

Chemical Analysis Report

NW-DIST-2018-07-12-02

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

Event Description: **WALTON LAKES RHINO**

Request ID: **RQ-2018-07-09-38**

Customer: **NW-DIST**

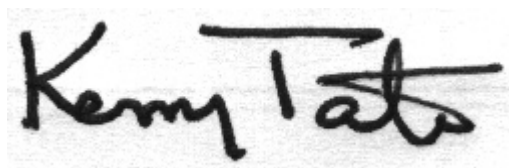
Project ID: **SMP**

Send Reports to:
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Attn: Cheryl Bunch

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

Date Certified: 06-AUG-2018 13:10

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 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: SPRING LAKE CENTER

Collection Date/Time: 07/11/2018 11:25

Field ID: G3NW0164

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2006835	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P348341	
	EPA 300.0 Rev. 2.1	Chloride	2.7		mg Cl/L	P348903	
		Sulfate	0.44	I	mg SO4/L	P348911	
	SM 2120 B	Color (true)	9.9		PCU	P348332	
	SM 2320 B-97	Total Alkalinity	2.8		mg CaCO3/L	P348512	
	SM 2540 C-97	TDS	20	I	mg/L	P348622	
	SM 2540 D-97	TSS	2	I	mg/L	P348618	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P348516	
2006836	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P348777	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.33		mg N/L	P348568	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P348418	
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P348592	
	SM 5310 B-00	Organic Carbon	4.1		mg C/L	P348458	
2006837	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P348346	
2006853	EPA 8321B	2,4-D	0.0020	U	ug/L	P348297	
		Bentazon	8.0E-04	U	ug/L	P348297	
		MCP	0.0020	U	ug/L	P348297	
		Triclopyr**	0.0040	U	ug/L	P348297	
		Imidacloprid	0.0020	U	ug/L	P348297	
		Diuron	0.0020	U	ug/L	P348297	
		Pyraclostrobin**	0.0020	U	ug/L	P348297	
		Primidone**	0.0040	U	ug/L	P348297	
		Linuron	0.0040	U	ug/L	P348297	
		Acetaminophen**	0.0080	U	ug/L	P348297	RPD
		Fenuron	0.016	U	ug/L	P348297	
		Imazapyr**	0.0040	U	ug/L	P348297	
		Carbamazepine**	4.0E-04	U	ug/L	P348297	
		Fluridone**	4.0E-04	U	ug/L	P348297	
		Hydrocodone**	8.0E-04	U	ug/L	P348297	
		Naproxen**	0.0080	U	ug/L	P348297	
		Ibuprofen**	0.020	U	ug/L	P348297	
		Sucralose**	0.070		ug/L	P348298	MS, RPD

Ref. Method and Comment:

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

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

Sample Location: LAKE STANLEY (CENTER)

Collection Date/Time: 07/11/2018 12:20

Field ID: G3NW0132

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2006829	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P348341	
	EPA 300.0 Rev. 2.1	Chloride	2.8		mg Cl/L	P348903	
		Sulfate	0.38	I	mg SO4/L	P348911	
	SM 2120 B	Color (true)	18		PCU	P348332	
	SM 2320 B-97	Total Alkalinity	4.2		mg CaCO3/L	P348512	
	SM 2540 C-97	TDS	23	I	mg/L	P348622	
	SM 2540 D-97	TSS	3	I	mg/L	P348617	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P348516	
2006831	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P348777	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.48		mg N/L	P348568	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P348418	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P348592	
	SM 5310 B-00	Organic Carbon	6.1		mg C/L	P348458	
2006833	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P348346	
2006849	EPA 8321B	Aldicarb	0.020	U	ug/L	P348297	
		Aldicarb Sulfone	0.0020	U	ug/L	P348297	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P348297	MS
		Carbaryl	0.0020	U	ug/L	P348297	
		Carbofuran	0.0020	U	ug/L	P348297	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P348297	
		Methiocarb	0.0020	U	ug/L	P348297	
		Methomyl	0.0020	U	ug/L	P348297	
		Oxamyl	0.0020	U	ug/L	P348297	
		Propoxur	0.0020	U	ug/L	P348297	
2006851		2,4-D	0.11		ug/L	P348297	
		Bentazon	8.0E-04	U	ug/L	P348297	
		MCP	0.0020	U	ug/L	P348297	
		Triclopyr**	0.0040	U	ug/L	P348297	
		Imidacloprid	0.0020	U	ug/L	P348297	
		Diuron	0.0020	U	ug/L	P348297	
		Pyraclostrobin**	0.0020	U	ug/L	P348297	
		Primidone**	0.0040	U	ug/L	P348297	
		Linuron	0.0040	U	ug/L	P348297	
		Acetaminophen**	0.0080	U	ug/L	P348297	RPD
		Fenuron	0.016	U	ug/L	P348297	
		Imazapyr**	0.0040	U	ug/L	P348297	
		Carbamazepine**	4.0E-04	U	ug/L	P348297	
		Fluridone**	0.0027		ug/L	P348297	
		Hydrocodone**	8.0E-04	U	ug/L	P348297	
		Naproxen**	0.0080	U	ug/L	P348297	
		Ibuprofen**	0.020	U	ug/L	P348297	
		Sucralose**	0.13		ug/L	P348298	MS, RPD
		Glyphosate**	0.10	U	ug/L	P348298	

Field ID: G3NW0132

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2006851	EPA 8321B	AMPA**	0.10	U	ug/L	P348298	MS, RPD, SUR
		Endothal**	0.10	UJ	ug/L	P348298	
		Glufosinate**	0.10	U	ug/L	P348298	
		Acesulfame K**	0.10	UJ	ug/L	P348298	
2006878	EPA 8270D	Aldrin	4.6	U	ng/L	P348396	MS, RPD, SUR
		Alpha-BHC	2.3	U	ng/L	P348396	
		Beta-BHC	4.6	U	ng/L	P348396	
		Delta-BHC	4.6	U	ng/L	P348396	
		Gamma-BHC	4.6	U	ng/L	P348396	
		Carbophenothion	4.6	U	ng/L	P348396	
		Chlorothalonil	2.3	U	ng/L	P348396	
		Cypermethrin	23	U	ng/L	P348396	
		DDD-p,p'	3.4	U	ng/L	P348396	
		DDE-p,p'	3.4	U	ng/L	P348396	
		DDT-p,p'	3.4	U	ng/L	P348396	
		Dieldrin	4.6	U	ng/L	P348396	
		Endosulfan I	4.6	U	ng/L	P348396	
		Endosulfan II	4.6	U	ng/L	P348396	
		Endosulfan Sulfate	2.3	U	ng/L	P348396	
		Endrin	2.3	U	ng/L	P348396	
		Endrin Aldehyde	2.3	U	ng/L	P348396	
		Heptachlor	1.7	U	ng/L	P348396	
		Heptachlor Epoxide	2.3	U	ng/L	P348396	
		Methoxychlor	4.6	U	ng/L	P348396	
		Mirex	2.3	U	ng/L	P348396	
		Permethrin	11	U	ng/L	P348396	
		Trifluralin	1.1	U	ng/L	P348396	
		Alpha-Chlordane	1.1	U	ng/L	P348396	
		Gamma-Chlordane	1.1	U	ng/L	P348396	
		Endrin Ketone	2.3	U	ng/L	P348396	
		Dicofol	34	U	ng/L	P348396	
	EPA 8276	Chlordane	2.9	UJ	ng/L	P348396	
		Toxaphene	34	U	ng/L	P348396	
2006880	EPA 8270D	Alachlor	0.25	U	ng/L	P348449	MS
		Ametryn	0.32	U	ng/L	P348449	
		Atrazine	4.3		ng/L	P348449	
		Atrazine Desethyl	2.2	I	ng/L	P348449	
		Azinphos Methyl	2.2	U	ng/L	P348449	
		Bromacil	0.50	U	ng/L	P348449	
		Butylate	0.40	U	ng/L	P348449	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P348449	
		Chlorpyrifos Methyl	0.10	U	ng/L	P348449	
		Demeton	2.0	U	ng/L	P348449	
		Diazinon	0.12	U	ng/L	P348449	

Field ID: G3NW0132

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2006880	EPA 8270D	Disulfoton	0.50	U	ng/L	P348449	
		EPTC	1.2	U	ng/L	P348449	
		Ethion	0.15	U	ng/L	P348449	
		Ethoprop	0.10	U	ng/L	P348449	
		Fenamiphos	0.25	U	ng/L	P348449	
		Fipronil	0.25	U	ng/L	P348449	
		Fipronil Sulfide	0.15	U	ng/L	P348449	
		Fipronil Sulfone	0.15	U	ng/L	P348449	
		Hexazinone	2.3		ng/L	P348449	
		Malathion	0.35	U	ng/L	P348449	
		Metribuzin	0.20	U	ng/L	P348449	
		Mevinphos	0.50	U	ng/L	P348449	
		Molinate	0.30	U	ng/L	P348449	
		Norflurazon	0.50	U	ng/L	P348449	
		Pendimethalin	1.0	U	ng/L	P348449	
		Phorate	0.25	U	ng/L	P348449	
		Prometon	0.90	U	ng/L	P348449	
		Prometryn	0.20	U	ng/L	P348449	
		Simazine	0.50	U	ng/L	P348449	
		Terbufos	0.10	U	ng/L	P348449	
		Terbuthylazine	0.42	U	ng/L	P348449	
		Fonofos	0.20	U	ng/L	P348449	
		Metalaxyl	0.25	U	ng/L	P348449	
		Metolachlor	3.5		ng/L	P348449	
		Acetochlor	0.28	I	ng/L	P348449	
		Cyanazine	0.50	U	ng/L	P348449	
		Parathion Ethyl	0.25	U	ng/L	P348449	
		Parathion Methyl	0.25	U	ng/L	P348449	
2006882	EPA 200.7 Rev. 4.4	Calcium	1.64		mg/L	P348507	
		Iron	30	U	ug/L	P348507	
		Magnesium	0.69		mg/L	P348507	
		Potassium	0.37	I	mg/L	P348507	
		Sodium	1.7	I	mg/L	P348507	
		Zinc	5.0	U	ug/L	P348507	
	EPA 200.8 Rev. 5.4	Arsenic	1.47		ug/L	P348507	
		Cadmium	0.020	U	ug/L	P348507	
		Chromium	0.40	U	ug/L	P348507	
		Copper	0.60	I	ug/L	P348507	
		Lead	0.050	U	ug/L	P348507	
		Nickel	0.20	U	ug/L	P348507	
		Silver	0.010	U	ug/L	P348507	

Field ID: G3NW0132

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Refer to the narrative for an explanation of QC Codes.
EPA 8321B: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample. Results confirmed in re-analysis.
EPA 8321B: Refer to the narrative for an explanation of QC Codes. "J" - estimation due to endothall-d6 surrogate spike recovery exceeding the control limits.
EPA 8270D: Insufficient sample available to perform duplicate matrix spikes.
EPA 8276: Refer to the narrative for an explanation of QC Codes. Insufficient sample available to perform duplicate matrix spikes.

Sample Location: LAKE STANLEY (CENTER)

Collection Date/Time: 07/11/2018 12:25

Field ID: G3NW0132_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2006830	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P348341	
	EPA 300.0 Rev. 2.1	Chloride	2.7		mg Cl/L	P348903	
		Sulfate	0.38	I	mg SO4/L	P348911	
	SM 2120 B	Color (true)	17		PCU	P348332	
	SM 2320 B-97	Total Alkalinity	4.0		mg CaCO3/L	P348512	
	SM 2540 C-97	TDS	26		mg/L	P348622	
	SM 2540 D-97	TSS	3	I	mg/L	P348617	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P348516	
2006832	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P348777	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.46		mg N/L	P348568	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P348418	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P348592	
	SM 5310 B-00	Organic Carbon	6.1		mg C/L	P348458	
2006834	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P348346	
2006850	EPA 8321B	Aldicarb	0.020	U	ug/L	P348297	
		Aldicarb Sulfone	0.0020	U	ug/L	P348297	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P348297	MS
		Carbaryl	0.0020	U	ug/L	P348297	
		Carbofuran	0.0020	U	ug/L	P348297	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P348297	
		Methiocarb	0.0020	U	ug/L	P348297	
		Methomyl	0.0020	U	ug/L	P348297	
		Oxamyl	0.0020	U	ug/L	P348297	
		Propoxur	0.0020	U	ug/L	P348297	
2006852		2,4-D	0.10		ug/L	P348297	
		Bentazon	8.0E-04	U	ug/L	P348297	
		MCP	0.0020	U	ug/L	P348297	
		Triclopyr**	0.0040	U	ug/L	P348297	
		Imidacloprid	0.0020	U	ug/L	P348297	
		Diuron	0.0020	U	ug/L	P348297	
		Pyraclostrobin**	0.0020	U	ug/L	P348297	
		Primidone**	0.0040	U	ug/L	P348297	
		Linuron	0.0040	U	ug/L	P348297	
		Acetaminophen**	0.0080	UJ	ug/L	P348297	RPD
		Fenuron	0.016	U	ug/L	P348297	
		Imazapyr**	0.0040	U	ug/L	P348297	
		Carbamazepine**	4.0E-04	U	ug/L	P348297	
		Fluridone**	0.0020		ug/L	P348297	
		Hydrocodone**	8.0E-04	U	ug/L	P348297	
		Naproxen**	0.0080	U	ug/L	P348297	
		Ibuprofen**	0.020	U	ug/L	P348297	
		Sucralose**	0.14		ug/L	P348298	MS, RPD
		Glyphosate**	0.10	U	ug/L	P348298	

Field ID: G3NW0132_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2006852	EPA 8321B	AMPA**	0.10	U	ug/L	P348298	
		Endothall**	0.10	U	ug/L	P348298	MS, RPD
		Glufosinate**	0.10	U	ug/L	P348298	
		Acesulfame K**	0.10	U	ug/L	P348298	MS, RPD
2006879	EPA 8270D	Aldrin	4.3	U	ng/L	P348396	
		Alpha-BHC	2.2	U	ng/L	P348396	
		Beta-BHC	4.3	U	ng/L	P348396	
		Delta-BHC	4.3	U	ng/L	P348396	
		Gamma-BHC	4.3	U	ng/L	P348396	
		Carbophenothion	4.3	U	ng/L	P348396	
		Chlorothalonil	2.2	U	ng/L	P348396	
		Cypermethrin	22	U	ng/L	P348396	
		DDD-p,p'	3.2	U	ng/L	P348396	
		DDE-p,p'	3.2	U	ng/L	P348396	
		DDT-p,p'	3.2	U	ng/L	P348396	
		Dieldrin	4.3	U	ng/L	P348396	
		Endosulfan I	4.3	U	ng/L	P348396	
		Endosulfan II	4.3	U	ng/L	P348396	
		Endosulfan Sulfate	2.2	U	ng/L	P348396	
		Endrin	2.2	U	ng/L	P348396	
		Endrin Aldehyde	2.2	U	ng/L	P348396	
		Heptachlor	1.6	U	ng/L	P348396	
		Heptachlor Epoxide	2.2	U	ng/L	P348396	
		Methoxychlor	4.3	U	ng/L	P348396	
		Mirex	2.2	U	ng/L	P348396	
		Permethrin	11	U	ng/L	P348396	
		Trifluralin	1.1	U	ng/L	P348396	
		Alpha-Chlordane	1.1	U	ng/L	P348396	
		Gamma-Chlordane	1.1	U	ng/L	P348396	
		Endrin Ketone	2.2	U	ng/L	P348396	
		Dicofol	32	U	ng/L	P348396	
	EPA 8276	Chlordane	2.7	UJ	ng/L	P348396	LCS
		Toxaphene	32	U	ng/L	P348396	
2006881	EPA 8270D	Alachlor	0.25	U	ng/L	P348449	
		Ametryn	0.32	U	ng/L	P348449	
		Atrazine	5.4		ng/L	P348449	
		Atrazine Desethyl	2.2	I	ng/L	P348449	
		Azinphos Methyl	2.2	U	ng/L	P348449	
		Bromacil	0.50	U	ng/L	P348449	
		Butylate	0.40	U	ng/L	P348449	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P348449	
		Chlorpyrifos Methyl	0.10	UJ	ng/L	P348449	MS
		Demeton	2.0	U	ng/L	P348449	
		Diazinon	0.12	U	ng/L	P348449	
		Disulfoton	0.50	U	ng/L	P348449	

Field ID: G3NW0132_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2006881	EPA 8270D	EPTC	1.2	U	ng/L	P348449	
		Ethion	0.15	U	ng/L	P348449	
		Ethoprop	0.10	U	ng/L	P348449	
		Fenamiphos	0.25	U	ng/L	P348449	
		Fipronil	0.25	U	ng/L	P348449	
		Fipronil Sulfide	0.15	U	ng/L	P348449	
		Fipronil Sulfone	0.15	U	ng/L	P348449	
		Hexazinone	3.0		ng/L	P348449	
		Malathion	0.35	U	ng/L	P348449	
		Metribuzin	0.20	U	ng/L	P348449	
		Mevinphos	0.50	U	ng/L	P348449	
		Molinate	0.30	U	ng/L	P348449	
		Norflurazon	0.50	U	ng/L	P348449	
		Pendimethalin	1.0	U	ng/L	P348449	
		Phorate	0.25	U	ng/L	P348449	
		Prometon	0.90	U	ng/L	P348449	
		Prometryn	0.20	U	ng/L	P348449	
		Simazine	0.50	U	ng/L	P348449	
		Terbufos	0.10	U	ng/L	P348449	
		Terbutylazine	0.42	U	ng/L	P348449	
		Fonofos	0.20	U	ng/L	P348449	
		Metalaxyl	0.25	U	ng/L	P348449	
		Metolachlor	3.3		ng/L	P348449	
		Acetochlor	0.31	I	ng/L	P348449	
		Cyanazine	0.50	U	ng/L	P348449	
		Parathion Ethyl	0.25	U	ng/L	P348449	
		Parathion Methyl	0.25	U	ng/L	P348449	
2006883	EPA 200.7 Rev. 4.4	Calcium	1.64		mg/L	P348507	
		Iron	30	U	ug/L	P348507	
		Magnesium	0.70		mg/L	P348507	
		Potassium	0.37	I	mg/L	P348507	
		Sodium	1.7	I	mg/L	P348507	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P348507	
		Arsenic	1.46		ug/L	P348507	
		Cadmium	0.020	U	ug/L	P348507	
		Chromium	0.40	U	ug/L	P348507	
		Copper	0.60	I	ug/L	P348507	
		Lead	0.050	U	ug/L	P348507	
		Nickel	0.20	U	ug/L	P348507	
		Silver	0.010	U	ug/L	P348507	

Ref. Method and Comment:

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

EPA 8321B: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample. Results confirmed in re-analysis. Refer to the narrative for an explanation of QC Codes.

EPA 8270D: Insufficient sample available to perform duplicate matrix spikes.

EPA 8276: Refer to the narrative for an explanation of QC Codes. Insufficient sample available to perform duplicate matrix spikes.

EPA 8270D: Refer to the narrative for an explanation of QC Codes. Insufficient sample available to perform duplicate matrix spikes.

Sample Location: LAKE STANLEY (CENTER)

Collection Date/Time: 07/11/2018 12:35

Field ID: BLANK_07112018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2006838	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P348341	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P348903	
		Sulfate	0.20	U	mg SO4/L	P348911	
		Color (true)	2.5	U	PCU	P348332	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P348512	
	SM 2540 C-97	TDS	15	U	mg/L	P348623	
	SM 2540 D-97	TSS	2	U	mg/L	P348618	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P348516	
2006839	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P348777	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P348568	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P348418	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P348592	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P348458	
2006840	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P348346	
2006884	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P348507	
		Iron	30	U	ug/L	P348507	
		Magnesium	0.040	U	mg/L	P348507	
		Potassium	0.30	U	mg/L	P348507	
		Sodium	0.50	U	mg/L	P348507	
		Zinc	5.0	U	ug/L	P348507	
	EPA 200.8 Rev. 5.4	Arsenic	0.050	U	ug/L	P348507	
		Cadmium	0.020	U	ug/L	P348507	
		Chromium	0.40	U	ug/L	P348507	
		Copper	0.20	U	ug/L	P348507	
		Lead	0.065	I	ug/L	P348507	
		Nickel	0.20	U	ug/L	P348507	
		Silver	0.010	U	ug/L	P348507	

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 07/17/2018.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P348341

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P348507

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: P348507

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: P348903

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P348911

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P348777

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P348568

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: P348418

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P348592

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P348346

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

Reference Method: EPA 8270D
Batch ID: P348396

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 8270D
Batch ID: P348449

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P348449

Component	Result	Code	Units
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
Metaxyl	0.25	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.25	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8276
Batch ID: P348396

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

Reference Method: EPA 8321B
Batch ID: P348297

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: P348297

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	4.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	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: P348298

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: P348332

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P348512

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

Reference Method: SM 2540 C-97
Batch ID: P348622

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P348622

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P348623

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P348617

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P348618

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P348516

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P348458

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: P348507

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	102		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	100		P	85 - 115
Sodium	98.3		P	85 - 115
Zinc	99.4		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P348507

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	100		P	85 - 115
Cadmium	97.6		P	85 - 115
Chromium	95.9		P	85 - 115
Copper	99.5		P	85 - 115
Lead	96.0		P	85 - 115
Nickel	100		P	85 - 115
Silver	100		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P348903

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P348911

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P348777

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P348568

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P348418

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: P348592

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P348346

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

Reference Method: EPA 8270D
 Batch ID: P348396

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	85.4	72.7	P/P	24 - 89.0
Alpha-BHC	93.8	88.8	P/P	58 - 117
Alpha-Chlordane	102	83.3	P/P	56 - 115
Beta-BHC	111	122	P/P	55 - 137
Carbophenothion	76.5	82.2	P/P	37 - 145
Chlorothalonil	80.5	86.2	P/P	26 - 163
Cypermethrin	91.9	90.0	P/P	42 - 156
DDD-p,p'	99.1	77.2	P/P	59 - 129
DDE-p,p'	112	86.9	P/P	52 - 117
DDT-p,p'	107	111	P/P	48 - 128
Delta-BHC	109	102	P/P	59 - 158
Dicofol	101	97.0	P/P	19 - 124
Dieldrin	114	89.3	P/P	57 - 126
Endosulfan I	102	86.0	P/P	59 - 133
Endosulfan II	108	80.4	P/P	58 - 148
Endosulfan Sulfate	99.4	108	P/P	56 - 135
Endrin	110	85.2	P/P	50 - 140
Endrin Aldehyde	110	86.7	P/P	47 - 141
Endrin Ketone	101	103	P/P	63 - 123
Gamma-BHC	99.5	105	P/P	59 - 132
Gamma-Chlordane	99.0	82.4	P/P	55 - 112
Heptachlor	89.5	80.7	P/P	45 - 102
Heptachlor Epoxide	105	88.4	P/P	61 - 116
Methoxychlor	109	105	P/P	60 - 133
Mirex	90.8	88.4	P/P	40 - 98.0
Permethrin	98.8	93.9	P/P	45 - 131
Trifluralin	95.4	95.1	P/P	38 - 179

Reference Method: EPA 8270D
 Batch ID: P348449

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	89.1	91.5	P/P	74 - 119
Alachlor	88.2	89.1	P/P	75 - 118
Ametryn	80.4	94.4	P/P	59 - 137
Atrazine	84.1	93.0	P/P	73 - 120
Atrazine Desethyl	69.8	74.2	P/P	19 - 129
Azinphos Methyl	91.1	74.3	P/P	65 - 181
Bromacil	63.6	78.3	P/P	43 - 123
Butylate	45.6	58.6	P/P	28 - 85.0

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P348449

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Ethyl	90.8	101	P/P	55 - 112
Chlorpyrifos Methyl	103	98.9	P/P	35 - 124
Cyanazine	101	127	P/P	26 - 262
Demeton	63.3	69.3	P/P	43 - 122
Diazinon	87.8	105	P/P	72 - 120
Disulfoton	89.1	81.2	P/P	45 - 137
EPTC	46.4	55.4	P/P	28 - 95.0
Ethion	99.5	103	P/P	63 - 127
Ethoprop	73.7	78.9	P/P	63 - 109
Fenamiphos	68.2	75.0	P/P	66 - 136
Fipronil	67.7	80.1	P/P	63 - 126
Fipronil Sulfide	65.8	75.0	P/P	59 - 123
Fipronil Sulfone	70.2	76.0	P/P	56 - 122
Fonofos	78.1	75.4	P/P	64 - 114
Hexazinone	111	112	P/P	49 - 144
Malathion	83.9	90.3	P/P	68 - 131
Metaxyl	72.6	84.9	P/P	57 - 126
Metolachlor	75.6	92.2	P/P	75 - 118
Metribuzin	106	108	P/P	46 - 169
Mevinphos	72.6	64.3	P/P	34 - 126
Molinate	68.9	73.7	P/P	37 - 101
Norflurazon	73.9	82.7	P/P	63 - 127
Parathion Ethyl	80.6	89.8	P/P	78 - 109
Parathion Methyl	108	105	P/P	74 - 123
Pendimethalin	92.1	96.1	P/P	51 - 130
Phorate	81.3	64.2	P/P	53 - 116
Prometon	78.9	82.7	P/P	66 - 124
Prometryn	82.3	88.3	P/P	66 - 124
Simazine	90.5	99.5	P/P	62 - 134
Terbufos	78.2	76.0	P/P	59 - 115
Terbutylazine	89.2	99.0	P/P	76 - 113

Reference Method: EPA 8276
Batch ID: P348396

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	112	138	P/F	41 - 134
Toxaphene	88.1	85.5	P/P	39 - 158

Reference Method: EPA 8321B
Batch ID: P348297

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	104		P	40 - 150
3-Hydroxycarbofuran	94.9		P	40 - 150
Acetaminophen	98.4		P	30 - 150
Aldicarb	116		P	30 - 150
Aldicarb Sulfone	102		P	40 - 150
Aldicarb Sulfoxide	95.1		P	40 - 150
Bentazon	107		P	30 - 150
Carbamazepine	93.9		P	40 - 150
Carbaryl	88.5		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P348297

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbofuran	90.4		P	40 - 150
Diuron	105		P	40 - 150
Fenuron	108		P	40 - 150
Fluridone	96.7		P	40 - 150
Hydrocodone	105		P	40 - 150
Ibuprofen	100		P	40 - 150
Imazapyr	96.8		P	40 - 150
Imidacloprid	97.7		P	40 - 160
Linuron	91.3		P	40 - 150
MCPP	100		P	40 - 150
Methiocarb	75.8		P	40 - 150
Methomyl	101		P	40 - 150
Naproxen	95.0		P	40 - 150
Oxamyl	100		P	40 - 150
Primidone	92.1		P	40 - 150
Propoxur	90.9		P	40 - 150
Pyraclostrobin	95.8		P	40 - 150
Triclopyr	103		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P348298

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	121		P	40 - 140
AMPA	85.4		P	40 - 140
Endothall	55.0		P	40 - 140
Glufosinate	108		P	40 - 140
Glyphosate	91.5		P	40 - 140
Sucralose	116		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P348332

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

Reference Method: SM 2320 B-97
Batch ID: P348512

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P348516

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.4		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P348458

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

Reference Method: SM 5310 B-00
Batch ID: P348458

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.9		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P348507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006762	Calcium	98.5		P	80 - 120
2006762	Iron	101	102	P/P	80 - 120
2006762	Magnesium	102		P	80 - 120
2006762	Potassium	98.7	99.2	P/P	80 - 120
2006762	Sodium	97.2		P	80 - 120
2006762	Zinc	98.7	99.9	P/P	80 - 120
2007494	Calcium	100		P	80 - 120
2007494	Iron	100		P	80 - 120
2007494	Magnesium	101		P	80 - 120
2007494	Potassium	95.1		P	80 - 120
2007494	Sodium	97.9		P	80 - 120
2007494	Zinc	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P348507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006762	Arsenic	100	103	P/P	80 - 120
2006762	Cadmium	99.8	100	P/P	80 - 120
2006762	Chromium	94.5	94.7	P/P	80 - 120
2006762	Copper	94.9	97.6	P/P	80 - 120
2006762	Lead	96.4	98.0	P/P	80 - 120
2006762	Nickel	97.1	98.6	P/P	80 - 120
2006762	Silver	97.7	102	P/P	80 - 120
2007494	Arsenic	100		P	80 - 120
2007494	Cadmium	99.3		P	80 - 120
2007494	Chromium	99.2		P	80 - 120
2007494	Copper	98.5		P	80 - 120
2007494	Lead	98.5		P	80 - 120
2007494	Nickel	99.9		P	80 - 120
2007494	Silver	101		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P348903

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006813	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P348911

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006813	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P348777

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006780	Ammonia-N	101	103	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P348568

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006831	Kjeldahl Nitrogen	105	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P348418

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006754	NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P348592

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006814	Total-P	109	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P348346

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006745	O-Phosphate-P	95.9	95.4	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P348396

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006878	Aldrin	58.8		P	26 - 96.0
2006878	Alpha-BHC	103		P	51 - 123
2006878	Alpha-Chlordane	70.5		P	45 - 120
2006878	Beta-BHC	142		P	43 - 146
2006878	Carbophenothion	96.1		P	26 - 179
2006878	Chlorothalonil	89.7		P	10 - 215
2006878	Cypermethrin	92.0		P	35 - 169
2006878	DDD-p,p'	69.0		P	49 - 131
2006878	DDE-p,p'	71.8		P	39 - 127
2006878	DDT-p,p'	79.9		P	49 - 120
2006878	Delta-BHC	112		P	49 - 187
2006878	Dicofol	82.7		P	10 - 129
2006878	Dieldrin	74.7		P	46 - 132
2006878	Endosulfan I	84.1		P	57 - 130
2006878	Endosulfan II	90.6		P	52 - 148
2006878	Endosulfan Sulfate	113		P	55 - 129
2006878	Endrin	76.9		P	45 - 133
2006878	Endrin Aldehyde	67.9		P	26 - 140
2006878	Endrin Ketone	107		P	60 - 125
2006878	Gamma-BHC	118		P	50 - 145
2006878	Gamma-Chlordane	70.4		P	44 - 118
2006878	Heptachlor	63.6		P	35 - 106
2006878	Heptachlor Epoxide	78.6		P	52 - 123
2006878	Methoxychlor	86.8		P	54 - 132
2006878	Mirex	74.9		P	36 - 107
2006878	Permethrin	83.5		P	47 - 135
2006878	Trifluralin	78.0		P	32 - 228

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P348449

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006881	Acetochlor	87.6		P	67 - 125
2006881	Alachlor	86.0		P	69 - 123
2006881	Ametryn	105		P	52 - 151
2006881	Atrazine	71.7		P	71 - 125
2006881	Atrazine Desethyl	86.3		P	10 - 129
2006881	Azinphos Methyl	121		P	48 - 200
2006881	Bromacil	96.1		P	46 - 130
2006881	Butylate	50.5		P	10 - 85.0
2006881	Chlorpyrifos Ethyl	99.1		P	54 - 115
2006881	Chlorpyrifos Methyl	128		F	44 - 117
2006881	Cyanazine	181		P	10 - 262
2006881	Demeton	70.3		P	24 - 145
2006881	Diazinon	96.2		P	66 - 129
2006881	Disulfoton	115		P	45 - 139
2006881	EPTC	45.2		P	10 - 86.0
2006881	Ethion	106		P	59 - 133
2006881	Ethoprop	89.1		P	54 - 116
2006881	Fenamiphos	80.2		P	55 - 140
2006881	Fipronil	66.8		P	37 - 142
2006881	Fipronil Sulfide	79.5		P	37 - 130
2006881	Fipronil Sulfone	99.9		P	18 - 143
2006881	Fonofos	99.3		P	55 - 118
2006881	Hexazinone	90.8		P	62 - 140
2006881	Malathion	112		P	64 - 132
2006881	Metaxyl	96.1		P	55 - 129
2006881	Metolachlor	85.7		P	56 - 137
2006881	Metribuzin	150		P	16 - 218
2006881	Mevinphos	91.4		P	34 - 129
2006881	Molinate	56.9		P	16 - 99.0
2006881	Norflurazon	73.9		P	43 - 135
2006881	Parathion Ethyl	84.0		P	71 - 112
2006881	Parathion Methyl	114		P	65 - 127
2006881	Pendimethalin	72.0		P	35 - 159
2006881	Phorate	91.0		P	41 - 129
2006881	Prometon	82.0		P	56 - 140
2006881	Prometryn	88.8		P	65 - 130
2006881	Simazine	95.5		P	54 - 148
2006881	Terbufos	99.2		P	53 - 126
2006881	Terbutylazine	88.3		P	73 - 114

Reference Method: EPA 8276
Batch ID: P348396

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006879	Chlordane	88.5		P	41 - 134
2006879	Toxaphene	62.4		P	39 - 158

Reference Method: EPA 8321B
Batch ID: P348297

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006849	3-Hydroxycarbofuran	82.2	82.2	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P348297

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006849	Aldicarb	104	87.3	P/P	30 - 150
2006849	Aldicarb Sulfone	91.2	89.5	P/P	40 - 150
2006849	Aldicarb Sulfoxide	33.3	30.9	F/F	40 - 150
2006849	Carbaryl	68.7	66.9	P/P	40 - 150
2006849	Carbofuran	67.5	67.2	P/P	40 - 150
2006849	Methiocarb	65.3	55.6	P/P	40 - 150
2006849	Methomyl	85.4	84.8	P/P	40 - 150
2006849	Oxamyl	82.7	86.1	P/P	40 - 150
2006849	Propoxur	72.0	70.7	P/P	40 - 150
2006852	Acetaminophen	96.9	70.1	P/P	30 - 150
2006852	Bentazon	74.0	74.1	P/P	30 - 150
2006852	Carbamazepine	85.0	69.5	P/P	40 - 150
2006852	Diuron	89.0	68.9	P/P	40 - 150
2006852	Fenuron	95.8	83.9	P/P	40 - 150
2006852	Fluridone	99.5	73.7	P/P	40 - 150
2006852	Hydrocodone	60.6	80.9	P/P	40 - 150
2006852	Ibuprofen	86.5	72.5	P/P	40 - 150
2006852	Imazapyr	113	109	P/P	40 - 150
2006852	Imidacloprid	156	132	P/P	40 - 160
2006852	Linuron	73.0	70.5	P/P	40 - 150
2006852	MCP	139	136	P/P	40 - 150
2006852	Naproxen	105	103	P/P	40 - 150
2006852	Primidone	102	83.0	P/P	40 - 150
2006852	Pyraclostrobin	93.5	94.0	P/P	40 - 150
2006852	Triclopyr	137	136	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P348298

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006741	Acesulfame K	75.2	224	P/F	40 - 140
2006741	Endothall	184	81.3	F/P	40 - 140
2006741	Sucralose	162	107	F/P	40 - 150
2006851	AMPA	91.2	84.4	P/P	40 - 140
2006851	Glufosinate	110	110	P/P	40 - 140
2006851	Glyphosate	98.0	99.8	P/P	40 - 140

Reference Method: SM 4500 F-C-97
Batch ID: P348516

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006737	Fluoride	99.5	100	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P348458

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2006666	Organic Carbon	97.4	99.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P348341

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006771	Turbidity	1.49	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P348507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006762	Calcium	1.39	Spike	P	0 - 20
2006762	Iron	1.04	Spike	P	0 - 20
2006762	Magnesium	0.128	Spike	P	0 - 20
2006762	Potassium	0.296	Spike	P	0 - 20
2006762	Sodium	1.21	Spike	P	0 - 20
2006762	Zinc	1.20	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P348507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006762	Arsenic	2.63	Spike	P	0 - 20
2006762	Cadmium	0.553	Spike	P	0 - 20
2006762	Chromium	0.229	Spike	P	0 - 20
2006762	Copper	2.75	Spike	P	0 - 20
2006762	Lead	1.63	Spike	P	0 - 20
2006762	Nickel	1.47	Spike	P	0 - 20
2006762	Silver	3.86	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P348903

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006813	Chloride	6.32	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P348911

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006813	Sulfate	7.31	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P348777

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006780	Ammonia-N	1.12	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P348568

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006831	Kjeldahl Nitrogen	2.06	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P348418

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006754	NO2NO3-N	1.35	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P348592

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006814	Total-P	7.98	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P348346

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006745	O-Phosphate-P	0.496	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P348396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Aldrin	16.0	LCS	P	0 - 30
LFB	Alpha-BHC	5.53	LCS	P	0 - 30
LFB	Alpha-Chlordane	20.4	LCS	P	0 - 30
LFB	Beta-BHC	9.46	LCS	P	0 - 30
LFB	Carbophenothion	7.14	LCS	P	0 - 30
LFB	Chlorothalonil	6.74	LCS	P	0 - 30
LFB	Cypermethrin	2.13	LCS	P	0 - 30
LFB	DDD-p,p'	24.9	LCS	P	0 - 30
LFB	DDE-p,p'	25.6	LCS	P	0 - 30
LFB	DDT-p,p'	3.46	LCS	P	0 - 30
LFB	Delta-BHC	6.67	LCS	P	0 - 30
LFB	Dicofol	3.94	LCS	P	0 - 30
LFB	Dieldrin	24.7	LCS	P	0 - 30
LFB	Endosulfan I	17.0	LCS	P	0 - 30
LFB	Endosulfan II	29.2	LCS	P	0 - 30
LFB	Endosulfan Sulfate	7.85	LCS	P	0 - 30
LFB	Endrin	25.2	LCS	P	0 - 30
LFB	Endrin Aldehyde	23.9	LCS	P	0 - 30
LFB	Endrin Ketone	2.00	LCS	P	0 - 30
LFB	Gamma-BHC	5.79	LCS	P	0 - 30
LFB	Gamma-Chlordane	18.3	LCS	P	0 - 30
LFB	Heptachlor	10.4	LCS	P	0 - 30
LFB	Heptachlor Epoxide	17.0	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P348396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Methoxychlor	3.17	LCS	P	0 - 30
LFB	Mirex	2.63	LCS	P	0 - 30
LFB	Permethrin	5.07	LCS	P	0 - 30
LFB	Trifluralin	0.348	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P348449

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Acetochlor	2.69	LCS	P	0 - 30
LFB	Alachlor	0.993	LCS	P	0 - 30
LFB	Ametryn	16.0	LCS	P	0 - 30
LFB	Atrazine	10.1	LCS	P	0 - 30
LFB	Atrazine Desethyl	6.14	LCS	P	0 - 30
LFB	Azinphos Methyl	20.3	LCS	P	0 - 30
LFB	Bromacil	20.8	LCS	P	0 - 30
LFB	Butylate	24.9	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	10.2	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	3.64	LCS	P	0 - 30
LFB	Cyanazine	22.8	LCS	P	0 - 30
LFB	Demeton	9.11	LCS	P	0 - 30
LFB	Diazinon	17.9	LCS	P	0 - 30
LFB	Disulfoton	9.28	LCS	P	0 - 30
LFB	EPTC	17.7	LCS	P	0 - 30
LFB	Ethion	3.06	LCS	P	0 - 30
LFB	Ethoprop	6.72	LCS	P	0 - 30
LFB	Fenamiphos	9.50	LCS	P	0 - 30
LFB	Fipronil	16.7	LCS	P	0 - 30
LFB	Fipronil Sulfide	13.1	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.85	LCS	P	0 - 30
LFB	Fonofos	3.48	LCS	P	0 - 30
LFB	Hexazinone	1.03	LCS	P	0 - 30
LFB	Malathion	7.33	LCS	P	0 - 30
LFB	Metaxyl	15.6	LCS	P	0 - 30
LFB	Metolachlor	19.8	LCS	P	0 - 30
LFB	Metribuzin	1.60	LCS	P	0 - 30
LFB	Mevinphos	12.1	LCS	P	0 - 30
LFB	Molinate	6.62	LCS	P	0 - 30
LFB	Norflurazon	11.2	LCS	P	0 - 30
LFB	Parathion Ethyl	10.8	LCS	P	0 - 30
LFB	Parathion Methyl	2.61	LCS	P	0 - 30
LFB	Pendimethalin	4.30	LCS	P	0 - 30
LFB	Phorate	23.6	LCS	P	0 - 30
LFB	Prometon	4.60	LCS	P	0 - 30
LFB	Prometryn	6.99	LCS	P	0 - 30
LFB	Simazine	9.49	LCS	P	0 - 30
LFB	Terbufos	2.85	LCS	P	0 - 30
LFB	Terbutylazine	10.4	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P348396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlordane	20.9	LCS	P	0 - 30
LFB	Toxaphene	2.98	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P348297

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006849	3-Hydroxycarbofuran	0.00474	Spike	P	0 - 30
2006849	Aldicarb	17.0	Spike	P	0 - 30
2006849	Aldicarb Sulfone	1.89	Spike	P	0 - 30
2006849	Aldicarb Sulfoxide	7.44	Spike	P	0 - 30
2006849	Carbaryl	2.64	Spike	P	0 - 30
2006849	Carbofuran	0.448	Spike	P	0 - 30
2006849	Methiocarb	16.0	Spike	P	0 - 30
2006849	Methomyl	0.710	Spike	P	0 - 30
2006849	Oxamyl	4.02	Spike	P	0 - 30
2006849	Propoxur	1.87	Spike	P	0 - 30
2006852	2,4-D	2.38	Spike	P	0 - 30
2006852	Acetaminophen	32.1	Spike	F	0 - 30
2006852	Bentazon	0.226	Spike	P	0 - 30
2006852	Carbamazepine	20.1	Spike	P	0 - 30
2006852	Diuron	25.5	Spike	P	0 - 30
2006852	Fenuron	13.2	Spike	P	0 - 30
2006852	Fluridone	29.0	Spike	P	0 - 30
2006852	Hydrocodone	28.7	Spike	P	0 - 30
2006852	Ibuprofen	17.6	Spike	P	0 - 30
2006852	Imazapyr	3.55	Spike	P	0 - 30
2006852	Imidacloprid	17.1	Spike	P	0 - 30
2006852	Linuron	3.52	Spike	P	0 - 30
2006852	MCP	2.04	Spike	P	0 - 30
2006852	Naproxen	1.56	Spike	P	0 - 30
2006852	Primidone	20.4	Spike	P	0 - 30
2006852	Pyraclostrobin	0.472	Spike	P	0 - 30
2006852	Triclopyr	0.447	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P348298

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006741	Acesulfame K	99.5	Spike	F	0 - 30
2006741	Endothall	77.6	Spike	F	0 - 30
2006741	Sucralose	34.5	Spike	F	0 - 30
2006851	AMPA	7.78	Spike	P	0 - 30
2006851	Glufosinate	0.740	Spike	P	0 - 30
2006851	Glyphosate	1.87	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P348332

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006750	Color (true)	2.44	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P348512

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006737	Total Alkalinity	0.472	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P348622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006751	TDS	0.302	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P348623

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006898	TDS	8.52	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P348516

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006737	Fluoride	0.519	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P348458

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2006666	Organic Carbon	1.05	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: 2006849
Field Sample ID: G3NW0132

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	60.5	P	30 - 160

Lab Sample ID: 2006850
Field Sample ID: G3NW0132_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	55.9	P	30 - 160

Lab Sample ID: 2006851
Field Sample ID: G3NW0132

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	119	P	30 - 160
EPA 8321B	Acetaminophen-d4	96.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	79.2	P	30 - 160
EPA 8321B	Diuron-d6	71.0	P	30 - 160
EPA 8321B	Endothall-d6	183	F	40 - 160
EPA 8321B	Glyphosate 13C 15N	116	P	40 - 160
EPA 8321B	Ibuprofen-d3	85.2	P	40 - 160
EPA 8321B	Primidone-d5	103	P	30 - 160
EPA 8321B	Sucralose-d6	101	P	40 - 160

Lab Sample ID: 2006852
Field Sample ID: G3NW0132_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	124	P	30 - 160
EPA 8321B	Acetaminophen-d4	72.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	66.4	P	30 - 160
EPA 8321B	Diuron-d6	53.5	P	30 - 160
EPA 8321B	Endothall-d6	66.2	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	118	P	40 - 160
EPA 8321B	Ibuprofen-d3	89.5	P	40 - 160
EPA 8321B	Primidone-d5	86.4	P	30 - 160
EPA 8321B	Sucralose-d6	103	P	40 - 160

Lab Sample ID: 2006853
Field Sample ID: G3NW0164

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	125	P	30 - 160
EPA 8321B	Acetaminophen-d4	82.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	74.8	P	30 - 160
EPA 8321B	Diuron-d6	66.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	86.6	P	40 - 160
EPA 8321B	Primidone-d5	87.9	P	30 - 160
EPA 8321B	Sucralose-d6	120	P	40 - 160

Lab Sample ID: 2006878
Field Sample ID: G3NW0132

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
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Quality Assurance Report Surrogates

Lab Sample ID: 2006878
Field Sample ID: G3NW0132

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	66.1	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	56.6	P	34 - 101
EPA 8276	Decachlorobiphenyl	58.2	P	31 - 108
EPA 8276	PCNB	83.7	P	62 - 142

Lab Sample ID: 2006879
Field Sample ID: G3NW0132_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	69.8	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	54.1	P	34 - 101
EPA 8276	Decachlorobiphenyl	61.7	P	31 - 108
EPA 8276	PCNB	84.2	P	62 - 142

Lab Sample ID: 2006880
Field Sample ID: G3NW0132

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	110	P	71 - 126
EPA 8270D	Terbufos-d10	93.8	P	59 - 149

Lab Sample ID: 2006881
Field Sample ID: G3NW0132_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	103	P	71 - 126
EPA 8270D	Terbufos-d10	86.6	P	59 - 149

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A85184

Included Lab Sample IDs: 2006829, 2006830, 2006835, 2006838

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.7	102	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A85185

Included Lab Sample IDs: 2006829, 2006830, 2006835, 2006838

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	99.0	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A85186

Included Lab Sample IDs: 2006833, 2006834, 2006837, 2006840

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.2	98.5	P/P	90 - 110
O-Phosphate-P	98.5	96.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A85220

Included Lab Sample IDs: 2006831, 2006832, 2006836, 2006839

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

Reference Method: EPA 8321B

Run ID: A85232

Included Lab Sample IDs: 2006851, 2006852, 2006853

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	108	100	P/P	50 - 150
2,4-D	96.1	107	P/P	50 - 150
3-Hydroxycarbofuran	105	105	P/P	50 - 150
Acetaminophen	104	107	P/P	60 - 160
Acetaminophen	110	104	P/P	60 - 160
Aldicarb	108	126	P/P	60 - 150
Aldicarb Sulfone	99.8	101	P/P	50 - 150
Aldicarb Sulfoxide	109	96.9	P/P	50 - 150
Bentazon	121	121	P/P	50 - 150
Bentazon	132	129	P/P	50 - 150
Carbamazepine	110	111	P/P	60 - 160
Carbamazepine	110	110	P/P	60 - 160
Carbaryl	106	109	P/P	60 - 150
Carbofuran	105	107	P/P	50 - 150
Diuron	119	119	P/P	60 - 150
Diuron	120	119	P/P	60 - 150
Fenuron	107	110	P/P	60 - 150
Fenuron	110	109	P/P	60 - 150
Fluridone	109	111	P/P	60 - 160
Fluridone	112	109	P/P	60 - 160
Hydrocodone	110	107	P/P	60 - 150
Hydrocodone	113	110	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A85232

Included Lab Sample IDs: 2006851, 2006852, 2006853

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ibuprofen	85.9	119	P/P	50 - 150
Ibuprofen	96.9	93.6	P/P	50 - 150
Imazapyr	103	85.6	P/P	50 - 150
Imazapyr	85.6	97.7	P/P	50 - 150
Imidacloprid	94.4	95.5	P/P	60 - 150
Imidacloprid	96.4	94.4	P/P	60 - 150
Linuron	102	104	P/P	60 - 150
Linuron	106	106	P/P	60 - 150
MCPP	96.3	97.4	P/P	50 - 150
MCPP	97.6	95.7	P/P	50 - 150
Methiocarb	107	101	P/P	50 - 150
Methomyl	103	103	P/P	50 - 150
Naproxen	109	115	P/P	60 - 150
Naproxen	67.8	90.4	P/P	60 - 150
Oxamyl	102	101	P/P	50 - 150
Primidone	92.9	96.4	P/P	60 - 150
Primidone	96.4	97.4	P/P	60 - 150
Propoxur	102	108	P/P	50 - 150
Pyraclostrobin	104	109	P/P	60 - 150
Pyraclostrobin	106	105	P/P	60 - 150
Triclopyr	100	84.8	P/P	50 - 160
Triclopyr	89.9	97.7	P/P	50 - 160

Reference Method: SM 5310 B-00

Run ID: A85237

Included Lab Sample IDs: 2006831, 2006832, 2006836, 2006839

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	101	P/P	90 - 110
Organic Carbon	99.8	101	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A85254

Included Lab Sample IDs: 2006829, 2006830, 2006835, 2006838

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

Reference Method: SM 4500 F-C-97

Run ID: A85254

Included Lab Sample IDs: 2006829, 2006830, 2006835, 2006838

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

Reference Method: EPA 8321B

Run ID: A85273

Included Lab Sample IDs: 2006851, 2006852

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	100	98.7	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A85273

Included Lab Sample IDs: 2006851, 2006852

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glufosinate	110	109	P/P	60 - 150
Glyphosate	103	108	P/P	60 - 150

Reference Method: EPA 8321B

Run ID: A85274

Included Lab Sample IDs: 2006851, 2006852

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	103	113	P/P	60 - 150
Endothall	92.2	60.5	P/P	60 - 150

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A85287

Included Lab Sample IDs: 2006882, 2006883, 2006884

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	100	98.4	P/P	95 - 105
Calcium	98.4	100	P/P	90 - 110
Iron	101	100	P/P	90 - 110
Iron	103	101	P/P	95 - 105
Magnesium	102	101	P/P	90 - 110
Magnesium	104	102	P/P	95 - 105
Potassium	101	98.6	P/P	95 - 105
Potassium	98.6	97.7	P/P	90 - 110
Sodium	97.3	97.3	P/P	90 - 110
Sodium	99.7	97.3	P/P	95 - 105
Zinc	101	103	P/P	95 - 105
Zinc	103	99.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A85288

Included Lab Sample IDs: 2006882, 2006883, 2006884

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	102	99.5	P/P	90 - 110
Arsenic	99.5	99.1	P/P	90 - 110
Cadmium	97.0	97.0	P/P	90 - 110
Cadmium	97.0	98.5	P/P	90 - 110
Chromium	97.7	98.9	P/P	90 - 110
Chromium	98.9	99.6	P/P	90 - 110
Copper	101	100	P/P	90 - 110
Copper	103	101	P/P	90 - 110
Lead	97.6	99.4	P/P	90 - 110
Lead	98.4	97.6	P/P	90 - 110
Nickel	100	99.9	P/P	90 - 110
Nickel	101	100	P/P	90 - 110
Silver	99.0	99.2	P/P	90 - 110
Silver	99.2	99.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A85302

Included Lab Sample IDs: 2006831, 2006832, 2006839

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

Reference Method: EPA 8321B

Run ID: A85319

Included Lab Sample IDs: 2006851, 2006852, 2006853

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	113	129	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A85337

Included Lab Sample IDs: 2006829, 2006830, 2006835, 2006838

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	96.8	98.5	P/P	90 - 110
Sulfate	97.7	100	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A85340

Included Lab Sample IDs: 2006878, 2006879

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.6		P	80 - 120
Toxaphene	90.5		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A85346

Included Lab Sample IDs: 2006831, 2006832, 2006836, 2006839

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A85364

Included Lab Sample IDs: 2006831, 2006832, 2006836, 2006839

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.2	98.4	P/P	90 - 110
Kjeldahl Nitrogen	98.4	97.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A85367

Included Lab Sample IDs: 2006836

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A85421

Included Lab Sample IDs: 2006878, 2006879

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.0		P	80 - 120
Alpha-BHC	94.4		P	80 - 120
Alpha-Chlordane	95.7		P	80 - 120
Beta-BHC	117		P	80 - 120
Carbophenothion	92.8		P	80 - 120
Chlorothalonil	93.2		P	80 - 120
Cypermethrin	92.6		P	80 - 120
DDD-p,p'	105		P	80 - 120
DDE-p,p'	98.9		P	80 - 120
DDT-p,p'	111		P	80 - 120
Delta-BHC	104		P	80 - 120
Dicofol	99.6		P	80 - 120
Dieldrin	99.3		P	80 - 120
Endosulfan I	97.0		P	80 - 120
Endosulfan II	105		P	80 - 120
Endosulfan Sulfate	107		P	80 - 120
Endrin	92.3		P	80 - 120
Endrin Aldehyde	99.7		P	80 - 120
Endrin Ketone	102		P	80 - 120
Gamma-BHC	103		P	80 - 120
Gamma-Chlordane	93.8		P	80 - 120
Heptachlor	95.1		P	80 - 120
Heptachlor Epoxide	98.5		P	80 - 120
Methoxychlor	102		P	80 - 120
Mirex	100		P	80 - 120
Permethrin	97.9		P	80 - 120
Trifluralin	97.7		P	80 - 120

Reference Method: EPA 8270D

Run ID: A85479

Included Lab Sample IDs: 2006880, 2006881

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	83.9		P	80 - 120
Alachlor	86.5		P	80 - 120
Ametryn	93.4		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	103		P	80 - 120
Azinphos Methyl	111		P	80 - 120
Bromacil	119		P	80 - 120
Butylate	82.4		P	80 - 120
Chlorpyrifos Ethyl	115		P	80 - 120
Chlorpyrifos Methyl	109		P	80 - 120
Cyanazine	111		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	86.0		P	80 - 120
Disulfoton	103		P	80 - 120
EPTC	88.5		P	80 - 120
Ethion	104		P	80 - 120
Ethoprop	93.5		P	80 - 120
Fenamiphos	94.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A85479

Included Lab Sample IDs: 2006880, 2006881

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil	86.2		P	80 - 120
Fipronil Sulfide	106		P	80 - 120
Fipronil Sulfone	108		P	80 - 120
Fonofos	90.2		P	80 - 120
Hexazinone	96.9		P	80 - 120
Malathion	100		P	80 - 120
Metalaxyl	88.9		P	80 - 120
Metolachlor	90.4		P	80 - 120
Metribuzin	114		P	80 - 120
Mevinphos	98.2		P	80 - 120
Molinate	96.2		P	80 - 120
Norflurazon	88.7		P	80 - 120
Parathion Ethyl	95.8		P	80 - 120
Parathion Methyl	97.2		P	80 - 120
Pendimethalin	102		P	80 - 120
Phorate	103		P	80 - 120
Prometon	93.5		P	80 - 120
Prometryn	91.0		P	80 - 120
Simazine	98.1		P	80 - 120
Terbufos	96.6		P	80 - 120
Terbuthylazine	97.5		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	MS
							SMP	
EPA 180.1 Rev. 2.0	Turbidity						1.49	
EPA 200.7 Rev. 4.4	Calcium	101		98.5	100			1.39
	Iron	102		101	102	100		1.04
	Magnesium	103		102	101			0.128
	Potassium	100		98.7	99.2	95.1		0.296
	Sodium	98.3		97.2	97.9			1.21
	Zinc	99.4		98.7	99.9	101		1.20
EPA 200.8 Rev. 5.4	Arsenic	100		100	103	100		2.63
	Cadmium	97.6		99.8	100	99.3		0.553
	Chromium	95.9		94.5	94.7	99.2		0.229
	Copper	99.5		94.9	97.6	98.5		2.75
	Lead	96.0		96.4	98.0	98.5		1.63
	Nickel	100		97.1	98.6	99.9		1.47
	Silver	100		97.7	102	101		3.86
EPA 300.0 Rev. 2.1	Chloride	99.8		103			6.32	
	Sulfate	99.7		102			7.31	
EPA 350.1 Rev. 2.0	Ammonia-N	102		101	103			1.12
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108		105	102			2.06
EPA 353.2 Rev. 2.0	NO2NO3-N	101		100	102			1.35
EPA 365.1 Rev. 2.0	Total-P	108		109	99.6			7.98
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.8		95.9	95.4			0.496
EPA 8270D	Acetochlor	89.1	91.5	87.6		2.69		
	Alachlor	88.2	89.1	86.0		0.993		
	Aldrin	85.4	72.7	58.8		16.0		
	Alpha-BHC	88.8	93.8	103		5.53		
	Alpha-Chlordane	83.3	102	70.5		20.4		
	Ametryn	80.4	94.4	105		16.0		
	Atrazine	84.1	93.0	71.7		10.1		
	Atrazine Desethyl	69.8	74.2	86.3		6.14		
	Azinphos Methyl	91.1	74.3	121		20.3		
	Beta-BHC	122	111	142		9.46		
	Bromacil	63.6	78.3	96.1		20.8		
	Butylate	45.6	58.6	50.5		24.9		
	Carbophenothion	82.2	76.5	96.1		7.14		
	Chlorothalonil	86.2	80.5	89.7		6.74		
	Chlorpyrifos Ethyl	90.8	101	99.1		10.2		
	Chlorpyrifos Methyl	103	98.9	128		3.64		
	Cyanazine	101	127	181		22.8		
	Cypermethrin	90.0	91.9	92.0		2.13		
	DDD-p,p'	77.2	99.1	69.0		24.9		
	DDE-p,p'	112	86.9	71.8		25.6		
	DDT-p,p'	107	111	79.9		3.46		
	Delta-BHC	102	109	112		6.67		
	Demeton	63.3	69.3	70.3		9.11		
	Diazinon	87.8	105	96.2		17.9		
	Dicofol	97.0	101	82.7		3.94		
	Dieldrin	114	89.3	74.7		24.7		
	Disulfoton	89.1	81.2	115		9.28		
	Endosulfan I	102	86.0	84.1		17.0		
	Endosulfan II	108	80.4	90.6		29.2		
	Endosulfan Sulfate	99.4	108	113		7.85		
	Endrin	110	85.2	76.9		25.2		
	Endrin Aldehyde	110	86.7	67.9		23.9		
	Endrin Ketone	103	101	107		2.00		

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						SMP	MS
EPA 8270D	EPTC	46.4	55.4	45.2		17.7	
	Ethion	99.5	103	106		3.06	
	Ethoprop	73.7	78.9	89.1		6.72	
	Fenamiphos	68.2	75.0	80.2		9.50	
	Fipronil	67.7	80.1	66.8		16.7	
	Fipronil Sulfide	65.8	75.0	79.5		13.1	
	Fipronil Sulfone	70.2	76.0	99.9		7.85	
	Fonofos	78.1	75.4	99.3		3.48	
	Gamma-BHC	105	99.5	118		5.79	
	Gamma-Chlordane	82.4	99.0	70.4		18.3	
	Heptachlor	89.5	80.7	63.6		10.4	
	Heptachlor Epoxide	88.4	105	78.6		17.0	
	Hexazinone	111	112	90.8		1.03	
	Malathion	83.9	90.3	112		7.33	
	Metalaxyl	72.6	84.9	96.1		15.6	
	Methoxychlor	105	109	86.8		3.17	
	Metolachlor	75.6	92.2	85.7		19.8	
	Metribuzin	106	108	150		1.60	
	Mevinphos	72.6	64.3	91.4		12.1	
	Mirex	88.4	90.8	74.9		2.63	
	Molinate	68.9	73.7	56.9		6.62	
	Norflurazon	73.9	82.7	73.9		11.2	
	Parathion Ethyl	80.6	89.8	84.0		10.8	
	Parathion Methyl	108	105	114		2.61	
	Pendimethalin	92.1	96.1	72.0		4.30	
	Permethrin	93.9	98.8	83.5		5.07	
	Phorate	81.3	64.2	91.0		23.6	
	Prometon	78.9	82.7	82.0		4.60	
	Prometryn	82.3	88.3	88.8		6.99	
	Simazine	90.5	99.5	95.5		9.49	
	Terbufos	78.2	76.0	99.2		2.85	
	Terbuthylazine	89.2	99.0	88.3		10.4	
	Trifluralin	95.1	95.4	78.0		0.348	
EPA 8276	Chlordane	112	138	88.5		20.9	
	Toxaphene	88.1	85.5	62.4		2.98	
EPA 8321B	2,4-D	104					2.38
	3-Hydroxycarbofuran	94.9		82.2	82.2		0.0047
	Acesulfame K	121		75.2	224		99.5
	Acetaminophen	98.4		70.1	96.9		32.1
	Aldicarb	116		104	87.3		17.0
	Aldicarb Sulfone	102		91.2	89.5		1.89
	Aldicarb Sulfoxide	95.1		33.3	30.9		7.44
	AMPA	85.4		91.2	84.4		7.78
	Bentazon	107		74.0	74.1		0.226
	Carbamazepine	93.9		69.5	85.0		20.1
	Carbaryl	88.5		68.7	66.9		2.64
	Carbofuran	90.4		67.5	67.2		0.448
	Diuron	105		68.9	89.0		25.5
	Endothall	55.0		184	81.3		77.6
	Fenuron	108		83.9	95.8		13.2
	Fluridone	96.7		73.7	99.5		29.0
	Glufosinate	108		110	110		0.740
	Glyphosate	91.5		98.0	99.8		1.87
	Hydrocodone	105		80.9	60.6		28.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Ibuprofen	100	86.5	72.5		17.6
	Imazapyr	96.8	113	109		3.55
	Imidacloprid	97.7	132	156		17.1
	Linuron	91.3	73.0	70.5		3.52
	MCPP	100	139	136		2.04
	Methiocarb	75.8	65.3	55.6		16.0
	Methomyl	101	85.4	84.8		0.710
	Naproxen	95.0	105	103		1.56
	Oxamyl	100	82.7	86.1		4.02
	Primidone	92.1	83.0	102		20.4
	Propoxur	90.9	72.0	70.7		1.87
	Pyraclostrobin	95.8	93.5	94.0		0.472
	Sucralose	116	162	107		34.5
	Triclopyr	103	137	136		0.447
SM 2120 B	Color (true)	98.8			2.44	
SM 2320 B-97	Total Alkalinity	102			0.472	
SM 2540 C-97	TDS				0.302	
	TDS				8.52	
SM 4500 F-C-97	Fluoride	99.4	99.5	100		0.519
SM 5310 B-00	Organic Carbon	99.9	97.4	99.0		1.05

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2006829, 2006830, 2006835, 2006838
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2006882, 2006883, 2006884
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2006882, 2006883, 2006884
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2006829, 2006830, 2006835, 2006838
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2006829, 2006830, 2006835, 2006838
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2006831, 2006832, 2006836, 2006839
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2006831, 2006832, 2006836, 2006839
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2006831, 2006832, 2006836, 2006839
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2006831, 2006832, 2006836, 2006839
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2006833, 2006834, 2006837, 2006840
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2006878, 2006879
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	2006880, 2006881
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2006878, 2006879
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2006849, 2006850
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2006851, 2006852, 2006853
SM 2120 B / E31780	True Color measured at 450 nm	2006829, 2006830, 2006835, 2006838
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2006829, 2006830, 2006835, 2006838
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2006829, 2006830, 2006835, 2006838
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2006829, 2006830, 2006835, 2006838

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2006829, 2006830, 2006835, 2006838
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2006831, 2006832, 2006836, 2006839

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	07/12/2018			07/12/2018 17:20	William L. Brown IV	2006829, 2006830, 2006835, 2006838
EPA 200.7 Rev. 4.4	07/12/2018	07/16/2018 17:30	Elliott D. Healy	07/17/2018 13:20	Betina Topolski	2006884
	07/12/2018	07/16/2018 17:30	Elliott D. Healy	07/17/2018 15:05	Betina Topolski	2006882
	07/12/2018	07/16/2018 17:30	Elliott D. Healy	07/17/2018 15:11	Betina Topolski	2006883
EPA 200.8 Rev. 5.4	07/12/2018	07/16/2018 17:30	Elliott D. Healy	07/17/2018 15:17	Robert K Palmer	2006884
	07/12/2018	07/16/2018 17:30	Elliott D. Healy	07/17/2018 17:19	Robert K Palmer	2006882
	07/12/2018	07/16/2018 17:30	Elliott D. Healy	07/17/2018 17:28	Robert K Palmer	2006883
EPA 300.0 Rev. 2.1	07/12/2018			07/20/2018 16:51	Lipi Saha	2006829
	07/12/2018			07/20/2018 17:03	Lipi Saha	2006830
	07/12/2018			07/20/2018 17:15	Lipi Saha	2006835
	07/12/2018			07/20/2018 17:27	Lipi Saha	2006838
EPA 350.1 Rev. 2.0	07/12/2018			07/19/2018 12:33	Ping Hua	2006831
	07/12/2018			07/19/2018 12:35	Ping Hua	2006832
	07/12/2018			07/19/2018 12:36	Ping Hua	2006836
	07/12/2018			07/19/2018 12:38	Ping Hua	2006839
EPA 351.2 Rev. 2.0	07/12/2018	07/17/2018 10:30	Adrian Shelby	07/18/2018 16:27	Joseph Suarez	2006831
	07/12/2018	07/17/2018 10:30	Adrian Shelby	07/18/2018 16:34	Joseph Suarez	2006832
	07/12/2018	07/17/2018 10:30	Adrian Shelby	07/18/2018 16:36	Joseph Suarez	2006836
	07/12/2018	07/17/2018 10:30	Adrian Shelby	07/18/2018 16:37	Joseph Suarez	2006839
EPA 353.2 Rev. 2.0	07/12/2018			07/13/2018 13:25	Lauren Bottorf	2006839
	07/12/2018			07/13/2018 13:26	Lauren Bottorf	2006831
	07/12/2018			07/13/2018 13:27	Lauren Bottorf	2006832
	07/12/2018			07/13/2018 13:33	Lauren Bottorf	2006836
EPA 365.1 Rev. 2.0	07/12/2018	07/17/2018 13:30	Sima Feizi	07/18/2018 11:39	Beverly Y. Sanders	2006831
	07/12/2018	07/17/2018 13:30	Sima Feizi	07/18/2018 11:40	Beverly Y. Sanders	2006832
	07/12/2018	07/17/2018 13:30	Sima Feizi	07/18/2018 11:41	Beverly Y. Sanders	2006839
	07/12/2018	07/17/2018 13:30	Sima Feizi	07/20/2018 12:20	Beverly Y. Sanders	2006836
EPA 365.1 Rev. 2.0 dissolved	07/12/2018			07/12/2018 17:39	Julia Storbeck	2006840
	07/12/2018			07/12/2018 17:40	Julia Storbeck	2006833, 2006834
	07/12/2018			07/12/2018 17:53	Julia Storbeck	2006837
EPA 8270D	07/12/2018	07/16/2018 08:00	Fe-Val Siddell	07/19/2018 18:56	Dinesh Mishra	2006878
	07/12/2018	07/16/2018 08:00	Fe-Val Siddell	07/19/2018 19:28	Dinesh Mishra	2006879
	07/12/2018	07/16/2018 08:10	Dinesh Mishra	07/19/2018 17:06	Vandana T. Nagar	2006880
	07/12/2018	07/16/2018 08:10	Dinesh Mishra	07/19/2018 17:30	Vandana T. Nagar	2006881
EPA 8276	07/12/2018	07/16/2018 08:00	Fe-Val Siddell	07/19/2018 03:51	Dinesh Mishra	2006878
	07/12/2018	07/16/2018 08:00	Fe-Val Siddell	07/19/2018 04:47	Dinesh Mishra	2006879
EPA 8321B	07/12/2018	07/13/2018 10:00	Hoor Shaik	07/14/2018 14:28	Juyoung Kim	2006852
	07/12/2018	07/13/2018 10:00	Hoor Shaik	07/14/2018 22:33	Juyoung Kim	2006851
	07/12/2018	07/13/2018 10:00	Hoor Shaik	07/14/2018 23:07	Juyoung Kim	2006853
	07/12/2018	07/13/2018 10:00	Hoor Shaik	07/15/2018 04:54	Juyoung Kim	2006849

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	07/12/2018	07/13/2018 10:00	Hoor Shaik	07/15/2018 05:28	Juyoung Kim	2006850
	07/12/2018	07/13/2018 10:00	Hoor Shaik	07/15/2018 07:47	Juyoung Kim	2006852
	07/12/2018	07/13/2018 10:00	Hoor Shaik	07/15/2018 15:17	Juyoung Kim	2006851
	07/12/2018	07/13/2018 10:00	Hoor Shaik	07/15/2018 15:51	Juyoung Kim	2006853
	07/12/2018	07/16/2018 11:30	Juyoung Kim	07/16/2018 20:30	Mohammad Ghaffari	2006851
	07/12/2018	07/16/2018 11:30	Juyoung Kim	07/16/2018 20:40	Mohammad Ghaffari	2006852
	07/12/2018	07/16/2018 11:30	Juyoung Kim	07/17/2018 05:42	Mohammad Ghaffari	2006851
	07/12/2018	07/16/2018 11:30	Juyoung Kim	07/17/2018 05:56	Mohammad Ghaffari	2006852
	07/12/2018	07/16/2018 11:30	Juyoung Kim	07/17/2018 06:11	Mohammad Ghaffari	2006853
	07/12/2018	07/16/2018 11:30	Juyoung Kim	07/17/2018 12:07	Mohammad Ghaffari	2006851
	07/12/2018	07/16/2018 11:30	Juyoung Kim	07/17/2018 12:21	Mohammad Ghaffari	2006852
SM 2120 B	07/12/2018			07/12/2018 15:08	Tanya Welborn	2006829
	07/12/2018			07/12/2018 15:09	Tanya Welborn	2006830
	07/12/2018			07/12/2018 15:10	Tanya Welborn	2006835, 2006838
SM 2320 B-97	07/12/2018			07/14/2018 07:22	Dale L. Simmons	2006829
	07/12/2018			07/14/2018 07:34	Dale L. Simmons	2006830
	07/12/2018			07/14/2018 07:45	Dale L. Simmons	2006835
	07/12/2018			07/14/2018 07:56	Dale L. Simmons	2006838
	07/12/2018			07/13/2018 17:35	William L. Brown IV	2006829, 2006830, 2006835, 2006838
SM 2540 C-97	07/12/2018			07/13/2018 17:35	William L. Brown IV	2006829, 2006830, 2006835, 2006838
SM 2540 D-97	07/12/2018			07/14/2018 07:22	Dale L. Simmons	2006829
SM 4500 F-C-97	07/12/2018			07/14/2018 07:34	Dale L. Simmons	2006830
	07/12/2018			07/14/2018 07:45	Dale L. Simmons	2006835
	07/12/2018			07/14/2018 07:56	Dale L. Simmons	2006838
	07/12/2018			07/14/2018 02:16	Megan Treadwell	2006831
SM 5310 B-00	07/12/2018			07/14/2018 02:29	Megan Treadwell	2006832
	07/12/2018			07/14/2018 02:41	Megan Treadwell	2006836
	07/12/2018			07/14/2018 03:18	Megan Treadwell	2006839