

Chemical Analysis Report

NE-DIST-2019-09-12-02

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

Event Description: **Suwannee North**
Request ID: **RQ-2019-09-02-32**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
Attn: Jeremy Parrish

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 09-OCT-2019 14:43



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: CANNON CR @ CANNON CR RD/BUSINESS
PARK POINT W CR 47

Collection Date/Time: 09/11/2019 11:00

Field ID: 21030138

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2118464	EPA 180.1 Rev. 2.0	Turbidity	16	A	NTU	P370588	
	EPA 300.0 Rev. 2.1	Chloride	8.6		mg Cl/L	P370812	
		Sulfate	1.2		mg SO4/L	P370815	
	SM 2120 B	Color (true)	130	A	PCU	P370578	
	SM 2320 B-97	Total Alkalinity	63		mg CaCO3/L	P371031	
	SM 2540 C-97	TDS	134	A	mg/L	P370850	
	SM 2540 D-97	TSS	9.6	IA	mg/L	P370799	
	SM 4500 F-C-97	Fluoride	0.067	I	mg F/L	P371509	
2118465	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P370766	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P370726	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P370634	
	EPA 365.1 Rev. 2.0	Total-P	0.090		mg P/L	P370646	
	SM 5310 B-00	Organic Carbon	20		mg C/L	P370754	
2118466	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.038		mg P/L	P370581	
2118521	EPA 8321B	Aldicarb	0.020	U	ug/L	P370422	
		Aldicarb Sulfone	0.0020	U	ug/L	P370422	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P370422	
		Carbaryl	0.0020	U	ug/L	P370422	
		Carbofuran	0.0020	U	ug/L	P370422	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P370422	
		Methiocarb	0.0020	U	ug/L	P370422	
		Methomyl	0.0020	U	ug/L	P370422	
		Oxamyl	0.0020	U	ug/L	P370422	
		Propoxur	0.0020	U	ug/L	P370422	
2118522		2,4-D	0.016		ug/L	P370625	
		Acesulfame K**	0.10	U	ug/L	P370612	MS
		AMPA**	0.29	I	ug/L	P370612	MS
		Sucralose**	0.078		ug/L	P370612	
		Acetaminophen**	0.0080	U	ug/L	P370625	
		Acetamiprid**	0.0020	U	ug/L	P370625	
		Endothal**	0.25	U	ug/L	P370612	MS
		Glufosinate**	0.10	U	ug/L	P370612	MS
		Glyphosate**	0.12	I	ug/L	P370612	MS
		Afidopyropen**	0.0020	UJ	ug/L	P370625	
		Bentazon	8.0E-04	U	ug/L	P370625	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370625	RPD
		Carbamazepine**	8.0E-04	U	ug/L	P370625	
		Clothianidin**	0.0020	U	ug/L	P370625	
		Dinotefuran**	0.0020	U	ug/L	P370625	
		Diuron	0.0020	U	ug/L	P370625	
		Fenuron	0.016	U	ug/L	P370625	
		Fluridone**	0.0024	I	ug/L	P370625	

Field ID: 21030138

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2118522	EPA 8321B	Imazapyr**	0.024		ug/L	P370625	
		Hydrocodone**	0.0020	U	ug/L	P370625	
		Ibuprofen**	0.020	U	ug/L	P370625	
		Imidacloprid	0.052		ug/L	P370625	MS
		Linuron	0.0040	U	ug/L	P370625	
		Mandestrobin**	0.0020	UJ	ug/L	P370625	
		MCPP	0.0020	U	ug/L	P370625	
		Naproxen**	0.0080	U	ug/L	P370625	RPD
		Primidone**	0.0040	U	ug/L	P370625	
		Pyraclostrobin**	0.0020	U	ug/L	P370625	RPD
		Thiamethoxam**	0.0020	U	ug/L	P370625	MS
		Tolfenpyrad**	0.0020	UJ	ug/L	P370625	LCS, MS
		Triclopyr**	0.0040	U	ug/L	P370625	
2118529	EPA 8270E	Aldrin	4.2	UJ	ng/L	P370757	LCS, RPD
		Alpha-BHC	2.1	U	ng/L	P370757	
		Alpha-Chlordane	1.0	U	ng/L	P370757	
		Beta-BHC	10	U	ng/L	P370757	
		Bifenthrin**	4.2	UJ	ng/L	P370757	RPD
		Delta-BHC	8.3	U	ng/L	P370757	
		Gamma-BHC	8.3	U	ng/L	P370757	
		Carbophenothion	10	U	ng/L	P370757	
		Chlorothalonil	3.1	IJ	ng/L	P370757	CCV
		Cis-Nonachlor**	1.0	U	ng/L	P370757	
		Cypermethrin	21	UJ	ng/L	P370757	RPD
		DDD-p,p'	6.2	U	ng/L	P370757	
		DDE-p,p'	6.2	U	ng/L	P370757	
		DDT-p,p'	7.3	UJ	ng/L	P370757	RPD
		Dicofol	31	U	ng/L	P370757	
		Dieldrin	4.2	U	ng/L	P370757	
		Endosulfan I	4.2	U	ng/L	P370757	
		Endosulfan II	4.2	U	ng/L	P370757	
		Endosulfan Sulfate	2.1	UJ	ng/L	P370757	LCS, MS
		Endrin	2.1	U	ng/L	P370757	
		Endrin Aldehyde	2.1	U	ng/L	P370757	
		Endrin Ketone	2.1	U	ng/L	P370757	
		Ethalfuralin**	3.1	U	ng/L	P370757	
		Gamma-Chlordane	1.0	U	ng/L	P370757	
		Heptachlor	1.6	U	ng/L	P370757	
		Heptachlor Epoxide	2.1	U	ng/L	P370757	
		Hexachlorobenzene	2.1	U	ng/L	P370757	
		Methoxychlor	4.2	UJ	ng/L	P370757	RPD
		Mirex	2.1	UJ	ng/L	P370757	LCS
		Permethrin	10	UJ	ng/L	P370757	RPD
		Trans-Nonachlor**	1.0	U	ng/L	P370757	
		Trifluralin	2.6	U	ng/L	P370757	

Field ID: 21030138

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2118529	EPA 8276	Chlordane	5.2	U	ng/L	P370757	
		Toxaphene	31	U	ng/L	P370757	
2118530	EPA 8270E	Acetochlor	0.27	U	ng/L	P370470	
		Alachlor	0.27	U	ng/L	P370470	
		Ametryn	0.65	U	ng/L	P370470	MS
		Atrazine	1.3		ng/L	P370470	
		Atrazine Desethyl	1.6	U	ng/L	P370470	RPD
		Azinphos Methyl	5.4	U	ng/L	P370470	
		Bromacil	0.54	U	ng/L	P370470	
		Butylate	0.44	U	ng/L	P370470	
		Chlorpyrifos Ethyl	0.27	U	ng/L	P370470	
		Chlorpyrifos Methyl	0.11	U	ng/L	P370470	
		Cyanazine	3.5	UJ	ng/L	P370470	RPD
		Demeton	7.6	U	ng/L	P370470	
		Diazinon	0.14	U	ng/L	P370470	
		Dimethenamid**	0.11	U	ng/L	P370470	
		Disulfoton	0.54	U	ng/L	P370470	
		Dithiopyr**	0.11	U	ng/L	P370470	
		EPTC	1.4	U	ng/L	P370470	
		Ethion	0.16	U	ng/L	P370470	
		Ethoprop	0.11	U	ng/L	P370470	
		Fenamiphos	0.54	U	ng/L	P370470	MS
		Fipronil	0.27	U	ng/L	P370470	RPD
		Fipronil Desulfinyl**	0.49	I	ng/L	P370470	RPD
		Fipronil Sulfide	0.67		ng/L	P370470	MS, RPD
		Fipronil Sulfone	1.5		ng/L	P370470	RPD
		Fonofos	0.22	U	ng/L	P370470	
		Hexazinone	0.54	U	ng/L	P370470	
		Malathion	0.38	U	ng/L	P370470	
		Metalaxyl	4.0		ng/L	P370470	
		Metolachlor	1.3	I	ng/L	P370470	
		Metribuzin	0.82	UJ	ng/L	P370470	RPD
		Mevinphos	0.54	U	ng/L	P370470	
		Molinate	0.33	U	ng/L	P370470	
		Norflurazon	0.54	U	ng/L	P370470	RPD
		Oxadiazon**	0.12	I	ng/L	P370470	
		Parathion Ethyl	0.27	U	ng/L	P370470	
		Parathion Methyl	0.60	U	ng/L	P370470	
		Pendimethalin	1.1	U	ng/L	P370470	
		Phorate	0.27	U	ng/L	P370470	
		Prodiamine**	0.19	U	ng/L	P370470	
		Prometon	0.98	U	ng/L	P370470	
		Prometryn	0.22	U	ng/L	P370470	
		Simazine	0.54	U	ng/L	P370470	
		Tebuconazole**	4.5		ng/L	P370470	

Field ID: 21030138

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2118530	EPA 8270E	Terbufos	0.11	U	ng/L	P370470	
		Terbutylazine	0.46	U	ng/L	P370470	
2118531	EPA 200.7 Rev. 4.4	Barium	13.7		ug/L	P370724	
		Calcium	24.9		mg/L	P370724	
		Iron	830		ug/L	P370724	
		Magnesium	2.28		mg/L	P370724	
		Potassium	1.3		mg/L	P370724	
		Sodium	5.2		mg/L	P370724	
		Zinc	5.0	U	ug/L	P370724	
		Aluminum	689		ug/L	P370724	
	EPA 200.8 Rev. 5.4	Antimony	0.091	I	ug/L	P370724	
		Arsenic	4.43		ug/L	P370724	
		Boron**	18.2		ug/L	P370724	
		Cadmium	0.020	U	ug/L	P370724	
		Chromium	1.6		ug/L	P370724	
		Copper	0.84		ug/L	P370724	
		Lead	0.59		ug/L	P370724	
		Nickel	0.50	U	ug/L	P370724	
		Selenium	0.20	U	ug/L	P370724	
		Silver	0.010	U	ug/L	P370724	
		Thallium	0.10	U	ug/L	P370724	

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: J - second source check standards for some analytes were not available for analysis. MS accuracy for imazapyr and fluridone could not be assessed due to high concentration of parameter in the spiked sample. Matrix spike precision for tolfenpyrad is not available due to low analyte recovery. Refer to the narrative for an explanation of QC Codes.

EPA 8321B: Matrix spike precision for some analytes is not available due to low analyte recoveries.

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

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

Sample Location: LITTLE CREEK AT US 441

Collection Date/Time: 09/11/2019 09:45

Field ID: 21010033

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2118467	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P370588	
	EPA 300.0 Rev. 2.1	Chloride	5.7		mg Cl/L	P370812	
		Sulfate	1.3		mg SO4/L	P370815	
	SM 2120 B	Color (true)	220		PCU	P370575	
	SM 2320 B-97	Total Alkalinity	54		mg CaCO3/L	P371031	
	SM 2540 C-97	TDS	115		mg/L	P370850	
	SM 2540 D-97	TSS	2	U	mg/L	P370799	
	SM 4500 F-C-97	Fluoride	0.24		mg F/L	P371509	
2118468	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P370766	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.49		mg N/L	P370726	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.021		mg N/L	P370634	
	EPA 365.1 Rev. 2.0	Total-P	0.47		mg P/L	P370646	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P370754	
2118469	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.40		mg P/L	P370580	
2118523	EPA 8321B	2,4-D	0.0020	U	ug/L	P370625	
		Acesulfame K**	0.10	U	ug/L	P370612	MS
		AMPA**	0.10	U	ug/L	P370612	MS
		Sucralose**	0.010	U	ug/L	P370612	
		Acetaminophen**	0.0080	U	ug/L	P370625	
		Acetamiprid**	0.0020	U	ug/L	P370625	
		Endothall**	0.25	U	ug/L	P370612	MS
		Glufosinate**	0.10	U	ug/L	P370612	MS
		Glyphosate**	0.10	U	ug/L	P370612	MS
		Afidopyropen**	0.0020	UJ	ug/L	P370625	
		Bentazon	8.0E-04	U	ug/L	P370625	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370625	RPD
		Carbamazepine**	8.0E-04	U	ug/L	P370625	
		Clothianidin**	0.0020	U	ug/L	P370625	
		Dinotefuran**	0.0020	U	ug/L	P370625	
		Diuron	0.0020	U	ug/L	P370625	
		Fenuron	0.016	U	ug/L	P370625	
		Fluridone**	8.0E-04	U	ug/L	P370625	
		Imazapyr**	0.0057	I	ug/L	P370625	
		Hydrocodone**	0.0020	U	ug/L	P370625	
		Ibuprofen**	0.020	U	ug/L	P370625	
		Imidacloprid	0.0020	U	ug/L	P370625	MS
		Linuron	0.0040	U	ug/L	P370625	
		Mandestrobin**	0.0020	UJ	ug/L	P370625	
		MCP	0.0020	U	ug/L	P370625	
		Naproxen**	0.0080	U	ug/L	P370625	RPD
		Primidone**	0.0040	U	ug/L	P370625	
		Pyraclostrobin**	0.0020	U	ug/L	P370625	RPD
		Thiamethoxam**	0.0020	U	ug/L	P370625	MS

Field ID: 21010033

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2118523	EPA 8321B	Tolfenpyrad**	0.0020	UJ	ug/L	P370625	LCS, MS
		Triclopyr**	0.0040	U	ug/L	P370625	

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: J - second source check standards for some analytes were not available for analysis. MS accuracy for imazapyr and fluridone could not be assessed due to high concentration of parameter in the spiked sample. Matrix spike precision for tolfenpyrad is not available due to low analyte recovery. Refer to the narrative for an explanation of QC Codes.

EPA 8321B: Matrix spike precision for some analytes is not available due to low analyte recoveries.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P370588

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P370724

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: P370724

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: P370812

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370815

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370766

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: P370726

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370634

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370646

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P370580

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P370581

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

Reference Method: EPA 8270E
Batch ID: P370470

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P370470

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

Reference Method: EPA 8270E
Batch ID: P370757

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	10	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	6.0	U	ng/L
DDE-p,p'	6.0	U	ng/L
DDT-p,p'	7.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfuralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P370757

Component	Result	Code	Units
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 8276
Batch ID: P370757

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

Reference Method: EPA 8321B
Batch ID: P370422

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

Reference Method: EPA 8321B
Batch ID: P370612

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: EPA 8321B
Batch ID: P370625

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyrophen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P370625

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

Reference Method: SM 2120 B
Batch ID: P370575

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P370578

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P371031

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

Reference Method: SM 2540 C-97
Batch ID: P370850

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P370799

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-97
Batch ID: P371509

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P370754

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: P370724

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	91.9		P	85 - 115
Calcium	104		P	85 - 115
Iron	100		P	85 - 115
Magnesium	99.8		P	85 - 115
Potassium	98.5		P	85 - 115
Sodium	101		P	85 - 115
Zinc	99.0		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P370724

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.1		P	85 - 115
Antimony	95.4		P	85 - 115
Arsenic	99.5		P	85 - 115
Boron	97.8		P	85 - 115
Cadmium	96.6		P	85 - 115
Chromium	90.4		P	85 - 115
Copper	90.6		P	85 - 115
Lead	89.4		P	85 - 115
Nickel	96.5		P	85 - 115
Selenium	97.8		P	85 - 115
Silver	94.4		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370812

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370815

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370766

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: P370726

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P370634

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P370646

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P370580

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P370581

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

Reference Method: EPA 8270E
 Batch ID: P370470

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	91.4	97.0	P/P	69 - 122
Alachlor	88.6	94.1	P/P	71 - 120
Ametryn	87.4	84.0	P/P	47 - 138
Atrazine	97.5	99.4	P/P	74 - 124
Atrazine Desethyl	103	80.1	P/P	38 - 138
Azinphos Methyl	108	108	P/P	69 - 154
Bromacil	66.7	83.1	P/P	39 - 121
Butylate	59.1	64.1	P/P	27 - 87.0
Chlorpyrifos Ethyl	93.7	103	P/P	69 - 118
Chlorpyrifos Methyl	98.8	94.0	P/P	70 - 120
Cyanazine	156	108	P/P	20 - 250
Demeton	66.3	65.2	P/P	39 - 118
Diazinon	100	91.8	P/P	68 - 127
Dimethenamid	87.7	97.1	P/P	66 - 125
Disulfoton	96.0	79.2	P/P	52 - 126
Dithiopyr	88.6	94.1	P/P	67 - 127
EPTC	58.7	67.5	P/P	24 - 88.0
Ethion	94.2	106	P/P	51 - 132
Ethoprop	90.6	85.6	P/P	58 - 117
Fenamiphos	89.6	95.7	P/P	38 - 139
Fipronil	79.7	96.3	P/P	61 - 124
Fipronil Desulfinyl	80.0	92.2	P/P	47 - 120
Fipronil Sulfide	83.0	97.2	P/P	56 - 119
Fipronil Sulfone	75.3	96.4	P/P	50 - 117
Fonofos	94.1	82.5	P/P	60 - 121
Hexazinone	99.5	107	P/P	55 - 137
Malathion	99.2	98.5	P/P	66 - 126
Metalaxyl	90.9	97.7	P/P	33 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P370470

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Metolachlor	83.3	100	P/P	69 - 119
Metribuzin	168	101	P/P	31 - 238
Mevinphos	82.7	85.5	P/P	42 - 113
Molinate	76.1	74.4	P/P	32 - 96.0
Norflurazon	84.5	96.9	P/P	54 - 123
Oxadiazon	90.3	103	P/P	63 - 128
Parathion Ethyl	91.9	94.5	P/P	72 - 111
Parathion Methyl	100	97.7	P/P	74 - 126
Pendimethalin	91.9	90.1	P/P	61 - 131
Phorate	93.9	88.6	P/P	51 - 115
Prodiamine	83.3	84.6	P/P	38 - 144
Prometon	78.5	91.2	P/P	54 - 119
Prometryn	85.1	92.7	P/P	63 - 120
Simazine	108	102	P/P	75 - 126
Tebuconazole	75.7	96.4	P/P	20 - 119
Terbufos	94.7	84.2	P/P	64 - 116
Terbutylazine	92.2	99.5	P/P	73 - 117

Reference Method: EPA 8270E
Batch ID: P370757

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	17.4	32.2	F/P	20 - 93.0
Alpha-BHC	67.2	89.7	P/P	55 - 133
Alpha-Chlordane	70.5	91.0	P/P	58 - 112
Beta-BHC	92.4	124	P/P	54 - 168
Bifenthrin	53.6	74.3	P/P	30 - 134
Carbophenothion	57.8	67.4	P/P	26 - 147
Chlorothalonil	52.7	68.6	P/P	20 - 155
Cis-Nonachlor	69.4	91.4	P/P	54 - 115
Cypermethrin	43.7	66.5	P/P	40 - 137
DDD-p,p'	80.1	105	P/P	65 - 129
DDE-p,p'	64.1	86.3	P/P	57 - 116
DDT-p,p'	64.0	90.6	P/P	53 - 133
Delta-BHC	96.9	124	P/P	59 - 178
Dicofol	75.3	87.9	P/P	24 - 138
Dieldrin	84.8	111	P/P	60 - 120
Endosulfan I	82.8	107	P/P	64 - 118
Endosulfan II	92.4	113	P/P	58 - 142
Endosulfan Sulfate	105	132	P/F	60 - 127
Endrin	89.2	107	P/P	59 - 122
Endrin Aldehyde	86.8	112	P/P	49 - 132
Endrin Ketone	92.6	117	P/P	64 - 121
Ethalfuralin	74.5	95.7	P/P	60 - 126
Gamma-BHC	88.1	111	P/P	57 - 154
Gamma-Chlordane	60.3	79.4	P/P	56 - 110
Heptachlor	58.1	74.3	P/P	46 - 96.0
Heptachlor Epoxide	77.3	97.8	P/P	61 - 112
Hexachlorobenzene	65.7	85.3	P/P	44 - 98.0
Methoxychlor	64.5	88.6	P/P	63 - 134
Mirex	39.7	52.2	F/P	45 - 100
Permethrin	58.4	79.0	P/P	53 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P370757

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Trans-Nonachlor	60.9	78.9	P/P	47 - 110
Trifluralin	73.1	94.3	P/P	39 - 142

Reference Method: EPA 8276
Batch ID: P370757

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	75.5	74.8	P/P	43 - 128
Toxaphene	55.4	66.1	P/P	38 - 140

Reference Method: EPA 8321B
Batch ID: P370422

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	109		P	40 - 160
Aldicarb	113		P	30 - 160
Aldicarb Sulfone	105		P	40 - 160
Aldicarb Sulfoxide	105		P	40 - 160
Carbaryl	113		P	40 - 160
Carbofuran	93.0		P	40 - 160
Methiocarb	80.4		P	40 - 160
Methomyl	90.6		P	40 - 160
Oxamyl	112		P	40 - 160
Propoxur	95.4		P	40 - 160

Reference Method: EPA 8321B
Batch ID: P370612

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	46.3		P	40 - 150
AMPA	106		P	40 - 150
Endothall	87.5		P	40 - 150
Glufosinate	115		P	40 - 150
Glyphosate	111		P	40 - 140
Sucralose	87.0		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P370625

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	74.6		P	40 - 160
Acetaminophen	83.7		P	30 - 160
Acetamiprid	96.7		P	40 - 160
Afidopyropen	79.9		P	40 - 160
Bentazon	93.6		P	30 - 160
Benzovindiflupyr	50.5		P	40 - 160
Carbamazepine	97.5		P	40 - 160
Clothianidin	95.6		P	40 - 160
Dinotefuran	89.5		P	40 - 160
Diuron	103		P	40 - 160
Fenuron	119		P	40 - 160
Fluridone	88.8		P	40 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P370625

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Hydrocodone	98.6		P	40 - 160
Ibuprofen	49.3		P	30 - 160
Imazapyr	86.7		P	40 - 160
Imidacloprid	100		P	40 - 160
Linuron	66.3		P	40 - 160
Mandestrobin	73.0		P	40 - 160
MCPP	75.3		P	40 - 160
Naproxen	60.1		P	40 - 160
Primidone	84.4		P	40 - 160
Pyraclostrobin	41.1		P	30 - 160
Thiamethoxam	108		P	40 - 160
Tolfenpyrad	14.2		F	40 - 160
Triclopyr	50.7		P	30 - 160

Reference Method: SM 2120 B
Batch ID: P370575

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.6		P	85 - 115

Reference Method: SM 2120 B
Batch ID: P370578

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P371031

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

Reference Method: SM 4500 F-C-97
Batch ID: P371509

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.7		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P370754

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P370724

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118069	Barium	99.5	101	P/P	80 - 120
2118069	Calcium	104		P	80 - 120
2118069	Iron	103	103	P/P	80 - 120
2118069	Magnesium	103	101	P/P	80 - 120
2118069	Potassium	106	106	P/P	80 - 120
2118069	Sodium	102		P	80 - 120
2118069	Zinc	101	98.8	P/P	80 - 120
2118292	Barium	98.5		P	80 - 120
2118292	Calcium	105		P	80 - 120
2118292	Iron	104		P	80 - 120
2118292	Magnesium	104		P	80 - 120
2118292	Potassium	103		P	80 - 120
2118292	Sodium	109		P	80 - 120
2118292	Zinc	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P370724

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118069	Aluminum	98.8	98.0	P/P	80 - 120
2118069	Antimony	94.0	97.4	P/P	80 - 120
2118069	Arsenic	96.1	97.1	P/P	80 - 120
2118069	Boron	100	100	P/P	80 - 120
2118069	Cadmium	94.2	95.4	P/P	80 - 120
2118069	Chromium	91.8	92.9	P/P	80 - 120
2118069	Copper	91.6	93.4	P/P	80 - 120
2118069	Lead	90.6	92.0	P/P	80 - 120
2118069	Nickel	94.0	94.6	P/P	80 - 120
2118069	Selenium	95.5	95.2	P/P	80 - 120
2118069	Silver	94.0	95.3	P/P	80 - 120
2118069	Thallium	103	105	P/P	80 - 120
2118292	Aluminum	95.9		P	80 - 120
2118292	Antimony	98.5		P	80 - 120
2118292	Arsenic	92.8		P	80 - 120
2118292	Boron	101		P	80 - 120
2118292	Cadmium	93.4		P	80 - 120
2118292	Chromium	89.8		P	80 - 120
2118292	Copper	87.7		P	80 - 120
2118292	Lead	89.9		P	80 - 120
2118292	Nickel	89.0		P	80 - 120
2118292	Selenium	92.6		P	80 - 120
2118292	Silver	94.9		P	80 - 120
2118292	Thallium	101		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370812

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118065	Chloride	103	104	P/P	90 - 110
2118275	Chloride	101		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370815

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118065	Sulfate	103	105	P/P	90 - 110
2118275	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370766

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118279	Ammonia-N	102	98.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370726

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118282	Kjeldahl Nitrogen	109	110	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370634

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118465	NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370646

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118280	Total-P	104	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P370580

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118284	O-Phosphate-P	96.0	97.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P370581

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118466	O-Phosphate-P	96.8	97.2	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P370470

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2117895	Acetochlor	95.1	87.3	P/P	63 - 129
2117895	Alachlor	95.4	91.4	P/P	65 - 127
2117895	Ametryn	215	198	F/F	40 - 164
2117895	Atrazine Desethyl	42.7	137	P/P	14 - 157
2117895	Azinphos Methyl	94.1	92.5	P/P	49 - 180
2117895	Bromacil	58.6	94.2	P/P	48 - 130
2117895	Butylate	61.8	71.3	P/P	10 - 94.0
2117895	Chlorpyrifos Ethyl	101	91.1	P/P	58 - 123
2117895	Chlorpyrifos Methyl	95.4	96.8	P/P	58 - 125

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P370470

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2117895	Cyanazine	89.8	155	P/P	24 - 253
2117895	Demeton	81.2	99.0	P/P	25 - 149
2117895	Diazinon	111	107	P/P	59 - 144
2117895	Dimethenamid	86.2	68.3	P/P	46 - 139
2117895	Disulfoton	105	109	P/P	54 - 132
2117895	Dithiopyr	90.4	83.3	P/P	64 - 130
2117895	EPTC	61.5	72.9	P/P	10 - 92.0
2117895	Ethion	89.0	84.3	P/P	30 - 148
2117895	Ethoprop	99.3	120	P/P	50 - 130
2117895	Fenamiphos	30.8	34.3	F/F	49 - 142
2117895	Fipronil	46.5	85.0	P/P	46 - 140
2117895	Fipronil Desulfinylnil	36.7	83.2	P/P	30 - 121
2117895	Fipronil Sulfide	13.0	88.8	F/P	31 - 136
2117895	Fonofos	101	110	P/P	55 - 129
2117895	Malathion	89.4	89.9	P/P	56 - 135
2117895	Metaxyl	92.3	85.3	P/P	54 - 135
2117895	Metolachlor	98.6	79.6	P/P	51 - 140
2117895	Metribuzin	180	224	P/P	45 - 254
2117895	Mevinphos	90.4	97.9	P/P	33 - 131
2117895	Molinate	80.5	82.2	P/P	14 - 98.0
2117895	Norflurazon	40.1	85.2	P/P	34 - 136
2117895	Oxadiazon	95.5	72.2	P/P	67 - 116
2117895	Parathion Ethyl	91.7	98.3	P/P	66 - 118
2117895	Parathion Methyl	99.8	109	P/P	64 - 136
2117895	Pendimethalin	95.9	95.0	P/P	59 - 144
2117895	Phorate	88.5	100	P/P	42 - 130
2117895	Prodiamine	83.2	83.8	P/P	42 - 148
2117895	Prometon	81.1	77.6	P/P	59 - 134
2117895	Prometryn	87.1	83.2	P/P	54 - 135
2117895	Tebuconazole	13.8	11.1	P/P	10 - 131
2117895	Terbufos	105	116	P/P	57 - 131
2117895	Terbutylazine	97.9	99.4	P/P	68 - 125

Reference Method: EPA 8270E
Batch ID: P370757

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118310	Aldrin	44.4	39.6	P/P	25 - 92.0
2118310	Alpha-BHC	101	101	P/P	48 - 150
2118310	Alpha-Chlordane	73.9	72.3	P/P	50 - 115
2118310	Beta-BHC	105	110	P/P	39 - 184
2118310	Bifenthrin	93.5	90.8	P/P	46 - 116
2118310	Carbophenothion	94.0	98.2	P/P	27 - 180
2118310	Chlorothalonil	42.3	40.3	P/P	10 - 216
2118310	Cis-Nonachlor	77.1	76.4	P/P	55 - 112
2118310	Cypermethrin	101	105	P/P	40 - 153
2118310	DDD-p,p'	85.5	85.2	P/P	53 - 128
2118310	DDE-p,p'	73.8	71.5	P/P	48 - 116
2118310	DDT-p,p'	79.5	75.3	P/P	47 - 128
2118310	Delta-BHC	104	110	P/P	48 - 221
2118310	Dicofol	67.6	76.2	P/P	10 - 147
2118310	Dieldrin	86.7	95.5	P/P	48 - 128

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P370757

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118310	Endosulfan I	85.8	89.7	P/P	58 - 126
2118310	Endosulfan II	99.4	102	P/P	50 - 150
2118310	Endosulfan Sulfate	120	140	P/F	56 - 130
2118310	Endrin	94.2	97.9	P/P	50 - 126
2118310	Endrin Aldehyde	51.8	50.7	P/P	12 - 145
2118310	Endrin Ketone	113	122	P/P	59 - 132
2118310	Ethalfuralin	77.0	75.9	P/P	65 - 122
2118310	Gamma-BHC	95.6	87.1	P/P	40 - 190
2118310	Gamma-Chlordane	67.0	64.9	P/P	50 - 112
2118310	Heptachlor	58.9	58.9	P/P	41 - 98.0
2118310	Heptachlor Epoxide	80.8	83.3	P/P	55 - 117
2118310	Hexachlorobenzene	58.6	58.4	P/P	47 - 91.0
2118310	Methoxychlor	66.6	75.8	P/P	55 - 133
2118310	Mirex	55.6	48.1	P/P	44 - 101
2118310	Permethrin	70.5	71.8	P/P	52 - 124
2118310	Trans-Nonachlor	61.4	61.2	P/P	53 - 99.0
2118310	Trifluralin	74.2	72.4	P/P	10 - 201

Reference Method: EPA 8276
Batch ID: P370757

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119145	Chlordane	68.1	67.5	P/P	34 - 136
2119145	Toxaphene	61.9	66.1	P/P	22 - 152

Reference Method: EPA 8321B
Batch ID: P370422

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2116928	3-Hydroxycarbofuran	93.4	98.9	P/P	40 - 160
2116928	Aldicarb	78.3	93.7	P/P	30 - 160
2116928	Aldicarb Sulfone	101	110	P/P	40 - 160
2116928	Aldicarb Sulfoxide	52.3	55.4	P/P	40 - 160
2116928	Carbaryl	81.7	88.9	P/P	40 - 160
2116928	Carbofuran	65.3	68.7	P/P	40 - 160
2116928	Methiocarb	64.5	70.6	P/P	40 - 160
2116928	Methomyl	69.8	76.4	P/P	40 - 160
2116928	Oxamyl	92.4	96.4	P/P	40 - 160
2116928	Propoxur	67.0	70.5	P/P	40 - 160

Reference Method: EPA 8321B
Batch ID: P370612

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118309	Acesulfame K	21.0	21.8	F/F	40 - 150
2118309	AMPA	0.0	0.0	F/F	40 - 150
2118309	Endothall	212	212	F/F	40 - 150
2118309	Glufosinate	0.0	0.0	F/F	40 - 150
2118309	Glyphosate	0.0	0.0	F/F	40 - 140
2118309	Sucralose	142	141	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P370625

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118309	2,4-D	132	119	P/P	40 - 160
2118309	Acetaminophen	88.0	89.4	P/P	30 - 160
2118309	Acetamiprid	127	110	P/P	40 - 160
2118309	Afidopyropen	117	114	P/P	40 - 160
2118309	Bentazon	73.0	75.1	P/P	30 - 160
2118309	Benzovindiflupyr	45.1	73.3	P/P	40 - 160
2118309	Carbamazepine	116	114	P/P	40 - 160
2118309	Clothianidin	117	116	P/P	40 - 160
2118309	Dinotefuran	123	123	P/P	40 - 160
2118309	Diuron	115	106	P/P	40 - 160
2118309	Fenuron	100	103	P/P	40 - 160
2118309	Hydrocodone	110	108	P/P	40 - 160
2118309	Ibuprofen	70.2	76.9	P/P	30 - 160
2118309	Imidacloprid	222	210	F/F	40 - 160
2118309	Linuron	72.3	71.9	P/P	40 - 160
2118309	Mandestrobin	86.0	90.6	P/P	40 - 160
2118309	MCCP	141	130	P/P	40 - 160
2118309	Naproxen	116	74.0	P/P	40 - 160
2118309	Primidone	102	101	P/P	40 - 160
2118309	Pyraclostrobin	36.8	65.1	P/P	30 - 160
2118309	Thiamethoxam	174	176	F/F	40 - 160
2118309	Tolfenpyrad	2.13	23.2	F/F	40 - 160
2118309	Triclopyr	100	88.9	P/P	30 - 160

Reference Method: SM 4500 F-C-97
Batch ID: P371509

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119156	Fluoride	97.0	97.0	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P370754

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118256	Organic Carbon	103	104	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P370588

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118464	Turbidity	2.58	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P370724

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118069	Barium	1.09	Spike	P	0 - 20
2118069	Calcium	0.361	Spike	P	0 - 20
2118069	Iron	0.208	Spike	P	0 - 20
2118069	Magnesium	1.47	Spike	P	0 - 20
2118069	Potassium	0.181	Spike	P	0 - 20
2118069	Sodium	1.32	Spike	P	0 - 20
2118069	Zinc	2.26	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P370724

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118069	Aluminum	0.651	Spike	P	0 - 20
2118069	Antimony	3.55	Spike	P	0 - 20
2118069	Arsenic	0.990	Spike	P	0 - 20
2118069	Boron	0.204	Spike	P	0 - 20
2118069	Cadmium	1.31	Spike	P	0 - 20
2118069	Chromium	1.28	Spike	P	0 - 20
2118069	Copper	1.98	Spike	P	0 - 20
2118069	Lead	1.56	Spike	P	0 - 20
2118069	Nickel	0.604	Spike	P	0 - 20
2118069	Selenium	0.352	Spike	P	0 - 20
2118069	Silver	1.45	Spike	P	0 - 20
2118069	Thallium	1.76	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370812

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118065	Chloride	0.959	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370815

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118065	Sulfate	1.67	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370766

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118279	Ammonia-N	1.92	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370726

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118282	Kjeldahl Nitrogen	0.464	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370634

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118465	NO2NO3-N	0.602	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370646

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118280	Total-P	2.51	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P370580

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118284	O-Phosphate-P	1.06	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P370581

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118466	O-Phosphate-P	0.297	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P370470

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2117895	Acetochlor	8.55	Spike	P	0 - 30
2117895	Alachlor	4.30	Spike	P	0 - 30
2117895	Ametryn	8.39	Spike	P	0 - 30
2117895	Atrazine	7.43	Spike	P	0 - 30
2117895	Atrazine Desethyl	52.2	Spike	F	0 - 30
2117895	Azinphos Methyl	1.75	Spike	P	0 - 30
2117895	Bromacil	25.8	Spike	P	0 - 30
2117895	Butylate	14.3	Spike	P	0 - 30
2117895	Chlorpyrifos Ethyl	9.98	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P370470

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2117895	Chlorpyrifos Methyl	1.45	Spike	P	0 - 30
2117895	Cyanazine	53.1	Spike	F	0 - 30
2117895	Demeton	19.7	Spike	P	0 - 30
2117895	Diazinon	3.23	Spike	P	0 - 30
2117895	Dimethenamid	20.0	Spike	P	0 - 30
2117895	Disulfoton	4.29	Spike	P	0 - 30
2117895	Dithiopyr	7.47	Spike	P	0 - 30
2117895	EPTC	17.1	Spike	P	0 - 30
2117895	Ethion	5.41	Spike	P	0 - 30
2117895	Ethoprop	18.9	Spike	P	0 - 30
2117895	Fenamiphos	10.7	Spike	P	0 - 30
2117895	Fipronil	46.2	Spike	F	0 - 30
2117895	Fipronil Desulfinyl	51.0	Spike	F	0 - 30
2117895	Fipronil Sulfide	50.2	Spike	F	0 - 30
2117895	Fipronil Sulfone	49.7	Spike	F	0 - 30
2117895	Fonofos	8.55	Spike	P	0 - 30
2117895	Hexazinone	21.5	Spike	P	0 - 30
2117895	Malathion	0.466	Spike	P	0 - 30
2117895	Metalaxyl	7.90	Spike	P	0 - 30
2117895	Metolachlor	14.1	Spike	P	0 - 30
2117895	Metribuzin	20.3	Spike	P	0 - 30
2117895	Mevinphos	7.97	Spike	P	0 - 30
2117895	Molinate	2.10	Spike	P	0 - 30
2117895	Norflurazon	72.0	Spike	F	0 - 30
2117895	Oxadiazon	18.0	Spike	P	0 - 30
2117895	Parathion Ethyl	6.92	Spike	P	0 - 30
2117895	Parathion Methyl	9.04	Spike	P	0 - 30
2117895	Pendimethalin	0.934	Spike	P	0 - 30
2117895	Phorate	10.8	Spike	P	0 - 30
2117895	Prodiamine	0.719	Spike	P	0 - 30
2117895	Prometon	3.32	Spike	P	0 - 30
2117895	Prometryn	4.56	Spike	P	0 - 30
2117895	Simazine	12.3	Spike	P	0 - 30
2117895	Tebuconazole	12.5	Spike	P	0 - 30
2117895	Terbufos	9.97	Spike	P	0 - 30
2117895	Terbuthylazine	1.58	Spike	P	0 - 30
LFB	Acetochlor	6.00	LCS	P	0 - 30
LFB	Alachlor	5.97	LCS	P	0 - 30
LFB	Ametryn	4.03	LCS	P	0 - 30
LFB	Atrazine	1.90	LCS	P	0 - 30
LFB	Atrazine Desethyl	25.4	LCS	P	0 - 30
LFB	Azinphos Methyl	0.0515	LCS	P	0 - 30
LFB	Bromacil	21.9	LCS	P	0 - 30
LFB	Butylate	8.06	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	9.34	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	5.02	LCS	P	0 - 30
LFB	Cyanazine	36.4	LCS	F	0 - 30
LFB	Demeton	1.56	LCS	P	0 - 30
LFB	Diazinon	8.58	LCS	P	0 - 30
LFB	Dimethenamid	10.2	LCS	P	0 - 30
LFB	Disulfoton	19.1	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P370470

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dithiopyr	5.94	LCS	P	0 - 30
LFB	EPTC	13.9	LCS	P	0 - 30
LFB	Ethion	12.1	LCS	P	0 - 30
LFB	Ethoprop	5.63	LCS	P	0 - 30
LFB	Fenamiphos	6.58	LCS	P	0 - 30
LFB	Fipronil	18.8	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	14.2	LCS	P	0 - 30
LFB	Fipronil Sulfide	15.8	LCS	P	0 - 30
LFB	Fipronil Sulfone	24.6	LCS	P	0 - 30
LFB	Fonofos	13.1	LCS	P	0 - 30
LFB	Hexazinone	7.31	LCS	P	0 - 30
LFB	Malathion	0.766	LCS	P	0 - 30
LFB	Metaxyl	7.21	LCS	P	0 - 30
LFB	Metolachlor	18.4	LCS	P	0 - 30
LFB	Metribuzin	50.1	LCS	F	0 - 30
LFB	Mevinphos	3.33	LCS	P	0 - 30
LFB	Molinate	2.27	LCS	P	0 - 30
LFB	Norflurazon	13.7	LCS	P	0 - 30
LFB	Oxadiazon	13.1	LCS	P	0 - 30
LFB	Parathion Ethyl	2.79	LCS	P	0 - 30
LFB	Parathion Methyl	2.58	LCS	P	0 - 30
LFB	Pendimethalin	1.92	LCS	P	0 - 30
LFB	Phorate	5.80	LCS	P	0 - 30
LFB	Prodiamine	1.57	LCS	P	0 - 30
LFB	Prometon	15.0	LCS	P	0 - 30
LFB	Prometryn	8.58	LCS	P	0 - 30
LFB	Simazine	5.61	LCS	P	0 - 30
LFB	Tebuconazole	24.1	LCS	P	0 - 30
LFB	Terbufos	11.8	LCS	P	0 - 30
LFB	Terbutylazine	7.68	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P370757

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118310	Aldrin	11.3	Spike	P	0 - 30
2118310	Alpha-BHC	0.315	Spike	P	0 - 30
2118310	Alpha-Chlordane	2.24	Spike	P	0 - 30
2118310	Beta-BHC	5.39	Spike	P	0 - 30
2118310	Bifenthrin	2.95	Spike	P	0 - 30
2118310	Carbophenothion	4.39	Spike	P	0 - 30
2118310	Chlorothalonil	4.69	Spike	P	0 - 30
2118310	Cis-Nonachlor	0.871	Spike	P	0 - 30
2118310	Cypermethrin	3.85	Spike	P	0 - 30
2118310	DDD-p,p'	0.372	Spike	P	0 - 30
2118310	DDE-p,p'	3.15	Spike	P	0 - 30
2118310	DDT-p,p'	5.40	Spike	P	0 - 30
2118310	Delta-BHC	5.45	Spike	P	0 - 30
2118310	Dicofol	12.0	Spike	P	0 - 30
2118310	Dieldrin	9.58	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P370757

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118310	Endosulfan I	4.47	Spike	P	0 - 30
2118310	Endosulfan II	2.62	Spike	P	0 - 30
2118310	Endosulfan Sulfate	14.8	Spike	P	0 - 30
2118310	Endrin	3.79	Spike	P	0 - 30
2118310	Endrin Aldehyde	2.08	Spike	P	0 - 30
2118310	Endrin Ketone	7.57	Spike	P	0 - 30
2118310	Ethalfuralin	1.54	Spike	P	0 - 30
2118310	Gamma-BHC	9.33	Spike	P	0 - 30
2118310	Gamma-Chlordane	3.09	Spike	P	0 - 30
2118310	Heptachlor	0.0682	Spike	P	0 - 30
2118310	Heptachlor Epoxide	3.14	Spike	P	0 - 30
2118310	Hexachlorobenzene	0.320	Spike	P	0 - 30
2118310	Methoxychlor	12.9	Spike	P	0 - 30
2118310	Mirex	14.5	Spike	P	0 - 30
2118310	Permethrin	1.78	Spike	P	0 - 30
2118310	Trans-Nonachlor	0.183	Spike	P	0 - 30
2118310	Trifluralin	2.40	Spike	P	0 - 30
LFB	Aldrin	59.9	LCS	F	0 - 30
LFB	Alpha-BHC	28.8	LCS	P	0 - 30
LFB	Alpha-Chlordane	25.3	LCS	P	0 - 30
LFB	Beta-BHC	29.2	LCS	P	0 - 30
LFB	Bifenthrin	32.5	LCS	F	0 - 30
LFB	Carbophenothion	15.3	LCS	P	0 - 30
LFB	Chlorothalonil	26.3	LCS	P	0 - 30
LFB	Cis-Nonachlor	27.3	LCS	P	0 - 30
LFB	Cypermethrin	41.5	LCS	F	0 - 30
LFB	DDD-p,p'	26.4	LCS	P	0 - 30
LFB	DDE-p,p'	29.5	LCS	P	0 - 30
LFB	DDT-p,p'	34.4	LCS	F	0 - 30
LFB	Delta-BHC	24.5	LCS	P	0 - 30
LFB	Dicofol	15.4	LCS	P	0 - 30
LFB	Dieldrin	26.7	LCS	P	0 - 30
LFB	Endosulfan I	25.6	LCS	P	0 - 30
LFB	Endosulfan II	19.8	LCS	P	0 - 30
LFB	Endosulfan Sulfate	23.2	LCS	P	0 - 30
LFB	Endrin	18.0	LCS	P	0 - 30
LFB	Endrin Aldehyde	25.7	LCS	P	0 - 30
LFB	Endrin Ketone	23.1	LCS	P	0 - 30
LFB	Ethalfuralin	24.8	LCS	P	0 - 30
LFB	Gamma-BHC	23.0	LCS	P	0 - 30
LFB	Gamma-Chlordane	27.4	LCS	P	0 - 30
LFB	Heptachlor	24.5	LCS	P	0 - 30
LFB	Heptachlor Epoxide	23.4	LCS	P	0 - 30
LFB	Hexachlorobenzene	26.0	LCS	P	0 - 30
LFB	Methoxychlor	31.4	LCS	F	0 - 30
LFB	Mirex	27.3	LCS	P	0 - 30
LFB	Permethrin	30.0	LCS	F	0 - 30
LFB	Trans-Nonachlor	25.7	LCS	P	0 - 30
LFB	Trifluralin	25.4	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P370757

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119145	Chlordane	0.778	Spike	P	0 - 30
2119145	Toxaphene	6.54	Spike	P	0 - 30
LFB	Chlordane	0.904	LCS	P	0 - 30
LFB	Toxaphene	17.7	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P370422

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2116928	3-Hydroxycarbofuran	5.71	Spike	P	0 - 30
2116928	Aldicarb	17.8	Spike	P	0 - 30
2116928	Aldicarb Sulfone	7.96	Spike	P	0 - 30
2116928	Aldicarb Sulfoxide	5.81	Spike	P	0 - 30
2116928	Carbaryl	8.44	Spike	P	0 - 30
2116928	Carbofuran	5.11	Spike	P	0 - 30
2116928	Methiocarb	9.03	Spike	P	0 - 30
2116928	Methomyl	8.99	Spike	P	0 - 30
2116928	Oxamyl	4.25	Spike	P	0 - 30
2116928	Propoxur	5.05	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P370612

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118309	Acesulfame K	3.60	Spike	P	0 - 30
2118309	Endothall	0.0455	Spike	P	0 - 30
2118309	Sucralose	0.548	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P370625

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118309	2,4-D	9.18	Spike	P	0 - 30
2118309	Acetaminophen	1.55	Spike	P	0 - 30
2118309	Acetamiprid	14.0	Spike	P	0 - 30
2118309	Afidopyropen	2.93	Spike	P	0 - 30
2118309	Bentazon	1.31	Spike	P	0 - 30
2118309	Benzovindiflupyr	47.5	Spike	F	0 - 30
2118309	Carbamazepine	2.37	Spike	P	0 - 30
2118309	Clothianidin	0.551	Spike	P	0 - 30
2118309	Dinotefuran	0.391	Spike	P	0 - 30
2118309	Diuron	7.38	Spike	P	0 - 30
2118309	Fenuron	2.67	Spike	P	0 - 30
2118309	Fluridone	2.67	Spike	P	0 - 30
2118309	Hydrocodone	1.74	Spike	P	0 - 30
2118309	Ibuprofen	9.11	Spike	P	0 - 30
2118309	Imazapyr	4.82	Spike	P	0 - 30
2118309	Imidacloprid	5.12	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P370625

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118309	Linuron	0.554	Spike	P	0 - 30
2118309	Mandestrobin	5.18	Spike	P	0 - 30
2118309	MCPP	8.08	Spike	P	0 - 30
2118309	Naproxen	44.2	Spike	F	0 - 30
2118309	Primidone	0.586	Spike	P	0 - 30
2118309	Pyraclostrobin	55.4	Spike	F	0 - 30
2118309	Thiamethoxam	1.23	Spike	P	0 - 30
2118309	Triclopyr	11.8	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P370575

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118682	Color (true)	0.0513	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P370578

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118464	Color (true)	0.0382	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P371031

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119156	Total Alkalinity	1.59	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P370850

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118464	TDS	2.25	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P371509

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119156	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P370754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118256	Organic Carbon	0.378	Spike	P	0 - 20

Quality Assurance Report Precision

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report Surrogates

Lab Sample ID: 2118521
Field Sample ID: 21030138

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

Lab Sample ID: 2118522
Field Sample ID: 21030138

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	125	P	30 - 160
EPA 8321B	Acetaminophen-d4	81.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.8	P	30 - 160
EPA 8321B	Diuron-d6	106	P	30 - 160
EPA 8321B	Endothall-d6	104	P	30 - 160
EPA 8321B	Endothall-d6	104	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	62.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	62.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	56.5	P	30 - 160
EPA 8321B	Primidone-d5	98.9	P	30 - 160
EPA 8321B	Sucralose-d6	78.4	P	30 - 160
EPA 8321B	Sucralose-d6	78.4	P	30 - 160

Lab Sample ID: 2118523
Field Sample ID: 21010033

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	122	P	30 - 160
EPA 8321B	Acetaminophen-d4	86.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	93.3	P	30 - 160
EPA 8321B	Diuron-d6	108	P	30 - 160
EPA 8321B	Endothall-d6	110	P	30 - 160
EPA 8321B	Endothall-d6	110	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	56.3	P	30 - 160
EPA 8321B	Primidone-d5	94.3	P	30 - 160
EPA 8321B	Sucralose-d6	72.1	P	30 - 160
EPA 8321B	Sucralose-d6	72.1	P	30 - 160

Lab Sample ID: 2118529
Field Sample ID: 21030138

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	104	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	64.9	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	51.8	P	30 - 103
EPA 8276	PCNB	128	P	37 - 143

Lab Sample ID: 2118530
Field Sample ID: 21030138

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	99.9	P	68 - 130
EPA 8270E	Terbufos-d10	75.8	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A94159

Included Lab Sample IDs: 2118464, 2118467

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

Reference Method: SM 2120 B

Run ID: A94165

Included Lab Sample IDs: 2118464, 2118467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 115
Color (true)	99.5	101	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A94166

Included Lab Sample IDs: 2118466, 2118469

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	99.3	P/P	90 - 110
O-Phosphate-P	98.6	99.7	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A94168

Included Lab Sample IDs: 2118464, 2118467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A94193

Included Lab Sample IDs: 2118465, 2118468

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

Reference Method: EPA 8321B

Run ID: A94238

Included Lab Sample IDs: 2118522, 2118523

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	92.4	97.9	P/P	60 - 160
Glufosinate	97.2	101	P/P	60 - 160
Glyphosate	104	108	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A94245

Included Lab Sample IDs: 2118465, 2118468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.4	99.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00

Run ID: A94255

Included Lab Sample IDs: 2118465, 2118468

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A94258

Included Lab Sample IDs: 2118465, 2118468

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A94277

Included Lab Sample IDs: 2118465, 2118468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.9	100	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A94285

Included Lab Sample IDs: 2118531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	96.0	98.5	P/P	90 - 110
Calcium	97.7	99.7	P/P	90 - 110
Iron	99.1	98.8	P/P	90 - 110
Magnesium	97.4	97.5	P/P	90 - 110
Potassium	98.1	98.5	P/P	90 - 110
Sodium	97.4	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A94290

Included Lab Sample IDs: 2118522, 2118523

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	72.4	65.0	P/P	60 - 160
Endothall	138	108	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A94322

Included Lab Sample IDs: 2118531

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

Reference Method: EPA 8321B

Run ID: A94333

Included Lab Sample IDs: 2118522, 2118523

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	76.1	85.2	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A94353

Included Lab Sample IDs: 2118464, 2118467

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94386

Included Lab Sample IDs: 2118531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	101	P/P	90 - 110
Arsenic	95.0	93.5	P/P	90 - 110
Boron	105	102	P/P	90 - 110
Cadmium	95.9	96.4	P/P	90 - 110
Nickel	95.1	91.3	P/P	90 - 110
Selenium	96.0	96.6	P/P	90 - 110
Thallium	95.0	94.1	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A94400

Included Lab Sample IDs: 2118522, 2118523

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	86.5	105	P/P	50 - 150
3-Hydroxycarbofuran	120	112	P/P	60 - 150
Acetaminophen	99.4	116	P/P	60 - 160
Acetamiprid	110	111	P/P	50 - 150
Afidopyropen	122	114	P/P	50 - 150
Aldicarb	129	119	P/P	60 - 150
Aldicarb Sulfone	101	108	P/P	50 - 150
Aldicarb Sulfoxide	114	112	P/P	50 - 150
Bentazon	75.8	80.5	P/P	50 - 160
Benzovindiflupyr	97.3	104	P/P	50 - 150
Carbamazepine	100	109	P/P	60 - 150
Carbaryl	128	130	P/P	60 - 150
Carbofuran	117	116	P/P	50 - 150
Clothianidin	97.7	104	P/P	60 - 150
Dinotefuran	90.3	97.3	P/P	50 - 150
Diuron	121	135	P/P	60 - 150
Fenuron	104	111	P/P	60 - 150
Fluridone	109	104	P/P	60 - 160
Hydrocodone	105	111	P/P	60 - 150
Ibuprofen	88.5	85.8	P/P	50 - 160
Imazapyr	91.8	92.1	P/P	50 - 150
Imidacloprid	96.7	96.7	P/P	60 - 150
Linuron	91.7	93.7	P/P	60 - 150
Mandestrobin	105	112	P/P	50 - 150
MCPP	92.3	88.9	P/P	50 - 150
Methiocarb	101	101	P/P	50 - 150
Methomyl	112	112	P/P	50 - 150
Naproxen	83.8	60.8	P/P	50 - 160
Oxamyl	115	121	P/P	50 - 150
Primidone	86.3	90.6	P/P	60 - 150
Propoxur	110	115	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A94400

Included Lab Sample IDs: 2118522, 2118523

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	104	109	P/P	60 - 150
Thiamethoxam	105	103	P/P	50 - 150
Tolfenpyrad	110	116	P/P	60 - 150
Triclopyr	88.1	89.6	P/P	50 - 150

Reference Method: EPA 8276

Run ID: A94440

Included Lab Sample IDs: 2118529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	92.4		P	80 - 120
Toxaphene	106		P	80 - 120

Reference Method: EPA 8270E

Run ID: A94470

Included Lab Sample IDs: 2118530

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	104		P	80 - 120
Alachlor	106		P	80 - 120
Ametryn	94.8		P	80 - 120
Atrazine	90.6		P	80 - 120
Atrazine Desethyl	95.3		P	80 - 120
Azinphos Methyl	98.3		P	80 - 120
Bromacil	102		P	80 - 120
Butylate	95.3		P	80 - 120
Chlorpyrifos Ethyl	98.3		P	80 - 120
Chlorpyrifos Methyl	99.9		P	80 - 120
Cyanazine	84.2		P	80 - 120
Demeton	85.7		P	80 - 120
Diazinon	104		P	80 - 120
Dimethenamid	105		P	80 - 120
Disulfoton	98.7		P	80 - 120
Dithiopyr	104		P	80 - 120
EPTC	99.9		P	80 - 120
Ethion	97.2		P	80 - 120
Ethoprop	98.0		P	80 - 120
Fenamiphos	94.7		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	105		P	80 - 120
Fipronil Sulfide	96.7		P	80 - 120
Fipronil Sulfone	96.6		P	80 - 120
Fonofos	96.5		P	80 - 120
Hexazinone	100		P	80 - 120
Malathion	96.3		P	80 - 120
Metalaxyl	104		P	80 - 120
Metolachlor	108		P	80 - 120
Metribuzin	96.2		P	80 - 120
Mevinphos	100		P	80 - 120
Molinate	99.8		P	80 - 120
Norflurazon	103		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A94470

Included Lab Sample IDs: 2118530

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxadiazon	108		P	80 - 120
Parathion Ethyl	98.2		P	80 - 120
Parathion Methyl	99.0		P	80 - 120
Pendimethalin	96.6		P	80 - 120
Phorate	95.1		P	80 - 120
Prodiamine	95.4		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	104		P	80 - 120
Simazine	97.8		P	80 - 120
Tebuconazole	104		P	80 - 120
Terbufos	96.6		P	80 - 120
Terbutylazine	99.2		P	80 - 120

Reference Method: EPA 8270E

Run ID: A94507

Included Lab Sample IDs: 2118529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	106		P	80 - 120
Alpha-BHC	113		P	80 - 120
Alpha-Chlordane	108		P	80 - 120
Beta-BHC	112		P	80 - 120
Bifenthrin	106		P	80 - 120
Carbophenothion	114		P	80 - 120
Chlorothalonil	121*		F	80 - 120
Cis-Nonachlor	107		P	80 - 120
Cypermethrin	115		P	80 - 120
DDD-p,p'	109		P	80 - 120
DDE-p,p'	109		P	80 - 120
DDT-p,p'	108		P	80 - 120
Delta-BHC	110		P	80 - 120
Dicofol	107		P	80 - 120
Dieldrin	108		P	80 - 120
Endosulfan I	108		P	80 - 120
Endosulfan II	106		P	80 - 120
Endosulfan Sulfate	110		P	80 - 120
Endrin	107		P	80 - 120
Endrin Aldehyde	102		P	80 - 120
Endrin Ketone	108		P	80 - 120
Ethalfuralin	113		P	80 - 120
Gamma-BHC	95.2		P	80 - 120
Gamma-Chlordane	107		P	80 - 120
Heptachlor	107		P	80 - 120
Heptachlor Epoxide	105		P	80 - 120
Hexachlorobenzene	118		P	80 - 120
Methoxychlor	108		P	80 - 120
Mirex	108		P	80 - 120
Permethrin	101		P	80 - 120
Trans-Nonachlor	107		P	80 - 120
Trifluralin	113		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94545

Included Lab Sample IDs: 2118531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	97.1	93.1	P/P	90 - 110
Copper	96.1	92.9	P/P	90 - 110
Lead	97.8	92.9	P/P	90 - 110
Silver	98.1	94.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A94568

Included Lab Sample IDs: 2118464, 2118467

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94590

Included Lab Sample IDs: 2118531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	93.2	93.1	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							2.58	
EPA 200.7 Rev. 4.4	Barium	91.9		99.5	101	98.5			1.09
	Calcium	104		104	105				0.361
	Iron	100		103	103	104			0.208
	Magnesium	99.8		103	101	104			1.47
	Potassium	98.5		106	106	103			0.181
	Sodium	101		102	109				1.32
	Zinc	99.0		101	98.8	101			2.26
EPA 200.8 Rev. 5.4	Aluminum	98.1		98.8	98.0	95.9			0.651
	Antimony	95.4		94.0	97.4	98.5			3.55
	Arsenic	99.5		96.1	97.1	92.8			0.990
	Boron	97.8		100	100	101			0.204
	Cadmium	96.6		94.2	95.4	93.4			1.31
	Chromium	90.4		91.8	92.9	89.8			1.28
	Copper	90.6		91.6	93.4	87.7			1.98
	Lead	89.4		90.6	92.0	89.9			1.56
	Nickel	96.5		94.0	94.6	89.0			0.604
	Selenium	97.8		95.5	95.2	92.6			0.352
	Silver	94.4		94.0	95.3	94.9			1.45
	Thallium	102		103	105	101			1.76
EPA 300.0 Rev. 2.1	Chloride	102		103	104	101			0.959
	Sulfate	103		103	105	102			1.67
EPA 350.1 Rev. 2.0	Ammonia-N	101		102	98.5				1.92
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103		109	110				0.464
EPA 353.2 Rev. 2.0	NO2NO3-N	100		99.5	100				0.602
EPA 365.1 Rev. 2.0	Total-P	100		104	101				2.51
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.3		96.0	97.2				1.06
	O-Phosphate-P	102		96.8	97.2				0.297
EPA 8270E	Acetochlor	97.0	91.4	95.1	87.3		6.00		8.55
	Alachlor	94.1	88.6	95.4	91.4		5.97		4.30
	Aldrin	17.4	32.2	44.4	39.6		59.9		11.3
	Alpha-BHC	67.2	89.7	101	101		28.8		0.315
	Alpha-Chlordane	70.5	91.0	73.9	72.3		25.3		2.24
	Ametryn	84.0	87.4	215	198		4.03		8.39
	Atrazine	99.4	97.5				1.90		7.43
	Atrazine Desethyl	103	80.1	42.7	137		25.4		52.2
	Azinphos Methyl	108	108	94.1	92.5		0.0515		1.75
	Beta-BHC	92.4	124	105	110		29.2		5.39
	Bifenthrin	53.6	74.3	93.5	90.8		32.5		2.95
	Bromacil	66.7	83.1	58.6	94.2		21.9		25.8
	Butylate	59.1	64.1	61.8	71.3		8.06		14.3
	Carbophenothion	57.8	67.4	94.0	98.2		15.3		4.39
	Chlorothalonil	52.7	68.6	42.3	40.3		26.3		4.69
	Chlorpyrifos Ethyl	93.7	103	101	91.1		9.34		9.98
	Chlorpyrifos Methyl	94.0	98.8	95.4	96.8		5.02		1.45
	Cis-Nonachlor	69.4	91.4	77.1	76.4		27.3		0.871
	Cyanazine	108	156	89.8	155		36.4		53.1
	Cypermethrin	43.7	66.5	101	105		41.5		3.85
	DDD-p,p'	80.1	105	85.5	85.2		26.4		0.372
	DDE-p,p'	64.1	86.3	73.8	71.5		29.5		3.15
	DDT-p,p'	64.0	90.6	79.5	75.3		34.4		5.40
	Delta-BHC	96.9	124	104	110		24.5		5.45
	Demeton	65.2	66.3	81.2	99.0		1.56		19.7
	Diazinon	91.8	100	111	107		8.58		3.23

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Dicofol	75.3	87.9	67.6	76.2	15.4	12.0
	Dieldrin	84.8	111	86.7	95.5	26.7	9.58
	Dimethenamid	97.1	87.7	86.2	68.3	10.2	20.0
	Disulfoton	79.2	96.0	105	109	19.1	4.29
	Dithiopyr	94.1	88.6	90.4	83.3	5.94	7.47
	Endosulfan I	82.8	107	85.8	89.7	25.6	4.47
	Endosulfan II	92.4	113	99.4	102	19.8	2.62
	Endosulfan Sulfate	105	132	120	140	23.2	14.8
	Endrin	89.2	107	94.2	97.9	18.0	3.79
	Endrin Aldehyde	86.8	112	51.8	50.7	25.7	2.08
	Endrin Ketone	92.6	117	113	122	23.1	7.57
	EPTC	67.5	58.7	61.5	72.9	13.9	17.1
	Ethalfuralin	74.5	95.7	77.0	75.9	24.8	1.54
	Ethion	106	94.2	89.0	84.3	12.1	5.41
	Ethoprop	85.6	90.6	99.3	120	5.63	18.9
	Fenamiphos	89.6	95.7	30.8	34.3	6.58	10.7
	Fipronil	96.3	79.7	46.5	85.0	18.8	46.2
	Fipronil Desulfinyl	92.2	80.0	36.7	83.2	14.2	51.0
	Fipronil Sulfide	97.2	83.0	13.0	88.8	15.8	50.2
	Fipronil Sulfone	96.4	75.3			24.6	49.7
	Fonofos	82.5	94.1	101	110	13.1	8.55
	Gamma-BHC	88.1	111	95.6	87.1	23.0	9.33
	Gamma-Chlordane	60.3	79.4	67.0	64.9	27.4	3.09
	Heptachlor	58.1	74.3	58.9	58.9	24.5	0.0682
	Heptachlor Epoxide	77.3	97.8	80.8	83.3	23.4	3.14
	Hexachlorobenzene	65.7	85.3	58.6	58.4	26.0	0.320
	Hexazinone	107	99.5			7.31	21.5
	Malathion	99.2	98.5	89.4	89.9	0.766	0.466
	Metalaxyl	97.7	90.9	92.3	85.3	7.21	7.90
	Methoxychlor	64.5	88.6	66.6	75.8	31.4	12.9
	Metolachlor	100	83.3	98.6	79.6	18.4	14.1
	Metribuzin	168	101	180	224	50.1	20.3
	Mevinphos	85.5	82.7	90.4	97.9	3.33	7.97
	Mirex	39.7	52.2	55.6	48.1	27.3	14.5
	Molinate	74.4	76.1	80.5	82.2	2.27	2.10
	Norflurazon	96.9	84.5	40.1	85.2	13.7	72.0
	Oxadiazon	103	90.3	95.5	72.2	13.1	18.0
	Parathion Ethyl	94.5	91.9	91.7	98.3	2.79	6.92
	Parathion Methyl	97.7	100	99.8	109	2.58	9.04
	Pendimethalin	90.1	91.9	95.9	95.0	1.92	0.934
	Permethrin	58.4	79.0	70.5	71.8	30.0	1.78
	Phorate	88.6	93.9	88.5	100	5.80	10.8
	Prodiamine	84.6	83.3	83.2	83.8	1.57	0.719
	Prometon	91.2	78.5	81.1	77.6	15.0	3.32
	Prometryn	92.7	85.1	87.1	83.2	8.58	4.56
	Simazine	102	108			5.61	12.3
	Tebuconazole	75.7	96.4	13.8	11.1	24.1	12.5
	Terbufos	84.2	94.7	105	116	11.8	9.97
	Terbutylazine	99.5	92.2	97.9	99.4	7.68	1.58
	Trans-Nonachlor	60.9	78.9	61.4	61.2	25.7	0.183
	Trifluralin	73.1	94.3	74.2	72.4	25.4	2.40
EPA 8276	Chlordane	75.5	74.8	68.1	67.5	0.904	0.778
	Toxaphene	55.4	66.1	61.9	66.1	17.7	6.54
EPA 8321B	2,4-D	74.6		132	119		9.18

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	3-Hydroxycarbofuran	109	93.4	98.9			5.71
	Acesulfame K	46.3	21.0	21.8			3.60
	Acetaminophen	83.7	88.0	89.4			1.55
	Acetamiprid	96.7	127	110			14.0
	Afidopyropen	79.9	117	114			2.93
	Aldicarb	113	78.3	93.7			17.8
	Aldicarb Sulfone	105	101	110			7.96
	Aldicarb Sulfoxide	105	52.3	55.4			5.81
	AMPA	106	0.0	0.0			
	Bentazon	93.6	73.0	75.1			1.31
	Benzovindiflupyr	50.5	45.1	73.3			47.5
	Carbamazepine	97.5	116	114			2.37
	Carbaryl	113	81.7	88.9			8.44
	Carbofuran	93.0	65.3	68.7			5.11
	Clothianidin	95.6	117	116			0.551
	Dinotefuran	89.5	123	123			0.391
	Diuron	103	115	106			7.38
	Endothall	87.5	212	212			0.0455
	Fenuron	119	100	103			2.67
	Fluridone	88.8					2.67
	Glufosinate	115	0.0	0.0			
	Glyphosate	111	0.0	0.0			
	Hydrocodone	98.6	110	108			1.74
	Ibuprofen	49.3	70.2	76.9			9.11
	Imazapyr	86.7					4.82
	Imidacloprid	100	222	210			5.12
	Linuron	66.3	72.3	71.9			0.554
	Mandestrobin	73.0	86.0	90.6			5.18
	MCPP	75.3	141	130			8.08
	Methiocarb	80.4	64.5	70.6			9.03
	Methomyl	90.6	69.8	76.4			8.99
	Naproxen	60.1	116	74.0			44.2
	Oxamyl	112	92.4	96.4			4.25
	Primidone	84.4	102	101			0.586
	Propoxur	95.4	67.0	70.5			5.05
	Pyraclostrobin	41.1	36.8	65.1			55.4
	Sucralose	87.0	142	141			0.548
	Thiamethoxam	108	174	176			1.23
	Tolfenpyrad	14.2	2.13	23.2			
	Triclopyr	50.7	100	88.9			11.8
SM 2120 B	Color (true)	99.6				0.0513	
	Color (true)	100				0.0382	
SM 2320 B-97	Total Alkalinity	104				1.59	
SM 2540 C-97	TDS					2.25	
SM 4500 F-C-97	Fluoride	95.7	97.0	97.0			0.0
SM 5310 B-00	Organic Carbon	102	103	104			0.378

Reference Method Descriptions

Method / DoH Cert #
EPA 180.1 Rev. 2.0 /
E31780

Description
Turbidity in aqueous matrices

Associated Samples
2118464, 2118467

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2118531
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2118531
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2118464, 2118467
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2118464, 2118467
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2118465, 2118468
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2118465, 2118468
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2118465, 2118468
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2118465, 2118468
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2118466, 2118469
EPA 8270E / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2118529
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2118530
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2118529
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2118521
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2118522, 2118523
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2118522, 2118523
SM 2120 B / E31780	True Color measured at 450 nm	2118464, 2118467
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2118464, 2118467
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2118464, 2118467
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2118464, 2118467
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2118464, 2118467
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2118465, 2118468

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	09/12/2019			09/12/2019 17:00	Samantha Davila	2118464, 2118467
EPA 200.7 Rev. 4.4	09/12/2019	09/16/2019 14:50	Elliott D. Healy	09/17/2019 16:06	Alexander Thompson	2118531
	09/12/2019	09/16/2019 14:50	Elliott D. Healy	09/18/2019 19:06	Betina Topolski	2118531
EPA 200.8 Rev. 5.4	09/12/2019	09/16/2019 14:50	Elliott D. Healy	09/20/2019 20:09	Justin Cutchin	2118531
	09/12/2019	09/16/2019 14:50	Elliott D. Healy	09/26/2019 19:19	Robert K Palmer	2118531
	09/12/2019	09/16/2019 14:50	Elliott D. Healy	09/27/2019 11:17	Robert K Palmer	2118531
EPA 300.0 Rev. 2.1	09/12/2019			09/14/2019 10:36	Jhamieka S. Greenwood	2118464
	09/12/2019			09/14/2019 10:48	Jhamieka S. Greenwood	2118467
EPA 350.1 Rev. 2.0	09/12/2019			09/16/2019 13:38	Ping Hua	2118465
	09/12/2019			09/16/2019 13:40	Ping Hua	2118468
EPA 351.2 Rev. 2.0	09/12/2019	09/16/2019 14:05	Sima Feizi	09/17/2019 14:11	Julia Storbeck	2118465
	09/12/2019	09/16/2019 14:05	Sima Feizi	09/17/2019 14:13	Julia Storbeck	2118468
EPA 353.2 Rev. 2.0	09/12/2019			09/13/2019 09:28	Beverly Y. Sanders	2118465
	09/12/2019			09/13/2019 09:35	Beverly Y. Sanders	2118468
EPA 365.1 Rev. 2.0	09/12/2019	09/13/2019 13:45	Lipi Saha	09/16/2019 13:17	Rosalyn Ballman	2118465
	09/12/2019	09/13/2019 13:45	Lipi Saha	09/16/2019 13:18	Rosalyn Ballman	2118468
EPA 365.1 Rev. 2.0 dissolved	09/12/2019			09/12/2019 15:13	Jhamieka S. Greenwood	2118466
	09/12/2019			09/12/2019 15:50	Jhamieka S. Greenwood	2118469
EPA 8270E	09/12/2019	09/12/2019 13:00	Fe-Val Siddell	09/13/2019 18:29	Vandana T. Nagar	2118530
	09/12/2019	09/17/2019 10:00	Fe-Val Siddell	09/24/2019 22:53	Arthur Maknenko	2118529
EPA 8276	09/12/2019	09/17/2019 10:00	Fe-Val Siddell	09/24/2019 01:09	Michael Poppell	2118529
EPA 8321B	09/12/2019	09/12/2019 13:00	Hoor Shaik	09/14/2019 01:14	Juyoung Kim	2118521
	09/12/2019	09/13/2019 11:00	Rebecca Ware	09/13/2019 23:25	Rebecca Ware	2118522
	09/12/2019	09/13/2019 11:00	Rebecca Ware	09/13/2019 23:36	Rebecca Ware	2118523
	09/12/2019	09/13/2019 11:00	Rebecca Ware	09/16/2019 15:45	Rebecca Ware	2118522
	09/12/2019	09/13/2019 11:00	Rebecca Ware	09/16/2019 15:59	Rebecca Ware	2118523
	09/12/2019	09/13/2019 11:00	Rebecca Ware	09/18/2019 18:47	Rebecca Ware	2118522
	09/12/2019	09/13/2019 11:00	Rebecca Ware	09/18/2019 18:59	Rebecca Ware	2118523
	09/12/2019	09/16/2019 09:00	Fe-Val Siddell	09/16/2019 18:52	Juyoung Kim	2118522
	09/12/2019	09/16/2019 09:00	Fe-Val Siddell	09/16/2019 19:26	Juyoung Kim	2118523
SM 2120 B	09/12/2019			09/12/2019 15:43	Madeline Funaro	2118464
	09/12/2019			09/12/2019 15:52	Madeline Funaro	2118467
SM 2320 B-97	09/12/2019			09/18/2019 06:46	Dale L. Simmons	2118464
	09/12/2019			09/18/2019 06:58	Dale L. Simmons	2118467
SM 2540 C-97	09/12/2019			09/13/2019 17:30	Blanca Fach	2118464, 2118467
SM 2540 D-97	09/12/2019			09/13/2019 17:30	Blanca Fach	2118464, 2118467
SM 4500 F-C-97	09/12/2019			09/25/2019 18:40	Dale L. Simmons	2118464
	09/12/2019			09/25/2019 18:45	Dale L. Simmons	2118467
SM 5310 B-00	09/12/2019			09/16/2019 20:29	Madeline Funaro	2118465
	09/12/2019			09/16/2019 20:41	Madeline Funaro	2118468