

Chemical Analysis Report

SO-DIST-2020-07-15-01

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

Event Description: **2020 SMP : DeSoto Cricks**
Request ID: **RQ-2020-07-13-26**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 05-AUG-2020 14:46

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

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: HawthorneCreek@Reynolds

Collection Date/Time: 07/14/2020 09:30

Field ID: G3SD0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2183104	EPA 180.1 Rev. 2.0	Turbidity	3.7		NTU	P384669	
	EPA 300.0 Rev. 2.1	Chloride	190		mg Cl/L	P385198	
		Sulfate	140		mg SO4/L	P385202	
	SM 2120 B-2011	Color (true)	89		PCU	P384672	
	SM 2320 B-2011	Total Alkalinity	154		mg CaCO3/L	P384849	
	SM 2540 C-2011	TDS	654		mg/L	P385213	
	SM 2540 D-2011	TSS	4	I	mg/L	P385125	
	SM 4500 F-C-2011	Fluoride	0.47		mg F/L	P384854	
2183105	EPA 350.1 Rev. 2.0	Ammonia-N	0.045		mg N/L	P384822	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P384772	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.33		mg N/L	P384769	
	EPA 365.1 Rev. 2.0	Total-P	0.54		mg P/L	P384878	
	SM 5310 B-2011	Organic Carbon	18		mg C/L	P384780	
2183106	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.44		mg P/L	P384674	
2183117	EPA 8321B	2,4-D	0.017		ug/L	P384835	
		Acesulfame K**	0.10	U	ug/L	P384657	
		AMPA**	3.5		ug/L	P384657	
		Sucralose**	0.048		ug/L	P384657	
		Acetaminophen**	0.013	I	ug/L	P384835	
		Acetamiprid**	0.0020	U	ug/L	P384835	
		Endothall**	0.25	U	ug/L	P384657	
		Glufosinate**	0.10	U	ug/L	P384657	
		Glyphosate**	4.5		ug/L	P384657	
		Afidopyropen**	0.0020	U	ug/L	P384835	
		Bentazon	9.2E-04	I	ug/L	P384835	
		Benzovindiflupyr**	0.0020	U	ug/L	P384835	
		Carbamazepine**	8.0E-04	U	ug/L	P384835	
		Clothianidin**	0.19		ug/L	P384835	
		Dinotefuran**	0.0020	U	ug/L	P384835	
		Diuron	0.026		ug/L	P384835	
		Fenuron	0.092		ug/L	P384835	
		Fluridone**	8.0E-04	U	ug/L	P384835	
		Imazapyr**	0.015	I	ug/L	P384835	
		Hydrocodone**	0.0020	U	ug/L	P384835	
		Ibuprofen**	0.020	U	ug/L	P384835	
		Imidacloprid	0.83		ug/L	P384835	
		Linuron	0.0040	U	ug/L	P384835	
		Mandestrobin**	0.0020	U	ug/L	P384835	
		MCP	0.0020	U	ug/L	P384835	
		Naproxen**	0.0080	U	ug/L	P384835	
		Primidone**	0.0040	U	ug/L	P384835	
		Pyraclostrobin**	0.0020	U	ug/L	P384835	
		Thiamethoxam**	0.69		ug/L	P384835	

Field ID: G3SD0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2183117	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P384835	
		Triclopyr**	0.0040	U	ug/L	P384835	
2183125	EPA 200.7 Rev. 4.4	Barium	39.1		ug/L	P384715	
		Calcium	108		mg/L	P384715	
		Iron	370		ug/L	P384715	
		Magnesium	29.6		mg/L	P384715	
		Potassium	14.9		mg/L	P384715	
		Sodium	81.8		mg/L	P384715	
		Zinc	5.0	U	ug/L	P384715	
	EPA 200.8 Rev. 5.4	Aluminum	163		ug/L	P384715	
		Antimony	0.43		ug/L	P384715	
		Arsenic	2.59		ug/L	P384715	
		Boron**	84.2		ug/L	P384715	
		Cadmium	0.022	I	ug/L	P384715	
		Chromium	1.0	I	ug/L	P384715	
		Copper	1.08		ug/L	P384715	
		Lead	0.20	U	ug/L	P384715	
		Nickel	2.5		ug/L	P384715	
		Selenium	0.36	I	ug/L	P384715	
		Silver	0.010	U	ug/L	P384715	
		Thallium	0.10	U	ug/L	P384715	
	SM 2340B	Hardness	392		mg/L	P384715	

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: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Hog Bay @ CR 763

Collection Date/Time: 07/14/2020 10:05

Field ID: G3SD0096

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2183101	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P384669	
	EPA 300.0 Rev. 2.1	Chloride	130		mg Cl/L	P385198	
		Sulfate	130		mg SO4/L	P385202	
	SM 2120 B-2011	Color (true)	75		PCU	P384671	
	SM 2320 B-2011	Total Alkalinity	118		mg CaCO3/L	P384849	
	SM 2540 C-2011	TDS	545		mg/L	P385213	
	SM 2540 D-2011	TSS	2	U	mg/L	P385125	
	SM 4500 F-C-2011	Fluoride	0.33		mg F/L	P384854	
2183102	EPA 350.1 Rev. 2.0	Ammonia-N	0.045		mg N/L	P384822	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P384772	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.19		mg N/L	P384769	
	EPA 365.1 Rev. 2.0	Total-P	0.20		mg P/L	P384878	
	SM 5310 B-2011	Organic Carbon	17		mg C/L	P384780	
2183103	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.16		mg P/L	P384674	
2183116	EPA 8321B	2,4-D	0.0040	I	ug/L	P384835	
		Acesulfame K**	0.10	U	ug/L	P384657	
		AMPA**	2.3		ug/L	P384657	
		Sucralose**	0.069		ug/L	P384657	
		Acetaminophen**	0.0080	U	ug/L	P384835	
		Acetamiprid**	0.0020	U	ug/L	P384835	
		Endothall**	0.25	U	ug/L	P384657	
		Glufosinate**	0.10	U	ug/L	P384657	
		Glyphosate**	1.6		ug/L	P384657	
		Afidopyropen**	0.0020	U	ug/L	P384835	
		Bentazon	8.0E-04	U	ug/L	P384835	
		Benzovindiflupyr**	0.0020	U	ug/L	P384835	
		Carbamazepine**	8.0E-04	U	ug/L	P384835	
		Clothianidin**	0.19		ug/L	P384835	
		Dinotefuran**	0.0020	U	ug/L	P384835	
		Diuron	0.0043	I	ug/L	P384835	
		Fenuron	0.016	U	ug/L	P384835	
		Fluridone**	8.0E-04	U	ug/L	P384835	
		Imazapyr**	0.0053	I	ug/L	P384835	
		Hydrocodone**	0.0020	U	ug/L	P384835	
		Ibuprofen**	0.020	U	ug/L	P384835	
		Imidacloprid	0.84		ug/L	P384835	
		Linuron	0.0040	U	ug/L	P384835	
		Mandestrobin**	0.0020	U	ug/L	P384835	
		MCP	0.0020	U	ug/L	P384835	
		Naproxen**	0.0080	U	ug/L	P384835	
		Primidone**	0.0040	U	ug/L	P384835	
		Pyraclostrobin**	0.0020	U	ug/L	P384835	
		Thiamethoxam**	0.58		ug/L	P384835	

Field ID: G3SD0096

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2183116	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P384835	
		Triclopyr**	0.0040	U	ug/L	P384835	
2183124	EPA 200.7 Rev. 4.4	Barium	44.5		ug/L	P384715	
		Calcium	79.3		mg/L	P384715	
		Iron	260		ug/L	P384715	
		Magnesium	23.7		mg/L	P384715	
		Potassium	16.7		mg/L	P384715	
		Sodium	65.5		mg/L	P384715	
		Zinc	5.0	U	ug/L	P384715	
	EPA 200.8 Rev. 5.4	Aluminum	42		ug/L	P384715	
		Antimony	0.94		ug/L	P384715	
		Arsenic	1.43		ug/L	P384715	
		Boron**	92.9		ug/L	P384715	
		Cadmium	0.020	U	ug/L	P384715	
		Chromium	0.68	I	ug/L	P384715	
		Copper	0.57	I	ug/L	P384715	
		Lead	0.20	U	ug/L	P384715	
		Nickel	3.0		ug/L	P384715	
		Selenium	0.50	I	ug/L	P384715	
		Silver	0.010	U	ug/L	P384715	
		Thallium	0.10	U	ug/L	P384715	
	SM 2340B	Hardness	296		mg/L	P384715	

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: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Joshua Creek @ 17

Collection Date/Time: 07/14/2020 11:10

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2183107	EPA 180.1 Rev. 2.0	Turbidity	2.9		NTU	P384669	
	EPA 300.0 Rev. 2.1	Chloride	120		mg Cl/L	P385198	
		Sulfate	120		mg SO4/L	P385202	
	SM 2120 B-2011	Color (true)	110		PCU	P384672	
	SM 2320 B-2011	Total Alkalinity	97		mg CaCO3/L	P384849	
	SM 2540 C-2011	TDS	504	A	mg/L	P385214	
	SM 2540 D-2011	TSS	4	IA	mg/L	P385126	
	SM 4500 F-C-2011	Fluoride	0.38		mg F/L	P384854	
2183108	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P384822	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P384772	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.53		mg N/L	P384770	
	EPA 365.1 Rev. 2.0	Total-P	0.39		mg P/L	P384878	
	SM 5310 B-2011	Organic Carbon	19		mg C/L	P384780	
2183109	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.28		mg P/L	P384674	
2183118	EPA 8321B	Aldicarb	0.020	U	ug/L	P384706	
		Aldicarb Sulfone	0.0020	U	ug/L	P384706	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P384706	
		Carbaryl	0.0020	U	ug/L	P384706	
		Carbofuran	0.0020	U	ug/L	P384706	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P384706	
		Methiocarb	0.0020	U	ug/L	P384706	
		Methomyl	0.0020	U	ug/L	P384706	
		Oxamyl	0.0020	U	ug/L	P384706	
		Propoxur	0.0020	U	ug/L	P384706	
2183119		2,4-D	0.031		ug/L	P384835	
		Acesulfame K**	0.10	U	ug/L	P384657	
		AMPA**	2.4		ug/L	P384657	
		Sucralose**	0.094		ug/L	P384657	
		Acetaminophen**	0.0080	U	ug/L	P384835	
		Acetamiprid**	0.0020	U	ug/L	P384835	
		Endothall**	0.25	U	ug/L	P384657	
		Glufosinate**	0.10	U	ug/L	P384657	
		Glyphosate**	2.5		ug/L	P384657	
		Afidopyropen**	0.0020	U	ug/L	P384835	
		Bentazon	8.0E-04	U	ug/L	P384835	
		Benzovindiflupyr**	0.0020	U	ug/L	P384835	
		Carbamazepine**	8.0E-04	U	ug/L	P384835	
		Clothianidin**	0.11		ug/L	P384835	
		Dinotefuran**	0.0020	U	ug/L	P384835	
		Diuron	0.023		ug/L	P384835	
		Fenuron	0.026	I	ug/L	P384835	
		Fluridone**	8.0E-04	U	ug/L	P384835	
		Imazapyr**	0.032		ug/L	P384835	

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2183119	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P384835	
		Ibuprofen**	0.020	U	ug/L	P384835	
		Imidacloprid	0.52		ug/L	P384835	
		Linuron	0.0040	U	ug/L	P384835	
		Mandestrobin**	0.0020	U	ug/L	P384835	
		MCP	0.0020	U	ug/L	P384835	
		Naproxen**	0.0080	U	ug/L	P384835	
		Primidone**	0.0040	U	ug/L	P384835	
		Pyraclostrobin**	0.0020	U	ug/L	P384835	
		Thiamethoxam**	0.37		ug/L	P384835	
		Tolfenpyrad**	0.0020	U	ug/L	P384835	
		Triclopyr**	0.0040	U	ug/L	P384835	
2183122	EPA 8270E	Aldrin	4.3	U	ng/L	P384679	
		Alpha-BHC	2.1	U	ng/L	P384679	
		Alpha-Chlordane	1.1	U	ng/L	P384679	
		Beta-BHC	8.5	U	ng/L	P384679	
		Beta-Cyfluthrin**	16	U	ng/L	P384679	
		Bifenthrin**	4.3	U	ng/L	P384679	
		Delta-BHC	8.5	U	ng/L	P384679	
		Gamma-BHC	8.5	U	ng/L	P384679	
		Chlorothalonil	2.1	U	ng/L	P384679	
		Cis-Nonachlor**	1.1	U	ng/L	P384679	
		Cypermethrin	21	U	ng/L	P384679	
		Dacthal**	1.1	U	ng/L	P384679	
		DDD-p,p'	5.3	U	ng/L	P384679	
		DDE-p,p'	5.3	U	ng/L	P384679	
		DDT-p,p'	6.4	U	ng/L	P384679	
		Dicofol	32	U	ng/L	P384679	
		Dieldrin	4.3	U	ng/L	P384679	
		Endosulfan I	4.3	U	ng/L	P384679	
		Endosulfan II	4.3	U	ng/L	P384679	
		Endosulfan Sulfate	2.1	U	ng/L	P384679	
		Endrin	2.1	U	ng/L	P384679	
		Endrin Aldehyde	2.1	U	ng/L	P384679	
		Endrin Ketone	2.1	UJ	ng/L	P384679	LCS, RPD
		Ethalfuralin**	3.2	U	ng/L	P384679	
		Gamma-Chlordane	1.1	U	ng/L	P384679	
		Heptachlor	1.6	U	ng/L	P384679	
		Heptachlor Epoxide	2.1	U	ng/L	P384679	
		Hexachlorobenzene	2.1	U	ng/L	P384679	
		Lambda-Cyhalothrin**	16	U	ng/L	P384679	
		Methoxychlor	4.3	U	ng/L	P384679	
		Mirex	2.1	U	ng/L	P384679	
		Permethrin	11	U	ng/L	P384679	
		Phenothrin**	32	U	ng/L	P384679	

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2183122	EPA 8270E	Prallethrin**	27	U	ng/L	P384679	
		Trans-Nonachlor**	1.1	U	ng/L	P384679	
		Trifluralin	2.7	U	ng/L	P384679	
		Chlordane	6.1	I	ng/L	P384679	
		Toxaphene	32	UJ	ng/L	P384679	CCV
2183123	EPA 8270E	Acetochlor	0.24	U	ng/L	P384651	
		Alachlor	0.24	U	ng/L	P384651	
		Ametryn	0.58	U	ng/L	P384651	
		Atrazine	2.3		ng/L	P384651	
		Atrazine Desethyl	1.5	U	ng/L	P384651	
		Azinphos Methyl	1.9	U	ng/L	P384651	
		Bromacil	570		ng/L	P384651	
		Butylate	0.39	U	ng/L	P384651	
		Carbophenothion	0.49	U	ng/L	P384651	
		Chlorpyrifos Ethyl	4.5		ng/L	P384651	
		Chlorpyrifos Methyl	0.049	U	ng/L	P384651	
		Cyanazine	3.2	U	ng/L	P384651	
		Demeton	1.5	U	ng/L	P384651	
		Diazinon	0.12	U	ng/L	P384651	
		Dimethenamid**	0.097	U	ng/L	P384651	
		Disulfoton	0.49	U	ng/L	P384651	
		Dithiopyr**	0.097	U	ng/L	P384651	
		EPTC	1.2	U	ng/L	P384651	
		Ethion	0.15	U	ng/L	P384651	
		Ethoprop	0.097	U	ng/L	P384651	
		Fenamiphos	0.49	U	ng/L	P384651	RPD
		Fipronil	0.24	U	ng/L	P384651	
		Fipronil Desulfinyl**	0.12	U	ng/L	P384651	
		Fipronil Sulfide	0.15	U	ng/L	P384651	
		Fipronil Sulfone	0.15	U	ng/L	P384651	
		Flumioxazin**	1.7	U	ng/L	P384651	
		Fonofos	0.19	U	ng/L	P384651	
		Hexazinone	210		ng/L	P384651	
		Imazalil**	0.73	U	ng/L	P384651	
		Malathion	0.34	U	ng/L	P384651	
		Metalaxyl	76		ng/L	P384651	
		Metolachlor	2.3		ng/L	P384651	
		Metribuzin	3.2	U	ng/L	P384651	
		Mevinphos	0.49	U	ng/L	P384651	
		Molinate	0.29	U	ng/L	P384651	
		Naled**	1.5	U	ng/L	P384651	
		Norflurazon	1.2E+03		ng/L	P384651	
		Oxadiazon	0.14	I	ng/L	P384651	
		Parathion Ethyl	0.24	U	ng/L	P384651	
		Parathion Methyl	0.54	U	ng/L	P384651	

Field ID: G3SD0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2183123	EPA 8270E	Pendimethalin	0.97	U	ng/L	P384651	
		Phorate	0.24	U	ng/L	P384651	
		Prodiamine**	0.17	U	ng/L	P384651	
		Prometon	0.88	U	ng/L	P384651	
		Prometryn	0.19	U	ng/L	P384651	
		Pronamide**	0.15	U	ng/L	P384651	
		Propiconazole**	0.49	U	ng/L	P384651	
		Simazine	4.5		ng/L	P384651	
		Sulfentrazone**	1.4	I	ng/L	P384651	
		Tebuconazole**	3.4		ng/L	P384651	
		Terbufos	0.097	U	ng/L	P384651	
		Terbuthylazine	0.41	U	ng/L	P384651	
2183126	EPA 200.7 Rev. 4.4	Barium	37.6		ug/L	P384715	
		Calcium	76.1		mg/L	P384715	
		Iron	600		ug/L	P384715	
		Magnesium	25.9		mg/L	P384715	
		Potassium	15.5		mg/L	P384715	
		Sodium	50.7		mg/L	P384715	
	EPA 200.8 Rev. 5.4	Zinc	5.6	I	ug/L	P384715	
		Aluminum	168		ug/L	P384715	
		Antimony	0.30		ug/L	P384715	
		Arsenic	1.53		ug/L	P384715	
		Boron**	74.8		ug/L	P384715	
		Cadmium	0.062	I	ug/L	P384715	
		Chromium	0.93	I	ug/L	P384715	
		Copper	0.93		ug/L	P384715	
		Lead	0.21	I	ug/L	P384715	
		Nickel	1.6	I	ug/L	P384715	
		Selenium	0.28	I	ug/L	P384715	
		Silver	0.010	U	ug/L	P384715	
		Thallium	0.10	U	ug/L	P384715	
		Hardness	296		mg/L	P384715	

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: MS accuracy for some analytes 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 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P384669

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P384715

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: P384715

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: P385198

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385202

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P384822

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P384772

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P384769

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P384770

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P384878

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P384674

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

Reference Method: EPA 8270E
 Batch ID: P384651

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P384651

Component	Result	Code	Units
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
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P384679

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	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P384679

Component	Result	Code	Units
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfuralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
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	25	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P384679

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

Reference Method: EPA 8321B
Batch ID: P384657

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: P384706

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P384835

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 2120 B-2011
Batch ID: P384671

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B-2011
Batch ID: P384672

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P384849

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

Reference Method: SM 2540 C-2011
Batch ID: P385213

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-2011
Batch ID: P385214

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P385125

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P385126

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P384854

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P384780

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: P384715

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	105		P	85 - 115
Calcium	103		P	85 - 115
Iron	108		P	85 - 115
Magnesium	101		P	85 - 115
Potassium	105		P	85 - 115
Sodium	103		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P384715

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	101		P	85 - 115
Boron	102		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	104		P	85 - 115
Copper	101		P	85 - 115
Lead	99.3		P	85 - 115
Nickel	101		P	85 - 115
Selenium	99.8		P	85 - 115
Silver	102		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385198

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385202

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P384822

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.1		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P384772

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P384769

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P384770

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P384878

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P384674

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	95.5		P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P384651

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	90.5	90.0	P/P	71 - 122
Alachlor	91.5	91.8	P/P	70 - 121
Ametryn	90.6	105	P/P	49 - 137
Atrazine	98.1	96.1	P/P	76 - 125
Atrazine Desethyl	75.9	75.0	P/P	31 - 144
Azinphos Methyl	138	127	P/P	67 - 150
Bromacil	88.1	84.2	P/P	36 - 121
Butylate	63.8	62.6	P/P	33 - 88.0
Carbophenothion	98.0	103	P/P	50 - 150
Chlorpyrifos Ethyl	96.8	102	P/P	73 - 117
Chlorpyrifos Methyl	96.1	99.3	P/P	68 - 121
Cyanazine	106	103	P/P	20 - 250
Demeton	86.8	86.9	P/P	30 - 123
Diazinon	94.5	92.9	P/P	70 - 128
Dimethenamid	91.2	90.0	P/P	66 - 122
Disulfoton	87.2	86.2	P/P	46 - 124
Dithiopyr	90.8	92.3	P/P	69 - 122
EPTC	61.1	58.8	P/P	31 - 90.0
Ethion	102	106	P/P	45 - 135
Ethoprop	90.4	90.3	P/P	59 - 118
Fenamiphos	100	94.6	P/P	30 - 136
Fipronil	95.7	92.0	P/P	57 - 127
Fipronil Desulfinyl	100	96.9	P/P	51 - 122
Fipronil Sulfide	89.0	92.1	P/P	57 - 119
Fipronil Sulfone	93.5	93.3	P/P	51 - 119
Flumioxazin	131	134	P/P	70 - 200
Fonofos	88.6	90.5	P/P	60 - 120
Hexazinone	94.1	90.0	P/P	57 - 142

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P384651

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imazalil	93.9	105	P/P	50 - 150
Malathion	107	111	P/P	67 - 128
Metalaxyl	94.6	89.8	P/P	21 - 148
Metolachlor	87.2	88.1	P/P	70 - 120
Metribuzin	104	101	P/P	20 - 253
Mevinphos	87.3	85.4	P/P	47 - 116
Molinate	74.3	68.8	P/P	41 - 99.0
Naled	74.6	69.3	P/P	40 - 130
Norflurazon	96.5	89.7	P/P	54 - 127
Oxadiazon	84.5	88.6	P/P	65 - 122
Parathion Ethyl	86.3	92.0	P/P	71 - 113
Parathion Methyl	101	100	P/P	73 - 129
Pendimethalin	95.2	112	P/P	63 - 130
Phorate	90.9	92.3	P/P	48 - 118
Prodiamine	74.1	79.1	P/P	20 - 144
Prometon	86.0	82.5	P/P	53 - 120
Prometryn	90.6	86.8	P/P	63 - 119
Pronamide	103	94.2	P/P	50 - 150
Propiconazole	85.2	84.0	P/P	50 - 150
Simazine	99.0	96.3	P/P	77 - 129
Sulfentrazone	90.1	80.3	P/P	50 - 150
Tebuconazole	52.0	47.6	P/P	20 - 118
Terbufos	96.1	99.5	P/P	61 - 119
Terbuthylazine	94.0	93.3	P/P	75 - 119

Reference Method: EPA 8270E
Batch ID: P384679

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	40.7	41.8	P/P	20 - 87.0
Alpha-BHC	85.4	91.4	P/P	65 - 142
Alpha-Chlordane	91.2	90.8	P/P	58 - 106
Beta-BHC	109	106	P/P	65 - 179
Beta-Cyfluthrin	96.3	98.9	P/P	39 - 153
Bifenthrin	89.4	88.5	P/P	38 - 128
Chlorothalonil	51.3	58.1	P/P	20 - 214
Cis-Nonachlor	91.8	90.6	P/P	56 - 113
Cypermethrin	94.5	98.7	P/P	37 - 130
Dacthal	95.4	95.8	P/P	75 - 109
DDD-p,p'	98.3	96.2	P/P	66 - 119
DDE-p,p'	86.4	84.8	P/P	53 - 108
DDT-p,p'	85.0	85.0	P/P	57 - 133
Delta-BHC	108	105	P/P	68 - 187
Dicofol	114	120	P/P	66 - 123
Dieldrin	96.8	95.3	P/P	65 - 111
Endosulfan I	94.1	94.8	P/P	65 - 115
Endosulfan II	110	107	P/P	68 - 133
Endosulfan Sulfate	103	103	P/P	62 - 127
Endrin	100	102	P/P	64 - 122
Endrin Aldehyde	120	120	P/P	61 - 132
Endrin Ketone	157	85.5	F/P	66 - 120
Ethalfuralin	78.0	77.4	P/P	57 - 127

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P384679

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Gamma-BHC	102	101	P/P	71 - 158
Gamma-Chlordane	87.1	86.1	P/P	53 - 106
Heptachlor	75.5	77.5	P/P	45 - 96.0
Heptachlor Epoxide	92.7	93.2	P/P	64 - 109
Hexachlorobenzene	70.2	70.6	P/P	46 - 103
Lambda-Cyhalothrin	102	104	P/P	38 - 145
Methoxychlor	107	106	P/P	69 - 149
Mirex	58.2	58.9	P/P	31 - 90.0
Permethrin	79.5	80.8	P/P	41 - 108
Phenothrin	46.3	47.0	P/P	22 - 91.0
Prallethrin	72.8	64.7	P/P	32 - 92.0
Trans-Nonachlor	87.5	86.5	P/P	50 - 107
Trifluralin	80.5	79.6	P/P	58 - 119

Reference Method: EPA 8276
Batch ID: P384679

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	88.0	91.6	P/P	47 - 119
Toxaphene	110	108	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P384657

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	90.8		P	40 - 150
AMPA	83.0		P	40 - 150
Endothall	77.4		P	40 - 150
Glufosinate	99.5		P	40 - 150
Glyphosate	92.6		P	40 - 140
Sucralose	93.1		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P384706

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	75.3		P	30 - 160
Aldicarb	78.1		P	30 - 160
Aldicarb Sulfone	84.7		P	30 - 160
Aldicarb Sulfoxide	81.4		P	30 - 160
Carbaryl	49.1		P	30 - 160
Carbofuran	53.9		P	30 - 160
Methiocarb	49.5		P	30 - 160
Methomyl	84.2		P	30 - 160
Oxamyl	83.5		P	30 - 160
Propoxur	55.5		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P384835

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	115		P	30 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P384835

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetaminophen	79.1		P	30 - 160
Acetamiprid	78.6		P	30 - 160
Afidopyropen	65.2		P	30 - 160
Bentazon	62.6		P	30 - 160
Benzovindiflupyr	69.9		P	30 - 160
Carbamazepine	66.9		P	30 - 160
Clothianidin	76.8		P	30 - 160
Dinotefuran	86.6		P	30 - 160
Diuron	58.2		P	30 - 160
Fenuron	101		P	30 - 160
Fluridone	90.5		P	30 - 160
Hydrocodone	82.3		P	30 - 160
Ibuprofen	79.6		P	30 - 160
Imazapyr	100		P	30 - 160
Imidacloprid	97.6		P	30 - 160
Linuron	67.0		P	30 - 160
Mandestrobin	75.5		P	30 - 160
MCPP	129		P	30 - 160
Naproxen	69.1		P	30 - 160
Primidone	77.2		P	30 - 160
Pyraclostrobin	74.1		P	30 - 160
Thiamethoxam	93.7		P	30 - 160
Tolfenpyrad	54.2		P	30 - 160
Triclopyr	95.7		P	30 - 160

Reference Method: SM 2120 B-2011
Batch ID: P384671

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.1		P	85 - 115

Reference Method: SM 2120 B-2011
Batch ID: P384672

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

Reference Method: SM 2320 B-2011
Batch ID: P384849

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.1		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P384854

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.9		P	90 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P384780

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P384715

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183090	Barium	101	102	P/P	80 - 120
2183090	Calcium	105		P	80 - 120
2183090	Iron	105	108	P/P	80 - 120
2183090	Magnesium	102		P	80 - 120
2183090	Potassium	101	103	P/P	80 - 120
2183090	Sodium	107		P	80 - 120
2183090	Zinc	97.0	98.4	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P384715

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183090	Aluminum	97.5	95.6	P/P	80 - 120
2183090	Antimony	106	106	P/P	80 - 120
2183090	Arsenic	105	103	P/P	80 - 120
2183090	Boron	100	98.6	P/P	80 - 120
2183090	Cadmium	103	102	P/P	80 - 120
2183090	Chromium	107	107	P/P	80 - 120
2183090	Copper	98.6	98.1	P/P	80 - 120
2183090	Lead	99.2	97.7	P/P	80 - 120
2183090	Nickel	99.1	98.8	P/P	80 - 120
2183090	Selenium	98.2	98.9	P/P	80 - 120
2183090	Silver	102	99.1	P/P	80 - 120
2183090	Thallium	105	105	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385198

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2182906	Chloride	96.2		P	90 - 110
2183153	Chloride	98.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385202

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2182906	Sulfate	95.4		P	90 - 110
2183153	Sulfate	94.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P384822

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183161	Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P384772

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183154	Kjeldahl Nitrogen	102	105	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P384769

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2182962	NO2NO3-N	96.0	95.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P384770

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183154	NO2NO3-N	99.5	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P384878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183102	Total-P	105	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P384674

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183162	O-Phosphate-P	98.0	97.8	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P384651

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2182712	Acetochlor	96.4	93.5	P/P	68 - 126
2182712	Alachlor	98.6	93.6	P/P	66 - 125
2182712	Azinphos Methyl	133	124	P/P	54 - 162
2182712	Bromacil	91.8	86.3	P/P	34 - 144
2182712	Butylate	51.2	57.6	P/P	16 - 92.0
2182712	Carbophenothion	83.6	85.5	P/P	50 - 150
2182712	Chlorpyrifos Ethyl	104	97.1	P/P	63 - 124
2182712	Chlorpyrifos Methyl	90.6	92.0	P/P	64 - 125
2182712	Cyanazine	106	95.7	P/P	13 - 245
2182712	Demeton	96.5	95.8	P/P	20 - 154
2182712	Diazinon	104	98.8	P/P	66 - 141
2182712	Dimethenamid	102	98.6	P/P	50 - 130
2182712	Disulfoton	89.0	89.9	P/P	55 - 130
2182712	Dithiopyr	97.5	93.8	P/P	66 - 122
2182712	EPTC	50.4	60.5	P/P	15 - 93.0
2182712	Ethion	89.0	95.8	P/P	15 - 148
2182712	Ethoprop	90.7	91.9	P/P	59 - 126
2182712	Fenamiphos	75.9	108	P/P	39 - 137
2182712	Fipronil	107	99.9	P/P	47 - 131
2182712	Fipronil Desulfinyl	106	97.4	P/P	43 - 121
2182712	Fipronil Sulfide	89.2	83.2	P/P	29 - 134
2182712	Fipronil Sulfone	90.2	86.8	P/P	19 - 131
2182712	Flumioxazin	198	185	P/P	70 - 200
2182712	Fonofos	88.2	85.8	P/P	62 - 128
2182712	Hexazinone	104	106	P/P	58 - 154
2182712	Imazalil	74.5	66.1	P/P	50 - 150
2182712	Malathion	102	106	P/P	54 - 135
2182712	Metalaxyl	94.6	90.0	P/P	46 - 136

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P384651

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2182712	Metolachlor	90.4	88.0	P/P	62 - 126
2182712	Metribuzin	111	104	P/P	44 - 277
2182712	Mevinphos	88.3	90.2	P/P	44 - 135
2182712	Molinate	71.4	74.4	P/P	31 - 104
2182712	Naled	84.7	80.4	P/P	40 - 130
2182712	Norflurazon	92.0	87.1	P/P	32 - 134
2182712	Oxadiazon	79.1	76.6	P/P	55 - 123
2182712	Parathion Ethyl	92.2	94.7	P/P	67 - 120
2182712	Parathion Methyl	104	105	P/P	70 - 140
2182712	Pendimethalin	118	120	P/P	59 - 145
2182712	Phorate	86.0	84.0	P/P	52 - 127
2182712	Prodiamine	112	110	P/P	11 - 157
2182712	Prometon	91.6	86.6	P/P	55 - 130
2182712	Prometryn	95.5	91.7	P/P	55 - 127
2182712	Pronamide	121	111	P/P	50 - 150
2182712	Sulfentrazone	90.7	85.7	P/P	50 - 150
2182712	Tebuconazole	50.7	49.6	P/P	10 - 122
2182712	Terbufos	97.7	96.9	P/P	65 - 131
2182712	Terbutylazine	106	100	P/P	63 - 131

Reference Method: EPA 8270E
Batch ID: P384679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183192	Aldrin	52.8	51.2	P/P	32 - 82.0
2183192	Alpha-BHC	93.9	95.4	P/P	68 - 157
2183192	Alpha-Chlordane	88.1	88.1	P/P	54 - 108
2183192	Beta-BHC	112	116	P/P	54 - 200
2183192	Beta-Cyfluthrin	92.8	87.9	P/P	50 - 154
2183192	Bifenthrin	77.2	75.6	P/P	49 - 124
2183192	Chlorothalonil	38.4	29.2	P/P	10 - 289
2183192	Cis-Nonachlor	87.9	87.8	P/P	53 - 112
2183192	Cypermethrin	91.8	90.3	P/P	43 - 141
2183192	Dacthal	98.1	98.7	P/P	75 - 112
2183192	DDD-p,p'	94.8	95.9	P/P	58 - 125
2183192	DDE-p,p'	77.8	78.3	P/P	50 - 108
2183192	DDT-p,p'	79.8	79.5	P/P	52 - 140
2183192	Delta-BHC	147	141	P/P	61 - 228
2183192	Dicofol	104	99.0	P/P	59 - 130
2183192	Dieldrin	96.0	97.8	P/P	57 - 121
2183192	Endosulfan I	94.7	96.5	P/P	62 - 123
2183192	Endosulfan II	113	118	P/P	48 - 163
2183192	Endosulfan Sulfate	113	110	P/P	63 - 132
2183192	Endrin	99.2	102	P/P	58 - 128
2183192	Endrin Aldehyde	109	113	P/P	44 - 126
2183192	Endrin Ketone	103	103	P/P	68 - 127
2183192	Ethalfuralin	75.0	76.6	P/P	55 - 131
2183192	Gamma-BHC	110	112	P/P	54 - 206
2183192	Gamma-Chlordane	81.8	82.9	P/P	52 - 105
2183192	Heptachlor	68.0	65.9	P/P	47 - 94.0
2183192	Heptachlor Epoxide	93.4	93.4	P/P	61 - 113
2183192	Hexachlorobenzene	61.0	62.3	P/P	45 - 100

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
 Batch ID: P384679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183192	Lambda-Cyhalothrin	96.7	93.2	P/P	37 - 165
2183192	Methoxychlor	96.7	94.8	P/P	63 - 153
2183192	Mirex	60.4	59.8	P/P	38 - 90.0
2183192	Permethrin	73.2	70.9	P/P	45 - 112
2183192	Phenothrin	55.6	54.0	P/P	22 - 118
2183192	Prallethrin	76.6	78.2	P/P	21 - 114
2183192	Trans-Nonachlor	82.7	83.1	P/P	50 - 103
2183192	Trifluralin	75.8	75.7	P/P	57 - 122

Reference Method: EPA 8276
 Batch ID: P384679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183537	Chlordane	92.9	91.9	P/P	34 - 129
2183537	Toxaphene	106	112	P/P	26 - 123

Reference Method: EPA 8321B
 Batch ID: P384657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2182983	Acesulfame K	99.2	95.0	P/P	40 - 150
2182983	AMPA	86.0	83.0	P/P	40 - 150
2182983	Endothall	85.5	88.4	P/P	40 - 150
2182983	Glufosinate	85.1	84.0	P/P	40 - 150
2182983	Glyphosate	70.4	65.3	P/P	40 - 140
2182983	Sucralose	106	98.9	P/P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P384706

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2182702	3-Hydroxycarbofuran	56.6	56.8	P/P	30 - 160
2182702	Aldicarb	59.7	49.0	P/P	30 - 160
2182702	Aldicarb Sulfone	69.6	65.8	P/P	30 - 160
2182702	Aldicarb Sulfoxide	36.2	35.1	P/P	30 - 160
2182702	Carbaryl	40.5	36.3	P/P	30 - 160
2182702	Carbofuran	45.5	41.1	P/P	30 - 160
2182702	Methiocarb	44.6	40.1	P/P	30 - 160
2182702	Methomyl	68.1	67.1	P/P	30 - 160
2182702	Oxamyl	62.4	61.0	P/P	30 - 160
2182702	Propoxur	42.8	39.9	P/P	30 - 160

Reference Method: EPA 8321B
 Batch ID: P384835

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183089	Acetaminophen	93.3	85.9	P/P	30 - 160
2183089	Acetamiprid	73.3	69.5	P/P	30 - 160
2183089	Afidopyropen	63.4	57.7	P/P	30 - 160
2183089	Benzovindiflupyr	58.9	56.6	P/P	30 - 160
2183089	Carbamazepine	50.1	50.3	P/P	30 - 160
2183089	Clothianidin	76.7	74.8	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
 Batch ID: P384835

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183089	Dinotefuran	96.0	91.4	P/P	30 - 160
2183089	Diuron	38.5	36.6	P/P	30 - 160
2183089	Fenuron	82.7	80.5	P/P	30 - 160
2183089	Fluridone	88.1	80.1	P/P	30 - 160
2183089	Hydrocodone	71.3	66.3	P/P	30 - 160
2183089	Ibuprofen	65.5	62.7	P/P	30 - 160
2183089	Imidacloprid	127	127	P/P	30 - 160
2183089	Linuron	50.4	52.2	P/P	30 - 160
2183089	Mandestrobin	70.9	66.5	P/P	30 - 160
2183089	MCPP	122	122	P/P	30 - 160
2183089	Naproxen	76.0	61.5	P/P	30 - 160
2183089	Primidone	88.2	79.7	P/P	30 - 160
2183089	Pyraclostrobin	70.6	70.4	P/P	30 - 160
2183089	Thiamethoxam	101	103	P/P	30 - 160
2183089	Tolfenpyrad	47.2	44.5	P/P	30 - 160
2183089	Triclopyr	97.1	97.1	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
 Batch ID: P384854

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2182837	Fluoride	101	100	P/P	94 - 107

Reference Method: SM 5310 B-2011
 Batch ID: P384780

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2182968	Organic Carbon	99.7	99.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P384669

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183076	Turbidity	1.57	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P384715

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183090	Barium	1.01	Spike	P	0 - 20
2183090	Calcium	1.06	Spike	P	0 - 20
2183090	Iron	2.25	Spike	P	0 - 20
2183090	Magnesium	0.176	Spike	P	0 - 20
2183090	Potassium	1.34	Spike	P	0 - 20
2183090	Sodium	1.06	Spike	P	0 - 20
2183090	Zinc	1.34	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P384715

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183090	Aluminum	1.85	Spike	P	0 - 20
2183090	Antimony	0.0356	Spike	P	0 - 20
2183090	Arsenic	1.14	Spike	P	0 - 20
2183090	Boron	1.29	Spike	P	0 - 20
2183090	Cadmium	0.615	Spike	P	0 - 20
2183090	Chromium	0.139	Spike	P	0 - 20
2183090	Copper	0.419	Spike	P	0 - 20
2183090	Lead	1.54	Spike	P	0 - 20
2183090	Nickel	0.264	Spike	P	0 - 20
2183090	Selenium	0.687	Spike	P	0 - 20
2183090	Silver	2.96	Spike	P	0 - 20
2183090	Thallium	0.0932	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385198

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182906	Chloride	0.0504	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385202

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182906	Sulfate	0.540	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P384822

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183161	Ammonia-N	1.03	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P384772

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183154	Kjeldahl Nitrogen	1.53	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P384769

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182962	NO2NO3-N	0.321	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P384770

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183154	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P384878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183102	Total-P	1.69	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P384674

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183162	O-Phosphate-P	0.204	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P384651

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182712	Acetochlor	3.05	Spike	P	0 - 30
2182712	Alachlor	5.15	Spike	P	0 - 30
2182712	Ametryn	6.72	Spike	P	0 - 30
2182712	Atrazine	0.746	Spike	P	0 - 30
2182712	Atrazine Desethyl	2.03	Spike	P	0 - 30
2182712	Azinphos Methyl	7.16	Spike	P	0 - 30
2182712	Bromacil	6.17	Spike	P	0 - 30
2182712	Butylate	11.7	Spike	P	0 - 30
2182712	Carbophenothion	2.17	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P384651

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182712	Chlorpyrifos Ethyl	6.81	Spike	P	0 - 30
2182712	Chlorpyrifos Methyl	1.53	Spike	P	0 - 30
2182712	Cyanazine	10.5	Spike	P	0 - 30
2182712	Demeton	0.659	Spike	P	0 - 30
2182712	Diazinon	5.24	Spike	P	0 - 30
2182712	Dimethenamid	3.73	Spike	P	0 - 30
2182712	Disulfoton	1.05	Spike	P	0 - 30
2182712	Dithiopyr	3.61	Spike	P	0 - 30
2182712	EPTC	18.1	Spike	P	0 - 30
2182712	Ethion	7.34	Spike	P	0 - 30
2182712	Ethoprop	1.38	Spike	P	0 - 30
2182712	Fenamiphos	35.0	Spike	F	0 - 30
2182712	Fipronil	6.70	Spike	P	0 - 30
2182712	Fipronil Desulfinyl	6.62	Spike	P	0 - 30
2182712	Fipronil Sulfide	5.44	Spike	P	0 - 30
2182712	Fipronil Sulfone	2.18	Spike	P	0 - 30
2182712	Flumioxazin	6.60	Spike	P	0 - 30
2182712	Fonofos	2.77	Spike	P	0 - 30
2182712	Hexazinone	2.16	Spike	P	0 - 30
2182712	Imazalil	12.1	Spike	P	0 - 30
2182712	Malathion	4.17	Spike	P	0 - 30
2182712	Metalaxyl	4.98	Spike	P	0 - 30
2182712	Metolachlor	2.68	Spike	P	0 - 30
2182712	Metribuzin	6.00	Spike	P	0 - 30
2182712	Mevinphos	2.14	Spike	P	0 - 30
2182712	Molinate	4.11	Spike	P	0 - 30
2182712	Naled	5.23	Spike	P	0 - 30
2182712	Norflurazon	5.47	Spike	P	0 - 30
2182712	Oxadiazon	3.08	Spike	P	0 - 30
2182712	Parathion Ethyl	2.67	Spike	P	0 - 30
2182712	Parathion Methyl	1.47	Spike	P	0 - 30
2182712	Pendimethalin	1.76	Spike	P	0 - 30
2182712	Phorate	2.36	Spike	P	0 - 30
2182712	Prodiamine	2.61	Spike	P	0 - 30
2182712	Prometon	5.62	Spike	P	0 - 30
2182712	Prometryn	4.13	Spike	P	0 - 30
2182712	Pronamide	8.99	Spike	P	0 - 30
2182712	Propiconazole	8.26	Spike	P	0 - 30
2182712	Simazine	5.70	Spike	P	0 - 30
2182712	Sulfentrazone	4.89	Spike	P	0 - 30
2182712	Tebuconazole	1.53	Spike	P	0 - 30
2182712	Terbufos	0.836	Spike	P	0 - 30
2182712	Terbutylazine	5.44	Spike	P	0 - 30
LFB	Acetochlor	0.549	LCS	P	0 - 30
LFB	Alachlor	0.331	LCS	P	0 - 30
LFB	Ametryn	14.5	LCS	P	0 - 30
LFB	Atrazine	2.05	LCS	P	0 - 30
LFB	Atrazine Desethyl	1.18	LCS	P	0 - 30
LFB	Azinphos Methyl	8.10	LCS	P	0 - 30
LFB	Bromacil	4.52	LCS	P	0 - 30
LFB	Butylate	1.98	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P384651

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Carbophenothion	4.94	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	5.39	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	3.21	LCS	P	0 - 30
LFB	Cyanazine	3.18	LCS	P	0 - 30
LFB	Demeton	0.147	LCS	P	0 - 30
LFB	Diazinon	1.77	LCS	P	0 - 30
LFB	Dimethenamid	1.37	LCS	P	0 - 30
LFB	Disulfoton	1.22	LCS	P	0 - 30
LFB	Dithiopyr	1.66	LCS	P	0 - 30
LFB	EPTC	3.81	LCS	P	0 - 30
LFB	Ethion	3.26	LCS	P	0 - 30
LFB	Ethoprop	0.177	LCS	P	0 - 30
LFB	Fenamiphos	5.95	LCS	P	0 - 30
LFB	Fipronil	3.95	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	3.66	LCS	P	0 - 30
LFB	Fipronil Sulfide	3.43	LCS	P	0 - 30
LFB	Fipronil Sulfone	0.202	LCS	P	0 - 30
LFB	Flumioxazin	2.32	LCS	P	0 - 30
LFB	Fonofos	2.11	LCS	P	0 - 30
LFB	Hexazinone	4.48	LCS	P	0 - 30
LFB	Imazalil	10.8	LCS	P	0 - 30
LFB	Malathion	3.50	LCS	P	0 - 30
LFB	Metalaxyl	5.23	LCS	P	0 - 30
LFB	Metolachlor	1.01	LCS	P	0 - 30
LFB	Metribuzin	3.30	LCS	P	0 - 30
LFB	Mevinphos	2.24	LCS	P	0 - 30
LFB	Molinate	7.66	LCS	P	0 - 30
LFB	Naled	7.30	LCS	P	0 - 30
LFB	Norflurazon	7.23	LCS	P	0 - 30
LFB	Oxadiazon	4.82	LCS	P	0 - 30
LFB	Parathion Ethyl	6.34	LCS	P	0 - 30
LFB	Parathion Methyl	0.313	LCS	P	0 - 30
LFB	Pendimethalin	16.2	LCS	P	0 - 30
LFB	Phorate	1.42	LCS	P	0 - 30
LFB	Prodiamine	6.53	LCS	P	0 - 30
LFB	Prometon	4.19	LCS	P	0 - 30
LFB	Prometryn	4.26	LCS	P	0 - 30
LFB	Pronamide	8.52	LCS	P	0 - 30
LFB	Propiconazole	1.31	LCS	P	0 - 30
LFB	Simazine	2.80	LCS	P	0 - 30
LFB	Sulfentrazone	11.4	LCS	P	0 - 30
LFB	Tebuconazole	8.79	LCS	P	0 - 30
LFB	Terbufos	3.47	LCS	P	0 - 30
LFB	Terbutylazine	0.719	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P384679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183192	Aldrin	3.01	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P384679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183192	Alpha-BHC	1.62	Spike	P	0 - 30
2183192	Alpha-Chlordane	0.0184	Spike	P	0 - 30
2183192	Beta-BHC	3.40	Spike	P	0 - 30
2183192	Beta-Cyfluthrin	5.41	Spike	P	0 - 30
2183192	Bifenthrin	2.21	Spike	P	0 - 30
2183192	Chlorothalonil	27.0	Spike	P	0 - 30
2183192	Cis-Nonachlor	0.0996	Spike	P	0 - 30
2183192	Cypermethrin	1.69	Spike	P	0 - 30
2183192	Dacthal	0.552	Spike	P	0 - 30
2183192	DDD-p,p'	1.21	Spike	P	0 - 30
2183192	DDE-p,p'	0.696	Spike	P	0 - 30
2183192	DDT-p,p'	0.286	Spike	P	0 - 30
2183192	Delta-BHC	4.26	Spike	P	0 - 30
2183192	Dicofol	5.02	Spike	P	0 - 30
2183192	Dieldrin	1.94	Spike	P	0 - 30
2183192	Endosulfan I	1.89	Spike	P	0 - 30
2183192	Endosulfan II	4.34	Spike	P	0 - 30
2183192	Endosulfan Sulfate	2.46	Spike	P	0 - 30
2183192	Endrin	3.27	Spike	P	0 - 30
2183192	Endrin Aldehyde	2.80	Spike	P	0 - 30
2183192	Endrin Ketone	0.445	Spike	P	0 - 30
2183192	Ethalfuralin	2.16	Spike	P	0 - 30
2183192	Gamma-BHC	1.84	Spike	P	0 - 30
2183192	Gamma-Chlordane	1.38	Spike	P	0 - 30
2183192	Heptachlor	3.25	Spike	P	0 - 30
2183192	Heptachlor Epoxide	0.0225	Spike	P	0 - 30
2183192	Hexachlorobenzene	2.05	Spike	P	0 - 30
2183192	Lambda-Cyhalothrin	3.64	Spike	P	0 - 30
2183192	Methoxychlor	2.05	Spike	P	0 - 30
2183192	Mirex	1.06	Spike	P	0 - 30
2183192	Permethrin	3.20	Spike	P	0 - 30
2183192	Phenothrin	3.02	Spike	P	0 - 30
2183192	Prallethrin	2.01	Spike	P	0 - 30
2183192	Trans-Nonachlor	0.529	Spike	P	0 - 30
2183192	Trifluralin	0.0860	Spike	P	0 - 30
LFB	Aldrin	2.61	LCS	P	0 - 30
LFB	Alpha-BHC	6.89	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.460	LCS	P	0 - 30
LFB	Beta-BHC	2.65	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	2.74	LCS	P	0 - 30
LFB	Bifenthrin	1.10	LCS	P	0 - 30
LFB	Chlorothalonil	12.3	LCS	P	0 - 30
LFB	Cis-Nonachlor	1.32	LCS	P	0 - 30
LFB	Cypermethrin	4.39	LCS	P	0 - 30
LFB	Dacthal	0.404	LCS	P	0 - 30
LFB	DDD-p,p'	2.15	LCS	P	0 - 30
LFB	DDE-p,p'	1.90	LCS	P	0 - 30
LFB	DDT-p,p'	0.0102	LCS	P	0 - 30
LFB	Delta-BHC	2.38	LCS	P	0 - 30
LFB	Dicofol	5.04	LCS	P	0 - 30
LFB	Dieldrin	1.54	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P384679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endosulfan I	0.696	LCS	P	0 - 30
LFB	Endosulfan II	3.05	LCS	P	0 - 30
LFB	Endosulfan Sulfate	0.398	LCS	P	0 - 30
LFB	Endrin	1.16	LCS	P	0 - 30
LFB	Endrin Aldehyde	0.238	LCS	P	0 - 30
LFB	Endrin Ketone	58.9	LCS	F	0 - 30
LFB	Ethalfuralin	0.658	LCS	P	0 - 30
LFB	Gamma-BHC	0.668	LCS	P	0 - 30
LFB	Gamma-Chlordane	1.12	LCS	P	0 - 30
LFB	Heptachlor	2.70	LCS	P	0 - 30
LFB	Heptachlor Epoxide	0.551	LCS	P	0 - 30
LFB	Hexachlorobenzene	0.508	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	1.97	LCS	P	0 - 30
LFB	Methoxychlor	0.816	LCS	P	0 - 30
LFB	Mirex	1.08	LCS	P	0 - 30
LFB	Permethrin	1.65	LCS	P	0 - 30
LFB	Phenothrin	1.57	LCS	P	0 - 30
LFB	Prallethrin	11.8	LCS	P	0 - 30
LFB	Trans-Nonachlor	1.13	LCS	P	0 - 30
LFB	Trifluralin	1.13	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P384679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183537	Chlordane	1.12	Spike	P	0 - 30
2183537	Toxaphene	5.77	Spike	P	0 - 30
LFB	Chlordane	4.04	LCS	P	0 - 30
LFB	Toxaphene	1.77	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P384657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182983	Acesulfame K	4.11	Spike	P	0 - 30
2182983	AMPA	3.61	Spike	P	0 - 30
2182983	Endothall	3.40	Spike	P	0 - 30
2182983	Glufosinate	1.31	Spike	P	0 - 30
2182983	Glyphosate	6.45	Spike	P	0 - 30
2182983	Sucralose	5.88	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P384706

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182702	3-Hydroxycarbofuran	0.394	Spike	P	0 - 30
2182702	Aldicarb	19.8	Spike	P	0 - 30
2182702	Aldicarb Sulfone	5.66	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P384706

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182702	Aldicarb Sulfoxide	3.06	Spike	P	0 - 30
2182702	Carbaryl	10.8	Spike	P	0 - 30
2182702	Carbofuran	10.2	Spike	P	0 - 30
2182702	Methiocarb	10.6	Spike	P	0 - 30
2182702	Methomyl	1.46	Spike	P	0 - 30
2182702	Oxamyl	2.31	Spike	P	0 - 30
2182702	Propoxur	7.08	Spike	P	0 - 30

Reference Method: EPA 8321B
 Batch ID: P384835

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183089	2,4-D	1.80	Spike	P	0 - 30
2183089	Acetaminophen	8.22	Spike	P	0 - 30
2183089	Acetamiprid	5.27	Spike	P	0 - 30
2183089	Afidopyropen	9.29	Spike	P	0 - 30
2183089	Bentazon	0.870	Spike	P	0 - 30
2183089	Benzovindiflupyr	4.00	Spike	P	0 - 30
2183089	Carbamazepine	0.389	Spike	P	0 - 30
2183089	Clothianidin	2.55	Spike	P	0 - 30
2183089	Dinotefuran	4.88	Spike	P	0 - 30
2183089	Diuron	4.00	Spike	P	0 - 30
2183089	Fenuron	2.69	Spike	P	0 - 30
2183089	Fluridone	7.74	Spike	P	0 - 30
2183089	Hydrocodone	7.24	Spike	P	0 - 30
2183089	Ibuprofen	4.32	Spike	P	0 - 30
2183089	Imazapyr	5.38	Spike	P	0 - 30
2183089	Imidacloprid	0.128	Spike	P	0 - 30
2183089	Linuron	3.57	Spike	P	0 - 30
2183089	Mandestrobin	6.38	Spike	P	0 - 30
2183089	MCP	0.692	Spike	P	0 - 30
2183089	Naproxen	21.1	Spike	P	0 - 30
2183089	Primidone	10.1	Spike	P	0 - 30
2183089	Pyraclostrobin	0.318	Spike	P	0 - 30
2183089	Thiamethoxam	1.10	Spike	P	0 - 30
2183089	Tolfenpyrad	5.84	Spike	P	0 - 30
2183089	Triclopyr	0.00865	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
 Batch ID: P384671

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182906	Color (true)	3.38	Sample	P	0 - 20

Reference Method: SM 2120 B-2011
 Batch ID: P384672

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
 Batch ID: P384672

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183153	Color (true)	2.80	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P384849

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182837	Total Alkalinity	4.98	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
 Batch ID: P385213

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182958	TDS	1.92	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
 Batch ID: P385214

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183107	TDS	2.58	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
 Batch ID: P384854

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182837	Fluoride	0.915	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
 Batch ID: P384780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2182968	Organic Carbon	0.0272	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2183116
Field Sample ID: G3SD0096

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	112	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	59.3	P	30 - 160
EPA 8321B	Diuron-d6	54.1	P	30 - 160
EPA 8321B	Endothall-d6	80.0	P	30 - 160
EPA 8321B	Endothall-d6	80.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	69.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	69.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	74.7	P	30 - 160
EPA 8321B	Primidone-d5	80.5	P	30 - 160
EPA 8321B	Sucralose-d6	109	P	30 - 160
EPA 8321B	Sucralose-d6	109	P	30 - 160

Lab Sample ID: 2183117
Field Sample ID: G3SD0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	77.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	50.6	P	30 - 160
EPA 8321B	Diuron-d6	45.5	P	30 - 160
EPA 8321B	Endothall-d6	74.4	P	30 - 160
EPA 8321B	Endothall-d6	74.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	62.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	62.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.3	P	30 - 160
EPA 8321B	Primidone-d5	75.6	P	30 - 160
EPA 8321B	Sucralose-d6	115	P	30 - 160
EPA 8321B	Sucralose-d6	115	P	30 - 160

Lab Sample ID: 2183118
Field Sample ID: G3SD0159

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	46.8	P	30 - 160

Lab Sample ID: 2183119
Field Sample ID: G3SD0159

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	110	P	30 - 160
EPA 8321B	Acetaminophen-d4	81.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	55.1	P	30 - 160
EPA 8321B	Diuron-d6	53.8	P	30 - 160
EPA 8321B	Endothall-d6	85.0	P	30 - 160
EPA 8321B	Endothall-d6	85.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	73.1	P	30 - 160
EPA 8321B	Primidone-d5	76.3	P	30 - 160
EPA 8321B	Sucralose-d6	115	P	30 - 160
EPA 8321B	Sucralose-d6	115	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2183122
Field Sample ID: G3SD0159

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	88.0	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	62.9	P	34 - 106
EPA 8276	Decachlorobiphenyl	68.6	P	26 - 97.0
EPA 8276	PCNB	99.5	P	38 - 141

Lab Sample ID: 2183123
Field Sample ID: G3SD0159

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	86.9	P	72 - 135
EPA 8270E	Terbufos-d10	90.2	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A100004

Included Lab Sample IDs: 2183124, 2183125, 2183126

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	102	101	P/P	90 - 110
Calcium	99.6	102	P/P	90 - 110
Iron	102	105	P/P	90 - 110
Magnesium	100	103	P/P	90 - 110
Potassium	99.2	101	P/P	90 - 110
Sodium	100	104	P/P	90 - 110
Zinc	99.7	98.0	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A100011

Included Lab Sample IDs: 2183122

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.1		P	80 - 120
Toxaphene	121*		F	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A100104

Included Lab Sample IDs: 2183101, 2183104, 2183107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.7	99.7	P/P	90 - 110
Sulfate	99.0	99.1	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A100105

Included Lab Sample IDs: 2183122

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	99.6		P	80 - 120
Alpha-BHC	97.1		P	80 - 120
Alpha-Chlordane	99.1		P	80 - 120
Beta-BHC	97.0		P	80 - 120
Beta-Cyfluthrin	90.0		P	80 - 120
Bifenthrin	92.1		P	80 - 120
Chlorothalonil	103		P	80 - 120
Cis-Nonachlor	97.7		P	80 - 120
Cypermethrin	91.7		P	80 - 120
Dacthal	102		P	80 - 120
DDD-p,p'	102		P	80 - 120
DDE-p,p'	99.9		P	80 - 120
DDT-p,p'	104		P	80 - 120
Delta-BHC	89.8		P	80 - 120
Dicofol	91.8		P	80 - 120
Dieldrin	102		P	80 - 120
Endosulfan I	101		P	80 - 120
Endosulfan II	96.7		P	80 - 120
Endosulfan Sulfate	87.4		P	80 - 120
Endrin	98.8		P	80 - 120
Endrin Aldehyde	99.7		P	80 - 120
Endrin Ketone	91.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A100105

Included Lab Sample IDs: 2183122

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ethalfuralin	92.8		P	80 - 120
Gamma-BHC	95.1		P	80 - 120
Gamma-Chlordane	98.3		P	80 - 120
Heptachlor	96.8		P	80 - 120
Heptachlor Epoxide	101		P	80 - 120
Hexachlorobenzene	100		P	80 - 120
Lambda-Cyhalothrin	90.6		P	80 - 120
Methoxychlor	103		P	80 - 120
Mirex	92.2		P	80 - 120
Permethrin	92.9		P	80 - 120
Phenothrin	90.0		P	80 - 120
Prallethrin	88.0		P	80 - 120
Trans-Nonachlor	98.9		P	80 - 120
Trifluralin	95.3		P	80 - 120

Reference Method: EPA 8321B

Run ID: A100141

Included Lab Sample IDs: 2183116, 2183117, 2183119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	94.2	90.4	P/P	60 - 160
Sucralose	97.9	94.2	P/P	60 - 160

Reference Method: EPA 8270E

Run ID: A100194

Included Lab Sample IDs: 2183123

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.0		P	80 - 120
Alachlor	103		P	80 - 120
Ametryn	96.0		P	80 - 120
Atrazine	99.6		P	80 - 120
Atrazine Desethyl	102		P	80 - 120
Azinphos Methyl	94.7		P	80 - 120
Bromacil	96.4		P	80 - 120
Butylate	103		P	80 - 120
Carbophenothion	98.7		P	80 - 120
Chlorpyrifos Ethyl	100		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Cyanazine	92.4		P	80 - 120
Demeton	98.4		P	80 - 120
Diazinon	99.7		P	80 - 120
Dimethenamid	98.9		P	80 - 120
Disulfoton	99.8		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	103		P	80 - 120
Ethion	97.2		P	80 - 120
Ethoprop	96.5		P	80 - 120
Fenamiphos	99.6		P	80 - 120
Fipronil	97.3		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A100194

Included Lab Sample IDs: 2183123

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil Sulfide	101		P	80 - 120
Fipronil Sulfone	98.2		P	80 - 120
Flumioxazin	95.2		P	80 - 120
Fonofos	100		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	99.7		P	80 - 120
Malathion	95.3		P	80 - 120
Metalaxyl	101		P	80 - 120
Metolachlor	99.1		P	80 - 120
Metribuzin	95.2		P	80 - 120
Mevinphos	97.8		P	80 - 120
Molinate	104		P	80 - 120
Naled	105		P	80 - 120
Norflurazon	95.1		P	80 - 120
Oxadiazon	96.1		P	80 - 120
Parathion Ethyl	99.0		P	80 - 120
Parathion Methyl	96.1		P	80 - 120
Pendimethalin	101		P	80 - 120
Phorate	99.5		P	80 - 120
Prodiamine	104		P	80 - 120
Prometon	97.4		P	80 - 120
Prometryn	99.0		P	80 - 120
Pronamide	97.1		P	80 - 120
Propiconazole	94.3		P	80 - 120
Simazine	95.7		P	80 - 120
Sulfentrazone	91.4		P	80 - 120
Tebuconazole	98.6		P	80 - 120
Terbufos	99.8		P	80 - 120
Terbutylazine	102		P	80 - 120

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A99896

Included Lab Sample IDs: 2183101, 2183104, 2183107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	102	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A99897

Included Lab Sample IDs: 2183101, 2183104, 2183107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	100	P/P	90 - 115
Color (true)	99.1	100	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A99898

Included Lab Sample IDs: 2183103, 2183106, 2183109

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	95.1	95.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A99898

Included Lab Sample IDs: 2183103, 2183106, 2183109

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	95.3	93.7	P/P	90 - 110
O-Phosphate-P	96.5	95.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A99931

Included Lab Sample IDs: 2183102, 2183105, 2183108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	99.0	P/P	90 - 110
NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A99937

Included Lab Sample IDs: 2183116, 2183117, 2183119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	78.1	79.4	P/P	60 - 160
AMPA	87.0	78.1	P/P	60 - 160
Glufosinate	85.3	102	P/P	60 - 160
Glufosinate	95.1	85.3	P/P	60 - 160
Glyphosate	94.5	95.1	P/P	60 - 160
Glyphosate	97.4	94.5	P/P	60 - 160

Reference Method: SM 5310 B-2011

Run ID: A99938

Included Lab Sample IDs: 2183102, 2183105, 2183108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.6	98.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A99954

Included Lab Sample IDs: 2183102, 2183105, 2183108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	98.2	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A99965

Included Lab Sample IDs: 2183101, 2183104, 2183107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	97.1	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A99965

Included Lab Sample IDs: 2183101, 2183104, 2183107

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A99971

Included Lab Sample IDs: 2183102, 2183105, 2183108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	109	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A99981

Included Lab Sample IDs: 2183116, 2183117, 2183119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	112	129	P/P	50 - 150
3-Hydroxycarbofuran	114	112	P/P	60 - 150
Acetaminophen	112	109	P/P	60 - 160
Acetamiprid	118	118	P/P	50 - 150
Afidopyropen	103	101	P/P	50 - 150
Aldicarb	109	108	P/P	60 - 150
Aldicarb Sulfone	111	103	P/P	50 - 150
Aldicarb Sulfoxide	108	101	P/P	50 - 150
Bentazon	100	102	P/P	50 - 160
Benzovindiflupyr	118	120	P/P	50 - 150
Carbamazepine	113	110	P/P	60 - 150
Carbaryl	113	120	P/P	60 - 150
Carbofuran	121	120	P/P	50 - 150
Clothianidin	99.7	101	P/P	60 - 150
Dinotefuran	98.3	102	P/P	50 - 150
Diuron	114	111	P/P	60 - 160
Fenuron	113	114	P/P	60 - 150
Fluridone	110	120	P/P	60 - 160
Hydrocodone	109	107	P/P	60 - 150
Ibuprofen	83.9	103	P/P	50 - 160
Imazapyr	128	103	P/P	50 - 150
Imidacloprid	94.2	92.4	P/P	60 - 150
Linuron	114	115	P/P	60 - 150
Mandestrobin	116	121	P/P	50 - 150
MCPP	116	128	P/P	50 - 150
Methiocarb	103	110	P/P	50 - 150
Methomyl	110	108	P/P	50 - 150
Naproxen	131	114	P/P	50 - 160
Oxamyl	111	104	P/P	50 - 150
Primidone	96.2	88.5	P/P	60 - 150
Propoxur	115	112	P/P	50 - 150
Pyraclostrobin	110	117	P/P	60 - 150
Thiamethoxam	98.3	95.4	P/P	50 - 150
Tolfenpyrad	113	108	P/P	60 - 150
Triclopyr	119	103	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A99984

Included Lab Sample IDs: 2183116, 2183117, 2183119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	73.9	69.4	P/P	60 - 160
Acesulfame K	89.8	73.9	P/P	60 - 160
Endothall	98.3	100	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A99984

Included Lab Sample IDs: 2183116, 2183117, 2183119

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endothall	100	95.5	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A99998

Included Lab Sample IDs: 2183102, 2183105, 2183108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.6	99.6	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A99999

Included Lab Sample IDs: 2183124, 2183125, 2183126

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.8	97.5	P/P	90 - 110
Antimony	100	101	P/P	90 - 110
Arsenic	99.1	99.0	P/P	90 - 110
Boron	98.1	97.5	P/P	90 - 110
Cadmium	103	100	P/P	90 - 110
Chromium	98.8	97.6	P/P	90 - 110
Copper	97.3	96.0	P/P	90 - 110
Lead	96.3	96.3	P/P	90 - 110
Nickel	97.6	97.3	P/P	90 - 110
Selenium	100	99.0	P/P	90 - 110
Silver	97.7	96.1	P/P	90 - 110
Thallium	96.0	98.1	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						1.57	
EPA 200.7 Rev. 4.4	Barium	105		101	102			1.01
	Calcium	103		105				1.06
	Iron	108		105	108			2.25
	Magnesium	101		102				0.176
	Potassium	105		101	103			1.34
	Sodium	103		107				1.06
	Zinc	102		97.0	98.4			1.34
EPA 200.8 Rev. 5.4	Aluminum	100		97.5	95.6			1.85
	Antimony	104		106	106			0.0356
	Arsenic	101		105	103			1.14
	Boron	102		100	98.6			1.29
	Cadmium	103		103	102			0.615
	Chromium	104		107	107			0.139
	Copper	101		98.6	98.1			0.419
	Lead	99.3		99.2	97.7			1.54
	Nickel	101		99.1	98.8			0.264
	Selenium	99.8		98.2	98.9			0.687
	Silver	102		102	99.1			2.96
	Thallium	103		105	105			0.0932
EPA 300.0 Rev. 2.1	Chloride	97.6		96.2	98.0		0.0504	
	Sulfate	96.6		95.4	94.9		0.540	
EPA 350.1 Rev. 2.0	Ammonia-N	98.1		101	100			1.03
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103		102	105			1.53
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	98.0		96.0	95.5			0.321
	NO ₂ NO ₃ -N	99.0		99.5	99.5			0.0
EPA 365.1 Rev. 2.0	Total-P	105		105	108			1.69
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	95.5		98.0	97.8			0.204
EPA 8270E	Acetochlor	90.0	90.5	93.5	96.4	0.549		3.05
	Alachlor	91.8	91.5	93.6	98.6	0.331		5.15
	Aldrin	40.7	41.8	52.8	51.2	2.61		3.01
	Alpha-BHC	85.4	91.4	93.9	95.4	6.89		1.62
	Alpha-Chlordane	91.2	90.8	88.1	88.1	0.460		0.0184
	Ametryn	105	90.6			14.5		6.72
	Atrazine	96.1	98.1			2.05		0.746
	Atrazine Desethyl	75.0	75.9			1.18		2.03
	Azinphos Methyl	138	127	133	124	8.10		7.16
	Beta-BHC	109	106	112	116	2.65		3.40
	Beta-Cyfluthrin	96.3	98.9	92.8	87.9	2.74		5.41
	Bifenthrin	89.4	88.5	77.2	75.6	1.10		2.21
	Bromacil	88.1	84.2	91.8	86.3	4.52		6.17
	Butylate	63.8	62.6	51.2	57.6	1.98		11.7
	Carbophenothion	98.0	103	83.6	85.5	4.94		2.17
	Chlorothalonil	51.3	58.1	38.4	29.2	12.3		27.0
	Chlorpyrifos Ethyl	102	96.8	97.1	104	5.39		6.81
	Chlorpyrifos Methyl	99.3	96.1	92.0	90.6	3.21		1.53
	Cis-Nonachlor	91.8	90.6	87.9	87.8	1.32		0.0996
	Cyanazine	103	106	95.7	106	3.18		10.5
	Cypermethrin	94.5	98.7	91.8	90.3	4.39		1.69
	Dacthal	95.4	95.8	98.1	98.7	0.404		0.552
	DDD-p,p'	98.3	96.2	94.8	95.9	2.15		1.21
	DDE-p,p'	86.4	84.8	77.8	78.3	1.90		0.696
	DDT-p,p'	85.0	85.0	79.8	79.5	0.0102		0.286
	Delta-BHC	108	105	147	141	2.38		4.26

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Demeton	86.9	86.8	95.8	96.5	0.147	0.659
	Diazinon	92.9	94.5	98.8	104	1.77	5.24
	Dicofol	114	120	104	99.0	5.04	5.02
	Dieldrin	96.8	95.3	96.0	97.8	1.54	1.94
	Dimethenamid	90.0	91.2	98.6	102	1.37	3.73
	Disulfoton	86.2	87.2	89.9	89.0	1.22	1.05
	Dithiopyr	92.3	90.8	93.8	97.5	1.66	3.61
	Endosulfan I	94.1	94.8	94.7	96.5	0.696	1.89
	Endosulfan II	110	107	113	118	3.05	4.34
	Endosulfan Sulfate	103	103	113	110	0.398	2.46
	Endrin	100	102	99.2	102	1.16	3.27
	Endrin Aldehyde	120	120	109	113	0.238	2.80
	Endrin Ketone	157	85.5	103	103	58.9	0.445
	EPTC	58.8	61.1	60.5	50.4	3.81	18.1
	Ethalfuralin	78.0	77.4	75.0	76.6	0.658	2.16
	Ethion	106	102	95.8	89.0	3.26	7.34
	Ethoprop	90.3	90.4	91.9	90.7	0.177	1.38
	Fenamiphos	94.6	100	108	75.9	5.95	35.0
	Fipronil	92.0	95.7	99.9	107	3.95	6.70
	Fipronil Desulfinyl	96.9	100	97.4	106	3.66	6.62
	Fipronil Sulfide	92.1	89.0	83.2	89.2	3.43	5.44
	Fipronil Sulfone	93.3	93.5	86.8	90.2	0.202	2.18
	Flumioxazin	134	131	185	198	2.32	6.60
	Fonofos	90.5	88.6	85.8	88.2	2.11	2.77
	Gamma-BHC	102	101	110	112	0.668	1.84
	Gamma-Chlordane	87.1	86.1	81.8	82.9	1.12	1.38
	Heptachlor	75.5	77.5	68.0	65.9	2.70	3.25
	Heptachlor Epoxide	92.7	93.2	93.4	93.4	0.551	0.0225
	Hexachlorobenzene	70.2	70.6	61.0	62.3	0.508	2.05
	Hexazinone	90.0	94.1	106	104	4.48	2.16
	Imazalil	105	93.9	66.1	74.5	10.8	12.1
	Lambda-Cyhalothrin	102	104	96.7	93.2	1.97	3.64
	Malathion	111	107	106	102	3.50	4.17
	Metalaxyl	89.8	94.6	90.0	94.6	5.23	4.98
	Methoxychlor	107	106	96.7	94.8	0.816	2.05
	Metolachlor	88.1	87.2	88.0	90.4	1.01	2.68
	Metribuzin	101	104	104	111	3.30	6.00
	Mevinphos	85.4	87.3	90.2	88.3	2.24	2.14
	Mirex	58.2	58.9	60.4	59.8	1.08	1.06
	Molinate	68.8	74.3	74.4	71.4	7.66	4.11
	Naled	69.3	74.6	80.4	84.7	7.30	5.23
	Norflurazon	89.7	96.5	87.1	92.0	7.23	5.47
	Oxadiazon	88.6	84.5	76.6	79.1	4.82	3.08
	Parathion Ethyl	92.0	86.3	94.7	92.2	6.34	2.67
	Parathion Methyl	100	101	105	104	0.313	1.47
	Pendimethalin	112	95.2	120	118	16.2	1.76
	Permethrin	79.5	80.8	73.2	70.9	1.65	3.20
	Phenothrin	46.3	47.0	55.6	54.0	1.57	3.02
	Phorate	92.3	90.9	84.0	86.0	1.42	2.36
	Prallethrin	72.8	64.7	76.6	78.2	11.8	2.01
	Prodiamine	79.1	74.1	110	112	6.53	2.61
	Prometon	82.5	86.0	86.6	91.6	4.19	5.62
	Prometryn	86.8	90.6	91.7	95.5	4.26	4.13
	Pronamide	94.2	103	111	121	8.52	8.99

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Propiconazole	84.0	85.2			1.31		8.26
	Simazine	96.3	99.0			2.80		5.70
	Sulfentrazone	80.3	90.1	85.7	90.7	11.4		4.89
	Tebuconazole	47.6	52.0	50.7	49.6	8.79		1.53
	Terbufos	99.5	96.1	97.7	96.9	3.47		0.836
	Terbutylazine	93.3	94.0	106	100	0.719		5.44
	Trans-Nonachlor	87.5	86.5	82.7	83.1	1.13		0.529
	Trifluralin	80.5	79.6	75.8	75.7	1.13		0.0860
EPA 8276	Chlordane	88.0	91.6	92.9	91.9	4.04		1.12
	Toxaphene	110	108	106	112	1.77		5.77
EPA 8321B	2,4-D	115						1.80
	3-Hydroxycarbofuran	75.3		56.6	56.8			0.394
	Acesulfame K	90.8		99.2	95.0			4.11
	Acetaminophen	79.1		93.3	85.9			8.22
	Acetamiprid	78.6		73.3	69.5			5.27
	Afidopyropen	65.2		63.4	57.7			9.29
	Aldicarb	78.1		59.7	49.0			19.8
	Aldicarb Sulfone	84.7		69.6	65.8			5.66
	Aldicarb Sulfoxide	81.4		36.2	35.1			3.06
	AMPA	83.0		86.0	83.0			3.61
	Bentazon	62.6						0.870
	Benzovindiflupyr	69.9		58.9	56.6			4.00
	Carbamazepine	66.9		50.1	50.3			0.389
	Carbaryl	49.1		40.5	36.3			10.8
	Carbofuran	53.9		45.5	41.1			10.2
	Clothianidin	76.8		76.7	74.8			2.55
	Dinotefuran	86.6		96.0	91.4			4.88
	Diuron	58.2		38.5	36.6			4.00
	Endothall	77.4		85.5	88.4			3.40
	Fenuron	101		82.7	80.5			2.69
	Fluridone	90.5		88.1	80.1			7.74
	Glufosinate	99.5		85.1	84.0			1.31
	Glyphosate	92.6		70.4	65.3			6.45
	Hydrocodone	82.3		71.3	66.3			7.24
	Ibuprofen	79.6		65.5	62.7			4.32
	Imazapyr	100						5.38
	Imidacloprid	97.6		127	127			0.128
	Linuron	67.0		50.4	52.2			3.57
	Mandestrobin	75.5		70.9	66.5			6.38
	MCP	129		122	122			0.692
	Methiocarb	49.5		44.6	40.1			10.6
	Methomyl	84.2		68.1	67.1			1.46
	Naproxen	69.1		76.0	61.5			21.1
	Oxamyl	83.5		62.4	61.0			2.31
	Primidone	77.2		88.2	79.7			10.1
	Propoxur	55.5		42.8	39.9			7.08
	Pyraclostrobin	74.1		70.6	70.4			0.318
	Sucralose	93.1		106	98.9			5.88
	Thiamethoxam	93.7		101	103			1.10
	Tolfenpyrad	54.2		47.2	44.5			5.84
	Triclopyr	95.7		97.1	97.1			0.0086
SM 2120 B-2011	Color (true)	99.1					3.38	
	Color (true)	99.0					2.80	
SM 2320 B-2011	Total Alkalinity	99.1					4.98	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	Precision		
				LCS	SMP	MS
SM 2540 C-2011	TDS				1.92	
	TDS				2.58	
SM 4500 F-C-2011	Fluoride	98.9	101 100			0.915
SM 5310 B-2011	Organic Carbon	100	99.7 99.8			0.0272

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2183101, 2183104, 2183107
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2183124, 2183125, 2183126
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2183124, 2183125, 2183126
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2183101, 2183104, 2183107
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2183101, 2183104, 2183107
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2183102, 2183105, 2183108
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2183102, 2183105, 2183108
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2183102, 2183105, 2183108
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2183102, 2183105, 2183108
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2183103, 2183106, 2183109
EPA 8270E	Organochlorine pesticides in water matrices by GC/MS-SIM	2183122
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2183123
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2183122
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2183118
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2183116, 2183117, 2183119
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2183116, 2183117, 2183119
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2183101, 2183104, 2183107
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2183101, 2183104, 2183107
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2183124, 2183125, 2183126
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2183101, 2183104, 2183107
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2183101, 2183104, 2183107
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2183101, 2183104, 2183107
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2183102, 2183105, 2183108

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	07/15/2020			07/15/2020 15:03	Yen Ta	2183101, 2183104, 2183107
EPA 200.7 Rev. 4.4	07/15/2020	07/16/2020 13:05	Elliott D. Healy	07/21/2020 14:29	Betina Topolski	2183124
	07/15/2020	07/16/2020 13:05	Elliott D. Healy	07/21/2020 14:37	Betina Topolski	2183125
	07/15/2020	07/16/2020 13:05	Elliott D. Healy	07/21/2020 14:45	Betina Topolski	2183126
EPA 200.8 Rev. 5.4	07/15/2020	07/16/2020 13:05	Elliott D. Healy	07/21/2020 20:36	Alexander Thompson	2183124
	07/15/2020	07/16/2020 13:05	Elliott D. Healy	07/21/2020 20:43	Alexander Thompson	2183125
	07/15/2020	07/16/2020 13:05	Elliott D. Healy	07/21/2020 20:49	Alexander Thompson	2183126
EPA 300.0 Rev. 2.1	07/15/2020			07/21/2020 23:15	Julia Storbeck	2183101
	07/15/2020			07/21/2020 23:27	Julia Storbeck	2183104
	07/15/2020			07/21/2020 23:39	Julia Storbeck	2183107
EPA 350.1 Rev. 2.0	07/15/2020			07/18/2020 13:16	Ping Hua	2183102
	07/15/2020			07/18/2020 13:17	Ping Hua	2183105
	07/15/2020			07/18/2020 13:19	Ping Hua	2183108
EPA 351.2 Rev. 2.0	07/15/2020	07/17/2020 11:15	Jhamieka S. Greenwood	07/20/2020 12:35	Jhamieka S. Greenwood	2183102
	07/15/2020	07/17/2020 11:15	Jhamieka S. Greenwood	07/20/2020 12:37	Jhamieka S. Greenwood	2183105
	07/15/2020	07/17/2020 11:15	Jhamieka S. Greenwood	07/20/2020 12:39	Jhamieka S. Greenwood	2183108
EPA 353.2 Rev. 2.0	07/15/2020			07/17/2020 09:09	Beverly Y. Sanders	2183102
	07/15/2020			07/17/2020 09:10	Beverly Y. Sanders	2183105
	07/15/2020			07/17/2020 09:17	Beverly Y. Sanders	2183108
EPA 365.1 Rev. 2.0	07/15/2020	07/20/2020 13:21	Yen Ta	07/21/2020 10:36	Lipi Saha	2183102
	07/15/2020	07/20/2020 13:21	Yen Ta	07/21/2020 10:40	Lipi Saha	2183105
	07/15/2020	07/20/2020 13:21	Yen Ta	07/21/2020 10:41	Lipi Saha	2183108
EPA 365.1 Rev. 2.0 dissolved	07/15/2020			07/15/2020 15:44	Jhamieka S. Greenwood	2183103
	07/15/2020			07/15/2020 16:40	Jhamieka S. Greenwood	2183106
	07/15/2020			07/15/2020 16:46	Jhamieka S. Greenwood	2183109
EPA 8270E	07/15/2020	07/17/2020 08:00	Fe-Val Siddell	07/23/2020 20:39	Vandana T. Nagar	2183123
	07/15/2020	07/17/2020 08:00	Fe-Val Siddell	07/23/2020 21:04	Vandana T. Nagar	2183123
	07/15/2020	07/17/2020 08:30	Rasheda Ghaffari	07/23/2020 19:14	Michael Poppell	2183122
EPA 8276	07/15/2020	07/17/2020 08:30	Rasheda Ghaffari	07/22/2020 05:19	Arthur Maknenko	2183122
EPA 8321B	07/15/2020	07/15/2020 15:30	Rebecca Ware	07/15/2020 21:11	Rebecca Ware	2183116
	07/15/2020	07/15/2020 15:30	Rebecca Ware	07/15/2020 21:32	Rebecca Ware	2183117
	07/15/2020	07/15/2020 15:30	Rebecca Ware	07/15/2020 21:43	Rebecca Ware	2183119
	07/15/2020	07/15/2020 15:30	Rebecca Ware	07/20/2020 15:17	Rebecca Ware	2183116
	07/15/2020	07/15/2020 15:30	Rebecca Ware	07/20/2020 16:10	Rebecca Ware	2183117
	07/15/2020	07/15/2020 15:30	Rebecca Ware	07/20/2020 16:24	Rebecca Ware	2183119
	07/15/2020	07/15/2020 15:30	Rebecca Ware	07/28/2020 23:21	Mohammad Ghaffari	2183116
	07/15/2020	07/15/2020 15:30	Rebecca Ware	07/28/2020 23:44	Mohammad Ghaffari	2183117
	07/15/2020	07/15/2020 15:30	Rebecca Ware	07/28/2020 23:56	Mohammad Ghaffari	2183119
	07/15/2020	07/20/2020 08:45	Hoor Shaik	07/20/2020 22:14	Juyoung Kim	2183118
	07/15/2020	07/21/2020 09:00	Hoor Shaik	07/21/2020 18:27	Juyoung Kim	2183116

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	07/15/2020	07/21/2020 09:00	Hoor Shaik	07/21/2020 19:02	Juyoung Kim	2183117
	07/15/2020	07/21/2020 09:00	Hoor Shaik	07/21/2020 19:37	Juyoung Kim	2183119
SM 2120 B-2011	07/15/2020			07/15/2020 15:35	Benjamin T. Nordmann	2183101
	07/15/2020			07/15/2020 15:40	Benjamin T. Nordmann	2183104
	07/15/2020			07/15/2020 15:41	Benjamin T. Nordmann	2183107
SM 2320 B-2011	07/15/2020			07/18/2020 10:28	Samantha Davila	2183107
	07/15/2020			07/18/2020 11:12	Samantha Davila	2183101
	07/15/2020			07/18/2020 11:25	Samantha Davila	2183104
SM 2340B	07/15/2020			07/21/2020 14:29	Betina Topolski	2183124
	07/15/2020			07/21/2020 14:37	Betina Topolski	2183125
	07/15/2020			07/21/2020 14:45	Betina Topolski	2183126
SM 2540 C-2011	07/15/2020			07/20/2020 13:22	Yijie Li	2183101, 2183104, 2183107
SM 2540 D-2011	07/15/2020			07/20/2020 13:22	Yijie Li	2183101, 2183104, 2183107
SM 4500 F-C-2011	07/15/2020			07/18/2020 10:28	Samantha Davila	2183107
	07/15/2020			07/18/2020 11:12	Samantha Davila	2183101
	07/15/2020			07/18/2020 11:25	Samantha Davila	2183104
SM 5310 B-2011	07/15/2020			07/16/2020 22:25	David Boose	2183102
	07/15/2020			07/16/2020 22:39	David Boose	2183105
	07/15/2020			07/16/2020 22:51	David Boose	2183108