

Chemical Analysis Report

NE-DIST-2018-08-01-02

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

Event Description: **LSJR Southside 1**

Request ID: **RQ-2018-07-23-18**

Customer: **NE-DIST**

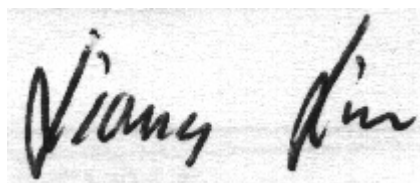
Project ID: **SMP**

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 22-AUG-2018 15:30

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

Case Narrative

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

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

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

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

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited or where accreditation for that field of testing is not applicable.

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: MILLER CR @ SCHUMACHER

Collection Date/Time: 07/31/2018 10:00

Field ID: 20030794

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2012186	EPA 8321B	2,4-D	0.0020	U	ug/L	P349361	MS
		Sucralose**	0.33		ug/L	P349535	
		Bentazon	0.0029	I	ug/L	P349361	
		MCP	0.0020	U	ug/L	P349361	
		Triclopyr**	0.0040	U	ug/L	P349361	
		Imidacloprid	0.040		ug/L	P349361	
		Diuron	0.0020	U	ug/L	P349361	
		Pyraclostrobin**	0.0020	U	ug/L	P349361	
		Primidone**	0.0040	U	ug/L	P349361	
		Linuron	0.0040	U	ug/L	P349361	
		Acetaminophen**	0.0080	U	ug/L	P349361	
		Fenuron	0.016	U	ug/L	P349361	
		Imazapyr**	0.016	I	ug/L	P349361	
		Carbamazepine**	8.0E-04	U	ug/L	P349361	
		Fluridone**	4.0E-04	U	ug/L	P349361	
		Hydrocodone**	8.0E-04	U	ug/L	P349361	
		Naproxen**	0.0080	U	ug/L	P349361	
		Ibuprofen**	0.020	U	ug/L	P349361	

Sample Location: MILLER CR @ BEACH BLVD

Collection Date/Time: 07/31/2018 09:45

Field ID: 20030828

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2012163	EPA 180.1 Rev. 2.0	Turbidity	6.7		NTU	P349508	
	EPA 300.0 Rev. 2.1	Chloride	25		mg Cl/L	P349593	MS
		Sulfate	53		mg SO4/L	P349596	
	SM 2120 B	Color (true)	62		PCU	P349504	
	SM 2320 B-97	Total Alkalinity	87		mg CaCO3/L	P349652	
	SM 2540 C-97	TDS	230		mg/L	P349797	
	SM 2540 D-97	TSS	2	I	mg/L	P349952	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P349655	
2012164	EPA 350.1 Rev. 2.0	Ammonia-N	0.18		mg N/L	P349684	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.65		mg N/L	P349539	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.48		mg N/L	P349615	
	EPA 365.1 Rev. 2.0	Total-P	0.059		mg P/L	P349562	
	SM 5310 B-00	Organic Carbon	7.7		mg C/L	P349733	
2012165	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.030		mg P/L	P349501	
2012187	EPA 8321B	2,4-D	0.0020	U	ug/L	P349361	MS
		Sucralose**	0.46		ug/L	P349535	
		Bentazon	0.0030	I	ug/L	P349361	
		MCP	0.0020	U	ug/L	P349361	
		Triclopyr**	0.0040	U	ug/L	P349361	
		Imidacloprid	0.028		ug/L	P349361	
		Diuron	0.0020	U	ug/L	P349361	
		Pyraclostrobin**	0.0020	U	ug/L	P349361	
		Primidone**	0.0040	U	ug/L	P349361	
		Linuron	0.0040	U	ug/L	P349361	
		Acetaminophen**	0.0080	U	ug/L	P349361	
		Fenuron	0.016	U	ug/L	P349361	
		Imazapyr**	0.016	I	ug/L	P349361	
		Carbamazepine**	8.0E-04	U	ug/L	P349361	
		Fluridone**	4.0E-04	U	ug/L	P349361	
		Hydrocodone**	8.0E-04	U	ug/L	P349361	
		Naproxen**	0.0080	U	ug/L	P349361	
		Ibuprofen**	0.020	U	ug/L	P349361	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

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

Sample Location: BIG POTTSBURG @ BOWDEN

Collection Date/Time: 07/31/2018 09:05

Field ID: 20030068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2012160	EPA 180.1 Rev. 2.0	Turbidity	3.3		NTU	P349508	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P349593	MS
		Sulfate	16		mg SO4/L	P349596	
	SM 2120 B	Color (true)	80	A	PCU	P349504	
	SM 2320 B-97	Total Alkalinity	53		mg CaCO3/L	P349652	
	SM 2540 C-97	TDS	123		mg/L	P349797	
	SM 2540 D-97	TSS	4	I	mg/L	P349952	
	SM 4500 F-C-97	Fluoride	0.082	I	mg F/L	P349655	
2012161	EPA 350.1 Rev. 2.0	Ammonia-N	0.041		mg N/L	P349684	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.55		mg N/L	P349539	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.083		mg N/L	P349615	
	EPA 365.1 Rev. 2.0	Total-P	0.083		mg P/L	P349562	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P349733	
2012162	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.052		mg P/L	P349501	
2012184	EPA 8321B	2,4-D	0.054		ug/L	P349361	MS
		Sucralose**	0.080		ug/L	P349535	
		Bentazon	0.018		ug/L	P349361	
		MCP	0.0026	I	ug/L	P349361	
		Triclopyr**	0.0040	U	ug/L	P349361	
		Imidacloprid	0.067		ug/L	P349361	
		Diuron	0.036		ug/L	P349361	
		Pyraclostrobin**	0.0020	U	ug/L	P349361	
		Primidone**	0.0040	U	ug/L	P349361	
		Linuron	0.0040	U	ug/L	P349361	
		Acetaminophen**	0.0080	U	ug/L	P349361	
		Fenuron	0.016	U	ug/L	P349361	
		Imazapyr**	0.49		ug/L	P349361	
		Carbamazepine**	8.0E-04	U	ug/L	P349361	
		Fluridone**	0.14		ug/L	P349361	
		Hydrocodone**	8.0E-04	U	ug/L	P349361	
		Naproxen**	0.0080	U	ug/L	P349361	
		Ibuprofen**	0.020	U	ug/L	P349361	
2012194	EPA 200.7 Rev. 4.4	Calcium	24.0		mg/L	P349576	
		Iron	630		ug/L	P349576	
		Magnesium	4.45		mg/L	P349576	
		Potassium	1.4		mg/L	P349576	
		Sodium	8.7		mg/L	P349576	
		Zinc	5.0	U	ug/L	P349576	
	EPA 200.8 Rev. 5.4	Arsenic	0.86		ug/L	P349576	
		Cadmium	0.020	U	ug/L	P349576	
		Chromium	0.41	I	ug/L	P349576	
		Copper	2.17		ug/L	P349576	
		Lead	0.26		ug/L	P349576	

Field ID: 20030068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2012194	EPA 200.8 Rev. 5.4	Nickel	1.50		ug/L	P349576	
		Silver	0.010	U	ug/L	P349576	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: MIRAMAR CR @ GADSEN RD

Collection Date/Time: 07/31/2018 10:20

Field ID: 20030825

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2012185	EPA 8321B	2,4-D	0.030		ug/L	P349361	MS
		Sucralose**	1.7		ug/L	P349535	
		Bentazon	0.011		ug/L	P349361	
		MCPD	0.014		ug/L	P349361	
		Triclopyr**	0.0040	U	ug/L	P349361	
		Imidacloprid	0.095		ug/L	P349361	
		Diuron	0.082		ug/L	P349361	
		Pyraclostrobin**	0.0020	U	ug/L	P349361	
		Primidone**	0.0040	U	ug/L	P349361	
		Linuron	0.0040	U	ug/L	P349361	
		Acetaminophen**	0.0080	U	ug/L	P349361	
		Fenuron	0.016	U	ug/L	P349361	
		Imazapyr**	0.096		ug/L	P349361	
		Carbamazepine**	0.053		ug/L	P349361	
		Fluridone**	4.0E-04	U	ug/L	P349361	
		Hydrocodone**	8.0E-04	U	ug/L	P349361	
		Naproxen**	0.0080	U	ug/L	P349361	
		Ibuprofen**	0.020	U	ug/L	P349361	

Sample Location: MIRAMAR AT SAN JOSE

Collection Date/Time: 07/31/2018 10:35

Field ID: G2NE1164

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2012157	EPA 180.1 Rev. 2.0	Turbidity	3.3	A	NTU	P349508	
	EPA 300.0 Rev. 2.1	Chloride	30		mg Cl/L	P349593	MS
		Sulfate	69		mg SO4/L	P349596	
	SM 2120 B	Color (true)	25		PCU	P349504	
	SM 2320 B-97	Total Alkalinity	82		mg CaCO3/L	P349652	
	SM 2540 C-97	TDS	227		mg/L	P349797	
	SM 2540 D-97	TSS	4	I	mg/L	P349952	
	SM 4500 F-C-97	Fluoride	0.14		mg F/L	P349655	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.078		mg N/L	P349684	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.60		mg N/L	P349539	
2012158	EPA 353.2 Rev. 2.0	NO2NO3-N	1.2		mg N/L	P349615	
	EPA 365.1 Rev. 2.0	Total-P	0.077		mg P/L	P349562	
	SM 5310 B-00	Organic Carbon	5.8		mg C/L	P349733	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.024		mg P/L	P349501	
	dissolved						
2012182	EPA 8321B	Aldicarb	0.020	U	ug/L	P349361	
		Aldicarb Sulfone	0.0020	U	ug/L	P349361	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P349361	
		Carbaryl	0.0020	U	ug/L	P349361	
		Carbofuran	0.0020	U	ug/L	P349361	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P349361	
		Methiocarb	0.0020	U	ug/L	P349361	
		Methomyl	0.0020	U	ug/L	P349361	
		Oxamyl	0.0020	U	ug/L	P349361	
		Propoxur	0.0020	U	ug/L	P349361	
2012183		2,4-D	0.017		ug/L	P349361	MS
		Sucralose**	1.5		ug/L	P349535	
		Bentazon	0.027		ug/L	P349361	
		MCP	0.0090		ug/L	P349361	
		Triclopyr**	0.0040	U	ug/L	P349361	
		Imidacloprid	0.079		ug/L	P349361	
		Diuron	0.037		ug/L	P349361	
		Pyraclostrobin**	0.0020	U	ug/L	P349361	
		Primidone**	0.0040	U	ug/L	P349361	
		Linuron	0.0040	U	ug/L	P349361	
		Acetaminophen**	0.0080	U	ug/L	P349361	
		Fenuron	0.016	U	ug/L	P349361	
		Imazapyr**	0.11		ug/L	P349361	
		Carbamazepine**	0.028		ug/L	P349361	
		Fluridone**	4.0E-04	U	ug/L	P349361	
		Hydrocodone**	8.0E-04	U	ug/L	P349361	
		Naproxen**	0.0080	U	ug/L	P349361	
		Ibuprofen**	0.020	U	ug/L	P349361	
		Glyphosate**	0.14	I	ug/L	P349535	

Field ID: G2NE1164

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2012183	EPA 8321B	AMPA**	0.13	I	ug/L	P349535	
		Endothall**	0.10	U	ug/L	P349535	
		Glufosinate**	0.10	U	ug/L	P349535	
		Acesulfame K**	1.7		ug/L	P349535	RPD
2012190	EPA 8270D	Aldrin	4.1	U	ng/L	P349755	
		Alpha-BHC	2.0	U	ng/L	P349755	
		Beta-BHC	4.1	U	ng/L	P349755	
		Delta-BHC	4.1	U	ng/L	P349755	
		Gamma-BHC	4.1	U	ng/L	P349755	
		Carbophenothion	4.1	U	ng/L	P349755	
		Chlorothalonil	2.0	U	ng/L	P349755	
		Cypermethrin	20	UJ	ng/L	P349755	RPD
		DDD-p,p'	3.0	U	ng/L	P349755	
		DDE-p,p'	3.0	U	ng/L	P349755	
		DDT-p,p'	3.0	U	ng/L	P349755	
		Dieldrin	12	I	ng/L	P349755	
		Endosulfan I	4.1	U	ng/L	P349755	
		Endosulfan II	4.1	U	ng/L	P349755	
		Endosulfan Sulfate	2.0	U	ng/L	P349755	
		Endrin	2.0	U	ng/L	P349755	
		Endrin Aldehyde	2.0	U	ng/L	P349755	
		Heptachlor	1.5	U	ng/L	P349755	
		Heptachlor Epoxide	3.2	I	ng/L	P349755	
		Methoxychlor	4.1	U	ng/L	P349755	
		Mirex	2.0	UJ	ng/L	P349755	RPD
		Permethrin	10	UJ	ng/L	P349755	RPD
		Trifluralin	1.0	U	ng/L	P349755	
		Alpha-Chlordane	1.0	U	ng/L	P349755	
		Gamma-Chlordane	1.0	U	ng/L	P349755	
		Endrin Ketone	2.0	U	ng/L	P349755	
		Dicofol	30	U	ng/L	P349755	
		Chlordane	4.5	I	ng/L	P349755	
		Toxaphene	30	U	ng/L	P349755	
		Alachlor	0.25	U	ng/L	P349696	
		Ametryn	0.33	U	ng/L	P349696	
		Atrazine	6.5		ng/L	P349696	
		Atrazine Desethyl	3.4	I	ng/L	P349696	
		Azinphos Methyl	2.3	U	ng/L	P349696	
		Bromacil	2.8		ng/L	P349696	
		Butylate	0.41	U	ng/L	P349696	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P349696	
		Chlorpyrifos Methyl	0.10	U	ng/L	P349696	
		Demeton	2.0	U	ng/L	P349696	
		Diazinon	0.13	UJ	ng/L	P349696	LCS
		Disulfoton	0.51	U	ng/L	P349696	
2012191	EPA 8270D						

Field ID: G2NE1164

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2012191	EPA 8270D	EPTC	1.3	U	ng/L	P349696	
		Ethion	0.15	U	ng/L	P349696	
		Ethoprop	0.10	U	ng/L	P349696	
		Fenamiphos	0.25	U	ng/L	P349696	
		Fipronil	6.9		ng/L	P349696	
		Fipronil Sulfide	3.5		ng/L	P349696	
		Fipronil Sulfone	8.6		ng/L	P349696	
		Hexazinone	0.51	U	ng/L	P349696	
		Malathion	0.36	U	ng/L	P349696	
		Metribuzin	0.20	U	ng/L	P349696	
		Mevinphos	0.51	U	ng/L	P349696	
		Molinate	0.31	U	ng/L	P349696	
		Norflurazon	0.51	U	ng/L	P349696	
		Pendimethalin	1.0	U	ng/L	P349696	
		Phorate	0.25	U	ng/L	P349696	
		Prometon	2.1	I	ng/L	P349696	
		Prometryn	0.20	U	ng/L	P349696	
		Simazine	2.8		ng/L	P349696	
		Terbufos	0.10	U	ng/L	P349696	
		Terbutylazine	0.43	U	ng/L	P349696	
		Fonofos	0.20	U	ng/L	P349696	
		Metalaxyl	0.25	U	ng/L	P349696	
		Metolachlor	0.35	I	ng/L	P349696	
		Acetochlor	0.25	U	ng/L	P349696	
		Cyanazine	0.51	U	ng/L	P349696	
		Parathion Ethyl	0.25	U	ng/L	P349696	
		Parathion Methyl	0.25	U	ng/L	P349696	
2012193	EPA 200.7 Rev. 4.4	Calcium	42.3		mg/L	P349576	
		Iron	1.28E+03		ug/L	P349576	
		Magnesium	12.6		mg/L	P349576	
		Potassium	2.9		mg/L	P349576	
		Sodium	19.9		mg/L	P349576	
	EPA 200.8 Rev. 5.4	Zinc	5.6	I	ug/L	P349576	
		Arsenic	0.81		ug/L	P349576	
		Cadmium	0.020	U	ug/L	P349576	
		Chromium	0.40	U	ug/L	P349576	
		Copper	0.66	I	ug/L	P349576	
		Lead	0.38		ug/L	P349576	
		Nickel	0.86		ug/L	P349576	
		Silver	0.010	U	ug/L	P349576	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

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

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

EPA 8270D: MS accuracy for Atrazine, Fipronil, Fipronil Sulfide and Fipronil Sulfone not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P349508

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P349576

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P349576

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349593

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349596

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P349684

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P349539

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P349615

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P349562

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P349501

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

Reference Method: EPA 8270D
Batch ID: P349696

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.32	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.2	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	0.50	U	ng/L
Demeton	2.0	U	ng/L
Diazinon	0.12	U	ng/L
Disulfoton	0.50	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.25	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.25	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P349696

Component	Result	Code	Units
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270D
Batch ID: P349755

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	4.0	U	ng/L
Carbophenothion	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	3.0	U	ng/L
DDE-p,p'	3.0	U	ng/L
DDT-p,p'	3.0	U	ng/L
Delta-BHC	4.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Gamma-BHC	4.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	1.0	U	ng/L

Reference Method: EPA 8276
Batch ID: P349755

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

Reference Method: EPA 8321B
Batch ID: P349361

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P349361

Component	Result	Code	Units
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	4.0E-04	U	ug/L
Hydrocodone	8.0E-04	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
MCPP	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P349535

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.10	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: P349504

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P349652

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

Reference Method: SM 2540 C-97
Batch ID: P349797

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P349797

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P349952

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P349655

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P349733

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: P349576

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	85 - 115
Iron	105		P	85 - 115
Magnesium	110		P	85 - 115
Potassium	103		P	85 - 115
Sodium	97.6		P	85 - 115
Zinc	103		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P349576

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	99.3		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	93.5		P	85 - 115
Copper	96.3		P	85 - 115
Lead	95.3		P	85 - 115
Nickel	98.2		P	85 - 115
Silver	97.6		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349593

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349596

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P349684

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P349539

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P349615

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P349562

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P349501

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

Reference Method: EPA 8270D
 Batch ID: P349696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	110	114	P/P	74 - 119
Alachlor	110	114	P/P	75 - 118
Ametryn	104	108	P/P	59 - 137
Atrazine	106	110	P/P	73 - 120
Atrazine Desethyl	98.1	95.8	P/P	19 - 129
Azinphos Methyl	125	129	P/P	65 - 181
Bromacil	102	107	P/P	43 - 123
Butylate	79.3	66.6	P/P	28 - 85.0
Chlorpyrifos Ethyl	101	104	P/P	55 - 112
Chlorpyrifos Methyl	106	108	P/P	35 - 124
Cyanazine	130	128	P/P	26 - 262
Demeton	93.2	87.2	P/P	43 - 122
Diazinon	115	120	P/F	72 - 120
Disulfoton	99.3	110	P/P	45 - 137
EPTC	77.9	62.6	P/P	28 - 95.0
Ethion	101	100	P/P	63 - 127
Ethoprop	96.7	99.8	P/P	63 - 109
Fenamiphos	105	111	P/P	66 - 136
Fipronil	103	108	P/P	63 - 126
Fipronil Sulfide	91.9	95.6	P/P	59 - 123
Fipronil Sulfone	86.5	88.6	P/P	56 - 122
Fonofos	103	109	P/P	64 - 114
Hexazinone	104	111	P/P	49 - 144
Malathion	103	107	P/P	68 - 131
Metaxyl	107	110	P/P	57 - 126
Metolachlor	107	108	P/P	75 - 118
Metribuzin	130	128	P/P	46 - 169
Mevinphos	92.1	98.7	P/P	34 - 126
Molinate	89.5	80.5	P/P	37 - 101
Norflurazon	99.0	106	P/P	63 - 127
Parathion Ethyl	105	105	P/P	78 - 109
Parathion Methyl	109	112	P/P	74 - 123
Pendimethalin	124	128	P/P	51 - 130
Phorate	91.8	93.3	P/P	53 - 116
Prometon	100	104	P/P	66 - 124
Prometryn	104	106	P/P	66 - 124
Simazine	111	113	P/P	62 - 134
Terbufos	97.4	101	P/P	59 - 115
Terbutylazine	106	106	P/P	76 - 113

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P349755

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	58.7	47.0	P/P	24 - 89.0
Alpha-BHC	92.2	87.6	P/P	58 - 117
Alpha-Chlordane	88.1	73.7	P/P	56 - 115
Beta-BHC	105	100	P/P	55 - 137
Carbophenothion	66.5	61.3	P/P	37 - 145
Chlorothalonil	78.4	77.0	P/P	26 - 163
Cypermethrin	70.0	47.6	P/P	42 - 156
DDD-p,p'	102	86.7	P/P	59 - 129
DDE-p,p'	90.8	72.6	P/P	52 - 117
DDT-p,p'	93.3	76.9	P/P	48 - 128
Delta-BHC	111	110	P/P	59 - 158
Dicofol	92.3	90.9	P/P	19 - 124
Dieldrin	97.6	85.5	P/P	57 - 126
Endosulfan I	100	91.9	P/P	59 - 133
Endosulfan II	100	95.9	P/P	58 - 148
Endosulfan Sulfate	102	102	P/P	56 - 135
Endrin	99.1	92.2	P/P	50 - 140
Endrin Aldehyde	108	105	P/P	47 - 141
Endrin Ketone	101	108	P/P	63 - 123
Gamma-BHC	85.4	99.8	P/P	59 - 132
Gamma-Chlordane	82.9	67.6	P/P	55 - 112
Heptachlor	75.2	58.3	P/P	45 - 102
Heptachlor Epoxide	91.6	84.7	P/P	61 - 116
Methoxychlor	102	97.1	P/P	60 - 133
Mirex	75.5	43.7	P/P	40 - 98.0
Permethrin	75.1	47.9	P/P	45 - 131
Trifluralin	80.8	66.2	P/P	38 - 179

Reference Method: EPA 8276
Batch ID: P349755

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	76.0	71.3	P/P	47 - 125
Toxaphene	77.4	84.1	P/P	46 - 147

Reference Method: EPA 8321B
Batch ID: P349361

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	126		P	40 - 150
3-Hydroxycarbofuran	98.4		P	40 - 150
Acetaminophen	85.6		P	30 - 150
Aldicarb	70.3		P	30 - 150
Aldicarb Sulfone	89.6		P	40 - 150
Aldicarb Sulfoxide	88.3		P	40 - 150
Bentazon	88.1		P	30 - 150
Carbamazepine	115		P	40 - 150
Carbaryl	88.3		P	40 - 150
Carbofuran	98.5		P	40 - 150
Diuron	90.5		P	40 - 150
Fenuron	105		P	40 - 150
Fluridone	105		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P349361

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Hydrocodone	98.0		P	40 - 150
Ibuprofen	112		P	40 - 150
Imazapyr	108		P	40 - 150
Imidacloprid	98.7		P	40 - 160
Linuron	80.2		P	40 - 150
MCPP	126		P	40 - 150
Methiocarb	87.3		P	40 - 150
Methomyl	112		P	40 - 150
Naproxen	120		P	40 - 150
Oxamyl	86.6		P	40 - 150
Primidone	115		P	40 - 150
Propoxur	96.3		P	40 - 150
Pyraclostrobin	86.9		P	40 - 150
Triclopyr	133		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P349535

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	101		P	40 - 140
AMPA	80.1		P	40 - 140
Endothall	102		P	40 - 140
Glufosinate	99.0		P	40 - 140
Glyphosate	79.7		P	40 - 140
Sucralose	114		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P349504

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.2		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P349652

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P349655

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.8		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P349733

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P349576

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2012229	Calcium	106		P	80 - 120
2012229	Iron	107		P	80 - 120
2012229	Magnesium	111		P	80 - 120
2012229	Potassium	105		P	80 - 120
2012229	Sodium	101		P	80 - 120
2012229	Zinc	105		P	80 - 120
2012690	Calcium	105		P	80 - 120
2012690	Iron	110	109	P/P	80 - 120
2012690	Magnesium	114	114	P/P	80 - 120
2012690	Potassium	106	106	P/P	80 - 120
2012690	Sodium	101		P	80 - 120
2012690	Zinc	107	108	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P349576

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2012229	Arsenic	102		P	80 - 120
2012229	Cadmium	103		P	80 - 120
2012229	Chromium	95.7		P	80 - 120
2012229	Copper	98.8		P	80 - 120
2012229	Lead	98.2		P	80 - 120
2012229	Nickel	101		P	80 - 120
2012229	Silver	99.0		P	80 - 120
2012690	Arsenic	99.4	104	P/P	80 - 120
2012690	Cadmium	98.8	102	P/P	80 - 120
2012690	Chromium	94.1	97.1	P/P	80 - 120
2012690	Copper	93.8	98.4	P/P	80 - 120
2012690	Lead	94.3	97.8	P/P	80 - 120
2012690	Nickel	96.1	100	P/P	80 - 120
2012690	Silver	96.2	98.8	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349593

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2011870	Chloride	99.0		P	90 - 110
2011973	Chloride	113		F	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349596

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2011870	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P349684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2012161	Ammonia-N	93.1	91.8	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P349539

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2012164	Kjeldahl Nitrogen	93.9	98.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P349615

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2012161	NO2NO3-N	99.8	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P349562

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2012208	Total-P	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P349501

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2012159	O-Phosphate-P	96.4	97.0	P/P	90 - 110

Reference Method: EPA 8270D
 Batch ID: P349696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2012191	Acetochlor	102	109	P/P	67 - 125
2012191	Alachlor	101	114	P/P	69 - 123
2012191	Ametryn	117	128	P/P	52 - 151
2012191	Atrazine Desethyl	61.0	56.9	P/P	10 - 129
2012191	Azinphos Methyl	97.9	102	P/P	48 - 200
2012191	Bromacil	83.9	85.0	P/P	46 - 130
2012191	Butylate	60.6	70.4	P/P	10 - 85.0
2012191	Chlorpyrifos Ethyl	93.7	102	P/P	54 - 115
2012191	Chlorpyrifos Methyl	90.8	103	P/P	44 - 117
2012191	Cyanazine	90.9	85.2	P/P	10 - 262
2012191	Demeton	83.6	94.2	P/P	24 - 145
2012191	Diazinon	107	119	P/P	66 - 129
2012191	Disulfoton	89.2	97.9	P/P	45 - 139
2012191	EPTC	62.9	73.3	P/P	10 - 86.0
2012191	Ethion	92.5	104	P/P	59 - 133
2012191	Ethoprop	84.5	91.5	P/P	54 - 116
2012191	Fenamiphos	85.0	100	P/P	55 - 140
2012191	Fonofos	89.2	105	P/P	55 - 118
2012191	Hexazinone	102	108	P/P	62 - 140
2012191	Malathion	94.2	104	P/P	64 - 132
2012191	Metalaxyl	94.7	99.9	P/P	55 - 129
2012191	Metolachlor	98.7	107	P/P	56 - 137
2012191	Metribuzin	113	118	P/P	16 - 218
2012191	Mevinphos	85.3	93.1	P/P	34 - 129
2012191	Molinate	78.6	91.8	P/P	16 - 99.0
2012191	Norflurazon	81.9	82.6	P/P	43 - 135
2012191	Parathion Ethyl	92.3	104	P/P	71 - 112
2012191	Parathion Methyl	97.8	105	P/P	65 - 127

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P349696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2012191	Pendimethalin	125	140	P/P	35 - 159
2012191	Phorate	78.5	90.3	P/P	41 - 129
2012191	Prometon	93.5	100	P/P	56 - 140
2012191	Prometryn	93.5	101	P/P	65 - 130
2012191	Simazine	99.1	104	P/P	54 - 148
2012191	Terbufos	90.4	104	P/P	53 - 126
2012191	Terbuthylazine	93.1	102	P/P	73 - 114

Reference Method: EPA 8270D
Batch ID: P349755

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2012798	Aldrin	75.6	61.5	P/P	26 - 96.0
2012798	Alpha-BHC	90.8	90.6	P/P	51 - 123
2012798	Alpha-Chlordane	87.1	78.4	P/P	45 - 120
2012798	Beta-BHC	99.1	113	P/P	43 - 146
2012798	Carbophenothion	105	90.6	P/P	26 - 179
2012798	Chlorothalonil	74.9	85.6	P/P	10 - 215
2012798	Cypermethrin	85.6	78.3	P/P	35 - 169
2012798	DDD-p,p'	96.0	92.5	P/P	49 - 131
2012798	DDE-p,p'	85.1	77.4	P/P	39 - 127
2012798	DDT-p,p'	94.0	84.0	P/P	49 - 120
2012798	Delta-BHC	133	129	P/P	49 - 187
2012798	Dicofol	95.4	83.7	P/P	10 - 129
2012798	Dieldrin	95.1	85.2	P/P	46 - 132
2012798	Endosulfan I	106	95.2	P/P	57 - 130
2012798	Endosulfan II	99.8	96.9	P/P	52 - 148
2012798	Endosulfan Sulfate	93.3	110	P/P	55 - 129
2012798	Endrin	93.5	90.4	P/P	45 - 133
2012798	Endrin Aldehyde	59.5	78.6	P/P	26 - 140
2012798	Endrin Ketone	109	103	P/P	60 - 125
2012798	Gamma-BHC	118	89.1	P/P	50 - 145
2012798	Gamma-Chlordane	83.5	74.1	P/P	44 - 118
2012798	Heptachlor	76.0	64.8	P/P	35 - 106
2012798	Heptachlor Epoxide	95.2	88.4	P/P	52 - 123
2012798	Methoxychlor	109	98.9	P/P	54 - 132
2012798	Mirex	83.5	66.9	P/P	36 - 107
2012798	Permethrin	89.1	72.5	P/P	47 - 135
2012798	Trifluralin	80.4	74.2	P/P	32 - 228

Reference Method: EPA 8276
Batch ID: P349755

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2011923	Chlordane	65.6	66.4	P/P	41 - 134
2011923	Toxaphene	55.7	57.8	P/P	39 - 158

Reference Method: EPA 8321B
Batch ID: P349361

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2011588	2,4-D	124	153	P/F	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P349361

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2011588	3-Hydroxycarbofuran	76.4	80.6	P/P	40 - 150
2011588	Acetaminophen	81.1	88.4	P/P	30 - 150
2011588	Aldicarb	67.7	60.5	P/P	30 - 150
2011588	Aldicarb Sulfone	90.7	106	P/P	40 - 150
2011588	Aldicarb Sulfoxide	90.7	93.0	P/P	40 - 150
2011588	Bentazon	46.6	45.3	P/P	30 - 150
2011588	Carbamazepine	71.8	68.5	P/P	40 - 150
2011588	Carbaryl	44.7	57.3	P/P	40 - 150
2011588	Carbofuran	67.3	50.9	P/P	40 - 150
2011588	Diuron	60.6	47.7	P/P	40 - 150
2011588	Fenuron	87.3	85.3	P/P	40 - 150
2011588	Fluridone	93.2	74.2	P/P	40 - 150
2011588	Hydrocodone	81.9	81.0	P/P	40 - 150
2011588	Ibuprofen	73.6	74.9	P/P	40 - 150
2011588	Imazapyr	101	88.9	P/P	40 - 150
2011588	Imidacloprid	134	149	P/P	40 - 160
2011588	Linuron	48.6	59.1	P/P	40 - 150
2011588	MCPP	121	119	P/P	40 - 150
2011588	Methiocarb	61.0	58.7	P/P	40 - 150
2011588	Methomyl	89.3	86.1	P/P	40 - 150
2011588	Naproxen	103	96.9	P/P	40 - 150
2011588	Oxamyl	74.6	94.9	P/P	40 - 150
2011588	Primidone	87.6	82.0	P/P	40 - 150
2011588	Propoxur	63.7	60.9	P/P	40 - 150
2011588	Pyraclostrobin	75.3	75.1	P/P	40 - 150
2011588	Triclopyr	121	121	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P349535

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2011995	Acesulfame K	137	96.5	P/P	40 - 140
2011995	Endothall	86.8	80.1	P/P	40 - 140
2011995	Sucralose	111	109	P/P	40 - 150
2012183	AMPA	65.9	64.4	P/P	40 - 140
2012183	Glufosinate	82.1	74.4	P/P	40 - 140
2012183	Glyphosate	78.8	76.1	P/P	40 - 140

Reference Method: SM 4500 F-C-97

Batch ID: P349655

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2011974	Fluoride	102	102	P/P	91 - 105

Reference Method: SM 5310 B-00

Batch ID: P349733

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2012158	Organic Carbon	98.3	96.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P349508

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012157	Turbidity	7.66	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P349576

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012690	Calcium	0.100	Spike	P	0 - 20
2012690	Iron	0.552	Spike	P	0 - 20
2012690	Magnesium	0.277	Spike	P	0 - 20
2012690	Potassium	0.331	Spike	P	0 - 20
2012690	Sodium	0.689	Spike	P	0 - 20
2012690	Zinc	0.608	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P349576

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012690	Arsenic	4.00	Spike	P	0 - 20
2012690	Cadmium	3.50	Spike	P	0 - 20
2012690	Chromium	3.10	Spike	P	0 - 20
2012690	Copper	4.68	Spike	P	0 - 20
2012690	Lead	3.61	Spike	P	0 - 20
2012690	Nickel	3.90	Spike	P	0 - 20
2012690	Silver	2.68	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349593

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2011870	Chloride	0.772	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P349596

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2011870	Sulfate	1.99	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P349684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012161	Ammonia-N	0.758	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P349539

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012164	Kjeldahl Nitrogen	3.01	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P349615

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012161	NO2NO3-N	1.05	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P349562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012208	Total-P	0.249	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P349501

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012159	O-Phosphate-P	0.496	Spike	P	0 - 20

Reference Method: EPA 8270D
 Batch ID: P349696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012191	Acetochlor	6.97	Spike	P	0 - 30
2012191	Alachlor	11.8	Spike	P	0 - 30
2012191	Ametryn	8.79	Spike	P	0 - 30
2012191	Atrazine	7.93	Spike	P	0 - 30
2012191	Atrazine Desethyl	5.11	Spike	P	0 - 30
2012191	Azinphos Methyl	4.44	Spike	P	0 - 30
2012191	Bromacil	0.949	Spike	P	0 - 30
2012191	Butylate	15.0	Spike	P	0 - 30
2012191	Chlorpyrifos Ethyl	8.87	Spike	P	0 - 30
2012191	Chlorpyrifos Methyl	12.5	Spike	P	0 - 30
2012191	Cyanazine	6.51	Spike	P	0 - 30
2012191	Demeton	11.9	Spike	P	0 - 30
2012191	Diazinon	10.1	Spike	P	0 - 30
2012191	Disulfoton	9.34	Spike	P	0 - 30
2012191	EPTC	15.2	Spike	P	0 - 30
2012191	Ethion	11.4	Spike	P	0 - 30
2012191	Ethoprop	7.94	Spike	P	0 - 30
2012191	Fenamiphos	16.5	Spike	P	0 - 30
2012191	Fipronil	2.97	Spike	P	0 - 30
2012191	Fipronil Sulfide	0.765	Spike	P	0 - 30
2012191	Fipronil Sulfone	3.17	Spike	P	0 - 30
2012191	Fonofos	16.3	Spike	P	0 - 30
2012191	Hexazinone	5.15	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P349696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012191	Malathion	9.83	Spike	P	0 - 30
2012191	Metalaxyl	5.27	Spike	P	0 - 30
2012191	Metolachlor	7.75	Spike	P	0 - 30
2012191	Metribuzin	4.31	Spike	P	0 - 30
2012191	Mevinphos	8.76	Spike	P	0 - 30
2012191	Molinate	15.5	Spike	P	0 - 30
2012191	Norflurazon	0.843	Spike	P	0 - 30
2012191	Parathion Ethyl	12.0	Spike	P	0 - 30
2012191	Parathion Methyl	7.32	Spike	P	0 - 30
2012191	Pendimethalin	10.9	Spike	P	0 - 30
2012191	Phorate	14.1	Spike	P	0 - 30
2012191	Prometon	5.50	Spike	P	0 - 30
2012191	Prometryn	6.90	Spike	P	0 - 30
2012191	Simazine	3.11	Spike	P	0 - 30
2012191	Terbufos	13.7	Spike	P	0 - 30
2012191	Terbutylazine	8.66	Spike	P	0 - 30
LFB	Acetochlor	3.35	LCS	P	0 - 30
LFB	Alachlor	3.24	LCS	P	0 - 30
LFB	Ametryn	4.05	LCS	P	0 - 30
LFB	Atrazine	3.88	LCS	P	0 - 30
LFB	Atrazine Desethyl	2.41	LCS	P	0 - 30
LFB	Azinphos Methyl	2.69	LCS	P	0 - 30
LFB	Bromacil	4.09	LCS	P	0 - 30
LFB	Butylate	17.5	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	3.00	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	2.51	LCS	P	0 - 30
LFB	Cyanazine	1.80	LCS	P	0 - 30
LFB	Demeton	6.62	LCS	P	0 - 30
LFB	Diazinon	4.27	LCS	P	0 - 30
LFB	Disulfoton	9.96	LCS	P	0 - 30
LFB	EPTC	21.8	LCS	P	0 - 30
LFB	Ethion	0.313	LCS	P	0 - 30
LFB	Ethoprop	3.13	LCS	P	0 - 30
LFB	Fenamiphos	5.64	LCS	P	0 - 30
LFB	Fipronil	4.54	LCS	P	0 - 30
LFB	Fipronil Sulfide	3.94	LCS	P	0 - 30
LFB	Fipronil Sulfone	2.41	LCS	P	0 - 30
LFB	Fonofos	5.45	LCS	P	0 - 30
LFB	Hexazinone	5.96	LCS	P	0 - 30
LFB	Malathion	3.33	LCS	P	0 - 30
LFB	Metalaxyl	3.37	LCS	P	0 - 30
LFB	Metolachlor	1.30	LCS	P	0 - 30
LFB	Metribuzin	1.73	LCS	P	0 - 30
LFB	Mevinphos	6.85	LCS	P	0 - 30
LFB	Molinate	10.6	LCS	P	0 - 30
LFB	Norflurazon	7.00	LCS	P	0 - 30
LFB	Parathion Ethyl	0.392	LCS	P	0 - 30
LFB	Parathion Methyl	2.19	LCS	P	0 - 30
LFB	Pendimethalin	2.50	LCS	P	0 - 30
LFB	Phorate	1.65	LCS	P	0 - 30
LFB	Prometon	4.22	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P349696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Prometryn	1.86	LCS	P	0 - 30
LFB	Simazine	1.72	LCS	P	0 - 30
LFB	Terbufos	4.04	LCS	P	0 - 30
LFB	Terbutylazine	0.623	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P349755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012798	Aldrin	20.5	Spike	P	0 - 30
2012798	Alpha-BHC	0.290	Spike	P	0 - 30
2012798	Alpha-Chlordane	10.5	Spike	P	0 - 30
2012798	Beta-BHC	13.3	Spike	P	0 - 30
2012798	Carbophenothion	15.0	Spike	P	0 - 30
2012798	Chlorothalonil	13.4	Spike	P	0 - 30
2012798	Cypermethrin	8.95	Spike	P	0 - 30
2012798	DDD-p,p'	3.79	Spike	P	0 - 30
2012798	DDE-p,p'	9.54	Spike	P	0 - 30
2012798	DDT-p,p'	11.3	Spike	P	0 - 30
2012798	Delta-BHC	3.55	Spike	P	0 - 30
2012798	Dicofol	13.0	Spike	P	0 - 30
2012798	Dieldrin	11.0	Spike	P	0 - 30
2012798	Endosulfan I	11.2	Spike	P	0 - 30
2012798	Endosulfan II	2.91	Spike	P	0 - 30
2012798	Endosulfan Sulfate	16.2	Spike	P	0 - 30
2012798	Endrin	3.32	Spike	P	0 - 30
2012798	Endrin Aldehyde	27.7	Spike	P	0 - 30
2012798	Endrin Ketone	6.30	Spike	P	0 - 30
2012798	Gamma-BHC	28.0	Spike	P	0 - 30
2012798	Gamma-Chlordane	11.8	Spike	P	0 - 30
2012798	Heptachlor	15.9	Spike	P	0 - 30
2012798	Heptachlor Epoxide	7.41	Spike	P	0 - 30
2012798	Methoxychlor	9.67	Spike	P	0 - 30
2012798	Mirex	22.0	Spike	P	0 - 30
2012798	Permethrin	20.5	Spike	P	0 - 30
2012798	Trifluralin	7.97	Spike	P	0 - 30
LFB	Aldrin	22.0	LCS	P	0 - 30
LFB	Alpha-BHC	5.12	LCS	P	0 - 30
LFB	Alpha-Chlordane	17.8	LCS	P	0 - 30
LFB	Beta-BHC	5.08	LCS	P	0 - 30
LFB	Carbophenothion	8.14	LCS	P	0 - 30
LFB	Chlorothalonil	1.79	LCS	P	0 - 30
LFB	Cypermethrin	38.2	LCS	F	0 - 30
LFB	DDD-p,p'	16.5	LCS	P	0 - 30
LFB	DDE-p,p'	22.3	LCS	P	0 - 30
LFB	DDT-p,p'	19.3	LCS	P	0 - 30
LFB	Delta-BHC	0.228	LCS	P	0 - 30
LFB	Dicofol	1.60	LCS	P	0 - 30
LFB	Dieldrin	13.3	LCS	P	0 - 30
LFB	Endosulfan I	8.45	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P349755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endosulfan II	4.18	LCS	P	0 - 30
LFB	Endosulfan Sulfate	0.190	LCS	P	0 - 30
LFB	Endrin	7.20	LCS	P	0 - 30
LFB	Endrin Aldehyde	2.76	LCS	P	0 - 30
LFB	Endrin Ketone	6.72	LCS	P	0 - 30
LFB	Gamma-BHC	15.6	LCS	P	0 - 30
LFB	Gamma-Chlordane	20.3	LCS	P	0 - 30
LFB	Heptachlor	25.2	LCS	P	0 - 30
LFB	Heptachlor Epoxide	7.79	LCS	P	0 - 30
LFB	Methoxychlor	4.50	LCS	P	0 - 30
LFB	Mirex	53.3	LCS	F	0 - 30
LFB	Permethrin	44.3	LCS	F	0 - 30
LFB	Trifluralin	19.8	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P349755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2011923	Chlordane	1.11	Spike	P	0 - 30
2011923	Toxaphene	3.81	Spike	P	0 - 30
LFB	Chlordane	6.36	LCS	P	0 - 30
LFB	Toxaphene	8.29	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P349361

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2011588	2,4-D	14.7	Spike	P	0 - 30
2011588	3-Hydroxycarbofuran	5.35	Spike	P	0 - 30
2011588	Acetaminophen	8.52	Spike	P	0 - 30
2011588	Aldicarb	11.2	Spike	P	0 - 30
2011588	Aldicarb Sulfone	15.5	Spike	P	0 - 30
2011588	Aldicarb Sulfoxide	2.50	Spike	P	0 - 30
2011588	Bentazon	2.31	Spike	P	0 - 30
2011588	Carbamazepine	4.61	Spike	P	0 - 30
2011588	Carbaryl	24.6	Spike	P	0 - 30
2011588	Carbofuran	27.7	Spike	P	0 - 30
2011588	Diuron	21.9	Spike	P	0 - 30
2011588	Fenuron	2.34	Spike	P	0 - 30
2011588	Fluridone	9.41	Spike	P	0 - 30
2011588	Hydrocodone	1.06	Spike	P	0 - 30
2011588	Ibuprofen	1.74	Spike	P	0 - 30
2011588	Imazapyr	4.03	Spike	P	0 - 30
2011588	Imidacloprid	6.51	Spike	P	0 - 30
2011588	Linuron	19.4	Spike	P	0 - 30
2011588	MCP	1.76	Spike	P	0 - 30
2011588	Methiocarb	3.83	Spike	P	0 - 30
2011588	Methomyl	3.69	Spike	P	0 - 30
2011588	Naproxen	6.02	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P349361

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2011588	Oxamyl	23.9	Spike	P	0 - 30
2011588	Primidone	6.60	Spike	P	0 - 30
2011588	Propoxur	4.50	Spike	P	0 - 30
2011588	Pyraclostrobin	0.342	Spike	P	0 - 30
2011588	Triclopyr	0.157	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P349535

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2011995	Acesulfame K	34.6	Spike	F	0 - 30
2011995	Endothall	8.09	Spike	P	0 - 30
2011995	Sucralose	1.55	Spike	P	0 - 30
2012183	AMPA	1.93	Spike	P	0 - 30
2012183	Glufosinate	9.80	Spike	P	0 - 30
2012183	Glyphosate	2.95	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P349504

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012160	Color (true)	1.27	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P349652

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2011974	Total Alkalinity	1.13	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P349797

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012021	TDS	0.962	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P349655

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2011974	Fluoride	0.0	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P349733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P349733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2012158	Organic Carbon	1.22	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: 2012182
Field Sample ID: G2NE1164

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	66.1	P	30 - 160

Lab Sample ID: 2012183
Field Sample ID: G2NE1164

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	129	P	30 - 160
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	73.8	P	30 - 160
EPA 8321B	Diuron-d6	58.2	P	30 - 160
EPA 8321B	Endothall-d6	123	P	40 - 160
EPA 8321B	Endothall-d6	123	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	101	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	101	P	40 - 160
EPA 8321B	Ibuprofen-d3	81.2	P	30 - 160
EPA 8321B	Primidone-d5	110	P	30 - 160
EPA 8321B	Sucralose-d6	96.2	P	40 - 160
EPA 8321B	Sucralose-d6	96.2	P	40 - 160

Lab Sample ID: 2012184
Field Sample ID: 20030068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	114	P	30 - 160
EPA 8321B	Acetaminophen-d4	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	88.5	P	30 - 160
EPA 8321B	Diuron-d6	62.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	83.4	P	30 - 160
EPA 8321B	Primidone-d5	102	P	30 - 160
EPA 8321B	Sucralose-d6	96.0	P	40 - 160

Lab Sample ID: 2012185
Field Sample ID: 20030825

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	131	P	30 - 160
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	84.5	P	30 - 160
EPA 8321B	Diuron-d6	68.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	104	P	30 - 160
EPA 8321B	Primidone-d5	110	P	30 - 160
EPA 8321B	Sucralose-d6	89.5	P	40 - 160

Lab Sample ID: 2012186
Field Sample ID: 20030794

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	128	P	30 - 160
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Carbamazepine-d10	85.7	P	30 - 160
EPA 8321B	Diuron-d6	70.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	89.5	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2012186
Field Sample ID: 20030794

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Primidone-d5	111	P	30 - 160
EPA 8321B	Sucralose-d6	95.6	P	40 - 160

Lab Sample ID: 2012187
Field Sample ID: 20030828

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	109	P	30 - 160
EPA 8321B	Acetaminophen-d4	89.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	63.2	P	30 - 160
EPA 8321B	Diuron-d6	65.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	73.1	P	30 - 160
EPA 8321B	Primidone-d5	97.9	P	30 - 160
EPA 8321B	Sucralose-d6	96.3	P	40 - 160

Lab Sample ID: 2012190
Field Sample ID: G2NE1164

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	48.1	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	47.9	P	34 - 101
EPA 8276	Decachlorobiphenyl	43.2	P	31 - 108
EPA 8276	PCNB	79.5	P	62 - 142

Lab Sample ID: 2012191
Field Sample ID: G2NE1164

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	111	P	71 - 126
EPA 8270D	Terbufos-d10	104	P	59 - 149

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A85560

Included Lab Sample IDs: 2012157, 2012160, 2012163

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	109	P/P	90 - 110
Sulfate	103	109	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A85616

Included Lab Sample IDs: 2012159, 2012162, 2012165

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	98.5	P/P	90 - 110
O-Phosphate-P	99.5	98.9	P/P	90 - 110
O-Phosphate-P	99.6	99.5	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A85617

Included Lab Sample IDs: 2012157, 2012160, 2012163

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A85618

Included Lab Sample IDs: 2012157, 2012160, 2012163

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	103	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A85666

Included Lab Sample IDs: 2012158, 2012161, 2012164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	102	P/P	90 - 110
Total-P	99.9	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A85667

Included Lab Sample IDs: 2012158, 2012161, 2012164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	108	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A85677

Included Lab Sample IDs: 2012158, 2012161, 2012164

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A85681
Included Lab Sample IDs: 2012183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	90.3	85.5	P/P	60 - 150
Glufosinate	112	109	P/P	60 - 150
Glyphosate	98.6	98.4	P/P	60 - 150

Reference Method: EPA 8321B
Run ID: A85682
Included Lab Sample IDs: 2012183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	109	93.6	P/P	60 - 150
Endothall	109	76.6	P/P	60 - 150

Reference Method: SM 2320 B-97
Run ID: A85692
Included Lab Sample IDs: 2012157, 2012160, 2012163

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	104	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A85692
Included Lab Sample IDs: 2012157, 2012160, 2012163

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A85703
Included Lab Sample IDs: 2012158, 2012161, 2012164

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A85708
Included Lab Sample IDs: 2012193, 2012194

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	103	P/P	90 - 110
Iron	101	102	P/P	90 - 110
Magnesium	103	103	P/P	90 - 110
Potassium	101	102	P/P	90 - 110
Sodium	98.4	98.3	P/P	90 - 110
Zinc	105	106	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A85716
Included Lab Sample IDs: 2012193, 2012194

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A85716

Included Lab Sample IDs: 2012193, 2012194

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	98.3	101	P/P	90 - 110
Cadmium	99.2	100	P/P	90 - 110
Copper	96.6	100	P/P	90 - 110
Lead	97.3	98.5	P/P	90 - 110
Nickel	96.2	100	P/P	90 - 110
Silver	93.8	95.4	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A85729

Included Lab Sample IDs: 2012158, 2012161, 2012164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.0	99.2	P/P	90 - 110
Organic Carbon	99.2	98.6	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A85738

Included Lab Sample IDs: 2012193, 2012194

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	97.4	97.3	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A85787

Included Lab Sample IDs: 2012183, 2012184, 2012185, 2012186, 2012187

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	106	104	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A85801

Included Lab Sample IDs: 2012182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	109	111	P/P	50 - 150
Acetaminophen	114	113	P/P	60 - 160
Aldicarb	99.2	105	P/P	60 - 150
Aldicarb Sulfone	103	117	P/P	50 - 150
Aldicarb Sulfoxide	104	89.8	P/P	50 - 150
Carbamazepine	109	101	P/P	60 - 160
Carbaryl	102	87.3	P/P	60 - 150
Carbofuran	110	99.1	P/P	50 - 150
Diuron	97.0	92.0	P/P	60 - 150
Fenuron	104	101	P/P	60 - 150
Fluridone	103	100	P/P	60 - 160
Hydrocodone	93.6	96.3	P/P	60 - 150
Imazapyr	94.8	87.1	P/P	50 - 150
Imidacloprid	96.2	95.8	P/P	60 - 150
Linuron	97.4	94.2	P/P	60 - 150
Methiocarb	129	118	P/P	50 - 150
Methomyl	105	139	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A85801

Included Lab Sample IDs: 2012182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxamyl	111	88.9	P/P	50 - 150
Primidone	97.8	110	P/P	60 - 150
Propoxur	112	117	P/P	50 - 150
Pyraclostrobin	90.0	85.0	P/P	60 - 150

Reference Method: EPA 8270D

Run ID: A85803

Included Lab Sample IDs: 2012190

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	96.2		P	80 - 120
Alpha-BHC	97.4		P	80 - 120
Alpha-Chlordane	97.6		P	80 - 120
Beta-BHC	98.3		P	80 - 120
Carbophenothion	87.1		P	80 - 120
Chlorothalonil	96.8		P	80 - 120
Cypermethrin	91.2		P	80 - 120
DDD-p,p'	102		P	80 - 120
DDE-p,p'	97.3		P	80 - 120
DDT-p,p'	110		P	80 - 120
Delta-BHC	99.2		P	80 - 120
Dicofol	99.3		P	80 - 120
Dieldrin	99.0		P	80 - 120
Endosulfan I	99.0		P	80 - 120
Endosulfan II	92.1		P	80 - 120
Endosulfan Sulfate	105		P	80 - 120
Endrin	98.5		P	80 - 120
Endrin Aldehyde	96.5		P	80 - 120
Endrin Ketone	100		P	80 - 120
Gamma-BHC	99.4		P	80 - 120
Gamma-Chlordane	97.5		P	80 - 120
Heptachlor	95.9		P	80 - 120
Heptachlor Epoxide	97.6		P	80 - 120
Methoxychlor	104		P	80 - 120
Mirex	101		P	80 - 120
Permethrin	94.4		P	80 - 120
Trifluralin	99.6		P	80 - 120

Reference Method: EPA 8276

Run ID: A85820

Included Lab Sample IDs: 2012190

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	100		P	80 - 120
Toxaphene	102		P	80 - 120

Reference Method: EPA 8321B

Run ID: A85823

Included Lab Sample IDs: 2012183, 2012184, 2012185, 2012186, 2012187

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

Reference Method: EPA 8321B

Run ID: A85823

Included Lab Sample IDs: 2012183, 2012184, 2012185, 2012186, 2012187

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	135	81.7	P/P	50 - 150
2,4-D	146	135	P/P	50 - 150
Acetaminophen	117	126	P/P	60 - 160
Bentazon	101	85.1	P/P	50 - 160
Bentazon	85.1	71.1	P/P	50 - 160
Carbamazepine	110	122	P/P	60 - 160
Diuron	99.6	120	P/P	60 - 150
Fenuron	95.5	104	P/P	60 - 150
Fluridone	98.7	119	P/P	60 - 160
Hydrocodone	94.1	112	P/P	60 - 150
Ibuprofen	119	129	P/P	50 - 160
Ibuprofen	129	149	P/P	50 - 160
Imazapyr	93.1	89.2	P/P	50 - 150
Imidacloprid	94.2	109	P/P	60 - 150
Linuron	97.9	114	P/P	60 - 150
MCPP	104	106	P/P	50 - 150
MCPP	115	104	P/P	50 - 150
Naproxen	101	107	P/P	50 - 160
Naproxen	107	149	P/P	50 - 160
Primidone	115	105	P/P	60 - 150
Pyraclostrobin	94.3	101	P/P	60 - 150
Triclopyr	112	112	P/P	50 - 160
Triclopyr	133	112	P/P	50 - 160

Reference Method: EPA 8270D

Run ID: A85914

Included Lab Sample IDs: 2012191

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.4		P	80 - 120
Alachlor	100		P	80 - 120
Ametryn	99.0		P	80 - 120
Atrazine	97.6		P	80 - 120
Atrazine Desethyl	96.2		P	80 - 120
Azinphos Methyl	95.6		P	80 - 120
Bromacil	93.1		P	80 - 120
Butylate	97.6		P	80 - 120
Chlorpyrifos Ethyl	97.6		P	80 - 120
Chlorpyrifos Methyl	96.6		P	80 - 120
Cyanazine	89.7		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	99.1		P	80 - 120
Disulfoton	98.8		P	80 - 120
EPTC	99.1		P	80 - 120
Ethion	94.7		P	80 - 120
Ethoprop	96.5		P	80 - 120
Fenamiphos	94.0		P	80 - 120
Fipronil	96.9		P	80 - 120
Fipronil Sulfide	94.0		P	80 - 120
Fipronil Sulfone	95.7		P	80 - 120
Fonofos	97.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A85914

Included Lab Sample IDs: 2012191

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Hexazinone	97.7		P	80 - 120
Malathion	97.8		P	80 - 120
Metalaxyl	98.9		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	95.0		P	80 - 120
Mevinphos	97.0		P	80 - 120
Molinate	109		P	80 - 120
Norflurazon	93.2		P	80 - 120
Parathion Ethyl	92.4		P	80 - 120
Parathion Methyl	93.6		P	80 - 120
Pendimethalin	99.8		P	80 - 120
Phorate	97.5		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	96.9		P	80 - 120
Simazine	103		P	80 - 120
Terbufos	95.2		P	80 - 120
Terbutylazine	97.0		P	80 - 120

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							7.66	
EPA 200.7 Rev. 4.4	Calcium	102		106	105				0.100
	Iron	105		107	110	109			0.552
	Magnesium	110		111	114	114			0.277
	Potassium	103		105	106	106			0.331
	Sodium	97.6		101	101				0.689
	Zinc	103		105	107	108			0.608
EPA 200.8 Rev. 5.4	Arsenic	99.3		102	99.4	104			4.00
	Cadmium	101		103	98.8	102			3.50
	Chromium	93.5		95.7	94.1	97.1			3.10
	Copper	96.3		98.8	93.8	98.4			4.68
	Lead	95.3		98.2	94.3	97.8			3.61
	Nickel	98.2		101	96.1	100			3.90
	Silver	97.6		99.0	96.2	98.8			2.68
EPA 300.0 Rev. 2.1	Chloride	99.3		99.0	113			0.772	
	Sulfate	98.4		100				1.99	
EPA 350.1 Rev. 2.0	Ammonia-N	98.5		93.1	91.8				0.758
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103		93.9	98.4				3.01
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	101		99.8	101				1.05
EPA 365.1 Rev. 2.0	Total-P	99.3		100	100				0.249
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.1		96.4	97.0				0.496
EPA 8270D	Acetochlor	110	114	102	109		3.35		6.97
	Alachlor	110	114	101	114		3.24		11.8
	Aldrin	58.7	47.0	75.6	61.5		22.0		20.5
	Alpha-BHC	92.2	87.6	90.8	90.6		5.12		0.290
	Alpha-Chlordane	88.1	73.7	87.1	78.4		17.8		10.5
	Ametryn	104	108	117	128		4.05		8.79
	Atrazine	106	110				3.88		7.93
	Atrazine Desethyl	98.1	95.8	61.0	56.9		2.41		5.11
	Azinphos Methyl	125	129	97.9	102		2.69		4.44
	Beta-BHC	105	100	99.1	113		5.08		13.3
	Bromacil	102	107	83.9	85.0		4.09		0.949
	Butylate	79.3	66.6	60.6	70.4		17.5		15.0
	Carbophenothion	66.5	61.3	105	90.6		8.14		15.0
	Chlorothalonil	78.4	77.0	74.9	85.6		1.79		13.4
	Chlorpyrifos Ethyl	101	104	93.7	102		3.00		8.87
	Chlorpyrifos Methyl	106	108	90.8	103		2.51		12.5
	Cyanazine	130	128	90.9	85.2		1.80		6.51
	Cypermethrin	70.0	47.6	85.6	78.3		38.2		8.95
	DDD-p,p'	102	86.7	96.0	92.5		16.5		3.79
	DDE-p,p'	90.8	72.6	85.1	77.4		22.3		9.54
	DDT-p,p'	93.3	76.9	94.0	84.0		19.3		11.3
	Delta-BHC	111	110	133	129		0.228		3.55
	Demeton	93.2	87.2	83.6	94.2		6.62		11.9
	Diazinon	115	120	107	119		4.27		10.1
	Dicofol	92.3	90.9	95.4	83.7		1.60		13.0
	Dieldrin	97.6	85.5	95.1	85.2		13.3		11.0
	Disulfoton	99.3	110	89.2	97.9		9.96		9.34
	Endosulfan I	100	91.9	106	95.2		8.45		11.2
	Endosulfan II	100	95.9	99.8	96.9		4.18		2.91
	Endosulfan Sulfate	102	102	93.3	110		0.190		16.2
	Endrin	99.1	92.2	93.5	90.4		7.20		3.32
	Endrin Aldehyde	108	105	59.5	78.6		2.76		27.7
	Endrin Ketone	101	108	109	103		6.72		6.30

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270D	EPTC	77.9	62.6	62.9	73.3	21.8		15.2
	Ethion	101	100	92.5	104	0.313		11.4
	Ethoprop	96.7	99.8	84.5	91.5	3.13		7.94
	Fenamiphos	105	111	85.0	100	5.64		16.5
	Fipronil	103	108			4.54		2.97
	Fipronil Sulfide	91.9	95.6			3.94		0.765
	Fipronil Sulfone	86.5	88.6			2.41		3.17
	Fonofos	103	109	89.2	105	5.45		16.3
	Gamma-BHC	85.4	99.8	118	89.1	15.6		28.0
	Gamma-Chlordane	82.9	67.6	83.5	74.1	20.3		11.8
	Heptachlor	75.2	58.3	76.0	64.8	25.2		15.9
	Heptachlor Epoxide	91.6	84.7	95.2	88.4	7.79		7.41
	Hexazinone	104	111	102	108	5.96		5.15
	Malathion	103	107	94.2	104	3.33		9.83
	Metalaxyl	107	110	94.7	99.9	3.37		5.27
	Methoxychlor	102	97.1	109	98.9	4.50		9.67
	Metolachlor	107	108	98.7	107	1.30		7.75
	Metribuzin	130	128	113	118	1.73		4.31
	Mevinphos	92.1	98.7	85.3	93.1	6.85		8.76
	Mirex	75.5	43.7	83.5	66.9	53.3		22.0
	Molinate	89.5	80.5	78.6	91.8	10.6		15.5
	Norflurazon	99.0	106	81.9	82.6	7.00		0.843
	Parathion Ethyl	105	105	92.3	104	0.392		12.0
	Parathion Methyl	109	112	97.8	105	2.19		7.32
	Pendimethalin	124	128	125	140	2.50		10.9
	Permethrin	75.1	47.9	89.1	72.5	44.3		20.5
	Phorate	91.8	93.3	78.5	90.3	1.65		14.1
	Prometon	100	104	93.5	100	4.22		5.50
	Prometryn	104	106	93.5	101	1.86		6.90
	Simazine	111	113	99.1	104	1.72		3.11
	Terbufos	97.4	101	90.4	104	4.04		13.7
	Terbuthylazine	106	106	93.1	102	0.623		8.66
	Trifluralin	80.8	66.2	80.4	74.2	19.8		7.97
EPA 8276	Chlordane	76.0	71.3	65.6	66.4	6.36		1.11
	Toxaphene	77.4	84.1	55.7	57.8	8.29		3.81
EPA 8321B	2,4-D	126		124	153			14.7
	3-Hydroxycarbofuran	98.4		76.4	80.6			5.35
	Acesulfame K	101		137	96.5			34.6
	Acetaminophen	85.6		81.1	88.4			8.52
	Aldicarb	70.3		67.7	60.5			11.2
	Aldicarb Sulfone	89.6		90.7	106			15.5
	Aldicarb Sulfoxide	88.3		90.7	93.0			2.50
	AMPA	80.1		65.9	64.4			1.93
	Bentazon	88.1		46.6	45.3			2.31
	Carbamazepine	115		71.8	68.5			4.61
	Carbaryl	88.3		44.7	57.3			24.6
	Carbofuran	98.5		67.3	50.9			27.7
	Diuron	90.5		60.6	47.7			21.9
	Endothall	102		86.8	80.1			8.09
	Fenuron	105		87.3	85.3			2.34
	Fluridone	105		93.2	74.2			9.41
	Glufosinate	99.0		82.1	74.4			9.80
	Glyphosate	79.7		78.8	76.1			2.95
	Hydrocodone	98.0		81.9	81.0			1.06

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Ibuprofen	112	73.6	74.9		1.74
	Imazapyr	108	101	88.9		4.03
	Imidacloprid	98.7	134	149		6.51
	Linuron	80.2	48.6	59.1		19.4
	MCP	126	121	119		1.76
	Methiocarb	87.3	61.0	58.7		3.83
	Methomyl	112	89.3	86.1		3.69
	Naproxen	120	103	96.9		6.02
	Oxamyl	86.6	74.6	94.9		23.9
	Primidone	115	87.6	82.0		6.60
	Propoxur	96.3	63.7	60.9		4.50
	Pyraclostrobin	86.9	75.3	75.1		0.342
	Sucralose	114	111	109		1.55
	Triclopyr	133	121	121		0.157
SM 2120 B	Color (true)	99.2			1.27	
SM 2320 B-97	Total Alkalinity	103			1.13	
SM 2540 C-97	TDS				0.962	
SM 4500 F-C-97	Fluoride	97.8	102	102		0.0
SM 5310 B-00	Organic Carbon	96.1	98.3	96.8		1.22

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2012157, 2012160, 2012163
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2012193, 2012194
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2012193, 2012194
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2012157, 2012160, 2012163
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2012157, 2012160, 2012163
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2012158, 2012161, 2012164
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2012158, 2012161, 2012164
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2012158, 2012161, 2012164
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2012158, 2012161, 2012164
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2012159, 2012162, 2012165
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2012190
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	2012191
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2012190
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2012182
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2012183
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2012183, 2012184, 2012185, 2012186, 2012187
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2012183, 2012184, 2012185, 2012186, 2012187
SM 2120 B / E31780	True Color measured at 450 nm	2012157, 2012160, 2012163
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2012157, 2012160, 2012163

Reference Method Descriptions

Method / DoH Cert #	Description	<u>Associated Samples</u>
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2012157, 2012160, 2012163
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2012157, 2012160, 2012163
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2012157, 2012160, 2012163
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2012158, 2012161, 2012164

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	08/01/2018			08/01/2018 14:45	William L. Brown IV	2012157, 2012160, 2012163
EPA 200.7 Rev. 4.4	08/01/2018	08/02/2018 15:20	Elliott D. Healy	08/03/2018 16:58	Betina Topolski	2012193
	08/01/2018	08/02/2018 15:20	Elliott D. Healy	08/03/2018 17:06	Betina Topolski	2012194
EPA 200.8 Rev. 5.4	08/01/2018	08/02/2018 15:20	Elliott D. Healy	08/06/2018 18:49	Allison Taylor	2012193
	08/01/2018	08/02/2018 15:20	Elliott D. Healy	08/06/2018 18:59	Allison Taylor	2012194
	08/01/2018	08/02/2018 15:20	Elliott D. Healy	08/07/2018 19:09	Allison Taylor	2012193
	08/01/2018	08/02/2018 15:20	Elliott D. Healy	08/07/2018 19:16	Allison Taylor	2012194
EPA 300.0 Rev. 2.1	08/01/2018			08/03/2018 04:53	Lipi Saha	2012157
	08/01/2018			08/03/2018 05:05	Lipi Saha	2012160
	08/01/2018			08/03/2018 05:17	Lipi Saha	2012163
EPA 350.1 Rev. 2.0	08/01/2018			08/06/2018 13:38	Julia Storbeck	2012161
	08/01/2018			08/06/2018 13:43	Julia Storbeck	2012164
	08/01/2018			08/06/2018 13:59	Julia Storbeck	2012158
EPA 351.2 Rev. 2.0	08/01/2018	08/02/2018 11:00	Adrian Shelby	08/03/2018 09:44	Joseph Suarez	2012158
	08/01/2018	08/02/2018 11:00	Adrian Shelby	08/03/2018 09:45	Joseph Suarez	2012161
	08/01/2018	08/02/2018 11:00	Adrian Shelby	08/03/2018 09:47	Joseph Suarez	2012164
EPA 353.2 Rev. 2.0	08/01/2018			08/03/2018 12:28	Lauren Bottorf	2012161
	08/01/2018			08/03/2018 12:33	Lauren Bottorf	2012164
	08/01/2018			08/03/2018 12:43	Lauren Bottorf	2012158
EPA 365.1 Rev. 2.0	08/01/2018	08/02/2018 11:50	Sima Feizi	08/03/2018 09:34	Beverly Y. Sanders	2012158
	08/01/2018	08/02/2018 11:50	Sima Feizi	08/03/2018 09:38	Beverly Y. Sanders	2012161
	08/01/2018	08/02/2018 11:50	Sima Feizi	08/03/2018 09:39	Beverly Y. Sanders	2012164
EPA 365.1 Rev. 2.0 dissolved	08/01/2018			08/01/2018 14:55	Julia Storbeck	2012159
	08/01/2018			08/01/2018 15:14	Julia Storbeck	2012165
	08/01/2018			08/01/2018 15:19	Julia Storbeck	2012162
EPA 8270D	08/01/2018	08/03/2018 08:45	Arthur Maknenko	08/10/2018 00:52	Dinesh Mishra	2012190
	08/01/2018	08/06/2018 08:51	Dinesh Mishra	08/07/2018 16:17	Vandana T. Nagar	2012191
EPA 8276	08/01/2018	08/03/2018 08:45	Arthur Maknenko	08/11/2018 04:34	Arthur Maknenko	2012190
EPA 8321B	08/01/2018	08/02/2018 09:00	Hoor Shaik	08/10/2018 00:30	Juyoung Kim	2012182
	08/01/2018	08/02/2018 09:00	Hoor Shaik	08/10/2018 06:16	Juyoung Kim	2012183
	08/01/2018	08/02/2018 09:00	Hoor Shaik	08/10/2018 23:22	Juyoung Kim	2012183
	08/01/2018	08/02/2018 09:00	Hoor Shaik	08/10/2018 23:56	Juyoung Kim	2012184
	08/01/2018	08/02/2018 09:00	Hoor Shaik	08/11/2018 00:31	Juyoung Kim	2012185
	08/01/2018	08/02/2018 09:00	Hoor Shaik	08/11/2018 01:06	Juyoung Kim	2012186
	08/01/2018	08/02/2018 09:00	Hoor Shaik	08/11/2018 02:15	Juyoung Kim	2012187
	08/01/2018	08/02/2018 09:00	Hoor Shaik	08/12/2018 11:42	Juyoung Kim	2012184
	08/01/2018	08/02/2018 09:00	Hoor Shaik	08/12/2018 12:16	Juyoung Kim	2012185
	08/01/2018	08/02/2018 09:00	Hoor Shaik	08/12/2018 12:51	Juyoung Kim	2012186
	08/01/2018	08/02/2018 09:00	Hoor Shaik	08/12/2018 13:25	Juyoung Kim	2012187
	08/01/2018	08/03/2018 09:00	Mohammad Ghaffari	08/03/2018 13:30	Mohammad Ghaffari	2012183

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	08/01/2018	08/03/2018 09:00	Mohammad Ghaffari	08/03/2018 18:18	Mohammad Ghaffari	2012183
	08/01/2018	08/03/2018 09:00	Mohammad Ghaffari	08/09/2018 04:56	Mohammad Ghaffari	2012183
	08/01/2018	08/03/2018 09:00	Mohammad Ghaffari	08/09/2018 05:11	Mohammad Ghaffari	2012184
	08/01/2018	08/03/2018 09:00	Mohammad Ghaffari	08/09/2018 05:26	Mohammad Ghaffari	2012185
	08/01/2018	08/03/2018 09:00	Mohammad Ghaffari	08/09/2018 05:40	Mohammad Ghaffari	2012186
	08/01/2018	08/03/2018 09:00	Mohammad Ghaffari	08/09/2018 05:55	Mohammad Ghaffari	2012187
	08/01/2018			08/01/2018 16:27	Tanya Welborn	2012157
SM 2120 B	08/01/2018			08/01/2018 16:29	Tanya Welborn	2012160
	08/01/2018			08/01/2018 16:30	Tanya Welborn	2012163
	08/01/2018			08/03/2018 05:29	Dale L. Simmons	2012157
SM 2320 B-97	08/01/2018			08/03/2018 05:40	Dale L. Simmons	2012160
	08/01/2018			08/03/2018 05:50	Dale L. Simmons	2012163
	08/01/2018			08/03/2018 16:45	Yijie Li	2012157, 2012160, 2012163
SM 2540 C-97	08/01/2018			08/03/2018 16:45	Yijie Li	2012157, 2012160, 2012163
SM 2540 D-97	08/01/2018			08/03/2018 05:29	Dale L. Simmons	2012157
SM 4500 F-C-97	08/01/2018			08/03/2018 05:40	Dale L. Simmons	2012160
	08/01/2018			08/03/2018 05:50	Dale L. Simmons	2012163
	08/01/2018			08/06/2018 15:37	Megan Treadwell	2012158
SM 5310 B-00	08/01/2018			08/06/2018 16:38	Megan Treadwell	2012161
	08/01/2018			08/06/2018 18:15	Megan Treadwell	2012164