

Chemical Analysis Report

SO-DIST-2021-08-18-01

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

Event Description: **2021 SMP : Large Highlands**
Request ID: **RQ-2021-08-02-75**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
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Date Certified: 14-SEP-2021 10:49



NON-CONFORMANCE REPORT INCLUDED

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: 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: C-19 @ US 27

Collection Date/Time: 08/17/2021 10:30

Field ID: G3SD0087

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2270171	EPA 180.1 Rev. 2.0	Turbidity	3.2	A	NTU	P402659	
	EPA 300.0 Rev. 2.1	Chloride	60		mg Cl/L	P402997	
		Sulfate	19		mg SO4/L	P403000	
	SM 2120 B-2011	Color (true)	120		PCU	P402656	
	SM 2320 B-2011	Total Alkalinity	227		mg CaCO3/L	P402803	
	SM 2540 C-2011	TDS	392		mg/L	P403216	
	SM 2540 D-2011	TSS	6	IA	mg/L	P403195	
	SM 4500 F-C-2011	Fluoride	0.19		mg F/L	P402805	
2270172	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P403033	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	4.3		mg N/L	P403178	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P402812	
	EPA 365.1 Rev. 2.0	Total-P	0.54		mg P/L	P402818	
	SM 5310 B-2011	Organic Carbon	23		mg C/L	P403117	
2270173	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.40		mg P/L	P402651	

Ref. Method and Comment:

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

Sample Location: C-19 Canal

Collection Date/Time: 08/17/2021 10:55

Field ID: G3SD0162

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2270177	EPA 180.1 Rev. 2.0	Turbidity	2.3		NTU	P402659	
	EPA 300.0 Rev. 2.1	Chloride	120		mg Cl/L	P402997	
		Sulfate	74		mg SO4/L	P403000	
	SM 2120 B-2011	Color (true)	120		PCU	P402656	
	SM 2320 B-2011	Total Alkalinity	261		mg CaCO3/L	P402803	
	SM 2540 C-2011	TDS	643		mg/L	P403216	
	SM 2540 D-2011	TSS	3	I	mg/L	P403195	
	SM 4500 F-C-2011	Fluoride	0.33		mg F/L	P402805	
2270178	EPA 350.1 Rev. 2.0	Ammonia-N	0.54		mg N/L	P403033	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.5		mg N/L	P403178	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.28		mg N/L	P402813	
	EPA 365.1 Rev. 2.0	Total-P	0.33		mg P/L	P402818	
	SM 5310 B-2011	Organic Carbon	23		mg C/L	P403117	
2270179	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.26		mg P/L	P402651	
2270206	EPA 8321B	Aldicarb	0.020	U	ug/L	P402513	
		Aldicarb Sulfone	0.0020	U	ug/L	P402513	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P402513	
		Carbaryl	0.0020	U	ug/L	P402513	
		Carbofuran	0.0020	U	ug/L	P402513	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P402513	MS
		Methiocarb	0.0020	U	ug/L	P402513	
		Methomyl	0.0020	U	ug/L	P402513	
		Oxamyl	0.0020	U	ug/L	P402513	
		Propoxur	0.0020	U	ug/L	P402513	
2270207		2,4-D	0.33		ug/L	P402808	
		Acesulfame K	0.10	U	ug/L	P402556	
		2,4,5-T	0.0040	U	ug/L	P402808	
		AMPA	1.5		ug/L	P402556	MS
		Acetaminophen	0.0080	U	ug/L	P402808	
		Acetamiprid	0.0020	U	ug/L	P402808	
		Endothall	0.25	U	ug/L	P402556	
		Glufosinate	0.10	U	ug/L	P402556	
		Glyphosate	5.1		ug/L	P402556	
		Afidopyropen	0.0020	U	ug/L	P402808	
		Bentazon	0.058		ug/L	P402808	
		Sucralose	0.40		ug/L	P402556	
		Benzovindiflupyr	0.0020	U	ug/L	P402808	
		Carbamazepine	8.0E-04	U	ug/L	P402808	
		Clothianidin	0.0020	U	ug/L	P402808	
		Dinotefuran	0.0024	I	ug/L	P402808	
		Diuron	0.0020	U	ug/L	P402808	
		Fenuron	0.016	U	ug/L	P402808	
		Fluridone	0.0012	I	ug/L	P402808	

Field ID: G3SD0162

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2270207	EPA 8321B	Imazapyr	0.78		ug/L	P402808	MS
		Hydrocodone	0.0020	U	ug/L	P402808	
		Ibuprofen	0.020	U	ug/L	P402808	
		Imidacloprid	0.0020	U	ug/L	P402808	MS
		Linuron	0.0040	U	ug/L	P402808	
		Mandestrobin	0.0020	U	ug/L	P402808	
		MCP	0.0020	U	ug/L	P402808	
		Naproxen	0.0080	U	ug/L	P402808	
		Primidone	0.0040	U	ug/L	P402808	
		Pyraclostrobin	0.0020	U	ug/L	P402808	
		Thiamethoxam	0.0020	U	ug/L	P402808	
		Tolfenpyrad	0.0020	U	ug/L	P402808	
		Triclopyr	0.0040	U	ug/L	P402808	
2270230	EPA 8270E	Aldrin	0.68	U	ng/L	P402612	
		Alpha-BHC	0.10	U	ng/L	P402612	
		Alpha-Chlordane	0.21	U	ng/L	P402612	
		Beta-BHC	0.10	U	ng/L	P402612	
		Beta-Cyfluthrin**	1.3	U	ng/L	P402612	
		Bifenthrin**	0.52	U	ng/L	P402612	
		Chlorothalonil	0.52	U	ng/L	P402612	
		Cis-Nonachlor**	0.21	U	ng/L	P402612	
		Cypermethrin	1.6	U	ng/L	P402612	
		Dacthal**	0.16	U	ng/L	P402612	
		DDD-p,p'	0.26	U	ng/L	P402612	
		DDE-p,p'	0.21	U	ng/L	P402612	
		DDT-p,p'	0.29	I	ng/L	P402612	
		Delta-BHC	0.42	U	ng/L	P402612	
		Deltamethrin**	1.3	UJ	ng/L	P402612	RPD
		Dichlobenil**	0.10	U	ng/L	P402612	MS
		Dicofol	1.3	U	ng/L	P402612	
		Dieldrin	0.42	U	ng/L	P402612	
		Endosulfan I	0.42	U	ng/L	P402612	
		Endosulfan II	0.42	U	ng/L	P402612	
		Endosulfan Sulfate	0.31	U	ng/L	P402612	
		Endrin	0.42	U	ng/L	P402612	
		Endrin Aldehyde	0.78	U	ng/L	P402612	MS
		Endrin Ketone	0.42	U	ng/L	P402612	
		Esfenvalerate**	0.78	U	ng/L	P402612	
		Ethalfuralin**	0.16	U	ng/L	P402612	
		Fenpropathrin**	0.26	U	ng/L	P402612	
		Gamma-BHC	0.13	U	ng/L	P402612	
		Gamma-Chlordane	0.27	I	ng/L	P402612	
		Heptachlor	0.21	U	ng/L	P402612	
		Heptachlor Epoxide	0.26	U	ng/L	P402612	
		Hexachlorobenzene	1.0	U	ng/L	P402612	

Field ID: G3SD0162

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2270230	EPA 8270E	Kepone**	5.2	UJ	ng/L	P402612	CCV, RPD
		Lambda-Cyhalothrin**	0.78	U	ng/L	P402612	
		Methoxychlor	0.31	U	ng/L	P402612	
		MGK-264**	0.21	U	ng/L	P402612	
		Mirex	0.73	UJ	ng/L	P402612	LCS
		Permethrin	1.7	U	ng/L	P402612	
		Phenothrin**	0.94	U	ng/L	P402612	RPD
		Piperonyl Butoxide**	0.30	I	ng/L	P402612	
		Prallethrin**	2.1	U	ng/L	P402612	MS, RPD
		Tau-Fluvalinate**	0.26	U	ng/L	P402612	
		Tetramethrin**	0.78	U	ng/L	P402612	MS, RPD
		Trans-Nonachlor**	0.21	U	ng/L	P402612	
		Triclosan Methyl**	0.16	U	ng/L	P402612	
		Trifluralin	0.21	U	ng/L	P402612	
		Chlordane	5.2	U	ng/L	P402612	
		Toxaphene	31	U	ng/L	P402612	
2270231	EPA 8270E	Acetochlor	0.24	U	ng/L	P402814	
		Alachlor	0.24	U	ng/L	P402814	
		Ametryn	82		ng/L	P402814	
		Atrazine	91		ng/L	P402814	RPD
		Atrazine Desethyl	10		ng/L	P402814	
		Azinphos Methyl	1.9	U	ng/L	P402814	
		Azoxystrobin**	4.9	J	ng/L	P402814	RPD
		Bromacil	1.4	I	ng/L	P402814	
		Butylate	0.39	U	ng/L	P402814	
		Caffeine**	7.3	U	ng/L	P402814	RPD
		Carbophenothion	0.49	U	ng/L	P402814	
		Carfentrazone Ethyl**	0.097	U	ng/L	P402814	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P402814	
		Chlorpyrifos Methyl	0.049	U	ng/L	P402814	
		Cyanazine	3.2	U	ng/L	P402814	
		Demeton	1.5	U	ng/L	P402814	
		Diazinon	0.12	U	ng/L	P402814	
		Difenoconazole**	0.58	U	ng/L	P402814	
		Dimethenamid**	0.24	I	ng/L	P402814	
		Disulfoton	0.49	U	ng/L	P402814	
		Dithiopyr**	0.17	U	ng/L	P402814	
		EPTC	1.2	U	ng/L	P402814	
		Ethion	0.15	U	ng/L	P402814	
		Ethoprop	0.097	U	ng/L	P402814	
		Fenamiphos	0.49	U	ng/L	P402814	
		Fenbuconazole**	0.12	U	ng/L	P402814	
		Fipronil	0.24	U	ng/L	P402814	
		Fipronil Desulfinyl**	0.12	U	ng/L	P402814	
		Fipronil Sulfide	0.15	U	ng/L	P402814	

Field ID: G3SD0162

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2270231	EPA 8270E	Fipronil Sulfone	0.15	U	ng/L	P402814	
		Fluazifop-P-butyl**	0.097	U	ng/L	P402814	
		Fludioxonil**	0.12	U	ng/L	P402814	
		Flumioxazin**	1.7	U	ng/L	P402814	
		Flutolanil**	0.097	U	ng/L	P402814	
		Fluxapyroxad**	4.6		ng/L	P402814	
		Fonofos	0.19	U	ng/L	P402814	
		Hexazinone	19		ng/L	P402814	
		Imazalil**	0.73	U	ng/L	P402814	
		Iprodione**	0.58	U	ng/L	P402814	
		Malathion	0.34	U	ng/L	P402814	
		Metalaxyl	0.73	U	ng/L	P402814	RPD
		Metolachlor	20		ng/L	P402814	RPD
		Metribuzin	4.7	I	ng/L	P402814	
		Mevinphos	1.0	U	ng/L	P402814	
		Molinate	0.29	U	ng/L	P402814	
		Myclobutanil**	0.24	U	ng/L	P402814	
		Naled**	1.5	U	ng/L	P402814	
		Norflurazon	3.7		ng/L	P402814	
		Oxadiazon	0.29	U	ng/L	P402814	
		Oxyfluorfen**	0.15	U	ng/L	P402814	
		Parathion Ethyl	0.24	U	ng/L	P402814	
		Parathion Methyl	0.53	U	ng/L	P402814	
		Pendimethalin	0.97	U	ng/L	P402814	
		Phorate	0.51	U	ng/L	P402814	
		Prodiamine**	0.17	U	ng/L	P402814	
		Prometon	0.87	U	ng/L	P402814	
		Prometryn	1.1		ng/L	P402814	
		Pronamide**	0.15	U	ng/L	P402814	
		Propiconazole**	4.8		ng/L	P402814	RPD
		Pyriproxyfen**	0.12	U	ng/L	P402814	
		Simazine	0.49	U	ng/L	P402814	
		Sulfentrazone**	0.68	I	ng/L	P402814	
		Tebuconazole**	0.49	U	ng/L	P402814	
		Terbufos	0.097	U	ng/L	P402814	
		Terbuthylazine	0.41	U	ng/L	P402814	

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 bentazon could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8321B: MS accuracy for glyphosate 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: MS accuracy for several parameters not assessed due to high content of these parameters in the sample spiked. Estimation for azoxystrobin due to internal standard recovery exceeding control limits.

Sample Location: Nine Mile Canal @ SR 80

Collection Date/Time: 08/17/2021 12:00

Field ID: G3SD0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2270174	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P402659	
	EPA 300.0 Rev. 2.1	Chloride	43		mg Cl/L	P402997	
		Sulfate	46		mg SO4/L	P403000	
	SM 2120 B-2011	Color (true)	85	A	PCU	P402656	
	SM 2320 B-2011	Total Alkalinity	212		mg CaCO3/L	P402803	
	SM 2540 C-2011	TDS	362		mg/L	P403216	
	SM 2540 D-2011	TSS	4	I	mg/L	P403195	
2270175	SM 4500 F-C-2011	Fluoride	0.27		mg F/L	P402805	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.078		mg N/L	P403033	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P403178	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.31		mg N/L	P402812	
	EPA 365.1 Rev. 2.0	Total-P	0.078		mg P/L	P402818	
2270176	SM 5310 B-2011	Organic Carbon	17		mg C/L	P403117	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.043		mg P/L	P402651	
2270229	EPA 8270E	Acetochlor	0.24	U	ng/L	P402814	
		Alachlor	0.24	U	ng/L	P402814	
		Ametryn	28		ng/L	P402814	
		Atrazine	79		ng/L	P402814	RPD
		Atrazine Desethyl	9.1		ng/L	P402814	
		Azinphos Methyl	1.9	U	ng/L	P402814	
		Azoxystrobin**	2.7		ng/L	P402814	RPD
		Bromacil	150		ng/L	P402814	
		Butylate	0.39	U	ng/L	P402814	
		Caffeine**	7.2	U	ng/L	P402814	RPD
		Carbophenothion	0.48	U	ng/L	P402814	
		Carfentrazone Ethyl**	0.096	U	ng/L	P402814	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P402814	
		Chlorpyrifos Methyl	0.048	U	ng/L	P402814	
		Cyanazine	3.1	U	ng/L	P402814	
		Demeton	1.4	U	ng/L	P402814	
		Diazinon	0.12	U	ng/L	P402814	
		Difenoconazole**	0.58	U	ng/L	P402814	
		Dimethenamid**	0.096	U	ng/L	P402814	
		Disulfoton	0.48	U	ng/L	P402814	
		Dithiopyr**	0.17	U	ng/L	P402814	
		EPTC	1.2	U	ng/L	P402814	
		Ethion	0.14	U	ng/L	P402814	
		Ethoprop	0.096	U	ng/L	P402814	
		Fenamiphos	0.48	U	ng/L	P402814	
		Fenbuconazole**	0.12	U	ng/L	P402814	
		Fipronil	0.24	U	ng/L	P402814	
		Fipronil Desulfinyl**	0.12	U	ng/L	P402814	
		Fipronil Sulfide	0.14	U	ng/L	P402814	

Field ID: G3SD0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2270229	EPA 8270E	Fipronil Sulfone	0.14	U	ng/L	P402814	
		Fluazifop-P-butyl**	0.096	U	ng/L	P402814	
		Fludioxonil**	0.12	U	ng/L	P402814	
		Flumioxazin**	1.7	U	ng/L	P402814	
		Flutolanil**	0.096	U	ng/L	P402814	
		Fluxapyroxad**	6.8		ng/L	P402814	
		Fonofos	0.19	U	ng/L	P402814	
		Hexazinone	14		ng/L	P402814	
		Imazalil**	0.72	U	ng/L	P402814	
		Iprodione**	0.58	U	ng/L	P402814	
		Malathion	0.34	U	ng/L	P402814	
		Metalaxyl	1.9	I	ng/L	P402814	RPD
		Metolachlor	31		ng/L	P402814	RPD
		Metribuzin	3.1	U	ng/L	P402814	
		Mevinphos	1.0	U	ng/L	P402814	
		Molinate	0.29	U	ng/L	P402814	
		Myclobutanil**	0.58	I	ng/L	P402814	
		Naled**	1.4	U	ng/L	P402814	
		Norflurazon	420		ng/L	P402814	
		Oxadiazon	0.29	U	ng/L	P402814	
		Oxyfluorfen**	0.14	U	ng/L	P402814	
		Parathion Ethyl	0.24	U	ng/L	P402814	
		Parathion Methyl	0.53	U	ng/L	P402814	
		Pendimethalin	2.0	I	ng/L	P402814	
		Phorate	0.51	U	ng/L	P402814	
		Prodiamine**	0.17	U	ng/L	P402814	
		Prometon	0.87	U	ng/L	P402814	
		Prometryn	0.47	I	ng/L	P402814	
		Pronamide**	0.14	U	ng/L	P402814	
		Propiconazole**	0.48	U	ng/L	P402814	RPD
		Pyriproxyfen**	0.12	U	ng/L	P402814	
		Simazine	4.0		ng/L	P402814	
		Sulfentrazone**	0.48	U	ng/L	P402814	
		Tebuconazole**	0.48	U	ng/L	P402814	
		Terbufos	0.096	U	ng/L	P402814	
		Terbuthylazine	0.41	U	ng/L	P402814	

Ref. Method and Comment:

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

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

Non-Conformance Report

NCR ID: 8993

Event(s)

SO-DIST-2021-08-18-01

Job(s)

TLH-2021-08-18-81

Sample(s)

2270229

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Sample Integrity

Observation: Sample received with cracked cap.

Resolution: Additional container logged in.

Authorized by/Date: Joshua Ayres 8/25/2021

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P402659

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P402997

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P403000

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P403033

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P403178

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P402812

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P402813

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P402818

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P402651

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
 Batch ID: P402612

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.10	U	ng/L
Dichlobenil	0.10	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P402612

Component	Result	Code	Units
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8270E

Batch ID: P402814

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P402814

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P402814

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P402814

Component	Result	Code	Units
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8276

Batch ID: P402612

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

Reference Method: EPA 8321B

Batch ID: P402513

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

Reference Method: EPA 8321B

Batch ID: P402556

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P402556

Component	Result	Code	Units
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B

Batch ID: P402808

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	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: P402656

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011

Batch ID: P402803

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

Reference Method: SM 2540 C-2011

Batch ID: P403216

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P403195

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P402805

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P403117

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P402997

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

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P403000

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

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P403033

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P403178

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P402812

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P402813

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P402818

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: P402651

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

Reference Method: EPA 8270E
 Batch ID: P402612

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	46.4	48.6	P/P	20 - 150
Alpha-BHC	94.7	95.4	P/P	50 - 150
Alpha-Chlordane	66.2	67.2	P/P	50 - 150
Beta-BHC	111	108	P/P	50 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P402612

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Beta-Cyfluthrin	97.7	73.5	P/P	50 - 150
Bifenthrin	78.8	63.2	P/P	40 - 150
Chlorothalonil	120	113	P/P	20 - 150
Cis-Nonachlor	64.0	58.2	P/P	50 - 150
Cypermethrin	102	76.5	P/P	50 - 150
Dacthal	93.2	94.0	P/P	50 - 150
DDD-p,p'	71.1	64.3	P/P	50 - 150
DDE-p,p'	73.1	77.3	P/P	50 - 150
DDT-p,p'	68.9	67.6	P/P	50 - 150
Delta-BHC	119	115	P/P	50 - 150
Deltamethrin	111	74.6	P/P	50 - 150
Dichlobenil	73.5	75.2	P/P	40 - 150
Dicofol	64.3	58.0	P/P	50 - 150
Dieldrin	75.8	78.0	P/P	50 - 150
Endosulfan I	75.2	78.6	P/P	50 - 150
Endosulfan II	87.4	73.3	P/P	50 - 150
Endosulfan Sulfate	89.7	83.5	P/P	50 - 150
Endrin	77.2	68.3	P/P	50 - 150
Endrin Aldehyde	64.3	57.7	P/P	50 - 150
Endrin Ketone	92.0	82.3	P/P	50 - 150
Esfenvalerate	107	79.8	P/P	50 - 180
Ethalfuralin	64.6	66.3	P/P	50 - 150
Fenpropathrin	78.3	65.9	P/P	50 - 150
Gamma-BHC	102	101	P/P	50 - 150
Gamma-Chlordane	64.7	66.4	P/P	50 - 150
Heptachlor	59.7	62.7	P/P	50 - 150
Heptachlor Epoxide	74.4	78.4	P/P	50 - 150
Hexachlorobenzene	63.0	62.6	P/P	50 - 150
Kepone	86.4	56.7	P/P	30 - 180
Lambda-Cyhalothrin	104	81.5	P/P	50 - 200
Methoxychlor	85.6	79.5	P/P	50 - 150
MGK-264	88.5	92.1	P/P	30 - 150
Mirex	49.5	46.1	F/F	50 - 180
Permethrin	99.6	74.4	P/P	50 - 150
Phenothrin	50.2	39.7	P/P	20 - 150
Piperonyl Butoxide	95.8	85.3	P/P	50 - 150
Prallethrin	69.4	76.5	P/P	30 - 150
Tau-Fluvalinate	78.3	58.8	P/P	40 - 150
Tetramethrin	96.5	80.2	P/P	30 - 150
Trans-Nonachlor	62.2	65.8	P/P	50 - 150
Triclosan Methyl	75.3	77.9	P/P	50 - 150
Trifluralin	66.3	66.0	P/P	50 - 150

Reference Method: EPA 8270E
 Batch ID: P402814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	93.3	103	P/P	70 - 121
Alachlor	89.1	97.0	P/P	70 - 119
Ametryn	96.6	98.4	P/P	61 - 135
Atrazine	93.8	103	P/P	76 - 123
Atrazine Desethyl	63.7	70.9	P/P	35 - 140

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P402814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Azinphos Methyl	95.6	120	P/P	57 - 163
Azoxystrobin	101	114	P/P	43 - 231
Bromacil	47.2	59.6	P/P	42 - 123
Butylate	49.7	59.6	P/P	34 - 92.0
Caffeine	77.5	86.4	P/P	70 - 130
Carbophenothion	99.8	106	P/P	61 - 121
Carfentrazone Ethyl	92.5	98.3	P/P	62 - 139
Chlorpyrifos Ethyl	82.9	97.8	P/P	67 - 121
Chlorpyrifos Methyl	90.5	99.4	P/P	67 - 120
Cyanazine	95.9	113	P/P	20 - 226
Demeton	83.2	98.4	P/P	35 - 125
Diazinon	96.1	108	P/P	70 - 122
Difenoconazole	141	124	P/P	56 - 186
Dimethenamid	77.2	83.1	P/P	67 - 119
Disulfoton	78.5	85.6	P/P	47 - 120
Dithiopyr	83.0	95.1	P/P	67 - 118
EPTC	47.1	59.9	P/P	33 - 90.0
Ethion	72.9	55.9	P/P	40 - 133
Ethoprop	87.0	101	P/P	61 - 121
Fenamiphos	87.0	86.1	P/P	31 - 139
Fenbuconazole	97.0	106	P/P	66 - 141
Fipronil	88.5	93.9	P/P	62 - 129
Fipronil Desulfinyl	102	103	P/P	59 - 126
Fipronil Sulfide	80.1	85.8	P/P	63 - 117
Fipronil Sulfone	81.8	75.1	P/P	57 - 117
Fluazifop-P-butyl	100	106	P/P	63 - 124
Fludioxonil	93.1	97.4	P/P	63 - 123
Flumioxazin	127	111	P/P	34 - 245
Flutolanil	84.7	84.3	P/P	56 - 131
Fluxapyroxad	90.8	89.2	P/P	57 - 117
Fonofos	80.5	89.6	P/P	61 - 116
Hexazinone	99.4	104	P/P	55 - 138
Imazalil	103	109	P/P	33 - 143
Iprodione	89.2	89.4	P/P	59 - 118
Malathion	94.3	109	P/P	62 - 138
Metalaxyl	86.9	93.2	P/P	24 - 147
Metolachlor	93.5	97.8	P/P	68 - 118
Metribuzin	96.2	111	P/P	20 - 239
Mevinphos	81.1	92.8	P/P	46 - 124
Molinate	68.6	79.9	P/P	46 - 100
Myclobutanil	87.1	88.9	P/P	32 - 149
Naled	42.7	50.6	P/P	32 - 95.0
Norflurazon	67.7	62.3	P/P	57 - 127
Oxadiazon	80.2	80.7	P/P	63 - 118
Oxyfluorfen	79.4	80.6	P/P	69 - 137
Parathion Ethyl	88.1	96.8	P/P	70 - 113
Parathion Methyl	107	118	P/P	71 - 130
Pendimethalin	74.5	80.9	P/P	55 - 118
Phorate	75.7	83.7	P/P	46 - 125
Prodiamine	28.2	33.1	P/P	20 - 141
Prometon	81.5	78.9	P/P	54 - 122
Prometryn	86.4	91.9	P/P	66 - 124

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P402814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pronamide	101	106	P/P	79 - 122
Propiconazole	69.0	63.3	P/P	61 - 126
Pyriproxyfen	72.4	67.6	P/P	52 - 131
Simazine	89.8	102	P/P	75 - 128
Sulfentrazone	75.6	82.0	P/P	20 - 132
Tebuconazole	63.6	48.4	P/P	20 - 116
Terbufos	101	115	P/P	61 - 117
Terbutylazine	97.1	105	P/P	74 - 116

Reference Method: EPA 8276
Batch ID: P402612

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	83.6	78.7	P/P	56 - 117
Toxaphene	67.9	67.1	P/P	45 - 116

Reference Method: EPA 8321B
Batch ID: P402513

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	81.2		P	30 - 160
Aldicarb	95.1		P	30 - 160
Aldicarb Sulfone	82.0		P	30 - 160
Aldicarb Sulfoxide	76.7		P	30 - 160
Carbaryl	62.8		P	30 - 160
Carbofuran	64.1		P	30 - 160
Methiocarb	68.7		P	30 - 160
Methomyl	84.6		P	30 - 160
Oxamyl	80.6		P	30 - 160
Propoxur	65.5		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P402556

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	88.2		P	40 - 150
AMPA	98.9		P	40 - 160
Endothall	126		P	40 - 150
Glufosinate	96.1		P	40 - 160
Glyphosate	96.4		P	40 - 160
Sucralose	105		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P402808

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	82.9		P	40 - 150
2,4,5-T	87.1		P	40 - 150
Acetaminophen	75.1		P	30 - 150
Acetamiprid	80.5		P	40 - 150
Afidopyropen	65.6		P	40 - 150
Bentazon	92.0		P	30 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P402808

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Benzovindiflupyr	78.8		P	40 - 150
Carbamazepine	77.0		P	40 - 150
Clothianidin	74.8		P	40 - 150
Dinotefuran	75.8		P	40 - 150
Diuron	96.1		P	40 - 150
Fenuron	85.3		P	40 - 150
Fluridone	81.8		P	40 - 150
Hydrocodone	77.3		P	40 - 150
Ibuprofen	71.7		P	40 - 150
Imazapyr	91.6		P	40 - 150
Imidacloprid	85.0		P	40 - 150
Linuron	79.4		P	40 - 150
Mandestrobin	77.6		P	40 - 150
MCPP	87.3		P	40 - 150
Naproxen	58.1		P	40 - 150
Primidone	87.9		P	40 - 150
Pyraclostrobin	66.5		P	40 - 150
Thiamethoxam	78.0		P	40 - 150
Tolfenpyrad	35.0		P	30 - 150
Triclopyr	76.0		P	40 - 150

Reference Method: SM 2120 B-2011

Batch ID: P402656

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	104		P	85 - 115

Reference Method: SM 2320 B-2011

Batch ID: P402803

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	94 - 106

Reference Method: SM 4500 F-C-2011

Batch ID: P402805

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

Reference Method: SM 5310 B-2011

Batch ID: P403117

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P402997

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2269888	Chloride	98.3		P	90 - 110
2270130	Chloride	99.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P403000

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2269888	Sulfate	99.0		P	90 - 110
2270130	Sulfate	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P403033

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270110	Ammonia-N	95.6	96.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P403178

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270389	Kjeldahl Nitrogen	100	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P402812

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270006	NO2NO3-N	98.3	98.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P402813

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270178	NO2NO3-N	97.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P402818

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270131	Total-P	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P402651

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270176	O-Phosphate-P	98.4	99.0	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P402612

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270127	Aldrin	46.0	40.3	P/P	20 - 170
2270127	Alpha-BHC	93.7	87.0	P/P	50 - 170

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P402612

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270127	Alpha-Chlordane	73.4	64.2	P/P	50 - 170
2270127	Beta-BHC	122	125	P/P	50 - 170
2270127	Beta-Cyfluthrin	102	81.2	P/P	50 - 170
2270127	Bifenthrin	60.3	49.1	P/P	40 - 170
2270127	Chlorothalonil	140	129	P/P	20 - 170
2270127	Cis-Nonachlor	67.7	58.5	P/P	50 - 170
2270127	Cypermethrin	74.0	57.5	P/P	50 - 170
2270127	Dacthal	91.3	83.5	P/P	50 - 170
2270127	DDD-p,p'	73.2	68.6	P/P	50 - 170
2270127	DDE-p,p'	73.7	68.9	P/P	50 - 170
2270127	DDT-p,p'	69.6	60.9	P/P	50 - 170
2270127	Delta-BHC	127	124	P/P	50 - 170
2270127	Deltamethrin	98.1	74.8	P/P	50 - 170
2270127	Dichlobenil	32.3	40.5	F/P	40 - 170
2270127	Dicofol	57.3	50.4	P/P	50 - 170
2270127	Dieldrin	79.5	69.4	P/P	50 - 170
2270127	Endosulfan I	82.7	71.0	P/P	50 - 170
2270127	Endosulfan II	68.6	54.4	P/P	50 - 170
2270127	Endosulfan Sulfate	62.4	51.9	P/P	50 - 170
2270127	Endrin	63.1	68.0	P/P	50 - 170
2270127	Endrin Aldehyde	31.5	26.8	F/F	50 - 170
2270127	Endrin Ketone	111	88.3	P/P	50 - 170
2270127	Esfenvalerate	91.4	70.7	P/P	50 - 180
2270127	Ethalfuralin	52.1	55.8	P/P	50 - 170
2270127	Fenpropathrin	62.0	51.3	P/P	50 - 170
2270127	Gamma-BHC	107	111	P/P	50 - 170
2270127	Gamma-Chlordane	71.0	62.5	P/P	50 - 170
2270127	Heptachlor	64.8	52.2	P/P	50 - 170
2270127	Heptachlor Epoxide	81.4	70.7	P/P	50 - 170
2270127	Hexachlorobenzene	62.8	56.3	P/P	50 - 170
2270127	Kepone	68.6	41.9	P/P	30 - 180
2270127	Lambda-Cyhalothrin	86.1	66.3	P/P	50 - 200
2270127	Methoxychlor	91.8	75.4	P/P	50 - 170
2270127	MGK-264	72.8	72.6	P/P	30 - 170
2270127	Mirex	58.1	52.0	P/P	50 - 180
2270127	Permethrin	84.7	75.5	P/P	50 - 170
2270127	Phenothrin	23.4	33.7	P/P	20 - 170
2270127	Piperonyl Butoxide	66.3	61.0	P/P	50 - 170
2270127	Prallethrin	3.54	2.40	F/F	30 - 170
2270127	Tau-Fluvalinate	72.8	54.3	P/P	40 - 170
2270127	Tetramethrin	19.7	9.82	F/F	30 - 170
2270127	Trans-Nonachlor	72.5	61.1	P/P	50 - 170
2270127	Triclosan Methyl	75.8	68.3	P/P	50 - 170
2270127	Trifluralin	68.4	62.0	P/P	50 - 170

Reference Method: EPA 8270E
Batch ID: P402814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2269822	Acetochlor	110	118	P/P	66 - 122
2269822	Alachlor	95.0	105	P/P	65 - 122
2269822	Atrazine Desethyl	79.5	66.4	P/P	25 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P402814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2269822	Azinphos Methyl	105	115	P/P	44 - 174
2269822	Bromacil	91.1	89.9	P/P	31 - 145
2269822	Butylate	60.0	56.0	P/P	15 - 97.0
2269822	Caffeine	78.8	114	P/P	70 - 130
2269822	Carbophenothion	81.7	95.3	P/P	42 - 129
2269822	Carfentrazone Ethyl	91.9	92.8	P/P	62 - 145
2269822	Chlorpyrifos Ethyl	70.6	74.5	P/P	60 - 124
2269822	Chlorpyrifos Methyl	91.3	103	P/P	66 - 119
2269822	Cyanazine	103	123	P/P	17 - 225
2269822	Demeton	103	109	P/P	36 - 142
2269822	Diazinon	116	119	P/P	70 - 128
2269822	Difenoconazole	120	144	P/P	33 - 222
2269822	Dimethenamid	82.3	87.7	P/P	54 - 125
2269822	Disulfoton	65.8	66.7	P/P	49 - 133
2269822	Dithiopyr	90.2	104	P/P	55 - 123
2269822	EPTC	63.1	54.3	P/P	19 - 91.0
2269822	Ethion	42.3	56.3	P/P	13 - 143
2269822	Ethoprop	104	116	P/P	49 - 144
2269822	Fenamiphos	67.3	53.2	P/P	32 - 136
2269822	Fenbuconazole	96.8	114	P/P	73 - 148
2269822	Fipronil	88.7	97.8	P/P	57 - 129
2269822	Fipronil Desulfinyl	82.9	104	P/P	49 - 127
2269822	Fipronil Sulfide	76.6	93.1	P/P	44 - 127
2269822	Fipronil Sulfone	84.3	101	P/P	35 - 126
2269822	Fluazifop-P-butyl	92.7	102	P/P	67 - 129
2269822	Fludioxonil	98.1	107	P/P	61 - 126
2269822	Flumioxazin	132	157	P/P	38 - 279
2269822	Flutolanil	75.9	84.2	P/P	55 - 136
2269822	Fonofos	89.3	99.5	P/P	58 - 125
2269822	Hexazinone	137	111	P/P	57 - 148
2269822	Imazalil	52.1	53.2	P/P	10 - 221
2269822	Iprodione	89.1	97.1	P/P	32 - 140
2269822	Malathion	104	125	P/P	52 - 138
2269822	Metribuzin	142	133	P/P	16 - 272
2269822	Mevinphos	90.3	99.5	P/P	45 - 140
2269822	Molinate	77.0	79.1	P/P	41 - 103
2269822	Myclobutanil	77.8	95.2	P/P	60 - 134
2269822	Naled	50.2	55.6	P/P	20 - 113
2269822	Norflurazon	75.8	80.1	P/P	51 - 123
2269822	Oxadiazon	70.5	76.0	P/P	44 - 125
2269822	Oxyfluorfen	96.3	104	P/P	66 - 176
2269822	Parathion Ethyl	92.1	104	P/P	57 - 132
2269822	Parathion Methyl	122	135	P/P	59 - 156
2269822	Pendimethalin	94.4	103	P/P	59 - 129
2269822	Phorate	82.2	90.7	P/P	47 - 136
2269822	Prodiamine	52.6	61.3	P/P	10 - 159
2269822	Prometon	81.4	84.1	P/P	59 - 127
2269822	Prometryn	61.2	93.0	P/P	59 - 129
2269822	Pronamide	105	114	P/P	65 - 145
2269822	Pyriproxyfen	82.0	89.7	P/P	21 - 180
2269822	Simazine	110	118	P/P	63 - 147
2269822	Sulfentrazone	99.8	98.9	P/P	32 - 136

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P402814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2269822	Tebuconazole	43.4	46.6	P/P	10 - 117
2269822	Terbufos	118	127	P/P	61 - 131
2269822	Terbutylazine	107	116	P/P	62 - 126

Reference Method: EPA 8276
Batch ID: P402612

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270340	Chlordane	90.7	82.1	P/P	47 - 128
2270340	Toxaphene	72.9	69.9	P/P	11 - 163

Reference Method: EPA 8321B
Batch ID: P402513

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2269819	3-Hydroxycarbofuran	44.5	33.2	P/F	40 - 150
2269819	Aldicarb	39.7	51.6	P/P	30 - 150
2269819	Aldicarb Sulfone	60.2	63.3	P/P	40 - 150
2269819	Aldicarb Sulfoxide	40.1	43.9	P/P	40 - 150
2269819	Carbaryl	60.4	61.2	P/P	40 - 150
2269819	Carbofuran	68.1	64.2	P/P	40 - 150
2269819	Methiocarb	75.2	68.7	P/P	40 - 150
2269819	Methomyl	81.4	78.0	P/P	40 - 150
2269819	Oxamyl	77.9	71.9	P/P	40 - 150
2269819	Propoxur	65.8	62.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P402556

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2269820	Acesulfame K	81.1	65.2	P/P	40 - 150
2269820	AMPA	55.8	39.5	P/F	40 - 160
2269820	Endothall	69.7	64.1	P/P	40 - 150
2269820	Glufosinate	158	143	P/P	40 - 160
2269820	Sucralose	114	110	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P402808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270486	2,4-D	107	104	P/P	40 - 150
2270486	2,4,5-T	100	99.1	P/P	40 - 150
2270486	Acetaminophen	85.7	86.3	P/P	30 - 150
2270486	Acetamiprid	94.1	94.9	P/P	40 - 150
2270486	Afidopyropen	80.2	67.1	P/P	40 - 150
2270486	Benzovindiflupyr	80.8	89.7	P/P	40 - 150
2270486	Carbamazepine	89.4	96.8	P/P	40 - 150
2270486	Clothianidin	114	102	P/P	40 - 150
2270486	Dinotefuran	101	108	P/P	40 - 150
2270486	Diuron	78.5	74.7	P/P	40 - 150
2270486	Fenuron	88.6	88.4	P/P	40 - 150
2270486	Fluridone	84.1	85.0	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P402808

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270486	Hydrocodone	89.9	88.8	P/P	40 - 150
2270486	Ibuprofen	84.5	70.1	P/P	40 - 150
2270486	Imazapyr	157	133	F/P	40 - 150
2270486	Imidacloprid	142	151	P/F	40 - 150
2270486	Linuron	76.2	85.8	P/P	40 - 150
2270486	Mandestrobin	83.6	84.6	P/P	40 - 150
2270486	MCP	101	104	P/P	40 - 150
2270486	Naproxen	76.5	80.5	P/P	40 - 150
2270486	Primidone	92.5	91.2	P/P	40 - 150
2270486	Pyraclostrobin	77.8	81.9	P/P	40 - 150
2270486	Thiamethoxam	127	127	P/P	40 - 150
2270486	Tolfenpyrad	50.0	55.1	P/P	30 - 150
2270486	Triclopyr	86.8	92.8	P/P	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P402805

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270130	Fluoride	100	99.9	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P403117

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2270134	Organic Carbon	96.6	96.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P402659

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270171	Turbidity	2.46	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P402997

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270130	Chloride	0.571	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P403000

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270130	Sulfate	0.707	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P403033

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270110	Ammonia-N	0.528	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P403178

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270389	Kjeldahl Nitrogen	1.99	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P402812

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270006	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P402813

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270178	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P402818

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270131	Total-P	1.32	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P402651

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270176	O-Phosphate-P	0.424	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P402612

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270127	Aldrin	13.2	Spike	P	0 - 30
2270127	Alpha-BHC	7.39	Spike	P	0 - 30
2270127	Alpha-Chlordane	13.5	Spike	P	0 - 30
2270127	Beta-BHC	2.46	Spike	P	0 - 30
2270127	Beta-Cyfluthrin	22.3	Spike	P	0 - 30
2270127	Bifenthrin	20.5	Spike	P	0 - 30
2270127	Chlorothalonil	8.08	Spike	P	0 - 50
2270127	Cis-Nonachlor	14.6	Spike	P	0 - 30
2270127	Cypermethrin	25.0	Spike	P	0 - 30
2270127	Dacthal	8.89	Spike	P	0 - 30
2270127	DDD-p,p'	6.51	Spike	P	0 - 30
2270127	DDE-p,p'	6.84	Spike	P	0 - 30
2270127	DDT-p,p'	13.4	Spike	P	0 - 30
2270127	Delta-BHC	2.46	Spike	P	0 - 30
2270127	Deltamethrin	27.0	Spike	P	0 - 30
2270127	Dichlobenil	22.6	Spike	P	0 - 30
2270127	Dicofol	12.7	Spike	P	0 - 30
2270127	Dieldrin	13.5	Spike	P	0 - 30
2270127	Endosulfan I	15.1	Spike	P	0 - 30
2270127	Endosulfan II	23.2	Spike	P	0 - 30
2270127	Endosulfan Sulfate	18.4	Spike	P	0 - 30
2270127	Endrin	7.57	Spike	P	0 - 30
2270127	Endrin Aldehyde	15.9	Spike	P	0 - 30
2270127	Endrin Ketone	23.0	Spike	P	0 - 30
2270127	Esfenvalerate	25.5	Spike	P	0 - 30
2270127	Ethalfuralin	6.76	Spike	P	0 - 30
2270127	Fenpropathrin	18.7	Spike	P	0 - 30
2270127	Gamma-BHC	4.45	Spike	P	0 - 30
2270127	Gamma-Chlordane	12.8	Spike	P	0 - 30
2270127	Heptachlor	21.6	Spike	P	0 - 30
2270127	Heptachlor Epoxide	14.1	Spike	P	0 - 30
2270127	Hexachlorobenzene	10.9	Spike	P	0 - 30
2270127	Kepone	48.4	Spike	F	0 - 30
2270127	Lambda-Cyhalothrin	26.0	Spike	P	0 - 30
2270127	Methoxychlor	19.6	Spike	P	0 - 30
2270127	MGK-264	0.252	Spike	P	0 - 30
2270127	Mirex	11.1	Spike	P	0 - 30
2270127	Permethrin	11.6	Spike	P	0 - 30
2270127	Phenothrin	36.1	Spike	F	0 - 30
2270127	Piperonyl Butoxide	8.36	Spike	P	0 - 30
2270127	Prallethrin	38.5	Spike	F	0 - 30
2270127	Tau-Fluvalinate	29.2	Spike	P	0 - 30
2270127	Tetramethrin	66.8	Spike	F	0 - 30
2270127	Trans-Nonachlor	17.0	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P402612

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270127	Triclosan Methyl	10.3	Spike	P	0 - 30
2270127	Trifluralin	9.81	Spike	P	0 - 30
LFB	Aldrin	4.69	LCS	P	0 - 30
LFB	Alpha-BHC	0.750	LCS	P	0 - 30
LFB	Alpha-Chlordane	1.39	LCS	P	0 - 30
LFB	Beta-BHC	2.65	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	28.3	LCS	P	0 - 30
LFB	Bifenthrin	22.0	LCS	P	0 - 30
LFB	Chlorothalonil	5.84	LCS	P	0 - 50
LFB	Cis-Nonachlor	9.50	LCS	P	0 - 30
LFB	Cypermethrin	28.6	LCS	P	0 - 30
LFB	Dacthal	0.872	LCS	P	0 - 30
LFB	DDD-p,p'	10.1	LCS	P	0 - 30
LFB	DDE-p,p'	5.53	LCS	P	0 - 30
LFB	DDT-p,p'	1.92	LCS	P	0 - 30
LFB	Delta-BHC	2.92	LCS	P	0 - 30
LFB	Deltamethrin	39.1	LCS	F	0 - 30
LFB	Dichlobenil	2.35	LCS	P	0 - 30
LFB	Dicofol	10.2	LCS	P	0 - 30
LFB	Dieldrin	2.76	LCS	P	0 - 30
LFB	Endosulfan I	4.49	LCS	P	0 - 30
LFB	Endosulfan II	17.6	LCS	P	0 - 30
LFB	Endosulfan Sulfate	7.14	LCS	P	0 - 30
LFB	Endrin	12.2	LCS	P	0 - 30
LFB	Endrin Aldehyde	10.8	LCS	P	0 - 30
LFB	Endrin Ketone	11.2	LCS	P	0 - 30
LFB	Esfenvalerate	29.3	LCS	P	0 - 30
LFB	Ethalfuralin	2.57	LCS	P	0 - 30
LFB	Fenpropathrin	17.3	LCS	P	0 - 30
LFB	Gamma-BHC	0.976	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.65	LCS	P	0 - 30
LFB	Heptachlor	4.97	LCS	P	0 - 30
LFB	Heptachlor Epoxide	5.30	LCS	P	0 - 30
LFB	Hexachlorobenzene	0.742	LCS	P	0 - 30
LFB	Kepone	41.6	LCS	F	0 - 30
LFB	Lambda-Cyhalothrin	24.3	LCS	P	0 - 30
LFB	Methoxychlor	7.39	LCS	P	0 - 30
LFB	MGK-264	3.90	LCS	P	0 - 30
LFB	Mirex	6.95	LCS	P	0 - 30
LFB	Permethrin	29.1	LCS	P	0 - 30
LFB	Phenothrin	23.4	LCS	P	0 - 30
LFB	Piperonyl Butoxide	11.6	LCS	P	0 - 30
LFB	Prallethrin	9.69	LCS	P	0 - 30
LFB	Tau-Fluvalinate	28.4	LCS	P	0 - 30
LFB	Tetramethrin	18.4	LCS	P	0 - 30
LFB	Trans-Nonachlor	5.65	LCS	P	0 - 30
LFB	Triclosan Methyl	3.43	LCS	P	0 - 30
LFB	Trifluralin	0.400	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P402814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2269822	Acetochlor	6.43	Spike	P	0 - 30
2269822	Alachlor	10.1	Spike	P	0 - 30
2269822	Ametryn	23.0	Spike	P	0 - 30
2269822	Atrazine	45.9	Spike	F	0 - 30
2269822	Atrazine Desethyl	8.16	Spike	P	0 - 30
2269822	Azinphos Methyl	8.71	Spike	P	0 - 30
2269822	Azoxystrobin	39.3	Spike	F	0 - 30
2269822	Bromacil	1.19	Spike	P	0 - 30
2269822	Butylate	6.94	Spike	P	0 - 30
2269822	Caffeine	36.4	Spike	F	0 - 30
2269822	Carbophenothion	15.3	Spike	P	0 - 30
2269822	Carfentrazone Ethyl	0.969	Spike	P	0 - 30
2269822	Chlorpyrifos Ethyl	5.31	Spike	P	0 - 30
2269822	Chlorpyrifos Methyl	12.2	Spike	P	0 - 30
2269822	Cyanazine	17.4	Spike	P	0 - 30
2269822	Demeton	4.76	Spike	P	0 - 30
2269822	Diazinon	2.57	Spike	P	0 - 30
2269822	Difenoconazole	17.7	Spike	P	0 - 30
2269822	Dimethenamid	6.37	Spike	P	0 - 30
2269822	Disulfoton	1.37	Spike	P	0 - 30
2269822	Dithiopyr	14.4	Spike	P	0 - 30
2269822	EPTC	15.0	Spike	P	0 - 30
2269822	Ethion	28.4	Spike	P	0 - 30
2269822	Ethoprop	10.9	Spike	P	0 - 30
2269822	Fenamiphos	23.4	Spike	P	0 - 30
2269822	Fenbuconazole	16.3	Spike	P	0 - 30
2269822	Fipronil	9.17	Spike	P	0 - 30
2269822	Fipronil Desulfinyl	22.6	Spike	P	0 - 30
2269822	Fipronil Sulfide	19.5	Spike	P	0 - 30
2269822	Fipronil Sulfone	17.8	Spike	P	0 - 30
2269822	Fluazifop-P-butyl	9.60	Spike	P	0 - 30
2269822	Fludioxonil	8.34	Spike	P	0 - 30
2269822	Flumioxazin	16.9	Spike	P	0 - 30
2269822	Flutolanil	10.4	Spike	P	0 - 30
2269822	Fluxapyroxad	25.3	Spike	P	0 - 30
2269822	Fonofos	10.8	Spike	P	0 - 30
2269822	Hexazinone	13.2	Spike	P	0 - 30
2269822	Imazalil	2.07	Spike	P	0 - 30
2269822	Iprodione	8.55	Spike	P	0 - 30
2269822	Malathion	18.1	Spike	P	0 - 30
2269822	Metalaxyl	115	Spike	F	0 - 30
2269822	Metolachlor	107	Spike	F	0 - 30
2269822	Metribuzin	6.46	Spike	P	0 - 30
2269822	Mevinphos	9.71	Spike	P	0 - 30
2269822	Molinate	2.66	Spike	P	0 - 30
2269822	Myclobutanil	20.1	Spike	P	0 - 30
2269822	Naled	10.1	Spike	P	0 - 30
2269822	Norflurazon	5.45	Spike	P	0 - 30
2269822	Oxadiazon	6.82	Spike	P	0 - 30
2269822	Oxyfluorfen	7.36	Spike	P	0 - 30
2269822	Parathion Ethyl	12.4	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P402814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2269822	Parathion Methyl	10.6	Spike	P	0 - 30
2269822	Pendimethalin	8.38	Spike	P	0 - 30
2269822	Phorate	9.76	Spike	P	0 - 30
2269822	Prodiamine	15.3	Spike	P	0 - 30
2269822	Prometon	3.25	Spike	P	0 - 30
2269822	Prometryn	28.1	Spike	P	0 - 30
2269822	Pronamide	8.18	Spike	P	0 - 30
2269822	Propiconazole	70.0	Spike	F	0 - 30
2269822	Pyriproxyfen	9.06	Spike	P	0 - 30
2269822	Simazine	7.10	Spike	P	0 - 30
2269822	Sulfentrazone	0.838	Spike	P	0 - 30
2269822	Tebuconazole	6.33	Spike	P	0 - 30
2269822	Terbufos	7.20	Spike	P	0 - 30
2269822	Terbuthylazine	8.64	Spike	P	0 - 30
LFB	Acetochlor	9.94	LCS	P	0 - 30
LFB	Alachlor	8.51	LCS	P	0 - 30
LFB	Ametryn	1.83	LCS	P	0 - 30
LFB	Atrazine	9.43	LCS	P	0 - 30
LFB	Atrazine Desethyl	10.7	LCS	P	0 - 30
LFB	Azinphos Methyl	22.7	LCS	P	0 - 30
LFB	Azoxystrobin	12.3	LCS	P	0 - 30
LFB	Bromacil	23.2	LCS	P	0 - 30
LFB	Butylate	18.0	LCS	P	0 - 30
LFB	Caffeine	10.8	LCS	P	0 - 30
LFB	Carbophenothion	5.90	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	6.10	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	16.5	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	9.35	LCS	P	0 - 30
LFB	Cyanazine	16.7	LCS	P	0 - 30
LFB	Demeton	16.7	LCS	P	0 - 30
LFB	Diazinon	11.8	LCS	P	0 - 30
LFB	Difenoconazole	12.9	LCS	P	0 - 30
LFB	Dimethenamid	7.44	LCS	P	0 - 30
LFB	Disulfoton	8.59	LCS	P	0 - 30
LFB	Dithiopyr	13.6	LCS	P	0 - 30
LFB	EPTC	23.9	LCS	P	0 - 30
LFB	Ethion	26.4	LCS	P	0 - 30
LFB	Ethoprop	14.7	LCS	P	0 - 30
LFB	Fenamiphos	1.02	LCS	P	0 - 30
LFB	Fenbuconazole	9.07	LCS	P	0 - 30
LFB	Fipronil	5.90	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	1.44	LCS	P	0 - 30
LFB	Fipronil Sulfide	6.90	LCS	P	0 - 30
LFB	Fipronil Sulfone	8.53	LCS	P	0 - 30
LFB	Fluazifop-P-butyl	5.46	LCS	P	0 - 30
LFB	Fludioxonil	4.49	LCS	P	0 - 30
LFB	Flumioxazin	13.2	LCS	P	0 - 30
LFB	Flutolanil	0.441	LCS	P	0 - 30
LFB	Fluxapyroxad	1.87	LCS	P	0 - 30
LFB	Fonofos	10.7	LCS	P	0 - 30
LFB	Hexazinone	4.85	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P402814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Imazalil	5.53	LCS	P	0 - 30
LFB	Iprodione	0.234	LCS	P	0 - 30
LFB	Malathion	14.2	LCS	P	0 - 30
LFB	Metalaxyl	7.02	LCS	P	0 - 30
LFB	Metolachlor	4.48	LCS	P	0 - 30
LFB	Metribuzin	14.3	LCS	P	0 - 30
LFB	Mevinphos	13.5	LCS	P	0 - 30
LFB	Molinate	15.1	LCS	P	0 - 30
LFB	Myclobutanil	2.04	LCS	P	0 - 30
LFB	Naled	16.9	LCS	P	0 - 30
LFB	Norflurazon	8.35	LCS	P	0 - 30
LFB	Oxadiazon	0.647	LCS	P	0 - 30
LFB	Oxyfluorfen	1.54	LCS	P	0 - 30
LFB	Parathion Ethyl	9.46	LCS	P	0 - 30
LFB	Parathion Methyl	9.36	LCS	P	0 - 30
LFB	Pendimethalin	8.30	LCS	P	0 - 30
LFB	Phorate	10.0	LCS	P	0 - 30
LFB	Prodiamine	16.0	LCS	P	0 - 30
LFB	Prometon	3.34	LCS	P	0 - 30
LFB	Prometryn	6.23	LCS	P	0 - 30
LFB	Pronamide	4.73	LCS	P	0 - 30
LFB	Propiconazole	8.66	LCS	P	0 - 30
LFB	Pyriproxyfen	6.92	LCS	P	0 - 30
LFB	Simazine	13.0	LCS	P	0 - 30
LFB	Sulfentrazone	8.03	LCS	P	0 - 30
LFB	Tebuconazole	27.1	LCS	P	0 - 30
LFB	Terbufos	13.3	LCS	P	0 - 30
LFB	Terbutylazine	7.90	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P402612

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270340	Chlordane	9.86	Spike	P	0 - 30
2270340	Toxaphene	4.18	Spike	P	0 - 30
LFB	Chlordane	6.04	LCS	P	0 - 30
LFB	Toxaphene	1.19	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P402513

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2269819	3-Hydroxycarbofuran	29.1	Spike	P	0 - 30
2269819	Aldicarb	26.0	Spike	P	0 - 30
2269819	Aldicarb Sulfone	5.12	Spike	P	0 - 30
2269819	Aldicarb Sulfoxide	9.05	Spike	P	0 - 30
2269819	Carbaryl	1.41	Spike	P	0 - 30
2269819	Carbofuran	6.01	Spike	P	0 - 30
2269819	Methiocarb	8.96	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P402513

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2269819	Methomyl	4.30	Spike	P	0 - 30
2269819	Oxamyl	8.03	Spike	P	0 - 30
2269819	Propoxur	5.89	Spike	P	0 - 30

Reference Method: EPA 8321B
 Batch ID: P402556

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2269820	Acesulfame K	21.6	Spike	P	0 - 30
2269820	AMPA	18.8	Spike	P	0 - 30
2269820	Endothall	8.35	Spike	P	0 - 30
2269820	Glufosinate	9.49	Spike	P	0 - 30
2269820	Glyphosate	0.454	Spike	P	0 - 30
2269820	Sucralose	3.85	Spike	P	0 - 30

Reference Method: EPA 8321B
 Batch ID: P402808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270486	2,4-D	2.53	Spike	P	0 - 30
2270486	2,4,5-T	1.19	Spike	P	0 - 30
2270486	Acetaminophen	0.572	Spike	P	0 - 30
2270486	Acetamiprid	0.839	Spike	P	0 - 30
2270486	Afidopyropen	17.7	Spike	P	0 - 30
2270486	Bentazon	4.63	Spike	P	0 - 30
2270486	Benzovindiflupyr	10.4	Spike	P	0 - 30
2270486	Carbamazepine	7.90	Spike	P	0 - 30
2270486	Clothianidin	10.7	Spike	P	0 - 30
2270486	Dinotefuran	5.97	Spike	P	0 - 30
2270486	Diuron	4.62	Spike	P	0 - 30
2270486	Fenuron	0.216	Spike	P	0 - 30
2270486	Fluridone	1.02	Spike	P	0 - 30
2270486	Hydrocodone	1.23	Spike	P	0 - 30
2270486	Ibuprofen	18.7	Spike	P	0 - 30
2270486	Imazapyr	11.1	Spike	P	0 - 30
2270486	Imidacloprid	4.03	Spike	P	0 - 30
2270486	Linuron	11.8	Spike	P	0 - 30
2270486	Mandestrobin	1.20	Spike	P	0 - 30
2270486	MCPP	2.30	Spike	P	0 - 30
2270486	Naproxen	5.06	Spike	P	0 - 30
2270486	Primidone	1.46	Spike	P	0 - 30
2270486	Pyraclostrobin	5.05	Spike	P	0 - 30
2270486	Thiamethoxam	0.0550	Spike	P	0 - 30
2270486	Tolfenpyrad	9.75	Spike	P	0 - 30
2270486	Triclopyr	6.74	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
Batch ID: P402656

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270174	Color (true)	0.217	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P402803

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270130	Total Alkalinity	0.888	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P403216

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270130	TDS	0.0	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P402805

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270130	Fluoride	0.469	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P403117

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2270134	Organic Carbon	0.205	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2270206
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	38.4	P	30 - 160

Lab Sample ID: 2270207
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	101	P	30 - 160
EPA 8321B	Acetaminophen-d4	89.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	100	P	30 - 160
EPA 8321B	Diuron-d6	78.5	P	30 - 160
EPA 8321B	Endothall-d6	120	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	50.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.8	P	30 - 160
EPA 8321B	Primidone-d5	89.1	P	30 - 160
EPA 8321B	Sucralose-d6	106	P	30 - 160

Lab Sample ID: 2270229
Field Sample ID: G3SD0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	77.6	P	20 - 200
EPA 8270E	Simazine-d10	129	P	73 - 135
EPA 8270E	Terbufos-d10	124	P	58 - 130

Lab Sample ID: 2270230
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	70.6	P	35 - 120
EPA 8270E	Tetrachloro-m-xylene	49.0	P	30 - 110
EPA 8276	Decachlorobiphenyl	81.8	P	29 - 92.0
EPA 8276	PCNB	80.0	P	43 - 134

Lab Sample ID: 2270231
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	67.3	P	20 - 200
EPA 8270E	Simazine-d10	119	P	73 - 135
EPA 8270E	Terbufos-d10	106	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A107319

Included Lab Sample IDs: 2270173, 2270176, 2270179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.8	98.9	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A107322

Included Lab Sample IDs: 2270171, 2270174, 2270177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	102	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A107323

Included Lab Sample IDs: 2270171, 2270174, 2270177

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

Reference Method: EPA 8321B

Run ID: A107353

Included Lab Sample IDs: 2270207

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	96.6	97.1	P/P	60 - 160
Glufosinate	105	97.1	P/P	60 - 160
Glyphosate	98.6	93.3	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A107377

Included Lab Sample IDs: 2270207

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	89.8	90.2	P/P	60 - 160
Endothall	109	131	P/P	60 - 160
Sucralose	107	103	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A107380

Included Lab Sample IDs: 2270171, 2270174, 2270177

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

Reference Method: SM 4500 F-C-2011

Run ID: A107380

Included Lab Sample IDs: 2270171, 2270174, 2270177

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A107385

Included Lab Sample IDs: 2270172, 2270175, 2270178

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

Reference Method: EPA 8270E

Run ID: A107412

Included Lab Sample IDs: 2270230

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.9		P	80 - 120
Alpha-BHC	101		P	80 - 120
Alpha-Chlordane	105		P	80 - 120
Beta-BHC	102		P	80 - 120
Beta-Cyfluthrin	94.0		P	80 - 120
Bifenthrin	98.7		P	80 - 120
Chlorothalonil	98.9		P	80 - 120
Cis-Nonachlor	89.1		P	80 - 120
Cypermethrin	96.2		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	90.8		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	102		P	80 - 120
Deltamethrin	92.1		P	80 - 120
Dichlobenil	87.8		P	80 - 120
Dicofol	81.5		P	80 - 120
Dieldrin	101		P	80 - 120
Endosulfan I	100		P	80 - 120
Endosulfan II	89.6		P	80 - 120
Endosulfan Sulfate	85.4		P	80 - 120
Endrin	94.3		P	80 - 120
Endrin Aldehyde	85.6		P	80 - 120
Endrin Ketone	89.2		P	80 - 120
Esfenvalerate	99.8		P	80 - 120
Ethalfuralin	100		P	80 - 120
Fenpropathrin	90.7		P	80 - 120
Gamma-BHC	111		P	80 - 120
Gamma-Chlordane	106		P	80 - 120
Heptachlor	104		P	80 - 120
Heptachlor Epoxide	104		P	80 - 120
Hexachlorobenzene	98.1		P	80 - 120
Kepone	69.7*		F	80 - 120
Lambda-Cyhalothrin	94.2		P	80 - 120
Methoxychlor	99.8		P	80 - 120
MGK-264	103		P	80 - 120
Mirex	93.9		P	80 - 120
Permethrin	92.9		P	80 - 120
Phenothrin	92.3		P	80 - 120
Piperonyl Butoxide	92.0		P	80 - 120
Prallethrin	95.0		P	80 - 120
Tau-Fluvalinate	93.7		P	80 - 120
Tetramethrin	103		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A107412
Included Lab Sample IDs: 2270230

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Trans-Nonachlor	98.4		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	99.6		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A107449
Included Lab Sample IDs: 2270171, 2270174, 2270177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.9	99.2	P/P	90 - 110
Sulfate	99.2	99.4	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A107453
Included Lab Sample IDs: 2270206

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	79.1	120	P/P	60 - 150
Aldicarb	96.9	76.5	P/P	60 - 150
Aldicarb Sulfone	105	112	P/P	50 - 150
Aldicarb Sulfoxide	99.6	99.5	P/P	50 - 150
Carbaryl	109	106	P/P	60 - 150
Carbofuran	103	106	P/P	50 - 150
Methiocarb	103	109	P/P	50 - 150
Methomyl	98.1	101	P/P	50 - 150
Oxamyl	97.2	105	P/P	50 - 150
Propoxur	103	101	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A107460
Included Lab Sample IDs: 2270207

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	94.6	92.7	P/P	50 - 150
2,4,5-T	94.6	99.0	P/P	50 - 150
Acetaminophen	98.4	97.3	P/P	60 - 160
Acetamiprid	102	108	P/P	50 - 150
Afidopyropen	99.4	97.6	P/P	50 - 150
Bentazon	116	116	P/P	50 - 160
Benzovindiflupyr	108	114	P/P	50 - 150
Carbamazepine	106	107	P/P	60 - 150
Clothianidin	87.6	84.9	P/P	60 - 150
Dinotefuran	99.2	103	P/P	50 - 150
Diuron	122	125	P/P	60 - 160
Fenuron	98.3	100	P/P	60 - 150
Fluridone	88.8	107	P/P	60 - 160
Hydrocodone	90.3	97.0	P/P	60 - 150
Ibuprofen	66.8	84.7	P/P	50 - 160
Imidacloprid	97.1	99.2	P/P	60 - 150
Linuron	102	101	P/P	60 - 150
Mandestrobin	101	108	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A107460
Included Lab Sample IDs: 2270207

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
MCPD	84.3	96.4	P/P	50 - 150
Naproxen	78.9	73.5	P/P	50 - 160
Primidone	77.9	107	P/P	60 - 150
Pyraclostrobin	100	109	P/P	60 - 150
Thiamethoxam	103	97.8	P/P	50 - 150
Tolfenpyrad	97.6	101	P/P	60 - 150
Triclopyr	103	102	P/P	50 - 150

Reference Method: EPA 8276
Run ID: A107479
Included Lab Sample IDs: 2270230

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.1		P	80 - 120
Toxaphene	106		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A107480
Included Lab Sample IDs: 2270172, 2270175, 2270178

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A107482
Included Lab Sample IDs: 2270172, 2270175, 2270178

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.5	99.1	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A107499
Included Lab Sample IDs: 2270207

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazapyr	96.8	111	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A107526
Included Lab Sample IDs: 2270229, 2270231

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	94.9		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	93.5		P	80 - 120
Atrazine	99.2		P	80 - 120
Atrazine Desethyl	94.1		P	80 - 120
Azinphos Methyl	88.3		P	80 - 120
Azoxystrobin	99.7		P	80 - 120
Bromacil	108		P	80 - 120
Butylate	92.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A107526

Included Lab Sample IDs: 2270229, 2270231

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Caffeine	94.6		P	80 - 120
Carbophenothion	88.9		P	80 - 120
Carfentrazone Ethyl	93.1		P	80 - 120
Chlorpyrifos Ethyl	91.9		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Cyanazine	99.2		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	99.7		P	80 - 120
Difenoconazole	95.0		P	80 - 120
Dimethenamid	98.5		P	80 - 120
Disulfoton	91.6		P	80 - 120
Dithiopyr	97.1		P	80 - 120
EPTC	102		P	80 - 120
Ethion	88.6		P	80 - 120
Ethoprop	111		P	80 - 120
Fenamiphos	91.5		P	80 - 120
Fenbuconazole	90.6		P	80 - 120
Fipronil	92.3		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	99.4		P	80 - 120
Fipronil Sulfone	98.9		P	80 - 120
Fluazifop-P-butyl	94.9		P	80 - 120
Fludioxonil	89.4		P	80 - 120
Flumioxazin	92.2		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	82.4		P	80 - 120
Fonofos	95.8		P	80 - 120
Hexazinone	111		P	80 - 120
Imazalil	98.1		P	80 - 120
Iprodione	91.3		P	80 - 120
Malathion	86.9		P	80 - 120
Metaxyl	104		P	80 - 120
Metolachlor	96.0		P	80 - 120
Metribuzin	104		P	80 - 120
Mevinphos	102		P	80 - 120
Molinate	101		P	80 - 120
Myclobutanil	107		P	80 - 120
Naled	108		P	80 - 120
Norflurazon	94.6		P	80 - 120
Oxadiazon	90.1		P	80 - 120
Oxyfluorfen	90.4		P	80 - 120
Parathion Ethyl	105		P	80 - 120
Parathion Methyl	107		P	80 - 120
Pendimethalin	103		P	80 - 120
Phorate	96.5		P	80 - 120
Prodiamine	98.4		P	80 - 120
Prometon	99.5		P	80 - 120
Prometryn	104		P	80 - 120
Pronamide	90.6		P	80 - 120
Propiconazole	94.2		P	80 - 120
Pyriproxyfen	89.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A107526

Included Lab Sample IDs: 2270229, 2270231

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Simazine	101		P	80 - 120
Sulfentrazone	92.0		P	80 - 120
Tebuconazole	93.7		P	80 - 120
Terbufos	93.6		P	80 - 120
Terbutylazine	98.5		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A107529

Included Lab Sample IDs: 2270172, 2270175, 2270178

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.4	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A107598

Included Lab Sample IDs: 2270175, 2270178

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A107619

Included Lab Sample IDs: 2270172

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.5	101	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	MS
							SMP	
EPA 180.1 Rev. 2.0	Turbidity						2.46	
EPA 300.0 Rev. 2.1	Chloride	100		99.2	98.3		0.571	
	Sulfate	100		99.2	99.0		0.707	
EPA 350.1 Rev. 2.0	Ammonia-N	97.6		95.6	96.2			0.528
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104		100	104			1.99
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5		98.3	98.3			0.0
	NO2NO3-N	100		97.8				0.0
EPA 365.1 Rev. 2.0	Total-P	105		103	102			1.32
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.3		98.4	99.0			0.424
EPA 8270E	Acetochlor	93.3	103	110	118	9.94		6.43
	Alachlor	89.1	97.0	95.0	105	8.51		10.1
	Aldrin	46.4	48.6	40.3	46.0	4.69		13.2
	Alpha-BHC	94.7	95.4	87.0	93.7	0.750		7.39
	Alpha-Chlordane	66.2	67.2	64.2	73.4	1.39		13.5
	Ametryn	96.6	98.4			1.83		23.0
	Atrazine	93.8	103			9.43		45.9
	Atrazine Desethyl	63.7	70.9	79.5	66.4	10.7		8.16
	Azinphos Methyl	95.6	120	105	115	22.7		8.71
	Azoxystrobin	101	114			12.3		39.3
	Beta-BHC	111	108	125	122	2.65		2.46
	Beta-Cyfluthrin	97.7	73.5	102	81.2	28.3		22.3
	Bifenthrin	78.8	63.2	49.1	60.3	22.0		20.5
	Bromacil	47.2	59.6	91.1	89.9	23.2		1.19
	Butylate	49.7	59.6	60.0	56.0	18.0		6.94
	Caffeine	77.5	86.4	78.8	114	10.8		36.4
	Carbophenothion	99.8	106	81.7	95.3	5.90		15.3
	Carfentrazone Ethyl	92.5	98.3	91.9	92.8	6.10		0.969
	Chlorothalonil	120	113	129	140	5.84		8.08
	Chlorpyrifos Ethyl	82.9	97.8	70.6	74.5	16.5		5.31
	Chlorpyrifos Methyl	90.5	99.4	91.3	103	9.35		12.2
	Cis-Nonachlor	64.0	58.2	58.5	67.7	9.50		14.6
	Cyanazine	95.9	113	103	123	16.7		17.4
	Cypermethrin	102	76.5	57.5	74.0	28.6		25.0
	Dacthal	93.2	94.0	83.5	91.3	0.872		8.89
	DDD-p,p'	71.1	64.3	68.6	73.2	10.1		6.51
	DDE-p,p'	73.1	77.3	68.9	73.7	5.53		6.84
	DDT-p,p'	68.9	67.6	60.9	69.6	1.92		13.4
	Delta-BHC	119	115	124	127	2.92		2.46
	Deltamethrin	111	74.6	74.8	98.1	39.1		27.0
	Demeton	83.2	98.4	103	109	16.7		4.76
	Diazinon	96.1	108	116	119	11.8		2.57
	Dichlobenil	73.5	75.2	40.5	32.3	2.35		22.6
	Dicofol	64.3	58.0	50.4	57.3	10.2		12.7
	Dieldrin	75.8	78.0	69.4	79.5	2.76		13.5
	Difenoconazole	141	124	120	144	12.9		17.7
	Dimethenamid	77.2	83.1	82.3	87.7	7.44		6.37
	Disulfoton	78.5	85.6	65.8	66.7	8.59		1.37
	Dithiopyr	83.0	95.1	90.2	104	13.6		14.4
	Endosulfan I	75.2	78.6	71.0	82.7	4.49		15.1
	Endosulfan II	87.4	73.3	54.4	68.6	17.6		23.2
	Endosulfan Sulfate	89.7	83.5	51.9	62.4	7.14		18.4
	Endrin	77.2	68.3	68.0	63.1	12.2		7.57
	Endrin Aldehyde	64.3	57.7	26.8	31.5	10.8		15.9
	Endrin Ketone	92.0	82.3	111	88.3	11.2		23.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	EPTC	47.1	59.9	63.1	54.3	23.9	15.0
	Esfenvalerate	107	79.8	70.7	91.4	29.3	25.5
	Ethalfuralin	64.6	66.3	55.8	52.1	2.57	6.76
	Ethion	72.9	55.9	42.3	56.3	26.4	28.4
	Ethoprop	87.0	101	104	116	14.7	10.9
	Fenamiphos	87.0	86.1	67.3	53.2	1.02	23.4
	Fenbuconazole	97.0	106	96.8	114	9.07	16.3
	Fenpropathrin	78.3	65.9	51.3	62.0	17.3	18.7
	Fipronil	88.5	93.9	88.7	97.8	5.90	9.17
	Fipronil Desulfinyl	102	103	82.9	104	1.44	22.6
	Fipronil Sulfide	80.1	85.8	76.6	93.1	6.90	19.5
	Fipronil Sulfone	81.8	75.1	84.3	101	8.53	17.8
	Fluazifop-P-butyl	100	106	92.7	102	5.46	9.60
	Fludioxonil	93.1	97.4	98.1	107	4.49	8.34
	Flumioxazin	127	111	132	157	13.2	16.9
	Flutolanil	84.7	84.3	75.9	84.2	0.441	10.4
	Fluxapyroxad	90.8	89.2			1.87	25.3
	Fonofos	80.5	89.6	89.3	99.5	10.7	10.8
	Gamma-BHC	102	101	111	107	0.976	4.45
	Gamma-Chlordane	64.7	66.4	62.5	71.0	2.65	12.8
	Heptachlor	59.7	62.7	52.2	64.8	4.97	21.6
	Heptachlor Epoxide	74.4	78.4	70.7	81.4	5.30	14.1
	Hexachlorobenzene	63.0	62.6	56.3	62.8	0.742	10.9
	Hexazinone	99.4	104	137	111	4.85	13.2
	Imazalil	103	109	52.1	53.2	5.53	2.07
	Iprodione	89.2	89.4	89.1	97.1	0.234	8.55
	Kepone	86.4	56.7	41.9	68.6	41.6	48.4
	Lambda-Cyhalothrin	104	81.5	66.3	86.1	24.3	26.0
	Malathion	94.3	109	104	125	14.2	18.1
	Metalaxyl	86.9	93.2			7.02	115
	Methoxychlor	85.6	79.5	75.4	91.8	7.39	19.6
	Metolachlor	93.5	97.8			4.48	107
	Metribuzin	96.2	111	142	133	14.3	6.46
	Mevinphos	81.1	92.8	90.3	99.5	13.5	9.71
	MGK-264	88.5	92.1	72.6	72.8	3.90	0.252
	Mirex	49.5	46.1	52.0	58.1	6.95	11.1
	Molinate	68.6	79.9	77.0	79.1	15.1	2.66
	Myclobutanil	87.1	88.9	77.8	95.2	2.04	20.1
	Naled	42.7	50.6	50.2	55.6	16.9	10.1
	Norflurazon	67.7	62.3	75.8	80.1	8.35	5.45
	Oxadiazon	80.2	80.7	70.5	76.0	0.647	6.82
	Oxyfluorfen	79.4	80.6	96.3	104	1.54	7.36
	Parathion Ethyl	88.1	96.8	92.1	104	9.46	12.4
	Parathion Methyl	107	118	122	135	9.36	10.6
	Pendimethalin	74.5	80.9	94.4	103	8.30	8.38
	Permethrin	99.6	74.4	84.7	75.5	29.1	11.6
	Phenothrin	50.2	39.7	23.4	33.7	23.4	36.1
	Phorate	75.7	83.7	82.2	90.7	10.0	9.76
	Piperonyl Butoxide	95.8	85.3	66.3	61.0	11.6	8.36
	Prallethrin	69.4	76.5	3.54	2.40	9.69	38.5
	Prodiamine	28.2	33.1	52.6	61.3	16.0	15.3
	Prometon	81.5	78.9	81.4	84.1	3.34	3.25
	Prometryn	86.4	91.9	61.2	93.0	6.23	28.1
	Pronamide	101	106	105	114	4.73	8.18

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Propiconazole	69.0	63.3			8.66		70.0
	Pyriproxyfen	72.4	67.6	82.0	89.7	6.92		9.06
	Simazine	89.8	102	110	118	13.0		7.10
	Sulfentrazone	75.6	82.0	99.8	98.9	8.03		0.838
	Tau-Fluvalinate	78.3	58.8	72.8	54.3	28.4		29.2
	Tebuconazole	63.6	48.4	43.4	46.6	27.1		6.33
	Terbufos	101	115	118	127	13.3		7.20
	Terbutylazine	97.1	105	107	116	7.90		8.64
	Tetramethrin	96.5	80.2	19.7	9.82	18.4		66.8
	Trans-Nonachlor	62.2	65.8	72.5	61.1	5.65		17.0
	Triclosan Methyl	75.3	77.9	75.8	68.3	3.43		10.3
	Trifluralin	66.3	66.0	68.4	62.0	0.400		9.81
EPA 8276	Chlordane	83.6	78.7	90.7	82.1	6.04		9.86
	Toxaphene	67.9	67.1	72.9	69.9	1.19		4.18
EPA 8321B	2,4-D	82.9		107	104			2.53
	2,4,5-T	87.1		100	99.1			1.19
	3-Hydroxycarbofuran	81.2		44.5	33.2			29.1
	Acesulfame K	88.2		81.1	65.2			21.6
	Acetaminophen	75.1		85.7	86.3			0.572
	Acetamiprid	80.5		94.1	94.9			0.839
	Afidopyropen	65.6		80.2	67.1			17.7
	Aldicarb	95.1		39.7	51.6			26.0
	Aldicarb Sulfone	82.0		60.2	63.3			5.12
	Aldicarb Sulfoxide	76.7		40.1	43.9			9.05
	AMPA	98.9		55.8	39.5			18.8
	Bentazon	92.0						4.63
	Benzovindiflupyr	78.8		80.8	89.7			10.4
	Carbamazepine	77.0		89.4	96.8			7.90
	Carbaryl	62.8		60.4	61.2			1.41
	Carbofuran	64.1		68.1	64.2			6.01
	Clothianidin	74.8		114	102			10.7
	Dinotefuran	75.8		101	108			5.97
	Diuron	96.1		78.5	74.7			4.62
	Endothall	126		69.7	64.1			8.35
	Fenuron	85.3		88.6	88.4			0.216
	Fluridone	81.8		84.1	85.0			1.02
	Glufosinate	96.1		158	143			9.49
	Glyphosate	96.4						0.454
	Hydrocodone	77.3		89.9	88.8			1.23
	Ibuprofen	71.7		84.5	70.1			18.7
	Imazapyr	91.6		157	133			11.1
	Imidacloprid	85.0		142	151			4.03
	Linuron	79.4		76.2	85.8			11.8
	Mandestrobin	77.6		83.6	84.6			1.20
	MCPP	87.3		101	104			2.30
	Methiocarb	68.7		75.2	68.7			8.96
	Methomyl	84.6		81.4	78.0			4.30
	Naproxen	58.1		76.5	80.5			5.06
	Oxamyl	80.6		77.9	71.9			8.03
	Primidone	87.9		92.5	91.2			1.46
	Propoxur	65.5		65.8	62.0			5.89
	Pyraclostrobin	66.5		77.8	81.9			5.05
	Sucralose	105		114	110			3.85
	Thiamethoxam	78.0		127	127			0.0550

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Tolfenpyrad	35.0	50.0	55.1		9.75
	Triclopyr	76.0	86.8	92.8		6.74
SM 2120 B-2011	Color (true)	104			0.217	
SM 2320 B-2011	Total Alkalinity	102			0.888	
SM 2540 C-2011	TDS				0.0	
SM 4500 F-C-2011	Fluoride	101	100	99.9		0.469
SM 5310 B-2011	Organic Carbon	95.0	96.6	96.3		0.205

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2270171, 2270174, 2270177
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2270171, 2270174, 2270177
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2270171, 2270174, 2270177
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2270172, 2270175, 2270178
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2270172, 2270175, 2270178
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2270172, 2270175, 2270178
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2270172, 2270175, 2270178
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2270173, 2270176, 2270179
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2270230
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2270229, 2270231
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2270230
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2270206
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2270207
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2270171, 2270174, 2270177
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2270171, 2270174, 2270177
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2270171, 2270174, 2270177
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2270171, 2270174, 2270177
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2270171, 2270174, 2270177
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2270172, 2270175, 2270178

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	08/18/2021			08/18/2021 15:34	Sarah A Nixon	2270171, 2270174, 2270177
EPA 300.0 Rev. 2.1	08/18/2021			08/26/2021 00:03	Lipi Saha	2270171
	08/18/2021			08/26/2021 00:15	Lipi Saha	2270174
	08/18/2021			08/26/2021 00:27	Lipi Saha	2270177
EPA 350.1 Rev. 2.0	08/18/2021			08/26/2021 13:17	Ping Hua	2270172
	08/18/2021			08/26/2021 13:19	Ping Hua	2270175
	08/18/2021			08/26/2021 13:20	Ping Hua	2270178
EPA 351.2 Rev. 2.0	08/18/2021	08/31/2021 10:12	Benjamin T. Nordmann	09/01/2021 11:30	Alexandra J Mattheus	2270175
	08/18/2021	08/31/2021 10:12	Benjamin T. Nordmann	09/01/2021 11:32	Alexandra J Mattheus	2270178
	08/18/2021	08/31/2021 10:12	Benjamin T. Nordmann	09/02/2021 10:17	Alexandra J Mattheus	2270172
EPA 353.2 Rev. 2.0	08/18/2021			08/23/2021 10:17	Beverly Y. Sanders	2270172
	08/18/2021			08/23/2021 10:19	Beverly Y. Sanders	2270175
	08/18/2021			08/23/2021 10:26	Beverly Y. Sanders	2270178
EPA 365.1 Rev. 2.0	08/18/2021	08/23/2021 13:48	Simonne.V. Calhoun	08/25/2021 16:39	Shengyu Ding	2270172
	08/18/2021	08/23/2021 13:48	Simonne.V. Calhoun	08/25/2021 16:40	Shengyu Ding	2270175
	08/18/2021	08/23/2021 13:48	Simonne.V. Calhoun	08/25/2021 16:41	Shengyu Ding	2270178
EPA 365.1 Rev. 2.0 dissolved	08/18/2021			08/18/2021 14:58	James L Waggeberby	2270176
	08/18/2021			08/18/2021 15:01	James L Waggeberby	2270173
	08/18/2021			08/18/2021 15:04	James L Waggeberby	2270179
EPA 8270E	08/18/2021	08/20/2021 08:00	Fe-Val Siddell	08/24/2021 01:58	Arthur Maknenko	2270230
	08/18/2021	08/23/2021 08:00	Fe-Val Siddell	08/25/2021 22:44	Michael Poppell	2270229
	08/18/2021	08/23/2021 08:00	Fe-Val Siddell	08/25/2021 23:09	Michael Poppell	2270229
	08/18/2021	08/23/2021 08:00	Fe-Val Siddell	08/25/2021 23:34	Michael Poppell	2270231
	08/18/2021	08/23/2021 08:00	Fe-Val Siddell	08/25/2021 23:59	Michael Poppell	2270231
EPA 8276	08/18/2021	08/20/2021 08:00	Fe-Val Siddell	08/25/2021 09:16	Michael Poppell	2270230
EPA 8321B	08/18/2021	08/18/2021 14:30	Hoor Shaik	08/25/2021 08:18	Juyoung Kim	2270206
	08/18/2021	08/19/2021 09:00	Juyoung Kim	08/19/2021 15:55	Juyoung Kim	2270207
	08/18/2021	08/19/2021 09:00	Juyoung Kim	08/20/2021 18:17	Pramila Ghimire	2270207
	08/18/2021	08/24/2021 09:00	Hoor Shaik	08/25/2021 06:54	Juyoung Kim	2270207
	08/18/2021	08/24/2021 09:00	Hoor Shaik	08/26/2021 22:26	Juyoung Kim	2270207
SM 2120 B-2011	08/18/2021			08/18/2021 16:27	Sarah A Nixon	2270174
	08/18/2021			08/18/2021 16:28	Sarah A Nixon	2270171
	08/18/2021			08/18/2021 16:29	Sarah A Nixon	2270177
SM 2320 B-2011	08/18/2021			08/19/2021 23:35	Dale L. Simmons	2270171
	08/18/2021			08/19/2021 23:51	Dale L. Simmons	2270174
	08/18/2021			08/20/2021 00:08	Dale L. Simmons	2270177
SM 2540 C-2011	08/18/2021			08/23/2021 15:36	Yijie Li	2270171, 2270174, 2270177
SM 2540 D-2011	08/18/2021			08/23/2021 15:36	Yijie Li	2270171, 2270174, 2270177
SM 4500 F-C-2011	08/18/2021			08/19/2021 23:35	Dale L. Simmons	2270171
	08/18/2021			08/19/2021 23:51	Dale L. Simmons	2270174

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	08/18/2021			08/20/2021 00:08	Dale L. Simmons	2270177
SM 5310 B-2011	08/18/2021			08/28/2021 08:00	Madeline Gruver	2270172
	08/18/2021			08/28/2021 08:13	Madeline Gruver	2270175
	08/18/2021			08/28/2021 08:26	Madeline Gruver	2270178