

Chemical Analysis Report

NW-DIST-2018-02-15-01

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

Event Description: **Bay/Walton RUN**
Request ID: **RQ-2018-02-12-36**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
Attn: Cheryl Bunch

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 23-MAR-2018 11:31



Case Narrative

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

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

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

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

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited 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: OTTER CREEK UPSTREAM OF O

Collection Date/Time: 02/14/2018 11:30

Field ID: G3NW0133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967810	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P340036	
	EPA 300.0 Rev. 2.1	Chloride	9.3		mg Cl/L	P340321	
		Sulfate	3.3		mg SO4/L	P340323	
	SM 2120 B	Color (true)	280		PCU	P340056	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P340528	
	SM 2540 C-97	TDS	62		mg/L	P340575	
	SM 2540 D-97	TSS	2	UQ	mg/L	P340442	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P340532	
1967811	EPA 350.1 Rev. 2.0	Ammonia-N	0.19		mg N/L	P340624	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.65		mg N/L	P340262	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.037		mg N/L	P340494	
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P340343	
	SM 5310 B-00	Organic Carbon	22		mg C/L	P340427	
1967812	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P340064	
1967850	EPA 200.7 Rev. 4.4	Calcium	2.52		mg/L	P340242	
		Iron	980		ug/L	P340242	
		Magnesium	0.71		mg/L	P340242	
		Potassium	1.0	I	mg/L	P340242	
		Sodium	5.6		mg/L	P340242	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P340242	
		Arsenic	0.36		ug/L	P340242	
		Cadmium	0.020	U	ug/L	P340242	
		Chromium	0.45	I	ug/L	P340242	
		Copper	0.26	I	ug/L	P340242	
		Lead	0.45		ug/L	P340242	
		Nickel	0.33	I	ug/L	P340242	
		Silver	0.010	U	ug/L	P340242	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample analyzed out of holding time due to analytical difficulties.

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: BLACK CREEK UPSTREAM OF

Collection Date/Time: 02/14/2018 12:30

Field ID: G3NW0148

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967804	EPA 180.1 Rev. 2.0	Turbidity	5.8		NTU	P340036	
	EPA 300.0 Rev. 2.1	Chloride	2.8		mg Cl/L	P340321	
		Sulfate	1.8		mg SO4/L	P340323	
	SM 2120 B	Color (true)	200		PCU	P340056	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P340528	
	SM 2540 C-97	TDS	46		mg/L	P340575	
	SM 2540 D-97	TSS	3	I	mg/L	P340235	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P340532	
1967806	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P340624	

Field ID: G3NW0148

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967840	EPA 8270D	Endosulfan II	5.6	U	ng/L	P340047	
		Endosulfan Sulfate	2.8	U	ng/L	P340047	
		Endrin	2.8	U	ng/L	P340047	
		Endrin Aldehyde	2.8	U	ng/L	P340047	
		Heptachlor	2.1	U	ng/L	P340047	
		Heptachlor Epoxide	2.8	U	ng/L	P340047	
		Methoxychlor	5.6	U	ng/L	P340047	
		Mirex	2.8	U	ng/L	P340047	
		Permethrin	14	U	ng/L	P340047	
		Trifluralin	1.4	U	ng/L	P340047	
		Alpha-Chlordane	1.4	U	ng/L	P340047	
		Gamma-Chlordane	1.4	U	ng/L	P340047	
		Endrin Ketone	2.8	U	ng/L	P340047	
		Dicofol	42	U	ng/L	P340047	
		Chlordane**	3.5	U	ng/L	P340047	
		Toxaphene**	42	U	ng/L	P340047	
		Alachlor	0.25	UJ	ng/L	P340051	SUR
		Ametryn	0.33	UJ	ng/L	P340051	MS, SUR
		Atrazine	0.25	U	ng/L	P340051	SUR
1967842	EPA 8270D	Atrazine Desethyl	1.5	UJ	ng/L	P340051	SUR
		Azinphos Methyl	2.3	U	ng/L	P340051	
		Bromacil	0.50	UJ	ng/L	P340051	LCS, SUR
		Butylate	0.40	UJ	ng/L	P340051	SUR
		Chlorpyrifos Ethyl	0.25	U	ng/L	P340051	
		Chlorpyrifos Methyl	0.10	U	ng/L	P340051	MS
		Demeton	2.0	U	ng/L	P340051	MS
		Diazinon	0.13	U	ng/L	P340051	
		Disulfoton	0.50	U	ng/L	P340051	
		EPTC	1.3	UJ	ng/L	P340051	SUR
		Ethion	0.32	U	ng/L	P340051	
		Ethoprop	0.10	U	ng/L	P340051	
		Fenamiphos	0.25	U	ng/L	P340051	RPD
		Fipronil	0.25	UJ	ng/L	P340051	SUR
		Fipronil Sulfide	0.15	UJ	ng/L	P340051	SUR
		Fipronil Sulfone	0.15	UJ	ng/L	P340051	CCV, SUR
		Hexazinone	0.50	UJ	ng/L	P340051	SUR
		Malathion	0.35	U	ng/L	P340051	MS
		Metribuzin	0.20	UJ	ng/L	P340051	SUR
		Mevinphos	0.50	UJ	ng/L	P340051	CCV, MS
		Molinate	0.30	UJ	ng/L	P340051	SUR
		Norflurazon	0.50	UJ	ng/L	P340051	SUR
		Pendimethalin	1.0	UJ	ng/L	P340051	SUR
		Phorate	0.25	U	ng/L	P340051	
		Prometon	0.91	UJ	ng/L	P340051	SUR
		Prometryn	0.20	UJ	ng/L	P340051	SUR

Field ID: G3NW0148

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967842	EPA 8270D	Simazine	0.50	UJ	ng/L	P340051	SUR
		Terbufos	0.10	U	ng/L	P340051	
		Terbuthylazine	0.43	UJ	ng/L	P340051	SUR
		Fonofos	0.20	U	ng/L	P340051	MS
		Metalaxyl	0.25	UJ	ng/L	P340051	SUR
		Metolachlor	0.25	U	ng/L	P340051	SUR
		Acetochlor	0.25	UJ	ng/L	P340051	SUR
		Cyanazine	0.50	UJ	ng/L	P340051	SUR
		Parathion Ethyl	0.25	U	ng/L	P340051	
		Parathion Methyl	0.25	U	ng/L	P340051	MS
1967848	EPA 200.7 Rev. 4.4	Calcium	1.35		mg/L	P340242	
		Iron	390		ug/L	P340242	
		Magnesium	0.55		mg/L	P340242	
		Potassium	0.30	U	mg/L	P340242	
		Sodium	1.9	I	mg/L	P340242	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P340242	
		Arsenic	0.28		ug/L	P340242	
		Cadmium	0.020	U	ug/L	P340242	
		Chromium	0.68	I	ug/L	P340242	
		Copper	0.28	I	ug/L	P340242	
		Lead	0.48		ug/L	P340242	
		Nickel	0.36	I	ug/L	P340242	
		Silver	0.010	U	ug/L	P340242	

Ref. Method and Comment:

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: Refer to the narrative for an explanation of QC Codes.

EPA 8270D: MS accuracy for Atrazine , Simazine, and Fipronil Sulfone not assessed due to high content of this parameter in the sample spiked.

Refer to the narrative for an explanation of QC Codes.

Sample Location: LAYFAYETTE CREEK UPSTREAM

Collection Date/Time: 02/14/2018 13:00

Field ID: G3NW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967813	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P340036	
	EPA 300.0 Rev. 2.1	Chloride	3.3		mg Cl/L	P340321	
		Sulfate	3.1		mg SO4/L	P340323	
	SM 2120 B	Color (true)	100		PCU	P340056	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P340528	
	SM 2540 C-97	TDS	25		mg/L	P340575	
	SM 2540 D-97	TSS	2	I	mg/L	P340235	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P340532	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P340675	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34		mg N/L	P340262	
1967814	EPA 353.2 Rev. 2.0	NO2NO3-N	0.074		mg N/L	P340495	
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P340343	
	SM 5310 B-00	Organic Carbon	8.8		mg C/L	P340427	

Field ID: G3NW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967815	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P340064	

Ref. Method and Comment:

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: FOURMILE CREEK UPSTREAM OF

Collection Date/Time: 02/14/2018 13:20

Field ID: G3NW0112

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967805	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P340036	
	EPA 300.0 Rev. 2.1	Chloride	2.8		mg Cl/L	P340320	
		Sulfate	2.6		mg SO4/L	P340322	
	SM 2120 B	Color (true)	98	A	PCU	P340056	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P340528	
	SM 2540 C-97	TDS	23	I	mg/L	P340575	
	SM 2540 D-97	TSS	2	U	mg/L	P340235	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P340532	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P340624	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27		mg N/L	P340262	
1967807	EPA 353.2 Rev. 2.0	NO2NO3-N	0.052		mg N/L	P340495	
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P340343	
	SM 5310 B-00	Organic Carbon	9.3		mg C/L	P340427	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P340065	
	EPA 8321B	2,4-D	0.0020	U	ug/L	P339943	
1967833		Sucralose**	0.010	U	ug/L	P340020	
		Bentazon	8.0E-04	U	ug/L	P339943	MS
		MCP	0.0020	U	ug/L	P339943	MS
		Triclopyr**	0.0040	U	ug/L	P339943	
		Imidacloprid	0.0050	I	ug/L	P339943	MS
		Diuron	0.0020	U	ug/L	P339943	
		Pyraclostrobin**	0.0020	U	ug/L	P339943	
		Primidone**	0.0040	UJ	ug/L	P339943	CCV
		Linuron	0.0040	U	ug/L	P339943	
		Acetaminophen**	0.0080	U	ug/L	P339943	
		Fenuron	0.0080	U	ug/L	P339943	
		Carbamazepine**	4.0E-04	U	ug/L	P339943	
		Fluridone**	4.0E-04	U	ug/L	P339943	
		Glyphosate**	0.10	U	ug/L	P340147	
		AMPA**	0.10	U	ug/L	P340147	
		Aldicarb	0.020	U	ug/L	P339943	
		Aldicarb Sulfone	0.0020	U	ug/L	P339943	MS
		Aldicarb Sulfoxide	0.0020	U	ug/L	P339943	
1967835		Carbaryl	0.0020	U	ug/L	P339943	
		Carbofuran	0.0020	U	ug/L	P339943	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P339943	
		Methiocarb	0.0020	U	ug/L	P339943	

Field ID: G3NW0112

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967835	EPA 8321B	Methomyl	0.0020	U	ug/L	P339943	
		Oxamyl	0.0020	U	ug/L	P339943	
		Propoxur	0.0020	U	ug/L	P339943	
1967841	EPA 8270D	Aldrin	4.3	U	ng/L	P340047	
		Alpha-BHC	2.2	U	ng/L	P340047	
		Beta-BHC	4.3	U	ng/L	P340047	
		Delta-BHC	4.3	U	ng/L	P340047	
		Gamma-BHC	4.3	U	ng/L	P340047	
		Carbophenothion	4.3	U	ng/L	P340047	
		Chlorothalonil	2.2	U	ng/L	P340047	RPD
		Cypermethrin	22	U	ng/L	P340047	
		DDD-p,p'	3.3	U	ng/L	P340047	
		DDE-p,p'	3.3	U	ng/L	P340047	
		DDT-p,p'	3.3	U	ng/L	P340047	
		Dieldrin	4.3	U	ng/L	P340047	
		Endosulfan I	4.3	U	ng/L	P340047	
		Endosulfan II	4.3	U	ng/L	P340047	
		Endosulfan Sulfate	2.2	U	ng/L	P340047	
		Endrin	2.2	U	ng/L	P340047	
		Endrin Aldehyde	2.2	U	ng/L	P340047	
		Heptachlor	1.6	U	ng/L	P340047	
		Heptachlor Epoxide	2.2	U	ng/L	P340047	
		Methoxychlor	4.3	U	ng/L	P340047	
		Mirex	2.2	U	ng/L	P340047	
		Permethrin	11	U	ng/L	P340047	
		Trifluralin	1.1	U	ng/L	P340047	
		Alpha-Chlordane	1.1	U	ng/L	P340047	
		Gamma-Chlordane	1.1	U	ng/L	P340047	
		Endrin Ketone	2.2	U	ng/L	P340047	
		Dicofol	33	U	ng/L	P340047	
	EPA 8276	Chlordane**	2.7	UJ	ng/L	P340047	SUR
		Toxaphene**	33	UJ	ng/L	P340047	SUR
1967843	EPA 8270D	Alachlor	0.25	U	ng/L	P340051	
		Ametryn	0.32	U	ng/L	P340051	MS
		Atrazine	0.34	I	ng/L	P340051	
		Atrazine Desethyl	1.5	U	ng/L	P340051	
		Azinphos Methyl	2.2	U	ng/L	P340051	
		Bromacil	9.4	J	ng/L	P340051	LCS
		Butylate	0.40	U	ng/L	P340051	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P340051	
		Chlorpyrifos Methyl	0.099	U	ng/L	P340051	MS
		Demeton	2.0	U	ng/L	P340051	MS
		Diazinon	0.12	U	ng/L	P340051	
		Disulfoton	0.50	U	ng/L	P340051	
		EPTC	1.2	U	ng/L	P340051	

Field ID: G3NW0112

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967843	EPA 8270D	Ethion	0.15	U	ng/L	P340051	
		Ethoprop	0.099	U	ng/L	P340051	
		Fenamiphos	0.25	U	ng/L	P340051	RPD
		Fipronil	0.25	U	ng/L	P340051	
		Fipronil Sulfide	0.15	U	ng/L	P340051	
		Fipronil Sulfone	0.15	UJ	ng/L	P340051	CCV
		Hexazinone	0.58	I	ng/L	P340051	
		Malathion	0.36	I	ng/L	P340051	MS
		Metribuzin	0.20	U	ng/L	P340051	
		Mevinphos	0.50	UJ	ng/L	P340051	CCV, MS
		Molinate	0.30	U	ng/L	P340051	
		Norflurazon	0.50	U	ng/L	P340051	
		Pendimethalin	0.99	U	ng/L	P340051	
		Phorate	0.25	U	ng/L	P340051	
		Prometon	0.89	U	ng/L	P340051	
		Prometryn	0.20	U	ng/L	P340051	
		Simazine	0.50	U	ng/L	P340051	
		Terbufos	0.099	U	ng/L	P340051	
		Terbuthylazine	0.42	U	ng/L	P340051	
		Fonofos	0.20	U	ng/L	P340051	MS
		Metalaxyl	0.25	U	ng/L	P340051	
		Metolachlor	0.40	I	ng/L	P340051	
		Acetochlor	0.25	U	ng/L	P340051	
		Cyanazine	0.50	U	ng/L	P340051	
		Parathion Ethyl	0.25	U	ng/L	P340051	
		Parathion Methyl	0.25	U	ng/L	P340051	MS
1967849	EPA 200.7 Rev. 4.4	Calcium	1.31		mg/L	P340242	
		Iron	140		ug/L	P340242	
		Magnesium	0.42		mg/L	P340242	
		Potassium	0.30	U	mg/L	P340242	
		Sodium	1.8	I	mg/L	P340242	
		Zinc	5.0	U	ug/L	P340242	
	EPA 200.8 Rev. 5.4	Arsenic	0.16	I	ug/L	P340242	
		Cadmium	0.020	U	ug/L	P340242	
		Chromium	0.40	U	ug/L	P340242	
		Copper	0.20	U	ug/L	P340242	
		Lead	0.19	I	ug/L	P340242	
		Nickel	0.26	I	ug/L	P340242	
		Silver	0.010	U	ug/L	P340242	

Ref. Method and Comment:

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: Refer to the narrative for an explanation of QC Codes.

EPA 8276: Refer to the narrative for an explanation of QC Codes.

EPA 8270D: MS accuracy for Atrazine , Simazine, and Fipronil Sulfone not assessed due to high content of this parameter in the sample spiked.

Refer to the narrative for an explanation of QC Codes.

Sample Location: FOURMILE CREEK UPSTREAM OF

Collection Date/Time: 02/14/2018 13:25

Field ID: G3NW0112DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes		
1967816	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P340036			
	EPA 300.0 Rev. 2.1	Chloride	2.9		mg Cl/L	P340321			
		Sulfate	2.7		mg SO4/L	P340323			
	SM 2120 B	Color (true)	99		PCU	P340056			
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P340528			
	SM 2540 C-97	TDS	24	I	mg/L	P340575			
	SM 2540 D-97	TSS	2	U	mg/L	P340235			
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P340532			
1967818	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P340675			
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P340262			
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.051		mg N/L	P340495			
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P340413			
	SM 5310 B-00	Organic Carbon	9.3		mg C/L	P340534			
1967820	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P340064			
1967836	EPA 8321B	2,4-D	0.0020	U	ug/L	P339943			
		Sucralose**	0.010	U	ug/L	P340020			
		Bentazon	8.0E-04	U	ug/L	P339943	MS		
		MCP	0.0020	U	ug/L	P339943	MS		
		Triclopyr**	0.0040	U	ug/L	P339943			
		Imidacloprid	0.0042	I	ug/L	P339943	MS		
		Diuron	0.0020	U	ug/L	P339943			
		Pyraclostrobin**	0.0020	U	ug/L	P339943			
		Primidone**	0.0040	UJ	ug/L	P339943	CCV		
		Linuron	0.0040	U	ug/L	P339943			
		Acetaminophen**	0.0080	U	ug/L	P339943			
		Fenuron	0.0080	U	ug/L	P339943			
		Carbamazepine**	4.0E-04	U	ug/L	P339943			
		Fluridone**	4.0E-04	U	ug/L	P339943			
		Glyphosate**	0.10	U	ug/L	P340147			
		AMPA**	0.10	U	ug/L	P340147			
		1967838		Aldicarb	0.020	U	ug/L	P339943	
				Aldicarb Sulfone	0.0020	U	ug/L	P339943	MS
				Aldicarb Sulfoxide	0.0020	U	ug/L	P339943	
				Carbaryl	0.0020	U	ug/L	P339943	
Carbofuran	0.0020			U	ug/L	P339943			
3-Hydroxycarbofuran	0.0020			U	ug/L	P339943			
Methiocarb	0.0020			U	ug/L	P339943			
Methomyl	0.0020			U	ug/L	P339943			
Oxamyl	0.0020			U	ug/L	P339943			
Propoxur	0.0020			U	ug/L	P339943			
1967844	EPA 8270D	Aldrin	4.3	U	ng/L	P340047			
		Alpha-BHC	2.2	U	ng/L	P340047			
		Beta-BHC	4.3	U	ng/L	P340047			
		Delta-BHC	4.3	U	ng/L	P340047			

Field ID: G3NW0112DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967844	EPA 8270D	Gamma-BHC	4.3	U	ng/L	P340047	
		Carbophenothion	4.3	U	ng/L	P340047	
		Chlorothalonil	2.2	U	ng/L	P340047	RPD
		Cypermethrin	22	U	ng/L	P340047	
		DDD-p,p'	3.2	U	ng/L	P340047	
		DDE-p,p'	3.2	U	ng/L	P340047	
		DDT-p,p'	3.2	U	ng/L	P340047	
		Dieldrin	4.3	U	ng/L	P340047	
		Endosulfan I	4.3	U	ng/L	P340047	
		Endosulfan II	4.3	U	ng/L	P340047	
		Endosulfan Sulfate	2.2	U	ng/L	P340047	
		Endrin	2.2	U	ng/L	P340047	
		Endrin Aldehyde	2.2	U	ng/L	P340047	
		Heptachlor	1.6	U	ng/L	P340047	
		Heptachlor Epoxide	2.2	U	ng/L	P340047	
		Methoxychlor	4.3	U	ng/L	P340047	
		Mirex	2.2	U	ng/L	P340047	
		Permethrin	11	U	ng/L	P340047	
		Trifluralin	1.1	U	ng/L	P340047	
		Alpha-Chlordane	1.1	U	ng/L	P340047	
		Gamma-Chlordane	1.1	U	ng/L	P340047	
		Endrin Ketone	2.2	U	ng/L	P340047	
		Dicofol	32	U	ng/L	P340047	
	EPA 8276	Chlordane**	2.7	UJ	ng/L	P340047	SUR
		Toxaphene**	32	UJ	ng/L	P340047	SUR
1967846	EPA 8270D	Alachlor	0.25	U	ng/L	P340051	
		Ametryn	0.33	U	ng/L	P340051	MS
		Atrazine	0.42	I	ng/L	P340051	
		Atrazine Desethyl	1.5	U	ng/L	P340051	
		Azinphos Methyl	2.3	U	ng/L	P340051	
		Bromacil	10	J	ng/L	P340051	LCS
		Butylate	0.41	U	ng/L	P340051	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P340051	
		Chlorpyrifos Methyl	0.10	U	ng/L	P340051	MS
		Demeton	2.0	U	ng/L	P340051	MS
		Diazinon	0.13	U	ng/L	P340051	
		Disulfoton	0.51	U	ng/L	P340051	
		EPTC	1.3	U	ng/L	P340051	
		Ethion	0.15	U	ng/L	P340051	
		Ethoprop	0.10	U	ng/L	P340051	
		Fenamiphos	0.25	U	ng/L	P340051	RPD
		Fipronil	0.25	U	ng/L	P340051	
		Fipronil Sulfide	0.15	U	ng/L	P340051	
		Fipronil Sulfone	0.15	UJ	ng/L	P340051	CCV
		Hexazinone	0.68	I	ng/L	P340051	

Field ID: G3NW0112DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967846	EPA 8270D	Malathion	0.37	I	ng/L	P340051	MS
		Metribuzin	0.20	U	ng/L	P340051	
		Mevinphos	0.51	UJ	ng/L	P340051	CCV, MS
		Molinate	0.30	U	ng/L	P340051	
		Norflurazon	0.51	U	ng/L	P340051	
		Pendimethalin	1.0	U	ng/L	P340051	
		Phorate	0.25	U	ng/L	P340051	
		Prometon	0.91	U	ng/L	P340051	
		Prometryn	0.20	U	ng/L	P340051	
		Simazine	0.51	U	ng/L	P340051	
		Terbufos	0.10	U	ng/L	P340051	
		Terbuthylazine	0.43	U	ng/L	P340051	
		Fonofos	0.20	U	ng/L	P340051	MS
		Metalaxyl	0.25	U	ng/L	P340051	
		Metolachlor	0.41	I	ng/L	P340051	
		Acetochlor	0.25	U	ng/L	P340051	
		Cyanazine	0.51	U	ng/L	P340051	
		Parathion Ethyl	0.25	U	ng/L	P340051	
		Parathion Methyl	0.25	U	ng/L	P340051	MS
1967851	EPA 200.7 Rev. 4.4	Calcium	1.28		mg/L	P340242	
		Iron	140		ug/L	P340242	
		Magnesium	0.42		mg/L	P340242	
		Potassium	0.30	U	mg/L	P340242	
		Sodium	1.8	I	mg/L	P340242	
		Zinc	5.0	U	ug/L	P340242	
	EPA 200.8 Rev. 5.4	Arsenic	0.16	I	ug/L	P340242	
		Cadmium	0.020	U	ug/L	P340242	
		Chromium	0.40	U	ug/L	P340242	
		Copper	0.20	U	ug/L	P340242	
		Lead	0.19	I	ug/L	P340242	
		Nickel	0.24	I	ug/L	P340242	
		Silver	0.010	U	ug/L	P340242	

Ref. Method and Comment:

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: Refer to the narrative for an explanation of QC Codes.

EPA 8276: Refer to the narrative for an explanation of QC Codes.

EPA 8270D: MS accuracy for Atrazine , Simazine, and Fipronil Sulfone not assessed due to high content of this parameter in the sample spiked.

Refer to the narrative for an explanation of QC Codes.

Sample Location: PENSACOLA ICE ROOM

Collection Date/Time: 02/14/2018 13:30

Field ID: BLANK_02142018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967817	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P340036	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P340321	
		Sulfate	0.20	U	mg SO4/L	P340323	
	SM 2120 B	Color (true)	2.5	U	PCU	P340077	

Field ID: BLANK_02142018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967817	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P340528	
	SM 2540 C-97	TDS	15	U	mg/L	P340575	
	SM 2540 D-97	TSS	2	U	mg/L	P340235	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P340532	
1967819	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P340675	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P340262	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P340421	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P340413	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P340427	
1967821	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P340064	
1967837	EPA 8321B	2,4-D	0.0020	U	ug/L	P339943	
		Sucralose**	0.010	U	ug/L	P340020	
		Bentazon	8.0E-04	U	ug/L	P339943	MS
		MCP	0.0020	U	ug/L	P339943	MS
		Triclopyr**	0.0040	U	ug/L	P339943	
		Imidacloprid	0.0020	U	ug/L	P339943	MS
		Diuron	0.0020	U	ug/L	P339943	
		Pyraclostrobin**	0.0020	U	ug/L	P339943	
		Primidone**	0.0040	UJ	ug/L	P339943	CCV
		Linuron	0.0040	U	ug/L	P339943	
		Acetaminophen**	0.0080	U	ug/L	P339943	
		Fenuron	0.0080	U	ug/L	P339943	
		Carbamazepine**	4.0E-04	U	ug/L	P339943	
		Fluridone**	4.0E-04	U	ug/L	P339943	
		Glyphosate**	0.10	U	ug/L	P340147	
		AMPA**	0.10	U	ug/L	P340147	
1967839		Aldicarb	0.020	U	ug/L	P339943	
		Aldicarb Sulfone	0.0020	U	ug/L	P339943	MS
		Aldicarb Sulfoxide	0.0020	U	ug/L	P339943	
		Carbaryl	0.0020	U	ug/L	P339943	
		Carbofuran	0.0020	U	ug/L	P339943	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P339943	
		Methiocarb	0.0020	U	ug/L	P339943	
		Methomyl	0.0020	U	ug/L	P339943	
		Oxamyl	0.0020	U	ug/L	P339943	
		Propoxur	0.0020	U	ug/L	P339943	
1967845	EPA 8270D	Aldrin	4.9	U	ng/L	P340047	
		Alpha-BHC	2.5	U	ng/L	P340047	
		Beta-BHC	4.9	U	ng/L	P340047	
		Delta-BHC	4.9	U	ng/L	P340047	
		Gamma-BHC	4.9	U	ng/L	P340047	
		Carbophenothion	4.9	U	ng/L	P340047	
		Chlorothalonil	2.5	U	ng/L	P340047	RPD
		Cypermethrin	25	U	ng/L	P340047	

Field ID: BLANK_02142018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967845	EPA 8270D	DDD-p,p'	3.7	U	ng/L	P340047	
		DDE-p,p'	3.7	U	ng/L	P340047	
		DDT-p,p'	3.7	U	ng/L	P340047	
		Dieldrin	4.9	U	ng/L	P340047	
		Endosulfan I	4.9	U	ng/L	P340047	
		Endosulfan II	4.9	U	ng/L	P340047	
		Endosulfan Sulfate	2.5	U	ng/L	P340047	
		Endrin	2.5	U	ng/L	P340047	
		Endrin Aldehyde	2.5	U	ng/L	P340047	
		Heptachlor	1.8	U	ng/L	P340047	
		Heptachlor Epoxide	2.5	U	ng/L	P340047	
		Methoxychlor	4.9	U	ng/L	P340047	
		Mirex	2.5	U	ng/L	P340047	
		Permethrin	12	U	ng/L	P340047	
		Trifluralin	1.2	U	ng/L	P340047	
		Alpha-Chlordane	1.2	U	ng/L	P340047	
		Gamma-Chlordane	1.2	U	ng/L	P340047	
		Endrin Ketone	2.5	U	ng/L	P340047	
		Dicofol	37	U	ng/L	P340047	
		Chlordane**	3.1	U	ng/L	P340047	
		Toxaphene**	37	U	ng/L	P340047	
1967847	EPA 8270D	Alachlor	0.28	U	ng/L	P340051	
		Ametryn	0.37	U	ng/L	P340051	MS
		Atrazine	0.28	U	ng/L	P340051	
		Atrazine Desethyl	1.7	U	ng/L	P340051	
		Azinphos Methyl	2.6	U	ng/L	P340051	
		Bromacil	0.57	UJ	ng/L	P340051	LCS
		Butylate	0.45	U	ng/L	P340051	
		Chlorpyrifos Ethyl	0.28	U	ng/L	P340051	
		Chlorpyrifos Methyl	0.11	U	ng/L	P340051	MS
		Demeton	2.3	U	ng/L	P340051	MS
		Diazinon	0.14	U	ng/L	P340051	
		Disulfoton	0.57	U	ng/L	P340051	
		EPTC	1.4	U	ng/L	P340051	
		Ethion	0.17	U	ng/L	P340051	
		Ethoprop	0.11	U	ng/L	P340051	
		Fenamiphos	0.28	U	ng/L	P340051	RPD
		Fipronil	0.28	U	ng/L	P340051	
		Fipronil Sulfide	0.17	U	ng/L	P340051	
		Fipronil Sulfone	0.17	UJ	ng/L	P340051	CCV
		Hexazinone	0.57	U	ng/L	P340051	
		Malathion	0.40	U	ng/L	P340051	MS
		Metribuzin	0.23	U	ng/L	P340051	
		Mevinphos	0.57	UJ	ng/L	P340051	CCV, MS
		Molinate	0.34	U	ng/L	P340051	

Field ID: BLANK_02142018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1967847	EPA 8270D	Norflurazon	0.57	U	ng/L	P340051	
		Pendimethalin	1.1	U	ng/L	P340051	
		Phorate	0.28	U	ng/L	P340051	
		Prometon	1.0	U	ng/L	P340051	
		Prometryn	0.23	U	ng/L	P340051	
		Simazine	0.57	U	ng/L	P340051	
		Terbufos	0.11	U	ng/L	P340051	
		Terbuthylazine	0.48	U	ng/L	P340051	
		Fonofos	0.23	U	ng/L	P340051	MS
		Metalaxyl	0.28	U	ng/L	P340051	
		Metolachlor	0.28	U	ng/L	P340051	
		Acetochlor	0.28	U	ng/L	P340051	
		Cyanazine	0.57	U	ng/L	P340051	
		Parathion Ethyl	0.28	U	ng/L	P340051	
		Parathion Methyl	0.28	U	ng/L	P340051	MS
1967852	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P340242	
		Iron	30	U	ug/L	P340242	
		Magnesium	0.040	U	mg/L	P340242	
		Potassium	0.30	U	mg/L	P340242	
		Sodium	0.50	U	mg/L	P340242	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P340242	
		Arsenic	0.050	U	ug/L	P340242	
		Cadmium	0.020	U	ug/L	P340242	
		Chromium	0.40	U	ug/L	P340242	
		Copper	0.20	U	ug/L	P340242	
		Lead	0.050	U	ug/L	P340242	
		Nickel	0.20	U	ug/L	P340242	
		Silver	0.010	U	ug/L	P340242	

Ref. Method and Comment:

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: Refer to the narrative for an explanation of QC Codes.

EPA 8270D: MS accuracy for Atrazine , Simazine, and Fipronil Sulfone not assessed due to high content of this parameter in the sample spiked.

Refer to the narrative for an explanation of QC Codes.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P340036

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P340242

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P340242

Component	Result	Code	Units
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340242

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.20	U	ug/L
Lead	0.050	U	ug/L
Nickel	0.20	U	ug/L
Silver	0.010	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340320

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340321

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340322

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340323

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340624

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340675

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P340262

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340421

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340494

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340495

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340343

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340413

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P340064

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P340065

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

Reference Method: EPA 8270D
Batch ID: P340047

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P340047

Component	Result	Code	Units
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
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 8270D
Batch ID: P340051

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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D

Batch ID: P340051

Component	Result	Code	Units
Metalaxyl	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
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8276

Batch ID: P340047

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

Reference Method: EPA 8321B

Batch ID: P339943

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	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
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P340020

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P340147

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

Reference Method: SM 2120 B
Batch ID: P340056

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P340077

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P340528

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

Reference Method: SM 2540 C-97
Batch ID: P340575

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P340235

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P340442

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P340532

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P340427

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

Reference Method: SM 5310 B-00
Batch ID: P340534

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P340242

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	111		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	98.7		P	85 - 115
Sodium	104		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340242

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	99.2		P	85 - 115
Cadmium	104		P	85 - 115
Chromium	99.1		P	85 - 115
Copper	101		P	85 - 115
Lead	102		P	85 - 115
Nickel	99.8		P	85 - 115
Silver	91.7		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340320

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	95.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340321

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	91.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340322

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	93.3		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340323

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	90.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340624

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	93.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340675

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P340262

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340421

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340494

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340495

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340343

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340413

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P340064

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.9		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P340065

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

Reference Method: EPA 8270D
 Batch ID: P340047

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	63.6	65.1	P/P	24 - 89.0
Alpha-BHC	91.1	85.5	P/P	58 - 117
Alpha-Chlordane	86.1	83.1	P/P	56 - 115
Beta-BHC	85.4	73.9	P/P	55 - 137
Carbophenothion	88.6	83.0	P/P	37 - 145
Chlorothalonil	79.3	91.1	P/P	26 - 163
Cypermethrin	71.3	64.1	P/P	42 - 156
DDD-p,p'	100	100	P/P	59 - 129
DDE-p,p'	91.0	88.2	P/P	52 - 117
DDT-p,p'	100	91.5	P/P	48 - 128
Delta-BHC	99.0	89.2	P/P	59 - 158
Dicofol	86.6	93.9	P/P	19 - 124
Dieldrin	89.8	83.1	P/P	57 - 126
Endosulfan I	97.9	98.7	P/P	59 - 133
Endosulfan II	117	109	P/P	58 - 148
Endosulfan Sulfate	87.6	79.8	P/P	56 - 135
Endrin	86.6	82.3	P/P	50 - 140
Endrin Aldehyde	86.1	72.0	P/P	47 - 141
Endrin Ketone	92.2	83.3	P/P	63 - 123
Gamma-BHC	85.0	73.4	P/P	59 - 132
Gamma-Chlordane	84.6	84.6	P/P	55 - 112
Heptachlor	70.4	72.9	P/P	45 - 102
Heptachlor Epoxide	85.7	84.5	P/P	61 - 116
Methoxychlor	94.6	91.9	P/P	60 - 133
Mirex	83.5	78.4	P/P	40 - 98.0
Permethrin	85.5	82.1	P/P	45 - 131
Trifluralin	86.3	87.9	P/P	38 - 179

Reference Method: EPA 8270D
 Batch ID: P340051

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	81.4	94.8	P/P	74 - 119
Alachlor	87.6	99.2	P/P	75 - 118
Ametryn	78.0	95.6	P/P	59 - 137
Atrazine	107	112	P/P	73 - 120
Atrazine Desethyl	97.6	95.2	P/P	19 - 129
Azinphos Methyl	147	164	P/P	65 - 181
Bromacil	32.8	32.3	F/F	43 - 123
Butylate	67.6	56.4	P/P	28 - 85.0

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P340051

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Ethyl	91.6	95.2	P/P	55 - 112
Chlorpyrifos Methyl	106	118	P/P	35 - 124
Cyanazine	108	111	P/P	26 - 262
Demeton	84.6	80.9	P/P	43 - 122
Diazinon	96.5	96.6	P/P	72 - 120
Disulfoton	112	110	P/P	45 - 137
EPTC	67.7	54.8	P/P	28 - 95.0
Ethion	120	115	P/P	63 - 127
Ethoprop	104	100	P/P	63 - 109
Fenamiphos	106	97.2	P/P	66 - 136
Fipronil	95.3	94.6	P/P	63 - 126
Fipronil Sulfide	92.3	94.1	P/P	59 - 123
Fipronil Sulfone	88.6	89.6	P/P	56 - 122
Fonofos	111	111	P/P	64 - 114
Hexazinone	113	120	P/P	49 - 144
Malathion	121	115	P/P	68 - 131
Metaxyl	84.3	90.3	P/P	57 - 126
Metolachlor	95.2	91.8	P/P	75 - 118
Metribuzin	126	141	P/P	46 - 169
Mevinphos	93.4	89.0	P/P	34 - 126
Molinate	88.3	80.9	P/P	37 - 101
Norflurazon	80.9	84.7	P/P	63 - 127
Parathion Ethyl	92.5	95.6	P/P	78 - 109
Parathion Methyl	98.7	103	P/P	74 - 123
Pendimethalin	102	115	P/P	51 - 130
Phorate	110	109	P/P	53 - 116
Prometon	88.0	88.9	P/P	66 - 124
Prometryn	83.2	81.5	P/P	66 - 124
Simazine	124	113	P/P	62 - 134
Terbufos	108	108	P/P	59 - 115
Terbutylazine	96.9	105	P/P	76 - 113

Reference Method: EPA 8276
Batch ID: P340047

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	91.9	86.0	P/P	47 - 125
Toxaphene	89.3	96.2	P/P	46 - 147

Reference Method: EPA 8321B
Batch ID: P339943

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	79.0		P	40 - 150
3-Hydroxycarbofuran	113		P	40 - 150
Acetaminophen	111		P	30 - 150
Aldicarb	65.2		P	30 - 150
Aldicarb Sulfone	110		P	40 - 150
Aldicarb Sulfoxide	102		P	40 - 150
Bentazon	84.6		P	30 - 150
Carbamazepine	91.2		P	40 - 150
Carbaryl	81.6		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P339943

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbofuran	80.3		P	40 - 150
Diuron	90.0		P	40 - 150
Fenuron	120		P	40 - 150
Fluridone	91.0		P	40 - 150
Imidacloprid	108		P	40 - 160
Linuron	103		P	40 - 150
MCPP	74.9		P	40 - 150
Methiocarb	80.4		P	40 - 150
Methomyl	110		P	40 - 150
Oxamyl	99.9		P	40 - 150
Primidone	123		P	40 - 150
Propoxur	74.1		P	40 - 150
Pyraclostrobin	81.4		P	40 - 150
Triclopyr	80.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P340020

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	93.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P340147

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
AMPA	99.4		P	40 - 150
Glyphosate	98.3		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P340528

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: P340532

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P340427

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

Reference Method: SM 5310 B-00
Batch ID: P340534

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P340242

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967770	Calcium	102		P	80 - 120
1967770	Iron	109		P	80 - 120
1967770	Magnesium	105		P	80 - 120
1967770	Potassium	98.2		P	80 - 120
1967770	Sodium	101		P	80 - 120
1967770	Zinc	102		P	80 - 120
1967980	Calcium	103		P	80 - 120
1967980	Iron	111	113	P/P	80 - 120
1967980	Magnesium	100		P	80 - 120
1967980	Potassium	101	100	P/P	80 - 120
1967980	Sodium	105		P	80 - 120
1967980	Zinc	96.9	99.5	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340242

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967770	Arsenic	99.2		P	80 - 120
1967770	Cadmium	105		P	80 - 120
1967770	Chromium	103		P	80 - 120
1967770	Copper	101		P	80 - 120
1967770	Lead	104		P	80 - 120
1967770	Nickel	99.3		P	80 - 120
1967770	Silver	92.8		P	80 - 120
1967980	Arsenic	103	104	P/P	80 - 120
1967980	Cadmium	105	107	P/P	80 - 120
1967980	Chromium	103	105	P/P	80 - 120
1967980	Copper	98.4	99.6	P/P	80 - 120
1967980	Lead	106	107	P/P	80 - 120
1967980	Nickel	98.3	99.0	P/P	80 - 120
1967980	Silver	94.2	95.4	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340320

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967645	Chloride	93.0		P	90 - 110
1967805	Chloride	94.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967813	Chloride	95.5		P	90 - 110
1968067	Chloride	93.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340322

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967645	Sulfate	92.7		P	90 - 110
1967805	Sulfate	93.2		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340323

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967813	Sulfate	91.3		P	90 - 110
1968067	Sulfate	93.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340624

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967755	Ammonia-N	99.4	97.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340675

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1968069	Ammonia-N	98.9	99.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340421

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967616	NO2NO3-N	98.9	98.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340494

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967651	NO2NO3-N	104	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340495

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967814	NO2NO3-N	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967783	Total-P	99.6	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340413

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1968023	Total-P	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P340064

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967757	O-Phosphate-P	95.3	95.8	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P340065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967809	O-Phosphate-P	96.9	97.6	P/P	90 - 110

Reference Method: EPA 8270D
 Batch ID: P340047

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967722	Aldrin	70.1	67.5	P/P	26 - 96.0
1967722	Alpha-BHC	74.7	75.5	P/P	51 - 123
1967722	Alpha-Chlordane	84.8	84.9	P/P	45 - 120
1967722	Beta-BHC	78.3	73.1	P/P	43 - 146
1967722	Carbophenothion	121	132	P/P	26 - 179
1967722	Chlorothalonil	85.9	128	P/P	10 - 215
1967722	Cypermethrin	99.2	95.2	P/P	35 - 169
1967722	DDD-p,p'	91.0	92.8	P/P	49 - 131
1967722	DDE-p,p'	84.8	81.8	P/P	39 - 127
1967722	DDT-p,p'	91.7	83.5	P/P	49 - 120
1967722	Delta-BHC	147	167	P/P	49 - 187
1967722	Dicofol	87.7	85.2	P/P	10 - 129
1967722	Dieldrin	85.5	88.1	P/P	46 - 132
1967722	Endosulfan I	106	111	P/P	57 - 130
1967722	Endosulfan II	109	120	P/P	52 - 148
1967722	Endosulfan Sulfate	127	107	P/P	55 - 129
1967722	Endrin	88.4	91.1	P/P	45 - 133
1967722	Endrin Aldehyde	31.9	32.5	P/P	26 - 140
1967722	Endrin Ketone	83.4	76.0	P/P	60 - 125
1967722	Gamma-BHC	77.4	94.4	P/P	50 - 145
1967722	Gamma-Chlordane	83.1	84.1	P/P	44 - 118
1967722	Heptachlor	81.0	81.2	P/P	35 - 106
1967722	Heptachlor Epoxide	89.0	87.6	P/P	52 - 123
1967722	Methoxychlor	103	95.5	P/P	54 - 132
1967722	Mirex	76.0	75.5	P/P	36 - 107
1967722	Permethrin	90.9	92.3	P/P	47 - 135
1967722	Trifluralin	83.1	76.3	P/P	32 - 228

Reference Method: EPA 8270D
 Batch ID: P340051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967723	Acetochlor	90.3	93.3	P/P	67 - 125
1967723	Alachlor	81.4	96.0	P/P	69 - 123
1967723	Ametryn	51.9	66.5	F/P	52 - 151
1967723	Atrazine Desethyl	60.1	65.2	P/P	10 - 129
1967723	Azinphos Methyl	174	198	P/P	48 - 200
1967723	Bromacil	62.8	82.7	P/P	46 - 130
1967723	Butylate	62.6	59.0	P/P	10 - 85.0
1967723	Chlorpyrifos Ethyl	83.3	111	P/P	54 - 115
1967723	Chlorpyrifos Methyl	113	127	P/F	44 - 117
1967723	Cyanazine	103	124	P/P	10 - 262
1967723	Demeton	143	154	P/F	24 - 145
1967723	Diazinon	96.1	97.1	P/P	66 - 129
1967723	Disulfoton	101	98.4	P/P	45 - 139
1967723	EPTC	58.8	53.5	P/P	10 - 86.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P340051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967723	Ethion	99.6	123	P/P	59 - 133
1967723	Ethoprop	101	114	P/P	54 - 116
1967723	Fenamiphos	77.7	111	P/P	55 - 140
1967723	Fipronil	93.0	72.6	P/P	37 - 142
1967723	Fipronil Sulfide	87.4	76.8	P/P	37 - 130
1967723	Fonofos	107	124	P/F	55 - 118
1967723	Hexazinone	108	127	P/P	62 - 140
1967723	Malathion	118	135	P/F	64 - 132
1967723	Metalaxyl	87.7	86.9	P/P	55 - 129
1967723	Metolachlor	92.3	104	P/P	56 - 137
1967723	Metribuzin	145	146	P/P	16 - 218
1967723	Mevinphos	139	160	F/F	34 - 129
1967723	Molinate	87.3	86.7	P/P	16 - 99.0
1967723	Norflurazon	88.7	106	P/P	43 - 135
1967723	Parathion Ethyl	102	112	P/P	71 - 112
1967723	Parathion Methyl	143	143	F/F	65 - 127
1967723	Pendimethalin	114	106	P/P	35 - 159
1967723	Phorate	99.7	109	P/P	41 - 129
1967723	Prometon	87.0	95.5	P/P	56 - 140
1967723	Prometryn	71.2	77.7	P/P	65 - 130
1967723	Terbufos	103	104	P/P	53 - 126
1967723	Terbutylazine	93.0	89.3	P/P	73 - 114

Reference Method: EPA 8276
Batch ID: P340047

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1968167	Chlordane	99.3	74.3	P/P	41 - 134
1968167	Toxaphene	119	111	P/P	39 - 158

Reference Method: EPA 8321B
Batch ID: P339943

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967832	2,4-D	49.8	51.0	P/P	40 - 150
1967832	3-Hydroxycarbofuran	132	133	P/P	40 - 150
1967832	Acetaminophen	136	135	P/P	30 - 150
1967832	Aldicarb	67.2	68.2	P/P	30 - 150
1967832	Aldicarb Sulfone	154	139	F/P	40 - 150
1967832	Aldicarb Sulfoxide	115	101	P/P	40 - 150
1967832	Bentazon	26.5	26.6	F/F	30 - 150
1967832	Carbamazepine	89.9	86.8	P/P	40 - 150
1967832	Carbaryl	60.9	56.9	P/P	40 - 150
1967832	Carbofuran	65.5	60.7	P/P	40 - 150
1967832	Diuron	77.3	73.9	P/P	40 - 150
1967832	Fenuron	105	100	P/P	40 - 150
1967832	Fluridone	72.5	61.5	P/P	40 - 150
1967832	Imidacloprid	212	199	F/F	40 - 160
1967832	Linuron	90.9	85.5	P/P	40 - 150
1967832	MCP	34.8	35.4	F/F	40 - 150
1967832	Methiocarb	76.8	72.6	P/P	40 - 150
1967832	Methomyl	109	101	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P339943

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967832	Oxamyl	111	99.9	P/P	40 - 150
1967832	Primidone	115	122	P/P	40 - 150
1967832	Propoxur	56.4	53.6	P/P	40 - 150
1967832	Pyraclostrobin	60.6	50.8	P/P	40 - 150
1967832	Triclopyr	40.3	44.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P340020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967545	Sucralose	124	125	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P340147

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967720	AMPA	95.4	93.0	P/P	40 - 150
1967720	Glyphosate	103	92.6	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P340532

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1968135	Fluoride	95.1	95.7	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P340427

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967650	Organic Carbon	95.3	96.1	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P340534

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967818	Organic Carbon	98.2	99.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P340036

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967785	Turbidity	1.67	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P340242

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967980	Calcium	0.439	Spike	P	0 - 20
1967980	Iron	1.45	Spike	P	0 - 20
1967980	Magnesium	0.122	Spike	P	0 - 20
1967980	Potassium	0.742	Spike	P	0 - 20
1967980	Sodium	0.0874	Spike	P	0 - 20
1967980	Zinc	2.19	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340242

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967980	Arsenic	0.963	Spike	P	0 - 20
1967980	Cadmium	1.31	Spike	P	0 - 20
1967980	Chromium	1.43	Spike	P	0 - 20
1967980	Copper	1.22	Spike	P	0 - 20
1967980	Lead	0.278	Spike	P	0 - 20
1967980	Nickel	0.652	Spike	P	0 - 20
1967980	Silver	1.26	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340320

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967645	Chloride	3.08	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1968067	Chloride	2.37	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340322

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967645	Sulfate	0.743	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340323

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1968067	Sulfate	5.68	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340624

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967755	Ammonia-N	1.50	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340675

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1968069	Ammonia-N	0.175	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P340262

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1968023	Kjeldahl Nitrogen	0.308	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340421

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967616	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340494

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967651	NO2NO3-N	0.816	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340495

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967814	NO2NO3-N	0.351	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967783	Total-P	0.958	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P340413

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1968023	Total-P	0.172	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P340064

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967757	O-Phosphate-P	0.523	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P340065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967809	O-Phosphate-P	0.720	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P340047

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967722	Aldrin	3.80	Spike	P	0 - 30
1967722	Alpha-BHC	1.15	Spike	P	0 - 30
1967722	Alpha-Chlordane	0.163	Spike	P	0 - 30
1967722	Beta-BHC	6.82	Spike	P	0 - 30
1967722	Carbophenothion	9.04	Spike	P	0 - 30
1967722	Chlorothalonil	39.3	Spike	F	0 - 30
1967722	Cypermethrin	4.09	Spike	P	0 - 30
1967722	DDD-p,p'	1.95	Spike	P	0 - 30
1967722	DDE-p,p'	3.59	Spike	P	0 - 30
1967722	DDT-p,p'	9.36	Spike	P	0 - 30
1967722	Delta-BHC	12.4	Spike	P	0 - 30
1967722	Dicofol	2.95	Spike	P	0 - 30
1967722	Dieldrin	3.01	Spike	P	0 - 30
1967722	Endosulfan I	5.11	Spike	P	0 - 30
1967722	Endosulfan II	9.22	Spike	P	0 - 30
1967722	Endosulfan Sulfate	17.4	Spike	P	0 - 30
1967722	Endrin	2.98	Spike	P	0 - 30
1967722	Endrin Aldehyde	2.07	Spike	P	0 - 30
1967722	Endrin Ketone	9.26	Spike	P	0 - 30
1967722	Gamma-BHC	19.8	Spike	P	0 - 30
1967722	Gamma-Chlordane	1.13	Spike	P	0 - 30
1967722	Heptachlor	0.326	Spike	P	0 - 30
1967722	Heptachlor Epoxide	1.55	Spike	P	0 - 30
1967722	Methoxychlor	7.23	Spike	P	0 - 30
1967722	Mirex	0.708	Spike	P	0 - 30
1967722	Permethrin	1.51	Spike	P	0 - 30
1967722	Trifluralin	7.73	Spike	P	0 - 30
LFB	Aldrin	2.32	LCS	P	0 - 30
LFB	Alpha-BHC	6.30	LCS	P	0 - 30
LFB	Alpha-Chlordane	3.51	LCS	P	0 - 30
LFB	Beta-BHC	14.5	LCS	P	0 - 30
LFB	Carbophenothion	6.55	LCS	P	0 - 30
LFB	Chlorothalonil	13.8	LCS	P	0 - 30
LFB	Cypermethrin	10.7	LCS	P	0 - 30
LFB	DDD-p,p'	0.271	LCS	P	0 - 30
LFB	DDE-p,p'	3.21	LCS	P	0 - 30
LFB	DDT-p,p'	8.87	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P340047

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Delta-BHC	10.4	LCS	P	0 - 30
LFB	Dicofol	8.01	LCS	P	0 - 30
LFB	Dieldrin	7.73	LCS	P	0 - 30
LFB	Endosulfan I	0.755	LCS	P	0 - 30
LFB	Endosulfan II	6.59	LCS	P	0 - 30
LFB	Endosulfan Sulfate	9.38	LCS	P	0 - 30
LFB	Endrin	5.15	LCS	P	0 - 30
LFB	Endrin Aldehyde	17.9	LCS	P	0 - 30
LFB	Endrin Ketone	10.2	LCS	P	0 - 30
LFB	Gamma-BHC	14.6	LCS	P	0 - 30
LFB	Gamma-Chlordane	0.0547	LCS	P	0 - 30
LFB	Heptachlor	3.41	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.44	LCS	P	0 - 30
LFB	Methoxychlor	2.90	LCS	P	0 - 30
LFB	Mirex	6.27	LCS	P	0 - 30
LFB	Permethrin	4.14	LCS	P	0 - 30
LFB	Trifluralin	1.87	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P340051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967723	Acetochlor	3.29	Spike	P	0 - 30
1967723	Alachlor	16.4	Spike	P	0 - 30
1967723	Ametryn	24.7	Spike	P	0 - 30
1967723	Atrazine	6.48	Spike	P	0 - 30
1967723	Atrazine Desethyl	6.00	Spike	P	0 - 30
1967723	Azinphos Methyl	13.1	Spike	P	0 - 30
1967723	Bromacil	20.5	Spike	P	0 - 30
1967723	Butylate	5.92	Spike	P	0 - 30
1967723	Chlorpyrifos Ethyl	28.7	Spike	P	0 - 30
1967723	Chlorpyrifos Methyl	11.9	Spike	P	0 - 30
1967723	Cyanazine	18.5	Spike	P	0 - 30
1967723	Demeton	7.03	Spike	P	0 - 30
1967723	Diazinon	1.05	Spike	P	0 - 30
1967723	Disulfoton	2.10	Spike	P	0 - 30
1967723	EPTC	9.53	Spike	P	0 - 30
1967723	Ethion	21.3	Spike	P	0 - 30
1967723	Ethoprop	11.6	Spike	P	0 - 30
1967723	Fenamiphos	35.4	Spike	F	0 - 30
1967723	Fipronil	14.7	Spike	P	0 - 30
1967723	Fipronil Sulfide	8.78	Spike	P	0 - 30
1967723	Fipronil Sulfone	15.9	Spike	P	0 - 30
1967723	Fonofos	15.2	Spike	P	0 - 30
1967723	Hexazinone	16.0	Spike	P	0 - 30
1967723	Malathion	13.7	Spike	P	0 - 30
1967723	Metalaxyl	0.975	Spike	P	0 - 30
1967723	Metolachlor	11.9	Spike	P	0 - 30
1967723	Metribuzin	0.613	Spike	P	0 - 30
1967723	Mevinphos	14.1	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P340051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967723	Molinate	0.691	Spike	P	0 - 30
1967723	Norflurazon	17.4	Spike	P	0 - 30
1967723	Parathion Ethyl	8.89	Spike	P	0 - 30
1967723	Parathion Methyl	0.121	Spike	P	0 - 30
1967723	Pendimethalin	7.70	Spike	P	0 - 30
1967723	Phorate	9.16	Spike	P	0 - 30
1967723	Prometon	9.31	Spike	P	0 - 30
1967723	Prometryn	8.80	Spike	P	0 - 30
1967723	Simazine	17.6	Spike	P	0 - 30
1967723	Terbufos	1.15	Spike	P	0 - 30
1967723	Terbuthylazine	4.10	Spike	P	0 - 30
LFB	Acetochlor	15.2	LCS	P	0 - 30
LFB	Alachlor	12.4	LCS	P	0 - 30
LFB	Ametryn	20.3	LCS	P	0 - 30
LFB	Atrazine	4.11	LCS	P	0 - 30
LFB	Atrazine Desethyl	2.58	LCS	P	0 - 30
LFB	Azinphos Methyl	11.4	LCS	P	0 - 30
LFB	Bromacil	1.35	LCS	P	0 - 30
LFB	Butylate	18.0	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	3.87	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	10.7	LCS	P	0 - 30
LFB	Cyanazine	3.31	LCS	P	0 - 30
LFB	Demeton	4.53	LCS	P	0 - 30
LFB	Diazinon	0.0362	LCS	P	0 - 30
LFB	Disulfoton	1.15	LCS	P	0 - 30
LFB	EPTC	21.1	LCS	P	0 - 30
LFB	Ethion	3.95	LCS	P	0 - 30
LFB	Ethoprop	3.42	LCS	P	0 - 30
LFB	Fenamiphos	8.47	LCS	P	0 - 30
LFB	Fipronil	0.773	LCS	P	0 - 30
LFB	Fipronil Sulfide	1.98	LCS	P	0 - 30
LFB	Fipronil Sulfone	1.06	LCS	P	0 - 30
LFB	Fonofos	0.757	LCS	P	0 - 30
LFB	Hexazinone	5.96	LCS	P	0 - 30
LFB	Malathion	5.21	LCS	P	0 - 30
LFB	Metalaxyl	6.81	LCS	P	0 - 30
LFB	Metolachlor	3.56	LCS	P	0 - 30
LFB	Metribuzin	11.1	LCS	P	0 - 30
LFB	Mevinphos	4.79	LCS	P	0 - 30
LFB	Molinate	8.68	LCS	P	0 - 30
LFB	Norflurazon	4.70	LCS	P	0 - 30
LFB	Parathion Ethyl	3.33	LCS	P	0 - 30
LFB	Parathion Methyl	3.92	LCS	P	0 - 30
LFB	Pendimethalin	12.4	LCS	P	0 - 30
LFB	Phorate	1.22	LCS	P	0 - 30
LFB	Prometon	1.08	LCS	P	0 - 30
LFB	Prometryn	2.14	LCS	P	0 - 30
LFB	Simazine	8.94	LCS	P	0 - 30
LFB	Terbufos	0.233	LCS	P	0 - 30
LFB	Terbuthylazine	8.48	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P340047

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1968167	Chlordane	28.8	Spike	P	0 - 30
1968167	Toxaphene	6.99	Spike	P	0 - 30
LFB	Chlordane	6.62	LCS	P	0 - 30
LFB	Toxaphene	7.43	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P339943

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967832	2,4-D	2.36	Spike	P	0 - 30
1967832	3-Hydroxycarbofuran	0.904	Spike	P	0 - 30
1967832	Acetaminophen	0.318	Spike	P	0 - 30
1967832	Aldicarb	1.43	Spike	P	0 - 30
1967832	Aldicarb Sulfone	10.2	Spike	P	0 - 30
1967832	Aldicarb Sulfoxide	13.2	Spike	P	0 - 30
1967832	Bentazon	0.264	Spike	P	0 - 30
1967832	Carbamazepine	3.41	Spike	P	0 - 30
1967832	Carbaryl	6.74	Spike	P	0 - 30
1967832	Carbofuran	7.67	Spike	P	0 - 30
1967832	Diuron	4.47	Spike	P	0 - 30
1967832	Fenuron	4.90	Spike	P	0 - 30
1967832	Fluridone	16.3	Spike	P	0 - 30
1967832	Imidacloprid	6.21	Spike	P	0 - 30
1967832	Linuron	6.19	Spike	P	0 - 30
1967832	MCP	1.51	Spike	P	0 - 30
1967832	Methiocarb	5.59	Spike	P	0 - 30
1967832	Methomyl	7.05	Spike	P	0 - 30
1967832	Oxamyl	10.5	Spike	P	0 - 30
1967832	Primidone	6.00	Spike	P	0 - 30
1967832	Propoxur	5.07	Spike	P	0 - 30
1967832	Pyraclostrobin	17.5	Spike	P	0 - 30
1967832	Triclopyr	10.1	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P340020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967545	Sucralose	0.858	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P340147

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967720	AMPA	2.07	Spike	P	0 - 30
1967720	Glyphosate	8.47	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P340056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967805	Color (true)	1.58	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P340077

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1968387	Color (true)	14.1	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P340528

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1968135	Total Alkalinity	0.719	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P340575

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967782	TDS	0.922	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P340235

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967782	TSS	6.90	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P340532

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1968135	Fluoride	0.514	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P340427

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967650	Organic Carbon	0.773	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P340534

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967818	Organic Carbon	0.621	Spike	P	0 - 20

Quality Assurance Report Precision

* 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: 1967832
Field Sample ID: G3NW0148

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	59.1	P	30 - 160
EPA 8321B	2,4-D-d3	59.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	138	P	30 - 160
EPA 8321B	Acetaminophen-d4	138	P	30 - 160
EPA 8321B	Carbamazepine-d10	97.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	97.2	P	30 - 160
EPA 8321B	Diuron-d6	87.4	P	30 - 160
EPA 8321B	Diuron-d6	87.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	89.3	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	89.3	P	40 - 160
EPA 8321B	Primidone-d5	123	P	30 - 160
EPA 8321B	Primidone-d5	123	P	30 - 160
EPA 8321B	Sucralose-d6	156	P	40 - 160

Lab Sample ID: 1967833
Field Sample ID: G3NW0112

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	64.7	P	30 - 160
EPA 8321B	2,4-D-d3	64.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	145	P	30 - 160
EPA 8321B	Acetaminophen-d4	145	P	30 - 160
EPA 8321B	Carbamazepine-d10	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	101	P	30 - 160
EPA 8321B	Diuron-d6	113	P	30 - 160
EPA 8321B	Diuron-d6	113	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	40 - 160
EPA 8321B	Primidone-d5	145	P	30 - 160
EPA 8321B	Primidone-d5	145	P	30 - 160
EPA 8321B	Sucralose-d6	128	P	40 - 160

Lab Sample ID: 1967834
Field Sample ID: G3NW0148

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	67.3	P	30 - 160

Lab Sample ID: 1967835
Field Sample ID: G3NW0112

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	72.8	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1967836
Field Sample ID: G3NW0112DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	66.1	P	30 - 160
EPA 8321B	2,4-D-d3	66.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	134	P	30 - 160
EPA 8321B	Acetaminophen-d4	134	P	30 - 160
EPA 8321B	Carbamazepine-d10	91.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	91.4	P	30 - 160
EPA 8321B	Diuron-d6	101	P	30 - 160
EPA 8321B	Diuron-d6	101	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	95.0	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	95.0	P	40 - 160
EPA 8321B	Primidone-d5	141	P	30 - 160
EPA 8321B	Primidone-d5	141	P	30 - 160
EPA 8321B	Sucralose-d6	124	P	40 - 160

Lab Sample ID: 1967837
Field Sample ID: BLANK_02142018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	73.2	P	30 - 160
EPA 8321B	2,4-D-d3	73.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	98.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.4	P	30 - 160
EPA 8321B	Diuron-d6	101	P	30 - 160
EPA 8321B	Diuron-d6	101	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	96.4	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	96.4	P	40 - 160
EPA 8321B	Primidone-d5	115	P	30 - 160
EPA 8321B	Primidone-d5	115	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	40 - 160

Lab Sample ID: 1967838
Field Sample ID: G3NW0112DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	84.2	P	30 - 160

Lab Sample ID: 1967839
Field Sample ID: BLANK_02142018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	79.5	P	30 - 160

Lab Sample ID: 1967840
Field Sample ID: G3NW0148

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	64.0	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	57.1	P	34 - 101
EPA 8276	Decachlorobiphenyl	64.6	P	31 - 108
EPA 8276	PCNB	135	P	62 - 142

Quality Assurance Report Surrogates

Lab Sample ID: 1967841
Field Sample ID: G3NW0112

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	82.8	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	64.7	P	34 - 101
EPA 8276	Decachlorobiphenyl	68.8	P	31 - 108
EPA 8276	PCNB	165	F	62 - 142

Lab Sample ID: 1967842
Field Sample ID: G3NW0148

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	143	F	71 - 126
EPA 8270D	Terbufos-d10	122	P	50 - 130

Lab Sample ID: 1967843
Field Sample ID: G3NW0112

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	108	P	71 - 126
EPA 8270D	Terbufos-d10	109	P	50 - 130

Lab Sample ID: 1967844
Field Sample ID: G3NW0112DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	85.2	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	60.4	P	34 - 101
EPA 8276	Decachlorobiphenyl	68.5	P	31 - 108
EPA 8276	PCNB	152	F	62 - 142

Lab Sample ID: 1967845
Field Sample ID: BLANK_02142018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	80.8	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	71.4	P	34 - 101
EPA 8276	Decachlorobiphenyl	72.2	P	31 - 108
EPA 8276	PCNB	112	P	62 - 142

Lab Sample ID: 1967846
Field Sample ID: G3NW0112DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	104	P	71 - 126
EPA 8270D	Terbufos-d10	106	P	50 - 130

Lab Sample ID: 1967847
Field Sample ID: BLANK_02142018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	112	P	71 - 126
EPA 8270D	Terbufos-d10	112	P	50 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A82096

Included Lab Sample IDs: 1967804, 1967805, 1967810, 1967813, 1967816, 1967817

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

Reference Method: SM 2120 B

Run ID: A82104

Included Lab Sample IDs: 1967804, 1967805, 1967810, 1967813, 1967816

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	105	103	P/P	85 - 115
Color (true)	99.5	98.8	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A82105

Included Lab Sample IDs: 1967808, 1967809, 1967812, 1967815, 1967820, 1967821

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	99.3	P/P	90 - 110
O-Phosphate-P	99.0	100	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A82110

Included Lab Sample IDs: 1967817

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	105	P/P	85 - 115

Reference Method: EPA 8321B

Run ID: A82142

Included Lab Sample IDs: 1967832, 1967833, 1967836, 1967837

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	105	115	P/P	70 - 130
AMPA	91.5	105	P/P	70 - 130
Glyphosate	104	104	P/P	70 - 160
Glyphosate	94.0	104	P/P	70 - 160

Reference Method: EPA 8321B

Run ID: A82167

Included Lab Sample IDs: 1967832, 1967833, 1967836, 1967837

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	85.9	90.5	P/P	60 - 150

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A82190

Included Lab Sample IDs: 1967804, 1967805, 1967810, 1967813, 1967816, 1967817

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	100	P/P	90 - 110
Chloride	102	101	P/P	90 - 110
Chloride	99.3	102	P/P	90 - 110
Sulfate	102	99.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A82190

Included Lab Sample IDs: 1967804, 1967805, 1967810, 1967813, 1967816, 1967817

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	104	99.0	P/P	90 - 110
Sulfate	97.1	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A82205

Included Lab Sample IDs: 1967834, 1967835, 1967838, 1967839

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	123	124	P/P	60 - 150
Acetaminophen	118	126	P/P	60 - 150
Acetaminophen	126	119	P/P	60 - 150
Aldicarb	81.8	78.5	P/P	60 - 150
Aldicarb Sulfone	107	114	P/P	50 - 150
Aldicarb Sulfoxide	97.0	119	P/P	50 - 150
Carbamazepine	104	97.3	P/P	60 - 150
Carbamazepine	97.3	97.2	P/P	60 - 150
Carbaryl	125	126	P/P	60 - 150
Carbofuran	119	129	P/P	50 - 150
Diuron	135	139	P/P	60 - 150
Diuron	137	135	P/P	60 - 150
Fenuron	120	123	P/P	60 - 150
Fenuron	123	118	P/P	60 - 150
Fluridone	108	116	P/P	60 - 160
Fluridone	115	108	P/P	60 - 160
Imidacloprid	101	108	P/P	60 - 150
Imidacloprid	119	101	P/P	60 - 150
Linuron	122	133	P/P	60 - 150
Linuron	133	121	P/P	60 - 150
Methiocarb	121	121	P/P	50 - 150
Methomyl	105	114	P/P	50 - 150
Oxamyl	110	116	P/P	50 - 150
Primidone	131	152*	P/F	60 - 150
Primidone	152*	113	F/P	60 - 150
Propoxur	106	112	P/P	50 - 150
Pyraclostrobin	112	112	P/P	60 - 150
Pyraclostrobin	113	112	P/P	60 - 150

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A82218

Included Lab Sample IDs: 1967848, 1967849, 1967850, 1967851, 1967852

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	100	99.6	P/P	90 - 110
Arsenic	99.6	99.2	P/P	90 - 110
Cadmium	98.3	99.1	P/P	90 - 110
Cadmium	98.6	98.3	P/P	90 - 110
Chromium	95.1	96.7	P/P	90 - 110
Chromium	96.7	98.6	P/P	90 - 110
Copper	100	98.7	P/P	90 - 110
Copper	98.7	97.9	P/P	90 - 110
Lead	98.8	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A82218

Included Lab Sample IDs: 1967848, 1967849, 1967850, 1967851, 1967852

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	98.9	98.8	P/P	90 - 110
Nickel	100	99.0	P/P	90 - 110
Nickel	99.0	97.8	P/P	90 - 110
Silver	96.8	96.9	P/P	90 - 110
Silver	97.1	96.8	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A82221

Included Lab Sample IDs: 1967848, 1967849, 1967850, 1967851, 1967852

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	101	P/P	90 - 110
Calcium	101	101	P/P	90 - 110
Magnesium	98.8	99.9	P/P	90 - 110
Magnesium	99.9	98.1	P/P	90 - 110
Potassium	97.1	97.9	P/P	90 - 110
Potassium	97.9	97.9	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Zinc	102	102	P/P	90 - 110
Zinc	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A82227

Included Lab Sample IDs: 1967806, 1967807, 1967811, 1967814

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A82229

Included Lab Sample IDs: 1967819

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A82230

Included Lab Sample IDs: 1967806, 1967807, 1967811, 1967814, 1967818, 1967819

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	108	P/P	90 - 110
Kjeldahl Nitrogen	108	105	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A82231

Included Lab Sample IDs: 1967806, 1967807, 1967811, 1967814, 1967819

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.6	98.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00

Run ID: A82231

Included Lab Sample IDs: 1967806, 1967807, 1967811, 1967814, 1967819

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.8	99.4	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A82243

Included Lab Sample IDs: 1967848, 1967849, 1967850, 1967851, 1967852

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	104	105	P/P	90 - 110
Iron	104	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A82256

Included Lab Sample IDs: 1967806, 1967807, 1967811, 1967814, 1967818

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A82258

Included Lab Sample IDs: 1967818, 1967819

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	100	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A82266

Included Lab Sample IDs: 1967804, 1967805, 1967810, 1967813, 1967816, 1967817

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	97.9	P/P	90 - 110
Total Alkalinity	97.7	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A82266

Included Lab Sample IDs: 1967804, 1967805, 1967810, 1967813, 1967816, 1967817

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	96.7	100	P/P	90 - 110
Fluoride	98.5	96.7	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A82268

Included Lab Sample IDs: 1967818

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	95.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A82285

Included Lab Sample IDs: 1967832, 1967833, 1967836, 1967837

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	112	113	P/P	50 - 150
2,4-D	113	98.4	P/P	50 - 150
Bentazon	100	119	P/P	50 - 150
Bentazon	119	121	P/P	50 - 150
MCP	101	105	P/P	50 - 150
MCP	105	92.9	P/P	50 - 150
Triclopyr	105	96.8	P/P	50 - 150
Triclopyr	96.8	105	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A82297

Included Lab Sample IDs: 1967806, 1967807, 1967811

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.9	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A82317

Included Lab Sample IDs: 1967814, 1967818, 1967819

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	98.4	P/P	90 - 110
Ammonia-N	98.4	95.5	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A82361

Included Lab Sample IDs: 1967840, 1967841, 1967844, 1967845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	105		P	80 - 120
Chlordane	106		P	80 - 120
Toxaphene	109		P	80 - 120
Toxaphene	118		P	80 - 120

Reference Method: EPA 8270D

Run ID: A82394

Included Lab Sample IDs: 1967840, 1967841, 1967844, 1967845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	91.2		P	80 - 120
Alpha-BHC	94.3		P	80 - 120
Alpha-Chlordane	92.1		P	80 - 120
Beta-BHC	98.0		P	80 - 120
Carbophenothion	86.5		P	80 - 120
Chlorothalonil	91.5		P	80 - 120
Cypermethrin	102		P	80 - 120
DDD-p,p'	98.7		P	80 - 120
DDE-p,p'	91.4		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	97.0		P	80 - 120
Dicofol	95.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A82394

Included Lab Sample IDs: 1967840, 1967841, 1967844, 1967845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dieldrin	92.3		P	80 - 120
Endosulfan I	88.0		P	80 - 120
Endosulfan II	90.7		P	80 - 120
Endosulfan Sulfate	112		P	80 - 120
Endrin	90.2		P	80 - 120
Endrin Aldehyde	97.6		P	80 - 120
Endrin Ketone	100		P	80 - 120
Gamma-BHC	96.3		P	80 - 120
Gamma-Chlordane	91.6		P	80 - 120
Heptachlor	87.0		P	80 - 120
Heptachlor Epoxide	92.6		P	80 - 120
Methoxychlor	103		P	80 - 120
Mirex	99.6		P	80 - 120
Permethrin	91.6		P	80 - 120
Trifluralin	100		P	80 - 120

Reference Method: EPA 8270D

Run ID: A82432

Included Lab Sample IDs: 1967842, 1967843, 1967846, 1967847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	103		P	80 - 120
Alachlor	109		P	80 - 120
Ametryn	109		P	80 - 120
Atrazine	112		P	80 - 120
Atrazine Desethyl	110		P	80 - 120
Azinphos Methyl	116		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	107		P	80 - 120
Chlorpyrifos Ethyl	99.5		P	80 - 120
Chlorpyrifos Methyl	111		P	80 - 120
Cyanazine	99.9		P	80 - 120
Demeton	112		P	80 - 120
Diazinon	97.6		P	80 - 120
Disulfoton	110		P	80 - 120
EPTC	111		P	80 - 120
Ethion	116		P	80 - 120
Ethoprop	108		P	80 - 120
Fenamiphos	99.7		P	80 - 120
Fipronil	115		P	80 - 120
Fipronil Sulfide	106		P	80 - 120
Fipronil Sulfone	135*		F	80 - 120
Fonofos	114		P	80 - 120
Hexazinone	111		P	80 - 120
Malathion	113		P	80 - 120
Metalaxyl	107		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	107		P	80 - 120
Mevinphos	126*		F	80 - 120
Molinate	107		P	80 - 120
Norflurazon	105		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A82432

Included Lab Sample IDs: 1967842, 1967843, 1967846, 1967847

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Parathion Ethyl	112		P	80 - 120
Parathion Methyl	119		P	80 - 120
Pendimethalin	114		P	80 - 120
Phorate	118		P	80 - 120
Prometon	106		P	80 - 120
Prometryn	108		P	80 - 120
Simazine	117		P	80 - 120
Terbufos	108		P	80 - 120
Terbuthylazine	107		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			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							1.67	
EPA 200.7 Rev. 4.4	Calcium	104		102	103				0.439
	Iron	111		109	111	113			1.45
	Magnesium	103		105	100				0.122
	Potassium	98.7		98.2	101	100			0.742
	Sodium	104		101	105				0.0874
	Zinc	100		102	96.9	99.5			2.19
EPA 200.8 Rev. 5.4	Arsenic	99.2		99.2	103	104			0.963
	Cadmium	104		105	105	107			1.31
	Chromium	99.1		103	103	105			1.43
	Copper	101		101	98.4	99.6			1.22
	Lead	102		104	106	107			0.278
	Nickel	99.8		99.3	98.3	99.0			0.652
	Silver	91.7		92.8	94.2	95.4			1.26
EPA 300.0 Rev. 2.1	Chloride	95.3		93.0	94.6			3.08	
	Chloride	91.2		93.2	95.5			2.37	
	Sulfate	93.3		92.7	93.2			0.743	
	Sulfate	90.1		93.5	91.3			5.68	
EPA 350.1 Rev. 2.0	Ammonia-N	93.8		99.4	97.8				1.50
	Ammonia-N	98.7		98.9	99.1				0.175
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105							0.308
EPA 353.2 Rev. 2.0	NO2NO3-N	104		98.9	98.9				0.0
	NO2NO3-N	104		104	106				0.816
	NO2NO3-N	104		105	105				0.351
EPA 365.1 Rev. 2.0	Total-P	99.8		99.6	98.6				0.958
	Total-P	103		104	104				0.172
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.9		95.3	95.8				0.523
	O-Phosphate-P	100		96.9	97.6				0.720
EPA 8270D	Acetochlor	81.4	94.8	90.3	93.3		15.2		3.29
	Alachlor	87.6	99.2	81.4	96.0		12.4		16.4
	Aldrin	63.6	65.1	70.1	67.5		2.32		3.80

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Alpha-BHC	91.1	85.5	74.7	75.5	6.30	1.15
	Alpha-Chlordane	86.1	83.1	84.8	84.9	3.51	0.163
	Ametryn	78.0	95.6	51.9	66.5	20.3	24.7
	Atrazine	107	112			4.11	6.48
	Atrazine Desethyl	97.6	95.2	60.1	65.2	2.58	6.00
	Azinphos Methyl	147	164	174	198	11.4	13.1
	Beta-BHC	85.4	73.9	78.3	73.1	14.5	6.82
	Bromacil	32.8	32.3	62.8	82.7	1.35	20.5
	Butylate	67.6	56.4	62.6	59.0	18.0	5.92
	Carbophenothion	88.6	83.0	121	132	6.55	9.04
	Chlorothalonil	79.3	91.1	85.9	128	13.8	39.3
	Chlorpyrifos Ethyl	91.6	95.2	83.3	111	3.87	28.7
	Chlorpyrifos Methyl	106	118	113	127	10.7	11.9
	Cyanazine	108	111	103	124	3.31	18.5
	Cypermethrin	71.3	64.1	99.2	95.2	10.7	4.09
	DDD-p,p'	100	100	91.0	92.8	0.271	1.95
	DDE-p,p'	91.0	88.2	84.8	81.8	3.21	3.59
	DDT-p,p'	100	91.5	91.7	83.5	8.87	9.36
	Delta-BHC	99.0	89.2	147	167	10.4	12.4
	Demeton	84.6	80.9	143	154	4.53	7.03
	Diazinon	96.5	96.6	96.1	97.1	0.0362	1.05
	Dicofol	86.6	93.9	87.7	85.2	8.01	2.95
	Dieldrin	89.8	83.1	85.5	88.1	7.73	3.01
	Disulfoton	112	110	101	98.4	1.15	2.10
	Endosulfan I	97.9	98.7	106	111	0.755	5.11
	Endosulfan II	117	109	109	120	6.59	9.22
	Endosulfan Sulfate	87.6	79.8	127	107	9.38	17.4
	Endrin	86.6	82.3	88.4	91.1	5.15	2.98
	Endrin Aldehyde	86.1	72.0	31.9	32.5	17.9	2.07
	Endrin Ketone	92.2	83.3	83.4	76.0	10.2	9.26
	EPTC	67.7	54.8	58.8	53.5	21.1	9.53
	Ethion	120	115	99.6	123	3.95	21.3
	Ethoprop	104	100	101	114	3.42	11.6
	Fenamiphos	106	97.2	77.7	111	8.47	35.4
	Fipronil	95.3	94.6	93.0	72.6	0.773	14.7
	Fipronil Sulfide	92.3	94.1	87.4	76.8	1.98	8.78
	Fipronil Sulfone	88.6	89.6			1.06	15.9
	Fonofos	111	111	107	124	0.757	15.2
	Gamma-BHC	85.0	73.4	77.4	94.4	14.6	19.8
	Gamma-Chlordane	84.6	84.6	83.1	84.1	0.0547	1.13
	Heptachlor	70.4	72.9	81.0	81.2	3.41	0.326
	Heptachlor Epoxide	85.7	84.5	89.0	87.6	1.44	1.55
	Hexazinone	113	120	108	127	5.96	16.0
	Malathion	121	115	118	135	5.21	13.7
	Metalaxyl	84.3	90.3	87.7	86.9	6.81	0.975
	Methoxychlor	94.6	91.9	103	95.5	2.90	7.23
	Metolachlor	95.2	91.8	92.3	104	3.56	11.9
	Metribuzin	126	141	145	146	11.1	0.613
	Mevinphos	93.4	89.0	139	160	4.79	14.1
	Mirex	83.5	78.4	76.0	75.5	6.27	0.708
	Molinate	88.3	80.9	87.3	86.7	8.68	0.691
	Norflurazon	80.9	84.7	88.7	106	4.70	17.4
	Parathion Ethyl	92.5	95.6	102	112	3.33	8.89
	Parathion Methyl	98.7	103	143	143	3.92	0.121

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Pendimethalin	102	115	114	106	12.4	7.70
	Permethrin	85.5	82.1	90.9	92.3	4.14	1.51
	Phorate	110	109	99.7	109	1.22	9.16
	Prometon	88.0	88.9	87.0	95.5	1.08	9.31
	Prometryn	83.2	81.5	71.2	77.7	2.14	8.80
	Simazine	124	113			8.94	17.6
	Terbufos	108	108	103	104	0.233	1.15
	Terbuthylazine	96.9	105	93.0	89.3	8.48	4.10
	Trifluralin	86.3	87.9	83.1	76.3	1.87	7.73
	Chlordane	91.9	86.0	99.3	74.3	6.62	28.8
EPA 8276	Toxaphene	89.3	96.2	119	111	7.43	6.99
EPA 8321B	2,4-D	79.0		49.8	51.0		2.36
	3-Hydroxycarbofuran	113		132	133		0.904
	Acetaminophen	111		136	135		0.318
	Aldicarb	65.2		67.2	68.2		1.43
	Aldicarb Sulfone	110		154	139		10.2
	Aldicarb Sulfoxide	102		115	101		13.2
	AMPA	99.4		95.4	93.0		2.07
	Bentazon	84.6		26.5	26.6		0.264
	Carbamazepine	91.2		89.9	86.8		3.41
	Carbaryl	81.6		60.9	56.9		6.74
	Carbofuran	80.3		65.5	60.7		7.67
	Diuron	90.0		77.3	73.9		4.47
	Fenuron	120		105	100		4.90
	Fluridone	91.0		72.5	61.5		16.3
	Glyphosate	98.3		103	92.6		8.47
	Imidacloprid	108		212	199		6.21
	Linuron	103		90.9	85.5		6.19
	MCPP	74.9		34.8	35.4		1.51
	Methiocarb	80.4		76.8	72.6		5.59
	Methomyl	110		109	101		7.05
	Oxamyl	99.9		111	99.9		10.5
	Primidone	123		115	122		6.00
	Propoxur	74.1		56.4	53.6		5.07
	Pyraclostrobin	81.4		60.6	50.8		17.5
	Sucralose	93.5		124	125		0.858
	Triclopyr	80.9		40.3	44.6		10.1
SM 2120 B	Color (true)					1.58	
	Color (true)					14.1	
SM 2320 B-97	Total Alkalinity	99.4				0.719	
SM 2540 C-97	TDS					0.922	
SM 2540 D-97	TSS					6.90	
SM 4500 F-C-97	Fluoride	96.3		95.1	95.7		0.514
SM 5310 B-00	Organic Carbon	95.6		95.3	96.1		0.773
	Organic Carbon	95.8		98.2	99.1		0.621

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1967804, 1967805, 1967810, 1967813, 1967816, 1967817
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1967848, 1967849, 1967850, 1967851, 1967852

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1967848, 1967849, 1967850, 1967851, 1967852
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1967804, 1967805, 1967810, 1967813, 1967816, 1967817
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1967804, 1967805, 1967810, 1967813, 1967816, 1967817
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1967806, 1967807, 1967811, 1967814, 1967818, 1967819
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1967806, 1967807, 1967811, 1967814, 1967818, 1967819
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1967806, 1967807, 1967811, 1967814, 1967818, 1967819
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1967806, 1967807, 1967811, 1967814, 1967818, 1967819
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1967808, 1967809, 1967812, 1967815, 1967820, 1967821
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1967840, 1967841, 1967844, 1967845
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1967842, 1967843, 1967846, 1967847
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	1967840, 1967841, 1967844, 1967845
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	1967834, 1967835, 1967838, 1967839
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	1967832, 1967833, 1967836, 1967837
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1967832, 1967833, 1967836, 1967837
SM 2120 B / E31780	True Color measured at 450 nm	1967804, 1967805, 1967810, 1967813, 1967816, 1967817
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1967804, 1967805, 1967810, 1967813, 1967816, 1967817
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1967804, 1967805, 1967810, 1967813, 1967816, 1967817
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1967804, 1967805, 1967810, 1967813, 1967816, 1967817
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1967804, 1967805, 1967810, 1967813, 1967816, 1967817
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1967806, 1967807, 1967811, 1967814, 1967818, 1967819

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	02/15/2018			02/15/2018 16:53	Julia Storbeck	1967804, 1967805, 1967810, 1967813, 1967816, 1967817
EPA 200.7 Rev. 4.4	02/15/2018	02/19/2018	Elliott D. Healy	02/21/2018	Martin Acosta	1967848, 1967849, 1967850, 1967851, 1967852
	02/15/2018	02/19/2018	Elliott D. Healy	02/22/2018	Betina Topolski	1967848, 1967849, 1967850, 1967851, 1967852
EPA 200.8 Rev. 5.4	02/15/2018	02/19/2018	Elliott D. Healy	02/21/2018	Nadine Brooks	1967848, 1967849, 1967850, 1967851, 1967852
EPA 300.0 Rev. 2.1	02/15/2018			02/20/2018	Julia Storbeck	1967804, 1967805, 1967810, 1967813, 1967816
	02/15/2018			02/21/2018	Julia Storbeck	1967817
EPA 350.1 Rev. 2.0	02/15/2018			02/26/2018	Julia Storbeck	1967806, 1967807, 1967811
	02/15/2018			02/27/2018	Ping Hua	1967814, 1967818, 1967819
EPA 351.2 Rev. 2.0	02/15/2018	02/20/2018	Adrian Shelby	02/22/2018	Joseph Suarez	1967806, 1967807, 1967811, 1967814, 1967818, 1967819
EPA 353.2 Rev. 2.0	02/15/2018			02/22/2018	Lauren Bottorf	1967819
	02/15/2018			02/23/2018	Lauren Bottorf	1967806, 1967807, 1967811, 1967814, 1967818
EPA 365.1 Rev. 2.0	02/15/2018	02/21/2018	Sima Feizi	02/22/2018	Lipi Saha	1967806, 1967807, 1967811, 1967814
	02/15/2018	02/22/2018	Sima Feizi	02/23/2018	Lipi Saha	1967818, 1967819
EPA 365.1 Rev. 2.0 dissolved	02/15/2018			02/15/2018 15:48	Megan Treadwell	1967809
	02/15/2018			02/15/2018 16:11	Megan Treadwell	1967808
	02/15/2018			02/15/2018 16:12	Megan Treadwell	1967812
	02/15/2018			02/15/2018 16:13	Megan Treadwell	1967815
	02/15/2018			02/15/2018 16:14	Megan Treadwell	1967820
	02/15/2018			02/15/2018 16:15	Megan Treadwell	1967821
EPA 8270D	02/15/2018	02/16/2018	Fe-Val Siddell	02/21/2018	Marek Topolski	1967840, 1967841, 1967844, 1967845
	02/15/2018	02/16/2018	Rasheda Ghaffari	02/20/2018	Vandana T. Nagar	1967842, 1967843, 1967846, 1967847
EPA 8276	02/15/2018	02/16/2018	Fe-Val Siddell	03/01/2018	John P. Burgos	1967840, 1967841, 1967844, 1967845
EPA 8321B	02/15/2018	02/15/2018	Juyoung Kim	02/17/2018	Juyoung Kim	1967832, 1967833, 1967836, 1967837
	02/15/2018	02/16/2018	Hoor Shaik	02/18/2018	Julie Michelle Frank	1967832, 1967833, 1967836, 1967837
	02/15/2018	02/16/2018	Hoor Shaik	02/19/2018	Julie Michelle Frank	1967834, 1967835, 1967838, 1967839
	02/15/2018	02/16/2018	Hoor Shaik	02/21/2018	Julie Michelle Frank	1967832, 1967833, 1967836, 1967837
	02/15/2018	02/19/2018	Julie Michelle Frank	02/19/2018	Julie Michelle Frank	1967832, 1967833, 1967836, 1967837
SM 2120 B	02/15/2018			02/15/2018 16:21	Tanya Welborn	1967805
	02/15/2018			02/15/2018 16:23	Tanya Welborn	1967813, 1967816
	02/15/2018			02/15/2018 18:25	Tanya Welborn	1967804
	02/15/2018			02/15/2018 18:26	Tanya Welborn	1967810
	02/15/2018			02/16/2018 11:59	Tanya Welborn	1967817
SM 2320 B-97	02/15/2018			02/24/2018	Dale L. Simmons	1967804, 1967805, 1967810, 1967813, 1967816, 1967817

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2540 C-97	02/15/2018			02/16/2018	DeAsia Armster	1967804, 1967805, 1967810, 1967813, 1967816, 1967817
SM 2540 D-97	02/15/2018			02/16/2018	DeAsia Armster	1967804, 1967805, 1967813, 1967816, 1967817
	02/15/2018			02/21/2018	DeAsia Armster	1967810
SM 4500 F-C-97	02/15/2018			02/24/2018	Dale L. Simmons	1967804, 1967805, 1967810, 1967813, 1967816, 1967817
SM 5310 B-00	02/15/2018			02/22/2018	Megan Treadwell	1967806, 1967807, 1967811, 1967814, 1967819
	02/15/2018			02/23/2018	Megan Treadwell	1967818