

Chemical Analysis Report

SW-DIST-2018-02-06-02

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

Event Description: **Cockroach & Lil Manatee**
Request ID: **RQ-2018-01-29-31**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Judy Ashton

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: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 06-MAR-2018 13:56



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: Piney Pt Creek @ County Line Rd

Collection Date/Time: 02/05/2018 10:15

Field ID: G1SW0091

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964945	EPA 8321B	2,4-D	0.0020	U	ug/L	P339489	
		Sucralose**	0.038	I	ug/L	P339388	
		Bentazon	0.0056	J	ug/L	P339489	MS
		MCP	0.0020	UJ	ug/L	P339489	MS
		Triclopyr**	0.0040	UJ	ug/L	P339489	MS
		Imidacloprid	0.014	J	ug/L	P339489	MS
		Diuron	0.032		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	

Ref. Method and Comment:
EPA 8321B: Refer to the narrative for an explanation of QC Codes.

Sample Location: Cockroach Bay at Boat Ramp

Collection Date/Time: 02/05/2018 09:00

Field ID: G1SW0089

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964908	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P339411	
	EPA 300.0 Rev. 2.1	Chloride	1.6E+04		mg Cl/L	P339950	
		Sulfate	2.3E+03		mg SO4/L	P339954	
	SM 2120 B	Color (true)	12		PCU	P339422	
	SM 2320 B-97	Total Alkalinity	121		mg CaCO3/L	P339728	
	SM 2540 C-97	TDS	2.96E+04		mg/L	P339843	
	SM 2540 D-97	TSS	3	I	mg/L	P339810	
	SM 4500 F-C-97	Fluoride	1.1		mg F/L	P339653	
1964910	EPA 350.1 Rev. 2.0	Ammonia-N	0.050		mg N/L	P339779	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.49		mg N/L	P339435	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P339693	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P339657	
	SM 5310 B-00	Organic Carbon	4.9		mg C/L	P339916	
1964912	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.082		mg P/L	P339451	
1964964	EPA 200.7 Rev. 4.4	Iron	120	U	ug/L	P339506	
	EPA 200.8 Rev. 5.4	Arsenic	2.65		ug/L	P339506	
		Cadmium	0.080	U	ug/L	P339506	
		Chromium	1.6	U	ug/L	P339506	
		Copper	0.80	U	ug/L	P339506	
		Lead	0.50	U	ug/L	P339506	
		Nickel	0.80	U	ug/L	P339506	
		Silver	0.040	U	ug/L	P339506	
		Zinc	4.0	U	ug/L	P339506	

Field ID: G1SW0089

Matrix: W-SURF-SLT

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

Sample Location: Cockroach Bay at Boat Ramp

Collection Date/Time: 02/05/2018 09:00

Field ID: G1SW0089

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964941	EPA 8321B	2,4-D	0.0020	U	ug/L	P339218	
		Sucralose**	0.55		ug/L	P339388	
		Bentazon	0.0019	I	ug/L	P339218	
		MCP	0.0020	U	ug/L	P339218	
		Triclopyr**	0.0040	U	ug/L	P339218	
		Imidacloprid	0.0020	U	ug/L	P339218	
		Diuron	0.0020	U	ug/L	P339218	
		Pyraclostrobin**	0.0020	U	ug/L	P339218	
		Primidone**	0.0040	U	ug/L	P339218	
		Linuron	0.0040	U	ug/L	P339218	
		Acetaminophen**	0.0080	U	ug/L	P339218	
		Fenuron	0.0080	U	ug/L	P339218	
		Carbamazepine**	0.0012	I	ug/L	P339218	
		Fluridone**	0.0016	I	ug/L	P339218	
		Glyphosate**	0.10	UJ	ug/L	P339377	SUR
		AMPA**	0.10	UJ	ug/L	P339377	SUR
1964943		Aldicarb	0.020	U	ug/L	P339489	
		Aldicarb Sulfone	0.0020	U	ug/L	P339489	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P339489	
		Carbaryl	0.0020	U	ug/L	P339489	
		Carbofuran	0.0020	U	ug/L	P339489	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P339489	
		Methiocarb	0.0020	U	ug/L	P339489	
		Methomyl	0.0020	U	ug/L	P339489	
		Oxamyl	0.0020	U	ug/L	P339489	
		Propoxur	0.0020	U	ug/L	P339489	
1964948	EPA 8270D	Aldrin	4.1	U	ng/L	P339743	
		Alpha-BHC	2.0	U	ng/L	P339743	
		Beta-BHC	4.1	U	ng/L	P339743	
		Delta-BHC	4.1	U	ng/L	P339743	
		Gamma-BHC	4.1	U	ng/L	P339743	
		Carbophenothion	4.1	U	ng/L	P339743	
		Chlorothalonil	2.0	UJ	ng/L	P339743	MS, RPD
		Cypermethrin	20	U	ng/L	P339743	
		DDD-p,p'	3.0	U	ng/L	P339743	
		DDE-p,p'	3.0	U	ng/L	P339743	
		DDT-p,p'	3.0	U	ng/L	P339743	
		Dieldrin	4.1	U	ng/L	P339743	

Field ID: G1SW0089

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964948	EPA 8270D	Endosulfan I	4.1	U	ng/L	P339743	MS
		Endosulfan II	4.1	U	ng/L	P339743	
		Endosulfan Sulfate	2.0	U	ng/L	P339743	
		Endrin	2.0	U	ng/L	P339743	
		Endrin Aldehyde	2.0	U	ng/L	P339743	
		Heptachlor	1.5	U	ng/L	P339743	
		Heptachlor Epoxide	2.0	U	ng/L	P339743	
		Methoxychlor	4.1	U	ng/L	P339743	
		Mirex	2.0	U	ng/L	P339743	
		Permethrin	10	U	ng/L	P339743	
		Trifluralin	1.0	U	ng/L	P339743	
		Alpha-Chlordane	1.0	U	ng/L	P339743	
		Gamma-Chlordane	1.0	U	ng/L	P339743	
		Endrin Ketone	2.0	U	ng/L	P339743	
		Dicofol	30	UJ	ng/L	P339743	
	EPA 8276	Chlordane**	2.5	U	ng/L	P339743	RPD
		Toxaphene**	13	U	ng/L	P339743	

Ref. Method and Comment:

EPA 8321B: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8321B: Refer to the narrative for an explanation of QC Codes. Results confirmed in re-extraction.

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

Sample Location: Cockroach Bay at Dockage

Collection Date/Time: 02/05/2018 09:30

Field ID: G1SW0090

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964909	EPA 180.1 Rev. 2.0	Turbidity	30	A	NTU	P339411	
	EPA 300.0 Rev. 2.1	Chloride	1.5E+04		mg Cl/L	P339950	
		Sulfate	2.1E+03		mg SO4/L	P339954	
		Color (true)	12	A	PCU	P339424	
	SM 2320 B-97	Total Alkalinity	128		mg CaCO3/L	P339728	
	SM 2540 C-97	TDS	2.66E+04		mg/L	P339843	
	SM 2540 D-97	TSS	112		mg/L	P339810	
	SM 4500 F-C-97	Fluoride	1.0		mg F/L	P339653	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.060		mg N/L	P339779	
		Kjeldahl Nitrogen	1.6		mg N/L	P339561	
1964911	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P339693	
	EPA 365.1 Rev. 2.0	Total-P	0.36		mg P/L	P339657	
	SM 5310 B-00	Organic Carbon	7.5		mg C/L	P339916	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.075		mg P/L	P339451	
1964913	EPA 200.7 Rev. 4.4	Iron	2.14E+03		ug/L	P339506	
	EPA 200.8 Rev. 5.4	Arsenic	4.82		ug/L	P339506	
		Cadmium	0.080	U	ug/L	P339506	
		Chromium	5.2	I	ug/L	P339506	
		Copper	7.4		ug/L	P339506	
		Lead	2.1		ug/L	P339506	

Field ID: G1SW0090

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964965	EPA 200.8 Rev. 5.4	Nickel	1.7	I	ug/L	P339506	
		Silver	0.040	U	ug/L	P339506	
		Zinc	5.9	I	ug/L	P339506	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The result was confirmed on 02/16/2018.

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

EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 02/16/2018.

Sample Location: Cockroach Bay at Dockage

Collection Date/Time: 02/05/2018 09:30

Field ID: G1SW0090

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964944	EPA 8321B	Aldicarb	0.020	U	ug/L	P339489	
		Aldicarb Sulfone	0.0020	U	ug/L	P339489	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P339489	
		Carbaryl	0.0020	U	ug/L	P339489	
		Carbofuran	0.0020	U	ug/L	P339489	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P339489	
		Methiocarb	0.0020	U	ug/L	P339489	
		Methomyl	0.0020	U	ug/L	P339489	
		Oxamyl	0.0020	U	ug/L	P339489	
		Propoxur	0.0020	U	ug/L	P339489	
1964949	EPA 8270D	Aldrin	4.1	U	ng/L	P339743	
		Alpha-BHC	2.0	U	ng/L	P339743	
		Beta-BHC	4.1	U	ng/L	P339743	
		Delta-BHC	4.1	U	ng/L	P339743	
		Gamma-BHC	4.1	U	ng/L	P339743	
		Carbophenothion	4.1	U	ng/L	P339743	
		Chlorothalonil	2.0	UJ	ng/L	P339743	MS, RPD
		Cypermethrin	20	U	ng/L	P339743	
		DDD-p,p'	3.1	U	ng/L	P339743	
		DDE-p,p'	3.1	U	ng/L	P339743	
		DDT-p,p'	3.1	U	ng/L	P339743	
		Dieldrin	4.1	U	ng/L	P339743	
		Endosulfan I	4.1	U	ng/L	P339743	
		Endosulfan II	4.1	U	ng/L	P339743	MS
		Endosulfan Sulfate	2.0	U	ng/L	P339743	
		Endrin	2.0	U	ng/L	P339743	
		Endrin Aldehyde	2.0	U	ng/L	P339743	
		Heptachlor	1.5	U	ng/L	P339743	
		Heptachlor Epoxide	2.0	U	ng/L	P339743	
		Methoxychlor	4.1	U	ng/L	P339743	
		Mirex	2.0	U	ng/L	P339743	
		Permethrin	10	U	ng/L	P339743	
		Trifluralin	1.0	U	ng/L	P339743	
		Alpha-Chlordane	1.0	U	ng/L	P339743	

Field ID: G1SW0090

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964949	EPA 8270D	Gamma-Chlordane	1.0	U	ng/L	P339743	
		Endrin Ketone	2.0	U	ng/L	P339743	
		Dicofol	31	UJ	ng/L	P339743	RPD
		Chlordane**	2.6	U	ng/L	P339743	
		Toxaphene**	13	U	ng/L	P339743	
1964951	EPA 8270D	Alachlor	0.23	U	ng/L	P339617	
		Ametryn	0.30	U	ng/L	P339617	
		Atrazine	4.1		ng/L	P339617	
		Atrazine Desethyl	1.4	U	ng/L	P339617	
		Azinphos Methyl	2.1	U	ng/L	P339617	
		Bromacil	4.2		ng/L	P339617	
		Butylate	0.37	U	ng/L	P339617	MS, RPD
		Chlorpyrifos Ethyl	0.23	U	ng/L	P339617	
		Chlorpyrifos Methyl	0.093	U	ng/L	P339617	
		Demeton	1.9	U	ng/L	P339617	
		Diazinon	0.12	U	ng/L	P339617	
		Disulfoton	0.47	U	ng/L	P339617	
		EPTC	1.2	U	ng/L	P339617	RPD
		Ethion	0.14	U	ng/L	P339617	
		Ethoprop	0.093	U	ng/L	P339617	
		Fenamiphos	0.23	U	ng/L	P339617	
		Fipronil	0.23	U	ng/L	P339617	
		Fipronil Sulfide	0.14	U	ng/L	P339617	RPD
		Fipronil Sulfone	0.14	U	ng/L	P339617	RPD
		Hexazinone	3.0		ng/L	P339617	
		Malathion	0.33	U	ng/L	P339617	
		Metribuzin	0.19	UJ	ng/L	P339617	CCV
		Mevinphos	0.47	U	ng/L	P339617	
		Molinate	0.28	U	ng/L	P339617	RPD
		Norflurazon	0.73	I	ng/L	P339617	
		Pendimethalin	0.93	U	ng/L	P339617	
		Phorate	0.23	U	ng/L	P339617	
		Prometon	0.84	U	ng/L	P339617	
		Prometryn	0.19	U	ng/L	P339617	
		Simazine	0.47	U	ng/L	P339617	
		Terbufos	0.093	U	ng/L	P339617	
		Terbuthylazine	0.40	U	ng/L	P339617	
		Fonofos	0.19	U	ng/L	P339617	
		Metalaxyl	0.53	I	ng/L	P339617	
		Metolachlor	3.0		ng/L	P339617	
		Acetochlor	0.23	U	ng/L	P339617	
		Cyanazine	0.47	UJ	ng/L	P339617	CCV, MS
		Parathion Ethyl	0.23	U	ng/L	P339617	
		Parathion Methyl	0.23	U	ng/L	P339617	

Field ID: G1SW0090

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
Ref. Method and Comment: EPA 8270D: Refer to the narrative for an explanation of QC Codes.							

Sample Location: Little Manatee River at SP Boat Ramp

Collection Date/Time: 02/05/2018 10:50

Field ID: G2SW0037

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964905	EPA 180.1 Rev. 2.0	Turbidity	9.3		NTU	P339410	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P339950	
		Sulfate	90		mg SO4/L	P339954	
	SM 2120 B	Color (true)	68	A	PCU	P339422	
	SM 2320 B-97	Total Alkalinity	35		mg CaCO3/L	P340124	
	SM 2540 C-97	TDS	254		mg/L	P339838	
	SM 2540 D-97	TSS	19		mg/L	P339802	
1964906	SM 4500 F-C-97	Fluoride	0.28		mg F/L	P340138	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.039		mg N/L	P339959	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.62		mg N/L	P339562	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.52		mg N/L	P339852	
	EPA 365.1 Rev. 2.0	Total-P	0.23		mg P/L	P339607	
1964907	SM 5310 B-00	Organic Carbon	13		mg C/L	P340090	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.17		mg P/L	P339449	
1964963	EPA 200.7 Rev. 4.4	Calcium	30.0		mg/L	P339505	
		Iron	300		ug/L	P339505	
		Magnesium	13.8		mg/L	P339505	
		Potassium	7.6		mg/L	P339505	
		Sodium	15.2		mg/L	P339505	
		Zinc	5.0	U	ug/L	P339505	
	EPA 200.8 Rev. 5.4	Arsenic	1.38		ug/L	P339505	
		Cadmium	0.050	I	ug/L	P339505	
		Chromium	0.72	I	ug/L	P340191	
		Copper	3.64		ug/L	P339505	
		Lead	0.29		ug/L	P339505	
		Nickel	0.48	I	ug/L	P340191	
		Silver	0.010	U	ug/L	P339505	

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 Manatee River at SP Boat Ramp

Collection Date/Time: 02/05/2018 10:50

Field ID: G2SW0037

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964939	EPA 8321B	2,4-D	0.0042	I	ug/L	P339218	
		Sucralose**	0.35		ug/L	P339388	
		Bentazon	0.0091		ug/L	P339218	
		MCP	0.0020	U	ug/L	P339218	
		Triclopyr**	0.0040	U	ug/L	P339218	

Field ID: G2SW0037

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964939	EPA 8321B	Imidacloprid	0.24		ug/L	P339218	
		Diuron	0.011		ug/L	P339218	
		Pyraclostrobin**	0.081		ug/L	P339218	
		Primidone**	0.0040	U	ug/L	P339218	
		Linuron	0.0040	U	ug/L	P339218	
		Acetaminophen**	0.0080	U	ug/L	P339218	
		Fenuron	0.0080	U	ug/L	P339218	
		Carbamazepine**	4.0E-04	U	ug/L	P339218	
		Fluridone**	0.0089		ug/L	P339218	
		Glyphosate**	1.2		ug/L	P339377	
		AMPA**	0.92		ug/L	P339377	
1964940		Aldicarb	0.020	U	ug/L	P339218	
		Aldicarb Sulfone	0.0020	U	ug/L	P339218	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P339218	
		Carbaryl	0.0020	U	ug/L	P339218	
		Carbofuran	0.0020	U	ug/L	P339218	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P339218	
		Methiocarb	0.0020	U	ug/L	P339218	
		Methomyl	0.0020	U	ug/L	P339218	
		Oxamyl	0.0020	U	ug/L	P339218	
		Propoxur	0.0020	U	ug/L	P339218	
1964946	EPA 8270D	Aldrin	4.2	U	ng/L	P339743	
		Alpha-BHC	2.1	U	ng/L	P339743	
		Beta-BHC	4.2	U	ng/L	P339743	
		Delta-BHC	4.2	U	ng/L	P339743	
		Gamma-BHC	4.2	U	ng/L	P339743	
		Carbophenothion	4.2	U	ng/L	P339743	
		Chlorothalonil	2.1	UJ	ng/L	P339743	MS, RPD
		Cypermethrin	21	U	ng/L	P339743	
		DDD-p,p'	3.2	U	ng/L	P339743	
		DDE-p,p'	3.2	U	ng/L	P339743	
		DDT-p,p'	3.2	U	ng/L	P339743	
		Dieldrin	4.2	U	ng/L	P339743	
		Endosulfan I	4.2	U	ng/L	P339743	
		Endosulfan II	4.2	U	ng/L	P339743	MS
		Endosulfan Sulfate	2.1	U	ng/L	P339743	
		Endrin	2.1	U	ng/L	P339743	
		Endrin Aldehyde	2.1	U	ng/L	P339743	
		Heptachlor	1.6	U	ng/L	P339743	
		Heptachlor Epoxide	2.1	U	ng/L	P339743	
		Methoxychlor	4.2	U	ng/L	P339743	
		Mirex	2.1	U	ng/L	P339743	
		Permethrin	11	U	ng/L	P339743	
		Trifluralin	1.1	U	ng/L	P339743	
		Alpha-Chlordane	1.1	U	ng/L	P339743	

Field ID: G2SW0037

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1964946	EPA 8270D	Gamma-Chlordane	1.1	U	ng/L	P339743	
		Endrin Ketone	2.1	U	ng/L	P339743	
		Dicofol	32	UJ	ng/L	P339743	RPD
	EPA 8276	Chlordane**	2.6	U	ng/L	P339743	
		Toxaphene**	13	U	ng/L	P339743	
1964947	EPA 8270D	Alachlor	0.24	U	ng/L	P339617	
		Ametryn	0.31	U	ng/L	P339617	
		Atrazine	38		ng/L	P339617	
		Atrazine Desethyl	5.6	I	ng/L	P339617	
		Azinphos Methyl	2.2	U	ng/L	P339617	
		Bromacil	470		ng/L	P339617	
		Butylate	0.38	U	ng/L	P339617	MS, RPD
		Chlorpyrifos Ethyl	0.24	U	ng/L	P339617	
		Chlorpyrifos Methyl	0.096	U	ng/L	P339617	
		Demeton	1.9	U	ng/L	P339617	
		Diazinon	0.12	U	ng/L	P339617	
		Disulfoton	0.48	U	ng/L	P339617	
		EPTC	1.2	U	ng/L	P339617	RPD
		Ethion	0.14	U	ng/L	P339617	
		Ethoprop	0.096	U	ng/L	P339617	
		Fenamiphos	0.24	U	ng/L	P339617	
		Fipronil	0.24	U	ng/L	P339617	
		Fipronil Sulfide	0.22	I	ng/L	P339617	RPD
		Fipronil Sulfone	0.49	I	ng/L	P339617	RPD
		Hexazinone	2.4		ng/L	P339617	
		Malathion	0.42	I	ng/L	P339617	
		Metribuzin	27	J	ng/L	P339617	CCV
		Mevinphos	0.48	U	ng/L	P339617	
		Molinate	0.29	U	ng/L	P339617	RPD
		Norflurazon	38		ng/L	P339617	
		Pendimethalin	0.96	U	ng/L	P339617	
		Phorate	0.24	U	ng/L	P339617	
		Prometon	0.86	U	ng/L	P339617	
		Prometryn	0.19	U	ng/L	P339617	
		Simazine	38		ng/L	P339617	
		Terbufos	0.096	U	ng/L	P339617	
		Terbuthylazine	0.41	U	ng/L	P339617	
		Fonofos	0.19	U	ng/L	P339617	
		Metalaxyl	18		ng/L	P339617	
		Metolachlor	38		ng/L	P339617	
		Acetochlor	0.24	U	ng/L	P339617	
		Cyanazine	0.48	UJ	ng/L	P339617	CCV, MS
		Parathion Ethyl	0.24	U	ng/L	P339617	
		Parathion Methyl	0.24	U	ng/L	P339617	

Field ID: G2SW0037

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
Ref. Method and Comment:							
EPA 8321B: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.							
EPA 8270D: 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: P339410

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P339411

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P339505

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P339506

Component	Result	Code	Units
Iron	30	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P339505

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

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P339506

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P339506

Component	Result	Code	Units
Silver	0.010	U	ug/L
Zinc	1.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340191

Component	Result	Code	Units
Chromium	0.40	U	ug/L
Nickel	0.20	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339950

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339954

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339779

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339959

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339435

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339561

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339562

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P339693

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P339852

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339607

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339657

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339449

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339451

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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P339617

Component	Result	Code	Units
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
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
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270D
Batch ID: P339743

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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P339743

Component	Result	Code	Units
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	1.0	U	ng/L

Reference Method: EPA 8276
Batch ID: P339743

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Toxaphene	12	U	ng/L

Reference Method: EPA 8321B
Batch ID: P339218

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	8.0E-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

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: P339388

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P339489

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
MCP	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
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2120 B
Batch ID: P339422

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P339424

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P339728

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2320 B-97
Batch ID: P340124

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-97
Batch ID: P339838

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P339843

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P339802

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P339810

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P339653

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P340138

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P339916

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

Reference Method: SM 5310 B-00
Batch ID: P340090

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: P339505

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	105		P	85 - 115
Magnesium	111		P	85 - 115
Potassium	104		P	85 - 115
Sodium	105		P	85 - 115
Zinc	102		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P339506

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	105		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P339505

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	106		P	85 - 115
Cadmium	104		P	85 - 115
Copper	102		P	85 - 115
Lead	107		P	85 - 115
Silver	91.4		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P339506

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	102		P	85 - 115
Cadmium	98.9		P	85 - 115
Chromium	99.8		P	85 - 115
Copper	99.1		P	85 - 115
Lead	103		P	85 - 115
Nickel	101		P	85 - 115
Silver	86.7		P	85 - 115
Zinc	97.7		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340191

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chromium	98.3		P	85 - 115
Nickel	99.6		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339950

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	93.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339954

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	106		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339779

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339959

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339435

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339561

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339562

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.9		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P339693

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: P339852

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: P339607

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339657

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339449

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P339451

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.4		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
Hexazinone	112	119	P/P	49 - 144
Malathion	106	109	P/P	68 - 131
Metaxyl	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: P339743

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	77.9	84.7	P/P	24 - 89.0
Alpha-BHC	83.4	97.5	P/P	58 - 117

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P339743

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alpha-Chlordane	92.2	106	P/P	56 - 115
Beta-BHC	94.4	124	P/P	55 - 137
Carbophenothion	101	121	P/P	37 - 145
Chlorothalonil	80.8	48.7	P/P	26 - 163
Cypermethrin	91.0	108	P/P	42 - 156
DDD-p,p'	99.2	125	P/P	59 - 129
DDE-p,p'	96.5	108	P/P	52 - 117
DDT-p,p'	86.3	106	P/P	48 - 128
Delta-BHC	104	129	P/P	59 - 158
Dicofol	76.7	39.7	P/P	19 - 124
Dieldrin	96.8	125	P/P	57 - 126
Endosulfan I	85.4	110	P/P	59 - 133
Endosulfan II	110	140	P/P	58 - 148
Endosulfan Sulfate	98.9	113	P/P	56 - 135
Endrin	98.9	120	P/P	50 - 140
Endrin Aldehyde	75.8	84.9	P/P	47 - 141
Endrin Ketone	96.4	121	P/P	63 - 123
Gamma-BHC	86.7	116	P/P	59 - 132
Gamma-Chlordane	92.2	107	P/P	55 - 112
Heptachlor	80.1	93.0	P/P	45 - 102
Heptachlor Epoxide	90.8	104	P/P	61 - 116
Methoxychlor	90.8	112	P/P	60 - 133
Mirex	81.8	92.8	P/P	40 - 98.0
Permethrin	90.5	108	P/P	45 - 131
Trifluralin	82.2	96.8	P/P	38 - 179

Reference Method: EPA 8276
Batch ID: P339743

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	88.6	89.6	P/P	47 - 125
Toxaphene	92.6	88.5	P/P	46 - 147

Reference Method: EPA 8321B
Batch ID: P339218

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	71.2		P	40 - 150
3-Hydroxycarbofuran	96.9		P	40 - 150
Acetaminophen	109		P	30 - 150
Aldicarb	72.0		P	30 - 150
Aldicarb Sulfone	103		P	40 - 150
Aldicarb Sulfoxide	100		P	40 - 150
Bentazon	84.2		P	30 - 150
Carbamazepine	94.0		P	40 - 150
Carbaryl	93.1		P	40 - 150
Carbofuran	81.9		P	40 - 150
Diuron	86.8		P	40 - 150
Fenuron	115		P	40 - 150
Fluridone	86.2		P	40 - 150
Imidacloprid	95.2		P	40 - 160
Linuron	89.5		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P339218

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
MCPP	81.1		P	40 - 150
Methiocarb	83.4		P	40 - 150
Methomyl	107		P	40 - 150
Oxamyl	103		P	40 - 150
Primidone	107		P	40 - 150
Propoxur	81.9		P	40 - 150
Pyraclostrobin	81.1		P	40 - 150
Triclopyr	73.8		P	40 - 150

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: P339388

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	97.0		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
3-Hydroxycarbofuran	82.2		P	40 - 150
Acetaminophen	92.2		P	30 - 150
Aldicarb	70.3		P	30 - 150
Aldicarb Sulfone	87.8		P	40 - 150
Aldicarb Sulfoxide	84.9		P	40 - 150
Bentazon	87.1		P	30 - 150
Carbamazepine	85.8		P	40 - 150
Carbaryl	84.5		P	40 - 150
Carbofuran	78.1		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
Methiocarb	76.5		P	40 - 150
Methomyl	90.3		P	40 - 150
Oxamyl	91.9		P	40 - 150
Primidone	105		P	40 - 150
Propoxur	77.3		P	40 - 150
Triclopyr	69.0		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P339728

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.0		P	95 - 108

Reference Method: SM 2320 B-97
Batch ID: P340124

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.2		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P339653

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

Reference Method: SM 4500 F-C-97
Batch ID: P340138

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.5		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P339916

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.7		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P340090

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P339505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964772	Calcium	100		P	80 - 120
1964772	Iron	107		P	80 - 120
1964772	Magnesium	109		P	80 - 120
1964772	Potassium	102		P	80 - 120
1964772	Sodium	103		P	80 - 120
1964772	Zinc	105		P	80 - 120
1964978	Calcium	103		P	80 - 120
1964978	Iron	107	106	P/P	80 - 120
1964978	Magnesium	111	109	P/P	80 - 120
1964978	Potassium	103	103	P/P	80 - 120
1964978	Sodium	105		P	80 - 120
1964978	Zinc	106	108	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P339506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1963648	Iron	104	105	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P339505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964772	Arsenic	108		P	80 - 120
1964772	Cadmium	104		P	80 - 120
1964772	Copper	105		P	80 - 120
1964772	Lead	108		P	80 - 120
1964772	Silver	90.2		P	80 - 120
1964978	Arsenic	108	108	P/P	80 - 120
1964978	Cadmium	103	108	P/P	80 - 120
1964978	Copper	99.1	99.8	P/P	80 - 120
1964978	Lead	109	110	P/P	80 - 120
1964978	Silver	91.0	101	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P339506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1963648	Arsenic	104	105	P/P	80 - 120
1963648	Cadmium	85.6	83.5	P/P	80 - 120
1963648	Chromium	89.1	89.2	P/P	70 - 130
1963648	Copper	96.9	98.2	P/P	80 - 120
1963648	Lead	107	109	P/P	80 - 120
1963648	Nickel	106	106	P/P	80 - 120
1963648	Silver	74.9	74.1	P/P	70 - 130
1963648	Zinc	80.8	81.1	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340191

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964772	Chromium	98.8		P	80 - 120
1964772	Nickel	97.8		P	80 - 120
1964979	Chromium	99.2	97.9	P/P	80 - 120
1964979	Nickel	99.1	98.0	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964823	Chloride	103		P	90 - 110
1965134	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339954

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964823	Sulfate	106		P	90 - 110
1965134	Sulfate	106		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339779

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965642	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339959

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964807	Ammonia-N	95.8	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339435

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964754	Kjeldahl Nitrogen	97.6	93.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339561

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965290	Kjeldahl Nitrogen	94.2	94.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339562

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964824	Kjeldahl Nitrogen	98.6	96.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P339693

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964564	NO2NO3-N	99.1	98.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P339852

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964814	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339607

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964824	Total-P	96.8	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964910	Total-P	94.0	96.6	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339449

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964818	O-Phosphate-P	98.8	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339451

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964912	O-Phosphate-P	98.5	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
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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P339743

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1963880	Aldrin	76.6	83.4	P/P	26 - 96.0
1963880	Alpha-BHC	102	99.4	P/P	51 - 123
1963880	Alpha-Chlordane	99.8	95.6	P/P	45 - 120
1963880	Beta-BHC	123	103	P/P	43 - 146
1963880	Carbophenothion	124	106	P/P	26 - 179
1963880	Chlorothalonil	230	131	F/P	10 - 215
1963880	Cypermethrin	112	97.1	P/P	35 - 169
1963880	DDD-p,p'	110	106	P/P	49 - 131
1963880	DDE-p,p'	100	100	P/P	39 - 127
1963880	DDT-p,p'	98.1	99.3	P/P	49 - 120
1963880	Delta-BHC	139	125	P/P	49 - 187
1963880	Dicofol	84.0	101	P/P	10 - 129
1963880	Dieldrin	100	98.3	P/P	46 - 132
1963880	Endosulfan I	124	117	P/P	57 - 130
1963880	Endosulfan II	158	155	F/F	52 - 148
1963880	Endosulfan Sulfate	110	103	P/P	55 - 129
1963880	Endrin	102	94.4	P/P	45 - 133
1963880	Endrin Aldehyde	104	130	P/P	26 - 140
1963880	Endrin Ketone	119	107	P/P	60 - 125
1963880	Gamma-BHC	99.6	95.9	P/P	50 - 145
1963880	Gamma-Chlordane	99.2	93.8	P/P	44 - 118
1963880	Heptachlor	88.2	81.8	P/P	35 - 106
1963880	Heptachlor Epoxide	101	95.7	P/P	52 - 123
1963880	Methoxychlor	113	106	P/P	54 - 132
1963880	Mirex	83.3	80.9	P/P	36 - 107
1963880	Permethrin	104	101	P/P	47 - 135
1963880	Trifluralin	93.9	89.8	P/P	32 - 228

Reference Method: EPA 8276
Batch ID: P339743

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1963585	Chlordane	56.7	56.9	P/P	41 - 134
1963585	Toxaphene	72.6	69.6	P/P	39 - 158

Reference Method: EPA 8321B
Batch ID: P339218

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1963931	3-Hydroxycarbofuran	114	112	P/P	40 - 150
1963931	Acetaminophen	134	126	P/P	30 - 150
1963931	Aldicarb	71.2	66.3	P/P	30 - 150
1963931	Aldicarb Sulfone	126	130	P/P	40 - 150
1963931	Aldicarb Sulfoxide	105	100	P/P	40 - 150
1963931	Bentazon	68.5	57.0	P/P	30 - 150
1963931	Carbamazepine	93.4	90.7	P/P	40 - 150
1963931	Carbaryl	86.0	79.6	P/P	40 - 150
1963931	Carbofuran	75.1	70.7	P/P	40 - 150
1963931	Diuron	84.6	77.4	P/P	40 - 150
1963931	Fenuron	98.1	88.2	P/P	40 - 150
1963931	Fluridone	71.6	66.0	P/P	40 - 150
1963931	Imidacloprid	149	153	P/P	40 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P339218

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1963931	Linuron	85.7	87.7	P/P	40 - 150
1963931	MCCP	64.2	59.4	P/P	40 - 150
1963931	Methiocarb	85.5	79.2	P/P	40 - 150
1963931	Methomyl	99.5	94.9	P/P	40 - 150
1963931	Oxamyl	103	101	P/P	40 - 150
1963931	Primidone	127	113	P/P	40 - 150
1963931	Propoxur	76.7	72.9	P/P	40 - 150
1963931	Pyraclostrobin	73.9	72.1	P/P	40 - 150
1963931	Triclopyr	64.7	52.8	P/P	40 - 150

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: P339388

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964717	Sucralose	100	102	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	3-Hydroxycarbofuran	104	103	P/P	40 - 150
1964945	Acetaminophen	123	108	P/P	30 - 150
1964945	Aldicarb	55.6	60.2	P/P	30 - 150
1964945	Aldicarb Sulfone	124	117	P/P	40 - 150
1964945	Aldicarb Sulfoxide	77.9	79.2	P/P	40 - 150
1964945	Bentazon	27.3	29.7	F/F	30 - 150
1964945	Carbamazepine	85.1	84.5	P/P	40 - 150
1964945	Carbaryl	75.3	75.4	P/P	40 - 150
1964945	Carbofuran	68.3	65.1	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	MCCP	38.1	40.3	F/P	40 - 150
1964945	Methiocarb	83.5	77.8	P/P	40 - 150
1964945	Methomyl	83.7	80.5	P/P	40 - 150
1964945	Oxamyl	94.0	93.7	P/P	40 - 150
1964945	Primidone	105	108	P/P	40 - 150
1964945	Propoxur	64.4	64.4	P/P	40 - 150
1964945	Triclopyr	39.1	40.4	F/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
 Batch ID: P340138

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964926	Fluoride	95.7	95.1	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P339916

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964754	Organic Carbon	97.1	98.7	P/P	85 - 115

Reference Method: SM 5310 B-00
 Batch ID: P340090

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964906	Organic Carbon	102	102	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P339410

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964810	Turbidity	0.175	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P339411

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964909	Turbidity	0.0	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P339505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964978	Calcium	0.104	Spike	P	0 - 20
1964978	Iron	1.22	Spike	P	0 - 20
1964978	Magnesium	1.12	Spike	P	0 - 20
1964978	Potassium	0.178	Spike	P	0 - 20
1964978	Sodium	0.365	Spike	P	0 - 20
1964978	Zinc	2.35	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P339506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1963648	Iron	0.704	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P339505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964978	Arsenic	0.595	Spike	P	0 - 20
1964978	Cadmium	4.50	Spike	P	0 - 20
1964978	Copper	0.665	Spike	P	0 - 20
1964978	Lead	0.718	Spike	P	0 - 20
1964978	Silver	10.5	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P339506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1963648	Arsenic	0.500	Spike	P	0 - 20
1963648	Cadmium	2.52	Spike	P	0 - 20
1963648	Chromium	0.0283	Spike	P	0 - 20
1963648	Copper	1.27	Spike	P	0 - 20
1963648	Lead	1.44	Spike	P	0 - 20
1963648	Nickel	0.0740	Spike	P	0 - 20
1963648	Silver	0.981	Spike	P	0 - 20
1963648	Zinc	0.363	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340191

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964979	Chromium	1.26	Spike	P	0 - 20
1964979	Nickel	1.17	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964823	Chloride	0.604	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339954

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964823	Sulfate	0.194	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339779

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965642	Ammonia-N	0.660	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339959

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964807	Ammonia-N	2.88	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339435

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964754	Kjeldahl Nitrogen	2.35	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339561

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965290	Kjeldahl Nitrogen	0.368	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964824	Kjeldahl Nitrogen	1.49	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P339693

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964564	NO2NO3-N	0.506	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P339852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964814	NO2NO3-N	0.269	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339607

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964824	Total-P	3.92	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964910	Total-P	2.44	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339449

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964818	O-Phosphate-P	0.978	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339451

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964912	O-Phosphate-P	1.00	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
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	Metalaxyl	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

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	Terbufos	8.86	Spike	P	0 - 30
1965593	Terbutylazine	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
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	Metalaxyl	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	Terbutylazine	0.543	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P339743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1963880	Aldrin	8.48	Spike	P	0 - 30
1963880	Alpha-BHC	2.77	Spike	P	0 - 30
1963880	Alpha-Chlordane	4.31	Spike	P	0 - 30
1963880	Beta-BHC	17.7	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P339743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1963880	Carbophenothion	15.2	Spike	P	0 - 30
1963880	Chlorothalonil	54.9	Spike	F	0 - 30
1963880	Cypermethrin	13.8	Spike	P	0 - 30
1963880	DDD-p,p'	3.09	Spike	P	0 - 30
1963880	DDE-p,p'	0.143	Spike	P	0 - 30
1963880	DDT-p,p'	1.20	Spike	P	0 - 30
1963880	Delta-BHC	10.4	Spike	P	0 - 30
1963880	Dicofol	18.8	Spike	P	0 - 30
1963880	Dieldrin	2.14	Spike	P	0 - 30
1963880	Endosulfan I	5.95	Spike	P	0 - 30
1963880	Endosulfan II	1.82	Spike	P	0 - 30
1963880	Endosulfan Sulfate	7.19	Spike	P	0 - 30
1963880	Endrin	7.62	Spike	P	0 - 30
1963880	Endrin Aldehyde	22.3	Spike	P	0 - 30
1963880	Endrin Ketone	10.2	Spike	P	0 - 30
1963880	Gamma-BHC	3.75	Spike	P	0 - 30
1963880	Gamma-Chlordane	5.61	Spike	P	0 - 30
1963880	Heptachlor	7.56	Spike	P	0 - 30
1963880	Heptachlor Epoxide	5.05	Spike	P	0 - 30
1963880	Methoxychlor	6.94	Spike	P	0 - 30
1963880	Mirex	2.83	Spike	P	0 - 30
1963880	Permethrin	3.57	Spike	P	0 - 30
1963880	Trifluralin	4.45	Spike	P	0 - 30
LFB	Aldrin	8.36	LCS	P	0 - 30
LFB	Alpha-BHC	15.6	LCS	P	0 - 30
LFB	Alpha-Chlordane	13.8	LCS	P	0 - 30
LFB	Beta-BHC	26.9	LCS	P	0 - 30
LFB	Carbophenothion	17.4	LCS	P	0 - 30
LFB	Chlorothalonil	49.7	LCS	F	0 - 30
LFB	Cypermethrin	17.4	LCS	P	0 - 30
LFB	DDD-p,p'	23.0	LCS	P	0 - 30
LFB	DDE-p,p'	11.6	LCS	P	0 - 30
LFB	DDT-p,p'	20.3	LCS	P	0 - 30
LFB	Delta-BHC	21.5	LCS	P	0 - 30
LFB	Dicofol	63.6	LCS	F	0 - 30
LFB	Dieldrin	25.5	LCS	P	0 - 30
LFB	Endosulfan I	25.5	LCS	P	0 - 30
LFB	Endosulfan II	23.4	LCS	P	0 - 30
LFB	Endosulfan Sulfate	13.2	LCS	P	0 - 30
LFB	Endrin	19.6	LCS	P	0 - 30
LFB	Endrin Aldehyde	11.4	LCS	P	0 - 30
LFB	Endrin Ketone	22.9	LCS	P	0 - 30
LFB	Gamma-BHC	29.0	LCS	P	0 - 30
LFB	Gamma-Chlordane	15.0	LCS	P	0 - 30
LFB	Heptachlor	14.9	LCS	P	0 - 30
LFB	Heptachlor Epoxide	14.0	LCS	P	0 - 30
LFB	Methoxychlor	21.3	LCS	P	0 - 30
LFB	Mirex	12.6	LCS	P	0 - 30
LFB	Permethrin	17.3	LCS	P	0 - 30
LFB	Trifluralin	16.3	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P339743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1963585	Chlordane	0.237	Spike	P	0 - 30
1963585	Toxaphene	4.22	Spike	P	0 - 30
LFB	Chlordane	1.10	LCS	P	0 - 30
LFB	Toxaphene	4.56	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P339218

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1963931	2,4-D	21.5	Spike	P	0 - 30
1963931	3-Hydroxycarbofuran	1.75	Spike	P	0 - 30
1963931	Acetaminophen	5.63	Spike	P	0 - 30
1963931	Aldicarb	7.13	Spike	P	0 - 30
1963931	Aldicarb Sulfone	2.81	Spike	P	0 - 30
1963931	Aldicarb Sulfoxide	4.87	Spike	P	0 - 30
1963931	Bentazon	8.15	Spike	P	0 - 30
1963931	Carbamazepine	2.87	Spike	P	0 - 30
1963931	Carbaryl	7.81	Spike	P	0 - 30
1963931	Carbofuran	5.98	Spike	P	0 - 30
1963931	Diuron	8.34	Spike	P	0 - 30
1963931	Fenuron	10.6	Spike	P	0 - 30
1963931	Fluridone	2.79	Spike	P	0 - 30
1963931	Imidacloprid	2.65	Spike	P	0 - 30
1963931	Linuron	2.27	Spike	P	0 - 30
1963931	MCP	7.72	Spike	P	0 - 30
1963931	Methiocarb	7.67	Spike	P	0 - 30
1963931	Methomyl	4.72	Spike	P	0 - 30
1963931	Oxamyl	1.83	Spike	P	0 - 30
1963931	Primidone	11.2	Spike	P	0 - 30
1963931	Propoxur	5.05	Spike	P	0 - 30
1963931	Pyraclostrobin	2.54	Spike	P	0 - 30
1963931	Triclopyr	20.2	Spike	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: P339388

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964717	Sucralose	1.33	Spike	P	0 - 30

Quality Assurance Report Precision

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	3-Hydroxycarbofuran	0.886	Spike	P	0 - 30
1964945	Acetaminophen	12.7	Spike	P	0 - 30
1964945	Aldicarb	7.89	Spike	P	0 - 30
1964945	Aldicarb Sulfone	5.80	Spike	P	0 - 30
1964945	Aldicarb Sulfoxide	1.66	Spike	P	0 - 30
1964945	Bentazon	6.75	Spike	P	0 - 30
1964945	Carbamazepine	0.653	Spike	P	0 - 30
1964945	Carbaryl	0.126	Spike	P	0 - 30
1964945	Carbofuran	4.81	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	MCPP	5.65	Spike	P	0 - 30
1964945	Methiocarb	7.11	Spike	P	0 - 30
1964945	Methomyl	3.87	Spike	P	0 - 30
1964945	Oxamyl	0.356	Spike	P	0 - 30
1964945	Primidone	3.58	Spike	P	0 - 30
1964945	Propoxur	0.0446	Spike	P	0 - 30
1964945	Triclopyr	3.31	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P339422

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964905	Color (true)	0.0250	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P339424

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964909	Color (true)	4.39	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P339728

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1963860	Total Alkalinity	0.519	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P340124

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964926	Total Alkalinity	0.822	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
Batch ID: P339838

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964813	TDS	0.0	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P339843

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965506	TDS	4.62	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P339653

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1963619	Fluoride	0.986	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P340138

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964926	Fluoride	0.473	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P339916

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964754	Organic Carbon	1.16	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P340090

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964906	Organic Carbon	0.0608	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: 1964939
Field Sample ID: G2SW0037

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	61.3	P	30 - 160
EPA 8321B	2,4-D-d3	61.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	126	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1964939
Field Sample ID: G2SW0037

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	126	P	30 - 160
EPA 8321B	Carbamazepine-d10	96.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	96.9	P	30 - 160
EPA 8321B	Diuron-d6	99.4	P	30 - 160
EPA 8321B	Diuron-d6	99.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	108	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	108	P	40 - 160
EPA 8321B	Primidone-d5	121	P	30 - 160
EPA 8321B	Primidone-d5	121	P	30 - 160
EPA 8321B	Sucralose-d6	124	P	40 - 160

Lab Sample ID: 1964940
Field Sample ID: G2SW0037

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

Lab Sample ID: 1964941
Field Sample ID: G1SW0089

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	43.4	P	30 - 160
EPA 8321B	2,4-D-d3	43.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	117	P	30 - 160
EPA 8321B	Acetaminophen-d4	117	P	30 - 160
EPA 8321B	Carbamazepine-d10	100	P	30 - 160
EPA 8321B	Carbamazepine-d10	100	P	30 - 160
EPA 8321B	Diuron-d6	95.1	P	30 - 160
EPA 8321B	Diuron-d6	95.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	0.950	F	40 - 160
EPA 8321B	Glyphosate 13C 15N	0.950	F	40 - 160
EPA 8321B	Primidone-d5	133	P	30 - 160
EPA 8321B	Primidone-d5	133	P	30 - 160
EPA 8321B	Sucralose-d6	84.5	P	40 - 160

Lab Sample ID: 1964943
Field Sample ID: G1SW0089

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	87.6	P	30 - 160

Lab Sample ID: 1964944
Field Sample ID: G1SW0090

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

Lab Sample ID: 1964945
Field Sample ID: G1SW0091

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	49.2	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1964945
Field Sample ID: G1SW0091

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	120	P	30 - 160
EPA 8321B	Carbamazepine-d10	84.6	P	30 - 160
EPA 8321B	Diuron-d6	83.2	P	30 - 160
EPA 8321B	Primidone-d5	103	P	30 - 160
EPA 8321B	Sucralose-d6	118	P	40 - 160

Lab Sample ID: 1964946
Field Sample ID: G2SW0037

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	87.0	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	65.0	P	34 - 101
EPA 8276	Decachlorobiphenyl	81.1	P	31 - 108
EPA 8276	PCNB	117	P	62 - 142

Lab Sample ID: 1964947
Field Sample ID: G2SW0037

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	116	P	71 - 126
EPA 8270D	Terbufos-d10	99.7	P	50 - 130

Lab Sample ID: 1964948
Field Sample ID: G1SW0089

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	86.6	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	65.5	P	34 - 101
EPA 8276	Decachlorobiphenyl	76.8	P	31 - 108
EPA 8276	PCNB	116	P	62 - 142

Lab Sample ID: 1964949
Field Sample ID: G1SW0090

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	87.3	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	58.9	P	34 - 101
EPA 8276	Decachlorobiphenyl	76.0	P	31 - 108
EPA 8276	PCNB	115	P	62 - 142

Lab Sample ID: 1964951
Field Sample ID: G1SW0090

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	98.8	P	71 - 126
EPA 8270D	Terbufos-d10	77.2	P	50 - 130

Quality Assurance Report Calibration Verification

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A81879

Included Lab Sample IDs: 1964905, 1964908, 1964909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105
Turbidity	101	100	P/P	95 - 105

Reference Method: SM 2120 B

Run ID: A81881

Included Lab Sample IDs: 1964905, 1964908, 1964909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	98.7	P/P	85 - 115
Color (true)	99.3	99.9	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A81897

Included Lab Sample IDs: 1964907, 1964912, 1964913

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

Reference Method: EPA 8321B

Run ID: A81910

Included Lab Sample IDs: 1964939, 1964941

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 200.8 Rev. 5.4

Run ID: A81938

Included Lab Sample IDs: 1964963

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	105	106	P/P	90 - 110
Cadmium	102	103	P/P	90 - 110
Copper	103	104	P/P	90 - 110
Lead	107	107	P/P	90 - 110
Silver	100	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A81939

Included Lab Sample IDs: 1964910

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A81944

Included Lab Sample IDs: 1964963, 1964964, 1964965

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	98.2	99.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A81944

Included Lab Sample IDs: 1964963, 1964964, 1964965

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	98.7	99.2	P/P	90 - 110
Iron	99.3	98.1	P/P	90 - 110
Magnesium	99.8	101	P/P	90 - 110
Potassium	99.6	100	P/P	90 - 110
Sodium	100	101	P/P	90 - 110
Zinc	102	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A81946

Included Lab Sample IDs: 1964908, 1964909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A81947

Included Lab Sample IDs: 1964906, 1964911

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	99.7	P/P	90 - 110
Kjeldahl Nitrogen	105	98.4	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A81950

Included Lab Sample IDs: 1964939, 1964941, 1964945

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	103	103	P/P	60 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A81952

Included Lab Sample IDs: 1964910, 1964911

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A81967

Included Lab Sample IDs: 1964964, 1964965

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	101	101	P/P	90 - 110
Cadmium	95.3	94.7	P/P	90 - 110
Copper	102	102	P/P	90 - 110
Lead	99.3	99.1	P/P	90 - 110
Nickel	102	102	P/P	90 - 110
Silver	96.2	95.4	P/P	90 - 110
Zinc	99.4	99.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A81981

Included Lab Sample IDs: 1964908, 1964909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.5	98.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A81982

Included Lab Sample IDs: 1964906, 1964911

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	100	P/P	90 - 110
Total-P	99.0	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A81985

Included Lab Sample IDs: 1964910

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A81995

Included Lab Sample IDs: 1964910, 1964911

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	105	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A82003

Included Lab Sample IDs: 1964905, 1964908, 1964909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	107	103	P/P	90 - 110
Sulfate	107	103	P/P	90 - 110
Sulfate	107	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A82028

Included Lab Sample IDs: 1964906

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

Reference Method: EPA 8270D

Run ID: A82038

Included Lab Sample IDs: 1964946, 1964948, 1964949

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Alpha-BHC	100		P	80 - 120
Alpha-Chlordane	99.7		P	80 - 120
Beta-BHC	97.4		P	80 - 120
Carbophenothion	95.8		P	80 - 120
Chlorothalonil	117		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A82038

Included Lab Sample IDs: 1964946, 1964948, 1964949

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cypermethrin	86.7		P	80 - 120
DDD-p,p'	103		P	80 - 120
DDE-p,p'	101		P	80 - 120
DDT-p,p'	99.1		P	80 - 120
Delta-BHC	99.9		P	80 - 120
Dicofol	104		P	80 - 120
Dieldrin	97.8		P	80 - 120
Endosulfan I	97.5		P	80 - 120
Endosulfan II	111		P	80 - 120
Endosulfan Sulfate	104		P	80 - 120
Endrin	99.5		P	80 - 120
Endrin Aldehyde	108		P	80 - 120
Endrin Ketone	100		P	80 - 120
Gamma-BHC	102		P	80 - 120
Gamma-Chlordane	99.8		P	80 - 120
Heptachlor	96.6		P	80 - 120
Heptachlor Epoxide	100		P	80 - 120
Methoxychlor	101		P	80 - 120
Mirex	100		P	80 - 120
Permethrin	95.5		P	80 - 120
Trifluralin	99.3		P	80 - 120

Reference Method: SM 5310 B-00

Run ID: A82049

Included Lab Sample IDs: 1964910, 1964911

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.8	94.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A82064

Included Lab Sample IDs: 1964906

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A82065

Included Lab Sample IDs: 1964964, 1964965

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	96.9	97.1	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A82103

Included Lab Sample IDs: 1964946, 1964948, 1964949

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	87.5		P	80 - 120
Toxaphene	83.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00
Run ID: A82117
Included Lab Sample IDs: 1964906

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.0	98.8	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A82122
Included Lab Sample IDs: 1964905

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.1	99.2	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A82122
Included Lab Sample IDs: 1964905

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	97.1	98.1	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A82182
Included Lab Sample IDs: 1964963

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	99.2	100	P/P	90 - 110
Nickel	99.4	100	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A82192
Included Lab Sample IDs: 1964939, 1964941, 1964945

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	92.1	70.2	P/P	50 - 150
2,4-D	95.4	92.1	P/P	50 - 150
3-Hydroxycarbofuran	107	110	P/P	60 - 150
3-Hydroxycarbofuran	110	104	P/P	60 - 150
Acetaminophen	105	112	P/P	60 - 150
Acetaminophen	112	112	P/P	60 - 150
Aldicarb	72.9	99.7	P/P	60 - 150
Aldicarb	91.5	72.9	P/P	60 - 150
Aldicarb Sulfone	103	108	P/P	50 - 150
Aldicarb Sulfone	107	103	P/P	50 - 150
Aldicarb Sulfoxide	102	93.9	P/P	50 - 150
Aldicarb Sulfoxide	107	102	P/P	50 - 150
Bentazon	108	109	P/P	50 - 150
Bentazon	109	95.2	P/P	50 - 150
Carbamazepine	114	111	P/P	60 - 150
Carbamazepine	117	114	P/P	60 - 150
Carbaryl	127	133	P/P	60 - 150
Carbaryl	134	127	P/P	60 - 150
Carbofuran	110	121	P/P	50 - 150
Carbofuran	122	110	P/P	50 - 150
Diuron	111	123	P/P	60 - 150
Diuron	123	112	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A82192

Included Lab Sample IDs: 1964939, 1964941, 1964945

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenuron	111	115	P/P	60 - 150
Fenuron	113	111	P/P	60 - 150
Fluridone	101	99.4	P/P	60 - 160
Fluridone	99.4	96.1	P/P	60 - 160
Imidacloprid	104	109	P/P	60 - 150
Imidacloprid	109	96.8	P/P	60 - 150
Linuron	119	120	P/P	60 - 150
Linuron	121	119	P/P	60 - 150
MCPPP	96.3	77.6	P/P	50 - 150
MCPPP	97.4	96.3	P/P	50 - 150
Methiocarb	120	124	P/P	50 - 150
Methiocarb	126	120	P/P	50 - 150
Methomyl	116	98.9	P/P	50 - 150
Methomyl	98.9	93.2	P/P	50 - 150
Oxamyl	112	96.0	P/P	50 - 150
Oxamyl	114	112	P/P	50 - 150
Primidone	114	114	P/P	60 - 150
Primidone	114	107	P/P	60 - 150
Propoxur	122	117	P/P	50 - 150
Propoxur	128	122	P/P	50 - 150
Pyraclostrobin	96.8	96.9	P/P	60 - 150
Triclopyr	90.4	77.8	P/P	50 - 150
Triclopyr	90.8	90.4	P/P	50 - 150

Reference Method: EPA 8270D

Run ID: A82273

Included Lab Sample IDs: 1964947, 1964951

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A82273

Included Lab Sample IDs: 1964947, 1964951

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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
Terbutylazine	94.5		P	80 - 120

Reference Method: EPA 8270D

Run ID: A82276

Included Lab Sample IDs: 1964947

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

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision	
			LCS			SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					0.175	
	Turbidity					0.0	
EPA 200.7 Rev. 4.4	Calcium	104	100	103			0.104
	Iron	105	107	107	106		1.22
	Iron	105	104	105			0.704
	Magnesium	111	109	111	109		1.12
	Potassium	104	102	103	103		0.178
	Sodium	105	103	105			0.365
	Zinc	102	105	106	108		2.35
EPA 200.8 Rev. 5.4	Arsenic	106	108	108	108		0.595
	Arsenic	102	104	105			0.500
	Cadmium	104	104	103	108		4.50
	Cadmium	98.9	85.6	83.5			2.52
	Chromium	99.8	89.1	89.2			0.0283
	Chromium	98.3	99.2	97.9	98.8		1.26
	Copper	102	105	99.1	99.8		0.665

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 200.8 Rev. 5.4	Copper	99.1		96.9	98.2			1.27
	Lead	107		108	109	110		0.718
	Lead	103		107	109			1.44
	Nickel	101		106	106			0.0740
	Nickel	99.6		99.1	98.0	97.8		1.17
	Silver	91.4		90.2	91.0	101		10.5
	Silver	86.7		74.9	74.1			0.981
	Zinc	97.7		80.8	81.1			0.363
EPA 300.0 Rev. 2.1	Chloride	93.7		103	104		0.604	
	Sulfate	106		106	106		0.194	
EPA 350.1 Rev. 2.0	Ammonia-N	101		102	102			0.660
	Ammonia-N	97.8		95.8	99.4			2.88
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104		97.6	93.9			2.35
	Kjeldahl Nitrogen	98.1		94.2	94.6			0.368
	Kjeldahl Nitrogen	97.9		98.6	96.5			1.49
EPA 353.2 Rev. 2.0	NO2NO3-N	104		99.1	98.6			0.506
	NO2NO3-N	104		102	102			0.269
EPA 365.1 Rev. 2.0	Total-P	98.4		96.8	101			3.92
	Total-P	95.5		94.0	96.6			2.44
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.4		98.8	101			0.978
	O-Phosphate-P	99.4		98.5	96.7			1.00
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	77.9	84.7	76.6	83.4	8.36		8.48
	Alpha-BHC	83.4	97.5	102	99.4	15.6		2.77
	Alpha-Chlordane	92.2	106	99.8	95.6	13.8		4.31
	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	94.4	124	123	103	26.9		17.7
	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	101	121	124	106	17.4		15.2
	Chlorothalonil	80.8	48.7	230	131	49.7		54.9
	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	91.0	108	112	97.1	17.4		13.8
	DDD-p,p'	99.2	125	110	106	23.0		3.09
	DDE-p,p'	96.5	108	100	100	11.6		0.143
	DDT-p,p'	86.3	106	98.1	99.3	20.3		1.20
	Delta-BHC	104	129	139	125	21.5		10.4
	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	76.7	39.7	84.0	101	63.6		18.8
	Dieldrin	96.8	125	100	98.3	25.5		2.14
	Disulfoton	127	124	94.5	78.9	2.33		18.1
	Endosulfan I	85.4	110	124	117	25.5		5.95
	Endosulfan II	110	140	158	155	23.4		1.82
	Endosulfan Sulfate	98.9	113	110	103	13.2		7.19
	Endrin	98.9	120	102	94.4	19.6		7.62
	Endrin Aldehyde	75.8	84.9	104	130	11.4		22.3
	Endrin Ketone	96.4	121	119	107	22.9		10.2

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	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	86.7	116	99.6	95.9	29.0	3.75
	Gamma-Chlordane	92.2	107	99.2	93.8	15.0	5.61
	Heptachlor	80.1	93.0	88.2	81.8	14.9	7.56
	Heptachlor Epoxide	90.8	104	101	95.7	14.0	5.05
	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	90.8	112	113	106	21.3	6.94
	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	81.8	92.8	83.3	80.9	12.6	2.83
	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	90.5	108	104	101	17.3	3.57
	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
	Terbuthylazine	91.3	91.8	94.3	94.7	0.543	0.383
	Trifluralin	82.2	96.8	93.9	89.8	16.3	4.45
EPA 8276	Chlordane	88.6	89.6	56.7	56.9	1.10	0.237
	Toxaphene	92.6	88.5	72.6	69.6	4.56	4.22
EPA 8321B	2,4-D	71.2					21.5
	2,4-D	69.5		46.1	49.4		7.05
	3-Hydroxycarbofuran	96.9		114	112		1.75
	3-Hydroxycarbofuran	82.2		104	103		0.886
	Acetaminophen	109		134	126		5.63
	Acetaminophen	92.2		123	108		12.7
	Aldicarb	72.0		71.2	66.3		7.13
	Aldicarb	70.3		55.6	60.2		7.89
	Aldicarb Sulfone	103		126	130		2.81
	Aldicarb Sulfone	87.8		124	117		5.80
	Aldicarb Sulfoxide	100		105	100		4.87
	Aldicarb Sulfoxide	84.9		77.9	79.2		1.66
	AMPA	105		104	108		4.58
	Bentazon	84.2		68.5	57.0		8.15
	Bentazon	87.1		27.3	29.7		6.75
	Carbamazepine	94.0		93.4	90.7		2.87
	Carbamazepine	85.8		85.1	84.5		0.653
	Carbaryl	93.1		86.0	79.6		7.81
	Carbaryl	84.5		75.3	75.4		0.126

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Carbofuran	81.9	75.1	70.7			5.98
	Carbofuran	78.1	68.3	65.1			4.81
	Diuron	86.8	84.6	77.4			8.34
	Diuron	76.3	77.2	74.5			2.39
	Fenuron	115	98.1	88.2			10.6
	Fenuron	96.9	85.0	83.1			2.26
	Fluridone	86.2	71.6	66.0			2.79
	Fluridone	74.6	67.3	65.9			2.11
	Glyphosate	100	108	106			1.03
	Imidacloprid	95.2	149	153			2.65
	Imidacloprid	83.4	165	146			11.4
	Linuron	89.5	85.7	87.7			2.27
	Linuron	80.2	79.8	83.0			3.93
	MCP	81.1	64.2	59.4			7.72
	MCP	67.6	38.1	40.3			5.65
	Methiocarb	83.4	85.5	79.2			7.67
	Methiocarb	76.5	83.5	77.8			7.11
	Methomyl	107	99.5	94.9			4.72
	Methomyl	90.3	83.7	80.5			3.87
	Oxamyl	103	103	101			1.83
	Oxamyl	91.9	94.0	93.7			0.356
	Primidone	107	127	113			11.2
	Primidone	105	105	108			3.58
	Propoxur	81.9	76.7	72.9			5.05
	Propoxur	77.3	64.4	64.4			0.0446
	Pyraclostrobin	81.1	73.9	72.1			2.54
	Sucralose	97.0	100	102			1.33
	Triclopyr	73.8	64.7	52.8			20.2
	Triclopyr	69.0	39.1	40.4			3.31
SM 2120 B	Color (true)					0.0250	
	Color (true)					4.39	
SM 2320 B-97	Total Alkalinity	97.0				0.519	
	Total Alkalinity	98.2				0.822	
SM 2540 C-97	TDS					0.0	
	TDS					4.62	
SM 4500 F-C-97	Fluoride	96.3					0.986
	Fluoride	94.5	95.7	95.1			0.473
SM 5310 B-00	Organic Carbon	95.7	97.1	98.7			1.16
	Organic Carbon	101	102	102			0.0608

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1964905, 1964908, 1964909
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1964963, 1964964, 1964965
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1964963, 1964964, 1964965
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1964905, 1964908, 1964909
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1964905, 1964908, 1964909

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1964906, 1964910, 1964911
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1964906, 1964910, 1964911
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1964906, 1964910, 1964911
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1964906, 1964910, 1964911
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1964907, 1964912, 1964913
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1964946, 1964948, 1964949
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1964947, 1964951
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	1964946, 1964948, 1964949
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	1964940, 1964943, 1964944
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	1964939, 1964941
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	1964939, 1964941, 1964945
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1964939, 1964941, 1964945
SM 2120 B / E31780	True Color measured at 450 nm	1964905, 1964908, 1964909
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1964905, 1964908, 1964909
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1964905, 1964908, 1964909
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1964905, 1964908, 1964909
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1964905, 1964908, 1964909
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1964906, 1964910, 1964911

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	02/06/2018			02/06/2018 17:02	DeAsia Armster	1964905, 1964908, 1964909
EPA 200.7 Rev. 4.4	02/06/2018	02/07/2018	Elliott D. Healy	02/08/2018	Martin Acosta	1964963, 1964964, 1964965
EPA 200.8 Rev. 5.4	02/06/2018	02/07/2018	Elliott D. Healy	02/09/2018	Nadine Brooks	1964963, 1964964, 1964965
	02/06/2018	02/07/2018	Elliott D. Healy	02/14/2018	Nadine Brooks	1964964, 1964965
	02/06/2018	02/19/2018	Elliott D. Healy	02/20/2018	Nadine Brooks	1964963
EPA 300.0 Rev. 2.1	02/06/2018			02/14/2018	Julia Storbeck	1964908, 1964909
	02/06/2018			02/15/2018	Julia Storbeck	1964905
EPA 350.1 Rev. 2.0	02/06/2018			02/12/2018	Julia Storbeck	1964910, 1964911
	02/06/2018			02/14/2018	Ping Hua	1964906
EPA 351.2 Rev. 2.0	02/06/2018	02/07/2018	Adrian Shelby	02/08/2018	Joseph Suarez	1964910
	02/06/2018	02/08/2018	Adrian Shelby	02/09/2018	Joseph Suarez	1964906, 1964911
EPA 353.2 Rev. 2.0	02/06/2018			02/09/2018	Beverly Y. Sanders	1964910, 1964911
	02/06/2018			02/13/2018	Lauren Bottorf	1964906
EPA 365.1 Rev. 2.0	02/06/2018	02/09/2018	Sima Feizi	02/12/2018	Beverly Y. Sanders	1964906, 1964910, 1964911
EPA 365.1 Rev. 2.0 dissolved	02/06/2018			02/06/2018 17:04	Megan Treadwell	1964912
	02/06/2018			02/06/2018 17:42	Megan Treadwell	1964907
	02/06/2018			02/06/2018 17:43	Megan Treadwell	1964913
EPA 8270D	02/06/2018	02/07/2018	Rasheda Ghaffari	02/09/2018	Marek Topolski	1964946, 1964948, 1964949
	02/06/2018	02/09/2018	John Kaba	02/15/2018	Vandana T. Nagar	1964947, 1964951
	02/06/2018	02/09/2018	John Kaba	02/20/2018	Vandana T. Nagar	1964947
EPA 8276	02/06/2018	02/07/2018	Rasheda Ghaffari	02/15/2018	John P. Burgos	1964946, 1964948, 1964949
EPA 8321B	02/06/2018	02/06/2018	Juyoung Kim	02/09/2018	Juyoung Kim	1964939, 1964941, 1964945
	02/06/2018	02/07/2018	Hoor Shaik	02/09/2018	Julie Michelle Frank	1964939, 1964941
	02/06/2018	02/07/2018	Hoor Shaik	02/10/2018	Julie Michelle Frank	1964939, 1964941
	02/06/2018	02/07/2018	Juyoung Kim	02/07/2018	Juyoung Kim	1964939, 1964941
	02/06/2018	02/08/2018	Hoor Shaik	02/10/2018	Julie Michelle Frank	1964943, 1964944
SM 2120 B	02/06/2018			02/06/2018 18:55	Tanya Welborn	1964905
	02/06/2018			02/06/2018 18:56	Tanya Welborn	1964908
	02/06/2018			02/06/2018 19:11	Tanya Welborn	1964909
SM 2320 B-97	02/06/2018			02/09/2018	Lauren Bottorf	1964908, 1964909
	02/06/2018			02/16/2018	Dale L. Simmons	1964905
SM 2540 C-97	02/06/2018			02/09/2018	Yijie Li	1964905, 1964908, 1964909
SM 2540 D-97	02/06/2018			02/09/2018	Yijie Li	1964905, 1964908, 1964909
SM 4500 F-C-97	02/06/2018			02/09/2018	Lauren Bottorf	1964908, 1964909
	02/06/2018			02/16/2018	Dale L. Simmons	1964905
SM 5310 B-00	02/06/2018			02/14/2018	Megan Treadwell	1964910, 1964911
	02/06/2018			02/15/2018	Megan Treadwell	1964906