

Chemical Analysis Report

WAS-SECT-2018-02-07-01

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

Event Description: **Alligator Creek NWQI**
Request ID: **RQ-2018-02-05-34**
Customer: **WAS-SECT**
Project ID: **NWQI**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
Tallahassee, FL 32399
Attn: Curtis Musson

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Liang Lin, Environmental Administrator

Date Certified: 06-MAR-2018 10:29

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

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 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: Minnow Creek At Lovewood Rd

Collection Date/Time: 02/07/2018 09:35

Field ID: G3WA0008

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965558	EPA 180.1 Rev. 2.0	Turbidity	22		NTU	P339494	
	EPA 300.0 Rev. 2.1	Chloride	4.3		mg Cl/L	P340695	
		Sulfate	1.5		mg SO4/L	P340697	
	SM 2120 B	Color (true)	40		PCU	P339502	
	SM 2320 B-97	Total Alkalinity	7.3		mg CaCO3/L	P340206	
	SM 2540 C-97	TDS	65		mg/L	P339842	
	SM 2540 D-97	TSS	3	I	mg/L	P339806	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P340474	
1965563	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P340182	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.40		mg N/L	P339647	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.021		mg N/L	P340043	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P339662	
	SM 5310 B-00	Organic Carbon	7.3		mg C/L	P339913	
1965568	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P339542	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 4500 F-C-97: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Alligator Creek upstream of SR 273

Collection Date/Time: 02/07/2018 10:20

Field ID: G3WA0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965559	EPA 180.1 Rev. 2.0	Turbidity	65		NTU	P339494	
	EPA 300.0 Rev. 2.1	Chloride	5.6		mg Cl/L	P340695	
		Sulfate	7.4		mg SO4/L	P340697	
	SM 2120 B	Color (true)	49		PCU	P339502	
	SM 2320 B-97	Total Alkalinity	7.7		mg CaCO3/L	P340206	
	SM 2540 C-97	TDS	102		mg/L	P339842	
	SM 2540 D-97	TSS	8	I	mg/L	P339806	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P340474	
1965564	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P340182	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82		mg N/L	P339647	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P340043	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P339662	
	SM 5310 B-00	Organic Carbon	8.9		mg C/L	P339913	
1965569	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.052		mg P/L	P339542	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 4500 F-C-97: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Alligator Creek upstream of SR 273

Collection Date/Time: 02/07/2018 10:20

Field ID: G3WA0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965584	EPA 8321B	2,4-D	0.013		ug/L	P339489	

Field ID: G3WA0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965584	EPA 8321B	Sucralose**	0.010	U	ug/L	P339557	
		Bentazon	8.0E-04	U	ug/L	P339489	MS
		MCP	0.0020	U	ug/L	P339489	MS
		Triclopyr**	0.0040	U	ug/L	P339489	MS
		Imidacloprid	0.057		ug/L	P339489	MS
		Diuron	0.0020	U	ug/L	P339489	
		Pyraclostrobin**	0.0020	U	ug/L	P339489	
		Primidone**	0.0040	U	ug/L	P339489	
		Linuron	0.0040	U	ug/L	P339489	
		Acetaminophen**	0.0080	UJ	ug/L	P339489	SUR
		Fenuron	0.0080	U	ug/L	P339489	
		Carbamazepine**	4.0E-04	U	ug/L	P339489	
		Fluridone**	4.0E-04	U	ug/L	P339489	
		Glyphosate**	0.10	U	ug/L	P339377	
		AMPA**	0.10	U	ug/L	P339377	
		Aldicarb	0.020	U	ug/L	P339538	
		Aldicarb Sulfone	0.0020	U	ug/L	P339538	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P339538	
		Carbaryl	0.0020	U	ug/L	P339538	
		Carbofuran	0.0020	U	ug/L	P339538	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P339538	
		Methiocarb	0.0020	U	ug/L	P339538	
1965590	EPA 8270D	Methomyl	0.0020	U	ug/L	P339538	
		Oxamyl	0.0020	U	ug/L	P339538	
		Propoxur	0.0020	U	ug/L	P339538	
		Aldrin	3.9	U	ng/L	P339620	
		Alpha-BHC	2.0	U	ng/L	P339620	
		Beta-BHC	3.9	U	ng/L	P339620	
		Delta-BHC	3.9	U	ng/L	P339620	
		Gamma-BHC	3.9	U	ng/L	P339620	
		Carbophenothion	3.9	U	ng/L	P339620	
		Chlorothalonil	2.0	U	ng/L	P339620	
		Cypermethrin	20	U	ng/L	P339620	
		DDD-p,p'	2.9	U	ng/L	P339620	
		DDE-p,p'	2.9	U	ng/L	P339620	
		DDT-p,p'	2.9	U	ng/L	P339620	
		Dieldrin	3.9	U	ng/L	P339620	
		Endosulfan I	3.9	U	ng/L	P339620	
		Endosulfan II	3.9	U	ng/L	P339620	
		Endosulfan Sulfate	2.0	U	ng/L	P339620	
		Endrin	2.0	U	ng/L	P339620	
		Endrin Aldehyde	2.0	U	ng/L	P339620	
		Heptachlor	1.5	U	ng/L	P339620	
		Heptachlor Epoxide	2.0	U	ng/L	P339620	
		Methoxychlor	3.9	U	ng/L	P339620	

Field ID: G3WA0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965590	EPA 8270D	Mirex	2.0	U	ng/L	P339620	
		Permethrin	9.8	U	ng/L	P339620	
		Trifluralin	0.98	U	ng/L	P339620	
		Alpha-Chlordane	0.98	U	ng/L	P339620	
		Gamma-Chlordane	0.98	U	ng/L	P339620	
		Endrin Ketone	2.0	U	ng/L	P339620	
		Dicofol	29	U	ng/L	P339620	
		Chlordane**	2.4	U	ng/L	P339620	
		Toxaphene**	29	U	ng/L	P339620	
1965593	EPA 8270D						
		Alachlor	0.24	U	ng/L	P339617	
		Ametryn	1.5		ng/L	P339617	
		Atrazine	3.0		ng/L	P339617	
		Atrazine Desethyl	1.5	U	ng/L	P339617	
		Azinphos Methyl	2.2	U	ng/L	P339617	
		Bromacil	0.49	U	ng/L	P339617	
		Butylate	0.39	UJ	ng/L	P339617	MS, RPD
		Chlorpyrifos Ethyl	0.24	U	ng/L	P339617	
		Chlorpyrifos Methyl	0.098	U	ng/L	P339617	
		Demeton	2.0	U	ng/L	P339617	
		Diazinon	0.12	U	ng/L	P339617	
		Disulfoton	0.49	U	ng/L	P339617	
		EPTC	1.2	UJ	ng/L	P339617	RPD
		Ethion	0.15	U	ng/L	P339617	
		Ethoprop	0.098	U	ng/L	P339617	
		Fenamiphos	0.24	U	ng/L	P339617	
		Fipronil	0.24	U	ng/L	P339617	
		Fipronil Sulfide	0.15	UJ	ng/L	P339617	RPD
		Fipronil Sulfone	0.15	UJ	ng/L	P339617	RPD
		Hexazinone	0.49	U	ng/L	P339617	
		Malathion	0.34	U	ng/L	P339617	
		Metribuzin	0.20	UJ	ng/L	P339617	CCV
		Mevinphos	0.49	U	ng/L	P339617	
		Molinate	0.29	UJ	ng/L	P339617	RPD
		Norflurazon	0.49	U	ng/L	P339617	
		Pendimethalin	0.98	U	ng/L	P339617	
		Phorate	0.24	U	ng/L	P339617	
		Prometon	0.88	U	ng/L	P339617	
		Prometryn	0.20	U	ng/L	P339617	
		Simazine	0.49	U	ng/L	P339617	
		Terbufos	0.098	U	ng/L	P339617	
		Terbuthylazine	0.41	U	ng/L	P339617	
		Fonofos	0.20	U	ng/L	P339617	
		Metalaxyl	0.24	U	ng/L	P339617	
		Metolachlor	7.6		ng/L	P339617	
		Acetochlor	0.24	U	ng/L	P339617	

Field ID: G3WA0005

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965593	EPA 8270D	Cyanazine	0.49	UJ	ng/L	P339617	CCV, MS
		Parathion Ethyl	0.24	U	ng/L	P339617	
		Parathion Methyl	0.24	U	ng/L	P339617	

Ref. Method and Comment:

EPA 8321B: Refer to the narrative for an explanation of QC Codes. Acetaminophen-d4 surrogate spike recovery exceeding the control limits.

EPA 8270D: Matrix spike duplicate was lost in preparation and was not reported.

EPA 8270D: Refer to the narrative for an explanation of QC Codes.

Sample Location: Alligator Creek upstream of SR 273 DUP

Collection Date/Time: 02/07/2018 10:20

Field ID: G3WA0005_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965560	EPA 180.1 Rev. 2.0	Turbidity	65		NTU	P339495	
	EPA 300.0 Rev. 2.1	Chloride	5.5		mg Cl/L	P340695	
		Sulfate	7.2		mg SO4/L	P340697	
	SM 2120 B	Color (true)	49		PCU	P339502	
	SM 2320 B-97	Total Alkalinity	7.5		mg CaCO3/L	P340206	
	SM 2540 C-97	TDS	95		mg/L	P339842	
	SM 2540 D-97	TSS	9	I	mg/L	P339806	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P340474	
1965565	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P340182	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.83		mg N/L	P339647	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P340043	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P339662	
	SM 5310 B-00	Organic Carbon	9.3		mg C/L	P340092	
1965570	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.053		mg P/L	P339542	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 4500 F-C-97: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Alligator Creek upstream of SR 273 DUP

Collection Date/Time: 02/07/2018 10:20

Field ID: G3WA0005_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965585	EPA 8321B	2,4-D	0.012		ug/L	P339489	
		Sucralose**	0.010	U	ug/L	P339557	
		Bentazon	8.0E-04	U	ug/L	P339489	MS
		MCP	0.0020	U	ug/L	P339489	MS
		Triclopyr**	0.0040	U	ug/L	P339489	MS
		Imidacloprid	0.045		ug/L	P339489	MS
		Diuron	0.0020	U	ug/L	P339489	
		Pyraclostrobin**	0.0020	U	ug/L	P339489	
		Primidone**	0.0040	U	ug/L	P339489	
		Linuron	0.0040	U	ug/L	P339489	
		Acetaminophen**	0.0080	U	ug/L	P339489	
		Fenuron	0.0080	U	ug/L	P339489	
		Carbamazepine**	4.0E-04	U	ug/L	P339489	

Field ID: G3WA0005_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965585	EPA 8321B	Fluridone**	4.0E-04	U	ug/L	P339489	
		Glyphosate**	0.10	U	ug/L	P339377	
		AMPA**	0.10	U	ug/L	P339377	
1965588		Aldicarb	0.020	U	ug/L	P339538	
		Aldicarb Sulfone	0.0020	U	ug/L	P339538	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P339538	
		Carbaryl	0.0020	U	ug/L	P339538	
		Carbofuran	0.0020	U	ug/L	P339538	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P339538	
		Methiocarb	0.0020	U	ug/L	P339538	
		Methomyl	0.0020	U	ug/L	P339538	
		Oxamyl	0.0020	U	ug/L	P339538	
		Propoxur	0.0020	U	ug/L	P339538	
		Aldrin	4.0	U	ng/L	P339620	
		Alpha-BHC	2.0	U	ng/L	P339620	
		Beta-BHC	4.0	U	ng/L	P339620	
1965591	EPA 8270D	Delta-BHC	4.0	U	ng/L	P339620	
		Gamma-BHC	4.0	U	ng/L	P339620	
		Carbophenothion	4.0	U	ng/L	P339620	
		Chlorothalonil	2.0	U	ng/L	P339620	
		Cypermethrin	20	U	ng/L	P339620	
		DDD-p,p'	3.0	U	ng/L	P339620	
		DDE-p,p'	3.0	U	ng/L	P339620	
		DDT-p,p'	3.0	U	ng/L	P339620	
		Dieldrin	4.0	U	ng/L	P339620	
		Endosulfan I	4.0	U	ng/L	P339620	
		Endosulfan II	4.0	U	ng/L	P339620	
		Endosulfan Sulfate	2.0	U	ng/L	P339620	
		Endrin	2.0	U	ng/L	P339620	
		Endrin Aldehyde	2.0	U	ng/L	P339620	
		Heptachlor	1.5	U	ng/L	P339620	
		Heptachlor Epoxide	2.0	U	ng/L	P339620	
		Methoxychlor	4.0	U	ng/L	P339620	
		Mirex	2.0	U	ng/L	P339620	
		Permethrin	9.9	U	ng/L	P339620	
		Trifluralin	0.99	U	ng/L	P339620	
		Alpha-Chlordane	0.99	U	ng/L	P339620	
		Gamma-Chlordane	0.99	U	ng/L	P339620	
		Endrin Ketone	2.0	U	ng/L	P339620	
		Dicofol	30	U	ng/L	P339620	
		Chlordane**	2.5	U	ng/L	P339620	
		Toxaphene**	30	U	ng/L	P339620	
1965594	EPA 8270D	Alachlor	0.25	U	ng/L	P339617	
		Ametryn	2.0		ng/L	P339617	
		Atrazine	3.0		ng/L	P339617	

Field ID: G3WA0005_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965594	EPA 8270D	Atrazine Desethyl	1.5	U	ng/L	P339617	
		Azinphos Methyl	2.3	U	ng/L	P339617	
		Bromacil	0.50	U	ng/L	P339617	
		Butylate	0.40	U	ng/L	P339617	MS, RPD
		Chlorpyrifos Ethyl	0.25	U	ng/L	P339617	
		Chlorpyrifos Methyl	0.10	U	ng/L	P339617	
		Demeton	2.0	U	ng/L	P339617	
		Diazinon	0.13	U	ng/L	P339617	
		Disulfoton	0.50	U	ng/L	P339617	
		EPTC	1.3	U	ng/L	P339617	RPD
		Ethion	0.15	U	ng/L	P339617	
		Ethoprop	0.10	U	ng/L	P339617	
		Fenamiphos	0.25	U	ng/L	P339617	
		Fipronil	0.25	U	ng/L	P339617	
		Fipronil Sulfide	0.15	U	ng/L	P339617	RPD
		Fipronil Sulfone	0.15	U	ng/L	P339617	RPD
		Hexazinone	0.50	U	ng/L	P339617	
		Malathion	0.35	U	ng/L	P339617	
		Metribuzin	0.20	UJ	ng/L	P339617	CCV
		Mevinphos	0.50	U	ng/L	P339617	
		Molinate	0.30	U	ng/L	P339617	RPD
		Norflurazon	0.50	U	ng/L	P339617	
		Pendimethalin	1.0	U	ng/L	P339617	
		Phorate	0.25	U	ng/L	P339617	
		Prometon	0.91	U	ng/L	P339617	
		Prometryn	0.20	U	ng/L	P339617	
		Simazine	0.50	U	ng/L	P339617	
		Terbufos	0.10	U	ng/L	P339617	
		Terbuthylazine	0.43	U	ng/L	P339617	
		Fonofos	0.20	U	ng/L	P339617	
		Metalaxyl	0.25	U	ng/L	P339617	
		Metolachlor	8.2		ng/L	P339617	
		Acetochlor	0.25	U	ng/L	P339617	
		Cyanazine	0.50	UJ	ng/L	P339617	CCV, MS
		Parathion Ethyl	0.25	U	ng/L	P339617	
		Parathion Methyl	0.25	U	ng/L	P339617	

Ref. Method and Comment:

EPA 8270D: Matrix spike duplicate was lost in preparation and was not reported.

EPA 8270D: Refer to the narrative for an explanation of QC Codes.

Sample Location: Field Blank

Collection Date/Time: 02/07/2018 10:20

Field ID: Blank_02072018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965561	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P339495	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P340014	

Field ID: Blank_02072018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965561	EPA 300.0 Rev. 2.1	Sulfate	0.20	U	mg SO4/L	P340017	
	SM 2120 B	Color (true)	2.5	U	PCU	P339501	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P340206	
	SM 2540 C-97	TDS	15	U	mg/L	P339837	
	SM 2540 D-97	TSS	2	U	mg/L	P339801	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P340474	
1965566	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P340182	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P339647	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P340043	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P339662	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P340092	
1965571	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P339542	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 4500 F-C-97: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Field Blank

Collection Date/Time: 02/07/2018 10:20

Field ID: Blank_02072018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965586	EPA 8321B	2,4-D	0.0020	U	ug/L	P339489	
		Sucralose**	0.010	U	ug/L	P339557	
		Bentazon	8.0E-04	U	ug/L	P339489	MS
		MCP	0.0020	U	ug/L	P339489	MS
		Triclopyr**	0.0040	U	ug/L	P339489	MS
		Imidacloprid	0.0020	U	ug/L	P339489	MS
		Diuron	0.0020	U	ug/L	P339489	
		Pyraclostrobin**	0.0020	U	ug/L	P339489	
		Primidone**	0.0040	U	ug/L	P339489	
		Linuron	0.0040	U	ug/L	P339489	
		Acetaminophen**	0.0080	U	ug/L	P339489	
		Fenuron	0.0080	U	ug/L	P339489	
		Carbamazepine**	4.0E-04	U	ug/L	P339489	
		Fluridone**	4.0E-04	U	ug/L	P339489	
		Glyphosate**	0.10	U	ug/L	P339377	
		AMPA**	0.10	U	ug/L	P339377	
		Aldicarb	0.020	U	ug/L	P339538	
		Aldicarb Sulfone	0.0020	U	ug/L	P339538	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P339538	
1965589		Carbaryl	0.0020	U	ug/L	P339538	
		Carbofuran	0.0020	U	ug/L	P339538	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P339538	
		Methiocarb	0.0020	U	ug/L	P339538	
		Methomyl	0.0020	U	ug/L	P339538	
		Oxamyl	0.0020	U	ug/L	P339538	
		Propoxur	0.0020	U	ug/L	P339538	

Field ID: Blank_02072018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965592	EPA 8270D	Aldrin	4.0	U	ng/L	P339620	
		Alpha-BHC	2.0	U	ng/L	P339620	
		Beta-BHC	4.0	U	ng/L	P339620	
		Delta-BHC	4.0	U	ng/L	P339620	
		Gamma-BHC	4.0	U	ng/L	P339620	
		Carbophenothion	4.0	U	ng/L	P339620	
		Chlorothalonil	2.0	U	ng/L	P339620	
		Cypermethrin	20	U	ng/L	P339620	
		DDD-p,p'	3.0	U	ng/L	P339620	
		DDE-p,p'	3.0	U	ng/L	P339620	
		DDT-p,p'	3.0	U	ng/L	P339620	
		Dieldrin	4.0	U	ng/L	P339620	
		Endosulfan I	4.0	U	ng/L	P339620	
		Endosulfan II	4.0	U	ng/L	P339620	
		Endosulfan Sulfate	2.0	U	ng/L	P339620	
		Endrin	2.0	U	ng/L	P339620	
		Endrin Aldehyde	2.0	U	ng/L	P339620	
		Heptachlor	1.5	U	ng/L	P339620	
		Heptachlor Epoxide	2.0	U	ng/L	P339620	
		Methoxychlor	4.0	U	ng/L	P339620	
		Mirex	2.0	U	ng/L	P339620	
		Permethrin	10	U	ng/L	P339620	
		Trifluralin	1.0	U	ng/L	P339620	
		Alpha-Chlordane	1.0	U	ng/L	P339620	
		Gamma-Chlordane	1.0	U	ng/L	P339620	
		Endrin Ketone	2.0	U	ng/L	P339620	
		Dicofol	30	U	ng/L	P339620	
	EPA 8276	Chlordane**	2.5	U	ng/L	P339620	
		Toxaphene**	30	U	ng/L	P339620	
1965595	EPA 8270D	Alachlor	0.26	U	ng/L	P339617	
		Ametryn	0.33	U	ng/L	P339617	
		Atrazine	0.26	U	ng/L	P339617	
		Atrazine Desethyl	1.5	U	ng/L	P339617	
		Azinphos Methyl	2.3	U	ng/L	P339617	
		Bromacil	0.51	U	ng/L	P339617	
		Butylate	0.41	U	ng/L	P339617	MS, RPD
		Chlorpyrifos Ethyl	0.26	U	ng/L	P339617	
		Chlorpyrifos Methyl	0.10	U	ng/L	P339617	
		Demeton	2.0	U	ng/L	P339617	
		Diazinon	0.13	U	ng/L	P339617	
		Disulfoton	0.51	U	ng/L	P339617	
		EPTC	1.3	U	ng/L	P339617	RPD
		Ethion	0.15	U	ng/L	P339617	
		Ethoprop	0.10	U	ng/L	P339617	
		Fenamiphos	0.26	U	ng/L	P339617	

Field ID: Blank_02072018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965595	EPA 8270D	Fipronil	0.26	U	ng/L	P339617	
		Fipronil Sulfide	0.15	U	ng/L	P339617	RPD
		Fipronil Sulfone	0.15	U	ng/L	P339617	RPD
		Hexazinone	0.51	U	ng/L	P339617	
		Malathion	0.36	U	ng/L	P339617	
		Metribuzin	0.20	UJ	ng/L	P339617	CCV
		Mevinphos	0.51	U	ng/L	P339617	
		Molinate	0.31	U	ng/L	P339617	RPD
		Norflurazon	0.51	U	ng/L	P339617	
		Pendimethalin	1.0	U	ng/L	P339617	
		Phorate	0.26	U	ng/L	P339617	
		Prometon	0.92	U	ng/L	P339617	
		Prometryn	0.20	U	ng/L	P339617	
		Simazine	0.51	U	ng/L	P339617	
		Terbufos	0.10	U	ng/L	P339617	
		Terbuthylazine	0.44	U	ng/L	P339617	
		Fonofos	0.20	U	ng/L	P339617	
		Metalaxyl	0.26	U	ng/L	P339617	
		Metolachlor	0.26	U	ng/L	P339617	
		Acetochlor	0.26	U	ng/L	P339617	
		Cyanazine	0.51	UJ	ng/L	P339617	CCV, MS
		Parathion Ethyl	0.26	U	ng/L	P339617	
		Parathion Methyl	0.26	U	ng/L	P339617	

Ref. Method and Comment:

EPA 8270D: Matrix spike duplicate was lost in preparation and was not reported.

EPA 8270D: Refer to the narrative for an explanation of QC Codes.

Sample Location: Little Alligator Creek at SR 273

Collection Date/Time: 02/07/2018 11:00

Field ID: G3WA0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965562	EPA 180.1 Rev. 2.0	Turbidity	12	A	NTU	P339495	
	EPA 300.0 Rev. 2.1	Chloride	8.8		mg Cl/L	P340014	
		Sulfate	3.1		mg SO4/L	P340017	
	SM 2120 B	Color (true)	57	A	PCU	P339501	
	SM 2320 B-97	Total Alkalinity	28		mg CaCO3/L	P340206	
	SM 2540 C-97	TDS	83		mg/L	P339842	
	SM 2540 D-97	TSS	3	I	mg/L	P339806	
	SM 4500 F-C-97	Fluoride	0.042	I	mg F/L	P340476	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P340182	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P339647	
1965567	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P340043	
	EPA 365.1 Rev. 2.0	Total-P	0.070		mg P/L	P339662	
	SM 5310 B-00	Organic Carbon	5.9		mg C/L	P340092	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.033		mg P/L	P339542	
	dissolved						

Field ID: G3WA0006					Matrix: W-SURF-FRH			
Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
Ref. Method and Comment:								
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.								
Sample Location: Little Alligator Creek at SR 273			Collection Date/Time: 02/07/2018 11:00					

Field ID: G3WA0006				Matrix: W-SURF-FRH				
Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
1965583	EPA 8321B	2,4-D	0.0020	U	ug/L	P339489		
		Sucralose**	0.010	U	ug/L	P339557		
		Bentazon	8.0E-04	U	ug/L	P339489	MS	
		MCP	0.0020	U	ug/L	P339489	MS	
		Triclopyr**	0.0040	U	ug/L	P339489	MS	
		Imidacloprid	0.0064	I	ug/L	P339489	MS	
		Diuron	0.0020	U	ug/L	P339489		
		Primidone**	0.0040	U	ug/L	P339489		
		Linuron	0.0040	U	ug/L	P339489		
		Acetaminophen**	0.0080	U	ug/L	P339489		
		Fenuron	0.0080	U	ug/L	P339489		
		Carbamazepine**	4.0E-04	U	ug/L	P339489		
		Fluridone**	4.0E-04	U	ug/L	P339489		

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0 Batch ID: P339494			
Component	Result	Code	Units
Turbidity	0.10	U	NTU
Reference Method: EPA 180.1 Rev. 2.0 Batch ID: P339495			
Component	Result	Code	Units
Turbidity	0.10	U	NTU
Reference Method: EPA 300.0 Rev. 2.1 Batch ID: P340014			
Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L
Reference Method: EPA 300.0 Rev. 2.1 Batch ID: P340017			
Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L
Reference Method: EPA 300.0 Rev. 2.1 Batch ID: P340695			
Component	Result	Code	Units

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340695

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340697

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340182

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339647

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340043

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339662

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339542

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

Reference Method: EPA 8270D
Batch ID: P339617

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.32	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.2	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D**Batch ID: P339617**

Component	Result	Code	Units
Cyanazine	0.50	U	ng/L
Demeton	2.0	U	ng/L
Diazinon	0.12	U	ng/L
Disulfoton	0.50	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.25	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.25	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270D**Batch ID: P339620**

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	4.0	U	ng/L
Carbophenothion	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	3.0	U	ng/L
DDE-p,p'	3.0	U	ng/L
DDT-p,p'	3.0	U	ng/L
Delta-BHC	4.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P339620

Component	Result	Code	Units
Endrin Ketone	2.0	U	ng/L
Gamma-BHC	4.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	1.0	U	ng/L

Reference Method: EPA 8276
Batch ID: P339620

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
Batch ID: P339377

Component	Result	Code	Units
AMPA	0.10	U	ug/L
Glyphosate	0.10	U	ug/L

Reference Method: EPA 8321B
Batch ID: P339489

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P339538

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P339538

Component	Result	Code	Units
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: P339557

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P339501

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P339502

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P340206

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

Reference Method: SM 2540 C-97
Batch ID: P339837

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P339842

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P339801

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P339806

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 4500 F-C-97
Batch ID: P340474

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P340476

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P339913

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

Reference Method: SM 5310 B-00
Batch ID: P340092

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: P340014

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340017

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340695

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340697

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340182

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P340182

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.3		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P339647

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P340043

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	105		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P339662

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P339542

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.5		P	90 - 110

Reference Method: EPA 8270D

Batch ID: P339617

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	84.5	93.8	P/P	74 - 119
Alachlor	81.5	88.6	P/P	75 - 118
Ametryn	78.7	78.1	P/P	59 - 137
Atrazine	97.8	105	P/P	73 - 120
Atrazine Desethyl	112	120	P/P	19 - 129
Azinphos Methyl	135	141	P/P	65 - 181
Bromacil	87.2	89.9	P/P	43 - 123
Butylate	47.5	46.5	P/P	28 - 85.0
Chlorpyrifos Ethyl	96.7	94.6	P/P	55 - 112
Chlorpyrifos Methyl	98.6	99.0	P/P	35 - 124
Cyanazine	140	138	P/P	26 - 262
Demeton	80.9	86.2	P/P	43 - 122
Diazinon	93.6	99.9	P/P	72 - 120
Disulfoton	124	127	P/P	45 - 137
EPTC	34.9	36.8	P/P	28 - 95.0
Ethion	101	115	P/P	63 - 127
Ethoprop	102	108	P/P	63 - 109
Fenamiphos	111	103	P/P	66 - 136
Fipronil	93.9	97.2	P/P	63 - 126
Fipronil Sulfide	101	92.5	P/P	59 - 123
Fipronil Sulfone	102	95.1	P/P	56 - 122
Fonofos	99.1	97.3	P/P	64 - 114

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270D

Batch ID: P339617

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Hexazinone	112	119	P/P	49 - 144
Malathion	106	109	P/P	68 - 131
Metalaxyl	96.0	98.3	P/P	57 - 126
Metolachlor	83.5	86.3	P/P	75 - 118
Metribuzin	157	169	P/P	46 - 169
Mevinphos	80.6	81.8	P/P	34 - 126
Molinate	53.0	59.0	P/P	37 - 101
Norflurazon	93.1	97.2	P/P	63 - 127
Parathion Ethyl	105	106	P/P	78 - 109
Parathion Methyl	105	108	P/P	74 - 123
Pendimethalin	108	111	P/P	51 - 130
Phorate	110	108	P/P	53 - 116
Prometon	78.7	83.6	P/P	66 - 124
Prometryn	93.7	95.6	P/P	66 - 124
Simazine	129	133	P/P	62 - 134
Terbufos	89.4	97.2	P/P	59 - 115
Terbutylazine	91.8	91.3	P/P	76 - 113

Reference Method: EPA 8270D

Batch ID: P339620

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	57.4	70.3	P/P	24 - 89.0
Alpha-BHC	91.9	88.0	P/P	58 - 117
Alpha-Chlordane	91.7	90.2	P/P	56 - 115
Beta-BHC	107	92.3	P/P	55 - 137
Carbophenothion	84.2	91.1	P/P	37 - 145
Chlorothalonil	108	104	P/P	26 - 163
Cypermethrin	90.2	86.1	P/P	42 - 156
DDD-p,p'	104	101	P/P	59 - 129
DDE-p,p'	94.5	97.8	P/P	52 - 117
DDT-p,p'	83.1	93.6	P/P	48 - 128
Delta-BHC	111	101	P/P	59 - 158
Dicofol	81.5	82.6	P/P	19 - 124
Dieldrin	98.2	90.1	P/P	57 - 126
Endosulfan I	106	105	P/P	59 - 133
Endosulfan II	119	124	P/P	58 - 148
Endosulfan Sulfate	104	86.3	P/P	56 - 135
Endrin	98.2	81.0	P/P	50 - 140
Endrin Aldehyde	98.5	87.5	P/P	47 - 141
Endrin Ketone	104	87.5	P/P	63 - 123
Gamma-BHC	96.2	93.8	P/P	59 - 132
Gamma-Chlordane	87.4	88.2	P/P	55 - 112
Heptachlor	69.4	73.1	P/P	45 - 102
Heptachlor Epoxide	95.8	89.7	P/P	61 - 116
Methoxychlor	97.2	96.3	P/P	60 - 133
Mirex	72.3	81.5	P/P	40 - 98.0
Permethrin	85.5	90.8	P/P	45 - 131
Trifluralin	80.4	86.5	P/P	38 - 179

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8276

Batch ID: P339620

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	74.8	63.9	P/P	41 - 134
Toxaphene	105	99.1	P/P	39 - 158

Reference Method: EPA 8321B

Batch ID: P339377

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
AMPA	105		P	40 - 150
Glyphosate	100		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P339489

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	69.5		P	40 - 150
Acetaminophen	92.2		P	30 - 150
Bentazon	87.1		P	30 - 150
Carbamazepine	85.8		P	40 - 150
Diuron	76.3		P	40 - 150
Fenuron	96.9		P	40 - 150
Fluridone	74.6		P	40 - 150
Imidacloprid	83.4		P	40 - 160
Linuron	80.2		P	40 - 150
MCPP	67.6		P	40 - 150
Primidone	105		P	40 - 150
Pyraclostrobin	69.3		P	40 - 150
Triclopyr	69.0		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P339538

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	106		P	40 - 150
Aldicarb	87.7		P	30 - 150
Aldicarb Sulfone	103		P	40 - 150
Aldicarb Sulfoxide	102		P	40 - 150
Carbaryl	79.9		P	40 - 150
Carbofuran	78.8		P	40 - 150
Methiocarb	74.5		P	40 - 150
Methomyl	105		P	40 - 150
Oxamyl	99.4		P	40 - 150
Propoxur	78.7		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P339557

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	109		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P340206

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.4		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P340474

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.6		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P340476

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P339913

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.6		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P340092

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340014

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965507	Chloride	103		P	90 - 110
1965562	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340017

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965507	Sulfate	104		P	90 - 110
1965562	Sulfate	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340695

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965558	Chloride	95.3		P	90 - 110
1969432	Chloride	95.8		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340697

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965558	Sulfate	95.5		P	90 - 110
1969432	Sulfate	93.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340182

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965563	Ammonia-N	95.5	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339647

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965567	Kjeldahl Nitrogen	98.2	96.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340043

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965563	NO2NO3-N	104	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339662

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965567	Total-P	101	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965288	O-Phosphate-P	97.1	96.7	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P339617

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965593	Acetochlor	92.4	99.3	P/P	67 - 125
1965593	Alachlor	87.2	89.9	P/P	69 - 123
1965593	Ametryn	144	140	P/P	52 - 151
1965593	Atrazine	110	107	P/P	71 - 125
1965593	Atrazine Desethyl	116	111	P/P	10 - 129
1965593	Azinphos Methyl	124	124	P/P	48 - 200
1965593	Bromacil	91.4	82.8	P/P	46 - 130
1965593	Butylate	5.19	14.8	F/P	10 - 85.0
1965593	Chlorpyrifos Ethyl	92.5	90.8	P/P	54 - 115
1965593	Chlorpyrifos Methyl	88.1	93.0	P/P	44 - 117
1965593	Cyanazine	276	260	F/P	10 - 262
1965593	Demeton	49.0	61.6	P/P	24 - 145
1965593	Diazinon	87.7	102	P/P	66 - 129
1965593	Disulfoton	78.9	94.5	P/P	45 - 139
1965593	EPTC	13.5	22.7	P/P	10 - 86.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D

Batch ID: P339617

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965593	Ethion	101	94.0	P/P	59 - 133
1965593	Ethoprop	71.5	94.5	P/P	54 - 116
1965593	Fenamiphos	99.9	85.3	P/P	55 - 140
1965593	Fipronil	90.2	69.6	P/P	37 - 142
1965593	Fipronil Sulfide	88.2	60.3	P/P	37 - 130
1965593	Fipronil Sulfone	73.8	46.9	P/P	18 - 143
1965593	Fonofos	85.2	92.5	P/P	55 - 118
1965593	Hexazinone	111	104	P/P	62 - 140
1965593	Malathion	97.2	101	P/P	64 - 132
1965593	Metalaxyl	97.6	96.5	P/P	55 - 129
1965593	Metolachlor	88.1	96.7	P/P	56 - 137
1965593	Metribuzin	197	217	P/P	16 - 218
1965593	Mevinphos	55.3	67.6	P/P	34 - 129
1965593	Molinate	22.0	40.2	P/P	16 - 99.0
1965593	Norflurazon	90.0	67.8	P/P	43 - 135
1965593	Parathion Ethyl	96.3	108	P/P	71 - 112
1965593	Parathion Methyl	101	106	P/P	65 - 127
1965593	Pendimethalin	107	117	P/P	35 - 159
1965593	Phorate	55.8	75.2	P/P	41 - 129
1965593	Prometon	84.4	84.4	P/P	56 - 140
1965593	Prometryn	100	105	P/P	65 - 130
1965593	Simazine	118	130	P/P	54 - 148
1965593	Terbufos	73.6	80.4	P/P	53 - 126
1965593	Terbutylazine	94.7	94.3	P/P	73 - 114

Reference Method: EPA 8270D

Batch ID: P339620

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965362	Aldrin	72.7		P	26 - 96.0
1965362	Alpha-BHC	105		P	51 - 123
1965362	Alpha-Chlordane	91.8		P	45 - 120
1965362	Beta-BHC	94.8		P	43 - 146
1965362	Carbophenothion	94.8		P	26 - 179
1965362	Chlorothalonil	35.6		P	10 - 215
1965362	Cypermethrin	94.7		P	35 - 169
1965362	DDD-p,p'	99.4		P	49 - 131
1965362	DDE-p,p'	97.3		P	39 - 127
1965362	DDT-p,p'	92.8		P	49 - 120
1965362	Delta-BHC	141		P	49 - 187
1965362	Dicofol	84.5		P	10 - 129
1965362	Dieldrin	96.1		P	46 - 132
1965362	Endosulfan I	114		P	57 - 130
1965362	Endosulfan II	140		P	52 - 148
1965362	Endosulfan Sulfate	86.5		P	55 - 129
1965362	Endrin	90.6		P	45 - 133
1965362	Endrin Aldehyde	27.1		P	26 - 140
1965362	Endrin Ketone	103		P	60 - 125
1965362	Gamma-BHC	134		P	50 - 145
1965362	Gamma-Chlordane	90.6		P	44 - 118
1965362	Heptachlor	71.2		P	35 - 106
1965362	Heptachlor Epoxide	96.5		P	52 - 123

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P339620

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965362	Methoxychlor	94.1		P	54 - 132
1965362	Mirex	82.2		P	36 - 107
1965362	Permethrin	95.0		P	47 - 135
1965362	Trifluralin	86.9		P	32 - 228

Reference Method: EPA 8276
Batch ID: P339620

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965429	Chlordane	78.5	72.3	P/P	41 - 134
1965429	Toxaphene	103	96.3	P/P	39 - 158

Reference Method: EPA 8321B
Batch ID: P339377

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964165	AMPA	104	108	P/P	40 - 150
1964165	Glyphosate	108	106	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P339489

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964945	2,4-D	46.1	49.4	P/P	40 - 150
1964945	Acetaminophen	123	108	P/P	30 - 150
1964945	Bentazon	27.3	29.7	F/F	30 - 150
1964945	Carbamazepine	85.1	84.5	P/P	40 - 150
1964945	Diuron	77.2	74.5	P/P	40 - 150
1964945	Fenuron	85.0	83.1	P/P	40 - 150
1964945	Fluridone	67.3	65.9	P/P	40 - 150
1964945	Imidacloprid	165	146	F/P	40 - 160
1964945	Linuron	79.8	83.0	P/P	40 - 150
1964945	MCP	38.1	40.3	F/P	40 - 150
1964945	Primidone	105	108	P/P	40 - 150
1964945	Pyraclostrobin	70.5	71.8	P/P	40 - 150
1964945	Triclopyr	39.1	40.4	F/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P339538

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965802	3-Hydroxycarbofuran	123	124	P/P	40 - 150
1965802	Aldicarb	95.4	91.0	P/P	30 - 150
1965802	Aldicarb Sulfone	123	118	P/P	40 - 150
1965802	Aldicarb Sulfoxide	108	102	P/P	40 - 150
1965802	Carbaryl	77.6	80.2	P/P	40 - 150
1965802	Carbofuran	82.6	84.2	P/P	40 - 150
1965802	Methiocarb	81.1	74.1	P/P	40 - 150
1965802	Methomyl	116	108	P/P	40 - 150
1965802	Oxamyl	106	99.8	P/P	40 - 150
1965802	Propoxur	77.2	76.5	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P339557

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965583	Sucralose	117	134	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P340476

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966131	Fluoride	94.1	97.0	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P339913

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964582	Organic Carbon	95.9	97.2	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P340092

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965443	Organic Carbon	97.8	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P339494

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965439	Turbidity	0.601	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P339495

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965562	Turbidity	0.837	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340014

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965507	Chloride	0.575	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340017

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965507	Sulfate	0.254	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340695

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1969432	Chloride	1.51	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340697

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1969432	Sulfate	0.0717	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340182

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965563	Ammonia-N	1.82	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339647

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965567	Kjeldahl Nitrogen	1.46	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340043

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965563	NO2NO3-N	1.30	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339662

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965567	Total-P	2.13	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965288	O-Phosphate-P	0.384	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P339617

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965593	Acetochlor	7.26	Spike	P	0 - 30
1965593	Alachlor	3.08	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D

Batch ID: P339617

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965593	Ametryn	2.93	Spike	P	0 - 30
1965593	Atrazine	1.79	Spike	P	0 - 30
1965593	Atrazine Desethyl	4.19	Spike	P	0 - 30
1965593	Azinphos Methyl	0.572	Spike	P	0 - 30
1965593	Bromacil	9.06	Spike	P	0 - 30
1965593	Butylate	96.1	Spike	F	0 - 30
1965593	Chlorpyrifos Ethyl	1.80	Spike	P	0 - 30
1965593	Chlorpyrifos Methyl	5.37	Spike	P	0 - 30
1965593	Cyanazine	5.81	Spike	P	0 - 30
1965593	Demeton	22.8	Spike	P	0 - 30
1965593	Diazinon	15.0	Spike	P	0 - 30
1965593	Disulfoton	18.1	Spike	P	0 - 30
1965593	EPTC	50.4	Spike	F	0 - 30
1965593	Ethion	6.67	Spike	P	0 - 30
1965593	Ethoprop	27.7	Spike	P	0 - 30
1965593	Fenamiphos	15.8	Spike	P	0 - 30
1965593	Fipronil	25.8	Spike	P	0 - 30
1965593	Fipronil Sulfide	37.6	Spike	F	0 - 30
1965593	Fipronil Sulfone	44.7	Spike	F	0 - 30
1965593	Fonofos	8.12	Spike	P	0 - 30
1965593	Hexazinone	6.59	Spike	P	0 - 30
1965593	Malathion	3.70	Spike	P	0 - 30
1965593	Metaxyl	1.13	Spike	P	0 - 30
1965593	Metolachlor	5.44	Spike	P	0 - 30
1965593	Metribuzin	9.42	Spike	P	0 - 30
1965593	Mevinphos	19.9	Spike	P	0 - 30
1965593	Molinate	58.6	Spike	F	0 - 30
1965593	Norflurazon	28.1	Spike	P	0 - 30
1965593	Parathion Ethyl	11.6	Spike	P	0 - 30
1965593	Parathion Methyl	5.04	Spike	P	0 - 30
1965593	Pendimethalin	8.41	Spike	P	0 - 30
1965593	Phorate	29.6	Spike	P	0 - 30
1965593	Prometon	0.0215	Spike	P	0 - 30
1965593	Prometryn	4.27	Spike	P	0 - 30
1965593	Simazine	9.68	Spike	P	0 - 30
1965593	Terbufos	8.86	Spike	P	0 - 30
1965593	Terbuthylazine	0.383	Spike	P	0 - 30
LFB	Acetochlor	10.5	LCS	P	0 - 30
LFB	Alachlor	8.24	LCS	P	0 - 30
LFB	Ametryn	0.819	LCS	P	0 - 30
LFB	Atrazine	7.29	LCS	P	0 - 30
LFB	Atrazine Desethyl	7.54	LCS	P	0 - 30
LFB	Azinphos Methyl	4.55	LCS	P	0 - 30
LFB	Bromacil	3.04	LCS	P	0 - 30
LFB	Butylate	2.10	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	2.18	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	0.361	LCS	P	0 - 30
LFB	Cyanazine	1.19	LCS	P	0 - 30
LFB	Demeton	6.37	LCS	P	0 - 30
LFB	Diazinon	6.50	LCS	P	0 - 30
LFB	Disulfoton	2.33	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D

Batch ID: P339617

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	EPTC	5.30	LCS	P	0 - 30
LFB	Ethion	12.3	LCS	P	0 - 30
LFB	Ethoprop	5.52	LCS	P	0 - 30
LFB	Fenamiphos	7.75	LCS	P	0 - 30
LFB	Fipronil	3.43	LCS	P	0 - 30
LFB	Fipronil Sulfide	9.24	LCS	P	0 - 30
LFB	Fipronil Sulfone	6.71	LCS	P	0 - 30
LFB	Fonofos	1.89	LCS	P	0 - 30
LFB	Hexazinone	5.91	LCS	P	0 - 30
LFB	Malathion	3.08	LCS	P	0 - 30
LFB	Metaxyl	2.38	LCS	P	0 - 30
LFB	Metolachlor	3.27	LCS	P	0 - 30
LFB	Metribuzin	6.99	LCS	P	0 - 30
LFB	Mevinphos	1.52	LCS	P	0 - 30
LFB	Molinate	10.7	LCS	P	0 - 30
LFB	Norflurazon	4.27	LCS	P	0 - 30
LFB	Parathion Ethyl	0.848	LCS	P	0 - 30
LFB	Parathion Methyl	2.99	LCS	P	0 - 30
LFB	Pendimethalin	2.52	LCS	P	0 - 30
LFB	Phorate	2.25	LCS	P	0 - 30
LFB	Prometon	5.95	LCS	P	0 - 30
LFB	Prometryn	2.09	LCS	P	0 - 30
LFB	Simazine	2.71	LCS	P	0 - 30
LFB	Terbufos	8.27	LCS	P	0 - 30
LFB	Terbuthylazine	0.543	LCS	P	0 - 30

Reference Method: EPA 8270D

Batch ID: P339620

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Aldrin	20.2	LCS	P	0 - 30
LFB	Alpha-BHC	4.40	LCS	P	0 - 30
LFB	Alpha-Chlordane	1.60	LCS	P	0 - 30
LFB	Beta-BHC	14.3	LCS	P	0 - 30
LFB	Carbophenothion	7.79	LCS	P	0 - 30
LFB	Chlorothalonil	3.94	LCS	P	0 - 30
LFB	Cypermethrin	4.71	LCS	P	0 - 30
LFB	DDD-p,p'	3.87	LCS	P	0 - 30
LFB	DDE-p,p'	3.45	LCS	P	0 - 30
LFB	DDT-p,p'	11.8	LCS	P	0 - 30
LFB	Delta-BHC	9.36	LCS	P	0 - 30
LFB	Dicofol	1.41	LCS	P	0 - 30
LFB	Dieldrin	8.66	LCS	P	0 - 30
LFB	Endosulfan I	0.547	LCS	P	0 - 30
LFB	Endosulfan II	4.13	LCS	P	0 - 30
LFB	Endosulfan Sulfate	18.1	LCS	P	0 - 30
LFB	Endrin	19.2	LCS	P	0 - 30
LFB	Endrin Aldehyde	11.9	LCS	P	0 - 30
LFB	Endrin Ketone	17.0	LCS	P	0 - 30
LFB	Gamma-BHC	2.56	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270D

Batch ID: P339620

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Gamma-Chlordane	0.896	LCS	P	0 - 30
LFB	Heptachlor	5.25	LCS	P	0 - 30
LFB	Heptachlor Epoxide	6.58	LCS	P	0 - 30
LFB	Methoxychlor	1.01	LCS	P	0 - 30
LFB	Mirex	11.9	LCS	P	0 - 30
LFB	Permethrin	6.01	LCS	P	0 - 30
LFB	Trifluralin	7.30	LCS	P	0 - 30

Reference Method: EPA 8276

Batch ID: P339620

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965429	Chlordane	6.74	Spike	P	0 - 30
1965429	Toxaphene	7.04	Spike	P	0 - 30
LFB	Chlordane	15.7	LCS	P	0 - 30
LFB	Toxaphene	5.82	LCS	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P339377

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964165	AMPA	4.58	Spike	P	0 - 30
1964165	Glyphosate	1.03	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P339489

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964945	2,4-D	7.05	Spike	P	0 - 30
1964945	Acetaminophen	12.7	Spike	P	0 - 30
1964945	Bentazon	6.75	Spike	P	0 - 30
1964945	Carbamazepine	0.653	Spike	P	0 - 30
1964945	Diuron	2.39	Spike	P	0 - 30
1964945	Fenuron	2.26	Spike	P	0 - 30
1964945	Fluridone	2.11	Spike	P	0 - 30
1964945	Imidacloprid	11.4	Spike	P	0 - 30
1964945	Linuron	3.93	Spike	P	0 - 30
1964945	MCP	5.65	Spike	P	0 - 30
1964945	Primidone	3.58	Spike	P	0 - 30
1964945	Pyraclostrobin	1.85	Spike	P	0 - 30
1964945	Triclopyr	3.31	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P339538

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965802	3-Hydroxycarbofuran	0.731	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P339538

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965802	Aldicarb	4.65	Spike	P	0 - 30
1965802	Aldicarb Sulfone	4.56	Spike	P	0 - 30
1965802	Aldicarb Sulfoxide	6.20	Spike	P	0 - 30
1965802	Carbaryl	3.37	Spike	P	0 - 30
1965802	Carbofuran	1.92	Spike	P	0 - 30
1965802	Methiocarb	9.00	Spike	P	0 - 30
1965802	Methomyl	7.03	Spike	P	0 - 30
1965802	Oxamyl	5.92	Spike	P	0 - 30
1965802	Propoxur	0.937	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P339557

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965583	Sucralose	13.3	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P339501

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965562	Color (true)	5.20	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P339502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965134	Color (true)	5.06	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P340206

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965352	Total Alkalinity	0.306	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P339837

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964801	TDS	4.17	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P339842

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965223	TDS	7.29	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P340474

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965350	Fluoride	0.937	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P340476

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966131	Fluoride	0.469	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P339913

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964582	Organic Carbon	0.733	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P340092

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965443	Organic Carbon	1.72	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Surrogates

Lab Sample ID: 1965583
Field Sample ID: G3WA0006

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	46.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	83.7	P	30 - 160
EPA 8321B	Diuron-d6	79.4	P	30 - 160
EPA 8321B	Primidone-d5	104	P	30 - 160
EPA 8321B	Sucralose-d6	122	P	40 - 160

Lab Sample ID: 1965584
Field Sample ID: G3WA0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	40.4	P	30 - 160
EPA 8321B	2,4-D-d3	40.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	182	F	30 - 160
EPA 8321B	Acetaminophen-d4	182	F	30 - 160
EPA 8321B	Carbamazepine-d10	120	P	30 - 160
EPA 8321B	Carbamazepine-d10	120	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1965584

Field Sample ID: G3WA0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Diuron-d6	114	P	30 - 160
EPA 8321B	Diuron-d6	114	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	111	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	111	P	40 - 160
EPA 8321B	Primidone-d5	150	P	30 - 160
EPA 8321B	Primidone-d5	150	P	30 - 160
EPA 8321B	Sucralose-d6	134	P	40 - 160

Lab Sample ID: 1965585

Field Sample ID: G3WA0005_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	44.6	P	30 - 160
EPA 8321B	2,4-D-d3	44.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	124	P	30 - 160
EPA 8321B	Acetaminophen-d4	124	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.2	P	30 - 160
EPA 8321B	Diuron-d6	88.9	P	30 - 160
EPA 8321B	Diuron-d6	88.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	105	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	105	P	40 - 160
EPA 8321B	Primidone-d5	117	P	30 - 160
EPA 8321B	Primidone-d5	117	P	30 - 160
EPA 8321B	Sucralose-d6	137	P	40 - 160

Lab Sample ID: 1965586

Field Sample ID: Blank_02072018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	64.6	P	30 - 160
EPA 8321B	2,4-D-d3	64.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	104	P	30 - 160
EPA 8321B	Carbamazepine-d10	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	103	P	30 - 160
EPA 8321B	Diuron-d6	105	P	30 - 160
EPA 8321B	Diuron-d6	105	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	107	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	107	P	40 - 160
EPA 8321B	Primidone-d5	121	P	30 - 160
EPA 8321B	Primidone-d5	121	P	30 - 160
EPA 8321B	Sucralose-d6	111	P	40 - 160

Lab Sample ID: 1965587

Field Sample ID: G3WA0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	54.2	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1965588
Field Sample ID: G3WA0005_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	53.4	P	30 - 160

Lab Sample ID: 1965589
Field Sample ID: Blank_02072018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	80.0	P	30 - 160

Lab Sample ID: 1965590
Field Sample ID: G3WA0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	70.4	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	48.9	P	34 - 101
EPA 8276	Decachlorobiphenyl	63.0	P	31 - 108
EPA 8276	PCNB	107	P	62 - 142

Lab Sample ID: 1965591
Field Sample ID: G3WA0005_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	70.9	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	48.5	P	34 - 101
EPA 8276	Decachlorobiphenyl	66.1	P	31 - 108
EPA 8276	PCNB	112	P	62 - 142

Lab Sample ID: 1965592
Field Sample ID: Blank_02072018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	62.3	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	48.0	P	34 - 101
EPA 8276	Decachlorobiphenyl	60.0	P	31 - 108
EPA 8276	PCNB	91.2	P	62 - 142

Lab Sample ID: 1965593
Field Sample ID: G3WA0005

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	119	P	71 - 126
EPA 8270D	Terbufos-d10	116	P	50 - 130

Lab Sample ID: 1965594
Field Sample ID: G3WA0005_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	107	P	71 - 126
EPA 8270D	Terbufos-d10	85.7	P	50 - 130

Quality Assurance Report Surrogates

Lab Sample ID: 1965595
Field Sample ID: Blank_02072018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	117	P	71 - 126
EPA 8270D	Terbufos-d10	105	P	50 - 130

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A81904

Included Lab Sample IDs: 1965558, 1965559, 1965560, 1965561, 1965562

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.8	99.4	P/P	85 - 115
Color (true)	99.4	101	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A81905

Included Lab Sample IDs: 1965558, 1965559, 1965560, 1965561, 1965562

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

Reference Method: EPA 8321B

Run ID: A81910

Included Lab Sample IDs: 1965584, 1965585, 1965586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	112	114	P/P	70 - 130
Glyphosate	113	107	P/P	70 - 160

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A81920

Included Lab Sample IDs: 1965568, 1965569, 1965570, 1965571, 1965572

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A81982

Included Lab Sample IDs: 1965564, 1965565, 1965567

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A81985

Included Lab Sample IDs: 1965563, 1965566

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A81986

Included Lab Sample IDs: 1965583, 1965584, 1965585, 1965586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	110	115	P/P	60 - 150
Sucralose	115	110	P/P	60 - 150

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A82003

Included Lab Sample IDs: 1965561, 1965562

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	104	P/P	90 - 110
Chloride	103	102	P/P	90 - 110
Sulfate	102	105	P/P	90 - 110
Sulfate	105	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A82013

Included Lab Sample IDs: 1965563, 1965564, 1965565, 1965566, 1965567

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.1	98.3	P/P	90 - 110
Kjeldahl Nitrogen	98.3	98.8	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A82049

Included Lab Sample IDs: 1965563, 1965564

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.8	96.1	P/P	90 - 110
Organic Carbon	96.1	96.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A82097

Included Lab Sample IDs: 1965563, 1965564, 1965565, 1965566, 1965567

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

Reference Method: SM 5310 B-00

Run ID: A82117

Included Lab Sample IDs: 1965565, 1965566, 1965567

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.4	99.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A82134

Included Lab Sample IDs: 1965563, 1965564, 1965565, 1965566, 1965567

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	101	P/P	90 - 110
Ammonia-N	99.4	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A82137

Included Lab Sample IDs: 1965558, 1965559, 1965560, 1965561, 1965562

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.2	99.8	P/P	90 - 110

Reference Method: EPA 8270D

Run ID: A82168

Included Lab Sample IDs: 1965590, 1965591, 1965592

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.7		P	80 - 120
Alpha-BHC	102		P	80 - 120
Alpha-Chlordane	99.0		P	80 - 120
Beta-BHC	92.2		P	80 - 120
Carbophenothion	88.2		P	80 - 120
Chlorothalonil	105		P	80 - 120
Cypermethrin	93.1		P	80 - 120
DDD-p,p'	100		P	80 - 120
DDE-p,p'	103		P	80 - 120
DDT-p,p'	105		P	80 - 120
Delta-BHC	92.8		P	80 - 120
Dicofol	101		P	80 - 120
Dieldrin	97.8		P	80 - 120
Endosulfan I	97.6		P	80 - 120
Endosulfan II	103		P	80 - 120
Endosulfan Sulfate	98.9		P	80 - 120
Endrin	98.4		P	80 - 120
Endrin Aldehyde	89.2		P	80 - 120
Endrin Ketone	97.9		P	80 - 120
Gamma-BHC	99.0		P	80 - 120
Gamma-Chlordane	99.1		P	80 - 120
Heptachlor	96.5		P	80 - 120
Heptachlor Epoxide	98.7		P	80 - 120
Methoxychlor	105		P	80 - 120
Mirex	101		P	80 - 120
Permethrin	95.9		P	80 - 120
Trifluralin	99.2		P	80 - 120

Reference Method: EPA 8321B

Run ID: A82192

Included Lab Sample IDs: 1965583, 1965584, 1965585, 1965586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	70.2	74.4	P/P	50 - 150
2,4-D	74.4	79.3	P/P	50 - 150
Acetaminophen	112	115	P/P	60 - 150
Bentazon	95.2	97.8	P/P	50 - 150
Bentazon	97.8	106	P/P	50 - 150
Carbamazepine	111	115	P/P	60 - 150
Diuron	112	113	P/P	60 - 150
Fenuron	115	115	P/P	60 - 150
Fluridone	96.1	97.9	P/P	60 - 160
Imidacloprid	96.8	101	P/P	60 - 150
Linuron	120	125	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A82192

Included Lab Sample IDs: 1965583, 1965584, 1965585, 1965586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
MCPP	75.9	79.0	P/P	50 - 150
MCPP	77.6	75.9	P/P	50 - 150
Primidone	107	101	P/P	60 - 150
Pyraclostrobin	88.1	83.4	P/P	60 - 150
Triclopyr	77.8	82.0	P/P	50 - 150
Triclopyr	82.0	87.2	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A82205

Included Lab Sample IDs: 1965587, 1965588, 1965589

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	120	121	P/P	60 - 150
3-Hydroxycarbofuran	121	116	P/P	60 - 150
Aldicarb	105	108	P/P	60 - 150
Aldicarb	108	104	P/P	60 - 150
Aldicarb Sulfone	109	112	P/P	50 - 150
Aldicarb Sulfone	112	105	P/P	50 - 150
Aldicarb Sulfoxide	104	108	P/P	50 - 150
Aldicarb Sulfoxide	108	105	P/P	50 - 150
Carbaryl	107	113	P/P	60 - 150
Carbaryl	114	107	P/P	60 - 150
Carbofuran	106	110	P/P	50 - 150
Carbofuran	116	106	P/P	50 - 150
Methiocarb	101	104	P/P	50 - 150
Methiocarb	104	101	P/P	50 - 150
Methomyl	104	119	P/P	50 - 150
Methomyl	110	104	P/P	50 - 150
Oxamyl	105	111	P/P	50 - 150
Oxamyl	111	114	P/P	50 - 150
Propoxur	109	98.6	P/P	50 - 150
Propoxur	98.6	107	P/P	50 - 150

Reference Method: EPA 8276

Run ID: A82212

Included Lab Sample IDs: 1965590, 1965591, 1965592

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	93.2		P	80 - 120
Toxaphene	109		P	80 - 120

Reference Method: SM 4500 F-C-97

Run ID: A82245

Included Lab Sample IDs: 1965558, 1965559, 1965560, 1965561, 1965562

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	102	P/P	90 - 110
Fluoride	98.6	98.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A82273

Included Lab Sample IDs: 1965593, 1965594, 1965595

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	93.6		P	80 - 120
Alachlor	91.0		P	80 - 120
Ametryn	92.7		P	80 - 120
Atrazine	98.0		P	80 - 120
Atrazine Desethyl	112		P	80 - 120
Azinphos Methyl	118		P	80 - 120
Bromacil	104		P	80 - 120
Butylate	91.2		P	80 - 120
Chlorpyrifos Ethyl	97.0		P	80 - 120
Chlorpyrifos Methyl	93.3		P	80 - 120
Cyanazine	171*		F	80 - 120
Demeton	90.7		P	80 - 120
Diazinon	92.9		P	80 - 120
Disulfoton	95.4		P	80 - 120
EPTC	90.2		P	80 - 120
Ethion	97.0		P	80 - 120
Ethoprop	104		P	80 - 120
Fenamiphos	95.3		P	80 - 120
Fipronil	95.4		P	80 - 120
Fipronil Sulfide	92.4		P	80 - 120
Fipronil Sulfone	97.8		P	80 - 120
Fonofos	94.0		P	80 - 120
Hexazinone	94.1		P	80 - 120
Malathion	102		P	80 - 120
Metalaxyl	90.0		P	80 - 120
Metolachlor	97.3		P	80 - 120
Metribuzin	127*		F	80 - 120
Mevinphos	103		P	80 - 120
Molinate	87.2		P	80 - 120
Norflurazon	98.7		P	80 - 120
Parathion Ethyl	95.1		P	80 - 120
Parathion Methyl	90.5		P	80 - 120
Pendimethalin	102		P	80 - 120
Phorate	90.7		P	80 - 120
Prometon	90.0		P	80 - 120
Prometryn	92.2		P	80 - 120
Simazine	97.9		P	80 - 120
Terbufos	92.2		P	80 - 120
Terbuthylazine	94.5		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A82322

Included Lab Sample IDs: 1965558, 1965559, 1965560

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	100	P/P	90 - 110
Sulfate	101	99.8	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						0.601	
	Turbidity						0.837	
EPA 300.0 Rev. 2.1	Chloride	99.6		103	101		0.575	
	Chloride	96.2		95.8	95.3		1.51	
	Sulfate	101		104	102		0.254	
	Sulfate	94.1		93.9	95.5		0.0717	
EPA 350.1 Rev. 2.0	Ammonia-N	96.3		95.5	97.6			1.82
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.8		98.2	96.1			1.46
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	105		104	106			1.30
EPA 365.1 Rev. 2.0	Total-P	103		101	98.4			2.13
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.5		97.1	96.7			0.384
EPA 8270D	Acetochlor	93.8	84.5	99.3	92.4	10.5		7.26
	Alachlor	81.5	88.6	89.9	87.2	8.24		3.08
	Aldrin	57.4	70.3	72.7		20.2		
	Alpha-BHC	91.9	88.0	105		4.40		
	Alpha-Chlordane	91.7	90.2	91.8		1.60		
	Ametryn	78.1	78.7	140	144	0.819		2.93
	Atrazine	105	97.8	107	110	7.29		1.79
	Atrazine Desethyl	112	120	111	116	7.54		4.19
	Azinphos Methyl	141	135	124	124	4.55		0.572
	Beta-BHC	107	92.3	94.8		14.3		
	Bromacil	89.9	87.2	82.8	91.4	3.04		9.06
	Butylate	47.5	46.5	5.19	14.8	2.10		96.1
	Carbophenothion	84.2	91.1	94.8		7.79		
	Chlorothalonil	108	104	35.6		3.94		
	Chlorpyrifos Ethyl	94.6	96.7	92.5	90.8	2.18		1.80
	Chlorpyrifos Methyl	99.0	98.6	88.1	93.0	0.361		5.37
	Cyanazine	140	138	260	276	1.19		5.81
	Cypermethrin	90.2	86.1	94.7		4.71		
	DDD-p,p'	104	101	99.4		3.87		
	DDE-p,p'	94.5	97.8	97.3		3.45		
	DDT-p,p'	83.1	93.6	92.8		11.8		
	Delta-BHC	111	101	141		9.36		
	Demeton	86.2	80.9	61.6	49.0	6.37		22.8
	Diazinon	99.9	93.6	102	87.7	6.50		15.0
	Dicofol	81.5	82.6	84.5		1.41		
	Dieldrin	98.2	90.1	96.1		8.66		
	Disulfoton	127	124	94.5	78.9	2.33		18.1
	Endosulfan I	106	105	114		0.547		
	Endosulfan II	119	124	140		4.13		
	Endosulfan Sulfate	104	86.3	86.5		18.1		
	Endrin	98.2	81.0	90.6		19.2		
	Endrin Aldehyde	98.5	87.5	27.1		11.9		
	Endrin Ketone	104	87.5	103		17.0		
	EPTC	36.8	34.9	22.7	13.5	5.30		50.4
	Ethion	101	115	94.0	101	12.3		6.67
	Ethoprop	102	108	94.5	71.5	5.52		27.7
	Fenamiphos	103	111	85.3	99.9	7.75		15.8
	Fipronil	97.2	93.9	69.6	90.2	3.43		25.8
	Fipronil Sulfide	92.5	101	60.3	88.2	9.24		37.6
	Fipronil Sulfone	95.1	102	46.9	73.8	6.71		44.7
	Fonofos	97.3	99.1	92.5	85.2	1.89		8.12
	Gamma-BHC	96.2	93.8	134		2.56		
	Gamma-Chlordane	87.4	88.2	90.6		0.896		

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8270D	Heptachlor	69.4	73.1	71.2		5.25		
	Heptachlor Epoxide	95.8	89.7	96.5		6.58		
	Hexazinone	119	112	104	111	5.91		6.59
	Malathion	109	106	101	97.2	3.08		3.70
	Metalaxyl	98.3	96.0	96.5	97.6	2.38		1.13
	Methoxychlor	97.2	96.3	94.1		1.01		
	Metolachlor	86.3	83.5	96.7	88.1	3.27		5.44
	Metribuzin	157	169	217	197	6.99		9.42
	Mevinphos	81.8	80.6	67.6	55.3	1.52		19.9
	Mirex	72.3	81.5	82.2		11.9		
	Molinate	59.0	53.0	40.2	22.0	10.7		58.6
	Norflurazon	97.2	93.1	67.8	90.0	4.27		28.1
	Parathion Ethyl	106	105	108	96.3	0.848		11.6
	Parathion Methyl	108	105	106	101	2.99		5.04
	Pendimethalin	111	108	117	107	2.52		8.41
	Permethrin	85.5	90.8	95.0		6.01		
	Phorate	110	108	75.2	55.8	2.25		29.6
	Prometon	83.6	78.7	84.4	84.4	5.95		0.0215
	Prometryn	93.7	95.6	105	100	2.09		4.27
	Simazine	129	133	130	118	2.71		9.68
	Terbufos	97.2	89.4	80.4	73.6	8.27		8.86
	Terbutylazine	91.3	91.8	94.3	94.7	0.543		0.383
	Trifluralin	80.4	86.5	86.9		7.30		
EPA 8276	Chlordane	74.8	63.9	78.5	72.3	15.7		6.74
	Toxaphene	105	99.1	103	96.3	5.82		7.04
EPA 8321B	2,4-D	69.5		46.1	49.4			7.05
	3-Hydroxycarbofuran	106		123	124			0.731
	Acetaminophen	92.2		123	108			12.7
	Aldicarb	87.7		95.4	91.0			4.65
	Aldicarb Sulfone	103		123	118			4.56
	Aldicarb Sulfoxide	102		108	102			6.20
	AMPA	105		104	108			4.58
	Bentazon	87.1		27.3	29.7			6.75
	Carbamazepine	85.8		85.1	84.5			0.653
	Carbaryl	79.9		77.6	80.2			3.37
	Carbofuran	78.8		82.6	84.2			1.92
	Diuron	76.3		77.2	74.5			2.39
	Fenuron	96.9		85.0	83.1			2.26
	Fluridone	74.6		67.3	65.9			2.11
	Glyphosate	100		108	106			1.03
	Imidacloprid	83.4		165	146			11.4
	Linuron	80.2		79.8	83.0			3.93
	MCPP	67.6		38.1	40.3			5.65
	Methiocarb	74.5		81.1	74.1			9.00
	Methomyl	105		116	108			7.03
	Oxamyl	99.4		106	99.8			5.92
	Primidone	105		105	108			3.58
	Propoxur	78.7		77.2	76.5			0.937
	Pyraclostrobin	69.3		70.5	71.8			1.85
	Sucralose	109		117	134			13.3
	Triclopyr	69.0		39.1	40.4			3.31
SM 2120 B	Color (true)						5.20	
	Color (true)						5.06	
SM 2320 B-97	Total Alkalinity	99.4					0.306	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 2540 C-97	TDS				4.17	
	TDS				7.29	
SM 4500 F-C-97	Fluoride	97.6				0.937
	Fluoride	95.8	94.1	97.0		0.469
SM 5310 B-00	Organic Carbon	95.6	95.9	97.2		0.733
	Organic Carbon	99.8	97.8	101		1.72

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1965558, 1965559, 1965560, 1965561, 1965562
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1965558, 1965559, 1965560, 1965561, 1965562
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1965558, 1965559, 1965560, 1965561, 1965562
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1965563, 1965564, 1965565, 1965566, 1965567
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1965563, 1965564, 1965565, 1965566, 1965567
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1965563, 1965564, 1965565, 1965566, 1965567
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1965563, 1965564, 1965565, 1965566, 1965567
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1965568, 1965569, 1965570, 1965571, 1965572
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1965590, 1965591, 1965592
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1965593, 1965594, 1965595
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	1965590, 1965591, 1965592
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	1965587, 1965588, 1965589
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	1965583, 1965584, 1965585, 1965586
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	1965584, 1965585, 1965586
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1965583, 1965584, 1965585, 1965586
SM 2120 B / E31780	True Color measured at 450 nm	1965558, 1965559, 1965560, 1965561, 1965562
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1965558, 1965559, 1965560, 1965561, 1965562
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1965558, 1965559, 1965560, 1965561, 1965562
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1965558, 1965559, 1965560, 1965561, 1965562
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1965558, 1965559, 1965560, 1965561, 1965562
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1965563, 1965564, 1965565, 1965566, 1965567

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	02/07/2018			02/07/2018 16:34	DeAsia Armster	1965558, 1965559, 1965560, 1965561, 1965562
EPA 300.0 Rev. 2.1	02/07/2018			02/14/2018	Julia Storbeck	1965562
	02/07/2018			02/15/2018	Julia Storbeck	1965561
	02/07/2018			02/27/2018	Julia Storbeck	1965558, 1965559, 1965560
EPA 350.1 Rev. 2.0	02/07/2018			02/16/2018	Julia Storbeck	1965563, 1965564, 1965565, 1965566, 1965567
EPA 351.2 Rev. 2.0	02/07/2018	02/09/2018	Adrian Shelby	02/13/2018	Joseph Suarez	1965563, 1965564, 1965565, 1965566, 1965567
EPA 353.2 Rev. 2.0	02/07/2018			02/15/2018	Lauren Bottorf	1965563, 1965564, 1965565, 1965566, 1965567
EPA 365.1 Rev. 2.0	02/07/2018	02/09/2018	Sima Feizi	02/12/2018	Beverly Y. Sanders	1965563, 1965564, 1965565, 1965566, 1965567
EPA 365.1 Rev. 2.0 dissolved	02/07/2018			02/07/2018 16:45	Megan Treadwell	1965568
	02/07/2018			02/07/2018 16:46	Megan Treadwell	1965569
	02/07/2018			02/07/2018 16:47	Megan Treadwell	1965570, 1965571
	02/07/2018			02/07/2018 16:48	Megan Treadwell	1965572
EPA 8270D	02/07/2018	02/09/2018	John Kaba	02/15/2018	Vandana T. Nagar	1965593, 1965594, 1965595
	02/07/2018	02/12/2018	Fe-Val Siddell	02/13/2018	Marek Topolski	1965590, 1965591, 1965592
EPA 8276	02/07/2018	02/12/2018	Fe-Val Siddell	02/17/2018	John P. Burgos	1965590, 1965591, 1965592
EPA 8321B	02/07/2018	02/07/2018	Juyoung Kim	02/07/2018	Juyoung Kim	1965584, 1965585, 1965586
	02/07/2018	02/08/2018	Hoor Shaik	02/10/2018	Julie Michelle Frank	1965583, 1965584, 1965585, 1965586
	02/07/2018	02/08/2018	Hoor Shaik	02/11/2018	Julie Michelle Frank	1965583, 1965584, 1965585, 1965586
	02/07/2018	02/09/2018	Hoor Shaik	02/09/2018	Juyoung Kim	1965583, 1965584, 1965585, 1965586
	02/07/2018	02/13/2018	Hoor Shaik	02/15/2018	Julie Michelle Frank	1965587, 1965588, 1965589
SM 2120 B	02/07/2018			02/07/2018 16:29	Tanya Welborn	1965561
	02/07/2018			02/07/2018 16:31	Tanya Welborn	1965562
	02/07/2018			02/07/2018 16:39	Tanya Welborn	1965558
	02/07/2018			02/07/2018 16:40	Tanya Welborn	1965559, 1965560
SM 2320 B-97	02/07/2018			02/17/2018	Dale L. Simmons	1965558, 1965559, 1965560, 1965561, 1965562
SM 2540 C-97	02/07/2018			02/09/2018	Yijie Li	1965558, 1965559, 1965560, 1965561, 1965562
SM 2540 D-97	02/07/2018			02/09/2018	Yijie Li	1965558, 1965559, 1965560, 1965561, 1965562
SM 4500 F-C-97	02/07/2018			02/22/2018	Dale L. Simmons	1965558, 1965559, 1965560, 1965561, 1965562
SM 5310 B-00	02/07/2018			02/13/2018	Megan Treadwell	1965563, 1965564
	02/07/2018			02/16/2018	Megan Treadwell	1965565, 1965566, 1965567