Chemical Analysis Report

SO-DIST-2021-03-04-01

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-2021-03-01-56**
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: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 23-MAR-2021 10:11

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: 03/03/2021 10:20**

Field ID: G3SD0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2228947	EPA 180.1 Rev. 2.0	Turbidity	6.4	A	NTU	P394500	
	EPA 300.0 Rev. 2.1	Chloride	42		mg Cl/L	P394698	
		Sulfate	19		mg SO4/L	P394700	
	SM 2120 B-2011	Color (true)	100		PCU	P394497	
	SM 2320 B-2011	Total Alkalinity	94		mg CaCO3/L	P394733	
	SM 2540 C-2011	TDS	231	A	mg/L	P394829	
	SM 2540 D-2011	TSS	9.6	I A	mg/L	P394834	
	SM 4500 F-C-2011	Fluoride	0.14		mg F/L	P394738	
2228948	EPA 350.1 Rev. 2.0	Ammonia-N	0.10		mg N/L	P394590	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P394658	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.027		mg N/L	P394618	
	EPA 365.1 Rev. 2.0	Total-P	0.092		mg P/L	P394550	
	SM 5310 B-2011	Organic Carbon	19		mg C/L	P395016	
2228949	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.036		mg P/L	P394491	

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: 03/03/2021 10:50**

Field ID: G3SD0162 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2228953	EPA 180.1 Rev. 2.0	Turbidity	7.6		NTU	P394500	
	EPA 300.0 Rev. 2.1	Chloride	44		mg Cl/L	P394698	
		Sulfate	16		mg SO4/L	P394700	
	SM 2120 B-2011	Color (true)	77		PCU	P394497	
	SM 2320 B-2011	Total Alkalinity	96		mg CaCO3/L	P394733	
	SM 2540 C-2011	TDS	231		mg/L	P394829	
	SM 2540 D-2011	TSS	11		mg/L	P394834	
	SM 4500 F-C-2011	Fluoride	0.15		mg F/L	P394738	
2228954	EPA 350.1 Rev. 2.0	Ammonia-N	0.057		mg N/L	P394590	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P394721	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.080		mg N/L	P394618	
	EPA 365.1 Rev. 2.0	Total-P	0.074		mg P/L	P394550	
	SM 5310 B-2011	Organic Carbon	17		mg C/L	P395016	
2228955	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.041		mg P/L	P394491	
2228965	EPA 8321B	Aldicarb	0.020	U	ug/L	P394538	
		Aldicarb Sulfone	0.0020	U	ug/L	P394538	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P394538	MS
		Carbaryl	0.0020	U	ug/L	P394538	
		Carbofuran	0.0020	U	ug/L	P394538	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P394538	
		Methiocarb	0.0020	U	ug/L	P394538	
		Methomyl	0.0020	U	ug/L	P394538	
		Oxamyl	0.0020	U	ug/L	P394538	
		Propoxur	0.0020	U	ug/L	P394538	
2228966		2,4-D	0.0048	I	ug/L	P394466	
		Acesulfame K	0.10	UJ	ug/L	P394526	MS
		AMPA	0.24	I	ug/L	P394526	
		2,4,5-T	0.0040	U	ug/L	P394466	
		Sucralose	0.12		ug/L	P394526	
		Acetaminophen	0.0080	U	ug/L	P394466	
		Acetamiprid	0.0020	U	ug/L	P394466	
		Endothall	0.25	UJ	ug/L	P394526	MS
		Glufosinate	0.10	UJ	ug/L	P394526	MS
		Glyphosate	0.10	U	ug/L	P394526	
		Afidopyropen	0.0020	U	ug/L	P394466	
		Bentazon	0.0045		ug/L	P394466	
		Benzovindiflupyr	0.0020	U	ug/L	P394466	
		Carbamazepine	8.0E-04	U	ug/L	P394466	
		Clothianidin	0.0030	I	ug/L	P394466	
		Dinotefuran	0.0020	U	ug/L	P394466	
		Diuron	0.0020	U	ug/L	P394466	
		Fenuron	0.032	I	ug/L	P394466	
		Fluridone	8.8E-04	I	ug/L	P394466	

Field ID: G3SD0162 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2228966	EPA 8321B	Imazapyr	0.032		ug/L	P394466	
		Hydrocodone	0.0020	U	ug/L	P394466	
		Ibuprofen	0.020	U	ug/L	P394466	
		Imidacloprid	0.0025	I	ug/L	P394466	
		Linuron	0.0040	U	ug/L	P394466	
		Mandestrobin	0.0020	U	ug/L	P394466	
		MCPP	0.0060	I	ug/L	P394466	
		Naproxen	0.0080	U	ug/L	P394466	
		Primidone	0.0040	U	ug/L	P394466	
		Pyraclostrobin	0.0020	U	ug/L	P394466	
		Thiamethoxam	0.0062	I	ug/L	P394466	
		Tolfenpyrad	0.0020	U	ug/L	P394466	
		Triclopyr	0.0040	U	ug/L	P394466	
2228973	EPA 8270E	Aldrin	0.85	U	ng/L	P394537	
		Dieldrin	0.45	U	ng/L	P394537	
		Alpha-BHC	2.3	U	ng/L	P394537	
		Kepone**	6.2	U	ng/L	P394537	
		Alpha-Chlordane	1.1	U	ng/L	P394537	
		Beta-BHC	9.0	U	ng/L	P394537	
		Beta-Cyfluthrin**	17	U	ng/L	P394537	
		Bifenthrin**	4.5	U	ng/L	P394537	
		Delta-BHC	9.0	U	ng/L	P394537	
		Gamma-BHC	9.0	U	ng/L	P394537	
		Chlorothalonil	2.3	U	ng/L	P394537	
		Cis-Nonachlor**	1.1	U	ng/L	P394537	
		Cypermethrin	23	U	ng/L	P394537	
		Dacthal**	1.1	U	ng/L	P394537	
		DDD-p,p'	5.7	U	ng/L	P394537	
		DDE-p,p'	5.7	U	ng/L	P394537	
		DDT-p,p'	6.8	U	ng/L	P394537	
		Deltamethrin**	23	U	ng/L	P394537	
		Dicofol	34	U	ng/L	P394537	
		Endosulfan I	4.5	U	ng/L	P394537	
		Endosulfan II	4.5	U	ng/L	P394537	
		Endosulfan Sulfate	2.3	U	ng/L	P394537	
		Endrin	2.3	U	ng/L	P394537	
		Endrin Aldehyde	2.3	U	ng/L	P394537	
		Endrin Ketone	2.3	U	ng/L	P394537	
		Ethalfluralin**	3.4	U	ng/L	P394537	
		Gamma-Chlordane	1.1	U	ng/L	P394537	
		Dichlobenil**	2.3	U	ng/L	P394537	
		Esfenvalerate**	23	U	ng/L	P394537	
		Fenpropathrin**	11	U	ng/L	P394537	
		Heptachlor	1.7	U	ng/L	P394537	
		Heptachlor Epoxide	2.3	U	ng/L	P394537	

Field ID: G3SD0162 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2228973	EPA 8270E	Hexachlorobenzene	2.3	U	ng/L	P394537	
		Lambda-Cyhalothrin**	17	U	ng/L	P394537	
		Methoxychlor	4.5	U	ng/L	P394537	
		Mirex	2.3	U	ng/L	P394537	
		MGK-264**	3.4	U	ng/L	P394537	
		Permethrin	11	U	ng/L	P394537	
		Phenothrin**	34	UJ	ng/L	P394537	LCS
		Piperonyl Butoxide**	1.7	U	ng/L	P394537	
		Prallethrin**	28	UJ	ng/L	P394537	LCS
		Tau-Fluvalinate**	4.0	U	ng/L	P394537	
		Tetramethrin**	9.0	U	ng/L	P394537	
		Trans-Nonachlor**	1.1	U	ng/L	P394537	
		Triclosan Methyl**	1.1	U	ng/L	P394537	
		Trifluralin	2.8	U	ng/L	P394537	
	EPA 8276	Chlordane	6.4	I	ng/L	P394537	
		Toxaphene	34	UJ	ng/L	P394537	LCS
2228974	EPA 8270E	Acetochlor	0.28	U	ng/L	P394522	
		Alachlor	0.28	U	ng/L	P394522	
		Ametryn	11		ng/L	P394522	
		Atrazine	140		ng/L	P394522	
		Atrazine Desethyl	27		ng/L	P394522	
		Azinphos Methyl	2.2	UJ	ng/L	P394522	CCV
		Azoxystrobin**	1.6	I J	ng/L	P394522	RPD
		Bromacil	3.1		ng/L	P394522	MS
		Butylate	0.45	U	ng/L	P394522	
		Caffeine**	8.4	U	ng/L	P394522	
		Carbophenothion	0.56	UJ	ng/L	P394522	LCS
		Carfentrazone Ethyl**	0.11	U	ng/L	P394522	
		Chlorpyrifos Ethyl	0.28	U	ng/L	P394522	MS
		Chlorpyrifos Methyl	0.056	U	ng/L	P394522	
		Cyanazine	3.7	U	ng/L	P394522	
		Demeton	1.7	U	ng/L	P394522	
		Diazinon	0.14	U	ng/L	P394522	
		Difenoconazole**	0.67	U	ng/L	P394522	
		Dimethenamid**	0.11	U	ng/L	P394522	
		Disulfoton	0.56	U	ng/L	P394522	
		Dithiopyr**	0.20	U	ng/L	P394522	
		EPTC	1.4	U	ng/L	P394522	
		Ethion	0.17	UJ	ng/L	P394522	RPD
		Ethoprop	0.11	U	ng/L	P394522	
		Fenamiphos	0.56	U	ng/L	P394522	
		Fenbuconazole**	0.14	U	ng/L	P394522	
		Fipronil	0.28	U	ng/L	P394522	
		Fipronil Desulfinyl**	0.14	U	ng/L	P394522	
		Fipronil Sulfide	0.17	U	ng/L	P394522	

Field ID: G3SD0162 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2228974	EPA 8270E	Fipronil Sulfone	0.17	U	ng/L	P394522	
		Fluazifop-P-butyl**	0.11	U	ng/L	P394522	
		Fludioxonil**	0.14	U	ng/L	P394522	
		Flumioxazin**	2.0	U	ng/L	P394522	
		Flutolanil**	0.18	I	ng/L	P394522	
		Fluxapyroxad**	0.31	I J	ng/L	P394522	LCS
		Fonofos	0.22	U	ng/L	P394522	
		Hexazinone	33		ng/L	P394522	
		Imazalil**	0.84	U	ng/L	P394522	
		Iprodione**	0.67	U	ng/L	P394522	
		Malathion	0.39	U	ng/L	P394522	
		Metalaxyl	1.9	I	ng/L	P394522	
		Metolachlor	9.6		ng/L	P394522	
		Metribuzin	3.7	U	ng/L	P394522	
		Mevinphos	1.2	U	ng/L	P394522	
		Molinate	0.34	U	ng/L	P394522	
		Myclobutanil**	0.28	U	ng/L	P394522	
		Naled**	1.7	U	ng/L	P394522	
		Norflurazon	4.5		ng/L	P394522	
		Oxadiazon	0.34	U	ng/L	P394522	
		Oxyfluorfen**	0.17	U	ng/L	P394522	
		Parathion Ethyl	0.28	U	ng/L	P394522	
		Parathion Methyl	0.62	U	ng/L	P394522	
		Pendimethalin	1.1	U	ng/L	P394522	
		Phorate	0.59	U	ng/L	P394522	
		Prodiamine**	0.20	U	ng/L	P394522	
		Prometon	1.0	U	ng/L	P394522	
		Prometryn	0.22	U	ng/L	P394522	
		Pronamide**	0.24	I	ng/L	P394522	
		Propiconazole**	1.9	I	ng/L	P394522	
		Pyriproxyfen**	0.14	U	ng/L	P394522	
		Simazine	2.2	I	ng/L	P394522	MS
		Sulfentrazone**	0.56	UJ	ng/L	P394522	RPD
		Tebuconazole**	0.56	UJ	ng/L	P394522	RPD
		Terbufos	0.11	U	ng/L	P394522	
		Terbuthylazine	0.48	U	ng/L	P394522	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MS accuracy for methomyl could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.
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. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: FB_03032021 **Collection Date/Time: 03/03/2021 11:05**

Field ID: FB_03032021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2228956	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P394500	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P394698	
		Sulfate	0.20	U	mg SO4/L	P394700	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P394497	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P394733	
	SM 2540 C-2011	TDS	15	U	mg/L	P394829	
	SM 2540 D-2011	TSS	2	U	mg/L	P394834	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P394738	
2228957	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P394590	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P394721	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P394618	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P394550	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P395016	
2228958	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P394491	
2228967	EPA 8321B	Aldicarb	0.020	U	ug/L	P394538	
		Aldicarb Sulfone	0.0020	U	ug/L	P394538	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P394538	MS
		Carbaryl	0.0020	U	ug/L	P394538	
		Carbofuran	0.0020	U	ug/L	P394538	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P394538	
		Methiocarb	0.0020	U	ug/L	P394538	
		Methomyl	0.0020	U	ug/L	P394538	
		Oxamyl	0.0020	U	ug/L	P394538	
		Propoxur	0.0020	U	ug/L	P394538	
2228968		2,4-D	0.0020	U	ug/L	P394466	
		Acesulfame K	0.10	U	ug/L	P394526	MS
		2,4,5-T	0.0040	U	ug/L	P394466	
		AMPA	0.10	U	ug/L	P394526	
		Sucralose	0.010	U	ug/L	P394526	
		Acetaminophen	0.0080	U	ug/L	P394466	
		Acetamiprid	0.0020	U	ug/L	P394466	
		Endothall	0.25	U	ug/L	P394526	MS
		Glufosinate	0.10	U	ug/L	P394526	MS
		Glyphosate	0.10	U	ug/L	P394526	
		Afidopyropen	0.0020	U	ug/L	P394466	
		Bentazon	8.0E-04	U	ug/L	P394466	
		Benzovindiflupyr	0.0020	U	ug/L	P394466	
		Carbamazepine	8.0E-04	U	ug/L	P394466	
		Clothianidin	0.0020	U	ug/L	P394466	
		Dinotefuran	0.0020	U	ug/L	P394466	
		Diuron	0.0020	U	ug/L	P394466	
		Fenuron	0.016	U	ug/L	P394466	
		Fluridone	8.0E-04	U	ug/L	P394466	

Field ID: FB_03032021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2228968	EPA 8321B	Imazapyr	0.0040	U	ug/L	P394466	
		Hydrocodone	0.0020	U	ug/L	P394466	
		Ibuprofen	0.020	U	ug/L	P394466	
		Imidacloprid	0.0020	U	ug/L	P394466	
		Linuron	0.0040	U	ug/L	P394466	
		Mandestrobin	0.0020	U	ug/L	P394466	
		MCPP	0.0020	U	ug/L	P394466	
		Naproxen	0.0080	U	ug/L	P394466	
		Primidone	0.0040	U	ug/L	P394466	
		Pyraclostrobin	0.0020	U	ug/L	P394466	
		Thiamethoxam	0.0020	U	ug/L	P394466	
		Tolfenpyrad	0.0020	U	ug/L	P394466	
		Triclopyr	0.0040	U	ug/L	P394466	
2228975	EPA 8270E	Aldrin	0.83	U	ng/L	P394537	
		Dieldrin	0.44	U	ng/L	P394537	
		Alpha-BHC	2.2	U	ng/L	P394537	
		Kepone**	6.1	U	ng/L	P394537	
		Alpha-Chlordane	1.1	U	ng/L	P394537	
		Beta-BHC	8.9	U	ng/L	P394537	
		Beta-Cyfluthrin**	17	U	ng/L	P394537	
		Bifenthrin**	4.4	U	ng/L	P394537	
		Delta-BHC	8.9	U	ng/L	P394537	
		Gamma-BHC	8.9	U	ng/L	P394537	
		Chlorothalonil	2.2	U	ng/L	P394537	
		Cis-Nonachlor**	1.1	U	ng/L	P394537	
		Cypermethrin	22	U	ng/L	P394537	
		Dacthal**	1.1	U	ng/L	P394537	
		DDD-p,p'	5.6	U	ng/L	P394537	
		DDE-p,p'	5.6	U	ng/L	P394537	
		DDT-p,p'	6.7	U	ng/L	P394537	
		Deltamethrin**	22	U	ng/L	P394537	
		Dicofol	33	U	ng/L	P394537	
		Endosulfan I	4.4	U	ng/L	P394537	
		Endosulfan II	4.4	U	ng/L	P394537	
		Endosulfan Sulfate	2.2	U	ng/L	P394537	
		Endrin	2.2	U	ng/L	P394537	
		Endrin Aldehyde	2.2	U	ng/L	P394537	
		Endrin Ketone	2.2	U	ng/L	P394537	
		Ethalfluralin**	3.3	U	ng/L	P394537	
		Gamma-Chlordane	1.1	U	ng/L	P394537	
		Dichlobenil**	2.2	U	ng/L	P394537	
		Esfenvalerate**	22	U	ng/L	P394537	
		Fenpropathrin**	11	U	ng/L	P394537	
		Heptachlor	1.7	U	ng/L	P394537	
		Heptachlor Epoxide	2.2	U	ng/L	P394537	

Field ID: FB_03032021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2228975	EPA 8270E	Hexachlorobenzene	2.2	U	ng/L	P394537	
		Lambda-Cyhalothrin**	17	U	ng/L	P394537	
		Methoxychlor	4.4	U	ng/L	P394537	
		Mirex	2.2	U	ng/L	P394537	
		MGK-264**	3.3	U	ng/L	P394537	
		Permethrin	11	U	ng/L	P394537	
		Phenothrin**	33	UJ	ng/L	P394537	LCS
		Piperonyl Butoxide**	1.7	U	ng/L	P394537	
		Prallethrin**	28	UJ	ng/L	P394537	LCS
		Tau-Fluvalinate**	3.9	U	ng/L	P394537	
		Tetramethrin**	8.9	U	ng/L	P394537	
		Trans-Nonachlor**	1.1	U	ng/L	P394537	
		Triclosan Methyl**	1.1	U	ng/L	P394537	
		Trifluralin	2.8	U	ng/L	P394537	
	EPA 8276	Chlordane	5.6	U	ng/L	P394537	
		Toxaphene	33	UJ	ng/L	P394537	LCS
2228976	EPA 8270E	Acetochlor	0.25	U	ng/L	P394522	
		Alachlor	0.25	U	ng/L	P394522	
		Ametryn	0.61	U	ng/L	P394522	
		Atrazine	0.25	U	ng/L	P394522	
		Atrazine Desethyl	1.5	U	ng/L	P394522	
		Azinphos Methyl	2.0	UJ	ng/L	P394522	CCV
		Azoxystrobin**	0.51	UJ	ng/L	P394522	RPD
		Bromacil	0.51	U	ng/L	P394522	MS
		Butylate	0.41	U	ng/L	P394522	
		Caffeine**	7.6	U	ng/L	P394522	
		Carbophenothion	0.51	UJ	ng/L	P394522	LCS
		Carfentrazone Ethyl**	0.10	U	ng/L	P394522	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P394522	MS
		Chlorpyrifos Methyl	0.051	U	ng/L	P394522	
		Cyanazine	3.3	U	ng/L	P394522	
		Demeton	1.5	U	ng/L	P394522	
		Diazinon	0.13	U	ng/L	P394522	
		Difenoconazole**	0.61	U	ng/L	P394522	
		Dimethenamid**	0.10	U	ng/L	P394522	
		Disulfoton	0.51	U	ng/L	P394522	
		Dithiopyr**	0.18	U	ng/L	P394522	
		EPTC	1.3	U	ng/L	P394522	
		Ethion	0.15	UJ	ng/L	P394522	RPD
		Ethoprop	0.10	U	ng/L	P394522	
		Fenamiphos	0.51	U	ng/L	P394522	
		Fenbuconazole**	0.13	U	ng/L	P394522	
		Fipronil	0.25	U	ng/L	P394522	
		Fipronil Desulfinyl**	0.13	U	ng/L	P394522	
		Fipronil Sulfide	0.15	U	ng/L	P394522	

Field ID: FB_03032021 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2228976	EPA 8270E	Fipronil Sulfone	0.15	U	ng/L	P394522	
		Fluazifop-P-butyl**	0.10	U	ng/L	P394522	
		Fludioxonil**	0.13	U	ng/L	P394522	
		Flumioxazin**	1.8	U	ng/L	P394522	
		Flutolanil**	0.10	U	ng/L	P394522	
		Fluxapyroxad**	0.10	UJ	ng/L	P394522	LCS
		Fonofos	0.20	U	ng/L	P394522	
		Hexazinone	0.51	U	ng/L	P394522	
		Imazalil**	0.76	U	ng/L	P394522	
		Iprodione**	0.61	U	ng/L	P394522	
		Malathion	0.36	U	ng/L	P394522	
		Metalaxyl	0.76	U	ng/L	P394522	
		Metolachlor	0.36	U	ng/L	P394522	
		Metribuzin	3.3	U	ng/L	P394522	
		Mevinphos	1.1	U	ng/L	P394522	
		Molinate	0.31	U	ng/L	P394522	
		Myclobutanil**	0.25	U	ng/L	P394522	
		Naled**	1.5	U	ng/L	P394522	
		Norflurazon	0.51	U	ng/L	P394522	
		Oxadiazon	0.31	U	ng/L	P394522	
		Oxyfluorfen**	0.15	U	ng/L	P394522	
		Parathion Ethyl	0.25	U	ng/L	P394522	
		Parathion Methyl	0.56	U	ng/L	P394522	
		Pendimethalin	1.0	U	ng/L	P394522	
		Phorate	0.53	U	ng/L	P394522	
		Prodiamine**	0.18	U	ng/L	P394522	
		Prometon	0.92	U	ng/L	P394522	
		Prometryn	0.20	U	ng/L	P394522	
		Pronamide**	0.15	U	ng/L	P394522	
		Propiconazole**	0.51	U	ng/L	P394522	
		Pyriproxyfen**	0.13	U	ng/L	P394522	
		Simazine	0.51	U	ng/L	P394522	MS
		Sulfentrazone**	0.51	UJ	ng/L	P394522	RPD
		Tebuconazole**	0.51	UJ	ng/L	P394522	RPD
		Terbufos	0.10	U	ng/L	P394522	
		Terbuthylazine	0.43	U	ng/L	P394522	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MS accuracy for methomyl 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. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Nine Mile Canal @ SR 80 **Collection Date/Time: 03/03/2021 12:00**

Field ID: G3SD0088 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2228950	EPA 180.1 Rev. 2.0	Turbidity	5.4		NTU	P394500	
	EPA 300.0 Rev. 2.1	Chloride	45		mg Cl/L	P394698	
		Sulfate	21		mg SO4/L	P394700	
	SM 2120 B-2011	Color (true)	80		PCU	P394497	
	SM 2320 B-2011	Total Alkalinity	100		mg CaCO3/L	P394733	
	SM 2540 C-2011	TDS	235		mg/L	P394829	
	SM 2540 D-2011	TSS	5	I	mg/L	P394834	
	SM 4500 F-C-2011	Fluoride	0.14		mg F/L	P394738	
2228951	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P394590	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P394658	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.015		mg N/L	P394618	
	EPA 365.1 Rev. 2.0	Total-P	0.065		mg P/L	P394550	
	SM 5310 B-2011	Organic Carbon	17		mg C/L	P395016	
2228952	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.022		mg P/L	P394491	
2228972	EPA 8270E	Acetochlor	0.25	U	ng/L	P394522	
		Alachlor	0.25	U	ng/L	P394522	
		Ametryn	13		ng/L	P394522	
		Atrazine	100		ng/L	P394522	
		Atrazine Desethyl	23		ng/L	P394522	
		Azinphos Methyl	2.0	UJ	ng/L	P394522	CCV
		Azoxystrobin**	0.51	UJ	ng/L	P394522	RPD
		Bromacil	0.51	UJ	ng/L	P394522	MS
		Butylate	0.40	U	ng/L	P394522	
		Caffeine**	7.6	U	ng/L	P394522	
		Carbophenothion	0.51	UJ	ng/L	P394522	LCS
		Carfentrazone Ethyl**	0.10	U	ng/L	P394522	
		Chlorpyrifos Ethyl	0.57	I J	ng/L	P394522	MS
		Chlorpyrifos Methyl	0.051	U	ng/L	P394522	
		Cyanazine	3.3	U	ng/L	P394522	
		Demeton	1.5	U	ng/L	P394522	
		Diazinon	0.13	U	ng/L	P394522	
		Difenoconazole**	0.61	U	ng/L	P394522	
		Dimethenamid**	0.10	U	ng/L	P394522	
		Disulfoton	0.51	U	ng/L	P394522	
		Dithiopyr**	0.18	U	ng/L	P394522	
		EPTC	1.3	U	ng/L	P394522	
		Ethion	0.15	UJ	ng/L	P394522	RPD
		Ethoprop	0.10	U	ng/L	P394522	
		Fenamiphos	0.51	U	ng/L	P394522	
		Fenbuconazole**	0.13	U	ng/L	P394522	
		Fipronil	0.25	U	ng/L	P394522	
		Fipronil Desulfinyl**	0.13	U	ng/L	P394522	
		Fipronil Sulfide	0.15	U	ng/L	P394522	

Field ID: G3SD0088 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2228972	EPA 8270E	Fipronil Sulfone	0.15	U	ng/L	P394522	
		Fluazifop-P-butyl**	0.10	U	ng/L	P394522	
		Fludioxonil**	0.13	U	ng/L	P394522	
		Flumioxazin**	1.8	U	ng/L	P394522	
		Flutolanil**	0.29	I	ng/L	P394522	
		Fluxapyroxad**	0.35	I J	ng/L	P394522	LCS
		Fonofos	0.20	U	ng/L	P394522	
		Hexazinone	31	J	ng/L	P394522	
		Imazalil**	0.76	U	ng/L	P394522	
		Iprodione**	0.61	U	ng/L	P394522	
		Malathion	0.35	U	ng/L	P394522	
		Metalaxyl	3.4		ng/L	P394522	
		Metolachlor	10		ng/L	P394522	
		Metribuzin	3.3	I	ng/L	P394522	
		Mevinphos	1.1	U	ng/L	P394522	
		Molinate	0.30	U	ng/L	P394522	
		Myclobutanil**	0.25	U	ng/L	P394522	
		Naled**	1.5	U	ng/L	P394522	
		Norflurazon	4.3		ng/L	P394522	
		Oxadiazon	0.30	U	ng/L	P394522	
		Oxyfluorfen**	0.15	U	ng/L	P394522	
		Parathion Ethyl	0.25	U	ng/L	P394522	
		Parathion Methyl	0.56	U	ng/L	P394522	
		Pendimethalin	3.4	I	ng/L	P394522	
		Phorate	0.53	U	ng/L	P394522	
		Prodiamine**	0.18	U	ng/L	P394522	
		Prometon	0.91	U	ng/L	P394522	
		Prometryn	0.20	U	ng/L	P394522	
		Pronamide**	0.41	I	ng/L	P394522	
		Propiconazole**	1.7	I	ng/L	P394522	
		Pyriproxyfen**	0.13	U	ng/L	P394522	
		Simazine	0.51	UJ	ng/L	P394522	MS
		Sulfentrazone**	0.51	UJ	ng/L	P394522	RPD
		Tebuconazole**	0.51	UJ	ng/L	P394522	RPD
		Terbufos	0.10	U	ng/L	P394522	
		Terbuthylazine	0.43	U	ng/L	P394522	

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 some parameters not assessed due to high content of these parameters in the sample spiked. Estimated value for hexazinone due to internal standard recovery exceeding control limits. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P394500

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394698

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394700

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394590

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394658

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394721

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394618

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394550

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394491

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: P394522

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P394522

Component	Result	Code	Units
Pendimethalin	1.0	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P394537

Component	Result	Code	Units
Aldrin	0.75	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	U	ng/L
Dichlobenil	2.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Esfenvalerate	20	U	ng/L
Ethalfluralin	3.0	U	ng/L
Fenpropathrin	10	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Kepone	5.5	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P394537

Component	Result	Code	Units
Methoxychlor	4.0	U	ng/L
MGK-264	3.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Piperonyl Butoxide	1.5	U	ng/L
Prallethrin	25	U	ng/L
Tau-Fluvalinate	3.5	U	ng/L
Tetramethrin	8.0	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Triclosan Methyl	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P394537

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

Reference Method: EPA 8321B
Batch ID: P394466

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P394526

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: P394538

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

Reference Method: SM 2120 B-2011
Batch ID: P394497

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P394733

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

Reference Method: SM 2540 C-2011
Batch ID: P394829

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P394834

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P394738

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P395016

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: P394698

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394700

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394590

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394658

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394721

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: P394618

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: P394550

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: P394491

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

Reference Method: EPA 8270E
Batch ID: P394522

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	85.7	89.4	P/P	70 - 121
Alachlor	85.1	81.9	P/P	70 - 119
Ametryn	93.1	125	P/P	61 - 135
Atrazine	85.6	85.9	P/P	76 - 123

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P394522

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine Desethyl	73.3	71.1	P/P	35 - 140
Azinphos Methyl	106	94.5	P/P	57 - 163
Azoxystrobin	221	154	P/P	43 - 231
Bromacil	89.2	83.6	P/P	42 - 123
Butylate	55.5	54.8	P/P	34 - 92.0
Caffeine	93.2	81.5	P/P	70 - 130
Carbophenothion	73.1	58.6	P/F	61 - 121
Carfentrazone Ethyl	91.4	75.8	P/P	62 - 139
Chlorpyrifos Ethyl	73.6	70.3	P/P	67 - 121
Chlorpyrifos Methyl	81.1	79.0	P/P	67 - 120
Cyanazine	147	142	P/P	20 - 226
Demeton	74.3	76.8	P/P	35 - 125
Diazinon	89.4	95.9	P/P	70 - 122
Difenoconazole	177	133	P/P	56 - 186
Dimethenamid	90.7	80.1	P/P	67 - 119
Disulfoton	68.3	67.9	P/P	47 - 120
Dithiopyr	83.7	81.3	P/P	67 - 118
EPTC	59.2	51.7	P/P	33 - 90.0
Ethion	65.0	44.5	P/P	40 - 133
Ethoprop	78.3	81.5	P/P	61 - 121
Fenamiphos	91.9	87.2	P/P	31 - 139
Fenbuconazole	109	95.1	P/P	66 - 141
Fipronil	96.5	93.8	P/P	62 - 129
Fipronil Desulfinyl	86.7	86.2	P/P	59 - 126
Fipronil Sulfide	80.0	76.4	P/P	63 - 117
Fipronil Sulfone	85.9	69.7	P/P	57 - 117
Fluazifop-P-butyl	86.1	76.9	P/P	63 - 124
Fludioxonil	82.0	74.5	P/P	63 - 123
Flumioxazin	223	185	P/P	34 - 245
Flutolanil	92.1	80.2	P/P	56 - 131
Fluxapyroxad	73.9	56.7	P/F	57 - 117
Fonofos	70.9	68.7	P/P	61 - 116
Hexazinone	80.4	74.0	P/P	55 - 138
Imazalil	62.1	63.1	P/P	33 - 143
Iprodione	89.8	75.7	P/P	59 - 118
Malathion	97.5	91.2	P/P	62 - 138
Metalaxyl	82.0	81.5	P/P	24 - 147
Metolachlor	78.8	76.9	P/P	68 - 118
Metribuzin	89.6	88.2	P/P	20 - 239
Mevinphos	97.0	99.2	P/P	46 - 124
Molinate	64.8	62.7	P/P	46 - 100
Myclobutanil	80.0	70.0	P/P	32 - 149
Naled	77.3	70.0	P/P	32 - 95.0
Norflurazon	81.4	68.1	P/P	57 - 127
Oxadiazon	79.4	69.4	P/P	63 - 118
Oxyfluorfen	90.0	84.2	P/P	69 - 137
Parathion Ethyl	87.5	79.3	P/P	70 - 113
Parathion Methyl	101	101	P/P	71 - 130
Pendimethalin	73.1	68.9	P/P	55 - 118
Phorate	63.9	68.6	P/P	46 - 125
Prodiamine	62.2	65.0	P/P	20 - 141
Prometon	92.8	88.6	P/P	54 - 122

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P394522

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prometryn	93.8	97.3	P/P	66 - 124
Pronamide	92.6	88.8	P/P	79 - 122
Propiconazole	80.0	74.5	P/P	61 - 126
Pyriproxyfen	81.2	61.9	P/P	52 - 131
Simazine	93.1	90.8	P/P	75 - 128
Sulfentrazone	78.8	56.8	P/P	20 - 132
Tebuconazole	34.1	23.5	P/P	20 - 116
Terbufos	77.3	74.8	P/P	61 - 117
Terbuthylazine	83.6	86.8	P/P	74 - 116

Reference Method: EPA 8270E
Batch ID: P394537

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	21.8	21.5	P/P	20 - 110
Alpha-BHC	85.2	88.0	P/P	58 - 130
Alpha-Chlordane	88.1	85.9	P/P	61 - 105
Beta-BHC	99.9	98.5	P/P	53 - 164
Beta-Cyfluthrin	60.6	58.4	P/P	40 - 140
Bifenthrin	75.2	75.7	P/P	44 - 122
Chlorothalonil	50.1	65.6	P/P	20 - 201
Cis-Nonachlor	93.2	90.3	P/P	60 - 110
Cypermethrin	72.9	67.7	P/P	43 - 131
Dacthal	95.2	93.4	P/P	76 - 108
DDD-p,p'	93.4	90.3	P/P	68 - 118
DDE-p,p'	83.6	83.3	P/P	56 - 107
DDT-p,p'	86.8	86.5	P/P	55 - 122
Delta-BHC	98.2	99.7	P/P	60 - 181
Deltamethrin	77.8	75.2	P/P	51 - 139
Dichlobenil	63.4	65.6	P/P	20 - 106
Dicofol	104	104	P/P	56 - 130
Dieldrin	81.8	76.9	P/P	58 - 112
Endosulfan I	90.6	92.5	P/P	68 - 115
Endosulfan II	103	104	P/P	69 - 133
Endosulfan Sulfate	87.1	86.3	P/P	65 - 126
Endrin	89.0	85.4	P/P	66 - 118
Endrin Aldehyde	100	95.0	P/P	60 - 132
Endrin Ketone	93.9	90.2	P/P	68 - 121
Esfenvalerate	69.5	62.5	P/P	42 - 116
Ethalfluralin	80.8	81.1	P/P	50 - 118
Fenpropathrin	89.1	88.5	P/P	55 - 132
Gamma-BHC	96.5	97.5	P/P	65 - 147
Gamma-Chlordane	82.8	80.9	P/P	56 - 103
Heptachlor	72.5	72.6	P/P	47 - 95.0
Heptachlor Epoxide	91.2	89.0	P/P	67 - 107
Hexachlorobenzene	75.1	76.4	P/P	45 - 99.0
Kepone	104	107	P/P	28 - 128
Lambda-Cyhalothrin	67.5	64.9	P/P	41 - 135
Methoxychlor	91.5	90.7	P/P	61 - 138
MGK-264	23.3	21.2	P/P	20 - 109
Mirex	69.9	69.1	P/P	36 - 92.0
Permethrin	72.6	70.2	P/P	45 - 111

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P394537

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Phenothrin	21.4	20.1	F/F	22 - 88.0
Piperonyl Butoxide	89.9	80.9	P/P	67 - 120
Prallethrin	18.9	18.5	F/F	28 - 92.0
Tau-Fluvalinate	71.3	67.7	P/P	38 - 145
Tetramethrin	40.6	33.6	P/P	29 - 150
Trans-Nonachlor	87.8	86.9	P/P	54 - 105
Triclosan Methyl	102	100	P/P	76 - 115
Trifluralin	81.0	81.6	P/P	53 - 111

Reference Method: EPA 8276
Batch ID: P394537

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	107	107	P/P	56 - 117
Toxaphene	123	119	F/F	45 - 116

Reference Method: EPA 8321B
Batch ID: P394466

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	91.0		P	30 - 160
2,4,5-T	78.0		P	30 - 160
Acetaminophen	99.7		P	30 - 160
Acetamiprid	72.9		P	30 - 160
Afidopyropen	52.2		P	30 - 160
Bentazon	81.9		P	30 - 160
Benzovindiflupyr	71.7		P	30 - 160
Carbamazepine	83.8		P	30 - 160
Clothianidin	87.9		P	30 - 160
Dinotefuran	83.9		P	30 - 160
Diuron	64.3		P	30 - 160
Fenuron	96.6		P	30 - 160
Fluridone	74.6		P	30 - 160
Hydrocodone	90.2		P	30 - 160
Ibuprofen	77.4		P	30 - 160
Imazapyr	99.7		P	30 - 160
Imidacloprid	94.0		P	30 - 160
Linuron	73.8		P	30 - 160
Mandestrobin	79.7		P	30 - 160
MCPP	87.8		P	30 - 160
Naproxen	53.5		P	30 - 160
Primidone	90.3		P	30 - 160
Pyraclostrobin	68.9		P	30 - 160
Thiamethoxam	88.9		P	30 - 160
Tolfenpyrad	47.9		P	30 - 160
Triclopyr	79.7		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P394526

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	142		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P394526

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
AMPA	95.1		P	40 - 150
Endothall	86.4		P	40 - 150
Glufosinate	101		P	40 - 150
Glyphosate	97.3		P	40 - 140
Sucralose	96.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P394538

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	90.6		P	30 - 160
Aldicarb	72.6		P	30 - 160
Aldicarb Sulfone	87.6		P	30 - 160
Aldicarb Sulfoxide	89.1		P	30 - 160
Carbaryl	64.2		P	30 - 160
Carbofuran	77.2		P	30 - 160
Methiocarb	74.1		P	30 - 160
Methomyl	87.9		P	30 - 160
Oxamyl	98.2		P	30 - 160
Propoxur	74.2		P	30 - 160

Reference Method: SM 2120 B-2011
Batch ID: P394497

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P394733

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.3		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P394738

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.6		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P395016

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394698

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228774	Chloride	99.7		P	90 - 110
2228990	Chloride	92.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394700

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228774	Sulfate	96.3		P	90 - 110
2228990	Sulfate	98.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394590

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228940	Ammonia-N	97.4	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394658

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228874	Kjeldahl Nitrogen	106	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394618

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228939	NO2NO3-N	99.6	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394550

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228939	Total-P	108	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394491

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228941	O-Phosphate-P	100	99.4	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P394522

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228972	Acetochlor	84.4	81.7	P/P	66 - 122
2228972	Alachlor	85.3	77.9	P/P	65 - 122
2228972	Azinphos Methyl	81.3	76.0	P/P	44 - 174
2228972	Azoxystrobin	196	217	P/P	10 - 268
2228972	Bromacil	146	143	F/P	31 - 145
2228972	Butylate	52.8	44.6	P/P	15 - 97.0
2228972	Caffeine	84.0	87.1	P/P	70 - 130
2228972	Carbophenothion	56.4	61.5	P/P	42 - 129

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P394522

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228972	Carfentrazone Ethyl	72.2	68.9	P/P	62 - 145
2228972	Chlorpyrifos Ethyl	49.9	58.6	F/F	60 - 124
2228972	Chlorpyrifos Methyl	74.3	76.2	P/P	66 - 119
2228972	Cyanazine	119	135	P/P	17 - 225
2228972	Demeton	90.8	68.5	P/P	36 - 142
2228972	Diazinon	90.2	90.6	P/P	70 - 128
2228972	Difenoconazole	143	156	P/P	33 - 222
2228972	Dimethenamid	82.8	75.2	P/P	54 - 125
2228972	Disulfoton	68.5	69.4	P/P	49 - 133
2228972	Dithiopyr	56.9	63.6	P/P	55 - 123
2228972	EPTC	51.9	45.2	P/P	19 - 91.0
2228972	Ethion	30.6	35.8	P/P	13 - 143
2228972	Ethoprop	87.4	84.2	P/P	49 - 144
2228972	Fenamiphos	53.0	62.1	P/P	32 - 136
2228972	Fenbuconazole	103	99.9	P/P	73 - 148
2228972	Fipronil	88.5	87.4	P/P	57 - 129
2228972	Fipronil Desulfinyl	75.6	77.1	P/P	49 - 127
2228972	Fipronil Sulfide	71.5	73.1	P/P	44 - 127
2228972	Fipronil Sulfone	69.4	73.2	P/P	35 - 126
2228972	Fluazifop-P-butyl	67.1	73.2	P/P	67 - 129
2228972	Fludioxonil	75.0	75.2	P/P	61 - 126
2228972	Flumioxazin	186	200	P/P	38 - 279
2228972	Flutolanil	75.6	81.8	P/P	55 - 136
2228972	Fluxapyroxad	58.8	59.0	P/P	33 - 140
2228972	Fonofos	60.2	65.0	P/P	58 - 125
2228972	Imazalil	104	114	P/P	10 - 221
2228972	Iprodione	71.1	72.2	P/P	32 - 140
2228972	Malathion	96.4	97.6	P/P	52 - 138
2228972	Metalaxyl	77.7	76.0	P/P	46 - 134
2228972	Metolachlor	85.9	79.4	P/P	58 - 122
2228972	Metribuzin	85.6	83.9	P/P	16 - 272
2228972	Mevinphos	110	105	P/P	45 - 140
2228972	Molinate	62.6	57.3	P/P	41 - 103
2228972	Myclobutanil	67.7	63.3	P/P	60 - 134
2228972	Naled	68.9	73.5	P/P	20 - 113
2228972	Norflurazon	119	123	P/P	51 - 123
2228972	Oxadiazon	67.1	69.3	P/P	44 - 125
2228972	Oxyfluorfen	83.3	83.6	P/P	66 - 176
2228972	Parathion Ethyl	84.7	84.5	P/P	57 - 132
2228972	Parathion Methyl	107	106	P/P	59 - 156
2228972	Pendimethalin	66.1	67.2	P/P	59 - 129
2228972	Phorate	73.6	69.2	P/P	47 - 136
2228972	Prodiamine	64.2	65.8	P/P	10 - 159
2228972	Prometon	95.4	89.5	P/P	59 - 127
2228972	Prometryn	87.7	90.5	P/P	59 - 129
2228972	Pronamide	83.8	82.0	P/P	65 - 145
2228972	Propiconazole	72.2	73.3	P/P	28 - 165
2228972	Pyriproxyfen	65.8	78.9	P/P	21 - 180
2228972	Simazine	157	151	F/F	63 - 147
2228972	Sulfentrazone	64.9	72.0	P/P	32 - 136
2228972	Tebuconazole	19.5	22.4	P/P	-8.3 - 117
2228972	Terbufos	79.9	78.8	P/P	61 - 131

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P394522

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228972	Terbuthylazine	90.6	79.5	P/P	62 - 126

Reference Method: EPA 8270E
Batch ID: P394537

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229185	Alpha-BHC	91.5	87.2	P/P	53 - 147
2229185	Alpha-Chlordane	89.3	88.2	P/P	56 - 107
2229185	Beta-BHC	101	98.8	P/P	43 - 182
2229185	Beta-Cyfluthrin	78.7	75.8	P/P	42 - 157
2229185	Bifenthrin	94.2	93.3	P/P	52 - 124
2229185	Chlorothalonil	23.5	28.4	P/P	10 - 265
2229185	Cis-Nonachlor	95.9	94.1	P/P	55 - 112
2229185	Cypermethrin	83.7	85.0	P/P	46 - 144
2229185	Dacthal	89.3	87.8	P/P	72 - 110
2229185	DDD-p,p'	94.8	93.2	P/P	58 - 123
2229185	DDE-p,p'	87.9	88.6	P/P	52 - 106
2229185	DDT-p,p'	89.3	90.3	P/P	50 - 127
2229185	Delta-BHC	105	101	P/P	56 - 222
2229185	Deltamethrin	89.4	90.6	P/P	47 - 152
2229185	Dichlobenil	85.9	84.1	P/P	22 - 99.0
2229185	Dicofol	97.6	103	P/P	38 - 145
2229185	Endosulfan I	94.7	90.8	P/P	64 - 124
2229185	Endosulfan II	103	92.0	P/P	52 - 159
2229185	Endosulfan Sulfate	86.8	80.4	P/P	62 - 136
2229185	Endrin	83.8	87.6	P/P	57 - 126
2229185	Endrin Aldehyde	75.2	68.8	P/P	41 - 128
2229185	Endrin Ketone	88.5	87.0	P/P	67 - 129
2229185	Esfenvalerate	85.3	73.1	P/P	50 - 120
2229185	Ethalfluralin	83.9	83.6	P/P	41 - 125
2229185	Fenpropathrin	130	124	P/P	40 - 202
2229185	Gamma-BHC	90.7	89.9	P/P	58 - 180
2229185	Gamma-Chlordane	86.6	85.6	P/P	54 - 103
2229185	Heptachlor	74.8	74.9	P/P	46 - 94.0
2229185	Heptachlor Epoxide	88.3	87.3	P/P	62 - 111
2229185	Hexachlorobenzene	78.7	78.7	P/P	42 - 95.0
2229185	Lambda-Cyhalothrin	82.7	81.3	P/P	37 - 162
2229185	Methoxychlor	88.5	88.9	P/P	52 - 143
2229185	MGK-264	49.4	46.1	P/P	37 - 102
2229185	Mirex	80.4	79.7	P/P	43 - 91.0
2229185	Permethrin	86.5	87.1	P/P	48 - 113
2229185	Phenothrin	55.8	58.4	P/P	30 - 104
2229185	Piperonyl Butoxide	94.5	94.1	P/P	67 - 127
2229185	Prallethrin	46.6	45.7	P/P	28 - 102
2229185	Tau-Fluvalinate	86.4	85.6	P/P	46 - 174
2229185	Tetramethrin	54.3	42.3	P/P	28 - 176
2229185	Trans-Nonachlor	91.4	90.1	P/P	51 - 103
2229185	Triclosan Methyl	98.5	98.0	P/P	67 - 116
2229185	Trifluralin	83.1	84.6	P/P	47 - 118
2229469	Aldrin	26.1	28.0	P/P	22 - 127
2229469	Dieldrin	64.3	59.7	P/P	52 - 123
2229469	Kepone	72.9	79.4	P/P	18 - 138

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P394537

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229469	Chlordane	99.4	103	P/P	47 - 128
2229469	Toxaphene	110	113	P/P	11 - 163

Reference Method: EPA 8321B
Batch ID: P394466

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228915	2,4-D	94.4	90.3	P/P	30 - 160
2228915	2,4,5-T	79.7	72.8	P/P	30 - 160
2228915	Acetaminophen	113	114	P/P	30 - 160
2228915	Acetamiprid	97.8	92.0	P/P	30 - 160
2228915	Afidopyropen	73.2	67.6	P/P	30 - 160
2228915	Bentazon	76.9	70.9	P/P	30 - 160
2228915	Benzovindiflupyr	76.2	74.3	P/P	30 - 160
2228915	Carbamazepine	92.4	85.8	P/P	30 - 160
2228915	Clothianidin	94.2	97.4	P/P	30 - 160
2228915	Dinotefuran	90.5	89.9	P/P	30 - 160
2228915	Diuron	68.7	62.3	P/P	30 - 160
2228915	Fenuron	95.8	83.2	P/P	30 - 160
2228915	Fluridone	95.3	96.4	P/P	30 - 160
2228915	Hydrocodone	107	97.1	P/P	30 - 160
2228915	Ibuprofen	70.4	76.4	P/P	30 - 160
2228915	Imazapyr	88.0	93.9	P/P	30 - 160
2228915	Imidacloprid	110	95.6	P/P	30 - 160
2228915	Linuron	76.7	73.7	P/P	30 - 160
2228915	Mandestrobin	82.5	77.0	P/P	30 - 160
2228915	MCPP	83.0	88.7	P/P	30 - 160
2228915	Naproxen	49.7	40.6	P/P	30 - 160
2228915	Primidone	97.8	98.9	P/P	30 - 160
2228915	Pyraclostrobin	73.3	69.5	P/P	30 - 160
2228915	Thiamethoxam	105	98.5	P/P	30 - 160
2228915	Tolfenpyrad	46.8	45.8	P/P	30 - 160
2228915	Triclopyr	77.8	69.6	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P394526

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228966	Acesulfame K	207	213	F/F	40 - 150
2228966	AMPA	109	110	P/P	40 - 150
2228966	Endothall	149	198	P/F	40 - 150
2228966	Glufosinate	133	151	P/F	40 - 150
2228966	Glyphosate	71.8	83.2	P/P	40 - 140
2228966	Sucralose	114	115	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P394538

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229585	3-Hydroxycarbofuran	86.7	80.2	P/P	30 - 160
2229585	Aldicarb	70.3	62.8	P/P	30 - 160
2229585	Aldicarb Sulfone	90.7	86.6	P/P	30 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P394538

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229585	Aldicarb Sulfoxide	23.8	24.7	F/F	30 - 160
2229585	Carbaryl	47.3	46.0	P/P	30 - 160
2229585	Carbofuran	55.5	48.8	P/P	30 - 160
2229585	Methiocarb	60.1	59.5	P/P	30 - 160
2229585	Oxamyl	83.4	76.1	P/P	30 - 160
2229585	Propoxur	54.8	48.1	P/P	30 - 160

Reference Method: SM 4500 F-C-2011
Batch ID: P394738

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2229519	Fluoride	98.5	96.8	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P395016

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2228991	Organic Carbon	96.0	94.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P394500

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228947	Turbidity	3.13	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228774	Chloride	0.911	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394700

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228774	Sulfate	0.456	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394590

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228940	Ammonia-N	0.462	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394658

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228874	Kjeldahl Nitrogen	1.23	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P394721

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228954	Kjeldahl Nitrogen	2.21	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P394618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228939	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P394550

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228939	Total-P	0.132	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P394491

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228941	O-Phosphate-P	0.901	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P394522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228972	Acetochlor	3.16	Spike	P	0 - 30
2228972	Alachlor	9.01	Spike	P	0 - 30
2228972	Ametryn	2.93	Spike	P	0 - 30
2228972	Atrazine	9.81	Spike	P	0 - 30
2228972	Atrazine Desethyl	3.95	Spike	P	0 - 30
2228972	Azinphos Methyl	6.78	Spike	P	0 - 30
2228972	Azoxystrobin	10.0	Spike	P	0 - 30
2228972	Bromacil	2.24	Spike	P	0 - 30
2228972	Butylate	16.8	Spike	P	0 - 30
2228972	Caffeine	3.61	Spike	P	0 - 30
2228972	Carbophenothion	8.52	Spike	P	0 - 30
2228972	Carfentrazone Ethyl	4.65	Spike	P	0 - 30
2228972	Chlorpyrifos Ethyl	12.8	Spike	P	0 - 30
2228972	Chlorpyrifos Methyl	2.59	Spike	P	0 - 30
2228972	Cyanazine	13.1	Spike	P	0 - 30
2228972	Demeton	28.1	Spike	P	0 - 30
2228972	Diazinon	0.464	Spike	P	0 - 30
2228972	Difenoconazole	8.71	Spike	P	0 - 30
2228972	Dimethenamid	9.61	Spike	P	0 - 30
2228972	Disulfoton	1.40	Spike	P	0 - 30
2228972	Dithiopyr	11.1	Spike	P	0 - 30
2228972	EPTC	13.9	Spike	P	0 - 30
2228972	Ethion	15.6	Spike	P	0 - 30
2228972	Ethoprop	3.81	Spike	P	0 - 30
2228972	Fenamiphos	15.8	Spike	P	0 - 30
2228972	Fenbuconazole	3.30	Spike	P	0 - 30
2228972	Fipronil	1.24	Spike	P	0 - 30
2228972	Fipronil Desulfinyl	2.09	Spike	P	0 - 30
2228972	Fipronil Sulfide	2.16	Spike	P	0 - 30
2228972	Fipronil Sulfone	5.39	Spike	P	0 - 30
2228972	Fluazifop-P-butyl	8.77	Spike	P	0 - 30
2228972	Fludioxonil	0.220	Spike	P	0 - 30
2228972	Flumioxazin	7.35	Spike	P	0 - 30
2228972	Flutolanil	7.26	Spike	P	0 - 30
2228972	Fluxapyroxad	0.298	Spike	P	0 - 30
2228972	Fonofos	7.66	Spike	P	0 - 30
2228972	Hexazinone	5.06	Spike	P	0 - 30
2228972	Imazalil	9.21	Spike	P	0 - 30
2228972	Iprodione	1.63	Spike	P	0 - 30
2228972	Malathion	1.26	Spike	P	0 - 30
2228972	Metalaxyl	1.73	Spike	P	0 - 30
2228972	Metolachlor	3.84	Spike	P	0 - 30
2228972	Metribuzin	1.37	Spike	P	0 - 30
2228972	Mevinphos	4.85	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P394522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228972	Molinate	8.79	Spike	P	0 - 30
2228972	Myclobutanil	6.68	Spike	P	0 - 30
2228972	Naled	6.44	Spike	P	0 - 30
2228972	Norflurazon	2.29	Spike	P	0 - 30
2228972	Oxadiazon	3.18	Spike	P	0 - 30
2228972	Oxyfluorfen	0.345	Spike	P	0 - 30
2228972	Parathion Ethyl	0.182	Spike	P	0 - 30
2228972	Parathion Methyl	1.54	Spike	P	0 - 30
2228972	Pendimethalin	0.939	Spike	P	0 - 30
2228972	Phorate	6.21	Spike	P	0 - 30
2228972	Prodiamine	2.41	Spike	P	0 - 30
2228972	Prometon	6.30	Spike	P	0 - 30
2228972	Prometryn	3.12	Spike	P	0 - 30
2228972	Pronamide	1.69	Spike	P	0 - 30
2228972	Propiconazole	0.965	Spike	P	0 - 30
2228972	Pyriproxyfen	18.1	Spike	P	0 - 30
2228972	Simazine	4.22	Spike	P	0 - 30
2228972	Sulfentrazone	10.4	Spike	P	0 - 30
2228972	Tebuconazole	14.1	Spike	P	0 - 30
2228972	Terbufos	1.35	Spike	P	0 - 30
2228972	Terbuthylazine	13.0	Spike	P	0 - 30
LFB	Acetochlor	4.21	LCS	P	0 - 30
LFB	Alachlor	3.76	LCS	P	0 - 30
LFB	Ametryn	29.0	LCS	P	0 - 30
LFB	Atrazine	0.369	LCS	P	0 - 30
LFB	Atrazine Desethyl	3.03	LCS	P	0 - 30
LFB	Azinphos Methyl	11.3	LCS	P	0 - 30
LFB	Azoxystrobin	35.5	LCS	F	0 - 30
LFB	Bromacil	6.48	LCS	P	0 - 30
LFB	Butylate	1.20	LCS	P	0 - 30
LFB	Caffeine	13.4	LCS	P	0 - 30
LFB	Carbophenothion	22.1	LCS	P	0 - 30
LFB	Carfentrazone Ethyl	18.6	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.61	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	2.59	LCS	P	0 - 30
LFB	Cyanazine	3.64	LCS	P	0 - 30
LFB	Demeton	3.28	LCS	P	0 - 30
LFB	Diazinon	6.97	LCS	P	0 - 30
LFB	Difenoconazole	28.0	LCS	P	0 - 30
LFB	Dimethenamid	12.3	LCS	P	0 - 30
LFB	Disulfoton	0.547	LCS	P	0 - 30
LFB	Dithiopyr	2.96	LCS	P	0 - 30
LFB	EPTC	13.5	LCS	P	0 - 30
LFB	Ethion	37.3	LCS	F	0 - 30
LFB	Ethoprop	3.95	LCS	P	0 - 30
LFB	Fenamiphos	5.28	LCS	P	0 - 30
LFB	Fenbuconazole	14.0	LCS	P	0 - 30
LFB	Fipronil	2.80	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	0.587	LCS	P	0 - 30
LFB	Fipronil Sulfide	4.62	LCS	P	0 - 30
LFB	Fipronil Sulfone	20.9	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P394522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Fluazifop-P-butyl	11.2	LCS	P	0 - 30
LFB	Fludioxonil	9.59	LCS	P	0 - 30
LFB	Flumioxazin	19.0	LCS	P	0 - 30
LFB	Flutolanil	13.8	LCS	P	0 - 30
LFB	Fluxapyroxad	26.3	LCS	P	0 - 30
LFB	Fonofos	3.08	LCS	P	0 - 30
LFB	Hexazinone	8.30	LCS	P	0 - 30
LFB	Imazalil	1.59	LCS	P	0 - 30
LFB	Iprodione	17.0	LCS	P	0 - 30
LFB	Malathion	6.68	LCS	P	0 - 30
LFB	Metalaxyl	0.526	LCS	P	0 - 30
LFB	Metolachlor	2.52	LCS	P	0 - 30
LFB	Metribuzin	1.61	LCS	P	0 - 30
LFB	Mevinphos	2.26	LCS	P	0 - 30
LFB	Molinate	3.30	LCS	P	0 - 30
LFB	Myclobutanil	13.3	LCS	P	0 - 30
LFB	Naled	9.89	LCS	P	0 - 30
LFB	Norflurazon	17.9	LCS	P	0 - 30
LFB	Oxadiazon	13.5	LCS	P	0 - 30
LFB	Oxyfluorfen	6.65	LCS	P	0 - 30
LFB	Parathion Ethyl	9.78	LCS	P	0 - 30
LFB	Parathion Methyl	0.777	LCS	P	0 - 30
LFB	Pendimethalin	5.92	LCS	P	0 - 30
LFB	Phorate	7.00	LCS	P	0 - 30
LFB	Prodiamine	4.40	LCS	P	0 - 30
LFB	Prometon	4.69	LCS	P	0 - 30
LFB	Prometryn	3.64	LCS	P	0 - 30
LFB	Pronamide	4.23	LCS	P	0 - 30
LFB	Propiconazole	7.06	LCS	P	0 - 30
LFB	Pyriproxyfen	26.9	LCS	P	0 - 30
LFB	Simazine	2.56	LCS	P	0 - 30
LFB	Sulfentrazone	32.5	LCS	F	0 - 30
LFB	Tebuconazole	36.8	LCS	F	0 - 30
LFB	Terbufos	3.31	LCS	P	0 - 30
LFB	Terbuthylazine	3.73	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P394537

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229185	Alpha-BHC	4.81	Spike	P	0 - 30
2229185	Alpha-Chlordane	1.29	Spike	P	0 - 30
2229185	Beta-BHC	1.98	Spike	P	0 - 30
2229185	Beta-Cyfluthrin	3.70	Spike	P	0 - 30
2229185	Bifenthrin	0.910	Spike	P	0 - 30
2229185	Chlorothalonil	19.2	Spike	P	0 - 30
2229185	Cis-Nonachlor	1.93	Spike	P	0 - 30
2229185	Cypermethrin	1.61	Spike	P	0 - 30
2229185	Dacthal	1.73	Spike	P	0 - 30
2229185	DDD-p,p'	1.66	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P394537

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229185	DDE-p,p'	0.873	Spike	P	0 - 30
2229185	DDT-p,p'	1.07	Spike	P	0 - 30
2229185	Delta-BHC	3.50	Spike	P	0 - 30
2229185	Deltamethrin	1.38	Spike	P	0 - 30
2229185	Dichlobenil	2.13	Spike	P	0 - 30
2229185	Dicofol	4.99	Spike	P	0 - 30
2229185	Endosulfan I	4.21	Spike	P	0 - 30
2229185	Endosulfan II	11.3	Spike	P	0 - 30
2229185	Endosulfan Sulfate	7.74	Spike	P	0 - 30
2229185	Endrin	4.41	Spike	P	0 - 30
2229185	Endrin Aldehyde	8.90	Spike	P	0 - 30
2229185	Endrin Ketone	1.72	Spike	P	0 - 30
2229185	Esfenvalerate	15.4	Spike	P	0 - 30
2229185	Ethalfluralin	0.416	Spike	P	0 - 30
2229185	Fenpropathrin	4.87	Spike	P	0 - 30
2229185	Gamma-BHC	0.877	Spike	P	0 - 30
2229185	Gamma-Chlordane	1.17	Spike	P	0 - 30
2229185	Heptachlor	0.224	Spike	P	0 - 30
2229185	Heptachlor Epoxide	1.11	Spike	P	0 - 30
2229185	Hexachlorobenzene	0.0371	Spike	P	0 - 30
2229185	Lambda-Cyhalothrin	1.74	Spike	P	0 - 30
2229185	Methoxychlor	0.442	Spike	P	0 - 30
2229185	MGK-264	6.87	Spike	P	0 - 30
2229185	Mirex	0.856	Spike	P	0 - 30
2229185	Permethrin	0.654	Spike	P	0 - 30
2229185	Phenothrin	4.56	Spike	P	0 - 30
2229185	Piperonyl Butoxide	0.393	Spike	P	0 - 30
2229185	Prallethrin	1.90	Spike	P	0 - 30
2229185	Tau-Fluvalinate	0.894	Spike	P	0 - 30
2229185	Tetramethrin	24.7	Spike	P	0 - 30
2229185	Trans-Nonachlor	1.44	Spike	P	0 - 30
2229185	Triclosan Methyl	0.583	Spike	P	0 - 30
2229185	Trifluralin	1.81	Spike	P	0 - 30
2229469	Aldrin	7.04	Spike	P	0 - 30
2229469	Dieldrin	6.24	Spike	P	0 - 30
2229469	Kepone	8.61	Spike	P	0 - 30
LFB	Aldrin	1.68	LCS	P	0 - 30
LFB	Alpha-BHC	3.20	LCS	P	0 - 30
LFB	Alpha-Chlordane	2.60	LCS	P	0 - 30
LFB	Beta-BHC	1.45	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	3.61	LCS	P	0 - 30
LFB	Bifenthrin	0.663	LCS	P	0 - 30
LFB	Chlorothalonil	26.7	LCS	P	0 - 30
LFB	Cis-Nonachlor	3.25	LCS	P	0 - 30
LFB	Cypermethrin	7.39	LCS	P	0 - 30
LFB	Dacthal	1.93	LCS	P	0 - 30
LFB	DDD-p,p'	3.45	LCS	P	0 - 30
LFB	DDE-p,p'	0.329	LCS	P	0 - 30
LFB	DDT-p,p'	0.235	LCS	P	0 - 30
LFB	Delta-BHC	1.44	LCS	P	0 - 30
LFB	Deltamethrin	3.42	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P394537

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dichlobenil	3.44	LCS	P	0 - 30
LFB	Dicofol	0.325	LCS	P	0 - 30
LFB	Dieldrin	6.13	LCS	P	0 - 30
LFB	Endosulfan I	2.08	LCS	P	0 - 30
LFB	Endosulfan II	1.39	LCS	P	0 - 30
LFB	Endosulfan Sulfate	0.974	LCS	P	0 - 30
LFB	Endrin	4.11	LCS	P	0 - 30
LFB	Endrin Aldehyde	5.48	LCS	P	0 - 30
LFB	Endrin Ketone	3.99	LCS	P	0 - 30
LFB	Esfenvalerate	10.6	LCS	P	0 - 30
LFB	Ethalfluralin	0.344	LCS	P	0 - 30
LFB	Fenpropathrin	0.676	LCS	P	0 - 30
LFB	Gamma-BHC	1.07	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.26	LCS	P	0 - 30
LFB	Heptachlor	0.0971	LCS	P	0 - 30
LFB	Heptachlor Epoxide	2.50	LCS	P	0 - 30
LFB	Hexachlorobenzene	1.72	LCS	P	0 - 30
LFB	Kepone	2.40	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	3.96	LCS	P	0 - 30
LFB	Methoxychlor	0.919	LCS	P	0 - 30
LFB	MGK-264	9.67	LCS	P	0 - 30
LFB	Mirex	1.11	LCS	P	0 - 30
LFB	Permethrin	3.31	LCS	P	0 - 30
LFB	Phenothrin	6.64	LCS	P	0 - 30
LFB	Piperonyl Butoxide	10.5	LCS	P	0 - 30
LFB	Prallethrin	2.03	LCS	P	0 - 30
LFB	Tau-Fluvalinate	5.18	LCS	P	0 - 30
LFB	Tetramethrin	19.0	LCS	P	0 - 30
LFB	Trans-Nonachlor	1.04	LCS	P	0 - 30
LFB	Triclosan Methyl	2.05	LCS	P	0 - 30
LFB	Trifluralin	0.815	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P394537

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229469	Chlordane	4.00	Spike	P	0 - 30
2229469	Toxaphene	2.85	Spike	P	0 - 30
LFB	Chlordane	0.0129	LCS	P	0 - 30
LFB	Toxaphene	2.90	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P394466

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228915	2,4-D	4.43	Spike	P	0 - 30
2228915	2,4,5-T	9.11	Spike	P	0 - 30
2228915	Acetaminophen	0.697	Spike	P	0 - 30
2228915	Acetamiprid	6.03	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P394466

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228915	Afidopyropen	7.91	Spike	P	0 - 30
2228915	Bentazon	6.46	Spike	P	0 - 30
2228915	Benzovindiflupyr	2.49	Spike	P	0 - 30
2228915	Carbamazepine	7.40	Spike	P	0 - 30
2228915	Clothianidin	3.42	Spike	P	0 - 30
2228915	Dinotefuran	0.607	Spike	P	0 - 30
2228915	Diuron	9.76	Spike	P	0 - 30
2228915	Fenuron	14.1	Spike	P	0 - 30
2228915	Fluridone	1.16	Spike	P	0 - 30
2228915	Hydrocodone	10.2	Spike	P	0 - 30
2228915	Ibuprofen	8.10	Spike	P	0 - 30
2228915	Imazapyr	6.48	Spike	P	0 - 30
2228915	Imidacloprid	13.1	Spike	P	0 - 30
2228915	Linuron	3.97	Spike	P	0 - 30
2228915	Mandestrobin	6.92	Spike	P	0 - 30
2228915	MCPP	6.63	Spike	P	0 - 30
2228915	Naproxen	15.7	Spike	P	0 - 30
2228915	Primidone	1.09	Spike	P	0 - 30
2228915	Pyraclostrobin	5.42	Spike	P	0 - 30
2228915	Thiamethoxam	6.36	Spike	P	0 - 30
2228915	Tolfenpyrad	2.14	Spike	P	0 - 30
2228915	Triclopyr	11.2	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P394526

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228966	Acesulfame K	2.84	Spike	P	0 - 30
2228966	AMPA	0.907	Spike	P	0 - 30
2228966	Endothall	28.4	Spike	P	0 - 30
2228966	Glufosinate	12.8	Spike	P	0 - 30
2228966	Glyphosate	14.8	Spike	P	0 - 30
2228966	Sucralose	1.07	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P394538

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229585	3-Hydroxycarbofuran	7.77	Spike	P	0 - 30
2229585	Aldicarb	11.3	Spike	P	0 - 30
2229585	Aldicarb Sulfone	4.65	Spike	P	0 - 30
2229585	Aldicarb Sulfoxide	3.86	Spike	P	0 - 30
2229585	Carbaryl	2.65	Spike	P	0 - 30
2229585	Carbofuran	12.7	Spike	P	0 - 30
2229585	Methiocarb	0.869	Spike	P	0 - 30
2229585	Methomyl	4.74	Spike	P	0 - 30
2229585	Oxamyl	9.11	Spike	P	0 - 30
2229585	Propoxur	13.1	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: SM 2120 B-2011
Batch ID: P394497

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228990	Color (true)	3.29	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P394733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229519	Total Alkalinity	0.827	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P394829

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228947	TDS	1.73	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P394738

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2229519	Fluoride	0.946	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P395016

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2228991	Organic Carbon	1.02	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2228965
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	37.4	P	30 - 160

Lab Sample ID: 2228966
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	72.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	62.2	P	30 - 160
EPA 8321B	Diuron-d6	44.1	P	30 - 160
EPA 8321B	Endothall-d6	113	P	40 - 160
EPA 8321B	Endothall-d6	113	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	47.8	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	47.8	P	40 - 160
EPA 8321B	Ibuprofen-d3	63.2	P	30 - 160
EPA 8321B	Primidone-d5	90.8	P	30 - 160
EPA 8321B	Sucralose-d6	123	P	30 - 160
EPA 8321B	Sucralose-d6	123	P	30 - 160

Lab Sample ID: 2228967
Field Sample ID: FB_03032021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	57.7	P	30 - 160

Lab Sample ID: 2228968
Field Sample ID: FB_03032021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	68.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.4	P	30 - 160
EPA 8321B	Diuron-d6	64.7	P	30 - 160
EPA 8321B	Endothall-d6	123	P	40 - 160
EPA 8321B	Endothall-d6	123	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	122	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	122	P	40 - 160
EPA 8321B	Ibuprofen-d3	77.4	P	30 - 160
EPA 8321B	Primidone-d5	104	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	30 - 160

Lab Sample ID: 2228972
Field Sample ID: G3SD0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	53.6	P	20 - 200
EPA 8270E	Simazine-d10	110	P	73 - 135
EPA 8270E	Terbufos-d10	95.0	P	58 - 130

Quality Assurance Report
Surrogates

Lab Sample ID: 2228973
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	107	P	40 - 123
EPA 8270E	Decachlorobiphenyl	97.1	P	47 - 111
EPA 8270E	Tetrachloro-m-xylene	69.4	P	31 - 100
EPA 8270E	Tetrachloro-m-xylene	72.8	P	33 - 102
EPA 8276	Decachlorobiphenyl	79.3	P	29 - 92.0
EPA 8276	PCNB	94.7	P	43 - 134

Lab Sample ID: 2228974
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	65.9	P	20 - 200
EPA 8270E	Simazine-d10	108	P	73 - 135
EPA 8270E	Terbufos-d10	82.6	P	58 - 130

Lab Sample ID: 2228975
Field Sample ID: FB_03032021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	104	P	40 - 123
EPA 8270E	Decachlorobiphenyl	108	P	47 - 111
EPA 8270E	Tetrachloro-m-xylene	87.8	P	31 - 100
EPA 8270E	Tetrachloro-m-xylene	87.2	P	33 - 102
EPA 8276	Decachlorobiphenyl	91.0	P	29 - 92.0
EPA 8276	PCNB	97.2	P	43 - 134

Lab Sample ID: 2228976
Field Sample ID: FB_03032021

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	65.3	P	20 - 200
EPA 8270E	Simazine-d10	101	P	73 - 135
EPA 8270E	Terbufos-d10	85.1	P	58 - 130

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A103892
Included Lab Sample IDs: 2228949, 2228952, 2228955, 2228958

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.0	98.0	P/P	90 - 110
O-Phosphate-P	98.0	99.2	P/P	90 - 110

Reference Method: SM 2120 B-2011
Run ID: A103893
Included Lab Sample IDs: 2228947, 2228950, 2228953, 2228956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	103	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A103894
Included Lab Sample IDs: 2228947, 2228950, 2228953, 2228956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	102	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A103925
Included Lab Sample IDs: 2228948, 2228951, 2228954, 2228957

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.1	98.5	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A103927
Included Lab Sample IDs: 2228966, 2228968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	66.3	64.7	P/P	50 - 150
2,4,5-T	73.9	67.2	P/P	50 - 150
3-Hydroxycarbofuran	96.8	105	P/P	60 - 150
Acetaminophen	88.1	109	P/P	60 - 160
Acetamiprid	94.9	99.6	P/P	50 - 150
Afidopyropen	76.0	79.6	P/P	50 - 150
Aldicarb	86.7	85.8	P/P	60 - 150
Aldicarb Sulfone	91.0	99.2	P/P	50 - 150
Aldicarb Sulfoxide	101	101	P/P	50 - 150
Bentazon	118	110	P/P	50 - 160
Benzovindiflupyr	92.9	88.4	P/P	50 - 160
Carbamazepine	91.3	91.1	P/P	60 - 150
Carbaryl	98.0	92.4	P/P	60 - 150
Carbofuran	107	105	P/P	50 - 150
Clothianidin	105	96.2	P/P	60 - 150
Dinotefuran	85.3	95.7	P/P	50 - 150
Diuron	97.7	89.6	P/P	60 - 160
Fenuron	105	103	P/P	60 - 150
Fluridone	115	120	P/P	60 - 160
Hydrocodone	93.1	99.7	P/P	60 - 150
Ibuprofen	94.4	79.5	P/P	50 - 160
Imazapyr	104	94.8	P/P	50 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A103927
Included Lab Sample IDs: 2228966, 2228968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imidacloprid	95.5	93.6	P/P	60 - 150
Linuron	96.3	101	P/P	60 - 150
Mandestrobin	91.7	94.4	P/P	50 - 150
MCPP	73.3	77.5	P/P	50 - 150
Methiocarb	104	103	P/P	50 - 150
Methomyl	95.0	105	P/P	50 - 150
Naproxen	127	123	P/P	50 - 160
Oxamyl	104	103	P/P	50 - 150
Primidone	104	91.9	P/P	60 - 150
Propoxur	107	104	P/P	50 - 150
Pyraclostrobin	88.6	87.5	P/P	60 - 150
Thiamethoxam	93.8	93.0	P/P	50 - 150
Tolfenpyrad	91.9	87.4	P/P	60 - 150
Triclopyr	60.7	78.4	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A103943
Included Lab Sample IDs: 2228948, 2228951, 2228954, 2228957

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A103946
Included Lab Sample IDs: 2228948, 2228951, 2228954

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

Reference Method: EPA 8321B
Run ID: A103949
Included Lab Sample IDs: 2228966, 2228968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	139	95.0	P/P	60 - 160
Acesulfame K	95.0	61.6	P/P	60 - 160
AMPA	106	113	P/P	60 - 160
AMPA	113	112	P/P	60 - 160
Endothall	145	120	P/P	60 - 160
Endothall	99.7	145	P/P	60 - 160
Glufosinate	93.3	96.4	P/P	60 - 160
Glufosinate	96.4	103	P/P	60 - 160
Glyphosate	111	132	P/P	60 - 160
Glyphosate	132	123	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A103950
Included Lab Sample IDs: 2228957

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.8	98.0	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A103974
Included Lab Sample IDs: 2228947, 2228950, 2228953, 2228956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	100	P/P	90 - 110
Chloride	99.9	100	P/P	90 - 110
Sulfate	99.3	99.4	P/P	90 - 110
Sulfate	99.4	99.8	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A103989
Included Lab Sample IDs: 2228947, 2228950, 2228953, 2228956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	96.5	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A103989
Included Lab Sample IDs: 2228947, 2228950, 2228953, 2228956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	100	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A103998
Included Lab Sample IDs: 2228973, 2228975

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	99.3		P	80 - 120
Dieldrin	98.9		P	80 - 120
Kepone	102		P	80 - 120

Reference Method: EPA 8276
Run ID: A103999
Included Lab Sample IDs: 2228973, 2228975

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.0		P	80 - 120
Toxaphene	103		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A104011
Included Lab Sample IDs: 2228948, 2228951, 2228954, 2228957

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	103	P/P	90 - 110
Kjeldahl Nitrogen	103	104	P/P	90 - 110
Kjeldahl Nitrogen	99.8	103	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A104071
Included Lab Sample IDs: 2228966, 2228968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	94.2	95.6	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-2011
Run ID: A104080
Included Lab Sample IDs: 2228948, 2228951, 2228954, 2228957

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.5	94.7	P/P	90 - 110
Organic Carbon	94.7	93.8	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A104085
Included Lab Sample IDs: 2228973, 2228975

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alpha-BHC	97.4		P	80 - 120
Alpha-Chlordane	103		P	80 - 120
Beta-BHC	97.2		P	80 - 120
Beta-Cyfluthrin	80.4		P	80 - 120
Bifenthrin	91.3		P	80 - 120
Chlorothalonil	88.9		P	80 - 120
Cis-Nonachlor	104		P	80 - 120
Cypermethrin	85.5		P	80 - 120
Dacthal	100		P	80 - 120
DDD-p,p'	99.5		P	80 - 120
DDE-p,p'	100		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	99.4		P	80 - 120
Deltamethrin	88.4		P	80 - 120
Dichlobenil	102		P	80 - 120
Dicofol	99.4		P	80 - 120
Endosulfan I	95.5		P	80 - 120
Endosulfan II	111		P	80 - 120
Endosulfan Sulfate	95.7		P	80 - 120
Endrin	105		P	80 - 120
Endrin Aldehyde	100		P	80 - 120
Endrin Ketone	98.5		P	80 - 120
Esfenvalerate	80.7		P	80 - 120
Ethalfluralin	95.0		P	80 - 120
Fenpropathrin	80.2		P	80 - 120
Gamma-BHC	98.3		P	80 - 120
Gamma-Chlordane	100		P	80 - 120
Heptachlor	98.4		P	80 - 120
Heptachlor Epoxide	102		P	80 - 120
Hexachlorobenzene	103		P	80 - 120
Lambda-Cyhalothrin	86.4		P	80 - 120
Methoxychlor	104		P	80 - 120
MGK-264	96.4		P	80 - 120
Mirex	99.2		P	80 - 120
Permethrin	88.6		P	80 - 120
Phenothrin	84.4		P	80 - 120
Piperonyl Butoxide	87.0		P	80 - 120
Prallethrin	88.2		P	80 - 120
Tau-Fluvalinate	83.9		P	80 - 120
Tetramethrin	80.1		P	80 - 120
Trans-Nonachlor	105		P	80 - 120
Triclosan Methyl	102		P	80 - 120
Trifluralin	96.3		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A104128
Included Lab Sample IDs: 2228972, 2228974, 2228976

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	100		P	80 - 120
Ametryn	101		P	80 - 120
Atrazine	98.6		P	80 - 120
Atrazine Desethyl	98.4		P	80 - 120
Azinphos Methyl	121*		F	80 - 120
Azoxystrobin	90.3		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	93.8		P	80 - 120
Caffeine	93.9		P	70 - 120
Carbophenothion	99.5		P	80 - 120
Carfentrazone Ethyl	106		P	80 - 120
Chlorpyrifos Ethyl	97.3		P	80 - 120
Chlorpyrifos Methyl	96.3		P	80 - 120
Cyanazine	103		P	80 - 120
Demeton	94.6		P	80 - 120
Diazinon	100		P	80 - 120
Difenoconazole	95.3		P	80 - 120
Dimethenamid	102		P	80 - 120
Disulfoton	94.3		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	97.5		P	80 - 120
Ethion	96.7		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	93.2		P	80 - 120
Fenbuconazole	94.6		P	80 - 120
Fipronil	100		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	95.2		P	80 - 120
Fipronil Sulfone	98.2		P	80 - 120
Fluazifop-P-butyl	103		P	80 - 120
Fludioxonil	103		P	80 - 120
Flumioxazin	94.5		P	80 - 120
Flutolanil	98.7		P	80 - 120
Fluxapyroxad	102		P	80 - 120
Fonofos	91.9		P	80 - 120
Hexazinone	99.5		P	80 - 120
Imazalil	103		P	80 - 120
Iprodione	102		P	80 - 120
Malathion	97.0		P	80 - 120
Metalaxyl	100		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	99.6		P	80 - 120
Mevinphos	100		P	80 - 120
Molinate	96.5		P	80 - 120
Myclobutanil	97.6		P	80 - 120
Naled	94.9		P	80 - 120
Norflurazon	99.3		P	80 - 120
Oxadiazon	106		P	80 - 120
Oxyfluorfen	97.2		P	80 - 120
Parathion Ethyl	98.1		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A104128
Included Lab Sample IDs: 2228972, 2228974, 2228976

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Parathion Methyl	94.3		P	80 - 120
Pendimethalin	98.2		P	80 - 120
Phorate	97.8		P	80 - 120
Prodiamine	104		P	80 - 120
Prometon	98.8		P	80 - 120
Prometryn	93.9		P	80 - 120
Pronamide	94.8		P	80 - 120
Propiconazole	104		P	80 - 120
Pyriproxyfen	115		P	80 - 120
Simazine	108		P	80 - 120
Sulfentrazone	101		P	80 - 120
Tebuconazole	104		P	80 - 120
Terbufos	97.6		P	80 - 120
Terbuthylazine	100		P	80 - 120

Reference Method: EPA 8270E
Run ID: A104130
Included Lab Sample IDs: 2228972, 2228974

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	96.9		P	80 - 120

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						3.13	
EPA 300.0 Rev. 2.1	Chloride	101		99.7	92.4		0.911	
	Sulfate	98.8		96.3	98.6		0.456	
EPA 350.1 Rev. 2.0	Ammonia-N	97.4		97.4	98.0			0.462
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104		106	107			1.23
	Kjeldahl Nitrogen	104						2.21
EPA 353.2 Rev. 2.0	NO2NO3-N	100		99.6	99.6			0.0
EPA 365.1 Rev. 2.0	Total-P	105		108	108			0.132
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.7		100	99.4			0.901
EPA 8270E	Acetochlor	85.7	89.4	81.7	84.4	4.21		3.16
	Alachlor	85.1	81.9	77.9	85.3	3.76		9.01
	Aldrin	21.8	21.5	26.1	28.0	1.68		7.04
	Alpha-BHC	85.2	88.0	91.5	87.2	3.20		4.81
	Alpha-Chlordane	88.1	85.9	89.3	88.2	2.60		1.29
	Ametryn	93.1	125			29.0		2.93
	Atrazine	85.6	85.9			0.369		9.81
	Atrazine Desethyl	73.3	71.1			3.03		3.95
	Azinphos Methyl	106	94.5	81.3	76.0	11.3		6.78
	Azoxystrobin	221	154	196	217	35.5		10.0
	Beta-BHC	99.9	98.5	101	98.8	1.45		1.98
	Beta-Cyfluthrin	60.6	58.4	78.7	75.8	3.61		3.70
	Bifenthrin	75.2	75.7	94.2	93.3	0.663		0.910
	Bromacil	89.2	83.6	146	143	6.48		2.24
	Butylate	55.5	54.8	52.8	44.6	1.20		16.8
	Caffeine	93.2	81.5	87.1	84.0	13.4		3.61
	Carbophenothion	73.1	58.6	61.5	56.4	22.1		8.52
	Carfentrazone Ethyl	91.4	75.8	68.9	72.2	18.6		4.65
	Chlorothalonil	50.1	65.6	23.5	28.4	26.7		19.2
	Chlorpyrifos Ethyl	73.6	70.3	58.6	49.9	4.61		12.8
	Chlorpyrifos Methyl	81.1	79.0	76.2	74.3	2.59		2.59
	Cis-Nonachlor	93.2	90.3	95.9	94.1	3.25		1.93
	Cyanazine	147	142	135	119	3.64		13.1
	Cypermethrin	72.9	67.7	83.7	85.0	7.39		1.61
	Dacthal	95.2	93.4	89.3	87.8	1.93		1.73
	DDD-p,p'	93.4	90.3	94.8	93.2	3.45		1.66
	DDE-p,p'	83.6	83.3	87.9	88.6	0.329		0.873
	DDT-p,p'	86.8	86.5	89.3	90.3	0.235		1.07
	Delta-BHC	98.2	99.7	105	101	1.44		3.50
	Deltamethrin	77.8	75.2	89.4	90.6	3.42		1.38
	Demeton	74.3	76.8	68.5	90.8	3.28		28.1
	Diazinon	89.4	95.9	90.6	90.2	6.97		0.464
	Dichlobenil	63.4	65.6	85.9	84.1	3.44		2.13
	Dicofol	104	104	97.6	103	0.325		4.99
	Dieldrin	81.8	76.9	64.3	59.7	6.13		6.24
	Difenoconazole	177	133	156	143	28.0		8.71
	Dimethenamid	90.7	80.1	75.2	82.8	12.3		9.61
	Disulfoton	68.3	67.9	69.4	68.5	0.547		1.40
	Dithiopyr	83.7	81.3	63.6	56.9	2.96		11.1
	Endosulfan I	90.6	92.5	94.7	90.8	2.08		4.21
	Endosulfan II	103	104	103	92.0	1.39		11.3
	Endosulfan Sulfate	87.1	86.3	86.8	80.4	0.974		7.74
	Endrin	89.0	85.4	83.8	87.6	4.11		4.41
	Endrin Aldehyde	100	95.0	75.2	68.8	5.48		8.90
	Endrin Ketone	93.9	90.2	88.5	87.0	3.99		1.72

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	EPTC	59.2	51.7	45.2	51.9	13.5		13.9
	Esfenvalerate	69.5	62.5	85.3	73.1	10.6		15.4
	Ethalfluralin	80.8	81.1	83.9	83.6	0.344		0.416
	Ethion	65.0	44.5	35.8	30.6	37.3		15.6
	Ethoprop	78.3	81.5	84.2	87.4	3.95		3.81
	Fenamiphos	91.9	87.2	62.1	53.0	5.28		15.8
	Fenbuconazole	109	95.1	99.9	103	14.0		3.30
	Fenpropathrin	89.1	88.5	130	124	0.676		4.87
	Fipronil	96.5	93.8	87.4	88.5	2.80		1.24
	Fipronil Desulfinyl	86.7	86.2	77.1	75.6	0.587		2.09
	Fipronil Sulfide	80.0	76.4	73.1	71.5	4.62		2.16
	Fipronil Sulfone	85.9	69.7	73.2	69.4	20.9		5.39
	Fluazifop-P-butyl	86.1	76.9	73.2	67.1	11.2		8.77
	Fludioxonil	82.0	74.5	75.2	75.0	9.59		0.220
	Flumioxazin	223	185	200	186	19.0		7.35
	Flutolanil	92.1	80.2	81.8	75.6	13.8		7.26
	Fluxapyroxad	73.9	56.7	59.0	58.8	26.3		0.298
	Fonofos	70.9	68.7	65.0	60.2	3.08		7.66
	Gamma-BHC	96.5	97.5	90.7	89.9	1.07		0.877
	Gamma-Chlordane	82.8	80.9	86.6	85.6	2.26		1.17
	Heptachlor	72.5	72.6	74.8	74.9	0.0971		0.224
	Heptachlor Epoxide	91.2	89.0	88.3	87.3	2.50		1.11
	Hexachlorobenzene	75.1	76.4	78.7	78.7	1.72		0.0371
	Hexazinone	80.4	74.0			8.30		5.06
	Imazalil	62.1	63.1	114	104	1.59		9.21
	Iprodione	89.8	75.7	72.2	71.1	17.0		1.63
	Kepone	104	107	72.9	79.4	2.40		8.61
	Lambda-Cyhalothrin	67.5	64.9	82.7	81.3	3.96		1.74
	Malathion	97.5	91.2	97.6	96.4	6.68		1.26
	Metalaxyl	82.0	81.5	76.0	77.7	0.526		1.73
	Methoxychlor	91.5	90.7	88.5	88.9	0.919		0.442
	Metolachlor	78.8	76.9	79.4	85.9	2.52		3.84
	Metribuzin	89.6	88.2	83.9	85.6	1.61		1.37
	Mevinphos	97.0	99.2	110	105	2.26		4.85
	MGK-264	23.3	21.2	49.4	46.1	9.67		6.87
	Mirex	69.9	69.1	80.4	79.7	1.11		0.856
	Molinate	64.8	62.7	62.6	57.3	3.30		8.79
	Myclobutanil	80.0	70.0	67.7	63.3	13.3		6.68
	Naled	77.3	70.0	68.9	73.5	9.89		6.44
	Norflurazon	81.4	68.1	119	123	17.9		2.29
	Oxadiazon	79.4	69.4	67.1	69.3	13.5		3.18
	Oxyfluorfen	90.0	84.2	83.3	83.6	6.65		0.345
	Parathion Ethyl	87.5	79.3	84.7	84.5	9.78		0.182
	Parathion Methyl	101	101	107	106	0.777		1.54
	Pendimethalin	73.1	68.9	66.1	67.2	5.92		0.939
	Permethrin	72.6	70.2	86.5	87.1	3.31		0.654
	Phenothrin	21.4	20.1	55.8	58.4	6.64		4.56
	Phorate	63.9	68.6	73.6	69.2	7.00		6.21
	Piperonyl Butoxide	89.9	80.9	94.5	94.1	10.5		0.393
	Prallethrin	18.9	18.5	46.6	45.7	2.03		1.90
	Prodiamine	62.2	65.0	64.2	65.8	4.40		2.41
	Prometon	92.8	88.6	95.4	89.5	4.69		6.30
	Prometryn	93.8	97.3	87.7	90.5	3.64		3.12
	Pronamide	92.6	88.8	83.8	82.0	4.23		1.69

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Propiconazole	80.0	74.5	72.2	73.3	7.06		0.965
	Pyriproxyfen	81.2	61.9	65.8	78.9	26.9		18.1
	Simazine	93.1	90.8	157	151	2.56		4.22
	Sulfentrazone	78.8	56.8	64.9	72.0	32.5		10.4
	Tau-Fluvalinate	71.3	67.7	86.4	85.6	5.18		0.894
	Tebuconazole	34.1	23.5	19.5	22.4	36.8		14.1
	Terbufos	77.3	74.8	79.9	78.8	3.31		1.35
	Terbuthylazine	83.6	86.8	90.6	79.5	3.73		13.0
	Tetramethrin	40.6	33.6	54.3	42.3	19.0		24.7
	Trans-Nonachlor	87.8	86.9	91.4	90.1	1.04		1.44
	Triclosan Methyl	102	100	98.5	98.0	2.05		0.583
	Trifluralin	81.0	81.6	83.1	84.6	0.815		1.81
EPA 8276	Chlordane	107	107	99.4	103	0.0129		4.00
	Toxaphene	123	119	110	113	2.90		2.85
EPA 8321B	2,4-D	91.0		94.4	90.3			4.43
	2,4,5-T	78.0		79.7	72.8			9.11
	3-Hydroxycarbofuran	90.6		86.7	80.2			7.77
	Acesulfame K	142		207	213			2.84
	Acetaminophen	99.7		113	114			0.697
	Acetamiprid	72.9		97.8	92.0			6.03
	Afidopyropen	52.2		73.2	67.6			7.91
	Aldicarb	72.6		70.3	62.8			11.3
	Aldicarb Sulfone	87.6		90.7	86.6			4.65
	Aldicarb Sulfoxide	89.1		23.8	24.7			3.86
	AMPA	95.1		109	110			0.907
	Bentazon	81.9		76.9	70.9			6.46
	Benzovindiflupyr	71.7		76.2	74.3			2.49
	Carbamazepine	83.8		92.4	85.8			7.40
	Carbaryl	64.2		47.3	46.0			2.65
	Carbofuran	77.2		55.5	48.8			12.7
	Clothianidin	87.9		94.2	97.4			3.42
	Dinotefuran	83.9		90.5	89.9			0.607
	Diuron	64.3		68.7	62.3			9.76
	Endothall	86.4		149	198			28.4
	Fenuron	96.6		95.8	83.2			14.1
	Fluridone	74.6		95.3	96.4			1.16
	Glufosinate	101		133	151			12.8
	Glyphosate	97.3		71.8	83.2			14.8
	Hydrocodone	90.2		107	97.1			10.2
	Ibuprofen	77.4		70.4	76.4			8.10
	Imazapyr	99.7		88.0	93.9			6.48
	Imidacloprid	94.0		110	95.6			13.1
	Linuron	73.8		76.7	73.7			3.97
	Mandestrobin	79.7		82.5	77.0			6.92
	MCPP	87.8		83.0	88.7			6.63
	Methiocarb	74.1		60.1	59.5			0.869
	Methomyl	87.9						4.74
	Naproxen	53.5		49.7	40.6			15.7
	Oxamyl	98.2		83.4	76.1			9.11
	Primidone	90.3		97.8	98.9			1.09
	Propoxur	74.2		54.8	48.1			13.1
	Pyraclostrobin	68.9		73.3	69.5			5.42
	Sucralose	96.9		114	115			1.07
	Thiamethoxam	88.9		105	98.5			6.36

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Tolfenpyrad	47.9	46.8	45.8			2.14
	Triclopyr	79.7	77.8	69.6			11.2
SM 2120 B-2011	Color (true)	101				3.29	
SM 2320 B-2011	Total Alkalinity	99.3				0.827	
SM 2540 C-2011	TDS					1.73	
SM 4500 F-C-2011	Fluoride	99.6	98.5	96.8			0.946
SM 5310 B-2011	Organic Carbon	94.3	96.0	94.6			1.02

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2228947, 2228950, 2228953, 2228956
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2228947, 2228950, 2228953, 2228956
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2228947, 2228950, 2228953, 2228956
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2228948, 2228951, 2228954, 2228957
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2228948, 2228951, 2228954, 2228957
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2228948, 2228951, 2228954, 2228957
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2228948, 2228951, 2228954, 2228957
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2228949, 2228952, 2228955, 2228958
EPA 8270E	Dieldrin (ultra low level) in water matrices by GC/MS/MS	2228973, 2228975
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS-SIM	2228973, 2228975
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2228972, 2228974, 2228976
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2228973, 2228975
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2228965, 2228967
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2228966, 2228968
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2228966, 2228968
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2228947, 2228950, 2228953, 2228956
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2228947, 2228950, 2228953, 2228956
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2228947, 2228950, 2228953, 2228956
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2228947, 2228950, 2228953, 2228956
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2228947, 2228950, 2228953, 2228956
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2228948, 2228951, 2228954, 2228957

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	03/04/2021			03/04/2021 16:10	Yen Ta	2228947, 2228950, 2228953, 2228956
EPA 300.0 Rev. 2.1	03/04/2021			03/08/2021 21:25	Lipi Saha	2228947
	03/04/2021			03/08/2021 21:37	Lipi Saha	2228950
	03/04/2021			03/08/2021 22:14	Lipi Saha	2228953
	03/04/2021			03/08/2021 22:26	Lipi Saha	2228956
EPA 350.1 Rev. 2.0	03/04/2021			03/07/2021 13:23	Ping Hua	2228948
	03/04/2021			03/07/2021 13:24	Ping Hua	2228951
	03/04/2021			03/07/2021 13:25	Ping Hua	2228954
	03/04/2021			03/07/2021 13:29	Ping Hua	2228957
EPA 351.2 Rev. 2.0	03/04/2021	03/09/2021 12:41	Benjamin T. Nordmann	03/11/2021 11:27	Virginia P. Brown	2228948
	03/04/2021	03/09/2021 12:41	Benjamin T. Nordmann	03/11/2021 11:29	Virginia P. Brown	2228951
	03/04/2021	03/10/2021 12:23	Benjamin T. Nordmann	03/11/2021 13:30	Virginia P. Brown	2228954
	03/04/2021	03/10/2021 12:23	Benjamin T. Nordmann	03/11/2021 13:38	Virginia P. Brown	2228957
EPA 353.2 Rev. 2.0	03/04/2021			03/08/2021 10:40	Beverly Y. Sanders	2228948
	03/04/2021			03/08/2021 10:41	Beverly Y. Sanders	2228951
	03/04/2021			03/08/2021 10:42	Beverly Y. Sanders	2228954
	03/04/2021			03/08/2021 10:43	Beverly Y. Sanders	2228957
EPA 365.1 Rev. 2.0	03/04/2021	03/05/2021 13:30	Lipi Saha	03/08/2021 12:54	Shengyu Ding	2228948
	03/04/2021	03/05/2021 13:30	Lipi Saha	03/08/2021 12:56	Shengyu Ding	2228951
	03/04/2021	03/05/2021 13:30	Lipi Saha	03/08/2021 12:57	Shengyu Ding	2228954
	03/04/2021	03/05/2021 13:30	Lipi Saha	03/08/2021 14:37	Shengyu Ding	2228957
EPA 365.1 Rev. 2.0 dissolved	03/04/2021			03/04/2021 14:55	Blanca Fach	2228949, 2228952
	03/04/2021			03/04/2021 14:56	Blanca Fach	2228955
	03/04/2021			03/04/2021 15:02	Blanca Fach	2228958
EPA 8270E	03/04/2021	03/08/2021 08:00	Fe-Val Siddell	03/10/2021 14:09	Vandana T. Nagar	2228972
	03/04/2021	03/08/2021 08:00	Fe-Val Siddell	03/10/2021 14:34	Vandana T. Nagar	2228974
	03/04/2021	03/08/2021 08:00	Fe-Val Siddell	03/16/2021 16:48	Vandana T. Nagar	2228972
	03/04/2021	03/08/2021 08:00	Fe-Val Siddell	03/16/2021 17:12	Vandana T. Nagar	2228974
	03/04/2021	03/08/2021 08:00	Fe-Val Siddell	03/16/2021 17:37	Vandana T. Nagar	2228976
	03/04/2021	03/08/2021 08:00	Rasheda Ghaffari	03/09/2021 20:24	Arthur Maknenko	2228973
	03/04/2021	03/08/2021 08:00	Rasheda Ghaffari	03/09/2021 20:45	Arthur Maknenko	2228975
	03/04/2021	03/08/2021 08:00	Rasheda Ghaffari	03/12/2021 23:07	Michael Poppell	2228973
	03/04/2021	03/08/2021 08:00	Rasheda Ghaffari	03/12/2021 23:39	Michael Poppell	2228975
EPA 8276	03/04/2021	03/08/2021 08:00	Rasheda Ghaffari	03/10/2021 02:10	Julie Wi	2228973
	03/04/2021	03/08/2021 08:00	Rasheda Ghaffari	03/10/2021 03:05	Julie Wi	2228975
EPA 8321B	03/04/2021	03/05/2021 11:30	Rebecca Ware	03/05/2021 14:36	Rebecca Ware	2228966
	03/04/2021	03/05/2021 11:30	Rebecca Ware	03/05/2021 19:09	Rebecca Ware	2228968
	03/04/2021	03/05/2021 11:30	Rebecca Ware	03/12/2021 13:05	Rebecca Ware	2228968
	03/04/2021	03/05/2021 11:30	Rebecca Ware	03/12/2021 14:21	Rebecca Ware	2228966
	03/04/2021	03/05/2021 13:00	Hoor Shaik	03/07/2021 20:13	Juyoung Kim	2228965

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	03/04/2021	03/05/2021 13:00	Hoor Shaik	03/07/2021 20:48	Juyoung Kim	2228967
	03/04/2021	03/05/2021 13:00	Hoor Shaik	03/08/2021 07:47	Juyoung Kim	2228966
	03/04/2021	03/05/2021 13:00	Hoor Shaik	03/08/2021 08:21	Juyoung Kim	2228968
SM 2120 B-2011	03/04/2021			03/04/2021 16:01	Benjamin T. Nordmann	2228947
	03/04/2021			03/04/2021 16:02	Benjamin T. Nordmann	2228950, 2228953
	03/04/2021			03/04/2021 16:03	Benjamin T. Nordmann	2228956
SM 2320 B-2011	03/04/2021			03/09/2021 22:22	Dale L. Simmons	2228947
	03/04/2021			03/09/2021 22:38	Dale L. Simmons	2228950
	03/04/2021			03/09/2021 22:53	Dale L. Simmons	2228953
	03/04/2021			03/09/2021 23:01	Dale L. Simmons	2228956
SM 2540 C-2011	03/04/2021			03/08/2021 14:25	Yijie Li	2228947, 2228950, 2228953, 2228956
SM 2540 D-2011	03/04/2021			03/08/2021 14:25	Yijie Li	2228947, 2228950, 2228953, 2228956
SM 4500 F-C-2011	03/04/2021			03/09/2021 22:22	Dale L. Simmons	2228947
	03/04/2021			03/09/2021 22:38	Dale L. Simmons	2228950
	03/04/2021			03/09/2021 22:53	Dale L. Simmons	2228953
	03/04/2021			03/09/2021 23:01	Dale L. Simmons	2228956
SM 5310 B-2011	03/04/2021			03/15/2021 23:05	Madeline Gruver	2228948
	03/04/2021			03/16/2021 00:56	Madeline Gruver	2228951
	03/04/2021			03/16/2021 01:06	Madeline Gruver	2228954
	03/04/2021			03/16/2021 01:16	Madeline Gruver	2228957