Hoor Shaik	04/08/2020 18:53	Juyoung Kim	2169478
	04/02/2020	04/06/2020 09:00	Hoor Shaik	04/08/2020 19:28	Juyoung Kim	2169479
	04/02/2020	04/06/2020 09:00	Hoor Shaik	04/11/2020 04:51	Juyoung Kim	2169477
	04/02/2020	04/08/2020 09:00	Hoor Shaik	04/11/2020 07:44	Juyoung Kim	2169480
	04/02/2020	04/08/2020 09:00	Hoor Shaik	04/11/2020 08:19	Juyoung Kim	2169481
	04/02/2020	04/08/2020 09:00	Hoor Shaik	04/12/2020 14:25	Juyoung Kim	2169480
	04/02/2020	04/08/2020 09:00	Hoor Shaik	04/12/2020 14:59	Juyoung Kim	2169481
SM 2320 B-2011	04/02/2020			04/10/2020 04:59	Samantha Davila	2169462
	04/02/2020			04/10/2020 06:19	Samantha Davila	2169457
	04/02/2020			04/10/2020 06:30	Samantha Davila	2169459
	04/02/2020			04/10/2020 06:40	Samantha Davila	2169461
	04/02/2020			04/10/2020 06:51	Samantha Davila	2169463
	04/02/2020			04/10/2020 07:23	Samantha Davila	2169467
SM 2340B	04/02/2020			04/13/2020 16:42	Betina Topolski	2169484
SM 2540 C-2011	04/02/2020			04/07/2020 14:10	Yijie Li	2169457, 2169459, 2169461, 2169462, 2169463, 2169467
SM 2540 D-2011	04/02/2020			04/07/2020 14:10	Yijie Li	2169457, 2169459, 2169461, 2169462, 2169463, 2169467
SM 4500 F-C-2011	04/02/2020			04/07/2020 19:44	Samantha Davila	2169457
	04/02/2020			04/07/2020 19:57	Samantha Davila	2169459
	04/02/2020			04/07/2020 20:10	Samantha Davila	2169461

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500 F-C-2011	04/02/2020			04/07/2020 20:22	Samantha Davila	2169462
	04/02/2020			04/07/2020 20:36	Samantha Davila	2169463
	04/02/2020			04/07/2020 21:15	Samantha Davila	2169467
SM 5310 B-2011	04/02/2020			04/04/2020 04:02	Madeline Gruver	2169460
	04/02/2020			04/04/2020 08:04	Madeline Gruver	2169458
	04/02/2020			04/04/2020 08:17	Madeline Gruver	2169464
	04/02/2020			04/04/2020 08:31	Madeline Gruver	2169465
	04/02/2020			04/04/2020 08:44	Madeline Gruver	2169466
	04/02/2020			04/04/2020 08:57	Madeline Gruver	2169468