

Chemical Analysis Report

WAS-SECT-2019-05-23-01

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

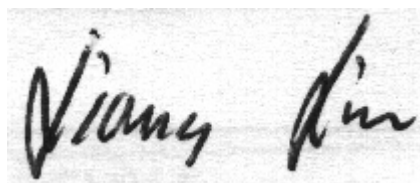
Event Description: **Group 2 Run**
Request ID: **RQ-2018-10-29-24**
Customer: **WAS-SECT**
Project ID: **SMP**

Send Reports to:
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2600 Blair Stone Rd
Tallahassee, FL 32399
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 19-JUN-2019 14:42

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

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Stone Mill Creek Upstream of Dianna St

Collection Date/Time: 05/23/2019 10:15

Field ID: G2WA0012

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2088840	EPA 180.1 Rev. 2.0	Turbidity	8.3	A	NTU	P364536	
	EPA 300.0 Rev. 2.1	Chloride	5.0		mg Cl/L	P364874	
		Sulfate	3.3		mg SO4/L	P364875	
	SM 2120 B	Color (true)	140		PCU	P364527	
	SM 2320 B-97	Total Alkalinity	20		mg CaCO3/L	P364858	
	SM 2540 C-97	TDS	56		mg/L	P364828	
	SM 2540 D-97	TSS	5	I	mg/L	P364668	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P364862	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.15		mg N/L	P364911	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.49		mg N/L	P364825	
2088842	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P364649	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P364832	
	SM 5310 B-00	Organic Carbon	6.2		mg C/L	P364643	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P364484	
	EPA 8321B	Aldicarb	0.020	U	ug/L	P364434	
2088844		Aldicarb Sulfone	0.0020	U	ug/L	P364434	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P364434	
		Carbaryl	0.0020	U	ug/L	P364434	
		Carbofuran	0.0020	U	ug/L	P364434	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P364434	
		Methiocarb	0.0020	U	ug/L	P364434	
		Methomyl	0.0020	U	ug/L	P364434	
		Oxamyl	0.0020	U	ug/L	P364434	
		Propoxur	0.0020	U	ug/L	P364434	
		2,4-D	0.0020	U	ug/L	P364434	
		Acesulfame K**	0.10	U	ug/L	P364605	
		AMPA**	0.10	U	ug/L	P364605	
		Sucralose**	0.10		ug/L	P364605	
		Acetaminophen**	0.0080	U	ug/L	P364434	
		Endothall**	0.25	U	ug/L	P364605	
2088857		Glufosinate**	0.10	U	ug/L	P364605	
		Bentazon	8.0E-04	U	ug/L	P364434	
		Glyphosate**	0.10	U	ug/L	P364605	
		Carbamazepine**	9.4E-04	I	ug/L	P364434	
		Diuron	0.0020	U	ug/L	P364434	
		Fenuron	0.016	U	ug/L	P364434	
		Fluridone**	8.0E-04	U	ug/L	P364434	
		Imazapyr**	0.0072	I	ug/L	P364434	
		Hydrocodone**	0.0020	U	ug/L	P364434	
		Ibuprofen**	0.020	U	ug/L	P364434	
		Imidacloprid	0.0020	U	ug/L	P364434	
		Linuron	0.0040	U	ug/L	P364434	
		MCP	0.0020	U	ug/L	P364434	

Field ID: G2WA0012

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2088857	EPA 8321B	Naproxen**	0.0080	U	ug/L	P364434	
		Primidone**	0.0040	U	ug/L	P364434	
		Pyraclostrobin**	0.0020	U	ug/L	P364434	
		Triclopyr**	0.0040	U	ug/L	P364434	RPD
2088859	EPA 8270D	Aldrin	4.1	UQ	ng/L	P365257	
		Alpha-BHC	2.1	UQ	ng/L	P365257	
		Alpha-Chlordane	1.0	UQ	ng/L	P365257	
		Beta-BHC	10	UQ	ng/L	P365257	
		Bifenthrin**	4.1	UQ	ng/L	P365257	
		Delta-BHC	10	UQ	ng/L	P365257	
		Gamma-BHC	10	UQ	ng/L	P365257	
		Carbophenothion	12	UQJ	ng/L	P365257	RPD
		Chlorothalonil	2.1	UQJ	ng/L	P365257	LCS
		Cis-Nonachlor**	1.0	UQ	ng/L	P365257	
		Cypermethrin	21	UQ	ng/L	P365257	
		DDD-p,p'	8.3	UQ	ng/L	P365257	
		DDE-p,p'	8.3	UQ	ng/L	P365257	
		DDT-p,p'	10	UQ	ng/L	P365257	
		Dicofol	31	UQ	ng/L	P365257	
		Dieldrin	4.1	UQ	ng/L	P365257	
		Endosulfan I	4.1	UQ	ng/L	P365257	
		Endosulfan II	4.1	UQ	ng/L	P365257	
		Endosulfan Sulfate	2.1	UQ	ng/L	P365257	
		Endrin	2.1	UQ	ng/L	P365257	
		Endrin Aldehyde	2.1	UQ	ng/L	P365257	
		Endrin Ketone	2.1	UQ	ng/L	P365257	
		Ethalfuralin**	3.1	UQ	ng/L	P365257	
		Gamma-Chlordane	1.0	UQ	ng/L	P365257	
		Heptachlor	1.6	UQ	ng/L	P365257	
		Heptachlor Epoxide	2.1	UQ	ng/L	P365257	
		Hexachlorobenzene**	2.1	UQ	ng/L	P365257	
		Methoxychlor	4.1	UQ	ng/L	P365257	
		Mirex	2.1	UQ	ng/L	P365257	
		Permethrin	10	UQ	ng/L	P365257	
		Trans-Nonachlor**	1.0	UQ	ng/L	P365257	
		Trifluralin	2.6	UQ	ng/L	P365257	
		Chlordane	5.2	U	ng/L	P364575	
		Toxaphene	31	U	ng/L	P364575	
2088861	EPA 8270E	Acetochlor	0.24	U	ng/L	P364696	
		Alachlor	0.24	U	ng/L	P364696	
		Ametryn	0.57	U	ng/L	P364696	
		Atrazine	0.24	U	ng/L	P364696	
		Atrazine Desethyl	1.4	U	ng/L	P364696	
		Azinphos Methyl	4.8	U	ng/L	P364696	
		Bromacil	0.48	U	ng/L	P364696	

Field ID: G2WA0012

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2088861	EPA 8270E	Butylate	0.38	U	ng/L	P364696	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P364696	
		Chlorpyrifos Methyl	0.095	U	ng/L	P364696	
		Cyanazine	3.1	U	ng/L	P364696	
		Demeton	6.7	U	ng/L	P364696	
		Diazinon	0.12	U	ng/L	P364696	
		Dimethenamid**	0.095	U	ng/L	P364696	
		Disulfoton	0.48	U	ng/L	P364696	
		Dithiopyr**	0.095	U	ng/L	P364696	
		EPTC	1.2	U	ng/L	P364696	
		Ethion	0.14	U	ng/L	P364696	
		Ethoprop	0.095	U	ng/L	P364696	
		Fenamiphos	0.48	UJ	ng/L	P364696	LCS, RPD
		Fipronil	0.24	U	ng/L	P364696	
		Fipronil Desulfinyl**	0.12	U	ng/L	P364696	
		Fipronil Sulfide	0.14	U	ng/L	P364696	
		Fipronil Sulfone	0.14	U	ng/L	P364696	
		Fonofos	0.19	U	ng/L	P364696	
		Hexazinone	0.48	U	ng/L	P364696	
		Malathion	0.33	U	ng/L	P364696	
		Metalaxyl	0.29	U	ng/L	P364696	
		Metolachlor	0.73	I	ng/L	P364696	
		Metribuzin	0.71	U	ng/L	P364696	
		Mevinphos	0.48	U	ng/L	P364696	
		Molinate	0.29	U	ng/L	P364696	
		Norflurazon	0.48	U	ng/L	P364696	
		Oxadiazon**	0.095	U	ng/L	P364696	
		Parathion Ethyl	0.24	U	ng/L	P364696	
		Parathion Methyl	0.52	UJ	ng/L	P364696	LCS
		Pendimethalin	0.95	U	ng/L	P364696	
		Phorate	0.24	U	ng/L	P364696	
		Prodiamine**	0.17	U	ng/L	P364696	
		Prometon	0.86	U	ng/L	P364696	
		Prometryn	0.19	U	ng/L	P364696	
		Simazine	0.48	U	ng/L	P364696	
		Tebuconazole**	0.48	U	ng/L	P364696	
		Terbufos	0.095	U	ng/L	P364696	
		Terbutylazine	0.40	U	ng/L	P364696	
2088863	EPA 200.7 Rev. 4.4	Barium	15.2		ug/L	P364577	
		Calcium	8.43		mg/L	P364577	
		Iron	830		ug/L	P364577	
		Magnesium	1.09		mg/L	P364577	
		Potassium	0.49	I	mg/L	P364577	
		Sodium	3.3		mg/L	P364577	
		Zinc	5.0	U	ug/L	P364577	

Field ID: G2WA0012

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2088863	EPA 200.8 Rev. 5.4	Aluminum	379		ug/L	P364577	
		Antimony	0.050	U	ug/L	P364577	
		Arsenic	0.27		ug/L	P364577	
		Boron**	10.5		ug/L	P364577	
		Cadmium	0.020	U	ug/L	P364577	
		Chromium	0.42	I	ug/L	P364577	
		Copper	0.40	U	ug/L	P364577	
		Lead	0.44		ug/L	P364577	
		Nickel	0.50	U	ug/L	P364577	
		Selenium	0.20	U	ug/L	P364577	
		Silver	0.010	U	ug/L	P364577	
		Thallium	0.10	U	ug/L	P364577	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

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

EPA 8270D: Insufficient sample available to perform matrix spikes. Sample re-extracted after expiration because of analytical difficulties. Refer to the narrative for an explanation of QC Codes.

EPA 8276: Insufficient sample available to perform duplicate matrix spikes.

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

Sample Location: Big Branch Downstream of Road 5

Collection Date/Time: 05/23/2019 11:01

Field ID: G2WA0010

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2088837	EPA 180.1 Rev. 2.0	Turbidity	6.5		NTU	P364536	
	EPA 300.0 Rev. 2.1	Chloride	4.1		mg Cl/L	P364874	
		Sulfate	0.26	I	mg SO4/L	P364875	
	SM 2120 B	Color (true)	170		PCU	P364527	
	SM 2320 B-97	Total Alkalinity	2.4	I	mg CaCO3/L	P364858	
	SM 2540 C-97	TDS	30		mg/L	P364828	
	SM 2540 D-97	TSS	7	I	mg/L	P364668	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P364862	
2088838	EPA 350.1 Rev. 2.0	Ammonia-N	0.17		mg N/L	P364911	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.73		mg N/L	P364825	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.009	I	mg N/L	P364726	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P364832	
	SM 5310 B-00	Organic Carbon	9.7		mg C/L	P364643	
2088839	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P364484	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Willson Mill Creek Upstream of 274

Collection Date/Time: 05/23/2019 12:50

Field ID: G2WA0020

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2088841	EPA 180.1 Rev. 2.0	Turbidity	3.8		NTU	P364536	
	EPA 300.0 Rev. 2.1	Chloride	7.4		mg Cl/L	P364874	
		Sulfate	0.87		mg SO4/L	P364875	
	SM 2120 B	Color (true)	45	A	PCU	P364527	
	SM 2320 B-97	Total Alkalinity	21		mg CaCO3/L	P364858	
	SM 2540 C-97	TDS	54		mg/L	P364828	
	SM 2540 D-97	TSS	3	I	mg/L	P364668	
	SM 4500 F-C-97	Fluoride	0.047	I	mg F/L	P364862	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.034		mg N/L	P364911	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.50		mg N/L	P364825	
2088843	EPA 353.2 Rev. 2.0	NO2NO3-N	1.8		mg N/L	P364649	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P364832	
	SM 5310 B-00	Organic Carbon	3.7		mg C/L	P364643	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P364484	
	EPA 8321B	Aldicarb	0.020	U	ug/L	P364434	
2088845		Aldicarb Sulfone	0.0020	U	ug/L	P364434	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P364434	
		Carbaryl	0.0020	U	ug/L	P364434	
		Carbofuran	0.0020	U	ug/L	P364434	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P364434	
		Methiocarb	0.0020	U	ug/L	P364434	
		Methomyl	0.0020	U	ug/L	P364434	
		Oxamyl	0.0020	U	ug/L	P364434	
		Propoxur	0.0020	U	ug/L	P364434	
		2,4-D	0.0020	U	ug/L	P364434	
		Acesulfame K**	0.10	U	ug/L	P364605	
		AMPA**	0.17	I	ug/L	P364605	
		Sucralose**	0.077		ug/L	P364605	
		Acetaminophen**	0.0080	U	ug/L	P364434	
		Endothall**	0.25	U	ug/L	P364605	
2088858		Glufosinate**	0.10	U	ug/L	P364605	
		Bentazon	0.0046		ug/L	P364434	
		Glyphosate**	0.10	U	ug/L	P364605	
		Carbamazepine**	8.0E-04	U	ug/L	P364434	
		Diuron	0.0020	U	ug/L	P364434	
		Fenuron	0.016	U	ug/L	P364434	
		Fluridone**	8.0E-04	U	ug/L	P364434	
		Imazapyr**	0.0040	U	ug/L	P364434	
		Hydrocodone**	0.0020	U	ug/L	P364434	
		Ibuprofen**	0.020	U	ug/L	P364434	
		Imidacloprid	0.0091		ug/L	P364434	
		Linuron	0.0040	U	ug/L	P364434	
		MCP	0.0020	U	ug/L	P364434	

Field ID: G2WA0020

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2088858	EPA 8321B	Naproxen**	0.0080	U	ug/L	P364434	
		Primidone**	0.0040	U	ug/L	P364434	
		Pyraclostrobin**	0.0020	U	ug/L	P364434	
		Triclopyr**	0.0040	U	ug/L	P364434	RPD
2088860	EPA 8270D	Aldrin	4.1	UQ	ng/L	P365257	
		Alpha-BHC	2.1	UQ	ng/L	P365257	
		Alpha-Chlordane	1.0	UQ	ng/L	P365257	
		Beta-BHC	10	UQ	ng/L	P365257	
		Bifenthrin**	4.1	UQ	ng/L	P365257	
		Delta-BHC	10	UQ	ng/L	P365257	
		Gamma-BHC	10	UQ	ng/L	P365257	
		Carbophenothion	12	UQJ	ng/L	P365257	RPD
		Chlorothalonil	2.1	UQJ	ng/L	P365257	LCS
		Cis-Nonachlor**	1.0	UQ	ng/L	P365257	
		Cypermethrin	21	UQ	ng/L	P365257	
		DDD-p,p'	8.2	UQ	ng/L	P365257	
		DDE-p,p'	8.2	UQ	ng/L	P365257	
		DDT-p,p'	10	UQ	ng/L	P365257	
		Dicofol	31	UQ	ng/L	P365257	
		Dieldrin	4.1	UQ	ng/L	P365257	
		Endosulfan I	4.1	UQ	ng/L	P365257	
		Endosulfan II	4.1	UQ	ng/L	P365257	
		Endosulfan Sulfate	2.1	UQ	ng/L	P365257	
		Endrin	2.1	UQ	ng/L	P365257	
		Endrin Aldehyde	2.1	UQ	ng/L	P365257	
		Endrin Ketone	2.1	UQ	ng/L	P365257	
		Ethalfuralin**	3.1	UQ	ng/L	P365257	
		Gamma-Chlordane	1.0	UQ	ng/L	P365257	
		Heptachlor	1.5	UQ	ng/L	P365257	
		Heptachlor Epoxide	2.1	UQ	ng/L	P365257	
		Hexachlorobenzene**	2.1	UQ	ng/L	P365257	
		Methoxychlor	4.1	UQ	ng/L	P365257	
		Mirex	2.1	UQ	ng/L	P365257	
		Permethrin	10	UQ	ng/L	P365257	
		Trans-Nonachlor**	1.0	UQ	ng/L	P365257	
		Trifluralin	2.6	UQ	ng/L	P365257	
	EPA 8276	Chlordane	5.1	U	ng/L	P364575	
		Toxaphene	31	U	ng/L	P364575	
2088862	EPA 8270E	Acetochlor	2.5		ng/L	P364696	
		Alachlor	36		ng/L	P364696	
		Ametryn	0.67	I	ng/L	P364696	
		Atrazine	0.25	U	ng/L	P364696	
		Atrazine Desethyl	1.5	U	ng/L	P364696	
		Azinphos Methyl	5.0	U	ng/L	P364696	
		Bromacil	0.50	U	ng/L	P364696	

Field ID: G2WA0020

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2088862	EPA 8270E	Butylate	0.40	U	ng/L	P364696	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P364696	
		Chlorpyrifos Methyl	0.099	U	ng/L	P364696	
		Cyanazine	3.2	U	ng/L	P364696	
		Demeton	6.9	U	ng/L	P364696	
		Diazinon	0.12	U	ng/L	P364696	
		Dimethenamid**	0.099	U	ng/L	P364696	
		Disulfoton	0.50	U	ng/L	P364696	
		Dithiopyr**	0.099	U	ng/L	P364696	
		EPTC	1.2	U	ng/L	P364696	
		Ethion	0.15	U	ng/L	P364696	
		Ethoprop	0.099	U	ng/L	P364696	
		Fenamiphos	0.50	UJ	ng/L	P364696	LCS, RPD
		Fipronil	0.25	U	ng/L	P364696	
		Fipronil Desulfinyl**	0.12	U	ng/L	P364696	
		Fipronil Sulfide	0.15	U	ng/L	P364696	
		Fipronil Sulfone	0.15	U	ng/L	P364696	
		Fonofos	0.20	U	ng/L	P364696	
		Hexazinone	0.50	U	ng/L	P364696	
		Malathion	0.35	U	ng/L	P364696	
		Metalaxyl	0.30	U	ng/L	P364696	
		Metolachlor	31		ng/L	P364696	
		Metribuzin	2.2	I	ng/L	P364696	
		Mevinphos	0.50	U	ng/L	P364696	
		Molinate	0.30	U	ng/L	P364696	
		Norflurazon	0.50	U	ng/L	P364696	
		Oxadiazon**	0.099	U	ng/L	P364696	
		Parathion Ethyl	0.25	U	ng/L	P364696	
		Parathion Methyl	0.55	UJ	ng/L	P364696	LCS
		Pendimethalin	0.99	U	ng/L	P364696	
		Phorate	0.25	U	ng/L	P364696	
		Prodiamine**	0.17	U	ng/L	P364696	
		Prometon	0.89	U	ng/L	P364696	
		Prometryn	0.20	U	ng/L	P364696	
		Simazine	0.50	U	ng/L	P364696	
		Tebuconazole**	0.59	I	ng/L	P364696	
		Terbufos	0.099	U	ng/L	P364696	
		Terbutylazine	0.42	U	ng/L	P364696	
2088864	EPA 200.7 Rev. 4.4	Barium	69.9		ug/L	P364577	
		Calcium	7.53		mg/L	P364577	
		Iron	630		ug/L	P364577	
		Magnesium	3.57		mg/L	P364577	
		Potassium	2.1		mg/L	P364577	
		Sodium	2.0	I	mg/L	P364577	
		Zinc	5.0	U	ug/L	P364577	

Field ID: G2WA0020

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2088864	EPA 200.8 Rev. 5.4	Aluminum	119		ug/L	P364577	
		Antimony	0.050	U	ug/L	P364577	
		Arsenic	0.45		ug/L	P364577	
		Boron**	15.8		ug/L	P364577	
		Cadmium	0.020	U	ug/L	P364577	
		Chromium	0.40	U	ug/L	P364577	
		Copper	0.40	U	ug/L	P364577	
		Lead	0.21	I	ug/L	P364577	
		Nickel	0.50	U	ug/L	P364577	
		Selenium	0.20	U	ug/L	P364577	
		Silver	0.010	U	ug/L	P364577	
		Thallium	0.10	U	ug/L	P364577	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

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

EPA 8270D: Insufficient sample available to perform matrix spikes. Sample re-extracted after expiration because of analytical difficulties. Refer to the narrative for an explanation of QC Codes.

EPA 8276: Insufficient sample available to perform duplicate matrix spikes.

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P364536

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P364577

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P364577

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364874

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364875

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364911

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: P364825

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364649

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364726

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P364832

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P364484

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

Reference Method: EPA 8270D
Batch ID: P365257

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	12	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	8.0	U	ng/L
DDE-p,p'	8.0	U	ng/L
DDT-p,p'	10	U	ng/L
Delta-BHC	10	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfuralin	3.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D**Batch ID: P365257**

Component	Result	Code	Units
Gamma-BHC	10	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8270E**Batch ID: P364696**

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	5.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	7.0	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P364696

Component	Result	Code	Units
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8276

Batch ID: P364575

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

Reference Method: EPA 8321B

Batch ID: P364434

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	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
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: P364605

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P364605

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

Reference Method: SM 2120 B
Batch ID: P364527

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P364858

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

Reference Method: SM 2540 C-97
Batch ID: P364828

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P364668

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P364862

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P364643

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: P364577

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	101		P	85 - 115
Calcium	105		P	85 - 115
Iron	101		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	100		P	85 - 115
Sodium	103		P	85 - 115
Zinc	98.2		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P364577

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	104		P	85 - 115
Boron	102		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	101		P	85 - 115
Copper	102		P	85 - 115
Lead	95.3		P	85 - 115
Nickel	102		P	85 - 115
Selenium	103		P	85 - 115
Silver	101		P	85 - 115
Thallium	104		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P364874

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P364875

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P364911

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P364825

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P364649

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P364726

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P364832

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P364484

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

Reference Method: EPA 8270D

Batch ID: P365257

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	58.3	64.0	P/P	20 - 93.0
Alpha-BHC	106	113	P/P	57 - 119
Alpha-Chlordane	80.7	86.5	P/P	58 - 112
Beta-BHC	109	126	P/P	56 - 149
Bifenthrin	63.3	69.4	P/P	50 - 130
Carbophenothion	103	64.8	P/P	26 - 147
Chlorothalonil	131	156	P/F	20 - 155
Cis-Nonachlor	81.3	85.3	P/P	50 - 130
Cypermethrin	64.5	76.2	P/P	40 - 137
DDD-p,p'	91.0	97.1	P/P	65 - 129
DDE-p,p'	80.2	84.5	P/P	57 - 116
DDT-p,p'	94.8	104	P/P	53 - 133
Delta-BHC	127	142	P/P	59 - 163
Dicofol	99.2	106	P/P	24 - 138
Dieldrin	88.7	91.8	P/P	60 - 120
Endosulfan I	90.3	97.3	P/P	64 - 118
Endosulfan II	107	106	P/P	58 - 142
Endosulfan Sulfate	81.9	95.0	P/P	60 - 127
Endrin	98.8	101	P/P	59 - 122
Endrin Aldehyde	94.2	104	P/P	49 - 132
Endrin Ketone	80.8	92.2	P/P	64 - 121
Ethalfuralin	93.3	91.4	P/P	50 - 130
Gamma-BHC	108	129	P/P	56 - 141
Gamma-Chlordane	78.0	84.7	P/P	56 - 110
Heptachlor	68.7	76.6	P/P	46 - 96.0
Heptachlor Epoxide	84.3	91.8	P/P	61 - 112
Hexachlorobenzene	71.7	77.7	P/P	50 - 130
Methoxychlor	107	117	P/P	63 - 134

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270D

Batch ID: P365257

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mirex	54.5	60.5	P/P	45 - 100
Permethrin	61.6	68.8	P/P	53 - 115
Trans-Nonachlor	75.9	80.1	P/P	50 - 130
Trifluralin	86.0	93.4	P/P	39 - 142

Reference Method: EPA 8270E

Batch ID: P364696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	77.8	80.9	P/P	69 - 122
Alachlor	77.3	81.2	P/P	71 - 120
Ametryn	77.5	80.5	P/P	47 - 138
Atrazine	77.5	80.0	P/P	74 - 124
Atrazine Desethyl	42.8	38.7	P/P	38 - 138
Azinphos Methyl	79.4	86.7	P/P	69 - 154
Bromacil	47.9	50.9	P/P	39 - 121
Butylate	67.5	58.6	P/P	27 - 87.0
Chlorpyrifos Ethyl	85.0	80.1	P/P	69 - 118
Chlorpyrifos Methyl	77.6	71.6	P/P	70 - 120
Cyanazine	74.6	71.1	P/P	20 - 250
Demeton	52.8	45.1	P/P	39 - 118
Diazinon	71.4	74.6	P/P	68 - 127
Dimethenamid	79.8	82.7	P/P	66 - 125
Disulfoton	60.5	53.5	P/P	52 - 126
Dithiopyr	78.1	82.3	P/P	67 - 127
EPTC	63.2	57.9	P/P	24 - 88.0
Ethion	86.8	85.0	P/P	51 - 132
Ethoprop	79.2	74.9	P/P	58 - 117
Fenamiphos	37.0	41.0	F/P	38 - 139
Fipronil	68.3	72.6	P/P	61 - 124
Fipronil Desulfinyl	74.9	79.9	P/P	47 - 120
Fipronil Sulfide	82.1	78.5	P/P	56 - 119
Fipronil Sulfone	76.8	75.8	P/P	50 - 117
Fonofos	70.0	64.6	P/P	60 - 121
Hexazinone	90.8	87.3	P/P	55 - 137
Malathion	87.2	84.2	P/P	66 - 126
Metalaxyl	33.1	37.6	P/P	33 - 140
Metolachlor	80.2	83.9	P/P	69 - 119
Metribuzin	74.2	65.4	P/P	31 - 238
Mevinphos	54.6	53.7	P/P	42 - 113
Molinate	78.9	66.4	P/P	32 - 96.0
Norflurazon	56.6	64.0	P/P	54 - 123
Oxadiazon	83.6	87.2	P/P	63 - 128
Parathion Ethyl	74.0	73.3	P/P	72 - 111
Parathion Methyl	72.8	72.2	F/F	74 - 126
Pendimethalin	81.9	77.7	P/P	61 - 131
Phorate	62.9	53.4	P/P	51 - 115
Prodiamine	85.7	86.1	P/P	38 - 144
Prometon	71.5	77.4	P/P	54 - 119
Prometryn	74.6	78.3	P/P	63 - 120
Simazine	78.8	84.5	P/P	75 - 126
Tebuconazole	32.1	39.1	P/P	20 - 119

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P364696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Terbufos	75.2	66.3	P/P	64 - 116
Terbutylazine	78.4	81.3	P/P	73 - 117

Reference Method: EPA 8276

Batch ID: P364575

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	82.7	83.3	P/P	43 - 128
Toxaphene	83.2	80.5	P/P	38 - 140

Reference Method: EPA 8321B

Batch ID: P364434

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	95.9		P	40 - 150
3-Hydroxycarbofuran	97.5		P	40 - 150
Acetaminophen	101		P	30 - 150
Aldicarb	149		P	30 - 150
Aldicarb Sulfone	89.5		P	40 - 150
Aldicarb Sulfoxide	110		P	40 - 150
Bentazon	128		P	30 - 150
Carbamazepine	108		P	40 - 150
Carbaryl	91.1		P	40 - 150
Carbofuran	88.4		P	40 - 150
Diuron	97.7		P	40 - 150
Fenuron	120		P	40 - 150
Fluridone	102		P	40 - 150
Hydrocodone	95.2		P	40 - 150
Ibuprofen	100		P	40 - 150
Imazapyr	104		P	40 - 150
Imidacloprid	102		P	40 - 150
Linuron	82.3		P	40 - 150
MCPP	119		P	40 - 150
Methiocarb	76.8		P	40 - 150
Methomyl	88.0		P	40 - 150
Naproxen	99.9		P	40 - 150
Oxamyl	102		P	40 - 150
Primidone	94.0		P	40 - 150
Propoxur	86.7		P	40 - 150
Pyraclostrobin	78.8		P	40 - 150
Triclopyr	70.4		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P364605

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	119		P	40 - 150
AMPA	120		P	40 - 150
Endothall	96.4		P	40 - 150
Glufosinate	98.2		P	40 - 150
Glyphosate	91.7		P	40 - 140
Sucralose	94.2		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P364527

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

Reference Method: SM 2320 B-97
Batch ID: P364858

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

Reference Method: SM 4500 F-C-97
Batch ID: P364862

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P364643

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P364577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088440	Barium	103		P	80 - 120
2088440	Calcium	104		P	80 - 120
2088440	Iron	107		P	80 - 120
2088440	Magnesium	106		P	80 - 120
2088440	Potassium	103		P	80 - 120
2088440	Sodium	106		P	80 - 120
2088440	Zinc	101		P	80 - 120
2089219	Barium	102	99.7	P/P	80 - 120
2089219	Calcium	105	104	P/P	80 - 120
2089219	Iron	104	101	P/P	80 - 120
2089219	Magnesium	105	103	P/P	80 - 120
2089219	Potassium	108	105	P/P	80 - 120
2089219	Sodium	105	102	P/P	80 - 120
2089219	Zinc	98.8	97.1	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P364577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088440	Aluminum	101		P	80 - 120
2088440	Antimony	103		P	80 - 120
2088440	Arsenic	106		P	80 - 120
2088440	Boron	104		P	80 - 120
2088440	Cadmium	106		P	80 - 120
2088440	Chromium	101		P	80 - 120
2088440	Copper	102		P	80 - 120
2088440	Lead	97.7		P	80 - 120
2088440	Nickel	101		P	80 - 120
2088440	Selenium	105		P	80 - 120
2088440	Silver	103		P	80 - 120
2088440	Thallium	106		P	80 - 120
2089219	Aluminum	101	101	P/P	80 - 120
2089219	Antimony	102	101	P/P	80 - 120
2089219	Arsenic	102	101	P/P	80 - 120
2089219	Boron	104	105	P/P	80 - 120
2089219	Cadmium	104	102	P/P	80 - 120
2089219	Chromium	101	101	P/P	80 - 120
2089219	Copper	102	100	P/P	80 - 120
2089219	Lead	96.7	94.7	P/P	80 - 120
2089219	Nickel	101	100	P/P	80 - 120
2089219	Selenium	102	101	P/P	80 - 120
2089219	Silver	103	101	P/P	80 - 120
2089219	Thallium	106	105	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P364874

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088391	Chloride	98.4		P	90 - 110
2088541	Chloride	96.3		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364875

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088391	Sulfate	96.5		P	90 - 110
2088541	Sulfate	98.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364911

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088884	Ammonia-N	102	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364649

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088842	NO2NO3-N	98.0	97.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364726

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088434	NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P364832

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088542	Total-P	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P364484

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088845	O-Phosphate-P	95.6	98.0	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P364696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088861	Acetochlor	76.7	91.4	P/P	63 - 129
2088861	Alachlor	77.4	92.4	P/P	65 - 127
2088861	Ametryn	73.8	83.1	P/P	40 - 164
2088861	Atrazine	85.2	92.9	P/P	66 - 135
2088861	Atrazine Desethyl	63.6	66.7	P/P	14 - 157
2088861	Azinphos Methyl	95.1	103	P/P	49 - 180
2088861	Bromacil	68.2	78.6	P/P	48 - 130
2088861	Butylate	40.0	31.1	P/P	10 - 94.0
2088861	Chlorpyrifos Ethyl	83.7	101	P/P	58 - 123
2088861	Chlorpyrifos Methyl	80.5	93.8	P/P	58 - 125
2088861	Cyanazine	116	145	P/P	24 - 253
2088861	Demeton	61.2	61.5	P/P	25 - 149
2088861	Diazinon	82.2	91.7	P/P	59 - 144
2088861	Dimethenamid	78.5	93.3	P/P	46 - 139
2088861	Disulfoton	77.4	82.9	P/P	54 - 132

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P364696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088861	Dithiopyr	79.9	92.9	P/P	64 - 130
2088861	EPTC	37.5	28.1	P/P	10 - 92.0
2088861	Ethion	85.7	103	P/P	30 - 148
2088861	Ethoprop	74.4	87.2	P/P	50 - 130
2088861	Fenamiphos	67.0	96.8	P/P	49 - 142
2088861	Fipronil	72.4	81.3	P/P	46 - 140
2088861	Fipronil Desulfinyl	67.0	77.1	P/P	30 - 121
2088861	Fipronil Sulfide	72.9	84.8	P/P	31 - 136
2088861	Fipronil Sulfone	67.6	76.8	P/P	16 - 136
2088861	Fonofos	74.8	82.7	P/P	55 - 129
2088861	Hexazinone	88.3	107	P/P	56 - 141
2088861	Malathion	83.9	99.5	P/P	56 - 135
2088861	Metalaxyl	88.2	102	P/P	54 - 135
2088861	Metolachlor	74.2	91.8	P/P	51 - 140
2088861	Metribuzin	131	137	P/P	45 - 254
2088861	Mevinphos	70.7	73.9	P/P	33 - 131
2088861	Molinate	58.6	58.0	P/P	14 - 98.0
2088861	Norflurazon	71.1	78.3	P/P	34 - 136
2088861	Oxadiazon	77.2	94.8	P/P	67 - 116
2088861	Parathion Ethyl	75.3	89.8	P/P	66 - 118
2088861	Parathion Methyl	81.3	92.2	P/P	64 - 136
2088861	Pendimethalin	94.3	114	P/P	59 - 144
2088861	Phorate	71.5	80.0	P/P	42 - 130
2088861	Prodiamine	103	123	P/P	42 - 148
2088861	Prometon	74.7	93.3	P/P	59 - 134
2088861	Prometryn	74.5	88.0	P/P	54 - 135
2088861	Simazine	82.1	92.3	P/P	53 - 156
2088861	Tebuconazole	51.4	63.6	P/P	10 - 131
2088861	Terbufos	77.7	85.8	P/P	57 - 131
2088861	Terbutylazine	82.2	95.4	P/P	68 - 125

Reference Method: EPA 8276

Batch ID: P364575

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088859	Chlordane	41.5		P	34 - 136
2088859	Toxaphene	51.4		P	22 - 152

Reference Method: EPA 8321B

Batch ID: P364434

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088090	Acetaminophen	63.9	67.8	P/P	30 - 150
2088090	Bentazon	88.1	52.4	P/P	30 - 150
2088090	Carbamazepine	73.1	79.0	P/P	40 - 150
2088090	Diuron	71.6	70.9	P/P	40 - 150
2088090	Fenuron	44.0	51.6	P/P	40 - 150
2088090	Fluridone	92.5	85.3	P/P	40 - 150
2088090	Hydrocodone	73.8	74.9	P/P	40 - 150
2088090	Ibuprofen	80.3	78.7	P/P	40 - 150
2088090	Imidacloprid	118	121	P/P	40 - 150
2088090	Linuron	60.1	64.4	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P364434

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088090	MCCP	140	144	P/P	40 - 150
2088090	Naproxen	80.8	94.7	P/P	40 - 150
2088090	Primidone	68.7	72.5	P/P	40 - 150
2088090	Pyraclostrobin	84.1	86.9	P/P	40 - 150
2088090	Triclopyr	83.8	114	P/P	40 - 150
2088855	3-Hydroxycarbofuran	96.6	96.7	P/P	40 - 150
2088855	Aldicarb	96.0	116	P/P	30 - 150
2088855	Aldicarb Sulfone	109	97.3	P/P	40 - 150
2088855	Aldicarb Sulfoxide	61.9	63.4	P/P	40 - 150
2088855	Carbaryl	81.2	77.4	P/P	40 - 150
2088855	Carbofuran	77.8	77.4	P/P	40 - 150
2088855	Methiocarb	76.1	73.3	P/P	40 - 150
2088855	Methomyl	86.3	80.2	P/P	40 - 150
2088855	Oxamyl	92.3	102	P/P	40 - 150
2088855	Propoxur	75.0	71.6	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P364605

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088857	Acesulfame K	112	108	P/P	40 - 150
2088857	AMPA	93.0	96.5	P/P	40 - 150
2088857	Endothall	86.4	90.3	P/P	40 - 150
2088857	Glufosinate	85.3	88.1	P/P	40 - 150
2088857	Glyphosate	77.9	78.8	P/P	40 - 140
2088857	Sucralose	94.9	85.1	P/P	40 - 150

Reference Method: SM 4500 F-C-97

Batch ID: P364862

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088894	Fluoride	98.4	98.4	P/P	89 - 106

Reference Method: SM 5310 B-00

Batch ID: P364643

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088455	Organic Carbon	91.6	94.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P364536

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088840	Turbidity	0.723	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P364577

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2089219	Barium	1.85	Spike	P	0 - 20
2089219	Calcium	0.619	Spike	P	0 - 20
2089219	Iron	2.64	Spike	P	0 - 20
2089219	Magnesium	1.15	Spike	P	0 - 20
2089219	Potassium	2.62	Spike	P	0 - 20
2089219	Sodium	2.16	Spike	P	0 - 20
2089219	Zinc	1.71	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P364577

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2089219	Aluminum	0.791	Spike	P	0 - 20
2089219	Antimony	0.837	Spike	P	0 - 20
2089219	Arsenic	1.30	Spike	P	0 - 20
2089219	Boron	0.679	Spike	P	0 - 20
2089219	Cadmium	2.14	Spike	P	0 - 20
2089219	Chromium	0.288	Spike	P	0 - 20
2089219	Copper	1.31	Spike	P	0 - 20
2089219	Lead	2.13	Spike	P	0 - 20
2089219	Nickel	0.730	Spike	P	0 - 20
2089219	Selenium	0.667	Spike	P	0 - 20
2089219	Silver	1.71	Spike	P	0 - 20
2089219	Thallium	1.81	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364874

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088391	Chloride	0.241	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364875

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088391	Sulfate	0.375	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P364911

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088884	Ammonia-N	1.58	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P364825

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088455	Kjeldahl Nitrogen	4.28	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P364649

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088842	NO2NO3-N	0.567	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P364726

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088434	NO2NO3-N	0.985	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P364832

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088542	Total-P	0.644	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P364484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088845	O-Phosphate-P	2.48	Spike	P	0 - 20

Reference Method: EPA 8270D
 Batch ID: P365257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Aldrin	9.29	LCS	P	0 - 30
LFB	Alpha-BHC	5.66	LCS	P	0 - 30
LFB	Alpha-Chlordane	6.94	LCS	P	0 - 30
LFB	Beta-BHC	14.6	LCS	P	0 - 30
LFB	Bifenthrin	9.23	LCS	P	0 - 30
LFB	Carbophenothion	45.1	LCS	F	0 - 30
LFB	Chlorothalonil	17.2	LCS	P	0 - 30
LFB	Cis-Nonachlor	4.85	LCS	P	0 - 30
LFB	Cypermethrin	16.7	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270D

Batch ID: P365257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	DDD-p,p'	6.42	LCS	P	0 - 30
LFB	DDE-p,p'	5.29	LCS	P	0 - 30
LFB	DDT-p,p'	9.67	LCS	P	0 - 30
LFB	Delta-BHC	11.2	LCS	P	0 - 30
LFB	Dicofol	6.78	LCS	P	0 - 30
LFB	Dieldrin	3.42	LCS	P	0 - 30
LFB	Endosulfan I	7.38	LCS	P	0 - 30
LFB	Endosulfan II	0.923	LCS	P	0 - 30
LFB	Endosulfan Sulfate	14.8	LCS	P	0 - 30
LFB	Endrin	2.39	LCS	P	0 - 30
LFB	Endrin Aldehyde	10.3	LCS	P	0 - 30
LFB	Endrin Ketone	13.2	LCS	P	0 - 30
LFB	Ethalfuralin	2.01	LCS	P	0 - 30
LFB	Gamma-BHC	17.3	LCS	P	0 - 30
LFB	Gamma-Chlordane	8.31	LCS	P	0 - 30
LFB	Heptachlor	10.8	LCS	P	0 - 30
LFB	Heptachlor Epoxide	8.55	LCS	P	0 - 30
LFB	Hexachlorobenzene	8.04	LCS	P	0 - 30
LFB	Methoxychlor	8.83	LCS	P	0 - 30
LFB	Mirex	10.5	LCS	P	0 - 30
LFB	Permethrin	11.1	LCS	P	0 - 30
LFB	Trans-Nonachlor	5.47	LCS	P	0 - 30
LFB	Trifluralin	8.21	LCS	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P364696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088861	Acetochlor	17.4	Spike	P	0 - 30
2088861	Alachlor	17.6	Spike	P	0 - 30
2088861	Ametryn	11.8	Spike	P	0 - 30
2088861	Atrazine	8.64	Spike	P	0 - 30
2088861	Atrazine Desethyl	4.75	Spike	P	0 - 30
2088861	Azinphos Methyl	7.86	Spike	P	0 - 30
2088861	Bromacil	14.1	Spike	P	0 - 30
2088861	Butylate	25.1	Spike	P	0 - 30
2088861	Chlorpyrifos Ethyl	18.8	Spike	P	0 - 30
2088861	Chlorpyrifos Methyl	15.4	Spike	P	0 - 30
2088861	Cyanazine	22.0	Spike	P	0 - 30
2088861	Demeton	0.329	Spike	P	0 - 30
2088861	Diazinon	10.9	Spike	P	0 - 30
2088861	Dimethenamid	17.3	Spike	P	0 - 30
2088861	Disulfoton	6.87	Spike	P	0 - 30
2088861	Dithiopyr	15.1	Spike	P	0 - 30
2088861	EPTC	28.8	Spike	P	0 - 30
2088861	Ethion	18.7	Spike	P	0 - 30
2088861	Ethoprop	15.8	Spike	P	0 - 30
2088861	Fenamiphos	36.5	Spike	F	0 - 30
2088861	Fipronil	11.5	Spike	P	0 - 30
2088861	Fipronil Desulfinyl	13.9	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P364696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088861	Fipronil Sulfide	15.1	Spike	P	0 - 30
2088861	Fipronil Sulfone	12.8	Spike	P	0 - 30
2088861	Fonofos	9.93	Spike	P	0 - 30
2088861	Hexazinone	19.0	Spike	P	0 - 30
2088861	Malathion	17.0	Spike	P	0 - 30
2088861	Metalaxyl	14.6	Spike	P	0 - 30
2088861	Metolachlor	19.7	Spike	P	0 - 30
2088861	Metribuzin	4.39	Spike	P	0 - 30
2088861	Mevinphos	4.32	Spike	P	0 - 30
2088861	Molinate	1.12	Spike	P	0 - 30
2088861	Norflurazon	9.64	Spike	P	0 - 30
2088861	Oxadiazon	20.4	Spike	P	0 - 30
2088861	Parathion Ethyl	17.7	Spike	P	0 - 30
2088861	Parathion Methyl	12.5	Spike	P	0 - 30
2088861	Pendimethalin	19.0	Spike	P	0 - 30
2088861	Phorate	11.2	Spike	P	0 - 30
2088861	Prodiamine	18.2	Spike	P	0 - 30
2088861	Prometon	22.0	Spike	P	0 - 30
2088861	Prometryn	16.5	Spike	P	0 - 30
2088861	Simazine	11.7	Spike	P	0 - 30
2088861	Tebuconazole	21.2	Spike	P	0 - 30
2088861	Terbufos	9.90	Spike	P	0 - 30
2088861	Terbutylazine	14.9	Spike	P	0 - 30
LFB	Acetochlor	3.85	LCS	P	0 - 30
LFB	Alachlor	4.93	LCS	P	0 - 30
LFB	Ametryn	3.72	LCS	P	0 - 30
LFB	Atrazine	3.13	LCS	P	0 - 30
LFB	Atrazine Desethyl	10.2	LCS	P	0 - 30
LFB	Azinphos Methyl	8.83	LCS	P	0 - 30
LFB	Bromacil	6.04	LCS	P	0 - 30
LFB	Butylate	14.2	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	5.91	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	8.00	LCS	P	0 - 30
LFB	Cyanazine	4.81	LCS	P	0 - 30
LFB	Demeton	15.7	LCS	P	0 - 30
LFB	Diazinon	4.39	LCS	P	0 - 30
LFB	Dimethenamid	3.58	LCS	P	0 - 30
LFB	Disulfoton	12.3	LCS	P	0 - 30
LFB	Dithiopyr	5.29	LCS	P	0 - 30
LFB	EPTC	8.70	LCS	P	0 - 30
LFB	Ethion	2.08	LCS	P	0 - 30
LFB	Ethoprop	5.67	LCS	P	0 - 30
LFB	Fenamiphos	10.3	LCS	P	0 - 30
LFB	Fipronil	6.19	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	6.45	LCS	P	0 - 30
LFB	Fipronil Sulfide	4.48	LCS	P	0 - 30
LFB	Fipronil Sulfone	1.26	LCS	P	0 - 30
LFB	Fonofos	8.06	LCS	P	0 - 30
LFB	Hexazinone	3.95	LCS	P	0 - 30
LFB	Malathion	3.60	LCS	P	0 - 30
LFB	Metalaxyl	12.7	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P364696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Metolachlor	4.49	LCS	P	0 - 30
LFB	Metribuzin	12.7	LCS	P	0 - 30
LFB	Mevinphos	1.70	LCS	P	0 - 30
LFB	Molinate	17.2	LCS	P	0 - 30
LFB	Norflurazon	12.4	LCS	P	0 - 30
LFB	Oxadiazon	4.15	LCS	P	0 - 30
LFB	Parathion Ethyl	1.04	LCS	P	0 - 30
LFB	Parathion Methyl	0.810	LCS	P	0 - 30
LFB	Pendimethalin	5.28	LCS	P	0 - 30
LFB	Phorate	16.4	LCS	P	0 - 30
LFB	Prodiamine	0.549	LCS	P	0 - 30
LFB	Prometon	7.95	LCS	P	0 - 30
LFB	Prometryn	4.82	LCS	P	0 - 30
LFB	Simazine	6.98	LCS	P	0 - 30
LFB	Tebuconazole	19.7	LCS	P	0 - 30
LFB	Terbufos	12.5	LCS	P	0 - 30
LFB	Terbutylazine	3.65	LCS	P	0 - 30

Reference Method: EPA 8276

Batch ID: P364575

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlordane	0.756	LCS	P	0 - 30
LFB	Toxaphene	3.27	LCS	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P364434

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088090	2,4-D	3.91	Spike	P	0 - 30
2088090	Acetaminophen	5.92	Spike	P	0 - 30
2088090	Bentazon	26.6	Spike	P	0 - 30
2088090	Carbamazepine	7.85	Spike	P	0 - 30
2088090	Diuron	0.943	Spike	P	0 - 30
2088090	Fenuron	9.58	Spike	P	0 - 30
2088090	Fluridone	6.68	Spike	P	0 - 30
2088090	Hydrocodone	1.47	Spike	P	0 - 30
2088090	Ibuprofen	1.95	Spike	P	0 - 30
2088090	Imazapyr	24.8	Spike	P	0 - 30
2088090	Imidacloprid	2.40	Spike	P	0 - 30
2088090	Linuron	7.05	Spike	P	0 - 30
2088090	MCPP	2.81	Spike	P	0 - 30
2088090	Naproxen	15.8	Spike	P	0 - 30
2088090	Primidone	5.30	Spike	P	0 - 30
2088090	Pyraclostrobin	3.29	Spike	P	0 - 30
2088090	Triclopyr	30.7	Spike	F	0 - 30
2088855	3-Hydroxycarbofuran	0.0600	Spike	P	0 - 30
2088855	Aldicarb	19.1	Spike	P	0 - 30
2088855	Aldicarb Sulfone	11.1	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P364434

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088855	Aldicarb Sulfoxide	2.41	Spike	P	0 - 30
2088855	Carbaryl	4.79	Spike	P	0 - 30
2088855	Carbofuran	0.513	Spike	P	0 - 30
2088855	Methiocarb	3.68	Spike	P	0 - 30
2088855	Methomyl	7.31	Spike	P	0 - 30
2088855	Oxamyl	9.83	Spike	P	0 - 30
2088855	Propoxur	4.68	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P364605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088857	Acesulfame K	2.93	Spike	P	0 - 30
2088857	AMPA	3.67	Spike	P	0 - 30
2088857	Endothall	4.43	Spike	P	0 - 30
2088857	Glufosinate	3.24	Spike	P	0 - 30
2088857	Glyphosate	1.20	Spike	P	0 - 30
2088857	Sucralose	10.4	Spike	P	0 - 30

Reference Method: SM 2120 B

Batch ID: P364527

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088841	Color (true)	0.0704	Sample	P	0 - 20

Reference Method: SM 2320 B-97

Batch ID: P364858

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088894	Total Alkalinity	0.418	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97

Batch ID: P364828

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088433	TDS	1.55	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97

Batch ID: P364862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088894	Fluoride	0.0	Spike	P	0 - 2.5

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P364643

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088455	Organic Carbon	1.33	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: 2088855

Field Sample ID: G2WA0012

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	95.2	P	30 - 160

Lab Sample ID: 2088856

Field Sample ID: G2WA0020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	101	P	30 - 160

Lab Sample ID: 2088857

Field Sample ID: G2WA0012

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	97.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.7	P	30 - 160
EPA 8321B	Diuron-d6	78.0	P	30 - 160
EPA 8321B	Endothall-d6	106	P	30 - 160
EPA 8321B	Endothall-d6	106	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	30 - 160
EPA 8321B	Ibuprofen-d3	84.3	P	30 - 160
EPA 8321B	Primidone-d5	95.5	P	30 - 160
EPA 8321B	Sucralose-d6	113	P	30 - 160
EPA 8321B	Sucralose-d6	113	P	30 - 160

Lab Sample ID: 2088858

Field Sample ID: G2WA0020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	129	P	30 - 160
EPA 8321B	Acetaminophen-d4	102	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.6	P	30 - 160
EPA 8321B	Diuron-d6	87.1	P	30 - 160
EPA 8321B	Endothall-d6	100	P	30 - 160
EPA 8321B	Endothall-d6	100	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	112	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	112	P	30 - 160
EPA 8321B	Ibuprofen-d3	100	P	30 - 160
EPA 8321B	Primidone-d5	96.4	P	30 - 160
EPA 8321B	Sucralose-d6	99.0	P	30 - 160
EPA 8321B	Sucralose-d6	99.0	P	30 - 160

Lab Sample ID: 2088859

Field Sample ID: G2WA0012

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	80.2	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	61.4	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	37.5	P	30 - 103
EPA 8276	PCNB	51.8	P	37 - 143

Quality Assurance Report Surrogates

Lab Sample ID: 2088860
Field Sample ID: G2WA0020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	74.6	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	57.6	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	33.6	P	30 - 103
EPA 8276	PCNB	51.4	P	37 - 143

Lab Sample ID: 2088861
Field Sample ID: G2WA0012

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	86.0	P	68 - 130
EPA 8270E	Terbufos-d10	77.5	P	61 - 136

Lab Sample ID: 2088862
Field Sample ID: G2WA0020

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	93.3	P	68 - 130
EPA 8270E	Terbufos-d10	83.4	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A91632

Included Lab Sample IDs: 2088839, 2088844, 2088845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.7	97.1	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A91669

Included Lab Sample IDs: 2088837, 2088840, 2088841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	102	P/P	90 - 115
Color (true)	94.2	100	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A91673

Included Lab Sample IDs: 2088837, 2088840, 2088841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.0	P/P	95 - 105

Reference Method: SM 5310 B-00

Run ID: A91711

Included Lab Sample IDs: 2088838, 2088842, 2088843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.5	94.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A91712

Included Lab Sample IDs: 2088842, 2088843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	99.5	P/P	90 - 110
NO2NO3-N	98.5	98.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A91720

Included Lab Sample IDs: 2088857, 2088858

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	145	95.3	P/P	60 - 160
Endothall	91.3	94.6	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A91730

Included Lab Sample IDs: 2088863, 2088864

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

Quality Assurance Report

Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A91730

Included Lab Sample IDs: 2088863, 2088864

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Zinc	106	104	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A91731

Included Lab Sample IDs: 2088857, 2088858

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	89.3	106	P/P	50 - 150
3-Hydroxycarbofuran	111	108	P/P	60 - 150
Acetaminophen	105	108	P/P	60 - 160
Aldicarb	95.2	132	P/P	60 - 150
Aldicarb Sulfone	86.4	97.0	P/P	50 - 150
Aldicarb Sulfoxide	124	110	P/P	50 - 150
Bentazon	113	107	P/P	50 - 160
Carbamazepine	110	104	P/P	60 - 150
Carbaryl	105	112	P/P	60 - 150
Carbofuran	106	98.7	P/P	50 - 150
Diuron	111	101	P/P	60 - 150
Fenuron	108	108	P/P	60 - 150
Fluridone	110	111	P/P	60 - 160
Hydrocodone	100	101	P/P	60 - 150
Ibuprofen	92.6	88.1	P/P	50 - 160
Imazapyr	98.5	96.7	P/P	50 - 150
Imidacloprid	102	83.0	P/P	60 - 150
Linuron	97.9	92.1	P/P	60 - 150
MCPP	95.4	94.2	P/P	50 - 150
Methiocarb	98.7	96.1	P/P	50 - 150
Methomyl	95.4	102	P/P	50 - 150
Naproxen	96.7	100	P/P	50 - 160
Oxamyl	110	96.9	P/P	50 - 150
Primidone	67.8	99.1	P/P	60 - 150
Propoxur	105	101	P/P	50 - 150
Pyraclostrobin	112	103	P/P	60 - 150
Triclopyr	97.4	106	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A91740

Included Lab Sample IDs: 2088838

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO ₂ NO ₃ -N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A91744

Included Lab Sample IDs: 2088857, 2088858

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	83.9	89.3	P/P	60 - 160
Glufosinate	76.5	88.1	P/P	60 - 160
Glyphosate	74.3	79.2	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A91748

Included Lab Sample IDs: 2088837, 2088840, 2088841

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A91768

Included Lab Sample IDs: 2088863, 2088864

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	101	P/P	90 - 110
Antimony	99.5	99.2	P/P	90 - 110
Arsenic	102	101	P/P	90 - 110
Boron	106	104	P/P	90 - 110
Cadmium	103	102	P/P	90 - 110
Chromium	102	103	P/P	90 - 110
Copper	102	101	P/P	90 - 110
Lead	96.0	97.4	P/P	90 - 110
Nickel	101	102	P/P	90 - 110
Selenium	102	101	P/P	90 - 110
Silver	101	101	P/P	90 - 110
Thallium	100	100	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A91798

Included Lab Sample IDs: 2088837, 2088840, 2088841

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

Reference Method: SM 4500 F-C-97

Run ID: A91798

Included Lab Sample IDs: 2088837, 2088840, 2088841

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A91814

Included Lab Sample IDs: 2088838, 2088842, 2088843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A91819

Included Lab Sample IDs: 2088838, 2088842, 2088843

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

Quality Assurance Report

Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A91832

Included Lab Sample IDs: 2088838, 2088842, 2088843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	100	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A91906

Included Lab Sample IDs: 2088859, 2088860

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.0		P	80 - 120
Toxaphene	101		P	80 - 120

Reference Method: EPA 8270E

Run ID: A91968

Included Lab Sample IDs: 2088861, 2088862

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	105		P	80 - 120
Ametryn	99.1		P	80 - 120
Atrazine	99.1		P	80 - 120
Atrazine Desethyl	93.9		P	80 - 120
Azinphos Methyl	101		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	99.7		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	98.3		P	80 - 120
Cyanazine	109		P	80 - 120
Demeton	97.4		P	80 - 120
Diazinon	100		P	80 - 120
Dimethenamid	103		P	80 - 120
Disulfoton	98.2		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	104		P	80 - 120
Ethion	97.7		P	80 - 120
Ethoprop	98.2		P	80 - 120
Fenamiphos	97.1		P	80 - 120
Fipronil	98.1		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	98.6		P	80 - 120
Fipronil Sulfone	98.7		P	80 - 120
Fonofos	99.6		P	80 - 120
Hexazinone	100		P	80 - 120
Malathion	98.9		P	80 - 120
Metalaxyl	100		P	80 - 120
Metolachlor	107		P	80 - 120
Metribuzin	87.6		P	80 - 120
Mevinphos	96.5		P	80 - 120
Molinate	105		P	80 - 120
Norflurazon	99.3		P	80 - 120
Oxadiazon	105		P	80 - 120
Parathion Ethyl	95.6		P	80 - 120
Parathion Methyl	95.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A91968

Included Lab Sample IDs: 2088861, 2088862

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pendimethalin	101		P	80 - 120
Phorate	98.1		P	80 - 120
Prodiamine	105		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	102		P	80 - 120
Simazine	108		P	80 - 120
Tebuconazole	102		P	80 - 120
Terbufos	96.0		P	80 - 120
Terbutylazine	101		P	80 - 120

Reference Method: EPA 8321B

Run ID: A92046

Included Lab Sample IDs: 2088857, 2088858

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	103	116	P/P	60 - 160

Reference Method: EPA 8270D

Run ID: A92103

Included Lab Sample IDs: 2088859, 2088860

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	93.6		P	80 - 120
Alpha-BHC	94.5		P	80 - 120
Alpha-Chlordane	92.5		P	80 - 120
Beta-BHC	91.0		P	80 - 120
Bifenthrin	91.6		P	80 - 120
Carbophenothion	89.1		P	80 - 120
Chlorothalonil	114		P	80 - 120
Cis-Nonachlor	91.3		P	80 - 120
Cypermethrin	86.9		P	80 - 120
DDD-p,p'	90.5		P	80 - 120
DDE-p,p'	94.4		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	94.7		P	80 - 120
Dicofol	102		P	80 - 120
Dieldrin	87.4		P	80 - 120
Endosulfan I	93.5		P	80 - 120
Endosulfan II	90.0		P	80 - 120
Endosulfan Sulfate	92.2		P	80 - 120
Endrin	93.0		P	80 - 120
Endrin Aldehyde	90.5		P	80 - 120
Endrin Ketone	91.6		P	80 - 120
Ethalfuralin	94.4		P	80 - 120
Gamma-BHC	95.0		P	80 - 120
Gamma-Chlordane	92.8		P	80 - 120
Heptachlor	93.0		P	80 - 120
Heptachlor Epoxide	92.6		P	80 - 120
Hexachlorobenzene	95.6		P	80 - 120
Methoxychlor	100		P	80 - 120
Mirex	95.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A92103

Included Lab Sample IDs: 2088859, 2088860

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Permethrin	88.3		P	80 - 120
Trans-Nonachlor	93.4		P	80 - 120
Trifluralin	96.3		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							0.723	
EPA 200.7 Rev. 4.4	Barium	101		103	102	99.7			1.85
	Calcium	105		104	105	104			0.619
	Iron	101		107	104	101			2.64
	Magnesium	104		106	105	103			1.15
	Potassium	100		103	108	105			2.62
	Sodium	103		102	106	105			2.16
	Zinc	98.2		101	98.8	97.1			1.71
EPA 200.8 Rev. 5.4	Aluminum	100		101	101	101			0.791
	Antimony	101		103	102	101			0.837
	Arsenic	104		106	102	101			1.30
	Boron	102		104	104	105			0.679
	Cadmium	103		106	104	102			2.14
	Chromium	101		101	101	101			0.288
	Copper	102		102	102	100			1.31
	Lead	95.3		97.7	96.7	94.7			2.13
	Nickel	102		101	101	100			0.730
	Selenium	103		105	102	101			0.667
	Silver	101		103	103	101			1.71
	Thallium	104		106	106	105			1.81
EPA 300.0 Rev. 2.1	Chloride	98.9		98.4	96.3			0.241	
	Sulfate	98.3		96.5	98.1			0.375	
EPA 350.1 Rev. 2.0	Ammonia-N	101		102	104				1.58
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101							4.28
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5		98.0	97.0				0.567
	NO2NO3-N	99.0		102	101				0.985
EPA 365.1 Rev. 2.0	Total-P	96.5		101	101				0.644
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.0		95.6	98.0				2.48
EPA 8270D	Aldrin	58.3	64.0				9.29		
	Alpha-BHC	106	113				5.66		
	Alpha-Chlordane	80.7	86.5				6.94		
	Beta-BHC	109	126				14.6		
	Bifenthrin	63.3	69.4				9.23		
	Carbophenothion	103	64.8				45.1		
	Chlorothalonil	131	156				17.2		
	Cis-Nonachlor	81.3	85.3				4.85		
	Cypermethrin	64.5	76.2				16.7		
	DDD-p,p'	91.0	97.1				6.42		
	DDE-p,p'	80.2	84.5				5.29		
	DDT-p,p'	94.8	104				9.67		
	Delta-BHC	127	142				11.2		
	Dicofol	99.2	106				6.78		
	Dieldrin	88.7	91.8				3.42		
	Endosulfan I	90.3	97.3				7.38		
	Endosulfan II	107	106				0.923		
	Endosulfan Sulfate	81.9	95.0				14.8		
	Endrin	98.8	101				2.39		
	Endrin Aldehyde	94.2	104				10.3		
	Endrin Ketone	80.8	92.2				13.2		
	Ethalfuralin	93.3	91.4				2.01		
	Gamma-BHC	108	129				17.3		
	Gamma-Chlordane	78.0	84.7				8.31		
	Heptachlor	68.7	76.6				10.8		
	Heptachlor Epoxide	84.3	91.8				8.55		

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8270D	Hexachlorobenzene	71.7	77.7			8.04		
	Methoxychlor	107	117			8.83		
	Mirex	54.5	60.5			10.5		
	Permethrin	61.6	68.8			11.1		
	Trans-Nonachlor	75.9	80.1			5.47		
	Trifluralin	86.0	93.4			8.21		
EPA 8270E	Acetochlor	77.8	80.9	76.7	91.4	3.85		17.4
	Alachlor	77.3	81.2	77.4	92.4	4.93		17.6
	Ametryn	77.5	80.5	73.8	83.1	3.72		11.8
	Atrazine	77.5	80.0	85.2	92.9	3.13		8.64
	Atrazine Desethyl	42.8	38.7	63.6	66.7	10.2		4.75
	Azinphos Methyl	79.4	86.7	95.1	103	8.83		7.86
	Bromacil	47.9	50.9	68.2	78.6	6.04		14.1
	Butylate	67.5	58.6	40.0	31.1	14.2		25.1
	Chlorpyrifos Ethyl	85.0	80.1	83.7	101	5.91		18.8
	Chlorpyrifos Methyl	77.6	71.6	80.5	93.8	8.00		15.4
	Cyanazine	74.6	71.1	116	145	4.81		22.0
	Demeton	52.8	45.1	61.2	61.5	15.7		0.329
	Diazinon	71.4	74.6	82.2	91.7	4.39		10.9
	Dimethenamid	79.8	82.7	78.5	93.3	3.58		17.3
	Disulfoton	60.5	53.5	77.4	82.9	12.3		6.87
	Dithiopyr	78.1	82.3	79.9	92.9	5.29		15.1
	EPTC	63.2	57.9	37.5	28.1	8.70		28.8
	Ethion	86.8	85.0	85.7	103	2.08		18.7
	Ethoprop	79.2	74.9	74.4	87.2	5.67		15.8
	Fenamiphos	37.0	41.0	67.0	96.8	10.3		36.5
	Fipronil	68.3	72.6	72.4	81.3	6.19		11.5
	Fipronil Desulfinyl	74.9	79.9	67.0	77.1	6.45		13.9
	Fipronil Sulfide	82.1	78.5	72.9	84.8	4.48		15.1
	Fipronil Sulfone	76.8	75.8	67.6	76.8	1.26		12.8
	Fonofos	70.0	64.6	74.8	82.7	8.06		9.93
	Hexazinone	90.8	87.3	88.3	107	3.95		19.0
	Malathion	87.2	84.2	83.9	99.5	3.60		17.0
	Metalaxyl	33.1	37.6	88.2	102	12.7		14.6
	Metolachlor	80.2	83.9	74.2	91.8	4.49		19.7
	Metribuzin	74.2	65.4	131	137	12.7		4.39
	Mevinphos	54.6	53.7	70.7	73.9	1.70		4.32
	Molinate	78.9	66.4	58.6	58.0	17.2		1.12
	Norflurazon	56.6	64.0	71.1	78.3	12.4		9.64
	Oxadiazon	83.6	87.2	77.2	94.8	4.15		20.4
	Parathion Ethyl	74.0	73.3	75.3	89.8	1.04		17.7
	Parathion Methyl	72.8	72.2	81.3	92.2	0.810		12.5
	Pendimethalin	81.9	77.7	94.3	114	5.28		19.0
	Phorate	62.9	53.4	71.5	80.0	16.4		11.2
	Prodiamine	85.7	86.1	103	123	0.549		18.2
	Prometon	71.5	77.4	74.7	93.3	7.95		22.0
	Prometryn	74.6	78.3	74.5	88.0	4.82		16.5
	Simazine	78.8	84.5	82.1	92.3	6.98		11.7
	Tebuconazole	32.1	39.1	51.4	63.6	19.7		21.2
	Terbufos	75.2	66.3	77.7	85.8	12.5		9.90
	Terbuthylazine	78.4	81.3	82.2	95.4	3.65		14.9
EPA 8276	Chlordane	82.7	83.3	41.5		0.756		
	Toxaphene	83.2	80.5	51.4		3.27		
EPA 8321B	2,4-D	95.9						3.91

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	3-Hydroxycarbofuran	97.5	96.6	96.7			0.0600
	Acesulfame K	119	112	108			2.93
	Acetaminophen	101	63.9	67.8			5.92
	Aldicarb	149	96.0	116			19.1
	Aldicarb Sulfone	89.5	109	97.3			11.1
	Aldicarb Sulfoxide	110	61.9	63.4			2.41
	AMPA	120	93.0	96.5			3.67
	Bentazon	128	88.1	52.4			26.6
	Carbamazepine	108	73.1	79.0			7.85
	Carbaryl	91.1	81.2	77.4			4.79
	Carbofuran	88.4	77.8	77.4			0.513
	Diuron	97.7	71.6	70.9			0.943
	Endothall	96.4	86.4	90.3			4.43
	Fenuron	120	44.0	51.6			9.58
	Fluridone	102	92.5	85.3			6.68
	Glufosinate	98.2	85.3	88.1			3.24
	Glyphosate	91.7	77.9	78.8			1.20
	Hydrocodone	95.2	73.8	74.9			1.47
	Ibuprofen	100	80.3	78.7			1.95
	Imazapyr	104					24.8
	Imidacloprid	102	118	121			2.40
	Linuron	82.3	60.1	64.4			7.05
	MCPP	119	140	144			2.81
	Methiocarb	76.8	76.1	73.3			3.68
	Methomyl	88.0	86.3	80.2			7.31
	Naproxen	99.9	80.8	94.7			15.8
	Oxamyl	102	92.3	102			9.83
	Primidone	94.0	68.7	72.5			5.30
	Propoxur	86.7	75.0	71.6			4.68
	Pyraclostrobin	78.8	84.1	86.9			3.29
	Sucralose	94.2	94.9	85.1			10.4
	Triclopyr	70.4	83.8	114			30.7
SM 2120 B	Color (true)	99.2				0.0704	
SM 2320 B-97	Total Alkalinity	105				0.418	
SM 2540 C-97	TDS					1.55	
SM 4500 F-C-97	Fluoride	97.9	98.4	98.4			0.0
SM 5310 B-00	Organic Carbon	93.2	91.6	94.0			1.33

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2088837, 2088840, 2088841
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2088863, 2088864
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2088863, 2088864
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2088837, 2088840, 2088841
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2088837, 2088840, 2088841
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2088838, 2088842, 2088843

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2088838, 2088842, 2088843
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2088838, 2088842, 2088843
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2088838, 2088842, 2088843
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2088839, 2088844, 2088845
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2088859, 2088860
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2088861, 2088862
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2088859, 2088860
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2088855, 2088856
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2088857, 2088858
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2088857, 2088858
SM 2120 B / E31780	True Color measured at 450 nm	2088837, 2088840, 2088841
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2088837, 2088840, 2088841
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2088837, 2088840, 2088841
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2088837, 2088840, 2088841
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2088837, 2088840, 2088841
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2088838, 2088842, 2088843

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	05/23/2019			05/24/2019 14:43	Adrian Shelby	2088837, 2088840, 2088841
EPA 200.7 Rev. 4.4	05/23/2019	05/28/2019 13:50	Elliott D. Healy	05/29/2019 17:26	Betina Topolski	2088863
	05/23/2019	05/28/2019 13:50	Elliott D. Healy	05/29/2019 17:33	Betina Topolski	2088864
EPA 200.8 Rev. 5.4	05/23/2019	05/28/2019 13:50	Elliott D. Healy	05/30/2019 23:26	Robert K Palmer	2088863
	05/23/2019	05/28/2019 13:50	Elliott D. Healy	05/30/2019 23:36	Robert K Palmer	2088864
EPA 300.0 Rev. 2.1	05/23/2019			05/30/2019 20:08	Lipi Saha	2088837
	05/23/2019			05/30/2019 20:20	Lipi Saha	2088840
	05/23/2019			05/30/2019 20:32	Lipi Saha	2088841
EPA 350.1 Rev. 2.0	05/23/2019			05/31/2019 12:16	Ping Hua	2088838
	05/23/2019			05/31/2019 12:18	Ping Hua	2088842
	05/23/2019			05/31/2019 12:19	Ping Hua	2088843
EPA 351.2 Rev. 2.0	05/23/2019	05/31/2019 13:15	Adrian Shelby	06/03/2019 15:34	Joseph Suarez	2088838
	05/23/2019	05/31/2019 13:15	Adrian Shelby	06/03/2019 15:36	Joseph Suarez	2088842
	05/23/2019	05/31/2019 13:15	Adrian Shelby	06/03/2019 15:37	Joseph Suarez	2088843
EPA 353.2 Rev. 2.0	05/23/2019			05/29/2019 10:53	Beverly Y. Sanders	2088842
	05/23/2019			05/29/2019 12:39	Beverly Y. Sanders	2088843
	05/23/2019			05/30/2019 09:26	Beverly Y. Sanders	2088838
EPA 365.1 Rev. 2.0	05/23/2019	05/31/2019 15:15	Adrian Shelby	06/03/2019 15:23	Julia Storbeck	2088838
	05/23/2019	05/31/2019 15:15	Adrian Shelby	06/03/2019 15:24	Julia Storbeck	2088842
	05/23/2019	05/31/2019 15:15	Adrian Shelby	06/03/2019 15:25	Julia Storbeck	2088843
EPA 365.1 Rev. 2.0 dissolved	05/23/2019			05/23/2019 16:57	Jhamieka S. Greenwood	2088845
	05/23/2019			05/23/2019 17:00	Jhamieka S. Greenwood	2088839
	05/23/2019			05/23/2019 17:01	Jhamieka S. Greenwood	2088844
EPA 8270D	05/23/2019	06/06/2019 08:30	Fe-Val Siddell	06/10/2019 19:53	Arthur Maknenko	2088859
	05/23/2019	06/06/2019 08:30	Fe-Val Siddell	06/10/2019 21:28	Arthur Maknenko	2088860
EPA 8270E	05/23/2019	05/30/2019 08:30	Dinesh Mishra	06/03/2019 15:53	Vandana T. Nagar	2088861
	05/23/2019	05/30/2019 08:30	Dinesh Mishra	06/03/2019 16:17	Vandana T. Nagar	2088862
EPA 8276	05/23/2019	05/29/2019 09:00	Arthur Maknenko	06/04/2019 04:48	Dinesh Mishra	2088859
	05/23/2019	05/29/2019 09:00	Arthur Maknenko	06/04/2019 05:43	Dinesh Mishra	2088860
EPA 8321B	05/23/2019	05/28/2019 09:00	Hoor Shaik	05/30/2019 02:47	Juyoung Kim	2088855
	05/23/2019	05/28/2019 09:00	Hoor Shaik	05/30/2019 03:22	Juyoung Kim	2088856
	05/23/2019	05/28/2019 09:00	Hoor Shaik	05/30/2019 06:49	Juyoung Kim	2088857
	05/23/2019	05/28/2019 09:00	Hoor Shaik	05/30/2019 07:24	Juyoung Kim	2088858
	05/23/2019	05/29/2019 09:30	Rebecca Ware	05/29/2019 10:16	Rebecca Ware	2088857
	05/23/2019	05/29/2019 09:30	Rebecca Ware	05/29/2019 10:27	Rebecca Ware	2088858
	05/23/2019	05/29/2019 09:30	Rebecca Ware	05/29/2019 12:48	Rebecca Ware	2088857
	05/23/2019	05/29/2019 09:30	Rebecca Ware	05/29/2019 13:02	Rebecca Ware	2088858
	05/23/2019	05/29/2019 09:30	Rebecca Ware	06/11/2019 18:29	Rebecca Ware	2088857
	05/23/2019	05/29/2019 09:30	Rebecca Ware	06/11/2019 18:41	Rebecca Ware	2088858
SM 2120 B	05/23/2019			05/24/2019 16:04	Julia Storbeck	2088841

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2120 B	05/23/2019			05/24/2019 16:05	Julia Storbeck	2088840
	05/23/2019			05/24/2019 16:37	Julia Storbeck	2088837
SM 2320 B-97	05/23/2019			06/01/2019 18:07	Dale L. Simmons	2088837
	05/23/2019			06/01/2019 18:20	Dale L. Simmons	2088840
	05/23/2019			06/01/2019 18:31	Dale L. Simmons	2088841
SM 2540 C-97	05/23/2019			05/28/2019 15:10	Sima Feizi	2088837, 2088840, 2088841
SM 2540 D-97	05/23/2019			05/28/2019 15:10	Sima Feizi	2088837, 2088840, 2088841
SM 4500 F-C-97	05/23/2019			06/01/2019 18:07	Dale L. Simmons	2088837
	05/23/2019			06/01/2019 18:20	Dale L. Simmons	2088840
	05/23/2019			06/01/2019 18:31	Dale L. Simmons	2088841
SM 5310 B-00	05/23/2019			05/29/2019 02:11	Julia Storbeck	2088838
	05/23/2019			05/29/2019 02:25	Julia Storbeck	2088842
	05/23/2019			05/29/2019 02:38	Julia Storbeck	2088843