

Chemical Analysis Report

TLH-ROC-2018-11-26-01

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

Event Description: **G2 Run 5**
Request ID: **RQ-2018-11-26-56**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
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2600 Blair Stone Rd
Tallahassee, FL 32399
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Certified by: Colin Wright, Program Administrator

Date Certified: 17-DEC-2018 14:28

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light-colored rectangular 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: Unnamed Branch @ Flat Creek Rd

Collection Date/Time: 11/26/2018 10:35

Field ID: G2TLHR0031

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2043515	EPA 180.1 Rev. 2.0	Turbidity	55		NTU	P355149	
	EPA 300.0 Rev. 2.1	Chloride	2.6		mg Cl/L	P355505	
		Sulfate	1.7		mg SO4/L	P355507	
	SM 2120 B	Color (true)	63		PCU	P355213	
	SM 2320 B-97	Total Alkalinity	11		mg CaCO3/L	P355469	
	SM 2540 C-97	TDS	62		mg/L	P355528	
	SM 2540 D-97	TSS	54		mg/L	P355510	
	SM 4500 F-C-97	Fluoride	0.068	I	mg F/L	P355474	
2043516	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P355306	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.73		mg N/L	P355646	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P355330	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P355222	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P355423	
2043517	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.018		mg P/L	P355154	
2043530	EPA 8321B	Aldicarb	0.020	U	ug/L	P355009	
		Aldicarb Sulfone	0.0020	U	ug/L	P355009	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P355009	
		Carbaryl	0.0020	U	ug/L	P355009	
		Carbofuran	0.0020	U	ug/L	P355009	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P355009	
		Methiocarb	0.0020	U	ug/L	P355009	
		Methomyl	0.0020	U	ug/L	P355009	
		Oxamyl	0.0020	U	ug/L	P355009	
		Propoxur	0.0020	U	ug/L	P355009	
		2,4-D	0.0020	U	ug/L	P355009	
		Bentazon	8.0E-04	U	ug/L	P355009	
		MCP	0.0020	U	ug/L	P355009	
		Triclopyr**	0.0040	U	ug/L	P355009	
2043531		Imidacloprid	0.0020	U	ug/L	P355009	
		Diuron	0.0020	U	ug/L	P355009	
		Pyraclostrobin**	0.0020	UJ	ug/L	P355009	CCV
		Primidone**	0.0040	U	ug/L	P355009	RPD
		Linuron	0.0040	U	ug/L	P355009	
		Acetaminophen**	0.0080	U	ug/L	P355009	
		Fenuron	0.016	U	ug/L	P355009	
		Imazapyr**	0.069		ug/L	P355009	
		Carbamazepine**	8.0E-04	U	ug/L	P355009	
		Fluridone**	4.0E-04	U	ug/L	P355009	
		Hydrocodone**	8.0E-04	U	ug/L	P355009	
		Naproxen**	0.0080	U	ug/L	P355009	RPD
		Ibuprofen**	0.020	U	ug/L	P355009	
		Sucralose**	0.010	U	ug/L	P355225	
		Glyphosate**	0.10	U	ug/L	P355225	

Field ID: G2TLHR0031

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2043531	EPA 8321B	AMPA**	0.10	U	ug/L	P355225	
		Endothall**	0.25	U	ug/L	P355225	
		Glufosinate**	0.10	U	ug/L	P355225	
		Acesulfame K**	0.10	U	ug/L	P355225	
2043532	EPA 8270D	Aldrin	4.1	U	ng/L	P355369	
		Alpha-BHC	2.1	U	ng/L	P355369	RPD
		Beta-BHC	4.1	U	ng/L	P355369	
		Delta-BHC	4.1	U	ng/L	P355369	MS
		Gamma-BHC	4.1	U	ng/L	P355369	MS
		Carbophenothion	4.1	U	ng/L	P355369	
		Chlorothalonil	2.1	U	ng/L	P355369	
		Cypermethrin	21	U	ng/L	P355369	
		DDD-p,p'	3.1	U	ng/L	P355369	
		DDE-p,p'	3.1	U	ng/L	P355369	
		DDT-p,p'	3.1	U	ng/L	P355369	
		Dieldrin	4.1	U	ng/L	P355369	
		Endosulfan I	4.1	U	ng/L	P355369	
		Endosulfan II	4.1	U	ng/L	P355369	
		Endosulfan Sulfate	2.1	U	ng/L	P355369	
		Endrin	2.1	U	ng/L	P355369	
		Endrin Aldehyde	2.1	U	ng/L	P355369	
		Heptachlor	1.5	U	ng/L	P355369	
		Heptachlor Epoxide	2.1	U	ng/L	P355369	
		Methoxychlor	4.1	U	ng/L	P355369	
		Mirex	2.1	U	ng/L	P355369	
		Permethrin	10	U	ng/L	P355369	
		Trifluralin	1.0	U	ng/L	P355369	
		Alpha-Chlordane	1.0	U	ng/L	P355369	
		Gamma-Chlordane	1.0	U	ng/L	P355369	
		Endrin Ketone	2.1	U	ng/L	P355369	
		Dicofol	31	U	ng/L	P355369	
		Chlordane	2.6	U	ng/L	P355369	
		Toxaphene	31	U	ng/L	P355369	
2043533	EPA 8270D	Alachlor	0.25	U	ng/L	P355439	
		Ametryn	0.33	UJ	ng/L	P355439	CCV
		Atrazine	0.25	U	ng/L	P355439	
		Atrazine Desethyl	1.5	UJ	ng/L	P355439	LCS
		Azinphos Methyl	2.3	U	ng/L	P355439	
		Bromacil	0.50	U	ng/L	P355439	
		Butylate	0.40	U	ng/L	P355439	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P355439	
		Chlorpyrifos Methyl	0.10	U	ng/L	P355439	
		Demeton	2.0	U	ng/L	P355439	
		Diazinon	0.13	U	ng/L	P355439	
		Disulfoton	0.50	U	ng/L	P355439	

Field ID: G2TLHR0031

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2043533	EPA 8270D	EPTC	1.3	U	ng/L	P355439	LCS, MS, RPD
		Ethion	0.15	UJ	ng/L	P355439	
		Ethoprop	0.10	U	ng/L	P355439	
		Fenamiphos	0.25	U	ng/L	P355439	
		Fipronil	0.25	U	ng/L	P355439	
		Fipronil Sulfide	0.15	U	ng/L	P355439	
		Fipronil Sulfone	0.15	U	ng/L	P355439	
		Hexazinone	0.50	U	ng/L	P355439	
		Malathion	0.35	U	ng/L	P355439	
		Metribuzin	0.20	UJ	ng/L	P355439	LCS
		Mevinphos	0.50	U	ng/L	P355439	
		Molinate	0.30	U	ng/L	P355439	
		Norflurazon	0.50	U	ng/L	P355439	
		Pendimethalin	1.0	U	ng/L	P355439	
		Phorate	0.25	U	ng/L	P355439	
		Prometon	0.90	U	ng/L	P355439	
		Prometryn	0.20	U	ng/L	P355439	
		Simazine	0.50	U	ng/L	P355439	
		Terbufos	0.10	U	ng/L	P355439	
		Terbutylazine	0.43	U	ng/L	P355439	
		Fonofos	0.20	U	ng/L	P355439	RPD
		Metalaxyl	0.25	U	ng/L	P355439	
		Metolachlor	0.25	U	ng/L	P355439	
		Acetochlor	0.25	U	ng/L	P355439	
		Cyanazine	0.50	UJ	ng/L	P355439	
		Parathion Ethyl	0.25	U	ng/L	P355439	
		Parathion Methyl	0.25	U	ng/L	P355439	
		Dimethenamid**	0.10	UJ	ng/L	P355439	MS, RPD
		Fipronil Desulfinyl**	0.13	UJ	ng/L	P355439	
		Dithiopyr**	0.10	U	ng/L	P355439	
		Prodiamine**	0.18	U	ng/L	P355439	
		Oxadiazon**	0.10	U	ng/L	P355439	MS, RPD
		Tebuconazole**	0.50	UJ	ng/L	P355439	
2043536	EPA 200.7 Rev. 4.4	Calcium	5.14		mg/L	P355153	
		Iron	3.19E+03		ug/L	P355153	
		Magnesium	2.65		mg/L	P355153	
		Potassium	1.1	I	mg/L	P355153	
		Sodium	1.8	I	mg/L	P355153	
		Zinc	5.8	I	ug/L	P355153	
	EPA 200.8 Rev. 5.4	Arsenic	0.82		ug/L	P355153	
		Cadmium	0.051	I	ug/L	P355153	
		Chromium	4.6		ug/L	P355153	
		Copper	1.07		ug/L	P355153	
		Lead	2.03		ug/L	P355153	

Field ID: G2TLHR0031

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2043536	EPA 200.8 Rev. 5.4	Nickel	1.26		ug/L	P355153	
		Silver	0.010	U	ug/L	P355153	

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 imazapyr could not be assessed due to high concentration of parameter in the spiked sample. Refer to the narrative for an explanation of QC Codes.

EPA 8270D: Estimated value for Fipronil Desulfinyl due to lack of the second source standard. Refer to the narrative for an explanation of QC Codes.

EPA 200.8 Rev. 5.4: The lead result was confirmed on 12/12/2018.

Sample Location: MOSQUITO CREEK @ SR269

Collection Date/Time: 11/26/2018 11:20

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2043509	EPA 180.1 Rev. 2.0	Turbidity	55		NTU	P355149	
	EPA 300.0 Rev. 2.1	Chloride	3.0		mg Cl/L	P355505	
		Sulfate	0.97		mg SO4/L	P355507	
	SM 2120 B	Color (true)	58		PCU	P355213	
	SM 2320 B-97	Total Alkalinity	15		mg CaCO3/L	P355469	
	SM 2540 C-97	TDS	67		mg/L	P355528	
	SM 2540 D-97	TSS	56		mg/L	P355510	
	SM 4500 F-C-97	Fluoride	0.053	I	mg F/L	P355474	
2043511	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P355305	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P355216	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.52		mg N/L	P355330	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P355222	
	SM 5310 B-00	Organic Carbon	9.8		mg C/L	P355326	
2043513	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.013		mg P/L	P355154	
2043528	EPA 8321B	2,4-D	0.0020	U	ug/L	P355009	
		Bentazon	0.0022	I	ug/L	P355009	
		MCP	0.0020	U	ug/L	P355009	
		Triclopyr**	0.0040	U	ug/L	P355009	
		Imidacloprid	0.0031	I	ug/L	P355009	
		Diuron	0.0020	U	ug/L	P355009	
		Pyraclostrobin**	0.0020	UJ	ug/L	P355009	CCV
		Primidone**	0.0040	U	ug/L	P355009	RPD
		Linuron	0.0040	U	ug/L	P355009	
		Acetaminophen**	0.0080	U	ug/L	P355009	
		Fenuron	0.016	U	ug/L	P355009	
		Imazapyr**	0.0047	I	ug/L	P355009	
		Carbamazepine**	8.0E-04	U	ug/L	P355009	
		Fluridone**	4.0E-04	U	ug/L	P355009	
		Hydrocodone**	8.0E-04	U	ug/L	P355009	
		Naproxen**	0.0080	U	ug/L	P355009	RPD
		Ibuprofen**	0.020	U	ug/L	P355009	
		Sucralose**	0.010	U	ug/L	P355225	
		Acesulfame K**	0.10	U	ug/L	P355225	
2043534	EPA 200.7 Rev. 4.4	Calcium	5.57		mg/L	P355153	
		Iron	2.90E+03		ug/L	P355153	
		Magnesium	2.81		mg/L	P355153	
		Potassium	1.5		mg/L	P355153	
		Sodium	1.8	I	mg/L	P355153	
	EPA 200.8 Rev. 5.4	Zinc	8.7	I	ug/L	P355153	
		Arsenic	0.85		ug/L	P355153	
		Cadmium	0.035	I	ug/L	P355153	
		Chromium	3.3		ug/L	P355153	
		Copper	1.43		ug/L	P355153	

Field ID: G2TLHR0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2043534	EPA 200.8 Rev. 5.4	Lead	1.90		ug/L	P355153	
		Nickel	0.99		ug/L	P355153	
		Silver	0.010	U	ug/L	P355153	

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 imazapyr could not be assessed due to high concentration of parameter in the spiked sample. Refer to the narrative for an explanation of QC Codes.
EPA 200.8 Rev. 5.4: The lead result was confirmed on 12/12/2018.

Sample Location: Mosquito Creek @ Jinks Crossing Rd

Collection Date/Time: 11/26/2018 11:50

Field ID: G2TLHR0092

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2043510	EPA 180.1 Rev. 2.0	Turbidity	17	A	NTU	P355149	
	EPA 300.0 Rev. 2.1	Chloride	4.1		mg Cl/L	P355505	
		Sulfate	0.81		mg SO4/L	P355507	
	SM 2120 B	Color (true)	37	A	PCU	P355213	
	SM 2320 B-97	Total Alkalinity	20		mg CaCO3/L	P355469	
	SM 2540 C-97	TDS	53		mg/L	P355528	
	SM 2540 D-97	TSS	10	I	mg/L	P355510	
	SM 4500 F-C-97	Fluoride	0.053	I	mg F/L	P355474	
2043512	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P355306	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39		mg N/L	P355216	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.59		mg N/L	P355330	
	EPA 365.1 Rev. 2.0	Total-P	0.040		mg P/L	P355222	
	SM 5310 B-00	Organic Carbon	6.4		mg C/L	P355326	
2043514	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P355154	
2043529	EPA 8321B	2,4-D	0.0020	U	ug/L	P355009	
		Bentazon	0.0056		ug/L	P355009	
		MCP	0.0020	U	ug/L	P355009	
		Triclopyr**	0.0040	U	ug/L	P355009	
		Imidacloprid	0.0068	I	ug/L	P355009	
		Diuron	0.0020	U	ug/L	P355009	
		Pyraclostrobin**	0.0020	UJ	ug/L	P355009	CCV
		Primidone**	0.0040	U	ug/L	P355009	RPD
		Linuron	0.0040	U	ug/L	P355009	
		Acetaminophen**	0.0080	U	ug/L	P355009	
		Fenuron	0.016	U	ug/L	P355009	
		Imazapyr**	0.013	I	ug/L	P355009	
		Carbamazepine**	8.0E-04	U	ug/L	P355009	
		Fluridone**	4.0E-04	U	ug/L	P355009	
		Hydrocodone**	8.0E-04	U	ug/L	P355009	
		Naproxen**	0.0080	U	ug/L	P355009	RPD
		Ibuprofen**	0.020	U	ug/L	P355009	
		Sucralose**	0.010	U	ug/L	P355225	
		Acesulfame K**	0.10	U	ug/L	P355225	
2043535	EPA 200.7 Rev. 4.4	Calcium	6.08		mg/L	P355153	
		Iron	850		ug/L	P355153	
		Magnesium	2.96		mg/L	P355153	
		Potassium	1.3		mg/L	P355153	
		Sodium	2.3		mg/L	P355153	
		Zinc	5.0	U	ug/L	P355153	
	EPA 200.8 Rev. 5.4	Arsenic	0.43		ug/L	P355153	
		Cadmium	0.020	U	ug/L	P355153	
		Chromium	0.62	I	ug/L	P355153	
		Copper	0.91		ug/L	P355153	

Field ID: G2TLHR0092

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2043535	EPA 200.8 Rev. 5.4	Lead	0.51		ug/L	P355153	
		Nickel	0.29	I	ug/L	P355153	
		Silver	0.010	U	ug/L	P355153	

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 imazapyr could not be assessed due to high concentration of parameter in the spiked sample. Refer to the narrative for an explanation of QC Codes.

Sample Location: South Mosquito Creek @ Power Line

Collection Date/Time: 11/26/2018 12:15

Field ID: G2TLHR0039

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2043506	EPA 180.1 Rev. 2.0	Turbidity	75		NTU	P355149	
	EPA 300.0 Rev. 2.1	Chloride	2.0		mg Cl/L	P355505	
		Sulfate	1.0		mg SO4/L	P355507	
	SM 2120 B	Color (true)	80		PCU	P355213	
	SM 2320 B-97	Total Alkalinity	7.0		mg CaCO3/L	P355469	
	SM 2540 C-97	TDS	57		mg/L	P355528	
	SM 2540 D-97	TSS	52		mg/L	P355510	
	SM 4500 F-C-97	Fluoride	0.043	I	mg F/L	P355474	
2043507	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P355305	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.72		mg N/L	P355216	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.17		mg N/L	P355330	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P355222	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P355326	
2043508	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.009	I	mg P/L	P355154	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P355149

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P355153

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: P355153

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: P355505

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355507

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355305

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355306

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355216

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355646

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355330

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P355222

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P355154

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

Reference Method: EPA 8270D
Batch ID: P355369

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D
Batch ID: P355369

Component	Result	Code	Units
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: P355439

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
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
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
Oxadiazon	0.10	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
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D
Batch ID: P355439

Component	Result	Code	Units
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8276
Batch ID: P355369

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

Reference Method: EPA 8321B
Batch ID: P355009

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	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: P355225

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P355225

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P355213

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P355469

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

Reference Method: SM 2540 C-97
Batch ID: P355528

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P355510

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P355474

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P355326

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

Reference Method: SM 5310 B-00
Batch ID: P355423

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: P355153

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	106		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	102		P	85 - 115
Sodium	102		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P355153

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	106		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	101		P	85 - 115
Copper	102		P	85 - 115
Lead	98.7		P	85 - 115
Nickel	102		P	85 - 115
Silver	103		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355505

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355507

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355305

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355306

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355216

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P355646

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P355330

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P355222

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P355154

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

Reference Method: EPA 8270D
 Batch ID: P355369

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	61.9	68.6	P/P	24 - 89.0
Alpha-BHC	96.2	102	P/P	58 - 117
Alpha-Chlordane	90.0	90.1	P/P	56 - 115
Beta-BHC	112	115	P/P	55 - 137
Carbophenothion	97.2	95.0	P/P	37 - 145
Chlorothalonil	107	107	P/P	26 - 163
Cypermethrin	76.1	73.6	P/P	42 - 156
DDD-p,p'	100	95.2	P/P	59 - 129
DDE-p,p'	94.9	94.6	P/P	52 - 117
DDT-p,p'	100	104	P/P	48 - 128
Delta-BHC	129	139	P/P	59 - 158
Dicofol	94.2	97.0	P/P	19 - 124
Dieldrin	101	99.2	P/P	57 - 126
Endosulfan I	89.4	84.7	P/P	59 - 133
Endosulfan II	113	102	P/P	58 - 148
Endosulfan Sulfate	86.0	82.6	P/P	56 - 135
Endrin	94.9	95.2	P/P	50 - 140
Endrin Aldehyde	100	93.5	P/P	47 - 141
Endrin Ketone	80.2	78.7	P/P	63 - 123
Gamma-BHC	124	116	P/P	59 - 132
Gamma-Chlordane	85.6	86.8	P/P	55 - 112
Heptachlor	67.6	78.0	P/P	45 - 102
Heptachlor Epoxide	86.4	90.5	P/P	61 - 116
Methoxychlor	103	110	P/P	60 - 133
Mirex	66.2	68.0	P/P	40 - 98.0
Permethrin	75.6	73.9	P/P	45 - 131
Trifluralin	91.2	94.0	P/P	38 - 179

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270D

Batch ID: P355439

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	80.5	93.4	P/P	74 - 119
Alachlor	76.6	87.9	P/P	75 - 118
Ametryn	78.4	81.4	P/P	59 - 137
Atrazine	104	119	P/P	73 - 120
Atrazine Desethyl	123	130	P/F	19 - 129
Azinphos Methyl	91.5	104	P/P	65 - 181
Bromacil	80.4	88.5	P/P	43 - 123
Butylate	59.0	63.6	P/P	28 - 85.0
Chlorpyrifos Ethyl	80.4	87.2	P/P	55 - 112
Chlorpyrifos Methyl	84.9	97.8	P/P	35 - 124
Cyanazine	127	181	P/P	26 - 262
Demeton	60.2	69.0	P/P	43 - 122
Diazinon	90.3	99.8	P/P	72 - 120
Dimethenamid	82.2	94.1	P/P	60 - 130
Disulfoton	65.2	77.2	P/P	45 - 137
Dithiopyr	77.4	90.1	P/P	60 - 130
EPTC	55.8	64.2	P/P	28 - 95.0
Ethion	33.7	38.4	F/F	63 - 127
Ethoprop	93.1	105	P/P	63 - 109
Fenamiphos	76.3	85.5	P/P	66 - 136
Fipronil	86.3	98.9	P/P	63 - 126
Fipronil Sulfide	74.3	88.6	P/P	59 - 123
Fipronil Sulfone	72.4	83.8	P/P	56 - 122
Fonofos	95.1	103	P/P	64 - 114
Hexazinone	101	113	P/P	49 - 144
Malathion	81.2	89.7	P/P	68 - 131
Metalaxyl	84.3	99.7	P/P	57 - 126
Metolachlor	75.0	87.4	P/P	75 - 118
Metribuzin	222	262	F/F	46 - 169
Mevinphos	83.6	91.7	P/P	34 - 126
Molinate	55.2	59.9	P/P	37 - 101
Norflurazon	79.2	89.1	P/P	63 - 127
Oxadiazon	86.8	101	P/P	60 - 130
Parathion Ethyl	85.1	94.9	P/P	78 - 109
Parathion Methyl	98.0	112	P/P	74 - 123
Pendimethalin	73.9	79.6	P/P	51 - 130
Phorate	81.5	94.2	P/P	53 - 116
Prodiamine	71.3	83.6	P/P	60 - 130
Prometon	72.7	83.9	P/P	66 - 124
Prometryn	76.0	87.7	P/P	66 - 124
Simazine	102	120	P/P	62 - 134
Tebuconazole	45.0	51.7	P/P	30 - 100
Terbufos	92.2	102	P/P	59 - 115
Terbutylazine	87.4	98.5	P/P	76 - 113

Reference Method: EPA 8276

Batch ID: P355369

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	71.3	73.8	P/P	47 - 125
Toxaphene	73.7	68.3	P/P	46 - 147

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P355009

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	85.1		P	40 - 150
3-Hydroxycarbofuran	88.2		P	40 - 150
Acetaminophen	114		P	30 - 150
Aldicarb	89.9		P	30 - 150
Aldicarb Sulfone	95.2		P	40 - 150
Aldicarb Sulfoxide	120		P	40 - 150
Bentazon	72.6		P	30 - 150
Carbamazepine	80.4		P	40 - 150
Carbaryl	76.9		P	40 - 150
Carbofuran	78.9		P	40 - 150
Diuron	69.6		P	40 - 150
Fenuron	101		P	40 - 150
Fluridone	107		P	40 - 150
Hydrocodone	98.6		P	40 - 150
Ibuprofen	78.4		P	40 - 150
Imazapyr	77.8		P	40 - 150
Imidacloprid	108		P	40 - 160
Linuron	76.9		P	40 - 150
MCPP	113		P	40 - 150
Methiocarb	63.9		P	40 - 150
Methomyl	101		P	40 - 150
Naproxen	91.5		P	40 - 150
Oxamyl	91.9		P	40 - 150
Primidone	80.0		P	40 - 150
Propoxur	81.1		P	40 - 150
Pyraclostrobin	71.7		P	40 - 150
Triclopyr	72.1		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P355225

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	102		P	40 - 150
AMPA	86.8		P	40 - 150
Endothall	90.6		P	40 - 150
Glufosinate	76.4		P	40 - 150
Glyphosate	66.3		P	40 - 140
Sucralose	114		P	40 - 150

Reference Method: SM 2120 B

Batch ID: P355213

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	104		P	85 - 115

Reference Method: SM 2320 B-97

Batch ID: P355469

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	98 - 107

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P355474

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.9		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P355326

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.5		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P355423

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P355153

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043589	Calcium	103		P	80 - 120
2043589	Iron	106	107	P/P	80 - 120
2043589	Magnesium	102		P	80 - 120
2043589	Potassium	101		P	80 - 120
2043589	Sodium	102		P	80 - 120
2043589	Zinc	100	101	P/P	80 - 120
2043717	Calcium	105		P	80 - 120
2043717	Iron	105		P	80 - 120
2043717	Magnesium	106		P	80 - 120
2043717	Potassium	101		P	80 - 120
2043717	Sodium	105		P	80 - 120
2043717	Zinc	99.1		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P355153

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043589	Arsenic	106	106	P/P	80 - 120
2043589	Cadmium	102	103	P/P	80 - 120
2043589	Chromium	100	101	P/P	80 - 120
2043589	Copper	99.9	100	P/P	80 - 120
2043589	Lead	98.3	98.7	P/P	80 - 120
2043589	Nickel	100	101	P/P	80 - 120
2043589	Silver	104	103	P/P	80 - 120
2043717	Arsenic	104		P	80 - 120
2043717	Cadmium	104		P	80 - 120
2043717	Chromium	102		P	80 - 120
2043717	Copper	99.2		P	80 - 120
2043717	Lead	98.8		P	80 - 120
2043717	Nickel	99.0		P	80 - 120
2043717	Silver	102		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043287	Chloride	98.1		P	90 - 110
2043510	Chloride	98.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043287	Sulfate	99.1		P	90 - 110
2043510	Sulfate	99.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355305

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043387	Ammonia-N	100	103	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355306

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043512	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355216

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043511	Kjeldahl Nitrogen	102	98.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355646

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043545	Kjeldahl Nitrogen	105	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355330

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043490	NO2NO3-N	105	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P355222

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043544	Total-P	97.8	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P355154

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043508	O-Phosphate-P	95.8	95.8	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P355369

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043714	Aldrin	73.6	68.5	P/P	26 - 96.0
2043714	Alpha-BHC	83.9	115	P/P	51 - 123
2043714	Alpha-Chlordane	95.0	92.2	P/P	45 - 120
2043714	Beta-BHC	128	128	P/P	43 - 146
2043714	Carbophenothion	107	106	P/P	26 - 179
2043714	Chlorothalonil	129	103	P/P	10 - 215
2043714	Cypermethrin	77.1	75.2	P/P	35 - 169
2043714	DDD-p,p'	98.8	94.9	P/P	49 - 131
2043714	DDE-p,p'	98.3	94.0	P/P	39 - 127
2043714	DDT-p,p'	101	100	P/P	49 - 120
2043714	Delta-BHC	216	201	F/F	49 - 187
2043714	Dicofol	105	100	P/P	10 - 129
2043714	Dieldrin	102	97.3	P/P	46 - 132
2043714	Endosulfan I	89.1	90.9	P/P	57 - 130
2043714	Endosulfan II	93.7	107	P/P	52 - 148
2043714	Endosulfan Sulfate	103	97.1	P/P	55 - 129

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P355369

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043714	Endrin	95.4	89.7	P/P	45 - 133
2043714	Endrin Aldehyde	92.8	92.0	P/P	26 - 140
2043714	Endrin Ketone	86.1	85.4	P/P	60 - 125
2043714	Gamma-BHC	155	144	F/P	50 - 145
2043714	Gamma-Chlordane	91.1	90.6	P/P	44 - 118
2043714	Heptachlor	77.3	73.1	P/P	35 - 106
2043714	Heptachlor Epoxide	94.0	93.8	P/P	52 - 123
2043714	Methoxychlor	103	107	P/P	54 - 132
2043714	Mirex	69.1	71.8	P/P	36 - 107
2043714	Permethrin	77.0	76.5	P/P	47 - 135
2043714	Trifluralin	98.8	97.7	P/P	32 - 228

Reference Method: EPA 8270D
Batch ID: P355439

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043533	Acetochlor	86.7	78.3	P/P	67 - 125
2043533	Alachlor	83.7	78.0	P/P	69 - 123
2043533	Ametryn	87.4	82.1	P/P	52 - 151
2043533	Atrazine	124	113	P/P	71 - 125
2043533	Atrazine Desethyl	119	94.3	P/P	10 - 129
2043533	Azinphos Methyl	90.5	78.3	P/P	48 - 200
2043533	Bromacil	86.8	72.8	P/P	46 - 130
2043533	Butylate	66.6	67.2	P/P	10 - 85.0
2043533	Chlorpyrifos Ethyl	91.1	86.7	P/P	54 - 115
2043533	Chlorpyrifos Methyl	92.7	91.1	P/P	44 - 117
2043533	Cyanazine	102	153	P/P	10 - 262
2043533	Demeton	91.6	96.7	P/P	24 - 145
2043533	Diazinon	102	92.6	P/P	66 - 129
2043533	Dimethenamid	69.9	30.7	P/F	60 - 130
2043533	Disulfoton	109	93.3	P/P	45 - 139
2043533	Dithiopyr	84.5	79.3	P/P	60 - 130
2043533	EPTC	59.2	65.1	P/P	10 - 86.0
2043533	Ethion	27.5	17.7	F/F	59 - 133
2043533	Ethoprop	88.3	92.2	P/P	54 - 116
2043533	Fenamiphos	107	81.7	P/P	55 - 140
2043533	Fipronil	99.0	86.0	P/P	37 - 142
2043533	Fipronil Sulfide	90.2	87.0	P/P	37 - 130
2043533	Fipronil Sulfone	81.6	73.9	P/P	18 - 143
2043533	Fonofos	103	104	P/P	55 - 118
2043533	Hexazinone	99.7	87.6	P/P	62 - 140
2043533	Malathion	92.2	96.4	P/P	64 - 132
2043533	Metalaxyl	96.7	91.4	P/P	55 - 129
2043533	Metolachlor	84.6	81.1	P/P	56 - 137
2043533	Metribuzin	207	189	P/P	16 - 218
2043533	Mevinphos	103	110	P/P	34 - 129
2043533	Molinate	53.3	46.7	P/P	16 - 99.0
2043533	Norflurazon	79.4	65.9	P/P	43 - 135
2043533	Oxadiazon	90.0	77.7	P/P	60 - 130
2043533	Parathion Ethyl	93.7	82.4	P/P	71 - 112
2043533	Parathion Methyl	102	95.9	P/P	65 - 127
2043533	Pendimethalin	85.9	78.4	P/P	35 - 159

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P355439

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043533	Phorate	105	116	P/P	41 - 129
2043533	Prodiamine	84.0	74.3	P/P	60 - 130
2043533	Prometon	61.5	74.6	P/P	56 - 140
2043533	Prometryn	86.2	77.6	P/P	65 - 130
2043533	Simazine	112	105	P/P	54 - 148
2043533	Tebuconazole	33.9	20.9	P/F	30 - 100
2043533	Terbufos	117	119	P/P	53 - 126
2043533	Terbuthylazine	95.3	87.4	P/P	73 - 114

Reference Method: EPA 8276
Batch ID: P355369

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2044160	Chlordane	87.6	73.7	P/P	41 - 134
2044160	Toxaphene	58.1	62.7	P/P	39 - 158

Reference Method: EPA 8321B
Batch ID: P355009

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043261	3-Hydroxycarbofuran	85.9	87.1	P/P	40 - 150
2043261	Aldicarb	71.8	67.7	P/P	30 - 150
2043261	Aldicarb Sulfone	77.5	82.1	P/P	40 - 150
2043261	Aldicarb Sulfoxide	62.3	59.4	P/P	40 - 150
2043261	Carbaryl	59.7	64.7	P/P	40 - 150
2043261	Carbofuran	66.1	65.4	P/P	40 - 150
2043261	Methiocarb	56.0	60.5	P/P	40 - 150
2043261	Methomyl	83.5	93.5	P/P	40 - 150
2043261	Oxamyl	78.7	76.9	P/P	40 - 150
2043261	Propoxur	65.0	66.4	P/P	40 - 150
2043262	2,4-D	107	120	P/P	40 - 150
2043262	Acetaminophen	130	130	P/P	30 - 150
2043262	Bentazon	53.3	62.0	P/P	30 - 150
2043262	Carbamazepine	79.7	81.3	P/P	40 - 150
2043262	Diuron	61.7	64.9	P/P	40 - 150
2043262	Fenuron	81.5	84.7	P/P	40 - 150
2043262	Fluridone	105	102	P/P	40 - 150
2043262	Hydrocodone	84.1	85.3	P/P	40 - 150
2043262	Ibuprofen	72.3	66.9	P/P	40 - 150
2043262	Imidacloprid	125	128	P/P	40 - 160
2043262	Linuron	67.2	68.2	P/P	40 - 150
2043262	MCP	134	129	P/P	40 - 150
2043262	Naproxen	86.6	59.7	P/P	40 - 150
2043262	Primidone	79.8	131	P/P	40 - 150
2043262	Pyraclostrobin	54.7	53.1	P/P	40 - 150
2043262	Triclopyr	79.2	78.2	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P355225

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043566	Acesulfame K	99.8	100	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P355225

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043566	AMPA	94.2	99.2	P/P	40 - 150
2043566	Endothall	94.8	92.9	P/P	40 - 150
2043566	Glufosinate	83.7	74.7	P/P	40 - 150
2043566	Glyphosate	66.1	70.4	P/P	40 - 140
2043566	Sucralose	114	113	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P355474

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043543	Fluoride	98.8	99.9	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P355326

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043289	Organic Carbon	97.4	94.1	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P355423

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2043516	Organic Carbon	98.2	98.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P355149

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043510	Turbidity	0.573	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P355153

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043589	Calcium	0.00903	Spike	P	0 - 20
2043589	Iron	0.540	Spike	P	0 - 20
2043589	Magnesium	0.862	Spike	P	0 - 20
2043589	Potassium	0.237	Spike	P	0 - 20
2043589	Sodium	0.0153	Spike	P	0 - 20
2043589	Zinc	0.531	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P355153

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043589	Arsenic	0.194	Spike	P	0 - 20
2043589	Cadmium	0.390	Spike	P	0 - 20
2043589	Chromium	0.263	Spike	P	0 - 20
2043589	Copper	0.451	Spike	P	0 - 20
2043589	Lead	0.380	Spike	P	0 - 20
2043589	Nickel	0.719	Spike	P	0 - 20
2043589	Silver	1.08	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043287	Chloride	0.513	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P355507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043287	Sulfate	0.739	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355305

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043387	Ammonia-N	1.99	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P355306

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043512	Ammonia-N	0.195	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355216

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043511	Kjeldahl Nitrogen	2.34	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P355646

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043545	Kjeldahl Nitrogen	0.601	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P355330

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043490	NO2NO3-N	0.244	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P355222

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043544	Total-P	5.43	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P355154

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043508	O-Phosphate-P	0.0	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P355369

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043714	Aldrin	7.17	Spike	P	0 - 30
2043714	Alpha-BHC	31.3	Spike	F	0 - 30
2043714	Alpha-Chlordane	3.00	Spike	P	0 - 30
2043714	Beta-BHC	0.218	Spike	P	0 - 30
2043714	Carbophenothion	1.44	Spike	P	0 - 30
2043714	Chlorothalonil	22.3	Spike	P	0 - 30
2043714	Cypermethrin	2.52	Spike	P	0 - 30
2043714	DDD-p,p'	3.95	Spike	P	0 - 30
2043714	DDE-p,p'	4.46	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P355369

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043714	DDT-p,p'	1.20	Spike	P	0 - 30
2043714	Delta-BHC	7.36	Spike	P	0 - 30
2043714	Dicofol	5.22	Spike	P	0 - 30
2043714	Dieldrin	4.30	Spike	P	0 - 30
2043714	Endosulfan I	1.99	Spike	P	0 - 30
2043714	Endosulfan II	13.1	Spike	P	0 - 30
2043714	Endosulfan Sulfate	5.61	Spike	P	0 - 30
2043714	Endrin	6.08	Spike	P	0 - 30
2043714	Endrin Aldehyde	0.796	Spike	P	0 - 30
2043714	Endrin Ketone	0.826	Spike	P	0 - 30
2043714	Gamma-BHC	7.76	Spike	P	0 - 30
2043714	Gamma-Chlordane	0.607	Spike	P	0 - 30
2043714	Heptachlor	5.64	Spike	P	0 - 30
2043714	Heptachlor Epoxide	0.270	Spike	P	0 - 30
2043714	Methoxychlor	3.63	Spike	P	0 - 30
2043714	Mirex	3.81	Spike	P	0 - 30
2043714	Permethrin	0.710	Spike	P	0 - 30
2043714	Trifluralin	1.03	Spike	P	0 - 30
LFB	Aldrin	10.2	LCS	P	0 - 30
LFB	Alpha-BHC	6.26	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.122	LCS	P	0 - 30
LFB	Beta-BHC	2.50	LCS	P	0 - 30
LFB	Carbophenothion	2.26	LCS	P	0 - 30
LFB	Chlorothalonil	0.0589	LCS	P	0 - 30
LFB	Cypermethrin	3.30	LCS	P	0 - 30
LFB	DDD-p,p'	4.97	LCS	P	0 - 30
LFB	DDE-p,p'	0.250	LCS	P	0 - 30
LFB	DDT-p,p'	3.50	LCS	P	0 - 30
LFB	Delta-BHC	7.50	LCS	P	0 - 30
LFB	Dicofol	3.00	LCS	P	0 - 30
LFB	Dieldrin	1.68	LCS	P	0 - 30
LFB	Endosulfan I	5.33	LCS	P	0 - 30
LFB	Endosulfan II	10.4	LCS	P	0 - 30
LFB	Endosulfan Sulfate	3.98	LCS	P	0 - 30
LFB	Endrin	0.262	LCS	P	0 - 30
LFB	Endrin Aldehyde	6.72	LCS	P	0 - 30
LFB	Endrin Ketone	1.89	LCS	P	0 - 30
LFB	Gamma-BHC	6.86	LCS	P	0 - 30
LFB	Gamma-Chlordane	1.46	LCS	P	0 - 30
LFB	Heptachlor	14.4	LCS	P	0 - 30
LFB	Heptachlor Epoxide	4.59	LCS	P	0 - 30
LFB	Methoxychlor	6.32	LCS	P	0 - 30
LFB	Mirex	2.65	LCS	P	0 - 30
LFB	Permethrin	2.39	LCS	P	0 - 30
LFB	Trifluralin	3.07	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P355439

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

Precision

Reference Method: EPA 8270D

Batch ID: P355439

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043533	Acetochlor	10.1	Spike	P	0 - 30
2043533	Alachlor	7.02	Spike	P	0 - 30
2043533	Ametryn	6.29	Spike	P	0 - 30
2043533	Atrazine	9.27	Spike	P	0 - 30
2043533	Atrazine Desethyl	23.4	Spike	P	0 - 30
2043533	Azinphos Methyl	14.5	Spike	P	0 - 30
2043533	Bromacil	17.5	Spike	P	0 - 30
2043533	Butylate	1.00	Spike	P	0 - 30
2043533	Chlorpyrifos Ethyl	4.90	Spike	P	0 - 30
2043533	Chlorpyrifos Methyl	1.68	Spike	P	0 - 30
2043533	Cyanazine	40.0	Spike	F	0 - 30
2043533	Demeton	5.44	Spike	P	0 - 30
2043533	Diazinon	9.47	Spike	P	0 - 30
2043533	Dimethenamid	77.9	Spike	F	0 - 30
2043533	Disulfoton	15.5	Spike	P	0 - 30
2043533	Dithiopyr	6.38	Spike	P	0 - 30
2043533	EPTC	9.42	Spike	P	0 - 30
2043533	Ethion	43.1	Spike	F	0 - 30
2043533	Ethoprop	4.04	Spike	P	0 - 30
2043533	Fenamiphos	26.9	Spike	P	0 - 30
2043533	Fipronil	14.1	Spike	P	0 - 30
2043533	Fipronil Sulfide	3.55	Spike	P	0 - 30
2043533	Fipronil Sulfone	10.0	Spike	P	0 - 30
2043533	Fonofos	1.32	Spike	P	0 - 30
2043533	Hexazinone	13.0	Spike	P	0 - 30
2043533	Malathion	4.50	Spike	P	0 - 30
2043533	Metaxyl	5.56	Spike	P	0 - 30
2043533	Metolachlor	4.28	Spike	P	0 - 30
2043533	Metribuzin	8.95	Spike	P	0 - 30
2043533	Mevinphos	6.44	Spike	P	0 - 30
2043533	Molinate	13.1	Spike	P	0 - 30
2043533	Norflurazon	18.7	Spike	P	0 - 30
2043533	Oxadiazon	14.6	Spike	P	0 - 30
2043533	Parathion Ethyl	12.9	Spike	P	0 - 30
2043533	Parathion Methyl	6.50	Spike	P	0 - 30
2043533	Pendimethalin	9.20	Spike	P	0 - 30
2043533	Phorate	10.6	Spike	P	0 - 30
2043533	Prodiamine	12.2	Spike	P	0 - 30
2043533	Prometon	19.2	Spike	P	0 - 30
2043533	Prometryn	10.6	Spike	P	0 - 30
2043533	Simazine	6.53	Spike	P	0 - 30
2043533	Tebuconazole	47.5	Spike	F	0 - 30
2043533	Terbufos	1.81	Spike	P	0 - 30
2043533	Terbutylazine	8.64	Spike	P	0 - 30
LFB	Acetochlor	14.9	LCS	P	0 - 30
LFB	Alachlor	13.8	LCS	P	0 - 30
LFB	Ametryn	3.79	LCS	P	0 - 30
LFB	Atrazine	14.0	LCS	P	0 - 30
LFB	Atrazine Desethyl	5.01	LCS	P	0 - 30
LFB	Azinphos Methyl	12.8	LCS	P	0 - 30
LFB	Bromacil	9.59	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D

Batch ID: P355439

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Butylate	7.54	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	8.17	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	14.2	LCS	P	0 - 30
LFB	Cyanazine	35.3	LCS	F	0 - 30
LFB	Demeton	13.7	LCS	P	0 - 30
LFB	Diazinon	9.90	LCS	P	0 - 30
LFB	Dimethenamid	13.5	LCS	P	0 - 30
LFB	Disulfoton	16.9	LCS	P	0 - 30
LFB	Dithiopyr	15.2	LCS	P	0 - 30
LFB	EPTC	14.0	LCS	P	0 - 30
LFB	Ethion	13.1	LCS	P	0 - 30
LFB	Ethoprop	11.9	LCS	P	0 - 30
LFB	Fenamiphos	11.5	LCS	P	0 - 30
LFB	Fipronil	13.6	LCS	P	0 - 30
LFB	Fipronil Sulfide	17.7	LCS	P	0 - 30
LFB	Fipronil Sulfone	14.6	LCS	P	0 - 30
LFB	Fonofos	7.70	LCS	P	0 - 30
LFB	Hexazinone	11.4	LCS	P	0 - 30
LFB	Malathion	9.93	LCS	P	0 - 30
LFB	Metalaxyl	16.8	LCS	P	0 - 30
LFB	Metolachlor	15.2	LCS	P	0 - 30
LFB	Metribuzin	16.8	LCS	P	0 - 30
LFB	Mevinphos	9.18	LCS	P	0 - 30
LFB	Molinate	8.24	LCS	P	0 - 30
LFB	Norflurazon	11.8	LCS	P	0 - 30
LFB	Oxadiazon	14.8	LCS	P	0 - 30
LFB	Parathion Ethyl	11.0	LCS	P	0 - 30
LFB	Parathion Methyl	13.6	LCS	P	0 - 30
LFB	Pendimethalin	7.48	LCS	P	0 - 30
LFB	Phorate	14.4	LCS	P	0 - 30
LFB	Prodiamine	15.9	LCS	P	0 - 30
LFB	Prometon	14.3	LCS	P	0 - 30
LFB	Prometryn	14.3	LCS	P	0 - 30
LFB	Simazine	16.4	LCS	P	0 - 30
LFB	Tebuconazole	13.9	LCS	P	0 - 30
LFB	Terbufos	10.0	LCS	P	0 - 30
LFB	Terbutylazine	11.9	LCS	P	0 - 30

Reference Method: EPA 8276

Batch ID: P355369

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2044160	Chlordane	17.3	Spike	P	0 - 30
2044160	Toxaphene	7.66	Spike	P	0 - 30
LFB	Chlordane	3.48	LCS	P	0 - 30
LFB	Toxaphene	7.57	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P355009

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043261	3-Hydroxycarbofuran	1.33	Spike	P	0 - 30
2043261	Aldicarb	5.93	Spike	P	0 - 30
2043261	Aldicarb Sulfone	5.79	Spike	P	0 - 30
2043261	Aldicarb Sulfoxide	4.80	Spike	P	0 - 30
2043261	Carbaryl	8.04	Spike	P	0 - 30
2043261	Carbofuran	1.02	Spike	P	0 - 30
2043261	Methiocarb	7.73	Spike	P	0 - 30
2043261	Methomyl	11.4	Spike	P	0 - 30
2043261	Oxamyl	2.35	Spike	P	0 - 30
2043261	Propoxur	2.07	Spike	P	0 - 30
2043262	2,4-D	11.0	Spike	P	0 - 30
2043262	Acetaminophen	0.135	Spike	P	0 - 30
2043262	Bentazon	15.2	Spike	P	0 - 30
2043262	Carbamazepine	1.96	Spike	P	0 - 30
2043262	Diuron	5.07	Spike	P	0 - 30
2043262	Fenuron	3.92	Spike	P	0 - 30
2043262	Fluridone	2.98	Spike	P	0 - 30
2043262	Hydrocodone	1.37	Spike	P	0 - 30
2043262	Ibuprofen	7.79	Spike	P	0 - 30
2043262	Imazapyr	20.5	Spike	P	0 - 30
2043262	Imidacloprid	2.12	Spike	P	0 - 30
2043262	Linuron	1.51	Spike	P	0 - 30
2043262	MCP	4.01	Spike	P	0 - 30
2043262	Naproxen	36.8	Spike	F	0 - 30
2043262	Primidone	48.9	Spike	F	0 - 30
2043262	Pyraclostrobin	2.97	Spike	P	0 - 30
2043262	Triclopyr	1.20	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P355225

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043566	Acesulfame K	0.180	Spike	P	0 - 30
2043566	AMPA	5.19	Spike	P	0 - 30
2043566	Endothall	2.03	Spike	P	0 - 30
2043566	Glufosinate	11.4	Spike	P	0 - 30
2043566	Glyphosate	6.32	Spike	P	0 - 30
2043566	Sucralose	1.25	Spike	P	0 - 30

Reference Method: SM 2120 B

Batch ID: P355213

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043510	Color (true)	1.35	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
 Batch ID: P355469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043543	Total Alkalinity	1.09	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
 Batch ID: P355528

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043541	TDS	5.66	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P355474

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043543	Fluoride	0.979	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
 Batch ID: P355326

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043289	Organic Carbon	2.29	Spike	P	0 - 20

Reference Method: SM 5310 B-00
 Batch ID: P355423

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2043516	Organic Carbon	0.0321	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: 2043528
Field Sample ID: G2TLHR0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	85.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	91.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	78.2	P	30 - 160
EPA 8321B	Diuron-d6	84.0	P	30 - 160
EPA 8321B	Endothall-d6	83.3	P	40 - 160
EPA 8321B	Ibuprofen-d3	77.0	P	30 - 160
EPA 8321B	Primidone-d5	56.6	P	30 - 160
EPA 8321B	Sucralose-d6	95.1	P	40 - 160

Lab Sample ID: 2043529
Field Sample ID: G2TLHR0092

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	89.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	102	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.5	P	30 - 160
EPA 8321B	Diuron-d6	93.7	P	30 - 160
EPA 8321B	Endothall-d6	86.0	P	40 - 160
EPA 8321B	Ibuprofen-d3	84.8	P	30 - 160
EPA 8321B	Primidone-d5	74.7	P	30 - 160
EPA 8321B	Sucralose-d6	113	P	40 - 160

Lab Sample ID: 2043530
Field Sample ID: G2TLHR0031

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	58.4	P	30 - 160

Lab Sample ID: 2043531
Field Sample ID: G2TLHR0031

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	81.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	97.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	76.7	P	30 - 160
EPA 8321B	Diuron-d6	75.2	P	30 - 160
EPA 8321B	Endothall-d6	90.6	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	73.3	P	40 - 160
EPA 8321B	Ibuprofen-d3	77.2	P	30 - 160
EPA 8321B	Primidone-d5	59.8	P	30 - 160
EPA 8321B	Sucralose-d6	111	P	40 - 160

Lab Sample ID: 2043532
Field Sample ID: G2TLHR0031

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	79.3	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	62.1	P	34 - 101
EPA 8276	Decachlorobiphenyl	63.4	P	31 - 108
EPA 8276	PCNB	96.6	P	62 - 142

Quality Assurance Report Surrogates

Lab Sample ID: 2043533

Field Sample ID: G2TLHR0031

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	103	P	71 - 126
EPA 8270D	Terbufos-d10	105	P	59 - 149

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A87978

Included Lab Sample IDs: 2043506, 2043509, 2043510, 2043515

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	100	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A87979

Included Lab Sample IDs: 2043508, 2043513, 2043514, 2043517

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.9	P/P	90 - 110
O-Phosphate-P	100	100	P/P	90 - 110
O-Phosphate-P	101	99.6	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A88001

Included Lab Sample IDs: 2043506, 2043509, 2043510, 2043515

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	106	104	P/P	90 - 115

Reference Method: EPA 8321B

Run ID: A88012

Included Lab Sample IDs: 2043528, 2043529, 2043531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	109	114	P/P	50 - 150
Acetaminophen	115	126	P/P	60 - 160
Bentazon	69.7	129	P/P	50 - 160
Carbamazepine	99.7	121	P/P	60 - 160
Diuron	83.9	90.4	P/P	60 - 150
Fenuron	107	124	P/P	60 - 150
Fluridone	128	137	P/P	60 - 160
Hydrocodone	107	148	P/P	60 - 150
Ibuprofen	85.0	88.9	P/P	50 - 160
Imazapyr	86.3	110	P/P	50 - 150
Imidacloprid	94.8	111	P/P	60 - 160
Linuron	101	101	P/P	60 - 150
MCPP	95.0	89.2	P/P	50 - 150
Naproxen	84.4	75.1	P/P	50 - 160
Primidone	87.2	154	P/P	60 - 160
Pyraclostrobin	163*	161*	F/F	60 - 150
Triclopyr	102	73.7	P/P	50 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A88031

Included Lab Sample IDs: 2043507, 2043511, 2043516

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A88036

Included Lab Sample IDs: 2043507, 2043511, 2043512

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	98.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A88037

Included Lab Sample IDs: 2043507, 2043511, 2043512, 2043516

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A88038

Included Lab Sample IDs: 2043512

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

Reference Method: SM 5310 B-00

Run ID: A88042

Included Lab Sample IDs: 2043507, 2043511, 2043512

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.4	96.2	P/P	90 - 110
Organic Carbon	96.2	95.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A88043

Included Lab Sample IDs: 2043507, 2043511, 2043512, 2043516

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

Reference Method: EPA 8321B

Run ID: A88058

Included Lab Sample IDs: 2043531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	85.9	84.1	P/P	60 - 160
Glufosinate	75.8	76.7	P/P	60 - 160
Glyphosate	61.1	67.9	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A88065

Included Lab Sample IDs: 2043534, 2043535, 2043536

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	105	P/P	95 - 105
Iron	103	104	P/P	95 - 105
Magnesium	103	104	P/P	95 - 105
Potassium	101	102	P/P	95 - 105
Sodium	102	103	P/P	95 - 105
Zinc	104	102	P/P	95 - 105

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00
Run ID: A88068
Included Lab Sample IDs: 2043516

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.4	97.3	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A88078
Included Lab Sample IDs: 2043530

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	97.5	94.4	P/P	50 - 150
Aldicarb	101	96.3	P/P	60 - 150
Aldicarb Sulfone	93.9	99.4	P/P	50 - 150
Aldicarb Sulfoxide	108	115	P/P	50 - 150
Carbaryl	102	105	P/P	60 - 150
Carbofuran	104	105	P/P	50 - 150
Methiocarb	110	107	P/P	50 - 150
Methomyl	89.9	89.8	P/P	50 - 150
Oxamyl	101	94.9	P/P	50 - 150
Propoxur	102	105	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A88079
Included Lab Sample IDs: 2043528, 2043529, 2043531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	119	89.3	P/P	60 - 160
Acesulfame K	89.3	90.8	P/P	60 - 160
Endothall	86.4	82.7	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A88081
Included Lab Sample IDs: 2043528, 2043529, 2043531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	116	123	P/P	60 - 160

Reference Method: SM 2320 B-97
Run ID: A88097
Included Lab Sample IDs: 2043506, 2043509, 2043510, 2043515

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.5	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A88097
Included Lab Sample IDs: 2043506, 2043509, 2043510, 2043515

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A88113

Included Lab Sample IDs: 2043506, 2043509, 2043510, 2043515

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A88146

Included Lab Sample IDs: 2043534, 2043535, 2043536

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	103	102	P/P	90 - 110
Cadmium	98.6	98.6	P/P	90 - 110
Chromium	98.8	99.1	P/P	90 - 110
Copper	103	101	P/P	90 - 110
Lead	98.7	97.4	P/P	90 - 110
Nickel	101	99.9	P/P	90 - 110
Silver	99.3	99.1	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A88164

Included Lab Sample IDs: 2043532

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.4		P	80 - 120
Toxaphene	97.5		P	80 - 120

Reference Method: EPA 8270D

Run ID: A88180

Included Lab Sample IDs: 2043532

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alpha-BHC	94.6		P	80 - 120
Beta-BHC	92.5		P	80 - 120
Delta-BHC	90.6		P	80 - 120
Gamma-BHC	97.3		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A88192

Included Lab Sample IDs: 2043516

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	97.7	P/P	90 - 110

Reference Method: EPA 8270D

Run ID: A88200

Included Lab Sample IDs: 2043532

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	94.2		P	80 - 120
Alpha-Chlordane	92.1		P	80 - 120
Carbophenothion	88.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A88200

Included Lab Sample IDs: 2043532

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorothalonil	94.0		P	80 - 120
Cypermethrin	87.3		P	80 - 120
DDD-p,p'	92.8		P	80 - 120
DDE-p,p'	95.2		P	80 - 120
DDT-p,p'	101		P	80 - 120
Dicofol	97.6		P	80 - 120
Dieldrin	94.9		P	80 - 120
Endosulfan I	90.7		P	80 - 120
Endosulfan II	87.0		P	80 - 120
Endosulfan Sulfate	90.2		P	80 - 120
Endrin	88.7		P	80 - 120
Endrin Aldehyde	89.8		P	80 - 120
Endrin Ketone	86.3		P	80 - 120
Gamma-Chlordane	91.2		P	80 - 120
Heptachlor	90.8		P	80 - 120
Heptachlor Epoxide	91.2		P	80 - 120
Methoxychlor	100		P	80 - 120
Mirex	92.9		P	80 - 120
Permethrin	85.6		P	80 - 120
Trifluralin	94.4		P	80 - 120

Reference Method: EPA 8270D

Run ID: A88272

Included Lab Sample IDs: 2043533

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	96.1		P	80 - 120
Alachlor	95.7		P	80 - 120
Ametryn	78.6*		F	80 - 120
Atrazine	95.6		P	80 - 120
Atrazine Desethyl	106		P	80 - 120
Azinphos Methyl	94.2		P	80 - 120
Bromacil	94.5		P	80 - 120
Butylate	89.4		P	80 - 120
Chlorpyrifos Ethyl	98.5		P	80 - 120
Chlorpyrifos Methyl	93.1		P	80 - 120
Cyanazine	118		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	95.3		P	80 - 120
Dimethenamid	97.8		P	80 - 120
Disulfoton	98.3		P	80 - 120
Dithiopyr	95.6		P	80 - 120
EPTC	95.5		P	80 - 120
Ethion	99.0		P	80 - 120
Ethoprop	97.1		P	80 - 120
Fenamiphos	94.3		P	80 - 120
Fipronil	95.0		P	80 - 120
Fipronil Desulfinyl	98.8		P	80 - 120
Fipronil Sulfide	98.1		P	80 - 120
Fipronil Sulfone	96.8		P	80 - 120
Fonofos	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A88272

Included Lab Sample IDs: 2043533

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Hexazinone	99.4		P	80 - 120
Malathion	97.9		P	80 - 120
Metalaxyl	101		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	95.3		P	80 - 120
Mevinphos	97.3		P	80 - 120
Molinate	98.0		P	80 - 120
Norflurazon	95.6		P	80 - 120
Oxadiazon	92.7		P	80 - 120
Parathion Ethyl	94.4		P	80 - 120
Parathion Methyl	90.0		P	80 - 120
Pendimethalin	87.3		P	80 - 120
Phorate	92.5		P	80 - 120
Prodiamine	95.3		P	80 - 120
Prometon	93.5		P	80 - 120
Prometryn	96.2		P	80 - 120
Simazine	92.3		P	80 - 120
Tebuconazole	98.3		P	80 - 120
Terbufos	94.8		P	80 - 120
Terbutylazine	94.7		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							0.573	
EPA 200.7 Rev. 4.4	Calcium	104		103	105				0.0090
	Iron	106		106	107	105			0.540
	Magnesium	102		102	106				0.862
	Potassium	102		101	101				0.237
	Sodium	102		102	105				0.0153
	Zinc	101		100	101	99.1			0.531
EPA 200.8 Rev. 5.4	Arsenic	106		106	106	104			0.194
	Cadmium	102		102	103	104			0.390
	Chromium	101		100	101	102			0.263
	Copper	102		99.9	100	99.2			0.451
	Lead	98.7		98.3	98.7	98.8			0.380
	Nickel	102		100	101	99.0			0.719
	Silver	103		104	103	102			1.08
EPA 300.0 Rev. 2.1	Chloride	101		98.1	98.7			0.513	
	Sulfate	100		99.1	99.1			0.739	
EPA 350.1 Rev. 2.0	Ammonia-N	101		100	103				1.99
	Ammonia-N	97.7		102	102				0.195
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102		102	98.5				2.34
	Kjeldahl Nitrogen	101		105	105				0.601
EPA 353.2 Rev. 2.0	NO2NO3-N	94.5		105	106				0.244
EPA 365.1 Rev. 2.0	Total-P	103		97.8	104				5.43
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.0		95.8	95.8				0.0
EPA 8270D	Acetochlor	80.5	93.4	86.7	78.3		14.9		10.1
	Alachlor	76.6	87.9	83.7	78.0		13.8		7.02
	Aldrin	61.9	68.6	73.6	68.5		10.2		7.17
	Alpha-BHC	96.2	102	115	83.9		6.26		31.3
	Alpha-Chlordane	90.1	90.0	95.0	92.2		0.122		3.00
	Ametryn	78.4	81.4	87.4	82.1		3.79		6.29
	Atrazine	104	119	124	113		14.0		9.27
	Atrazine Desethyl	123	130	119	94.3		5.01		23.4
	Azinphos Methyl	91.5	104	90.5	78.3		12.8		14.5
	Beta-BHC	112	115	128	128		2.50		0.218
	Bromacil	80.4	88.5	86.8	72.8		9.59		17.5
	Butylate	59.0	63.6	66.6	67.2		7.54		1.00
	Carbophenothion	95.0	97.2	107	106		2.26		1.44
	Chlorothalonil	107	107	129	103		0.0589		22.3
	Chlorpyrifos Ethyl	80.4	87.2	91.1	86.7		8.17		4.90
	Chlorpyrifos Methyl	84.9	97.8	92.7	91.1		14.2		1.68
	Cyanazine	181	127	102	153		35.3		40.0
	Cypermethrin	73.6	76.1	77.1	75.2		3.30		2.52
	DDD-p,p'	95.2	100	98.8	94.9		4.97		3.95
	DDE-p,p'	94.9	94.6	98.3	94.0		0.250		4.46
	DDT-p,p'	104	100	101	100		3.50		1.20
	Delta-BHC	129	139	216	201		7.50		7.36
	Demeton	60.2	69.0	91.6	96.7		13.7		5.44
	Diazinon	90.3	99.8	102	92.6		9.90		9.47
	Dicofol	97.0	94.2	105	100		3.00		5.22
	Dieldrin	99.2	101	102	97.3		1.68		4.30
	Dimethenamid	82.2	94.1	69.9	30.7		13.5		77.9
	Disulfoton	65.2	77.2	109	93.3		16.9		15.5
	Dithiopyr	77.4	90.1	84.5	79.3		15.2		6.38
	Endosulfan I	84.7	89.4	89.1	90.9		5.33		1.99
	Endosulfan II	102	113	93.7	107		10.4		13.1

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Endosulfan Sulfate	82.6	86.0	103	97.1	3.98	5.61
	Endrin	95.2	94.9	95.4	89.7	0.262	6.08
	Endrin Aldehyde	93.5	100	92.8	92.0	6.72	0.796
	Endrin Ketone	78.7	80.2	86.1	85.4	1.89	0.826
	EPTC	55.8	64.2	59.2	65.1	14.0	9.42
	Ethion	33.7	38.4	27.5	17.7	13.1	43.1
	Ethoprop	93.1	105	88.3	92.2	11.9	4.04
	Fenamiphos	76.3	85.5	107	81.7	11.5	26.9
	Fipronil	86.3	98.9	99.0	86.0	13.6	14.1
	Fipronil Sulfide	74.3	88.6	90.2	87.0	17.7	3.55
	Fipronil Sulfone	72.4	83.8	81.6	73.9	14.6	10.0
	Fonofos	95.1	103	103	104	7.70	1.32
	Gamma-BHC	124	116	155	144	6.86	7.76
	Gamma-Chlordane	86.8	85.6	91.1	90.6	1.46	0.607
	Heptachlor	78.0	67.6	77.3	73.1	14.4	5.64
	Heptachlor Epoxide	90.5	86.4	94.0	93.8	4.59	0.270
	Hexazinone	101	113	99.7	87.6	11.4	13.0
	Malathion	81.2	89.7	92.2	96.4	9.93	4.50
	Metalaxyl	84.3	99.7	96.7	91.4	16.8	5.56
	Methoxychlor	110	103	103	107	6.32	3.63
	Metolachlor	75.0	87.4	84.6	81.1	15.2	4.28
	Metribuzin	222	262	207	189	16.8	8.95
	Mevinphos	83.6	91.7	103	110	9.18	6.44
	Mirex	68.0	66.2	69.1	71.8	2.65	3.81
	Molinate	55.2	59.9	53.3	46.7	8.24	13.1
	Norflurazon	79.2	89.1	79.4	65.9	11.8	18.7
	Oxadiazon	86.8	101	90.0	77.7	14.8	14.6
	Parathion Ethyl	85.1	94.9	93.7	82.4	11.0	12.9
	Parathion Methyl	98.0	112	102	95.9	13.6	6.50
	Pendimethalin	73.9	79.6	85.9	78.4	7.48	9.20
	Permethrin	73.9	75.6	77.0	76.5	2.39	0.710
	Phorate	81.5	94.2	105	116	14.4	10.6
	Prodiamine	71.3	83.6	84.0	74.3	15.9	12.2
	Prometon	72.7	83.9	61.5	74.6	14.3	19.2
	Prometryn	76.0	87.7	86.2	77.6	14.3	10.6
	Simazine	102	120	112	105	16.4	6.53
	Tebuconazole	45.0	51.7	33.9	20.9	13.9	47.5
	Terbufos	92.2	102	117	119	10.0	1.81
	Terbuthylazine	87.4	98.5	95.3	87.4	11.9	8.64
	Trifluralin	94.0	91.2	98.8	97.7	3.07	1.03
EPA 8276	Chlordane	71.3	73.8	87.6	73.7	3.48	17.3
	Toxaphene	73.7	68.3	58.1	62.7	7.57	7.66
EPA 8321B	2,4-D	85.1		107	120		11.0
	3-Hydroxycarbofuran	88.2		85.9	87.1		1.33
	Acesulfame K	102		99.8	100		0.180
	Acetaminophen	114		130	130		0.135
	Aldicarb	89.9		71.8	67.7		5.93
	Aldicarb Sulfone	95.2		77.5	82.1		5.79
	Aldicarb Sulfoxide	120		62.3	59.4		4.80
	AMPA	86.8		94.2	99.2		5.19
	Bentazon	72.6		53.3	62.0		15.2
	Carbamazepine	80.4		79.7	81.3		1.96
	Carbaryl	76.9		59.7	64.7		8.04
	Carbofuran	78.9		66.1	65.4		1.02

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	Diuron	69.6	61.7	64.9		
	Endothall	90.6	94.8	92.9		
	Fenuron	101	81.5	84.7		
	Fluridone	107	105	102		
	Glufosinate	76.4	83.7	74.7		
	Glyphosate	66.3	66.1	70.4		
	Hydrocodone	98.6	84.1	85.3		
	Ibuprofen	78.4	72.3	66.9		
	Imazapyr	77.8				
	Imidacloprid	108	125	128		
	Linuron	76.9	67.2	68.2		
	MCPP	113	134	129		
	Methiocarb	63.9	56.0	60.5		
	Methomyl	101	83.5	93.5		
	Naproxen	91.5	86.6	59.7		
	Oxamyl	91.9	78.7	76.9		
	Primidone	80.0	79.8	131		
	Propoxur	81.1	65.0	66.4		
	Pyraclostrobin	71.7	54.7	53.1		
	Sucralose	114	114	113		
	Triclopyr	72.1	79.2	78.2		
SM 2120 B	Color (true)	104				1.35
SM 2320 B-97	Total Alkalinity	100				1.09
SM 2540 C-97	TDS					5.66
SM 4500 F-C-97	Fluoride	98.9	98.8	99.9		0.979
SM 5310 B-00	Organic Carbon	94.5	97.4	94.1		2.29
	Organic Carbon	95.0	98.2	98.3		0.0321

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2043506, 2043509, 2043510, 2043515
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2043534, 2043535, 2043536
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2043534, 2043535, 2043536
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2043506, 2043509, 2043510, 2043515
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2043506, 2043509, 2043510, 2043515
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2043507, 2043511, 2043512, 2043516
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2043507, 2043511, 2043512, 2043516
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2043507, 2043511, 2043512, 2043516
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2043507, 2043511, 2043512, 2043516
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2043508, 2043513, 2043514, 2043517
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2043532
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2043533
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2043532

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2043530
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2043528, 2043529, 2043531
SM 2120 B / E31780	True Color measured at 450 nm	2043506, 2043509, 2043510, 2043515
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2043506, 2043509, 2043510, 2043515
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2043506, 2043509, 2043510, 2043515
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2043506, 2043509, 2043510, 2043515
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2043506, 2043509, 2043510, 2043515
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2043507, 2043511, 2043512, 2043516

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	11/26/2018			11/27/2018 16:56	Julia Storbeck	2043506, 2043509, 2043510, 2043515
EPA 200.7 Rev. 4.4	11/26/2018	11/27/2018 17:30	Elliott D. Healy	11/30/2018 12:30	Betina Topolski	2043534
	11/26/2018	11/27/2018 17:30	Elliott D. Healy	11/30/2018 12:36	Betina Topolski	2043535
	11/26/2018	11/27/2018 17:30	Elliott D. Healy	11/30/2018 12:42	Betina Topolski	2043536
EPA 200.8 Rev. 5.4	11/26/2018	11/27/2018 17:30	Elliott D. Healy	12/05/2018 05:29	Robert K Palmer	2043534
	11/26/2018	11/27/2018 17:30	Elliott D. Healy	12/05/2018 05:39	Robert K Palmer	2043535
	11/26/2018	11/27/2018 17:30	Elliott D. Healy	12/05/2018 05:49	Robert K Palmer	2043536
EPA 300.0 Rev. 2.1	11/26/2018			12/03/2018 18:16	Lipi Saha	2043510
	11/26/2018			12/03/2018 20:33	Lipi Saha	2043506
	11/26/2018			12/03/2018 20:45	Lipi Saha	2043509
	11/26/2018			12/03/2018 20:58	Lipi Saha	2043515
EPA 350.1 Rev. 2.0	11/26/2018			11/29/2018 11:12	Ping Hua	2043507
	11/26/2018			11/29/2018 11:13	Ping Hua	2043511
	11/26/2018			11/29/2018 11:18	Ping Hua	2043512
	11/26/2018			11/29/2018 11:22	Ping Hua	2043516
EPA 351.2 Rev. 2.0	11/26/2018	11/28/2018 11:50	Adrian Shelby	11/29/2018 09:59	Joseph Suarez	2043507
	11/26/2018	11/28/2018 11:50	Adrian Shelby	11/29/2018 10:00	Joseph Suarez	2043511
	11/26/2018	11/28/2018 11:50	Adrian Shelby	11/29/2018 10:05	Joseph Suarez	2043512
	11/26/2018	12/05/2018 11:30	Adrian Shelby	12/06/2018 09:41	Joseph Suarez	2043516
EPA 353.2 Rev. 2.0	11/26/2018			11/29/2018 12:24	Lauren Bottorf	2043507
	11/26/2018			11/29/2018 12:25	Lauren Bottorf	2043511
	11/26/2018			11/29/2018 12:26	Lauren Bottorf	2043512
	11/26/2018			11/29/2018 12:27	Lauren Bottorf	2043516
EPA 365.1 Rev. 2.0	11/26/2018	11/28/2018 12:35	Sima Feizi	11/29/2018 08:55	Beverly Y. Sanders	2043507
	11/26/2018	11/28/2018 12:35	Sima Feizi	11/29/2018 08:56	Beverly Y. Sanders	2043511
	11/26/2018	11/28/2018 12:35	Sima Feizi	11/29/2018 08:58	Beverly Y. Sanders	2043516
	11/26/2018	11/28/2018 12:35	Sima Feizi	11/29/2018 12:26	Beverly Y. Sanders	2043512
EPA 365.1 Rev. 2.0 dissolved	11/26/2018			11/27/2018 15:21	Jhamieka S. Greenwood	2043508
	11/26/2018			11/27/2018 15:51	Jhamieka S. Greenwood	2043514
	11/26/2018			11/27/2018 15:53	Jhamieka S. Greenwood	2043513
	11/26/2018			11/27/2018 15:59	Jhamieka S. Greenwood	2043517
EPA 8270D	11/26/2018	11/30/2018 08:00	Fe-Val Siddell	12/04/2018 21:00	Arthur Maknenko	2043532
	11/26/2018	11/30/2018 08:00	Fe-Val Siddell	12/05/2018 19:54	Arthur Maknenko	2043532
	11/26/2018	11/30/2018 09:30	Rasheda Ghaffari	12/10/2018 17:00	Vandana T. Nagar	2043533
EPA 8276	11/26/2018	11/30/2018 08:00	Fe-Val Siddell	12/05/2018 00:11	Dinesh Mishra	2043532
EPA 8321B	11/26/2018	11/27/2018 08:50	Hoor Shaik	11/29/2018 08:42	Juyoung Kim	2043528
	11/26/2018	11/27/2018 08:50	Hoor Shaik	11/29/2018 08:59	Juyoung Kim	2043529
	11/26/2018	11/27/2018 08:50	Hoor Shaik	11/29/2018 09:15	Juyoung Kim	2043531
	11/26/2018	11/27/2018 08:50	Hoor Shaik	12/01/2018 05:08	Juyoung Kim	2043530
	11/26/2018	11/29/2018 11:00	Rebecca Ware	11/29/2018 11:14	Rebecca Ware	2043531

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	11/26/2018	11/29/2018 11:00	Rebecca Ware	11/29/2018 14:20	Rebecca Ware	2043528
	11/26/2018	11/29/2018 11:00	Rebecca Ware	11/29/2018 14:48	Rebecca Ware	2043529
	11/26/2018	11/29/2018 11:00	Rebecca Ware	11/29/2018 15:02	Rebecca Ware	2043531
	11/26/2018	11/29/2018 11:00	Rebecca Ware	11/30/2018 11:20	Rebecca Ware	2043528
	11/26/2018	11/29/2018 11:00	Rebecca Ware	11/30/2018 11:34	Rebecca Ware	2043529
	11/26/2018	11/29/2018 11:00	Rebecca Ware	11/30/2018 11:48	Rebecca Ware	2043531
SM 2120 B	11/26/2018			11/27/2018 15:29	Chelsea Hernandez	2043506
	11/26/2018			11/27/2018 15:30	Chelsea Hernandez	2043509
	11/26/2018			11/27/2018 15:31	Chelsea Hernandez	2043510
	11/26/2018			11/27/2018 15:32	Chelsea Hernandez	2043515
SM 2320 B-97	11/26/2018			11/30/2018 10:07	Dale L. Simmons	2043506
	11/26/2018			11/30/2018 10:18	Dale L. Simmons	2043509
	11/26/2018			11/30/2018 10:28	Dale L. Simmons	2043510
	11/26/2018			11/30/2018 10:39	Dale L. Simmons	2043515
SM 2540 C-97	11/26/2018			11/29/2018 13:42	Yijie Li	2043506, 2043509, 2043510, 2043515
SM 2540 D-97	11/26/2018			11/29/2018 13:42	Yijie Li	2043506, 2043509, 2043510, 2043515
SM 4500 F-C-97	11/26/2018			11/30/2018 10:07	Dale L. Simmons	2043506
	11/26/2018			11/30/2018 10:18	Dale L. Simmons	2043509
	11/26/2018			11/30/2018 10:28	Dale L. Simmons	2043510
	11/26/2018			11/30/2018 10:39	Dale L. Simmons	2043515
SM 5310 B-00	11/26/2018			11/29/2018 03:28	Megan Treadwell	2043507
	11/26/2018			11/29/2018 03:41	Megan Treadwell	2043511
	11/26/2018			11/29/2018 04:23	Megan Treadwell	2043512
	11/26/2018			11/29/2018 19:55	Megan Treadwell	2043516