

Chemical Analysis Report

NE-DIST-2019-08-29-02

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

Event Description: **LSJR Downtown**
Request ID: **RQ-2019-08-26-17**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 25-SEP-2019 10:45

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first name.

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 by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: MCGIRTS CREEK AT OLD PLANK ROAD

Collection Date/Time: 08/28/2019 09:15

Field ID: 20030346

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2115534	EPA 180.1 Rev. 2.0	Turbidity	8.0		NTU	P369967	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P370214	
		Sulfate	13		mg SO4/L	P370217	
	SM 2120 B	Color (true)	43	A	PCU	P369944	
	SM 2320 B-97	Total Alkalinity	10		mg CaCO3/L	P370197	
	SM 2540 C-97	TDS	71		mg/L	P370142	
	SM 2540 D-97	TSS	3	I	mg/L	P370057	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P370202	
2115536	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P370237	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.78		mg N/L	P369910	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.054		mg N/L	P370064	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P370095	
	SM 5310 B-00	Organic Carbon	5.4		mg C/L	P370115	
2115538	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P369960	
2115584	EPA 200.7 Rev. 4.4	Barium	34.3		ug/L	P369935	
		Calcium	8.79		mg/L	P369935	
		Iron	470		ug/L	P369935	
		Magnesium	1.82		mg/L	P369935	
		Potassium	1.0	I	mg/L	P369935	
		Sodium	8.9		mg/L	P369935	
		Zinc	5.0	U	ug/L	P369935	
		Aluminum	387		ug/L	P369935	
		Antimony	0.050	U	ug/L	P369935	
		Arsenic	0.61		ug/L	P369935	
	EPA 200.8 Rev. 5.4	Boron**	16.7		ug/L	P369935	
		Cadmium	0.021	I	ug/L	P369935	
		Chromium	0.40	U	ug/L	P369935	
		Copper	0.40	U	ug/L	P369935	
		Lead	0.97		ug/L	P369935	
		Nickel	1.7	I	ug/L	P369935	
		Selenium	0.20	U	ug/L	P369935	
		Silver	0.010	U	ug/L	P369935	
		Thallium	0.10	U	ug/L	P369935	

Ref. Method and Comment:

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

EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 09/19/2019.

Sample Location: TROUT RIVER AT GARDEN ST

Collection Date/Time: 08/28/2019 10:05

Field ID: 20030751

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2115535	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P369967	
	EPA 300.0 Rev. 2.1	Chloride	21		mg Cl/L	P370214	
		Sulfate	14		mg SO4/L	P370217	
		Color (true)	79		PCU	P369944	
	SM 2120 B	Total Alkalinity	29	A	mg CaCO3/L	P370200	
	SM 2540 C-97	TDS	88		mg/L	P370142	
	SM 2540 D-97	TSS	2	U	mg/L	P370057	
	SM 4500 F-C-97	Fluoride	0.046	I	mg F/L	P370203	
2115537	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P370237	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.61		mg N/L	P369910	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.097		mg N/L	P370064	
	EPA 365.1 Rev. 2.0	Total-P	0.050		mg P/L	P370095	
	SM 5310 B-00	Organic Carbon	8.9		mg C/L	P370115	
2115539	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.033		mg P/L	P369960	
2115585	EPA 200.7 Rev. 4.4	Barium	39.3		ug/L	P369935	
		Calcium	14.0		mg/L	P369935	
		Iron	450		ug/L	P369935	
		Magnesium	3.37		mg/L	P369935	
		Potassium	1.9		mg/L	P369935	
		Sodium	12.3		mg/L	P369935	
		Zinc	5.0	U	ug/L	P369935	
	EPA 200.8 Rev. 5.4	Aluminum	156		ug/L	P369935	
		Antimony	0.050	U	ug/L	P369935	
		Arsenic	0.43		ug/L	P369935	
		Boron**	32.9		ug/L	P369935	
		Cadmium	0.020	U	ug/L	P369935	
		Chromium	0.40	U	ug/L	P369935	
		Copper	0.48	I	ug/L	P369935	
		Lead	0.20	U	ug/L	P369935	
		Nickel	0.50	U	ug/L	P369935	
		Selenium	0.20	U	ug/L	P369935	
		Silver	0.010	U	ug/L	P369935	
		Thallium	0.10	U	ug/L	P369935	

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: BLOCKHOUSE 100M ABV IRMA RD.

Collection Date/Time: 08/28/2019 10:40

Field ID: G2NE1159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2115540	EPA 180.1 Rev. 2.0	Turbidity	14	A	NTU	P369967	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P370214	
		Sulfate	11		mg SO4/L	P370217	
		Color (true)	120		PCU	P369944	
	SM 2320 B-97	Total Alkalinity	41		mg CaCO3/L	P370200	
	SM 2540 C-97	TDS	111		mg/L	P370142	
	SM 2540 D-97	TSS	10	I	mg/L	P370057	
	SM 4500 F-C-97	Fluoride	0.079	I	mg F/L	P370203	
2115541	EPA 350.1 Rev. 2.0	Ammonia-N	0.048		mg N/L	P370238	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.87		mg N/L	P370086	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.032		mg N/L	P370181	
	EPA 365.1 Rev. 2.0	Total-P	0.25		mg P/L	P370288	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P370115	
2115542	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.14		mg P/L	P369960	
2115586	EPA 200.7 Rev. 4.4	Barium	24.5		ug/L	P369935	
		Calcium	17.1		mg/L	P369935	
		Iron	1.37E+03		ug/L	P369935	
		Magnesium	3.39		mg/L	P369935	
		Potassium	3.8		mg/L	P369935	
		Sodium	8.9		mg/L	P369935	
		Zinc	6.2	I	ug/L	P369935	
		Aluminum	385		ug/L	P369935	
		Antimony	0.16	I	ug/L	P369935	
		Arsenic	1.21		ug/L	P369935	
	EPA 200.8 Rev. 5.4	Boron**	22.9		ug/L	P369935	
		Cadmium	0.020	U	ug/L	P369935	
		Chromium	0.62	I	ug/L	P369935	
		Copper	1.71		ug/L	P369935	
		Lead	0.62		ug/L	P369935	
		Nickel	0.62	I	ug/L	P369935	
		Selenium	0.20	U	ug/L	P369935	
		Silver	0.010	U	ug/L	P369935	
		Thallium	0.10	U	ug/L	P369935	

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: BLOCKHOUSE AT BROWARD RD.

Collection Date/Time: 08/28/2019 11:10

Field ID: G2NE1180

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2115531	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P369967	
	EPA 300.0	Bromide	15		mg Br/L	P370340	
	SM 2320 B-97	Total Alkalinity	81		mg CaCO3/L	P370209	
	SM 2540 D-97	TSS	17		mg/L	P370059	
	SM 4500 F-C-97	Fluoride	0.35		mg F/L	P370211	
2115532	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P370158	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P370087	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.026		mg N/L	P370120	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P370113	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P370115	
2115533	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.079		mg P/L	P369959	
2115567	EPA 8321B	Aldicarb	0.020	U	ug/L	P369771	
		Aldicarb Sulfone	0.0020	U	ug/L	P369771	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P369771	
		Carbaryl	0.0020	U	ug/L	P369771	
		Carbofuran	0.0020	U	ug/L	P369771	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P369771	
		Methiocarb	0.0020	U	ug/L	P369771	
		Methomyl	0.0020	U	ug/L	P369771	
		Oxamyl	0.0020	U	ug/L	P369771	
		Propoxur	0.0020	U	ug/L	P369771	
2115568		2,4-D	0.083		ug/L	P370004	MS
		Acesulfame K**	0.10	UJ	ug/L	P370034	SUR
		AMPA**	1.0	U	ug/L	P370034	MS
		Sucralose**	0.49		ug/L	P370034	
		Acetaminophen**	0.0080	U	ug/L	P370004	
		Endothall**	0.25	UJ	ug/L	P370034	SUR
		Acetamiprid**	0.0020	U	ug/L	P370004	
		Glufosinate**	1.0	U	ug/L	P370034	
		Glyphosate**	1.0	U	ug/L	P370034	
		Afidopyropen**	0.0020	UJ	ug/L	P370004	
		Bentazon	0.0050		ug/L	P370004	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370004	
		Carbamazepine**	0.0028	I	ug/L	P370004	
		Clothianidin**	0.0035	I	ug/L	P370004	
		Dinotefuran**	0.0020	U	ug/L	P370004	
		Diuron	0.015		ug/L	P370004	
		Fenuron	0.016	U	ug/L	P370004	
		Fluridone**	0.032		ug/L	P370004	
		Imazapyr**	0.11		ug/L	P370004	
		Hydrocodone**	0.0020	U	ug/L	P370004	
		Ibuprofen**	0.020	U	ug/L	P370004	
		Imidacloprid	0.018		ug/L	P370004	MS

Field ID: G2NE1180

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2115568	EPA 8321B	Linuron	0.0040	U	ug/L	P370004	
		Mandestrobin**	0.0020	UJ	ug/L	P370004	
		MCP	0.0085		ug/L	P370004	MS
		Naproxen**	0.0080	U	ug/L	P370004	
		Primidone**	0.0040	U	ug/L	P370004	
		Pyraclostrobin**	0.0020	U	ug/L	P370004	
		Thiamethoxam**	0.0020	U	ug/L	P370004	MS
		Tolfenpyrad**	0.0024	I	ug/L	P370004	
		Triclopyr**	0.0040	U	ug/L	P370004	MS
2115569	EPA 8270E	Aldrin	4.3	U	ng/L	P369811	
		Alpha-BHC	2.1	U	ng/L	P369811	
		Alpha-Chlordane	1.1	U	ng/L	P369811	
		Beta-BHC	11	U	ng/L	P369811	
		Bifenthrin**	4.3	U	ng/L	P369811	
		Delta-BHC	8.5	U	ng/L	P369811	
		Gamma-BHC	8.5	U	ng/L	P369811	
		Carbophenothion	11	U	ng/L	P369811	
		Chlorothalonil	2.1	UJ	ng/L	P369811	LCS, MS
		Cis-Nonachlor**	1.1	U	ng/L	P369811	
		Cypermethrin	21	U	ng/L	P369811	
		DDD-p,p'	6.4	U	ng/L	P369811	
		DDE-p,p'	6.4	U	ng/L	P369811	
		DDT-p,p'	7.5	U	ng/L	P369811	
		Dicofol	32	U	ng/L	P369811	
		Dieldrin	4.3	U	ng/L	P369811	
		Endosulfan I	4.3	U	ng/L	P369811	
		Endosulfan II	4.3	U	ng/L	P369811	
		Endosulfan Sulfate	2.1	U	ng/L	P369811	
		Endrin	2.1	U	ng/L	P369811	
		Endrin Aldehyde	2.1	U	ng/L	P369811	
		Endrin Ketone	2.1	U	ng/L	P369811	
		Ethalfuralin**	3.2	U	ng/L	P369811	
		Gamma-Chlordane	1.1	U	ng/L	P369811	
		Heptachlor	1.6	U	ng/L	P369811	
		Heptachlor Epoxide	2.1	U	ng/L	P369811	
		Hexachlorobenzene	2.1	U	ng/L	P369811	
		Methoxychlor	4.3	U	ng/L	P369811	
		Mirex	2.1	U	ng/L	P369811	
		Permethrin	11	U	ng/L	P369811	
		Trans-Nonachlor**	1.1	U	ng/L	P369811	
		Trifluralin	2.7	U	ng/L	P369811	
	EPA 8276	Chlordane	6.4	I	ng/L	P369811	
		Toxaphene	32	UJ	ng/L	P369811	CCV
2115570	EPA 8270E	Acetochlor	0.24	U	ng/L	P369752	
		Alachlor	0.24	U	ng/L	P369752	

Field ID: G2NE1180

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2115570	EPA 8270E	Ametryn	0.58	U	ng/L	P369752	
		Atrazine	40		ng/L	P369752	
		Atrazine Desethyl	10	J	ng/L	P369752	RPD
		Azinphos Methyl	4.8	U	ng/L	P369752	
		Bromacil	10		ng/L	P369752	
		Butylate	0.38	U	ng/L	P369752	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P369752	
		Chlorpyrifos Methyl	0.096	U	ng/L	P369752	
		Cyanazine	3.1	UJ	ng/L	P369752	LCS, RPD
		Demeton	6.7	U	ng/L	P369752	
		Diazinon	0.12	U	ng/L	P369752	
		Dimethenamid**	0.096	U	ng/L	P369752	
		Disulfoton	0.48	U	ng/L	P369752	
		Dithiopyr**	0.12	I	ng/L	P369752	
		EPTC	1.2	U	ng/L	P369752	
		Ethion	0.14	U	ng/L	P369752	
		Ethoprop	0.096	U	ng/L	P369752	
		Fenamiphos	0.48	UJ	ng/L	P369752	MS, RPD
		Fipronil	0.24	U	ng/L	P369752	
		Fipronil Desulfinyl**	0.54		ng/L	P369752	
		Fipronil Sulfide	0.49	I	ng/L	P369752	
		Fipronil Sulfone	0.93		ng/L	P369752	
		Fonofos	0.19	U	ng/L	P369752	
		Hexazinone	0.48	U	ng/L	P369752	
		Malathion	0.34	UJ	ng/L	P369752	LCS, MS, RPD
		Metalaxyl	0.29	U	ng/L	P369752	
		Metolachlor	3.9		ng/L	P369752	
		Metribuzin	7.4	J	ng/L	P369752	MS, RPD
		Mevinphos	0.48	U	ng/L	P369752	
		Molinate	0.29	U	ng/L	P369752	
		Norflurazon	0.48	U	ng/L	P369752	
		Oxadiazon**	0.49		ng/L	P369752	
		Parathion Ethyl	0.24	U	ng/L	P369752	
		Parathion Methyl	0.53	U	ng/L	P369752	
		Pendimethalin	0.96	U	ng/L	P369752	
		Phorate	0.24	U	ng/L	P369752	
		Prodiamine**	0.17	U	ng/L	P369752	
		Prometon	2.8	I	ng/L	P369752	
		Prometryn	0.19	U	ng/L	P369752	
		Simazine	3.2		ng/L	P369752	
		Tebuconazole**	0.48	UJ	ng/L	P369752	RPD
		Terbufos	0.096	U	ng/L	P369752	
		Terbutylazine	0.41	U	ng/L	P369752	
2115583	EPA 200.7 Rev. 4.4	Iron	670		ug/L	P369941	

Field ID: G2NE1180

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2115583	EPA 200.7 Rev. 4.4	Manganese	29		ug/L	P369941	
		Zinc	15	U	ug/L	P369941	
	EPA 200.8 Rev. 5.4	Aluminum	425		ug/L	P369941	
		Antimony	0.20	U	ug/L	P369941	
		Arsenic	2.23		ug/L	P369941	
		Cadmium	0.080	U	ug/L	P369941	
		Chromium	4.0	U	ug/L	P369941	
		Copper	1.8	I	ug/L	P369941	
		Lead	1.3	I	ug/L	P369941	
		Nickel	2.0	U	ug/L	P369941	
		Selenium	0.80	U	ug/L	P369941	
		Silver	0.040	U	ug/L	P369941	
		Thallium	0.40	U	ug/L	P369941	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample contains high density particulates with sandy appearance that settle out quickly.

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

EPA 8321B: Refer to the narrative for an explanation of QC Codes. Surrogate spike recovery exceeding the control limits. Results confirmed in sample duplicate. MDL for some parameters elevated due to matrix interference.

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

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

EPA 8270E: MS accuracy for atrazine and bromacil not assessed due to high content of these parameters in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: LONG BR AT EVERGREEN AVE.

Collection Date/Time: 08/28/2019 11:45

Field ID: G2NE0735

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2115543	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P369967	
	EPA 300.0	Bromide	1.4		mg Br/L	P370412	
	SM 2320 B-97	Total Alkalinity	98		mg CaCO3/L	P370209	
	SM 2540 D-97	TSS	3	U	mg/L	P370254	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P370403	
2115544	EPA 350.1 Rev. 2.0	Ammonia-N	0.10		mg N/L	P370158	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.47		mg N/L	P370087	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P370388	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P370289	
	SM 5310 B-00	Organic Carbon	6.7		mg C/L	P370117	
2115545	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.056		mg P/L	P369959	

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.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P369967

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P369935

Component	Result	Code	Units
Barium	1.0	U	ug/L
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: P369941

Component	Result	Code	Units
Iron	30	U	ug/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369935

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369941

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.20	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369941

Component	Result	Code	Units
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0
Batch ID: P370340

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 300.0
Batch ID: P370412

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370214

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370217

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370158

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370237

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370238

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P369910

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370086

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370087

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370064

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370120

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370181

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370388

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370095

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370113

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370288

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370289

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P369959

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P369960

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

Reference Method: EPA 8270E
Batch ID: P369752

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	5.0	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	3.2	U	ng/L
Demeton	7.0	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P369752

Component	Result	Code	Units
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P369811

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	10	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	10	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	6.0	U	ng/L
DDE-p,p'	6.0	U	ng/L
DDT-p,p'	7.0	U	ng/L
Delta-BHC	8.0	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
Ethalfuralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8276
Batch ID: P369811

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

Reference Method: EPA 8321B
Batch ID: P369771

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

Reference Method: EPA 8321B
Batch ID: P370004

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P370034

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P370034

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P369944

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P370197

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

Reference Method: SM 2320 B-97
Batch ID: P370200

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

Reference Method: SM 2320 B-97
Batch ID: P370209

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

Reference Method: SM 2540 C-97
Batch ID: P370142

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P370057

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P370059

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P370254

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P370202

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P370203

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P370211

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P370403

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P370115

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

Reference Method: SM 5310 B-00
Batch ID: P370117

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: P369935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	102		P	85 - 115
Calcium	109		P	85 - 115
Iron	104		P	85 - 115
Magnesium	109		P	85 - 115
Potassium	109		P	85 - 115
Sodium	106		P	85 - 115
Zinc	98.8		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P369941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	107		P	85 - 115
Manganese	104		P	85 - 115
Zinc	103		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	105		P	85 - 115
Boron	92.2		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	90.1		P	85 - 115
Copper	102		P	85 - 115
Lead	104		P	85 - 115
Nickel	103		P	85 - 115
Selenium	103		P	85 - 115
Silver	105		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	98.4		P	85 - 115
Arsenic	103		P	85 - 115
Cadmium	100		P	85 - 115
Chromium	100		P	80 - 120
Copper	99.5		P	85 - 115
Lead	98.0		P	85 - 115
Nickel	101		P	85 - 115
Selenium	98.3		P	85 - 115
Silver	101		P	85 - 115
Thallium	103		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0
Batch ID: P370340

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

Reference Method: EPA 300.0
Batch ID: P370412

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bromide	95.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370214

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370217

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370158

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370237

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370238

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.5		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P369910

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: P370086

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	94.8		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370087

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.7		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370064

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370120

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370181

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370388

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	101		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370095

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.3		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370113

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	93.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.4		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370289

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	94.9		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P369959

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P369960

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

Reference Method: EPA 8270E
Batch ID: P369752

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	99.7	87.4	P/P	69 - 122
Alachlor	95.0	84.0	P/P	71 - 120
Ametryn	98.8	91.2	P/P	47 - 138
Atrazine	104	106	P/P	74 - 124
Atrazine Desethyl	72.1	136	P/P	38 - 138
Azinphos Methyl	98.9	108	P/P	69 - 154
Bromacil	95.8	77.0	P/P	39 - 121
Butylate	60.1	57.6	P/P	27 - 87.0
Chlorpyrifos Ethyl	93.8	97.9	P/P	69 - 118
Chlorpyrifos Methyl	85.9	103	P/P	70 - 120
Cyanazine	86.8	298	P/F	20 - 250
Demeton	65.3	78.2	P/P	39 - 118
Diazinon	95.1	97.0	P/P	68 - 127
Dimethenamid	98.3	85.8	P/P	66 - 125
Disulfoton	73.4	87.8	P/P	52 - 126
Dithiopyr	98.4	87.5	P/P	67 - 127
EPTC	57.2	64.2	P/P	24 - 88.0
Ethion	100	97.7	P/P	51 - 132
Ethoprop	83.0	101	P/P	58 - 117
Fenamiphos	83.1	57.3	P/P	38 - 139
Fipronil	107	81.3	P/P	61 - 124
Fipronil Desulfinyl	102	85.3	P/P	47 - 120
Fipronil Sulfide	102	96.9	P/P	56 - 119
Fipronil Sulfone	100	90.6	P/P	50 - 117
Fonofos	76.6	102	P/P	60 - 121
Hexazinone	114	101	P/P	55 - 137
Malathion	106	46.8	P/F	66 - 126
Metaxyl	91.2	89.2	P/P	33 - 140
Metolachlor	99.9	86.0	P/P	69 - 119
Metribuzin	88.2	220	P/P	31 - 238
Mevinphos	71.0	84.8	P/P	42 - 113
Molinate	59.7	73.7	P/P	32 - 96.0
Norflurazon	107	94.2	P/P	54 - 123
Oxadiazon	103	85.7	P/P	63 - 128
Parathion Ethyl	95.3	97.0	P/P	72 - 111
Parathion Methyl	102	114	P/P	74 - 126
Pendimethalin	82.4	89.0	P/P	61 - 131
Phorate	80.7	99.4	P/P	51 - 115
Prodiamine	72.9	69.8	P/P	38 - 144
Prometon	94.8	85.1	P/P	54 - 119

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P369752

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prometryn	100	84.9	P/P	63 - 120
Simazine	102	114	P/P	75 - 126
Tebuconazole	74.7	22.5	P/P	20 - 119
Terbufos	79.4	97.7	P/P	64 - 116
Terbutylazine	100	98.2	P/P	73 - 117

Reference Method: EPA 8270E
Batch ID: P369811

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	72.8	68.7	P/P	20 - 93.0
Alpha-BHC	108	107	P/P	55 - 133
Alpha-Chlordane	98.4	95.0	P/P	58 - 112
Beta-BHC	146	148	P/P	54 - 168
Bifenthrin	109	102	P/P	30 - 134
Carbophenothion	82.5	66.4	P/P	26 - 147
Chlorothalonil	169	169	F/F	20 - 155
Cis-Nonachlor	100	96.7	P/P	54 - 115
Cypermethrin	135	127	P/P	40 - 137
DDD-p,p'	108	105	P/P	65 - 129
DDE-p,p'	96.8	95.5	P/P	57 - 116
DDT-p,p'	126	124	P/P	53 - 133
Delta-BHC	153	155	P/P	59 - 178
Dicofol	103	106	P/P	24 - 138
Dieldrin	102	96.6	P/P	60 - 120
Endosulfan I	107	103	P/P	64 - 118
Endosulfan II	116	110	P/P	58 - 142
Endosulfan Sulfate	102	97.2	P/P	60 - 127
Endrin	103	101	P/P	59 - 122
Endrin Aldehyde	111	102	P/P	49 - 132
Endrin Ketone	93.9	94.9	P/P	64 - 121
Ethalfuralin	117	116	P/P	60 - 126
Gamma-BHC	125	127	P/P	57 - 154
Gamma-Chlordane	96.6	93.5	P/P	56 - 110
Heptachlor	90.2	85.5	P/P	46 - 96.0
Heptachlor Epoxide	99.9	97.0	P/P	61 - 112
Hexachlorobenzene	91.7	90.9	P/P	44 - 98.0
Methoxychlor	97.2	92.4	P/P	63 - 134
Mirex	75.2	71.6	P/P	45 - 100
Permethrin	100	86.4	P/P	53 - 115
Trans-Nonachlor	95.5	92.6	P/P	47 - 110
Trifluralin	114	111	P/P	39 - 142

Reference Method: EPA 8276
Batch ID: P369811

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	102	96.7	P/P	43 - 128
Toxaphene	81.2	83.9	P/P	38 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P369771

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	75.9		P	40 - 160
Aldicarb	66.4		P	30 - 160
Aldicarb Sulfone	92.7		P	40 - 160
Aldicarb Sulfoxide	69.7		P	40 - 160
Carbaryl	67.8		P	40 - 160
Carbofuran	82.8		P	40 - 160
Methiocarb	77.5		P	40 - 160
Methomyl	81.0		P	40 - 160
Oxamyl	96.2		P	40 - 160
Propoxur	85.9		P	40 - 160

Reference Method: EPA 8321B
Batch ID: P370004

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	110		P	40 - 160
Acetaminophen	73.1		P	30 - 160
Acetamiprid	87.0		P	40 - 160
Afidopyropen	99.1		P	40 - 160
Bentazon	90.4		P	30 - 160
Benzovindiflupyr	87.2		P	40 - 160
Carbamazepine	94.7		P	40 - 160
Clothianidin	94.1		P	40 - 160
Dinotefuran	82.7		P	40 - 160
Diuron	97.6		P	40 - 160
Fenuron	99.3		P	40 - 160
Fluridone	107		P	40 - 160
Hydrocodone	90.7		P	40 - 160
Ibuprofen	135		P	30 - 160
Imazapyr	75.9		P	40 - 160
Imidacloprid	94.2		P	40 - 160
Linuron	76.7		P	40 - 160
Mandestrobin	95.7		P	40 - 160
MCPP	139		P	40 - 160
Naproxen	112		P	40 - 160
Primidone	82.6		P	40 - 160
Pyraclostrobin	87.1		P	30 - 160
Thiamethoxam	91.7		P	40 - 160
Tolfenpyrad	70.6		P	40 - 160
Triclopyr	75.8		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P370034

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	150		P	40 - 150
AMPA	149		P	40 - 150
Endothall	109		P	40 - 150
Glufosinate	118		P	40 - 150
Glyphosate	130		P	40 - 140
Sucralose	101		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P369944

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

Reference Method: SM 2320 B-97
Batch ID: P370197

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	98 - 106

Reference Method: SM 2320 B-97
Batch ID: P370200

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	105		P	98 - 106

Reference Method: SM 2320 B-97
Batch ID: P370209

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	105		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P370202

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.1		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P370203

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.8		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P370211

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.5		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P370403

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.5		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P370115

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P370117

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	103		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P369935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115585	Barium	100		P	80 - 120
2115585	Calcium	107		P	80 - 120
2115585	Iron	104		P	80 - 120
2115585	Magnesium	104		P	80 - 120
2115585	Potassium	107		P	80 - 120
2115585	Sodium	99.1		P	80 - 120
2115585	Zinc	99.5		P	80 - 120
2115701	Barium	103	103	P/P	80 - 120
2115701	Calcium	110	110	P/P	80 - 120
2115701	Iron	107	107	P/P	80 - 120
2115701	Magnesium	111	112	P/P	80 - 120
2115701	Potassium	117	117	P/P	80 - 120
2115701	Sodium	105	105	P/P	80 - 120
2115701	Zinc	99.9	100	P/P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P369941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114477	Iron	103	99.9	P/P	70 - 130
2114477	Manganese	98.1	97.3	P/P	70 - 130
2114477	Zinc	106	106	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115585	Aluminum	101		P	80 - 120
2115585	Antimony	100		P	80 - 120
2115585	Arsenic	103		P	80 - 120
2115585	Boron	94.1		P	80 - 120
2115585	Cadmium	103		P	80 - 120
2115585	Chromium	91.7		P	80 - 120
2115585	Copper	99.9		P	80 - 120
2115585	Lead	107		P	80 - 120
2115585	Nickel	102		P	80 - 120
2115585	Selenium	98.7		P	80 - 120
2115585	Silver	102		P	80 - 120
2115585	Thallium	106		P	80 - 120
2115701	Aluminum	99.8	101	P/P	80 - 120
2115701	Antimony	99.1	99.7	P/P	80 - 120
2115701	Arsenic	100	102	P/P	80 - 120
2115701	Boron	94.1	91.1	P/P	80 - 120
2115701	Cadmium	102	100	P/P	80 - 120
2115701	Chromium	91.4	88.6	P/P	80 - 120
2115701	Copper	99.6	101	P/P	80 - 120
2115701	Lead	104	105	P/P	80 - 120
2115701	Nickel	99.1	101	P/P	80 - 120
2115701	Selenium	99.8	97.8	P/P	80 - 120
2115701	Silver	103	103	P/P	80 - 120
2115701	Thallium	101	106	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114477	Aluminum	107	109	P/P	70 - 130
2114477	Antimony	103	103	P/P	70 - 130
2114477	Arsenic	112	111	P/P	70 - 130
2114477	Cadmium	97.2	98.9	P/P	70 - 130
2114477	Chromium	97.1	96.5	P/P	70 - 130
2114477	Copper	99.3	100	P/P	70 - 130
2114477	Lead	103	104	P/P	70 - 130
2114477	Nickel	100	100	P/P	70 - 130
2114477	Selenium	108	105	P/P	70 - 130
2114477	Silver	95.4	95.2	P/P	70 - 130
2114477	Thallium	107	108	P/P	70 - 130

Reference Method: EPA 300.0
Batch ID: P370340

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2116013	Bromide	93.8	94.7	P/P	90 - 110
2116078	Bromide	94.6		P	90 - 110

Reference Method: EPA 300.0
Batch ID: P370412

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114910	Bromide	92.2	92.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370214

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115341	Chloride	101	104	P/P	90 - 110
2115493	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370217

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115341	Sulfate	101	104	P/P	90 - 110
2115493	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370158

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115317	Ammonia-N	100	97.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370237

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115536	Ammonia-N	99.3	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370238

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115685	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P369910

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115537	Kjeldahl Nitrogen	102	98.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370086

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115541	Kjeldahl Nitrogen	97.6	97.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370087

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115121	Kjeldahl Nitrogen	99.2	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370064

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115494	NO2NO3-N	94.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370120

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115057	NO2NO3-N	99.4	98.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370181

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115546	NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370388

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115544	NO2NO3-N	104	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370095

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115537	Total-P	100	108	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P370113

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114535	Total-P	96.4	96.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P370288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115322	Total-P	93.9	95.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P370289

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115544	Total-P	96.4	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P369959

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115545	O-Phosphate-P	97.2	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P369960

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115538	O-Phosphate-P	99.0	99.8	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P369752

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115570	Acetochlor	75.6	75.6	P/P	63 - 129
2115570	Alachlor	79.4	96.0	P/P	65 - 127
2115570	Ametryn	108	110	P/P	40 - 164
2115570	Atrazine Desethyl	123	127	P/P	14 - 157
2115570	Azinphos Methyl	98.9	95.8	P/P	49 - 180
2115570	Butylate	53.6	49.4	P/P	10 - 94.0
2115570	Chlorpyrifos Ethyl	93.2	92.4	P/P	58 - 123
2115570	Chlorpyrifos Methyl	95.7	94.3	P/P	58 - 125
2115570	Cyanazine	144	148	P/P	24 - 253
2115570	Demeton	114	112	P/P	25 - 149
2115570	Diazinon	95.8	97.0	P/P	59 - 144
2115570	Dimethenamid	61.6	58.1	P/P	46 - 139
2115570	Disulfoton	105	108	P/P	54 - 132
2115570	Dithiopyr	76.0	75.3	P/P	64 - 130
2115570	EPTC	57.6	51.8	P/P	10 - 92.0
2115570	Ethion	89.3	95.6	P/P	30 - 148
2115570	Ethoprop	108	108	P/P	50 - 130
2115570	Fenamiphos	48.5	47.6	F/F	49 - 142
2115570	Fipronil	81.6	77.6	P/P	46 - 140
2115570	Fipronil Desulfanyl	80.9	80.5	P/P	30 - 121
2115570	Fipronil Sulfide	90.4	87.7	P/P	31 - 136
2115570	Fipronil Sulfone	80.6	65.3	P/P	16 - 136

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P369752

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115570	Fonofos	110	104	P/P	55 - 129
2115570	Hexazinone	110	104	P/P	56 - 141
2115570	Malathion	61.6	53.5	P/F	56 - 135
2115570	Metalaxyl	82.4	76.4	P/P	54 - 135
2115570	Metolachlor	80.1	80.4	P/P	51 - 140
2115570	Metribuzin	307	322	F/F	45 - 254
2115570	Mevinphos	39.1	36.9	P/P	33 - 131
2115570	Molinate	68.6	62.3	P/P	14 - 98.0
2115570	Norflurazon	80.2	79.1	P/P	34 - 136
2115570	Oxadiazon	74.7	73.7	P/P	67 - 116
2115570	Parathion Ethyl	97.1	98.3	P/P	66 - 118
2115570	Parathion Methyl	114	114	P/P	64 - 136
2115570	Pendimethalin	96.5	96.5	P/P	59 - 144
2115570	Phorate	113	112	P/P	42 - 130
2115570	Prodiamine	75.5	74.7	P/P	42 - 148
2115570	Prometon	96.1	106	P/P	59 - 134
2115570	Prometryn	83.2	84.1	P/P	54 - 135
2115570	Simazine	102	110	P/P	53 - 156
2115570	Tebuconazole	24.9	20.0	P/P	10 - 131
2115570	Terbufos	113	115	P/P	57 - 131
2115570	Terbutylazine	94.8	97.9	P/P	68 - 125

Reference Method: EPA 8270E
Batch ID: P369811

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115386	Aldrin	72.4	76.2	P/P	25 - 92.0
2115386	Alpha-BHC	124	121	P/P	48 - 150
2115386	Alpha-Chlordane	96.6	98.4	P/P	50 - 115
2115386	Beta-BHC	146	142	P/P	39 - 184
2115386	Bifenthrin	106	109	P/P	46 - 116
2115386	Carbophenothion	123	125	P/P	27 - 180
2115386	Chlorothalonil	200	223	P/F	10 - 216
2115386	Cis-Nonachlor	99.5	99.9	P/P	55 - 112
2115386	Cypermethrin	134	138	P/P	40 - 153
2115386	DDD-p,p'	108	109	P/P	53 - 128
2115386	DDE-p,p'	99.4	100	P/P	48 - 116
2115386	DDT-p,p'	121	127	P/P	47 - 128
2115386	Delta-BHC	157	163	P/P	48 - 221
2115386	Dicofol	99.8	104	P/P	10 - 147
2115386	Dieldrin	102	102	P/P	48 - 128
2115386	Endosulfan I	107	108	P/P	58 - 126
2115386	Endosulfan II	117	114	P/P	50 - 150
2115386	Endosulfan Sulfate	101	100	P/P	56 - 130
2115386	Endrin	103	105	P/P	50 - 126
2115386	Endrin Aldehyde	106	106	P/P	12 - 145
2115386	Endrin Ketone	114	110	P/P	59 - 132
2115386	Ethalfuralin	116	121	P/P	65 - 122
2115386	Gamma-BHC	135	139	P/P	40 - 190
2115386	Gamma-Chlordane	95.9	96.3	P/P	50 - 112
2115386	Heptachlor	88.1	89.9	P/P	41 - 98.0
2115386	Heptachlor Epoxide	99.1	99.1	P/P	55 - 117

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P369811

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115386	Hexachlorobenzene	87.2	90.2	P/P	47 - 91.0
2115386	Methoxychlor	97.0	91.0	P/P	55 - 133
2115386	Mirex	72.8	76.1	P/P	44 - 101
2115386	Permethrin	95.3	97.8	P/P	52 - 124
2115386	Trans-Nonachlor	93.5	94.7	P/P	53 - 99.0
2115386	Trifluralin	113	118	P/P	10 - 201

Reference Method: EPA 8276

Batch ID: P369811

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115829	Chlordane	106	96.1	P/P	34 - 136
2115829	Toxaphene	88.1	82.8	P/P	22 - 152

Reference Method: EPA 8321B

Batch ID: P369771

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114831	3-Hydroxycarbofuran	89.3	90.4	P/P	40 - 160
2114831	Aldicarb	45.6	43.5	P/P	30 - 160
2114831	Aldicarb Sulfone	101	92.7	P/P	40 - 160
2114831	Aldicarb Sulfoxide	48.3	47.0	P/P	40 - 160
2114831	Carbaryl	66.9	71.0	P/P	40 - 160
2114831	Carbofuran	75.0	75.6	P/P	40 - 160
2114831	Methiocarb	73.0	71.3	P/P	40 - 160
2114831	Methomyl	78.4	75.4	P/P	40 - 160
2114831	Oxamyl	90.7	88.2	P/P	40 - 160
2114831	Propoxur	75.3	74.5	P/P	40 - 160

Reference Method: EPA 8321B

Batch ID: P370004

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115469	2,4-D	205	180	F/F	40 - 160
2115469	Acetaminophen	104	83.0	P/P	30 - 160
2115469	Acetamiprid	107	102	P/P	40 - 160
2115469	Afidopyropen	114	99.1	P/P	40 - 160
2115469	Bentazon	56.8	55.7	P/P	30 - 160
2115469	Benzovindiflupyr	114	101	P/P	40 - 160
2115469	Carbamazepine	121	109	P/P	40 - 160
2115469	Clothianidin	139	123	P/P	40 - 160
2115469	Dinotefuran	138	118	P/P	40 - 160
2115469	Diuron	115	102	P/P	40 - 160
2115469	Fenuron	102	93.6	P/P	40 - 160
2115469	Fluridone	127	109	P/P	40 - 160
2115469	Hydrocodone	121	114	P/P	40 - 160
2115469	Ibuprofen	150	144	P/P	30 - 160
2115469	Imazapyr	112	102	P/P	40 - 160
2115469	Imidacloprid	257	210	F/F	40 - 160
2115469	Linuron	87.8	77.1	P/P	40 - 160
2115469	Mandestrobin	113	103	P/P	40 - 160
2115469	MCP	238	221	F/F	40 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P370004

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115469	Naproxen	136	133	P/P	40 - 160
2115469	Primidone	117	112	P/P	40 - 160
2115469	Pyraclostrobin	109	108	P/P	30 - 160
2115469	Thiamethoxam	206	178	F/F	40 - 160
2115469	Tolfenpyrad	101	93.7	P/P	40 - 160
2115469	Triclopyr	162	137	F/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P370034

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115665	Acesulfame K	136	139	P/P	40 - 150
2115665	AMPA	150	153	P/F	40 - 150
2115665	Endothall	107	106	P/P	40 - 150
2115665	Glufosinate	119	118	P/P	40 - 150
2115665	Glyphosate	128	132	P/P	40 - 140
2115665	Sucralose	93.3	113	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P370202

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115450	Fluoride	94.7	94.7	P/P	89 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P370203

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115535	Fluoride	94.0	93.5	P/P	89 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P370211

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115531	Fluoride	97.5	96.9	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P370115

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115476	Organic Carbon	102	102	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P370117

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2115544	Organic Carbon	102	103	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P369967

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115540	Turbidity	2.88	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P369935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115701	Barium	0.253	Spike	P	0 - 20
2115701	Calcium	0.232	Spike	P	0 - 20
2115701	Iron	0.0594	Spike	P	0 - 20
2115701	Magnesium	0.171	Spike	P	0 - 20
2115701	Potassium	0.234	Spike	P	0 - 20
2115701	Sodium	0.0541	Spike	P	0 - 20
2115701	Zinc	0.342	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P369941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114477	Iron	2.82	Spike	P	0 - 20
2114477	Manganese	0.750	Spike	P	0 - 20
2114477	Zinc	0.160	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115701	Aluminum	1.19	Spike	P	0 - 20
2115701	Antimony	0.554	Spike	P	0 - 20
2115701	Arsenic	1.12	Spike	P	0 - 20
2115701	Boron	3.00	Spike	P	0 - 20
2115701	Cadmium	1.12	Spike	P	0 - 20
2115701	Chromium	3.07	Spike	P	0 - 20
2115701	Copper	0.998	Spike	P	0 - 20
2115701	Lead	0.766	Spike	P	0 - 20
2115701	Nickel	1.93	Spike	P	0 - 20
2115701	Selenium	2.01	Spike	P	0 - 20
2115701	Silver	0.253	Spike	P	0 - 20
2115701	Thallium	4.74	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114477	Aluminum	1.76	Spike	P	0 - 20
2114477	Antimony	0.393	Spike	P	0 - 20
2114477	Arsenic	0.691	Spike	P	0 - 20
2114477	Cadmium	1.79	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114477	Chromium	0.675	Spike	P	0 - 20
2114477	Copper	0.812	Spike	P	0 - 20
2114477	Lead	0.123	Spike	P	0 - 20
2114477	Nickel	0.0686	Spike	P	0 - 20
2114477	Selenium	3.00	Spike	P	0 - 20
2114477	Silver	0.128	Spike	P	0 - 20
2114477	Thallium	1.27	Spike	P	0 - 20

Reference Method: EPA 300.0
Batch ID: P370340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2116013	Bromide	0.722	Spike	P	0 - 20

Reference Method: EPA 300.0
Batch ID: P370412

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114910	Bromide	0.119	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370214

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115341	Chloride	1.95	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370217

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115341	Sulfate	2.59	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370158

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115317	Ammonia-N	2.01	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370237

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115536	Ammonia-N	0.986	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370238

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115685	Ammonia-N	0.243	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P369910

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115537	Kjeldahl Nitrogen	2.54	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370086

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115541	Kjeldahl Nitrogen	0.348	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370087

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115121	Kjeldahl Nitrogen	3.56	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370064

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115494	NO2NO3-N	0.181	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115057	NO2NO3-N	1.01	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370181

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115546	NO2NO3-N	0.445	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370388

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115544	NO2NO3-N	0.892	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370095

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115537	Total-P	6.56	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370113

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114535	Total-P	0.0955	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115322	Total-P	1.70	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370289

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115544	Total-P	0.984	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P369959

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115545	O-Phosphate-P	0.131	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P369960

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115538	O-Phosphate-P	0.751	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P369752

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115570	Acetochlor	0.0438	Spike	P	0 - 30
2115570	Alachlor	19.0	Spike	P	0 - 30
2115570	Ametryn	2.51	Spike	P	0 - 30
2115570	Atrazine	2.23	Spike	P	0 - 30
2115570	Atrazine Desethyl	2.31	Spike	P	0 - 30
2115570	Azinphos Methyl	3.10	Spike	P	0 - 30
2115570	Bromacil	2.11	Spike	P	0 - 30
2115570	Butylate	8.23	Spike	P	0 - 30
2115570	Chlorpyrifos Ethyl	0.822	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P369752

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115570	Chlorpyrifos Methyl	1.51	Spike	P	0 - 30
2115570	Cyanazine	2.78	Spike	P	0 - 30
2115570	Demeton	2.21	Spike	P	0 - 30
2115570	Diazinon	1.24	Spike	P	0 - 30
2115570	Dimethenamid	5.90	Spike	P	0 - 30
2115570	Disulfoton	2.61	Spike	P	0 - 30
2115570	Dithiopyr	0.944	Spike	P	0 - 30
2115570	EPTC	10.6	Spike	P	0 - 30
2115570	Ethion	6.86	Spike	P	0 - 30
2115570	Ethoprop	0.691	Spike	P	0 - 30
2115570	Fenamiphos	1.92	Spike	P	0 - 30
2115570	Fipronil	3.94	Spike	P	0 - 30
2115570	Fipronil Desulfinyl	0.411	Spike	P	0 - 30
2115570	Fipronil Sulfide	2.34	Spike	P	0 - 30
2115570	Fipronil Sulfone	12.6	Spike	P	0 - 30
2115570	Fonofos	4.99	Spike	P	0 - 30
2115570	Hexazinone	6.19	Spike	P	0 - 30
2115570	Malathion	14.0	Spike	P	0 - 30
2115570	Metalaxyl	7.54	Spike	P	0 - 30
2115570	Metolachlor	0.299	Spike	P	0 - 30
2115570	Metribuzin	3.53	Spike	P	0 - 30
2115570	Mevinphos	5.70	Spike	P	0 - 30
2115570	Molinate	9.64	Spike	P	0 - 30
2115570	Norflurazon	1.38	Spike	P	0 - 30
2115570	Oxadiazon	1.15	Spike	P	0 - 30
2115570	Parathion Ethyl	1.25	Spike	P	0 - 30
2115570	Parathion Methyl	0.272	Spike	P	0 - 30
2115570	Pendimethalin	0.00421	Spike	P	0 - 30
2115570	Phorate	0.909	Spike	P	0 - 30
2115570	Prodiamine	1.02	Spike	P	0 - 30
2115570	Prometon	7.25	Spike	P	0 - 30
2115570	Prometryn	1.08	Spike	P	0 - 30
2115570	Simazine	3.88	Spike	P	0 - 30
2115570	Tebuconazole	22.0	Spike	P	0 - 30
2115570	Terbufos	1.30	Spike	P	0 - 30
2115570	Terbuthylazine	3.18	Spike	P	0 - 30
LFB	Acetochlor	13.2	LCS	P	0 - 30
LFB	Alachlor	12.4	LCS	P	0 - 30
LFB	Ametryn	8.02	LCS	P	0 - 30
LFB	Atrazine	1.70	LCS	P	0 - 30
LFB	Atrazine Desethyl	61.7	LCS	F	0 - 30
LFB	Azinphos Methyl	8.99	LCS	P	0 - 30
LFB	Bromacil	21.8	LCS	P	0 - 30
LFB	Butylate	4.33	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.26	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	18.3	LCS	P	0 - 30
LFB	Cyanazine	110	LCS	F	0 - 30
LFB	Demeton	17.9	LCS	P	0 - 30
LFB	Diazinon	1.97	LCS	P	0 - 30
LFB	Dimethenamid	13.7	LCS	P	0 - 30
LFB	Disulfoton	17.8	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P369752

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dithiopyr	11.7	LCS	P	0 - 30
LFB	EPTC	11.4	LCS	P	0 - 30
LFB	Ethion	2.54	LCS	P	0 - 30
LFB	Ethoprop	20.0	LCS	P	0 - 30
LFB	Fenamiphos	36.8	LCS	F	0 - 30
LFB	Fipronil	26.9	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	17.6	LCS	P	0 - 30
LFB	Fipronil Sulfide	5.17	LCS	P	0 - 30
LFB	Fipronil Sulfone	9.85	LCS	P	0 - 30
LFB	Fonofos	28.1	LCS	P	0 - 30
LFB	Hexazinone	11.6	LCS	P	0 - 30
LFB	Malathion	77.7	LCS	F	0 - 30
LFB	Metaxyl	2.21	LCS	P	0 - 30
LFB	Metolachlor	15.0	LCS	P	0 - 30
LFB	Metribuzin	85.6	LCS	F	0 - 30
LFB	Mevinphos	17.7	LCS	P	0 - 30
LFB	Molinate	21.1	LCS	P	0 - 30
LFB	Norflurazon	12.3	LCS	P	0 - 30
LFB	Oxadiazon	18.1	LCS	P	0 - 30
LFB	Parathion Ethyl	1.76	LCS	P	0 - 30
LFB	Parathion Methyl	10.6	LCS	P	0 - 30
LFB	Pendimethalin	7.66	LCS	P	0 - 30
LFB	Phorate	20.8	LCS	P	0 - 30
LFB	Prodiamine	4.36	LCS	P	0 - 30
LFB	Prometon	10.8	LCS	P	0 - 30
LFB	Prometryn	16.5	LCS	P	0 - 30
LFB	Simazine	11.1	LCS	P	0 - 30
LFB	Tebuconazole	107	LCS	F	0 - 30
LFB	Terbufos	20.6	LCS	P	0 - 30
LFB	Terbutylazine	1.77	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P369811

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115386	Aldrin	5.12	Spike	P	0 - 30
2115386	Alpha-BHC	2.37	Spike	P	0 - 30
2115386	Alpha-Chlordane	1.88	Spike	P	0 - 30
2115386	Beta-BHC	2.63	Spike	P	0 - 30
2115386	Bifenthrin	3.15	Spike	P	0 - 30
2115386	Carbophenothion	1.87	Spike	P	0 - 30
2115386	Chlorothalonil	10.6	Spike	P	0 - 30
2115386	Cis-Nonachlor	0.422	Spike	P	0 - 30
2115386	Cypermethrin	3.41	Spike	P	0 - 30
2115386	DDD-p,p'	1.11	Spike	P	0 - 30
2115386	DDE-p,p'	0.787	Spike	P	0 - 30
2115386	DDT-p,p'	5.30	Spike	P	0 - 30
2115386	Delta-BHC	3.17	Spike	P	0 - 30
2115386	Dicofol	4.29	Spike	P	0 - 30
2115386	Dieldrin	0.0558	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P369811

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115386	Endosulfan I	0.608	Spike	P	0 - 30
2115386	Endosulfan II	1.96	Spike	P	0 - 30
2115386	Endosulfan Sulfate	0.824	Spike	P	0 - 30
2115386	Endrin	1.83	Spike	P	0 - 30
2115386	Endrin Aldehyde	0.311	Spike	P	0 - 30
2115386	Endrin Ketone	2.95	Spike	P	0 - 30
2115386	Ethalfuralin	4.42	Spike	P	0 - 30
2115386	Gamma-BHC	2.97	Spike	P	0 - 30
2115386	Gamma-Chlordane	0.420	Spike	P	0 - 30
2115386	Heptachlor	2.03	Spike	P	0 - 30
2115386	Heptachlor Epoxide	0.0456	Spike	P	0 - 30
2115386	Hexachlorobenzene	3.30	Spike	P	0 - 30
2115386	Methoxychlor	6.47	Spike	P	0 - 30
2115386	Mirex	4.34	Spike	P	0 - 30
2115386	Permethrin	2.58	Spike	P	0 - 30
2115386	Trans-Nonachlor	1.30	Spike	P	0 - 30
2115386	Trifluralin	4.44	Spike	P	0 - 30
LFB	Aldrin	5.75	LCS	P	0 - 30
LFB	Alpha-BHC	0.987	LCS	P	0 - 30
LFB	Alpha-Chlordane	3.58	LCS	P	0 - 30
LFB	Beta-BHC	1.64	LCS	P	0 - 30
LFB	Bifenthrin	6.99	LCS	P	0 - 30
LFB	Carbophenothion	21.7	LCS	P	0 - 30
LFB	Chlorothalonil	0.482	LCS	P	0 - 30
LFB	Cis-Nonachlor	3.82	LCS	P	0 - 30
LFB	Cypermethrin	6.03	LCS	P	0 - 30
LFB	DDD-p,p'	3.39	LCS	P	0 - 30
LFB	DDE-p,p'	1.41	LCS	P	0 - 30
LFB	DDT-p,p'	1.60	LCS	P	0 - 30
LFB	Delta-BHC	1.26	LCS	P	0 - 30
LFB	Dicofol	2.92	LCS	P	0 - 30
LFB	Dieldrin	5.67	LCS	P	0 - 30
LFB	Endosulfan I	4.35	LCS	P	0 - 30
LFB	Endosulfan II	4.93	LCS	P	0 - 30
LFB	Endosulfan Sulfate	5.16	LCS	P	0 - 30
LFB	Endrin	1.84	LCS	P	0 - 30
LFB	Endrin Aldehyde	7.91	LCS	P	0 - 30
LFB	Endrin Ketone	1.08	LCS	P	0 - 30
LFB	Ethalfuralin	1.36	LCS	P	0 - 30
LFB	Gamma-BHC	1.63	LCS	P	0 - 30
LFB	Gamma-Chlordane	3.30	LCS	P	0 - 30
LFB	Heptachlor	5.39	LCS	P	0 - 30
LFB	Heptachlor Epoxide	2.95	LCS	P	0 - 30
LFB	Hexachlorobenzene	0.953	LCS	P	0 - 30
LFB	Methoxychlor	5.02	LCS	P	0 - 30
LFB	Mirex	4.98	LCS	P	0 - 30
LFB	Permethrin	14.8	LCS	P	0 - 30
LFB	Trans-Nonachlor	3.08	LCS	P	0 - 30
LFB	Trifluralin	2.23	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P369811

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115829	Chlordane	9.49	Spike	P	0 - 30
2115829	Toxaphene	6.18	Spike	P	0 - 30
LFB	Chlordane	5.05	LCS	P	0 - 30
LFB	Toxaphene	3.25	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P369771

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114831	3-Hydroxycarbofuran	1.23	Spike	P	0 - 30
2114831	Aldicarb	4.70	Spike	P	0 - 30
2114831	Aldicarb Sulfone	8.18	Spike	P	0 - 30
2114831	Aldicarb Sulfoxide	2.92	Spike	P	0 - 30
2114831	Carbaryl	5.96	Spike	P	0 - 30
2114831	Carbofuran	0.718	Spike	P	0 - 30
2114831	Methiocarb	2.40	Spike	P	0 - 30
2114831	Methomyl	3.68	Spike	P	0 - 30
2114831	Oxamyl	2.83	Spike	P	0 - 30
2114831	Propoxur	1.08	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P370004

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115469	2,4-D	13.0	Spike	P	0 - 30
2115469	Acetaminophen	22.4	Spike	P	0 - 30
2115469	Acetamiprid	4.65	Spike	P	0 - 30
2115469	Afidopyropen	13.7	Spike	P	0 - 30
2115469	Bentazon	1.91	Spike	P	0 - 30
2115469	Benzovindiflupyr	11.5	Spike	P	0 - 30
2115469	Carbamazepine	10.1	Spike	P	0 - 30
2115469	Clothianidin	12.1	Spike	P	0 - 30
2115469	Dinotefuran	16.1	Spike	P	0 - 30
2115469	Diuron	11.9	Spike	P	0 - 30
2115469	Fenuron	8.16	Spike	P	0 - 30
2115469	Fluridone	15.8	Spike	P	0 - 30
2115469	Hydrocodone	6.14	Spike	P	0 - 30
2115469	Ibuprofen	4.27	Spike	P	0 - 30
2115469	Imazapyr	9.35	Spike	P	0 - 30
2115469	Imidacloprid	20.2	Spike	P	0 - 30
2115469	Linuron	12.9	Spike	P	0 - 30
2115469	Mandestrobin	9.43	Spike	P	0 - 30
2115469	MCCP	7.30	Spike	P	0 - 30
2115469	Naproxen	2.65	Spike	P	0 - 30
2115469	Primidone	4.61	Spike	P	0 - 30
2115469	Pyraclostrobin	1.19	Spike	P	0 - 30
2115469	Thiamethoxam	14.8	Spike	P	0 - 30
2115469	Tolfenpyrad	7.84	Spike	P	0 - 30
2115469	Triclopyr	17.1	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P370034

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115665	Acesulfame K	2.52	Spike	P	0 - 30
2115665	AMPA	2.19	Spike	P	0 - 30
2115665	Endothall	0.565	Spike	P	0 - 30
2115665	Glufosinate	0.959	Spike	P	0 - 30
2115665	Glyphosate	3.46	Spike	P	0 - 30
2115665	Sucralose	19.1	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P369944

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115534	Color (true)	3.87	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P370197

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115450	Total Alkalinity	0.287	Sample	P	0 - 2.8

Reference Method: SM 2320 B-97
Batch ID: P370200

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115535	Total Alkalinity	0.321	Sample	P	0 - 2.8

Reference Method: SM 2320 B-97
Batch ID: P370209

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115918	Total Alkalinity	0.386	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P370142

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115505	TDS	0.503	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P370202

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115450	Fluoride	0.0	Spike	P	0 - 2.5

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P370203

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115535	Fluoride	0.477	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-97
Batch ID: P370211

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115531	Fluoride	0.473	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-97
Batch ID: P370403

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2116620	Fluoride	0.471	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P370115

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115476	Organic Carbon	0.0	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P370117

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2115544	Organic Carbon	0.837	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: 2115567
Field Sample ID: G2NE1180

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	82.3	P	30 - 160

Lab Sample ID: 2115568
Field Sample ID: G2NE1180

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	99.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	93.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	105	P	30 - 160
EPA 8321B	Diuron-d6	96.1	P	30 - 160
EPA 8321B	Endothall-d6	380	F	30 - 160
EPA 8321B	Endothall-d6	380	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	120	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	120	P	30 - 160
EPA 8321B	Ibuprofen-d3	128	P	30 - 160
EPA 8321B	Primidone-d5	132	P	30 - 160
EPA 8321B	Sucralose-d6	123	P	30 - 160
EPA 8321B	Sucralose-d6	123	P	30 - 160

Lab Sample ID: 2115569
Field Sample ID: G2NE1180

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	85.9	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	73.2	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	52.5	P	30 - 103
EPA 8276	PCNB	114	P	37 - 143

Lab Sample ID: 2115570
Field Sample ID: G2NE1180

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	112	P	68 - 130
EPA 8270E	Terbufos-d10	109	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A93891

Included Lab Sample IDs: 2115534, 2115535, 2115540

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	100	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A93904

Included Lab Sample IDs: 2115533, 2115538, 2115539, 2115542, 2115545

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	99.2	P/P	90 - 110
O-Phosphate-P	99.2	98.8	P/P	90 - 110
O-Phosphate-P	99.3	99.6	P/P	90 - 110
O-Phosphate-P	99.6	98.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A93907

Included Lab Sample IDs: 2115531, 2115534, 2115535, 2115540, 2115543

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	100	P/P	95 - 105

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A93934

Included Lab Sample IDs: 2115536, 2115537

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	107	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A93936

Included Lab Sample IDs: 2115584, 2115585, 2115586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	101	P/P	90 - 110
Calcium	101	99.5	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Potassium	101	102	P/P	90 - 110
Zinc	97.2	97.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A93955

Included Lab Sample IDs: 2115536, 2115537

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A93961

Included Lab Sample IDs: 2115583

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A93961

Included Lab Sample IDs: 2115583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Manganese	103	102	P/P	90 - 110
Zinc	101	101	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A93968

Included Lab Sample IDs: 2115532, 2115536, 2115537, 2115541, 2115544

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	106	105	P/P	90 - 110
Organic Carbon	107	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A93970

Included Lab Sample IDs: 2115532

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A93971

Included Lab Sample IDs: 2115532

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A93975

Included Lab Sample IDs: 2115568

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	108	115	P/P	60 - 160
Glufosinate	89.1	103	P/P	60 - 160
Glyphosate	104	115	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A93977

Included Lab Sample IDs: 2115568

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	142	109	P/P	60 - 160
Endothall	120	112	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A93984

Included Lab Sample IDs: 2115541

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A93985

Included Lab Sample IDs: 2115532, 2115544

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	97.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A93986

Included Lab Sample IDs: 2115532, 2115544

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A93993

Included Lab Sample IDs: 2115584, 2115585, 2115586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sodium	96.5	96.8	P/P	95 - 105
Sodium	96.8	97.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A93996

Included Lab Sample IDs: 2115568

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	91.9	88.2	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A93999

Included Lab Sample IDs: 2115541

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A94000

Included Lab Sample IDs: 2115537

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

Reference Method: SM 2320 B-97

Run ID: A94004

Included Lab Sample IDs: 2115534, 2115535, 2115540

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	105	P/P	90 - 110
Total Alkalinity	105	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A94004

Included Lab Sample IDs: 2115534, 2115535, 2115540

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A94006

Included Lab Sample IDs: 2115536

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

Reference Method: SM 2320 B-97

Run ID: A94011

Included Lab Sample IDs: 2115531, 2115543

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	105	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A94011

Included Lab Sample IDs: 2115531

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A94012

Included Lab Sample IDs: 2115534, 2115535, 2115540

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	102	P/P	90 - 110
Sulfate	102	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A94019

Included Lab Sample IDs: 2115536, 2115537, 2115541

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

Reference Method: EPA 8276

Run ID: A94061

Included Lab Sample IDs: 2115569

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	93.3		P	80 - 120
Toxaphene	77.8*		F	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0
Run ID: A94066
Included Lab Sample IDs: 2115531

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

Reference Method: EPA 8270E
Run ID: A94080
Included Lab Sample IDs: 2115569

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	92.8		P	80 - 120
Alpha-BHC	94.5		P	80 - 120
Alpha-Chlordane	94.0		P	80 - 120
Beta-BHC	102		P	80 - 120
Bifenthrin	90.3		P	80 - 120
Carbophenothion	102		P	80 - 120
Chlorothalonil	97.1		P	80 - 120
Cis-Nonachlor	94.5		P	80 - 120
Cypermethrin	97.2		P	80 - 120
DDD-p,p'	95.6		P	80 - 120
DDE-p,p'	94.2		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	95.0		P	80 - 120
Dicofol	100		P	80 - 120
Dieldrin	94.9		P	80 - 120
Endosulfan I	94.7		P	80 - 120
Endosulfan II	99.7		P	80 - 120
Endosulfan Sulfate	96.1		P	80 - 120
Endrin	96.5		P	80 - 120
Endrin Aldehyde	93.7		P	80 - 120
Endrin Ketone	96.7		P	80 - 120
Ethalfuralin	92.7		P	80 - 120
Gamma-BHC	95.0		P	80 - 120
Gamma-Chlordane	94.3		P	80 - 120
Heptachlor	88.7		P	80 - 120
Heptachlor Epoxide	93.9		P	80 - 120
Hexachlorobenzene	98.6		P	80 - 120
Methoxychlor	98.7		P	80 - 120
Mirex	97.6		P	80 - 120
Permethrin	88.7		P	80 - 120
Trans-Nonachlor	94.3		P	80 - 120
Trifluralin	94.0		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A94085
Included Lab Sample IDs: 2115544

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A94087
Included Lab Sample IDs: 2115570

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	102		P	80 - 120
Ametryn	98.2		P	80 - 120
Atrazine	98.7		P	80 - 120
Atrazine Desethyl	105		P	80 - 120
Azinphos Methyl	94.7		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	96.8		P	80 - 120
Chlorpyrifos Ethyl	96.2		P	80 - 120
Chlorpyrifos Methyl	97.4		P	80 - 120
Cyanazine	95.3		P	80 - 120
Demeton	97.4		P	80 - 120
Diazinon	99.4		P	80 - 120
Dimethenamid	101		P	80 - 120
Disulfoton	99.2		P	80 - 120
Dithiopyr	98.8		P	80 - 120
EPTC	96.7		P	80 - 120
Ethion	97.4		P	80 - 120
Ethoprop	98.7		P	80 - 120
Fenamiphos	98.0		P	80 - 120
Fipronil	98.9		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	97.8		P	80 - 120
Fipronil Sulfone	98.5		P	80 - 120
Fonofos	98.2		P	80 - 120
Hexazinone	100		P	80 - 120
Malathion	97.5		P	80 - 120
Metaxyl	102		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	88.0		P	80 - 120
Mevinphos	99.9		P	80 - 120
Molinate	87.1		P	80 - 120
Norflurazon	98.9		P	80 - 120
Oxadiazon	102		P	80 - 120
Parathion Ethyl	98.0		P	80 - 120
Parathion Methyl	99.7		P	80 - 120
Pendimethalin	97.7		P	80 - 120
Phorate	97.5		P	80 - 120
Prodiamine	95.4		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	101		P	80 - 120
Simazine	100		P	80 - 120
Tebuconazole	100		P	80 - 120
Terbufos	98.2		P	80 - 120
Terbutylazine	98.1		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A94092
Included Lab Sample IDs: 2115541

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A94092

Included Lab Sample IDs: 2115541

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.6	98.3	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A94093

Included Lab Sample IDs: 2115543

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A94096

Included Lab Sample IDs: 2115544

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.5	99.8	P/P	90 - 110

Reference Method: EPA 300.0

Run ID: A94097

Included Lab Sample IDs: 2115543

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

Reference Method: EPA 8321B

Run ID: A94124

Included Lab Sample IDs: 2115568

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	99.5	115	P/P	50 - 150
3-Hydroxycarbofuran	102	106	P/P	60 - 150
Acetaminophen	96.0	101	P/P	60 - 160
Acetamiprid	108	107	P/P	50 - 150
Afidopyropen	104	100	P/P	50 - 150
Aldicarb	103	99.0	P/P	60 - 150
Aldicarb Sulfone	105	103	P/P	50 - 150
Aldicarb Sulfoxide	105	104	P/P	50 - 150
Bentazon	93.6	93.3	P/P	50 - 160
Benzovindiflupyr	105	107	P/P	50 - 150
Carbamazepine	112	114	P/P	60 - 150
Carbaryl	87.4	101	P/P	60 - 150
Carbofuran	109	113	P/P	50 - 150
Clothianidin	106	111	P/P	60 - 150
Dinotefuran	95.4	97.8	P/P	50 - 150
Diuron	108	93.9	P/P	60 - 150
Fenuron	106	111	P/P	60 - 150
Fluridone	117	122	P/P	60 - 160
Hydrocodone	102	113	P/P	60 - 150
Ibuprofen	105	103	P/P	50 - 160
Imazapyr	77.5	89.4	P/P	50 - 150
Imidacloprid	100	103	P/P	60 - 150
Linuron	89.5	92.4	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A94124

Included Lab Sample IDs: 2115568

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Mandestrobin	120	121	P/P	50 - 150
MCP	123	124	P/P	50 - 150
Methiocarb	100	105	P/P	50 - 150
Methomyl	102	102	P/P	50 - 150
Naproxen	121	119	P/P	50 - 160
Oxamyl	106	105	P/P	50 - 150
Primidone	99.4	99.9	P/P	60 - 150
Propoxur	109	108	P/P	50 - 150
Pyraclostrobin	115	120	P/P	60 - 150
Thiamethoxam	104	107	P/P	50 - 150
Tolfenpyrad	130	139	P/P	60 - 150
Triclopyr	115	126	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94164

Included Lab Sample IDs: 2115583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	103	101	P/P	90 - 110
Antimony	97.8	99.1	P/P	90 - 110
Arsenic	101	99.1	P/P	90 - 110
Cadmium	95.8	97.2	P/P	90 - 110
Copper	98.2	96.1	P/P	90 - 110
Lead	94.8	95.1	P/P	90 - 110
Nickel	99.5	96.5	P/P	90 - 110
Selenium	98.3	98.1	P/P	90 - 110
Silver	96.6	97.1	P/P	90 - 110
Thallium	92.6	92.6	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94323

Included Lab Sample IDs: 2115584, 2115585, 2115586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	100	P/P	90 - 110
Aluminum	103	102	P/P	90 - 110
Antimony	97.8	96.3	P/P	90 - 110
Antimony	99.1	97.8	P/P	90 - 110
Arsenic	102	101	P/P	90 - 110
Arsenic	104	102	P/P	90 - 110
Cadmium	102	101	P/P	90 - 110
Cadmium	102	102	P/P	90 - 110
Copper	102	100	P/P	90 - 110
Copper	104	102	P/P	90 - 110
Lead	104	104	P/P	90 - 110
Lead	105	104	P/P	90 - 110
Nickel	102	100	P/P	90 - 110
Nickel	103	102	P/P	90 - 110
Selenium	102	101	P/P	90 - 110
Selenium	105	102	P/P	90 - 110
Thallium	94.8	94.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94323

Included Lab Sample IDs: 2115584, 2115585, 2115586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Thallium	96.3	94.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94342

Included Lab Sample IDs: 2115584, 2115585, 2115586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	92.2	93.2	P/P	90 - 110
Boron	94.6	92.2	P/P	90 - 110
Chromium	90.7	92.6	P/P	90 - 110
Chromium	99.4	90.7	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94372

Included Lab Sample IDs: 2115584, 2115585, 2115586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	97.4	98.8	P/P	90 - 110
Silver	99.3	97.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94383

Included Lab Sample IDs: 2115583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	102	99.5	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						2.88	
EPA 200.7 Rev. 4.4	Barium	102	100	103	103			0.253
	Calcium	109	107	110	110			0.232
	Iron	104	104	107	107			0.0594
	Iron	107	103	99.9				2.82
	Magnesium	109	104	111	112			0.171
	Manganese	104	98.1	97.3				0.750
	Potassium	109	107	117	117			0.234
	Sodium	106	99.1	105	105			0.0541
	Zinc	98.8	99.5	99.9	100			0.342
	Zinc	103	106	106				0.160
EPA 200.8 Rev. 5.4	Aluminum	102	101	99.8	101			1.19
	Aluminum	100	107	109				1.76
	Antimony	101	100	99.1	99.7			0.554
	Antimony	98.4	103	103				0.393
	Arsenic	105	103	100	102			1.12
	Arsenic	103	112	111				0.691
	Boron	92.2	94.1	94.1	91.1			3.00
	Cadmium	101	103	102	100			1.12
	Cadmium	100	97.2	98.9				1.79
	Chromium	90.1	91.7	91.4	88.6			3.07
	Chromium	100	97.1	96.5				0.675
	Copper	102	99.9	99.6	101			0.998
	Copper	99.5	99.3	100				0.812
	Lead	104	107	104	105			0.766
	Lead	98.0	103	104				0.123
	Nickel	103	102	99.1	101			1.93
	Nickel	101	100	100				0.0686
	Selenium	103	98.7	99.8	97.8			2.01
	Selenium	98.3	108	105				3.00
	Silver	105	102	103	103			0.253
	Silver	101	95.4	95.2				0.128
	Thallium	101	106	101	106			4.74
	Thallium	103	107	108				1.27
EPA 300.0	Bromide	97.8	93.8	94.7	94.6			0.722
	Bromide	95.6	92.2	92.4				0.119
EPA 300.0 Rev. 2.1	Chloride	101	101	104	102			1.95
	Sulfate	102	101	104	100			2.59
EPA 350.1 Rev. 2.0	Ammonia-N	94.3	100	97.2				2.01
	Ammonia-N	101	99.3	101				0.986
	Ammonia-N	94.5	102	102				0.243
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	102	98.1				2.54
	Kjeldahl Nitrogen	94.8	97.6	97.0				0.348
	Kjeldahl Nitrogen	97.7	99.2	105				3.56
EPA 353.2 Rev. 2.0	NO2NO3-N	100	94.5					0.181
	NO2NO3-N	102	99.4	98.4				1.01
	NO2NO3-N	102	101	101				0.445
	NO2NO3-N	101	104	102				0.892
EPA 365.1 Rev. 2.0	Total-P	99.3	100	108				6.56
	Total-P	93.2	96.4	96.4				0.0955
	Total-P	96.4	93.9	95.7				1.70
	Total-P	94.9	96.4	97.4				0.984
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	97.2	97.4				0.131
	O-Phosphate-P	100	99.0	99.8				0.751

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Acetochlor	99.7	87.4	75.6	75.6	13.2		0.0438
	Alachlor	95.0	84.0	79.4	96.0	12.4		19.0
	Aldrin	72.8	68.7	76.2	72.4	5.75		5.12
	Alpha-BHC	108	107	124	121	0.987		2.37
	Alpha-Chlordane	98.4	95.0	96.6	98.4	3.58		1.88
	Ametryn	98.8	91.2	108	110	8.02		2.51
	Atrazine	104	106			1.70		2.23
	Atrazine Desethyl	72.1	136	123	127	61.7		2.31
	Azinphos Methyl	98.9	108	98.9	95.8	8.99		3.10
	Beta-BHC	146	148	146	142	1.64		2.63
	Bifenthrin	109	102	106	109	6.99		3.15
	Bromacil	95.8	77.0			21.8		2.11
	Butylate	60.1	57.6	53.6	49.4	4.33		8.23
	Carbophenothion	82.5	66.4	123	125	21.7		1.87
	Chlorothalonil	169	169	200	223	0.482		10.6
	Chlorpyrifos Ethyl	93.8	97.9	93.2	92.4	4.26		0.822
	Chlorpyrifos Methyl	85.9	103	95.7	94.3	18.3		1.51
	Cis-Nonachlor	100	96.7	99.9	99.5	3.82		0.422
	Cyanazine	86.8	298	144	148	110		2.78
	Cypermethrin	135	127	138	134	6.03		3.41
	DDD-p,p'	108	105	109	108	3.39		1.11
	DDE-p,p'	96.8	95.5	100	99.4	1.41		0.787
	DDT-p,p'	126	124	127	121	1.60		5.30
	Delta-BHC	153	155	157	163	1.26		3.17
	Demeton	65.3	78.2	114	112	17.9		2.21
	Diazinon	95.1	97.0	95.8	97.0	1.97		1.24
	Dicofol	103	106	104	99.8	2.92		4.29
	Dieldrin	102	96.6	102	102	5.67		0.0558
	Dimethenamid	98.3	85.8	61.6	58.1	13.7		5.90
	Disulfoton	73.4	87.8	105	108	17.8		2.61
	Dithiopyr	98.4	87.5	76.0	75.3	11.7		0.944
	Endosulfan I	107	103	108	107	4.35		0.608
	Endosulfan II	116	110	114	117	4.93		1.96
	Endosulfan Sulfate	102	97.2	100	101	5.16		0.824
	Endrin	103	101	105	103	1.84		1.83
	Endrin Aldehyde	111	102	106	106	7.91		0.311
	Endrin Ketone	93.9	94.9	110	114	1.08		2.95
	EPTC	57.2	64.2	57.6	51.8	11.4		10.6
	Ethalfuralin	117	116	116	121	1.36		4.42
	Ethion	100	97.7	89.3	95.6	2.54		6.86
	Ethoprop	83.0	101	108	108	20.0		0.691
	Fenamiphos	83.1	57.3	48.5	47.6	36.8		1.92
	Fipronil	107	81.3	81.6	77.6	26.9		3.94
	Fipronil Desulfinyl	102	85.3	80.9	80.5	17.6		0.411
	Fipronil Sulfide	102	96.9	90.4	87.7	5.17		2.34
	Fipronil Sulfone	100	90.6	80.6	65.3	9.85		12.6
	Fonofos	76.6	102	110	104	28.1		4.99
	Gamma-BHC	125	127	135	139	1.63		2.97
	Gamma-Chlordane	96.6	93.5	95.9	96.3	3.30		0.420
	Heptachlor	90.2	85.5	88.1	89.9	5.39		2.03
	Heptachlor Epoxide	99.9	97.0	99.1	99.1	2.95		0.0456
	Hexachlorobenzene	91.7	90.9	87.2	90.2	0.953		3.30
	Hexazinone	114	101	110	104	11.6		6.19
	Malathion	106	46.8	61.6	53.5	77.7		14.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Metalaxyl	91.2	89.2	82.4	76.4	2.21	7.54
	Methoxychlor	97.2	92.4	97.0	91.0	5.02	6.47
	Metolachlor	99.9	86.0	80.1	80.4	15.0	0.299
	Metribuzin	88.2	220	307	322	85.6	3.53
	Mevinphos	71.0	84.8	39.1	36.9	17.7	5.70
	Mirex	75.2	71.6	72.8	76.1	4.98	4.34
	Molinate	59.7	73.7	68.6	62.3	21.1	9.64
	Norflurazon	107	94.2	80.2	79.1	12.3	1.38
	Oxadiazon	103	85.7	74.7	73.7	18.1	1.15
	Parathion Ethyl	95.3	97.0	97.1	98.3	1.76	1.25
	Parathion Methyl	102	114	114	114	10.6	0.272
	Pendimethalin	82.4	89.0	96.5	96.5	7.66	0.0042
	Permethrin	100	86.4	95.3	97.8	14.8	2.58
	Phorate	80.7	99.4	113	112	20.8	0.909
	Prodiamine	72.9	69.8	75.5	74.7	4.36	1.02
	Prometon	94.8	85.1	96.1	106	10.8	7.25
	Prometryn	100	84.9	83.2	84.1	16.5	1.08
	Simazine	102	114	102	110	11.1	3.88
	Tebuconazole	74.7	22.5	24.9	20.0	107	22.0
	Terbufos	79.4	97.7	113	115	20.6	1.30
	Terbuthylazine	100	98.2	94.8	97.9	1.77	3.18
	Trans-Nonachlor	95.5	92.6	93.5	94.7	3.08	1.30
	Trifluralin	114	111	113	118	2.23	4.44
EPA 8276	Chlordane	102	96.7	106	96.1	5.05	9.49
	Toxaphene	81.2	83.9	88.1	82.8	3.25	6.18
EPA 8321B	2,4-D	110		205	180		13.0
	3-Hydroxycarbofuran	75.9		89.3	90.4		1.23
	Acesulfame K	150		136	139		2.52
	Acetaminophen	73.1		104	83.0		22.4
	Acetamiprid	87.0		107	102		4.65
	Afidopyropen	99.1		114	99.1		13.7
	Aldicarb	66.4		45.6	43.5		4.70
	Aldicarb Sulfone	92.7		101	92.7		8.18
	Aldicarb Sulfoxide	69.7		48.3	47.0		2.92
	AMPA	149		150	153		2.19
	Bentazon	90.4		56.8	55.7		1.91
	Benzovindiflupyr	87.2		114	101		11.5
	Carbamazepine	94.7		121	109		10.1
	Carbaryl	67.8		66.9	71.0		5.96
	Carbofuran	82.8		75.0	75.6		0.718
	Clothianidin	94.1		139	123		12.1
	Dinotefuran	82.7		138	118		16.1
	Diuron	97.6		115	102		11.9
	Endothall	109		107	106		0.565
	Fenuron	99.3		102	93.6		8.16
	Fluridone	107		127	109		15.8
	Glufosinate	118		119	118		0.959
	Glyphosate	130		128	132		3.46
	Hydrocodone	90.7		121	114		6.14
	Ibuprofen	135		150	144		4.27
	Imazapyr	75.9		112	102		9.35
	Imidacloprid	94.2		257	210		20.2
	Linuron	76.7		87.8	77.1		12.9
	Mandestrobin	95.7		113	103		9.43

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	MCCP	139	238	221		7.30
	Methiocarb	77.5	73.0	71.3		2.40
	Methomyl	81.0	78.4	75.4		3.68
	Naproxen	112	136	133		2.65
	Oxamyl	96.2	90.7	88.2		2.83
	Primidone	82.6	117	112		4.61
	Propoxur	85.9	75.3	74.5		1.08
	Pyraclostrobin	87.1	109	108		1.19
	Sucralose	101	93.3	113		19.1
	Thiamethoxam	91.7	206	178		14.8
	Tolfenpyrad	70.6	101	93.7		7.84
	Triclopyr	75.8	162	137		17.1
SM 2120 B	Color (true)	101			3.87	
SM 2320 B-97	Total Alkalinity	104			0.287	
	Total Alkalinity	105			0.321	
	Total Alkalinity	105			0.386	
SM 2540 C-97	TDS				0.503	
SM 4500 F-C-97	Fluoride	97.1	94.7	94.7		0.0
	Fluoride	94.8	94.0	93.5		0.477
	Fluoride	96.5	97.5	96.9		0.473
	Fluoride	96.5				0.471
SM 5310 B-00	Organic Carbon	102	102	102		0.0
	Organic Carbon	103	102	103		0.837

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2115531, 2115534, 2115535, 2115540, 2115543
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2115583, 2115584, 2115585, 2115586
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2115583, 2115584, 2115585, 2115586
EPA 300.0 / E31780	Bromide in aqueous matrices	2115531, 2115543
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2115534, 2115535, 2115540
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2115534, 2115535, 2115540
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2115532, 2115536, 2115537, 2115541, 2115544
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2115532, 2115536, 2115537, 2115541, 2115544
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2115532, 2115536, 2115537, 2115541, 2115544
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2115532, 2115536, 2115537, 2115541, 2115544
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2115533, 2115538, 2115539, 2115542, 2115545
EPA 8270E / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2115569
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2115570
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2115569
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2115567
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2115568
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2115568

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2120 B / E31780	True Color measured at 450 nm	2115534, 2115535, 2115540
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2115531, 2115534, 2115535, 2115540, 2115543
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2115534, 2115535, 2115540
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2115531, 2115534, 2115535, 2115540, 2115543
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2115531, 2115534, 2115535, 2115540, 2115543
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2115532, 2115536, 2115537, 2115541, 2115544

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	08/29/2019			08/29/2019 17:38	Rosalyn Ballman	2115531, 2115534, 2115535, 2115540, 2115543
EPA 200.7 Rev. 4.4	08/29/2019	08/29/2019 16:50	Elliott D. Healy	08/30/2019 17:53	Alexander Thompson	2115584
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	08/30/2019 18:01	Alexander Thompson	2115585
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	08/30/2019 18:20	Alexander Thompson	2115586
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/03/2019 12:09	Alexander Thompson	2115583
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/04/2019 12:37	Alexander Thompson	2115584
EPA 200.8 Rev. 5.4	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/04/2019 12:41	Alexander Thompson	2115585
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/04/2019 13:03	Alexander Thompson	2115586
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/11/2019 23:40	Justin Cutchin	2115583
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/17/2019 17:41	Robert K Palmer	2115584
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/17/2019 18:20	Robert K Palmer	2115585
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/17/2019 18:49	Robert K Palmer	2115586
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/18/2019 16:41	Robert K Palmer	2115584
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/18/2019 16:59	Robert K Palmer	2115585
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/18/2019 17:11	Robert K Palmer	2115586
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/19/2019 12:16	Justin Cutchin	2115583
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/19/2019 19:28	Robert K Palmer	2115584
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/19/2019 19:46	Robert K Palmer	2115585
	08/29/2019	08/29/2019 16:50	Elliott D. Healy	09/19/2019 19:58	Robert K Palmer	2115586
EPA 300.0	08/29/2019			09/06/2019 18:51	Jhamieka S. Greenwood	2115531
	08/29/2019			09/09/2019 20:18	Jhamieka S. Greenwood	2115543
EPA 300.0 Rev. 2.1	08/29/2019			09/05/2019 02:04	Jhamieka S. Greenwood	2115534
	08/29/2019			09/05/2019 02:16	Jhamieka S. Greenwood	2115535
	08/29/2019			09/05/2019 02:28	Jhamieka S. Greenwood	2115540
EPA 350.1 Rev. 2.0	08/29/2019			09/04/2019 14:10	Ping Hua	2115544
	08/29/2019			09/04/2019 14:31	Ping Hua	2115532
	08/29/2019			09/05/2019 13:01	Ping Hua	2115536
	08/29/2019			09/05/2019 13:19	Ping Hua	2115537
	08/29/2019			09/05/2019 13:44	Ping Hua	2115541
EPA 351.2 Rev. 2.0	08/29/2019	08/29/2019 13:50	Sima Feizi	08/30/2019 15:34	Joseph Suarez	2115536
	08/29/2019	08/29/2019 13:50	Sima Feizi	08/30/2019 15:36	Joseph Suarez	2115537
	08/29/2019	09/03/2019 16:50	Jhamieka S. Greenwood	09/04/2019 15:28	Julia Storbeck	2115541
	08/29/2019	09/03/2019 16:50	Jhamieka S. Greenwood	09/04/2019 19:00	Julia Storbeck	2115532
	08/29/2019	09/03/2019 16:50	Jhamieka S. Greenwood	09/04/2019 19:02	Julia Storbeck	2115544
EPA 353.2 Rev. 2.0	08/29/2019			09/03/2019 12:54	Beverly Y. Sanders	2115536
	08/29/2019			09/03/2019 12:55	Beverly Y. Sanders	2115537
	08/29/2019			09/04/2019 09:45	Beverly Y. Sanders	2115532
	08/29/2019			09/05/2019 09:47	Beverly Y. Sanders	2115541
	08/29/2019			09/10/2019 08:07	Beverly Y. Sanders	2115544

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0	08/29/2019	09/03/2019 13:30	Lipi Saha	09/04/2019 10:31	Lipi Saha	2115532
	08/29/2019	09/04/2019 07:24	Joseph Suarez	09/05/2019 12:07	Lipi Saha	2115537
	08/29/2019	09/04/2019 07:24	Joseph Suarez	09/05/2019 13:26	Lipi Saha	2115536
	08/29/2019	09/06/2019 13:30	Lipi Saha	09/09/2019 14:00	Rosalyn Ballman	2115541
	08/29/2019	09/06/2019 13:30	Lipi Saha	09/09/2019 15:34	Rosalyn Ballman	2115544
EPA 365.1 Rev. 2.0 dissolved	08/29/2019			08/29/2019 17:33	Jhamieka S. Greenwood	2115545
	08/29/2019			08/29/2019 17:41	Jhamieka S. Greenwood	2115538
	08/29/2019			08/29/2019 17:59	Jhamieka S. Greenwood	2115533
	08/29/2019			08/29/2019 18:05	Jhamieka S. Greenwood	2115539
	08/29/2019			08/29/2019 18:06	Jhamieka S. Greenwood	2115542
EPA 8270E	08/29/2019	08/30/2019 06:30	Rasheda Ghaffari	09/06/2019 22:47	Arthur Maknenko	2115569
	08/29/2019	08/30/2019 09:00	Fe-Val Siddell	09/04/2019 17:04	Vandana T. Nagar	2115570
EPA 8276	08/29/2019	08/30/2019 06:30	Rasheda Ghaffari	09/06/2019 09:11	Luis Flores	2115569
EPA 8321B	08/29/2019	08/30/2019 12:30	Hoor Shaik	08/31/2019 23:09	Juyoung Kim	2115567
	08/29/2019	09/03/2019 10:00	Rebecca Ware	09/03/2019 11:31	Rebecca Ware	2115568
	08/29/2019	09/03/2019 10:00	Rebecca Ware	09/03/2019 17:13	Rebecca Ware	2115568
	08/29/2019	09/03/2019 10:00	Rebecca Ware	09/04/2019 16:55	Rebecca Ware	2115568
	08/29/2019	09/04/2019 07:00	Fe-Val Siddell	09/05/2019 17:07	Juyoung Kim	2115568
SM 2120 B	08/29/2019			08/29/2019 16:44	Madeline Funaro	2115534
	08/29/2019			08/29/2019 16:45	Madeline Funaro	2115535
	08/29/2019			08/29/2019 16:46	Madeline Funaro	2115540
SM 2320 B-97	08/29/2019			09/04/2019 03:02	Dale L. Simmons	2115534
	08/29/2019			09/04/2019 05:22	Dale L. Simmons	2115535
	08/29/2019			09/04/2019 05:43	Dale L. Simmons	2115540
	08/29/2019			09/05/2019 04:58	Dale L. Simmons	2115531
	08/29/2019			09/05/2019 07:15	Dale L. Simmons	2115543
SM 2540 C-97	08/29/2019			08/30/2019 17:48	Rosalyn Ballman	2115534, 2115535, 2115540
SM 2540 D-97	08/29/2019			08/30/2019 15:41	Yijie Li	2115543
	08/29/2019			08/30/2019 17:48	Rosalyn Ballman	2115531, 2115534, 2115535, 2115540
SM 4500 F-C-97	08/29/2019			09/04/2019 03:02	Dale L. Simmons	2115534
	08/29/2019			09/04/2019 05:12	Dale L. Simmons	2115535
	08/29/2019			09/04/2019 05:43	Dale L. Simmons	2115540
	08/29/2019			09/05/2019 01:54	Dale L. Simmons	2115531
	08/29/2019			09/09/2019 22:30	Dale L. Simmons	2115543
SM 5310 B-00	08/29/2019			09/03/2019 20:16	Madeline Funaro	2115532
	08/29/2019			09/03/2019 20:28	Madeline Funaro	2115536
	08/29/2019			09/03/2019 20:42	Madeline Funaro	2115537
	08/29/2019			09/03/2019 20:54	Madeline Funaro	2115541
	08/29/2019			09/04/2019 04:44	Madeline Funaro	2115544