

Chemical Analysis Report

NW-DIST-2019-09-13-01

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

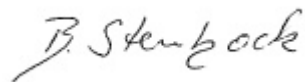
Event Description: **PENS/CANT RUN**
Request ID: **RQ-2019-09-09-47**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
Attn: Cheryl Bunch

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 15:16



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: Jones Creek upstream of N Navy Blvd

Collection Date/Time: 09/12/2019 08:10

Field ID: G4NW0429

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119073	EPA 8321B	2,4-D	0.0020	U	ug/L	P370625	
		Acesulfame K**	0.10	U	ug/L	P370674	
		AMPA**	0.10	U	ug/L	P370674	
		Sucralose**	0.36		ug/L	P370674	
		Acetaminophen**	0.0080	U	ug/L	P370625	
		Acetamiprid**	0.0020	U	ug/L	P370625	
		Endothall**	0.25	U	ug/L	P370674	
		Glufosinate**	0.10	U	ug/L	P370674	
		Glyphosate**	0.10	U	ug/L	P370674	
		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	0.0029	I	ug/L	P370625	
		Fenuron	0.016	U	ug/L	P370625	
		Fluridone**	8.0E-04	U	ug/L	P370625	
		Imazapyr**	0.0051	I	ug/L	P370625	
		Hydrocodone**	0.0020	U	ug/L	P370625	
		Ibuprofen**	0.020	U	ug/L	P370625	
		Imidacloprid	0.0027	I	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	

Ref. Method and Comment:

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.

Sample Location: Jackson Creek upstream of Old Corry Field Road

Collection Date/Time: 09/12/2019 08:20

Field ID: G4NW0430

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119074	EPA 8321B	2,4-D	0.0020	U	ug/L	P370771	
		Acesulfame K**	0.10	U	ug/L	P370674	
		AMPA**	0.26	I	ug/L	P370674	
		Sucralose**	2.0		ug/L	P370674	
		Acetaminophen**	0.0080	U	ug/L	P370771	
		Acetamiprid**	0.0020	U	ug/L	P370771	
		Endothall**	0.25	U	ug/L	P370674	
		Glufosinate**	0.10	U	ug/L	P370674	
		Glyphosate**	0.30	I	ug/L	P370674	
		Afidopyropen**	0.0020	UJ	ug/L	P370771	
		Bentazon	0.027		ug/L	P370771	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370771	
		Carbamazepine**	0.053		ug/L	P370771	
		Clothianidin**	0.0020	U	ug/L	P370771	
		Dinotefuran**	0.0020	U	ug/L	P370771	
		Diuron	0.020		ug/L	P370771	
		Fenuron	0.016	U	ug/L	P370771	
		Fluridone**	8.0E-04	U	ug/L	P370771	
		Imazapyr**	0.014	I	ug/L	P370771	
		Hydrocodone**	0.0020	U	ug/L	P370771	
		Ibuprofen**	0.034	I	ug/L	P370771	
		Imidacloprid	0.044		ug/L	P370771	
		Linuron	0.0040	U	ug/L	P370771	
		Mandestrobin**	0.0020	UJ	ug/L	P370771	
		MCPP	0.0020	U	ug/L	P370771	
		Naproxen**	0.0080	U	ug/L	P370771	
		Primidone**	0.0040	U	ug/L	P370771	
		Pyraclostrobin**	0.0020	U	ug/L	P370771	
		Thiamethoxam**	0.0020	U	ug/L	P370771	
		Tolfenpyrad**	0.0020	U	ug/L	P370771	
		Triclopyr**	0.0040	U	ug/L	P370771	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis.

Sample Location: Carpenter Creek upstream of 9th Avenue

Collection Date/Time: 09/12/2019 08:45

Field ID: G4NW0415

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119021	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P370652	
	EPA 300.0 Rev. 2.1	Chloride	8.6		mg Cl/L	P370974	
		Sulfate	5.3		mg SO4/L	P370977	
	SM 2120 B	Color (true)	8.3		PCU	P370654	
	SM 2320 B-97	Total Alkalinity	21		mg CaCO3/L	P371032	
	SM 2540 C-97	TDS	53		mg/L	P371183	
	SM 2540 D-97	TSS	2	I	mg/L	P371157	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P371510	
2119023	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P370929	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.14	I	mg N/L	P370785	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.2		mg N/L	P370968	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P370790	
	SM 5310 B-00	Organic Carbon	1.2		mg C/L	P370862	
2119025	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P370637	
2119069	EPA 8321B	Aldicarb	0.020	U	ug/L	P370852	
		Aldicarb Sulfone	0.0020	U	ug/L	P370852	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P370852	
		Carbaryl	0.0020	U	ug/L	P370852	
		Carbofuran	0.0020	U	ug/L	P370852	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P370852	
		Methiocarb	0.0020	U	ug/L	P370852	
		Methomyl	0.0020	U	ug/L	P370852	
		Oxamyl	0.0020	U	ug/L	P370852	
		Propoxur	0.0020	U	ug/L	P370852	
2119071		2,4-D	0.0020	U	ug/L	P370771	
		Acesulfame K**	0.10	U	ug/L	P370674	
		AMPA**	0.22	I	ug/L	P370674	
		Sucralose**	0.14		ug/L	P370674	
		Acetaminophen**	0.0080	U	ug/L	P370771	
		Acetamiprid**	0.0020	U	ug/L	P370771	
		Endothall**	0.25	U	ug/L	P370674	
		Glufosinate**	0.10	U	ug/L	P370674	
		Glyphosate**	0.10	U	ug/L	P370674	
		Afidopyropen**	0.0020	UJ	ug/L	P370771	
		Bentazon	0.0013	I	ug/L	P370771	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370771	
		Carbamazepine**	0.0028	I	ug/L	P370771	
		Clothianidin**	0.0020	U	ug/L	P370771	
		Dinotefuran**	0.0020	U	ug/L	P370771	
		Diuron	0.0020	U	ug/L	P370771	
		Fenuron	0.016	U	ug/L	P370771	
		Fluridone**	8.0E-04	U	ug/L	P370771	
		Imazapyr**	0.0083	I	ug/L	P370771	

Field ID: G4NW0415

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119071	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P370771	
		Ibuprofen**	0.020	U	ug/L	P370771	
		Imidacloprid	0.038		ug/L	P370771	
		Linuron	0.0040	U	ug/L	P370771	
		Mandestrobin**	0.0020	UJ	ug/L	P370771	
		MCP	0.0020	U	ug/L	P370771	
		Naproxen**	0.0080	U	ug/L	P370771	
		Primidone**	0.0040	U	ug/L	P370771	
		Pyraclostrobin**	0.0020	U	ug/L	P370771	
		Thiamethoxam**	0.0020	U	ug/L	P370771	
		Tolfenpyrad**	0.0020	U	ug/L	P370771	
		Triclopyr**	0.0040	U	ug/L	P370771	
2119077	EPA 8270E	Aldrin	4.4	UJ	ng/L	P370757	LCS, RPD
		Alpha-BHC	2.2	U	ng/L	P370757	
		Alpha-Chlordane	1.1	U	ng/L	P370757	
		Beta-BHC	11	U	ng/L	P370757	
		Bifenthrin**	4.4	UJ	ng/L	P370757	RPD
		Delta-BHC	8.9	U	ng/L	P370757	
		Gamma-BHC	8.9	U	ng/L	P370757	
		Carbophenothion	11	U	ng/L	P370757	
		Chlorothalonil	2.2	UJ	ng/L	P370757	CCV
		Cis-Nonachlor**	1.1	U	ng/L	P370757	
		Cypermethrin	22	UJ	ng/L	P370757	RPD
		DDD-p,p'	6.7	U	ng/L	P370757	
		DDE-p,p'	6.7	U	ng/L	P370757	
		DDT-p,p'	7.8	UJ	ng/L	P370757	RPD
		Dicofol	33	U	ng/L	P370757	
		Dieldrin	6.8	I	ng/L	P370757	
		Endosulfan I	4.4	U	ng/L	P370757	
		Endosulfan II	4.4	U	ng/L	P370757	
		Endosulfan Sulfate	2.2	UJ	ng/L	P370757	LCS, MS
		Endrin	2.2	U	ng/L	P370757	
		Endrin Aldehyde	2.2	U	ng/L	P370757	
		Endrin Ketone	2.2	U	ng/L	P370757	
		Ethalfuralin**	3.3	U	ng/L	P370757	
		Gamma-Chlordane	1.1	U	ng/L	P370757	
		Heptachlor	1.7	U	ng/L	P370757	
		Heptachlor Epoxide	5.4	I	ng/L	P370757	
		Hexachlorobenzene	2.2	U	ng/L	P370757	
		Methoxychlor	4.4	UJ	ng/L	P370757	RPD
		Mirex	2.2	UJ	ng/L	P370757	LCS
		Permethrin	11	UJ	ng/L	P370757	RPD
		Trans-Nonachlor**	1.1	U	ng/L	P370757	
		Trifluralin	2.8	U	ng/L	P370757	
	EPA 8276	Chlordane	5.5	U	ng/L	P370757	

Field ID: G4NW0415

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119077	EPA 8276	Toxaphene	33	U	ng/L	P370757	
2119079	EPA 8270E	Acetochlor	0.27	U	ng/L	P370888	
		Alachlor	0.27	U	ng/L	P370888	
		Ametryn	0.66	U	ng/L	P370888	
		Atrazine	16		ng/L	P370888	
		Atrazine Desethyl	12		ng/L	P370888	
		Azinphos Methyl	5.5	U	ng/L	P370888	
		Bromacil	11		ng/L	P370888	
		Butylate	0.44	U	ng/L	P370888	
		Chlorpyrifos Ethyl	0.40	I	ng/L	P370888	
		Chlorpyrifos Methyl	0.11	U	ng/L	P370888	
		Cyanazine	3.6	UJ	ng/L	P370888	CCV
		Demeton	7.7	U	ng/L	P370888	
		Diazinon	0.14	U	ng/L	P370888	
		Dimethenamid**	0.11	U	ng/L	P370888	
		Disulfoton	0.55	U	ng/L	P370888	
		Dithiopyr**	0.11	U	ng/L	P370888	
		EPTC	1.4	U	ng/L	P370888	
		Ethion	0.16	U	ng/L	P370888	
		Ethoprop	0.11	U	ng/L	P370888	
		Fenamiphos	0.55	U	ng/L	P370888	
		Fipronil	2.4		ng/L	P370888	
		Fipronil Desulfinyl**	0.17	I	ng/L	P370888	
		Fipronil Sulfide	0.55	I	ng/L	P370888	
		Fipronil Sulfone	5.3	J	ng/L	P370888	
		Fonofos	0.22	U	ng/L	P370888	
		Hexazinone	0.55	U	ng/L	P370888	
		Malathion	0.38	U	ng/L	P370888	
		Metalaxyl	0.33	U	ng/L	P370888	
		Metolachlor	0.55	U	ng/L	P370888	
		Metribuzin	0.82	U	ng/L	P370888	
		Mevinphos	0.55	U	ng/L	P370888	
		Molinate	0.33	U	ng/L	P370888	
		Norflurazon	0.55	U	ng/L	P370888	
		Oxadiazon**	0.11	U	ng/L	P370888	
		Parathion Ethyl	0.27	U	ng/L	P370888	
		Parathion Methyl	0.60	U	ng/L	P370888	
		Pendimethalin	1.1	U	ng/L	P370888	
		Phorate	0.27	U	ng/L	P370888	
		Prodiamine**	0.38	I	ng/L	P370888	
		Prometon	1.8	I	ng/L	P370888	
		Prometryn	0.22	U	ng/L	P370888	
		Simazine	4.4		ng/L	P370888	
		Tebuconazole**	0.55	U	ng/L	P370888	
		Terbufos	0.11	U	ng/L	P370888	

Field ID: G4NW0415

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119079	EPA 8270E	Terbutylazine	2.2		ng/L	P370888	
2119083	EPA 200.7 Rev. 4.4	Barium	30.8		ug/L	P370802	
		Calcium	8.63		mg/L	P370802	
		Iron	270		ug/L	P370802	
		Magnesium	2.37		mg/L	P370802	
		Manganese	19.5		ug/L	P370802	
		Potassium	0.84	I	mg/L	P370802	
		Sodium	6.2		mg/L	P370802	
		Zinc	5.0	U	ug/L	P370802	
	EPA 200.8 Rev. 5.4	Aluminum	29		ug/L	P371238	
		Antimony	0.050	U	ug/L	P370802	
		Arsenic	0.16	I	ug/L	P370802	
		Beryllium	0.017	I	ug/L	P370802	
		Boron**	23.6		ug/L	P370802	
		Cadmium	0.020	U	ug/L	P370802	
		Chromium	0.40	U	ug/L	P370802	
		Cobalt	0.208		ug/L	P370802	
		Copper	0.40	U	ug/L	P370802	
		Lead	0.20	U	ug/L	P370802	
		Molybdenum	0.15	U	ug/L	P370802	
		Nickel	0.50	U	ug/L	P370802	
		Selenium	0.23	I	ug/L	P370802	
		Silver	0.010	U	ug/L	P370802	
		Thallium	0.10	U	ug/L	P370802	

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.

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

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Reported result for fipronil sulfone is J qualified due to the internal standard recovery exceeding control limits. Refer to the narrative for an explanation of QC Codes.

Sample Location: Carpenter Creek upstream of 9th Avenue

Collection Date/Time: 09/12/2019 08:50

Field ID: G4NW0415_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119022	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P370652	
	EPA 300.0 Rev. 2.1	Chloride	8.7		mg Cl/L	P370974	
		Sulfate	5.4		mg SO4/L	P370977	
	SM 2120 B	Color (true)	7.6		PCU	P370654	
	SM 2320 B-97	Total Alkalinity	21		mg CaCO3/L	P371032	
	SM 2540 C-97	TDS	55	AQ	mg/L	P371618	
	SM 2540 D-97	TSS	3	I	mg/L	P371157	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P371510	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P370929	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.14	I	mg N/L	P370785	
2119024	EPA 353.2 Rev. 2.0	NO2NO3-N	1.2		mg N/L	P370968	
	EPA 365.1 Rev. 2.0	Total-P	0.005	I	mg P/L	P370790	
	SM 5310 B-00	Organic Carbon	1.0	I	mg C/L	P370862	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P370637	
	EPA 8321B	Aldicarb	0.020	U	ug/L	P370852	
2119026		Aldicarb Sulfone	0.0020	U	ug/L	P370852	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P370852	
		Carbaryl	0.0020	U	ug/L	P370852	
		Carbofuran	0.0020	U	ug/L	P370852	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P370852	
		Methiocarb	0.0020	U	ug/L	P370852	
		Methomyl	0.0020	U	ug/L	P370852	
		Oxamyl	0.0020	U	ug/L	P370852	
		Propoxur	0.0020	U	ug/L	P370852	
		2,4-D	0.0020	U	ug/L	P370771	
2119072		Acesulfame K**	0.10	U	ug/L	P370674	
		AMPA**	0.22	I	ug/L	P370674	
		Sucralose**	0.13		ug/L	P370674	
		Acetaminophen**	0.0080	U	ug/L	P370771	
		Acetamiprid**	0.0020	U	ug/L	P370771	
		Endothall**	0.25	U	ug/L	P370674	
		Glufosinate**	0.10	U	ug/L	P370674	
		Glyphosate**	0.10	U	ug/L	P370674	
		Afidopyropen**	0.0020	UJ	ug/L	P370771	
		Bentazon	0.0013	I	ug/L	P370771	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370771	
		Carbamazepine**	0.0029	I	ug/L	P370771	
		Clothianidin**	0.0020	U	ug/L	P370771	
		Dinotefuran**	0.0020	U	ug/L	P370771	
		Diuron	0.0020	U	ug/L	P370771	
		Fenuron	0.016	U	ug/L	P370771	
		Fluridone**	8.0E-04	U	ug/L	P370771	
		Imazapyr**	0.0072	I	ug/L	P370771	

Field ID: G4NW0415_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119072	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P370771	
		Ibuprofen**	0.020	U	ug/L	P370771	
		Imidacloprid	0.043		ug/L	P370771	
		Linuron	0.0040	U	ug/L	P370771	
		Mandestrobin**	0.0020	UJ	ug/L	P370771	
		MCP	0.0020	U	ug/L	P370771	
		Naproxen**	0.0080	U	ug/L	P370771	
		Primidone**	0.0040	U	ug/L	P370771	
		Pyraclostrobin**	0.0020	U	ug/L	P370771	
		Thiamethoxam**	0.0020	U	ug/L	P370771	
		Tolfenpyrad**	0.0020	U	ug/L	P370771	
		Triclopyr**	0.0040	U	ug/L	P370771	
2119078	EPA 8270E	Aldrin	4.5	UJ	ng/L	P370757	LCS, RPD
		Alpha-BHC	2.2	U	ng/L	P370757	
		Alpha-Chlordane	1.1	U	ng/L	P370757	
		Beta-BHC	11	U	ng/L	P370757	
		Bifenthrin**	4.5	UJ	ng/L	P370757	RPD
		Delta-BHC	8.9	U	ng/L	P370757	
		Gamma-BHC	8.9	U	ng/L	P370757	
		Carbophenothion	11	U	ng/L	P370757	
		Chlorothalonil	2.2	UJ	ng/L	P370757	CCV
		Cis-Nonachlor**	1.1	U	ng/L	P370757	
		Cypermethrin	22	UJ	ng/L	P370757	RPD
		DDD-p,p'	6.7	U	ng/L	P370757	
		DDE-p,p'	6.7	U	ng/L	P370757	
		DDT-p,p'	7.8	UJ	ng/L	P370757	RPD
		Dicofol	33	U	ng/L	P370757	
		Dieldrin	6.8	I	ng/L	P370757	
		Endosulfan I	4.5	U	ng/L	P370757	
		Endosulfan II	4.5	U	ng/L	P370757	
		Endosulfan Sulfate	2.2	UJ	ng/L	P370757	LCS, MS
		Endrin	2.2	U	ng/L	P370757	
		Endrin Aldehyde	2.2	U	ng/L	P370757	
		Endrin Ketone	2.2	U	ng/L	P370757	
		Ethalfuralin**	3.3	U	ng/L	P370757	
		Gamma-Chlordane	1.1	U	ng/L	P370757	
		Heptachlor	1.7	U	ng/L	P370757	
		Heptachlor Epoxide	5.6	I	ng/L	P370757	
		Hexachlorobenzene	2.2	U	ng/L	P370757	
		Methoxychlor	4.5	UJ	ng/L	P370757	RPD
		Mirex	2.2	UJ	ng/L	P370757	LCS
		Permethrin	11	UJ	ng/L	P370757	RPD
		Trans-Nonachlor**	1.1	U	ng/L	P370757	
		Trifluralin	2.8	U	ng/L	P370757	
	EPA 8276	Chlordane	5.6	U	ng/L	P370757	

Field ID: G4NW0415_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119078	EPA 8276	Toxaphene	33	U	ng/L	P370757	
2119080	EPA 8270E	Acetochlor	0.28	U	ng/L	P370888	
		Alachlor	0.28	U	ng/L	P370888	
		Ametryn	0.67	U	ng/L	P370888	
		Atrazine	15		ng/L	P370888	
		Atrazine Desethyl	11		ng/L	P370888	
		Azinphos Methyl	5.6	U	ng/L	P370888	
		Bromacil	11		ng/L	P370888	
		Butylate	0.44	U	ng/L	P370888	
		Chlorpyrifos Ethyl	0.55	I	ng/L	P370888	
		Chlorpyrifos Methyl	0.11	U	ng/L	P370888	
		Cyanazine	3.6	UJ	ng/L	P370888	CCV
		Demeton	7.8	U	ng/L	P370888	
		Diazinon	0.14	U	ng/L	P370888	
		Dimethenamid**	0.11	U	ng/L	P370888	
		Disulfoton	0.56	U	ng/L	P370888	
		Dithiopyr**	0.11	U	ng/L	P370888	
		EPTC	1.4	U	ng/L	P370888	
		Ethion	0.17	U	ng/L	P370888	
		Ethoprop	0.11	U	ng/L	P370888	
		Fenamiphos	0.56	U	ng/L	P370888	
		Fipronil	2.4		ng/L	P370888	
		Fipronil Desulfinyl**	0.17	I	ng/L	P370888	
		Fipronil Sulfide	0.50	I	ng/L	P370888	
		Fipronil Sulfone	4.5		ng/L	P370888	
		Fonofos	0.22	U	ng/L	P370888	
		Hexazinone	0.56	U	ng/L	P370888	
		Malathion	0.39	U	ng/L	P370888	
		Metalaxyl	0.33	U	ng/L	P370888	
		Metolachlor	0.56	U	ng/L	P370888	
		Metribuzin	0.83	U	ng/L	P370888	
		Mevinphos	0.56	U	ng/L	P370888	
		Molinate	0.33	U	ng/L	P370888	
		Norflurazon	0.56	U	ng/L	P370888	
		Oxadiazon**	0.11	U	ng/L	P370888	
		Parathion Ethyl	0.28	U	ng/L	P370888	
		Parathion Methyl	0.61	U	ng/L	P370888	
		Pendimethalin	1.1	U	ng/L	P370888	
		Phorate	0.28	U	ng/L	P370888	
		Prodiamine**	0.41	I	ng/L	P370888	
		Prometon	1.9	I	ng/L	P370888	
		Prometryn	0.22	U	ng/L	P370888	
		Simazine	4.4		ng/L	P370888	
		Tebuconazole**	0.56	U	ng/L	P370888	
		Terbufos	0.11	U	ng/L	P370888	

Field ID: G4NW0415_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119080	EPA 8270E	Terbutylazine	2.2		ng/L	P370888	
2119084	EPA 200.7 Rev. 4.4	Barium	30.5		ug/L	P370802	
		Calcium	8.53		mg/L	P370802	
		Iron	280		ug/L	P370802	
		Magnesium	2.35		mg/L	P370802	
		Manganese	19.9		ug/L	P370802	
		Potassium	0.85	I	mg/L	P370802	
		Sodium	6.0		mg/L	P370802	
		Zinc	5.0	U	ug/L	P370802	
	EPA 200.8 Rev. 5.4	Aluminum	34		ug/L	P371238	
		Antimony	0.050	U	ug/L	P370802	
		Arsenic	0.16	I	ug/L	P370802	
		Beryllium	0.017	I	ug/L	P370802	
		Boron**	23.8		ug/L	P370802	
		Cadmium	0.020	U	ug/L	P370802	
		Chromium	0.40	U	ug/L	P370802	
		Cobalt	0.215		ug/L	P370802	
		Copper	0.40	U	ug/L	P370802	
		Lead	0.20	U	ug/L	P370802	
		Molybdenum	0.15	U	ug/L	P370802	
		Nickel	0.50	U	ug/L	P370802	
		Selenium	0.25	I	ug/L	P370802	
		Silver	0.010	U	ug/L	P370802	
		Thallium	0.10	U	ug/L	P370802	

Ref. Method and Comment:

SM 2540 C-97: Sample reanalyzed out of holding time because of analytical difficulties.

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.

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

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: Carpenter Creek upstream of 9th Avenue

Collection Date/Time: 09/12/2019 08:55

Field ID: FB_09122019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119033	EPA 180.1 Rev. 2.0	Turbidity	0.20		NTU	P370652	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P370974	
		Sulfate	0.20	U	mg SO4/L	P370977	
	SM 2120 B	Color (true)	2.5	U	PCU	P370654	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P371032	
	SM 2540 C-97	TDS	15	U	mg/L	P371182	
	SM 2540 D-97	TSS	2	U	mg/L	P371156	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P371510	
2119034	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P370929	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P370785	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P370968	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P370790	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P370862	
2119035	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P370639	
2119075	EPA 8321B	Aldicarb	0.020	U	ug/L	P370852	
		Aldicarb Sulfone	0.0020	U	ug/L	P370852	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P370852	
		Carbaryl	0.0020	U	ug/L	P370852	
		Carbofuran	0.0020	U	ug/L	P370852	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P370852	
		Methiocarb	0.0020	U	ug/L	P370852	
		Methomyl	0.0020	U	ug/L	P370852	
		Oxamyl	0.0020	U	ug/L	P370852	
		Propoxur	0.0020	U	ug/L	P370852	
2119076		2,4-D	0.0020	U	ug/L	P370771	
		Acesulfame K**	0.10	U	ug/L	P370674	
		AMPA**	0.10	U	ug/L	P370674	
		Sucralose**	0.010	U	ug/L	P370674	
		Acetaminophen**	0.0080	U	ug/L	P370771	
		Acetamiprid**	0.0020	U	ug/L	P370771	
		Endothall**	0.25	U	ug/L	P370674	
		Glufosinate**	0.10	U	ug/L	P370674	
		Glyphosate**	0.10	U	ug/L	P370674	
		Afidopyropen**	0.0020	UJ	ug/L	P370771	
		Bentazon	8.0E-04	U	ug/L	P370771	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370771	
		Carbamazepine**	8.0E-04	U	ug/L	P370771	
		Clothianidin**	0.0020	U	ug/L	P370771	
		Dinotefuran**	0.0020	U	ug/L	P370771	
		Diuron	0.0020	U	ug/L	P370771	
		Fenuron	0.016	U	ug/L	P370771	
		Fluridone**	8.0E-04	U	ug/L	P370771	
		Imazapyr**	0.0040	U	ug/L	P370771	

Field ID: FB_09122019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119076	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P370771	
		Ibuprofen**	0.020	U	ug/L	P370771	
		Imidacloprid	0.0020	U	ug/L	P370771	
		Linuron	0.0040	U	ug/L	P370771	
		Mandestrobin**	0.0020	UJ	ug/L	P370771	
		MCP	0.0020	U	ug/L	P370771	
		Naproxen**	0.0080	U	ug/L	P370771	
		Primidone**	0.0040	U	ug/L	P370771	
		Pyraclostrobin**	0.0020	U	ug/L	P370771	
		Thiamethoxam**	0.0020	U	ug/L	P370771	
		Tolfenpyrad**	0.0020	U	ug/L	P370771	
		Triclopyr**	0.0040	U	ug/L	P370771	
2119081	EPA 8270E	Aldrin	4.3	UJ	ng/L	P370757	LCS, RPD
		Alpha-BHC	2.1	U	ng/L	P370757	
		Alpha-Chlordane	1.1	U	ng/L	P370757	
		Beta-BHC	11	U	ng/L	P370757	
		Bifenthrin**	4.3	UJ	ng/L	P370757	RPD
		Delta-BHC	8.6	U	ng/L	P370757	
		Gamma-BHC	8.6	U	ng/L	P370757	
		Carbophenothion	11	U	ng/L	P370757	
		Chlorothalonil	2.1	UJ	ng/L	P370757	CCV
		Cis-Nonachlor**	1.1	U	ng/L	P370757	
		Cypermethrin	21	UJ	ng/L	P370757	RPD
		DDD-p,p'	6.4	U	ng/L	P370757	
		DDE-p,p'	6.4	U	ng/L	P370757	
		DDT-p,p'	7.5	UJ	ng/L	P370757	RPD
		Dicofol	32	U	ng/L	P370757	
		Dieldrin	4.3	U	ng/L	P370757	
		Endosulfan I	4.3	U	ng/L	P370757	
		Endosulfan II	4.3	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**	3.2	U	ng/L	P370757	
		Gamma-Chlordane	1.1	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	4.3	UJ	ng/L	P370757	RPD
		Mirex	2.1	UJ	ng/L	P370757	LCS
		Permethrin	11	UJ	ng/L	P370757	RPD
		Trans-Nonachlor**	1.1	U	ng/L	P370757	
		Trifluralin	2.7	U	ng/L	P370757	
	EPA 8276	Chlordane	5.4	U	ng/L	P370757	

Field ID: FB_09122019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119081	EPA 8276	Toxaphene	32	U	ng/L	P370757	
2119082	EPA 8270E	Acetochlor	0.28	U	ng/L	P370888	
		Alachlor	0.28	U	ng/L	P370888	
		Ametryn	0.68	U	ng/L	P370888	
		Atrazine	0.28	U	ng/L	P370888	
		Atrazine Desethyl	1.7	U	ng/L	P370888	
		Azinphos Methyl	5.6	U	ng/L	P370888	
		Bromacil	0.56	U	ng/L	P370888	
		Butylate	0.45	U	ng/L	P370888	
		Chlorpyrifos Ethyl	0.28	U	ng/L	P370888	
		Chlorpyrifos Methyl	0.11	U	ng/L	P370888	
		Cyanazine	3.7	U	ng/L	P370888	
		Demeton	7.9	U	ng/L	P370888	
		Diazinon	0.14	U	ng/L	P370888	
		Dimethenamid**	0.11	U	ng/L	P370888	
		Disulfoton	0.56	U	ng/L	P370888	
		Dithiopyr**	0.11	U	ng/L	P370888	
		EPTC	1.4	U	ng/L	P370888	
		Ethion	0.17	U	ng/L	P370888	
		Ethoprop	0.11	U	ng/L	P370888	
		Fenamiphos	0.56	U	ng/L	P370888	
		Fipronil	0.28	U	ng/L	P370888	
		Fipronil Desulfinyl**	0.14	U	ng/L	P370888	
		Fipronil Sulfide	0.17	U	ng/L	P370888	
		Fipronil Sulfone	0.17	U	ng/L	P370888	
		Fonofos	0.23	U	ng/L	P370888	
		Hexazinone	0.56	U	ng/L	P370888	
		Malathion	0.40	U	ng/L	P370888	
		Metalaxyl	0.34	U	ng/L	P370888	
		Metolachlor	0.56	U	ng/L	P370888	
		Metribuzin	0.85	U	ng/L	P370888	
		Mevinphos	0.56	U	ng/L	P370888	
		Molinate	0.34	U	ng/L	P370888	
		Norflurazon	0.56	U	ng/L	P370888	
		Oxadiazon**	0.11	U	ng/L	P370888	
		Parathion Ethyl	0.28	U	ng/L	P370888	
		Parathion Methyl	0.62	U	ng/L	P370888	
		Pendimethalin	1.1	U	ng/L	P370888	
		Phorate	0.28	U	ng/L	P370888	
		Prodiamine**	0.20	U	ng/L	P370888	
		Prometon	1.0	U	ng/L	P370888	
		Prometryn	0.23	U	ng/L	P370888	
		Simazine	0.56	U	ng/L	P370888	
		Tebuconazole**	0.56	U	ng/L	P370888	
		Terbufos	0.11	U	ng/L	P370888	

Field ID: FB_09122019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119082	EPA 8270E	Terbutylazine	0.48	U	ng/L	P370888	
2119085	EPA 200.7 Rev. 4.4	Barium	1.0	U	ug/L	P370802	
		Calcium	0.075	U	mg/L	P370802	
		Iron	30	U	ug/L	P370802	
		Magnesium	0.040	U	mg/L	P370802	
		Manganese	1.0	U	ug/L	P370802	
		Potassium	0.30	U	mg/L	P370802	
		Sodium	0.50	U	mg/L	P370802	
		Zinc	5.0	U	ug/L	P370802	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P370802	
		Antimony	0.050	U	ug/L	P370802	
		Arsenic	0.050	U	ug/L	P370802	
		Beryllium	0.010	U	ug/L	P370802	
		Boron**	2.0	U	ug/L	P370802	
		Cadmium	0.020	U	ug/L	P370802	
		Chromium	0.40	U	ug/L	P370802	
		Cobalt	0.020	U	ug/L	P370802	
		Copper	0.45	I	ug/L	P370802	
		Lead	0.20	U	ug/L	P370802	
		Molybdenum	0.15	U	ug/L	P370802	
		Nickel	0.50	U	ug/L	P370802	
		Selenium	0.20	U	ug/L	P370802	
		Silver	0.010	U	ug/L	P370802	
		Thallium	0.10	U	ug/L	P370802	

Ref. Method and Comment:

EPA 180.1 Rev. 2.0: The sample was reanalyzed on 09/18/2019. The result was 0.10 UQ NTU.

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.

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

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked.

EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 09/21/2019.

Sample Location: Rest Area Run below Beaver Pond Creek

Collection Date/Time: 09/12/2019 10:05

Field ID: G5NW0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119027	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P370652	
	EPA 300.0 Rev. 2.1	Chloride	7.2		mg Cl/L	P370974	
		Sulfate	1.9		mg SO4/L	P370977	
	SM 2120 B	Color (true)	39	A	PCU	P370654	
	SM 2320 B-97	Total Alkalinity	7.7		mg CaCO3/L	P371032	
	SM 2540 C-97	TDS	34		mg/L	P371183	
	SM 2540 D-97	TSS	2	I	mg/L	P371157	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P371510	
2119029	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P370929	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22		mg N/L	P370785	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.33		mg N/L	P370968	
	EPA 365.1 Rev. 2.0	Total-P	0.005		mg P/L	P370790	
	SM 5310 B-00	Organic Carbon	3.7		mg C/L	P370862	
2119031	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P370637	

Ref. Method and Comment:

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

Sample Location: Direct Runoff-Graveyard Branch @ Tradewinds Dr **Collection Date/Time: 09/12/2019 11:05**

Field ID: G4NW0176

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2119028	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P370652	
	EPA 300.0 Rev. 2.1	Chloride	7.0		mg Cl/L	P370974	
		Sulfate	6.0		mg SO4/L	P370977	
		Color (true)	13		PCU	P370654	
	SM 2320 B-97	Total Alkalinity	36		mg CaCO3/L	P371032	
	SM 2540 C-97	TDS	65		mg/L	P371184	
	SM 2540 D-97	TSS	2	I	mg/L	P371158	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P371510	
2119030	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P370929	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.13	I	mg N/L	P370785	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.32		mg N/L	P370968	
	EPA 365.1 Rev. 2.0	Total-P	0.007		mg P/L	P370790	
	SM 5310 B-00	Organic Carbon	1.7		mg C/L	P370862	
2119032	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P370639	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P370652

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P370802

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
Manganese	1.0	U	ug/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: P370802

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Molybdenum	0.15	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 200.8 Rev. 5.4
Batch ID: P371238

Component	Result	Code	Units
Aluminum	5.0	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370974

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370977

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370929

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370785

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370968

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370790

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P370637

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P370639

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P370757

Component	Result	Code	Units
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
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: P370888

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
Metaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P370888

Component	Result	Code	Units
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 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: 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
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
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
MCP	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P370674

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: P370771

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
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: EPA 8321B
Batch ID: P370852

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B
Batch ID: P370654

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P371032

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

Reference Method: SM 2540 C-97
Batch ID: P371182

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P371183

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P371184

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P371618

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P371156

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P371157

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P371158

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-97
Batch ID: P371510

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P370862

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: P370802

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	102		P	85 - 115
Calcium	103		P	85 - 115
Iron	102		P	85 - 115
Magnesium	110		P	85 - 115
Manganese	101		P	85 - 115
Potassium	103		P	85 - 115
Sodium	98.5		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P370802

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.6		P	85 - 115
Antimony	100		P	85 - 115
Arsenic	93.5		P	85 - 115
Beryllium	92.3		P	85 - 115
Boron	103		P	85 - 115
Cadmium	94.5		P	85 - 115
Chromium	92.1		P	85 - 115
Cobalt	94.6		P	85 - 115
Copper	99.1		P	85 - 115
Lead	99.0		P	85 - 115
Molybdenum	97.3		P	85 - 115
Nickel	102		P	85 - 115
Selenium	93.9		P	85 - 115
Silver	101		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P371238

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	90.8		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370974

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370977

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370929

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.6		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370785

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370968

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: P370790

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P370637

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: P370639

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

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P370757

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

Reference Method: EPA 8270E
Batch ID: P370888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	97.8	105	P/P	69 - 122
Alachlor	97.0	103	P/P	71 - 120
Ametryn	99.1	102	P/P	47 - 138
Atrazine	102	101	P/P	74 - 124
Atrazine Desethyl	67.4	74.1	P/P	38 - 138
Azinphos Methyl	98.9	100	P/P	69 - 154
Bromacil	92.4	86.4	P/P	39 - 121
Butylate	57.2	60.2	P/P	27 - 87.0
Chlorpyrifos Ethyl	92.2	95.5	P/P	69 - 118
Chlorpyrifos Methyl	75.0	79.1	P/P	70 - 120
Cyanazine	72.6	91.9	P/P	20 - 250
Demeton	64.9	62.5	P/P	39 - 118
Diazinon	90.5	97.8	P/P	68 - 127
Dimethenamid	101	105	P/P	66 - 125
Disulfoton	68.0	68.3	P/P	52 - 126
Dithiopyr	94.7	100	P/P	67 - 127
EPTC	63.7	66.4	P/P	24 - 88.0
Ethion	96.9	94.9	P/P	51 - 132
Ethoprop	82.9	93.1	P/P	58 - 117
Fenamiphos	96.1	83.5	P/P	38 - 139
Fipronil	111	107	P/P	61 - 124
Fipronil Desulfinyl	97.0	96.5	P/P	47 - 120
Fipronil Sulfide	91.5	85.9	P/P	56 - 119
Fipronil Sulfone	97.6	95.6	P/P	50 - 117
Fonofos	65.9	70.2	P/P	60 - 121
Hexazinone	111	119	P/P	55 - 137
Malathion	98.1	100	P/P	66 - 126
Metalaxyl	78.6	83.2	P/P	33 - 140
Metolachlor	99.9	102	P/P	69 - 119
Metribuzin	77.3	85.5	P/P	31 - 238
Mevinphos	80.6	90.1	P/P	42 - 113
Molinate	69.7	77.8	P/P	32 - 96.0
Norflurazon	110	108	P/P	54 - 123
Oxadiazon	98.8	96.6	P/P	63 - 128
Parathion Ethyl	85.5	88.3	P/P	72 - 111
Parathion Methyl	81.3	84.6	P/P	74 - 126
Pendimethalin	84.8	84.9	P/P	61 - 131

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P370888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Phorate	74.4	75.3	P/P	51 - 115
Prodiamine	104	93.4	P/P	38 - 144
Prometon	100	98.0	P/P	54 - 119
Prometryn	96.1	98.2	P/P	63 - 120
Simazine	100	96.5	P/P	75 - 126
Tebuconazole	97.4	97.5	P/P	20 - 119
Terbufos	69.4	73.9	P/P	64 - 116
Terbuthylazine	97.5	98.5	P/P	73 - 117

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: 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
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: EPA 8321B
Batch ID: P370674

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	63.8		P	40 - 150
AMPA	107		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P370674

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endothall	107		P	40 - 150
Glufosinate	132		P	40 - 150
Glyphosate	132		P	40 - 140
Sucralose	65.1		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P370771

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	148		P	40 - 160
Acetaminophen	76.0		P	30 - 160
Acetamiprid	95.9		P	40 - 160
Afidopyropen	101		P	40 - 160
Bentazon	125		P	30 - 160
Benzovindiflupyr	94.1		P	40 - 160
Carbamazepine	103		P	40 - 160
Clothianidin	90.9		P	40 - 160
Dinotefuran	88.3		P	40 - 160
Diuron	107		P	40 - 160
Fenuron	101		P	40 - 160
Fluridone	97.3		P	40 - 160
Hydrocodone	93.1		P	40 - 160
Ibuprofen	96.4		P	30 - 160
Imazapyr	93.2		P	40 - 160
Imidacloprid	99.5		P	40 - 160
Linuron	84.6		P	40 - 160
Mandestrobin	92.2		P	40 - 160
MCPP	146		P	40 - 160
Naproxen	96.9		P	40 - 160
Primidone	93.5		P	40 - 160
Pyraclostrobin	91.9		P	30 - 160
Thiamethoxam	90.7		P	40 - 160
Tolfenpyrad	73.2		P	40 - 160
Triclopyr	120		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P370852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	90.9		P	40 - 160
Aldicarb	82.6		P	30 - 160
Aldicarb Sulfone	94.5		P	40 - 160
Aldicarb Sulfoxide	83.6		P	40 - 160
Carbaryl	78.5		P	40 - 160
Carbofuran	85.4		P	40 - 160
Methiocarb	71.9		P	40 - 160
Methomyl	83.7		P	40 - 160
Oxamyl	93.2		P	40 - 160
Propoxur	86.7		P	40 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P370654

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.7		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P371032

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

Reference Method: SM 4500 F-C-97
Batch ID: P371510

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.1		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P370862

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P370802

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118927	Barium	100		P	80 - 120
2118927	Calcium	106		P	80 - 120
2118927	Iron	103		P	80 - 120
2118927	Magnesium	109		P	80 - 120
2118927	Manganese	98.4		P	80 - 120
2118927	Potassium	108		P	80 - 120
2118927	Sodium	97.7		P	80 - 120
2118927	Zinc	100		P	80 - 120
2119171	Barium	100	96.3	P/P	80 - 120
2119171	Calcium	102		P	80 - 120
2119171	Iron	102	99.3	P/P	80 - 120
2119171	Magnesium	109	104	P/P	80 - 120
2119171	Manganese	99.1	95.0	P/P	80 - 120
2119171	Potassium	98.0	95.2	P/P	80 - 120
2119171	Sodium	97.5		P	80 - 120
2119171	Zinc	101	97.0	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P370802

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118927	Aluminum	98.8		P	80 - 120
2118927	Antimony	100		P	80 - 120
2118927	Arsenic	94.5		P	80 - 120
2118927	Beryllium	95.2		P	80 - 120
2118927	Boron	103		P	80 - 120
2118927	Cadmium	95.0		P	80 - 120
2118927	Chromium	95.6		P	80 - 120
2118927	Cobalt	95.2		P	80 - 120
2118927	Copper	101		P	80 - 120
2118927	Lead	99.2		P	80 - 120
2118927	Molybdenum	97.5		P	80 - 120
2118927	Nickel	103		P	80 - 120
2118927	Selenium	93.9		P	80 - 120
2118927	Silver	100		P	80 - 120
2118927	Thallium	103		P	80 - 120
2119171	Aluminum	97.4	98.6	P/P	80 - 120
2119171	Antimony	99.2	100	P/P	80 - 120
2119171	Arsenic	94.0	93.8	P/P	80 - 120
2119171	Beryllium	93.6	96.3	P/P	80 - 120
2119171	Boron	102	103	P/P	80 - 120
2119171	Cadmium	95.1	95.7	P/P	80 - 120
2119171	Chromium	94.7	95.1	P/P	80 - 120
2119171	Cobalt	95.4	94.8	P/P	80 - 120
2119171	Copper	99.9	102	P/P	80 - 120
2119171	Lead	100	100	P/P	80 - 120
2119171	Molybdenum	98.1	98.7	P/P	80 - 120
2119171	Nickel	100	110	P/P	80 - 120
2119171	Selenium	94.1	93.0	P/P	80 - 120
2119171	Silver	102	101	P/P	80 - 120
2119171	Thallium	102	103	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P371238

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120078	Aluminum	90.8		P	80 - 120
2121224	Aluminum	89.5	90.5	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P370974

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118682	Chloride	101		P	90 - 110
2119000	Chloride	96.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P370977

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2118682	Sulfate	101		P	90 - 110
2119000	Sulfate	98.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P370929

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119023	Ammonia-N	99.6	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P370785

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119096	Kjeldahl Nitrogen	93.6	98.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P370968

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119029	NO2NO3-N	98.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P370790

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119023	Total-P	97.2	93.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P370637

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119109	O-Phosphate-P	95.9	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P370639

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119163	O-Phosphate-P	97.1	99.7	P/P	90 - 110

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	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
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 8270E
 Batch ID: P370888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119146	Acetochlor	108	113	P/P	63 - 129
2119146	Alachlor	101	108	P/P	65 - 127
2119146	Ametryn	139	144	P/P	40 - 164
2119146	Atrazine Desethyl	116	112	P/P	14 - 157
2119146	Azinphos Methyl	99.0	126	P/P	49 - 180
2119146	Bromacil	92.9	113	P/P	48 - 130
2119146	Butylate	61.9	65.3	P/P	10 - 94.0
2119146	Chlorpyrifos Ethyl	88.1	87.4	P/P	58 - 123
2119146	Chlorpyrifos Methyl	99.7	100	P/P	58 - 125
2119146	Cyanazine	128	139	P/P	24 - 253
2119146	Demeton	97.5	102	P/P	25 - 149
2119146	Diazinon	115	123	P/P	59 - 144
2119146	Dimethenamid	106	110	P/P	46 - 139
2119146	Disulfoton	103	101	P/P	54 - 132
2119146	Dithiopyr	105	108	P/P	64 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P370888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119146	EPTC	66.1	70.9	P/P	10 - 92.0
2119146	Ethion	60.3	55.3	P/P	30 - 148
2119146	Ethoprop	104	107	P/P	50 - 130
2119146	Fenamiphos	103	95.9	P/P	49 - 142
2119146	Fipronil	113	114	P/P	46 - 140
2119146	Fipronil Desulfinyl	97.1	99.7	P/P	30 - 121
2119146	Fipronil Sulfide	108	92.6	P/P	31 - 136
2119146	Fipronil Sulfone	81.8	84.0	P/P	16 - 136
2119146	Fonofos	104	109	P/P	55 - 129
2119146	Hexazinone	126	123	P/P	56 - 141
2119146	Malathion	102	95.4	P/P	56 - 135
2119146	Metalaxyl	98.7	102	P/P	54 - 135
2119146	Metolachlor	100	104	P/P	51 - 140
2119146	Metribuzin	206	203	P/P	45 - 254
2119146	Mevinphos	99.5	105	P/P	33 - 131
2119146	Molinate	86.6	95.0	P/P	14 - 98.0
2119146	Norflurazon	103	105	P/P	34 - 136
2119146	Oxadiazon	96.1	97.0	P/P	67 - 116
2119146	Parathion Ethyl	97.5	101	P/P	66 - 118
2119146	Parathion Methyl	109	114	P/P	64 - 136
2119146	Pendimethalin	98.3	102	P/P	59 - 144
2119146	Phorate	108	114	P/P	42 - 130
2119146	Prodiamine	53.1	53.2	P/P	42 - 148
2119146	Prometon	108	108	P/P	59 - 134
2119146	Prometryn	111	119	P/P	54 - 135
2119146	Simazine	111	109	P/P	53 - 156
2119146	Tebuconazole	57.4	50.1	P/P	10 - 131
2119146	Terbufos	114	118	P/P	57 - 131
2119146	Terbutylazine	101	102	P/P	68 - 125

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: 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

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	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	MCP	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: EPA 8321B
Batch ID: P370674

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119049	Acesulfame K	55.2	56.2	P/P	40 - 150
2119049	AMPA	49.9	46.3	P/P	40 - 150
2119049	Endothall	83.8	84.7	P/P	40 - 150
2119049	Glufosinate	94.5	97.7	P/P	40 - 150
2119049	Glyphosate	113	113	P/P	40 - 140
2119049	Sucralose	53.9	52.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P370771

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119072	2,4-D	141	141	P/P	40 - 160
2119072	Acetaminophen	88.5	86.5	P/P	30 - 160
2119072	Acetamiprid	110	100	P/P	40 - 160
2119072	Afidopyropen	109	93.4	P/P	40 - 160
2119072	Bentazon	109	101	P/P	30 - 160
2119072	Benzovindiflupyr	96.0	93.5	P/P	40 - 160
2119072	Carbamazepine	108	102	P/P	40 - 160
2119072	Clothianidin	102	97.1	P/P	40 - 160
2119072	Dinotefuran	103	101	P/P	40 - 160
2119072	Diuron	106	103	P/P	40 - 160
2119072	Fenuron	100	98.4	P/P	40 - 160
2119072	Fluridone	94.4	92.7	P/P	40 - 160
2119072	Hydrocodone	103	95.6	P/P	40 - 160
2119072	Ibuprofen	92.9	93.2	P/P	30 - 160
2119072	Imazapyr	112	103	P/P	40 - 160
2119072	Imidacloprid	124	136	P/P	40 - 160
2119072	Linuron	82.3	81.0	P/P	40 - 160
2119072	Mandestrobin	95.2	95.3	P/P	40 - 160
2119072	MCP	151	147	P/P	40 - 160
2119072	Naproxen	97.8	95.8	P/P	40 - 160
2119072	Primidone	86.4	88.8	P/P	40 - 160
2119072	Pyraclostrobin	91.3	92.0	P/P	30 - 160
2119072	Thiamethoxam	118	115	P/P	40 - 160
2119072	Tolfenpyrad	71.1	73.6	P/P	40 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P370771

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119072	Triclopyr	111	122	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P370852

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119069	3-Hydroxycarbofuran	94.4	95.0	P/P	40 - 160
2119069	Aldicarb	96.9	84.5	P/P	30 - 160
2119069	Aldicarb Sulfone	102	98.4	P/P	40 - 160
2119069	Aldicarb Sulfoxide	45.8	47.6	P/P	40 - 160
2119069	Carbaryl	77.9	76.0	P/P	40 - 160
2119069	Carbofuran	83.3	81.4	P/P	40 - 160
2119069	Methiocarb	72.6	73.8	P/P	40 - 160
2119069	Methomyl	85.5	87.6	P/P	40 - 160
2119069	Oxamyl	98.5	93.0	P/P	40 - 160
2119069	Propoxur	86.8	83.5	P/P	40 - 160

Reference Method: SM 4500 F-C-97
Batch ID: P371510

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119000	Fluoride	98.1	98.1	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P370862

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119001	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P370652

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119127	Turbidity	4.27	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P370802

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119171	Barium	4.02	Spike	P	0 - 20
2119171	Calcium	2.37	Spike	P	0 - 20
2119171	Iron	2.86	Spike	P	0 - 20
2119171	Magnesium	3.39	Spike	P	0 - 20
2119171	Manganese	3.80	Spike	P	0 - 20
2119171	Potassium	1.88	Spike	P	0 - 20
2119171	Sodium	3.08	Spike	P	0 - 20
2119171	Zinc	3.76	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P370802

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119171	Aluminum	1.18	Spike	P	0 - 20
2119171	Antimony	0.963	Spike	P	0 - 20
2119171	Arsenic	0.205	Spike	P	0 - 20
2119171	Beryllium	2.84	Spike	P	0 - 20
2119171	Boron	0.401	Spike	P	0 - 20
2119171	Cadmium	0.592	Spike	P	0 - 20
2119171	Chromium	0.463	Spike	P	0 - 20
2119171	Cobalt	0.607	Spike	P	0 - 20
2119171	Copper	2.33	Spike	P	0 - 20
2119171	Lead	0.0841	Spike	P	0 - 20
2119171	Molybdenum	0.584	Spike	P	0 - 20
2119171	Nickel	9.58	Spike	P	0 - 20
2119171	Selenium	1.25	Spike	P	0 - 20
2119171	Silver	1.16	Spike	P	0 - 20
2119171	Thallium	0.319	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P371238

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121224	Aluminum	1.03	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P370974

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118682	Chloride	0.234	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P370977

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118682	Sulfate	0.701	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370929

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119023	Ammonia-N	0.635	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P370785

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119096	Kjeldahl Nitrogen	3.60	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P370968

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119029	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P370790

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119023	Total-P	3.72	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P370637

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119109	O-Phosphate-P	1.09	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P370639

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119163	O-Phosphate-P	2.64	Spike	P	0 - 20

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

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	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
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

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P370757

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

Reference Method: EPA 8270E
Batch ID: P370888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119146	Acetochlor	4.58	Spike	P	0 - 30
2119146	Alachlor	6.72	Spike	P	0 - 30
2119146	Ametryn	3.53	Spike	P	0 - 30
2119146	Atrazine	9.33	Spike	P	0 - 30
2119146	Atrazine Desethyl	2.48	Spike	P	0 - 30
2119146	Azinphos Methyl	23.7	Spike	P	0 - 30
2119146	Bromacil	19.1	Spike	P	0 - 30
2119146	Butylate	5.29	Spike	P	0 - 30
2119146	Chlorpyrifos Ethyl	0.761	Spike	P	0 - 30
2119146	Chlorpyrifos Methyl	0.506	Spike	P	0 - 30
2119146	Cyanazine	8.33	Spike	P	0 - 30
2119146	Demeton	4.98	Spike	P	0 - 30
2119146	Diazinon	6.68	Spike	P	0 - 30
2119146	Dimethenamid	3.88	Spike	P	0 - 30
2119146	Disulfoton	1.58	Spike	P	0 - 30
2119146	Dithiopyr	2.51	Spike	P	0 - 30
2119146	EPTC	6.98	Spike	P	0 - 30
2119146	Ethion	8.68	Spike	P	0 - 30
2119146	Ethoprop	2.49	Spike	P	0 - 30
2119146	Fenamiphos	6.83	Spike	P	0 - 30
2119146	Fipronil	0.693	Spike	P	0 - 30
2119146	Fipronil Desulfinyl	2.66	Spike	P	0 - 30
2119146	Fipronil Sulfide	15.2	Spike	P	0 - 30
2119146	Fipronil Sulfone	2.36	Spike	P	0 - 30
2119146	Fonofos	5.10	Spike	P	0 - 30
2119146	Hexazinone	2.19	Spike	P	0 - 30
2119146	Malathion	6.94	Spike	P	0 - 30
2119146	Metalaxyl	3.26	Spike	P	0 - 30
2119146	Metolachlor	3.92	Spike	P	0 - 30
2119146	Metribuzin	1.27	Spike	P	0 - 30
2119146	Mevinphos	5.30	Spike	P	0 - 30
2119146	Molinate	9.31	Spike	P	0 - 30
2119146	Norflurazon	1.68	Spike	P	0 - 30
2119146	Oxadiazon	0.928	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P370888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119146	Parathion Ethyl	3.78	Spike	P	0 - 30
2119146	Parathion Methyl	4.15	Spike	P	0 - 30
2119146	Pendimethalin	4.03	Spike	P	0 - 30
2119146	Phorate	5.17	Spike	P	0 - 30
2119146	Prodiamine	0.241	Spike	P	0 - 30
2119146	Prometon	0.00866	Spike	P	0 - 30
2119146	Prometryn	7.14	Spike	P	0 - 30
2119146	Simazine	1.47	Spike	P	0 - 30
2119146	Tebuconazole	12.1	Spike	P	0 - 30
2119146	Terbufos	3.35	Spike	P	0 - 30
2119146	Terbuthylazine	1.00	Spike	P	0 - 30
LFB	Acetochlor	6.99	LCS	P	0 - 30
LFB	Alachlor	5.74	LCS	P	0 - 30
LFB	Ametryn	3.41	LCS	P	0 - 30
LFB	Atrazine	1.30	LCS	P	0 - 30
LFB	Atrazine Desethyl	9.49	LCS	P	0 - 30
LFB	Azinphos Methyl	1.57	LCS	P	0 - 30
LFB	Bromacil	6.71	LCS	P	0 - 30
LFB	Butylate	5.08	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	3.46	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	5.34	LCS	P	0 - 30
LFB	Cyanazine	23.4	LCS	P	0 - 30
LFB	Demeton	3.80	LCS	P	0 - 30
LFB	Diazinon	7.79	LCS	P	0 - 30
LFB	Dimethenamid	3.54	LCS	P	0 - 30
LFB	Disulfoton	0.356	LCS	P	0 - 30
LFB	Dithiopyr	5.66	LCS	P	0 - 30
LFB	EPTC	4.23	LCS	P	0 - 30
LFB	Ethion	2.11	LCS	P	0 - 30
LFB	Ethoprop	11.6	LCS	P	0 - 30
LFB	Fenamiphos	14.0	LCS	P	0 - 30
LFB	Fipronil	2.98	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	0.565	LCS	P	0 - 30
LFB	Fipronil Sulfide	6.33	LCS	P	0 - 30
LFB	Fipronil Sulfone	2.05	LCS	P	0 - 30
LFB	Fonofos	6.33	LCS	P	0 - 30
LFB	Hexazinone	7.24	LCS	P	0 - 30
LFB	Malathion	2.06	LCS	P	0 - 30
LFB	Metalaxyl	5.65	LCS	P	0 - 30
LFB	Metolachlor	1.92	LCS	P	0 - 30
LFB	Metribuzin	10.1	LCS	P	0 - 30
LFB	Mevinphos	11.2	LCS	P	0 - 30
LFB	Molinate	11.1	LCS	P	0 - 30
LFB	Norflurazon	1.72	LCS	P	0 - 30
LFB	Oxadiazon	2.30	LCS	P	0 - 30
LFB	Parathion Ethyl	3.23	LCS	P	0 - 30
LFB	Parathion Methyl	3.97	LCS	P	0 - 30
LFB	Pendimethalin	0.115	LCS	P	0 - 30
LFB	Phorate	1.33	LCS	P	0 - 30
LFB	Prodiamine	10.9	LCS	P	0 - 30
LFB	Prometon	2.19	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P370888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Prometryn	2.22	LCS	P	0 - 30
LFB	Simazine	3.89	LCS	P	0 - 30
LFB	Tebuconazole	0.184	LCS	P	0 - 30
LFB	Terbufos	6.27	LCS	P	0 - 30
LFB	Terbutylazine	1.06	LCS	P	0 - 30

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: 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	Afidopyrophen	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
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: EPA 8321B
Batch ID: P370674

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

Reference Method: EPA 8321B
Batch ID: P370674

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119049	Acesulfame K	1.78	Spike	P	0 - 30
2119049	AMPA	5.11	Spike	P	0 - 30
2119049	Endothall	0.988	Spike	P	0 - 30
2119049	Glufosinate	3.34	Spike	P	0 - 30
2119049	Glyphosate	0.485	Spike	P	0 - 30
2119049	Sucralose	3.40	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P370771

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119072	2,4-D	0.219	Spike	P	0 - 30
2119072	Acetaminophen	2.37	Spike	P	0 - 30
2119072	Acetamiprid	8.84	Spike	P	0 - 30
2119072	Afidopyropen	15.0	Spike	P	0 - 30
2119072	Bentazon	7.30	Spike	P	0 - 30
2119072	Benzovindiflupyr	2.61	Spike	P	0 - 30
2119072	Carbamazepine	5.56	Spike	P	0 - 30
2119072	Clothianidin	5.27	Spike	P	0 - 30
2119072	Dinotefuran	2.02	Spike	P	0 - 30
2119072	Diuron	2.37	Spike	P	0 - 30
2119072	Fenuron	1.65	Spike	P	0 - 30
2119072	Fluridone	1.79	Spike	P	0 - 30
2119072	Hydrocodone	7.85	Spike	P	0 - 30
2119072	Ibuprofen	0.280	Spike	P	0 - 30
2119072	Imazapyr	8.42	Spike	P	0 - 30
2119072	Imidacloprid	6.52	Spike	P	0 - 30
2119072	Linuron	1.66	Spike	P	0 - 30
2119072	Mandestrobin	0.115	Spike	P	0 - 30
2119072	MCPP	2.13	Spike	P	0 - 30
2119072	Naproxen	2.00	Spike	P	0 - 30
2119072	Primidone	2.79	Spike	P	0 - 30
2119072	Pyraclostrobin	0.692	Spike	P	0 - 30
2119072	Thiamethoxam	2.87	Spike	P	0 - 30
2119072	Tolfenpyrad	3.55	Spike	P	0 - 30
2119072	Triclopyr	9.27	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P370852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119069	3-Hydroxycarbofuran	0.708	Spike	P	0 - 30
2119069	Aldicarb	13.6	Spike	P	0 - 30
2119069	Aldicarb Sulfone	4.04	Spike	P	0 - 30
2119069	Aldicarb Sulfoxide	3.91	Spike	P	0 - 30
2119069	Carbaryl	2.47	Spike	P	0 - 30
2119069	Carbofuran	2.25	Spike	P	0 - 30
2119069	Methiocarb	1.58	Spike	P	0 - 30
2119069	Methomyl	2.47	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P370852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119069	Oxamyl	5.75	Spike	P	0 - 30
2119069	Propoxur	3.86	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P370654

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119027	Color (true)	3.13	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P371032

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119000	Total Alkalinity	0.777	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P371182

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118204	TDS	7.41	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P371183

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2118278	TDS	6.13	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P371184

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119100	TDS	5.08	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P371618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119022	TDS	7.27	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P371510

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119000	Fluoride	0.0	Spike	P	0 - 2.5

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P370862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119001	Organic Carbon	0.127	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2119069
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	83.5	P	30 - 160

Lab Sample ID: 2119070
Field Sample ID: G4NW0415_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	99.2	P	30 - 160

Lab Sample ID: 2119071
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	140	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	98.4	P	30 - 160
EPA 8321B	Diuron-d6	93.0	P	30 - 160
EPA 8321B	Endothall-d6	158	P	30 - 160
EPA 8321B	Endothall-d6	158	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	83.2	P	30 - 160
EPA 8321B	Primidone-d5	90.4	P	30 - 160
EPA 8321B	Sucralose-d6	40.6	P	30 - 160
EPA 8321B	Sucralose-d6	40.6	P	30 - 160

Lab Sample ID: 2119072
Field Sample ID: G4NW0415_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	159	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	97.9	P	30 - 160
EPA 8321B	Diuron-d6	95.3	P	30 - 160
EPA 8321B	Endothall-d6	151	P	30 - 160
EPA 8321B	Endothall-d6	151	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	107	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	107	P	30 - 160
EPA 8321B	Ibuprofen-d3	80.0	P	30 - 160
EPA 8321B	Primidone-d5	94.2	P	30 - 160
EPA 8321B	Sucralose-d6	43.3	P	30 - 160
EPA 8321B	Sucralose-d6	43.3	P	30 - 160

Lab Sample ID: 2119073
Field Sample ID: G4NW0429

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	129	P	30 - 160
EPA 8321B	Acetaminophen-d4	87.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	98.4	P	30 - 160
EPA 8321B	Diuron-d6	112	P	30 - 160
EPA 8321B	Endothall-d6	153	P	30 - 160
EPA 8321B	Endothall-d6	153	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2119073
Field Sample ID: G4NW0429

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	98.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	73.7	P	30 - 160
EPA 8321B	Primidone-d5	95.1	P	30 - 160
EPA 8321B	Sucralose-d6	60.0	P	30 - 160
EPA 8321B	Sucralose-d6	60.0	P	30 - 160

Lab Sample ID: 2119074
Field Sample ID: G4NW0430

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	144	P	30 - 160
EPA 8321B	Acetaminophen-d4	73.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.1	P	30 - 160
EPA 8321B	Diuron-d6	88.0	P	30 - 160
EPA 8321B	Endothall-d6	151	P	30 - 160
EPA 8321B	Endothall-d6	151	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	74.3	P	30 - 160
EPA 8321B	Primidone-d5	94.3	P	30 - 160
EPA 8321B	Sucralose-d6	61.9	P	30 - 160
EPA 8321B	Sucralose-d6	61.9	P	30 - 160

Lab Sample ID: 2119075
Field Sample ID: FB_09122019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	85.8	P	30 - 160

Lab Sample ID: 2119076
Field Sample ID: FB_09122019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	148	P	30 - 160
EPA 8321B	Acetaminophen-d4	84.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	101	P	30 - 160
EPA 8321B	Diuron-d6	96.2	P	30 - 160
EPA 8321B	Endothall-d6	159	P	30 - 160
EPA 8321B	Endothall-d6	159	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	119	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	119	P	30 - 160
EPA 8321B	Ibuprofen-d3	90.7	P	30 - 160
EPA 8321B	Primidone-d5	102	P	30 - 160
EPA 8321B	Sucralose-d6	68.5	P	30 - 160
EPA 8321B	Sucralose-d6	68.5	P	30 - 160

Lab Sample ID: 2119077
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	69.6	P	39 - 109

Quality Assurance Report Surrogates

Lab Sample ID: 2119077
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Tetrachloro-m-xylene	41.3	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	39.2	P	30 - 103
EPA 8276	PCNB	114	P	37 - 143

Lab Sample ID: 2119078
Field Sample ID: G4NW0415_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	62.4	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	43.2	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	36.2	P	30 - 103
EPA 8276	PCNB	106	P	37 - 143

Lab Sample ID: 2119079
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	113	P	68 - 130
EPA 8270E	Terbufos-d10	115	P	61 - 136

Lab Sample ID: 2119080
Field Sample ID: G4NW0415_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	114	P	68 - 130
EPA 8270E	Terbufos-d10	116	P	61 - 136

Lab Sample ID: 2119081
Field Sample ID: FB_09122019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	76.2	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	58.7	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	46.0	P	30 - 103
EPA 8276	PCNB	95.4	P	37 - 143

Lab Sample ID: 2119082
Field Sample ID: FB_09122019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	99.7	P	68 - 130
EPA 8270E	Terbufos-d10	82.2	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A94198

Included Lab Sample IDs: 2119025, 2119026, 2119031, 2119032, 2119035

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	98.9	P/P	90 - 110
O-Phosphate-P	98.7	97.8	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A94201

Included Lab Sample IDs: 2119021, 2119022, 2119027, 2119028, 2119033

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

Reference Method: SM 2120 B

Run ID: A94204

Included Lab Sample IDs: 2119021, 2119022, 2119027, 2119028, 2119033

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	99.0	P/P	90 - 115

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A94268

Included Lab Sample IDs: 2119021, 2119022, 2119027, 2119028, 2119033

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	101	P/P	90 - 110
Chloride	99.4	100	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110
Sulfate	102	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A94290

Included Lab Sample IDs: 2119071, 2119072, 2119073, 2119074, 2119076

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	84.3	64.3	P/P	60 - 160
Acesulfame K	96.7	84.3	P/P	60 - 160
Endothall	139	141	P/P	60 - 160
Endothall	151	139	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A94300

Included Lab Sample IDs: 2119071, 2119072, 2119073, 2119074, 2119076

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	97.1	77.1	P/P	60 - 160
Glufosinate	100	82.1	P/P	60 - 160
Glyphosate	107	86.9	P/P	60 - 160

Reference Method: SM 5310 B-00

Run ID: A94304

Included Lab Sample IDs: 2119023, 2119024, 2119029, 2119030, 2119034

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

Reference Method: SM 5310 B-00

Run ID: A94304

Included Lab Sample IDs: 2119023, 2119024, 2119029, 2119030, 2119034

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A94317

Included Lab Sample IDs: 2119023, 2119024, 2119029, 2119030, 2119034

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A94318

Included Lab Sample IDs: 2119023, 2119024, 2119029, 2119030, 2119034

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.8	98.3	P/P	90 - 110
Kjeldahl Nitrogen	98.3	98.1	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A94333

Included Lab Sample IDs: 2119071, 2119072, 2119073, 2119074, 2119076

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	65.6	67.1	P/P	60 - 160
Sucralose	67.1	76.1	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A94334

Included Lab Sample IDs: 2119023, 2119024, 2119029, 2119030, 2119034

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	102	P/P	90 - 110
Ammonia-N	102	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A94338

Included Lab Sample IDs: 2119023, 2119024, 2119029, 2119030, 2119034

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	101	P/P	90 - 110
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A94353

Included Lab Sample IDs: 2119021, 2119022, 2119027, 2119028, 2119033

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A94354

Included Lab Sample IDs: 2119083, 2119084, 2119085

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	103	103	P/P	95 - 105
Barium	103	103	P/P	90 - 110
Calcium	103	103	P/P	90 - 110
Calcium	103	102	P/P	95 - 105
Iron	102	102	P/P	95 - 105
Iron	103	103	P/P	90 - 110
Magnesium	103	102	P/P	95 - 105
Magnesium	104	104	P/P	90 - 110
Manganese	103	103	P/P	95 - 105
Manganese	103	103	P/P	90 - 110
Potassium	101	99.7	P/P	95 - 105
Potassium	101	100	P/P	90 - 110
Sodium	100	101	P/P	90 - 110
Sodium	98.4	98.0	P/P	95 - 105
Zinc	101	100	P/P	90 - 110
Zinc	101	101	P/P	95 - 105

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94386

Included Lab Sample IDs: 2119083, 2119084, 2119085

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	99.6	P/P	90 - 110
Arsenic	93.1	93.4	P/P	90 - 110
Arsenic	93.5	93.1	P/P	90 - 110
Beryllium	100	94.8	P/P	90 - 110
Beryllium	94.8	96.0	P/P	90 - 110
Boron	102	101	P/P	90 - 110
Boron	102	102	P/P	90 - 110
Cadmium	95.2	95.9	P/P	90 - 110
Cadmium	96.4	95.2	P/P	90 - 110
Selenium	95.0	95.4	P/P	90 - 110
Selenium	96.6	95.0	P/P	90 - 110
Thallium	93.7	94.5	P/P	90 - 110
Thallium	94.1	93.7	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A94400

Included Lab Sample IDs: 2119073

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	105	97.7	P/P	50 - 150
Acetaminophen	116	99.9	P/P	60 - 160
Acetamiprid	111	112	P/P	50 - 150
Afidopyropen	114	121	P/P	50 - 150
Bentazon	80.5	82.3	P/P	50 - 160
Benzovindiflupyr	104	106	P/P	50 - 150
Carbamazepine	109	104	P/P	60 - 150
Clothianidin	104	101	P/P	60 - 150
Dinotefuran	97.3	98.1	P/P	50 - 150
Diuron	135	130	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A94400

Included Lab Sample IDs: 2119073

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenuron	111	111	P/P	60 - 150
Fluridone	104	114	P/P	60 - 160
Hydrocodone	111	106	P/P	60 - 150
Ibuprofen	85.8	80.7	P/P	50 - 160
Imazapyr	92.1	85.5	P/P	50 - 150
Imidacloprid	96.7	101	P/P	60 - 150
Linuron	93.7	93.8	P/P	60 - 150
Mandestrobin	112	112	P/P	50 - 150
MCPP	88.9	91.5	P/P	50 - 150
Naproxen	60.8	82.8	P/P	50 - 160
Primidone	90.6	70.7	P/P	60 - 150
Pyraclostrobin	109	110	P/P	60 - 150
Thiamethoxam	103	107	P/P	50 - 150
Tolfenpyrad	116	115	P/P	60 - 150
Triclopyr	89.6	103	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A94410

Included Lab Sample IDs: 2119071, 2119072, 2119074, 2119076

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	92.5	92.7	P/P	50 - 150
3-Hydroxycarbofuran	97.6	94.3	P/P	60 - 150
Acetaminophen	108	114	P/P	60 - 160
Acetamiprid	107	113	P/P	50 - 150
Afidopyropen	108	110	P/P	50 - 150
Aldicarb	98.8	91.2	P/P	60 - 150
Aldicarb Sulfone	102	90.4	P/P	50 - 150
Aldicarb Sulfoxide	110	107	P/P	50 - 150
Bentazon	102	112	P/P	50 - 160
Benzovindiflupyr	114	112	P/P	50 - 150
Carbamazepine	107	107	P/P	60 - 150
Carbaryl	99.5	107	P/P	60 - 150
Carbofuran	113	112	P/P	50 - 150
Clothianidin	94.5	105	P/P	60 - 150
Dinotefuran	99.3	109	P/P	50 - 150
Diuron	117	112	P/P	60 - 150
Fenuron	105	107	P/P	60 - 150
Fluridone	109	113	P/P	60 - 160
Hydrocodone	110	112	P/P	60 - 150
Ibuprofen	96.2	90.5	P/P	50 - 160
Imazapyr	108	97.7	P/P	50 - 150
Imidacloprid	105	98.6	P/P	60 - 150
Linuron	108	104	P/P	60 - 150
Mandestrobin	110	108	P/P	50 - 150
MCPP	93.9	96.7	P/P	50 - 150
Methiocarb	113	112	P/P	50 - 150
Methomyl	96.9	112	P/P	50 - 150
Naproxen	106	113	P/P	50 - 160
Oxamyl	106	106	P/P	50 - 150
Primidone	99.9	105	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A94410

Included Lab Sample IDs: 2119069, 2119070, 2119075

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Propoxur	109	112	P/P	50 - 150
Pyraclostrobin	117	120	P/P	60 - 150
Thiamethoxam	96.7	104	P/P	50 - 150
Tolfenpyrad	122	121	P/P	60 - 150
Triclopyr	104	96.5	P/P	50 - 150

Reference Method: EPA 8276

Run ID: A94440

Included Lab Sample IDs: 2119077, 2119078, 2119081

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: A94507

Included Lab Sample IDs: 2119077, 2119078, 2119081

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 8270E

Run ID: A94523

Included Lab Sample IDs: 2119079, 2119080, 2119082

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	105		P	80 - 120
Alachlor	106		P	80 - 120
Ametryn	113		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	95.5		P	80 - 120
Azinphos Methyl	94.7		P	80 - 120
Bromacil	106		P	80 - 120
Butylate	92.6		P	80 - 120
Chlorpyrifos Ethyl	96.0		P	80 - 120
Chlorpyrifos Methyl	97.8		P	80 - 120
Cyanazine	85.7		P	80 - 120
Demeton	93.3		P	80 - 120
Diazinon	102		P	80 - 120
Dimethenamid	106		P	80 - 120
Disulfoton	96.3		P	80 - 120
Dithiopyr	105		P	80 - 120
EPTC	100		P	80 - 120
Ethion	94.1		P	80 - 120
Ethoprop	99.0		P	80 - 120
Fenamiphos	99.5		P	80 - 120
Fipronil	103		P	80 - 120
Fipronil Desulfinyl	107		P	80 - 120
Fipronil Sulfide	98.8		P	80 - 120
Fipronil Sulfone	98.5		P	80 - 120
Fonofos	95.8		P	80 - 120
Hexazinone	99.7		P	80 - 120
Malathion	97.3		P	80 - 120
Metaxyl	107		P	80 - 120
Metolachlor	109		P	80 - 120
Metribuzin	84.1		P	80 - 120
Mevinphos	104		P	80 - 120
Molinate	94.4		P	80 - 120
Norflurazon	104		P	80 - 120
Oxadiazon	110		P	80 - 120
Parathion Ethyl	98.6		P	80 - 120
Parathion Methyl	98.3		P	80 - 120
Pendimethalin	98.3		P	80 - 120
Phorate	93.3		P	80 - 120
Prodiamine	97.2		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	104		P	80 - 120
Simazine	102		P	80 - 120
Tebuconazole	106		P	80 - 120
Terbufos	93.1		P	80 - 120
Terbutylazine	97.8		P	80 - 120

Reference Method: SM 4500 F-C-97

Run ID: A94568

Included Lab Sample IDs: 2119021, 2119022, 2119027, 2119028, 2119033

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

Reference Method: SM 4500 F-C-97

Run ID: A94568

Included Lab Sample IDs: 2119021, 2119022, 2119027, 2119028, 2119033

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

Reference Method: EPA 8270E

Run ID: A94601

Included Lab Sample IDs: 2119079, 2119080

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	103		P	80 - 120
Ametryn	99.8		P	80 - 120
Atrazine	99.3		P	80 - 120
Atrazine Desethyl	91.7		P	80 - 120
Azinphos Methyl	96.3		P	80 - 120
Bromacil	96.1		P	80 - 120
Butylate	92.4		P	80 - 120
Chlorpyrifos Ethyl	98.1		P	80 - 120
Chlorpyrifos Methyl	98.0		P	80 - 120
Cyanazine	77.9*		F	80 - 120
Demeton	96.7		P	80 - 120
Diazinon	97.3		P	80 - 120
Dimethenamid	100		P	80 - 120
Disulfoton	98.2		P	80 - 120
Dithiopyr	99.4		P	80 - 120
EPTC	101		P	80 - 120
Ethion	96.3		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	98.8		P	80 - 120
Fipronil	97.1		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	99.3		P	80 - 120
Fipronil Sulfone	100		P	80 - 120
Fonofos	97.7		P	80 - 120
Hexazinone	103		P	80 - 120
Malathion	100		P	80 - 120
Metaxyl	101		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	83.9		P	80 - 120
Mevinphos	104		P	80 - 120
Molinate	101		P	80 - 120
Norflurazon	93.7		P	80 - 120
Oxadiazon	100		P	80 - 120
Parathion Ethyl	93.4		P	80 - 120
Parathion Methyl	97.7		P	80 - 120
Pendimethalin	94.3		P	80 - 120
Phorate	95.4		P	80 - 120
Prodiamine	90.8		P	80 - 120
Prometryn	105		P	80 - 120
Simazine	94.7		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	95.6		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A94601

Included Lab Sample IDs: 2119079, 2119080

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Terbutylazine	96.9		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A9471

Included Lab Sample IDs: 2119083, 2119084, 2119085

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	95.9	95.6	P/P	90 - 110
Nickel	101	101	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94722

Included Lab Sample IDs: 2119083, 2119084, 2119085

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	95.8	96.1	P/P	90 - 110
Cobalt	96.2	95.7	P/P	90 - 110
Copper	101	101	P/P	90 - 110
Lead	99.8	101	P/P	90 - 110
Molybdenum	99.4	99.3	P/P	90 - 110
Silver	98.5	98.6	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94728

Included Lab Sample IDs: 2119083, 2119084

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	93.6	93.4	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						4.27	
EPA 200.7 Rev. 4.4	Barium	102		100	100	96.3		4.02
	Calcium	103		106	102			2.37
	Iron	102		103	102	99.3		2.86
	Magnesium	110		109	109	104		3.39
	Manganese	101		98.4	99.1	95.0		3.80
	Potassium	103		108	98.0	95.2		1.88
	Sodium	98.5		97.7	97.5			3.08
	Zinc	100		100	101	97.0		3.76
EPA 200.8 Rev. 5.4	Aluminum	97.6		98.8	97.4	98.6		1.18
	Aluminum	90.8		90.8	89.5	90.5		1.03
	Antimony	100		100	99.2	100		0.963
	Arsenic	93.5		94.5	94.0	93.8		0.205
	Beryllium	92.3		95.2	93.6	96.3		2.84
	Boron	103		103	102	103		0.401
	Cadmium	94.5		95.0	95.1	95.7		0.592
	Chromium	92.1		95.6	94.7	95.1		0.463
	Cobalt	94.6		95.2	95.4	94.8		0.607
	Copper	99.1		101	99.9	102		2.33
	Lead	99.0		99.2	100	100		0.0841
	Molybdenum	97.3		97.5	98.1	98.7		0.584
	Nickel	102		103	100	110		9.58
	Selenium	93.9		93.9	94.1	93.0		1.25
	Silver	101		100	102	101		1.16
	Thallium	101		103	102	103		0.319
EPA 300.0 Rev. 2.1	Chloride	97.8		101	96.2		0.234	
	Sulfate	99.2		101	98.3		0.701	
EPA 350.1 Rev. 2.0	Ammonia-N	98.6		99.6	98.8			0.635
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.5		93.6	98.9			3.60
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100		98.0				0.0
EPA 365.1 Rev. 2.0	Total-P	98.4		97.2	93.6			3.72
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.3		95.9	97.6			1.09
	O-Phosphate-P	99.5		97.1	99.7			2.64
EPA 8270E	Acetochlor	97.8	105	108	113	6.99		4.58
	Alachlor	97.0	103	101	108	5.74		6.72
	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	99.1	102	139	144	3.41		3.53
	Atrazine	102	101			1.30		9.33
	Atrazine Desethyl	67.4	74.1	116	112	9.49		2.48
	Azinphos Methyl	98.9	100	99.0	126	1.57		23.7
	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	92.4	86.4	92.9	113	6.71		19.1
	Butylate	57.2	60.2	61.9	65.3	5.08		5.29
	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	92.2	95.5	88.1	87.4	3.46		0.761
	Chlorpyrifos Methyl	75.0	79.1	99.7	100	5.34		0.506
	Cis-Nonachlor	69.4	91.4	77.1	76.4	27.3		0.871
	Cyanazine	72.6	91.9	128	139	23.4		8.33
	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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	SMP
EPA 8270E	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	64.9	62.5	97.5	102	3.80	4.98
	Diazinon	90.5	97.8	115	123	7.79	6.68
	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	101	105	106	110	3.54	3.88
	Disulfoton	68.0	68.3	103	101	0.356	1.58
	Dithiopyr	94.7	100	105	108	5.66	2.51
	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	63.7	66.4	66.1	70.9	4.23	6.98
	Ethalfuralin	74.5	95.7	77.0	75.9	24.8	1.54
	Ethion	96.9	94.9	60.3	55.3	2.11	8.68
	Ethoprop	82.9	93.1	104	107	11.6	2.49
	Fenamiphos	96.1	83.5	103	95.9	14.0	6.83
	Fipronil	111	107	113	114	2.98	0.693
	Fipronil Desulfinyl	97.0	96.5	97.1	99.7	0.565	2.66
	Fipronil Sulfide	91.5	85.9	108	92.6	6.33	15.2
	Fipronil Sulfone	97.6	95.6	81.8	84.0	2.05	2.36
	Fonofos	65.9	70.2	104	109	6.33	5.10
	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	111	119	126	123	7.24	2.19
	Malathion	98.1	100	102	95.4	2.06	6.94
	Metalaxyl	78.6	83.2	98.7	102	5.65	3.26
	Methoxychlor	64.5	88.6	66.6	75.8	31.4	12.9
	Metolachlor	99.9	102	100	104	1.92	3.92
	Metribuzin	77.3	85.5	206	203	10.1	1.27
	Mevinphos	80.6	90.1	99.5	105	11.2	5.30
	Mirex	39.7	52.2	55.6	48.1	27.3	14.5
	Molinate	69.7	77.8	86.6	95.0	11.1	9.31
	Norflurazon	110	108	103	105	1.72	1.68
	Oxadiazon	98.8	96.6	96.1	97.0	2.30	0.928
	Parathion Ethyl	85.5	88.3	97.5	101	3.23	3.78
	Parathion Methyl	81.3	84.6	109	114	3.97	4.15
	Pendimethalin	84.8	84.9	98.3	102	0.115	4.03
	Permethrin	58.4	79.0	70.5	71.8	30.0	1.78
	Phorate	74.4	75.3	108	114	1.33	5.17
	Prodiamine	104	93.4	53.1	53.2	10.9	0.241
	Prometon	100	98.0	108	108	2.19	0.0086
	Prometryn	96.1	98.2	111	119	2.22	7.14
	Simazine	100	96.5	111	109	3.89	1.47
	Tebuconazole	97.4	97.5	57.4	50.1	0.184	12.1
	Terbufos	69.4	73.9	114	118	6.27	3.35
	Terbutylazine	97.5	98.5	101	102	1.06	1.00

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	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
	2,4-D	148		141	141			0.219
	3-Hydroxycarbofuran	90.9		94.4	95.0			0.708
	Acesulfame K	63.8		55.2	56.2			1.78
	Acetaminophen	83.7		88.0	89.4			1.55
	Acetaminophen	76.0		88.5	86.5			2.37
	Acetamiprid	96.7		127	110			14.0
	Acetamiprid	95.9		110	100			8.84
	Afidopyropen	79.9		117	114			2.93
	Afidopyropen	101		109	93.4			15.0
	Aldicarb	82.6		96.9	84.5			13.6
	Aldicarb Sulfone	94.5		102	98.4			4.04
	Aldicarb Sulfoxide	83.6		45.8	47.6			3.91
	AMPA	107		49.9	46.3			5.11
	Bentazon	93.6		73.0	75.1			1.31
	Bentazon	125		109	101			7.30
	Benzovindiflupyr	50.5		45.1	73.3			47.5
	Benzovindiflupyr	94.1		96.0	93.5			2.61
	Carbamazepine	97.5		116	114			2.37
	Carbamazepine	103		108	102			5.56
	Carbaryl	78.5		77.9	76.0			2.47
	Carbofuran	85.4		83.3	81.4			2.25
	Clothianidin	95.6		117	116			0.551
	Clothianidin	90.9		102	97.1			5.27
	Dinotefuran	89.5		123	123			0.391
	Dinotefuran	88.3		103	101			2.02
	Diuron	103		115	106			7.38
	Diuron	107		106	103			2.37
	Endothall	107		83.8	84.7			0.988
	Fenuron	119		100	103			2.67
	Fenuron	101		100	98.4			1.65
	Fluridone	88.8						2.67
	Fluridone	97.3		94.4	92.7			1.79
	Glufosinate	132		94.5	97.7			3.34
	Glyphosate	132		113	113			0.485
	Hydrocodone	98.6		110	108			1.74
	Hydrocodone	93.1		103	95.6			7.85
	Ibuprofen	49.3		70.2	76.9			9.11
	Ibuprofen	96.4		92.9	93.2			0.280
	Imazapyr	86.7						4.82
	Imazapyr	93.2		112	103			8.42
	Imidacloprid	100		222	210			5.12
	Imidacloprid	99.5		124	136			6.52
	Linuron	66.3		72.3	71.9			0.554
	Linuron	84.6		82.3	81.0			1.66
	Mandestrobin	73.0		86.0	90.6			5.18
	Mandestrobin	92.2		95.2	95.3			0.115
	MCPP	75.3		141	130			8.08
	MCPP	146		151	147			2.13
	Methiocarb	71.9		72.6	73.8			1.58

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Methomyl	83.7	85.5	87.6		2.47
	Naproxen	60.1	116	74.0		44.2
	Naproxen	96.9	97.8	95.8		2.00
	Oxamyl	93.2	98.5	93.0		5.75
	Primidone	84.4	102	101		0.586
	Primidone	93.5	86.4	88.8		2.79
	Propoxur	86.7	86.8	83.5		3.86
	Pyraclostrobin	41.1	36.8	65.1		55.4
	Pyraclostrobin	91.9	91.3	92.0		0.692
	Sucralose	65.1	53.9	52.0		3.40
	Thiamethoxam	108	174	176		1.23
	Thiamethoxam	90.7	118	115		2.87
	Tolfenpyrad	14.2	2.13	23.2		
	Tolfenpyrad	73.2	71.1	73.6		3.55
	Triclopyr	50.7	100	88.9		11.8
	Triclopyr	120	111	122		9.27
SM 2120 B	Color (true)	99.7			3.13	
SM 2320 B-97	Total Alkalinity	104			0.777	
SM 2540 C-97	TDS				7.41	
	TDS				6.13	
	TDS				5.08	
	TDS				7.27	
SM 4500 F-C-97	Fluoride	96.1	98.1	98.1		0.0
SM 5310 B-00	Organic Carbon	103	101	101		0.127

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2119021, 2119022, 2119027, 2119028, 2119033
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2119083, 2119084, 2119085
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2119083, 2119084, 2119085
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2119021, 2119022, 2119027, 2119028, 2119033
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2119021, 2119022, 2119027, 2119028, 2119033
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2119023, 2119024, 2119029, 2119030, 2119034
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2119023, 2119024, 2119029, 2119030, 2119034
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2119023, 2119024, 2119029, 2119030, 2119034
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2119023, 2119024, 2119029, 2119030, 2119034
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2119025, 2119026, 2119031, 2119032, 2119035
EPA 8270E / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2119077, 2119078, 2119081
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2119079, 2119080, 2119082
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2119077, 2119078, 2119081
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2119069, 2119070, 2119075
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2119071, 2119072, 2119073, 2119074, 2119076

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2119071, 2119072, 2119073, 2119074, 2119076
SM 2120 B / E31780	True Color measured at 450 nm	2119021, 2119022, 2119027, 2119028, 2119033
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2119021, 2119022, 2119027, 2119028, 2119033
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2119021, 2119022, 2119027, 2119028, 2119033
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2119021, 2119022, 2119027, 2119028, 2119033
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2119021, 2119022, 2119027, 2119028, 2119033
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2119023, 2119024, 2119029, 2119030, 2119034

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	09/13/2019			09/13/2019 16:48	Samantha Davila	2119021, 2119022, 2119027, 2119028, 2119033
EPA 200.7 Rev. 4.4	09/13/2019	09/17/2019 15:15	Elliott D. Healy	09/19/2019 12:15	Betina Topolski	2119085
	09/13/2019	09/17/2019 15:15	Elliott D. Healy	09/19/2019 14:42	Betina Topolski	2119083
	09/13/2019	09/17/2019 15:15	Elliott D. Healy	09/19/2019 14:49	Betina Topolski	2119084
EPA 200.8 Rev. 5.4	09/13/2019	09/17/2019 15:15	Elliott D. Healy	09/20/2019 21:26	Justin Cutchin	2119085
	09/13/2019	09/17/2019 15:15	Elliott D. Healy	09/20/2019 23:39	Justin Cutchin	2119083
	09/13/2019	09/17/2019 15:15	Elliott D. Healy	09/20/2019 23:49	Justin Cutchin	2119084
	09/13/2019	09/17/2019 15:15	Elliott D. Healy	10/03/2019 22:10	Justin Cutchin	2119083
	09/13/2019	09/17/2019 15:15	Elliott D. Healy	10/03/2019 22:20	Justin Cutchin	2119084
	09/13/2019	09/17/2019 15:15	Elliott D. Healy	10/03/2019 22:29	Justin Cutchin	2119085
	09/13/2019	09/17/2019 15:15	Elliott D. Healy	10/05/2019 00:13	Justin Cutchin	2119083
	09/13/2019	09/17/2019 15:15	Elliott D. Healy	10/05/2019 00:22	Justin Cutchin	2119084
	09/13/2019	09/17/2019 15:15	Elliott D. Healy	10/05/2019 00:32	Justin Cutchin	2119085
	09/13/2019	09/24/2019 17:50	Elliott D. Healy	10/03/2019 15:51	Robert K Palmer	2119083
	09/13/2019	09/24/2019 17:50	Elliott D. Healy	10/03/2019 16:01	Robert K Palmer	2119084
EPA 300.0 Rev. 2.1	09/13/2019			09/18/2019 17:09	Jhamieka S. Greenwood	2119021
	09/13/2019			09/18/2019 17:21	Jhamieka S. Greenwood	2119022
	09/13/2019			09/18/2019 17:58	Jhamieka S. Greenwood	2119027
	09/13/2019			09/18/2019 18:10	Jhamieka S. Greenwood	2119028
	09/13/2019			09/18/2019 18:22	Jhamieka S. Greenwood	2119033
EPA 350.1 Rev. 2.0	09/13/2019			09/18/2019 12:02	Ping Hua	2119023
	09/13/2019			09/18/2019 12:13	Ping Hua	2119024
	09/13/2019			09/18/2019 12:16	Ping Hua	2119029
	09/13/2019			09/18/2019 12:17	Ping Hua	2119030
	09/13/2019			09/18/2019 12:25	Ping Hua	2119034
EPA 351.2 Rev. 2.0	09/13/2019	09/17/2019 12:50	Sima Feizi	09/18/2019 14:11	Julia Storbeck	2119023
	09/13/2019	09/17/2019 12:50	Sima Feizi	09/18/2019 14:16	Julia Storbeck	2119024
	09/13/2019	09/17/2019 12:50	Sima Feizi	09/18/2019 14:18	Julia Storbeck	2119029
	09/13/2019	09/17/2019 12:50	Sima Feizi	09/18/2019 14:19	Julia Storbeck	2119030
	09/13/2019	09/17/2019 12:50	Sima Feizi	09/18/2019 14:21	Julia Storbeck	2119034
EPA 353.2 Rev. 2.0	09/13/2019			09/19/2019 10:04	Beverly Y. Sanders	2119029
	09/13/2019			09/19/2019 10:16	Beverly Y. Sanders	2119034
	09/13/2019			09/19/2019 11:43	Beverly Y. Sanders	2119023
	09/13/2019			09/19/2019 11:44	Beverly Y. Sanders	2119024
	09/13/2019			09/19/2019 11:46	Beverly Y. Sanders	2119030
EPA 365.1 Rev. 2.0	09/13/2019	09/17/2019 13:00	Lipi Saha	09/18/2019 13:34	Rosalyn Ballman	2119023
	09/13/2019	09/17/2019 13:00	Lipi Saha	09/18/2019 13:35	Rosalyn Ballman	2119024
	09/13/2019	09/17/2019 13:00	Lipi Saha	09/18/2019 13:36	Rosalyn Ballman	2119029
	09/13/2019	09/17/2019 13:00	Lipi Saha	09/18/2019 13:37	Rosalyn Ballman	2119030

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0	09/13/2019	09/17/2019 13:00	Lipi Saha	09/18/2019 13:38	Rosalyn Ballman	2119034
EPA 365.1 Rev. 2.0 dissolved	09/13/2019			09/13/2019 13:06	Jhamieka S. Greenwood	2119025, 2119026
	09/13/2019			09/13/2019 13:07	Jhamieka S. Greenwood	2119031
	09/13/2019			09/13/2019 13:25	Jhamieka S. Greenwood	2119035
	09/13/2019			09/13/2019 13:28	Jhamieka S. Greenwood	2119032
EPA 8270E	09/13/2019	09/17/2019 10:00	Fe-Val Siddell	09/24/2019 23:24	Arthur Maknenko	2119077
	09/13/2019	09/17/2019 10:00	Fe-Val Siddell	09/24/2019 23:56	Arthur Maknenko	2119078
	09/13/2019	09/17/2019 10:00	Fe-Val Siddell	09/25/2019 00:28	Arthur Maknenko	2119081
	09/13/2019	09/18/2019 08:15	Rasheda Ghaffari	09/24/2019 16:40	Vandana T. Nagar	2119079
	09/13/2019	09/18/2019 08:15	Rasheda Ghaffari	09/24/2019 17:06	Vandana T. Nagar	2119080
	09/13/2019	09/18/2019 08:15	Rasheda Ghaffari	09/24/2019 17:32	Vandana T. Nagar	2119082
	09/13/2019	09/18/2019 08:15	Rasheda Ghaffari	09/27/2019 17:14	Vandana T. Nagar	2119079
	09/13/2019	09/18/2019 08:15	Rasheda Ghaffari	09/27/2019 17:40	Vandana T. Nagar	2119080
EPA 8276	09/13/2019	09/17/2019 10:00	Fe-Val Siddell	09/24/2019 02:04	Michael Poppell	2119077
	09/13/2019	09/17/2019 10:00	Fe-Val Siddell	09/24/2019 03:00	Michael Poppell	2119078
	09/13/2019	09/17/2019 10:00	Fe-Val Siddell	09/24/2019 03:55	Michael Poppell	2119081
EPA 8321B	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/17/2019 13:26	Rebecca Ware	2119071
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/17/2019 13:56	Rebecca Ware	2119072
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/17/2019 14:10	Rebecca Ware	2119073
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/17/2019 14:23	Rebecca Ware	2119074
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/17/2019 14:37	Rebecca Ware	2119076
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/17/2019 20:03	Rebecca Ware	2119071
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/17/2019 20:14	Rebecca Ware	2119072
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/17/2019 20:25	Rebecca Ware	2119073
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/17/2019 20:35	Rebecca Ware	2119074
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/17/2019 20:46	Rebecca Ware	2119076
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/18/2019 13:40	Rebecca Ware	2119071
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/18/2019 13:51	Rebecca Ware	2119072
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/18/2019 14:03	Rebecca Ware	2119073
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/18/2019 14:15	Rebecca Ware	2119074
	09/13/2019	09/16/2019 10:00	Rebecca Ware	09/18/2019 15:51	Rebecca Ware	2119076
	09/13/2019	09/16/2019 10:30	Fe-Val Siddell	09/17/2019 01:47	Juyoung Kim	2119073
	09/13/2019	09/18/2019 12:00	Hoor Shaik	09/18/2019 22:41	Juyoung Kim	2119071
	09/13/2019	09/18/2019 12:00	Hoor Shaik	09/18/2019 23:15	Juyoung Kim	2119072
	09/13/2019	09/18/2019 12:00	Hoor Shaik	09/19/2019 00:59	Juyoung Kim	2119074
	09/13/2019	09/18/2019 12:00	Hoor Shaik	09/19/2019 01:34	Juyoung Kim	2119076
	09/13/2019	09/19/2019 08:30	Hoor Shaik	09/19/2019 22:03	Juyoung Kim	2119069
	09/13/2019	09/19/2019 08:30	Hoor Shaik	09/19/2019 22:37	Juyoung Kim	2119070
	09/13/2019	09/19/2019 08:30	Hoor Shaik	09/19/2019 23:12	Juyoung Kim	2119075
SM 2120 B	09/13/2019			09/13/2019 17:09	Madeline Funaro	2119021

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2120 B	09/13/2019			09/13/2019 17:10	Madeline Funaro	2119022
	09/13/2019			09/13/2019 17:11	Madeline Funaro	2119027
	09/13/2019			09/13/2019 17:12	Madeline Funaro	2119028
	09/13/2019			09/13/2019 17:13	Madeline Funaro	2119033
SM 2320 B-97	09/13/2019			09/18/2019 10:00	Dale L. Simmons	2119021
	09/13/2019			09/18/2019 10:12	Dale L. Simmons	2119022
	09/13/2019			09/18/2019 10:23	Dale L. Simmons	2119027
	09/13/2019			09/18/2019 10:35	Dale L. Simmons	2119028
SM 2540 C-97	09/13/2019			09/18/2019 10:48	Dale L. Simmons	2119033
	09/13/2019			09/17/2019 14:10	Yijie Li	2119021, 2119027, 2119028, 2119033
	09/13/2019			09/25/2019 14:25	Yijie Li	2119022
	09/13/2019			09/17/2019 14:10	Yijie Li	2119021, 2119022, 2119027, 2119028, 2119033
SM 2540 D-97	09/13/2019					
	09/13/2019					
	09/13/2019					
	09/13/2019					
SM 4500 F-C-97	09/13/2019			09/25/2019 20:08	Dale L. Simmons	2119021
	09/13/2019			09/25/2019 20:13	Dale L. Simmons	2119022
	09/13/2019			09/25/2019 20:18	Dale L. Simmons	2119027
	09/13/2019			09/25/2019 20:23	Dale L. Simmons	2119028
SM 5310 B-00	09/13/2019			09/25/2019 20:40	Dale L. Simmons	2119033
	09/13/2019			09/17/2019 17:57	Madeline Funaro	2119023
	09/13/2019			09/17/2019 18:09	Madeline Funaro	2119024
	09/13/2019			09/17/2019 18:21	Madeline Funaro	2119029
	09/13/2019			09/17/2019 18:34	Madeline Funaro	2119030
	09/13/2019			09/17/2019 18:46	Madeline Funaro	2119034