

Chemical Analysis Report

NE-DIST-2019-07-24-02

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

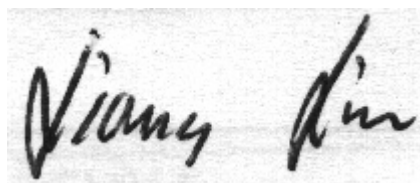
Event Description: **ICW Boat**
Request ID: **RQ-2019-07-22-06**
Customer: **NE-DIST**
Project ID: **SMP**

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

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

Certified by: Liang Lin, Environmental Administrator

Date Certified: 21-AUG-2019 15:49

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

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: OPEN CREEK 200 METERS ABOVE MOUTH

Collection Date/Time: 07/23/2019 09:10

Field ID: G2NE1178

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105452	EPA 180.1 Rev. 2.0	Turbidity	9.4		NTU	P367856	
	EPA 300.0	Bromide	41		mg Br/L	P367963	
	SM 2320 B-97	Total Alkalinity	116		mg CaCO3/L	P368376	
	SM 2540 D-97	TSS	14	Q	mg/L	P368399	
	SM 4500 F-C-97	Fluoride	0.77		mg F/L	P368238	
2105454	EPA 350.1 Rev. 2.0	Ammonia-N	0.040		mg N/L	P368343	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.83		mg N/L	P368084	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.020		mg N/L	P367876	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P367982	
	SM 5310 B-00	Organic Carbon	8.6		mg C/L	P367970	
2105456	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.052		mg P/L	P367844	
2105476	EPA 8321B	Aldicarb	0.020	U	ug/L	P367818	
		Aldicarb Sulfone	0.0020	U	ug/L	P367818	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P367818	RPD
		Carbaryl	0.0020	U	ug/L	P367818	
		Carbofuran	0.0020	U	ug/L	P367818	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P367818	
		Methiocarb	0.0020	U	ug/L	P367818	
		Methomyl	0.0020	U	ug/L	P367818	
		Oxamyl	0.0020	U	ug/L	P367818	
		Propoxur	0.0020	U	ug/L	P367818	
		2,4-D	0.0077	I	ug/L	P367470	
		Acesulfame K**	0.10	UJ	ug/L	P367852	SUR
		AMPA**	0.10	UJ	ug/L	P367852	MS, SUR
		Sucralose**	0.40		ug/L	P367852	
2105478		Acetaminophen**	0.0080	U	ug/L	P367470	
		Endothall**	0.25	UJ	ug/L	P367852	SUR
		Acetamiprid**	0.0020	UJ	ug/L	P367470	
		Glufosinate**	0.10	UJ	ug/L	P367852	SUR
		Glyphosate**	0.10	UJ	ug/L	P367852	SUR
		Afidopyropen**	0.0020	UJ	ug/L	P367470	
		Bentazon	0.028		ug/L	P367470	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P367470	
		Carbamazepine**	8.0E-04	U	ug/L	P367470	
		Clothianidin**	0.0025	IJ	ug/L	P367470	
		Dinotefuran**	0.0020	UJ	ug/L	P367470	
		Diuron	0.0088		ug/L	P367470	
		Fenuron	0.016	U	ug/L	P367470	
		Fluridone**	0.085		ug/L	P367470	
		Imazapyr**	0.068		ug/L	P367470	
		Hydrocodone**	0.0020	U	ug/L	P367470	
		Ibuprofen**	0.020	U	ug/L	P367470	
		Imidacloprid	0.010		ug/L	P367470	MS

Field ID: G2NE1178

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105478	EPA 8321B	Linuron	0.0040	U	ug/L	P367470	
		Mandestrobin**	0.0020	UJ	ug/L	P367470	
		MCP	0.0020	U	ug/L	P367470	MS
		Naproxen**	0.0080	U	ug/L	P367470	
		Primidone**	0.0040	U	ug/L	P367470	
		Pyraclostrobin**	0.0020	U	ug/L	P367470	
		Thiamethoxam**	0.0020	UJ	ug/L	P367470	
		Tolfenpyrad**	0.0020	UJ	ug/L	P367470	
		Triclopyr**	0.0040	U	ug/L	P367470	
2105484	EPA 8270E	Aldrin	4.1	U	ng/L	P368103	
		Alpha-BHC	2.0	U	ng/L	P368103	
		Alpha-Chlordane	1.0	U	ng/L	P368103	
		Beta-BHC	10	U	ng/L	P368103	
		Bifenthrin**	4.1	U	ng/L	P368103	
		Delta-BHC	8.1	U	ng/L	P368103	
		Gamma-BHC	8.1	U	ng/L	P368103	
		Carbophenothion	10	U	ng/L	P368103	
		Chlorothalonil	2.0	U	ng/L	P368103	
		Cis-Nonachlor**	1.0	U	ng/L	P368103	
		Cypermethrin	20	U	ng/L	P368103	
		DDD-p,p'	6.1	U	ng/L	P368103	
		DDE-p,p'	6.1	U	ng/L	P368103	
		DDT-p,p'	7.1	U	ng/L	P368103	
		Dicofol	30	U	ng/L	P368103	
		Dieldrin	4.1	U	ng/L	P368103	
		Endosulfan I	4.1	U	ng/L	P368103	
		Endosulfan II	4.1	U	ng/L	P368103	
		Endosulfan Sulfate	2.0	U	ng/L	P368103	
		Endrin	2.0	U	ng/L	P368103	
		Endrin Aldehyde	2.0	U	ng/L	P368103	
		Endrin Ketone	2.0	U	ng/L	P368103	
		Ethalfuralin**	3.0	U	ng/L	P368103	
		Gamma-Chlordane	1.0	U	ng/L	P368103	
		Heptachlor	1.5	U	ng/L	P368103	
		Heptachlor Epoxide	2.0	U	ng/L	P368103	
		Hexachlorobenzene	2.0	U	ng/L	P368103	
		Methoxychlor	4.1	U	ng/L	P368103	
		Mirex	2.0	U	ng/L	P368103	
		Permethrin	10	U	ng/L	P368103	
		Trans-Nonachlor**	1.0	U	ng/L	P368103	
		Trifluralin	2.5	U	ng/L	P368103	
	EPA 8276	Chlordane	5.1	U	ng/L	P368103	
		Toxaphene	30	U	ng/L	P368103	
2105486	EPA 8270E	Acetochlor	0.26	U	ng/L	P367888	
		Alachlor	0.26	U	ng/L	P367888	

Field ID: G2NE1178

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105486	EPA 8270E	Ametryn	0.62	U	ng/L	P367888	
		Atrazine	9.0		ng/L	P367888	
		Atrazine Desethyl	4.1	IJ	ng/L	P367888	MS, RPD
		Azinphos Methyl	5.2	U	ng/L	P367888	
		Bromacil	0.52	U	ng/L	P367888	
		Butylate	0.42	U	ng/L	P367888	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P367888	
		Chlorpyrifos Methyl	0.10	U	ng/L	P367888	
		Cyanazine	3.4	UJ	ng/L	P367888	RPD
		Demeton	7.3	UJ	ng/L	P367888	RPD
		Diazinon	0.13	U	ng/L	P367888	
		Dimethenamid**	0.10	U	ng/L	P367888	
		Disulfoton	0.52	UJ	ng/L	P367888	LCS, RPD
		Dithiopyr**	0.19	I	ng/L	P367888	
		EPTC	1.3	U	ng/L	P367888	
		Ethion	0.16	UJ	ng/L	P367888	RPD
		Ethoprop	0.10	U	ng/L	P367888	
		Fenamiphos	0.52	U	ng/L	P367888	
		Fipronil	0.26	U	ng/L	P367888	
		Fipronil Desulfinyl**	0.28	I	ng/L	P367888	
		Fipronil Sulfide	0.28	I	ng/L	P367888	
		Fipronil Sulfone	0.95		ng/L	P367888	
		Fonofos	0.21	U	ng/L	P367888	
		Hexazinone	0.95	I	ng/L	P367888	
		Malathion	0.36	U	ng/L	P367888	
		Metalaxyl	0.31	U	ng/L	P367888	
		Metolachlor	1.4	I	ng/L	P367888	
		Metribuzin	2.3	IJ	ng/L	P367888	MS, RPD
		Mevinphos	0.52	U	ng/L	P367888	
		Molinate	0.31	U	ng/L	P367888	
		Norflurazon	0.52	U	ng/L	P367888	
		Oxadiazon**	3.4		ng/L	P367888	
		Parathion Ethyl	0.26	U	ng/L	P367888	
		Parathion Methyl	0.57	U	ng/L	P367888	
		Pendimethalin	1.0	U	ng/L	P367888	
		Phorate	0.26	U	ng/L	P367888	
		Prodiamine**	0.18	U	ng/L	P367888	
		Prometon	0.94	U	ng/L	P367888	
		Prometryn	0.21	U	ng/L	P367888	MS, RPD
		Simazine	1.8	I	ng/L	P367888	
		Tebuconazole**	0.81	IJ	ng/L	P367888	RPD
		Terbufos	0.10	U	ng/L	P367888	
		Terbutylazine	0.44	U	ng/L	P367888	
2105490	EPA 200.7 Rev. 4.4	Iron	270	I	ug/L	P368222	
		Manganese	32		ug/L	P368222	

Field ID: G2NE1178

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105490	EPA 200.7 Rev. 4.4	Zinc	15	U	ug/L	P368222	
	EPA 200.8 Rev. 5.4	Aluminum	357		ug/L	P368222	
		Antimony	0.20	U	ug/L	P368222	
		Arsenic	4.91		ug/L	P368222	
		Cadmium	0.080	U	ug/L	P368222	
		Chromium	4.0	U	ug/L	P368222	
		Copper	2.0	I	ug/L	P368222	
		Lead	0.80	U	ug/L	P368222	
		Nickel	2.0	U	ug/L	P368222	
		Selenium	2.0	U	ug/L	P368222	
		Silver	0.040	U	ug/L	P368222	
		Thallium	0.40	U	ug/L	P368222	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample reanalyzed out of holding time because of analytical difficulties.

EPA 350.1 Rev. 2.0: The result was confirmed on 08/02/2019.

EPA 8321B: Refer to the narrative for an explanation of QC Codes.

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample. Results confirmed in re-extraction.

EPA 8321B: Refer to the narrative for an explanation of QC Codes. Surrogate spike recovery exceeding the control limits. Results confirmed in sample duplicate.

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

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

EPA 200.7 Rev. 4.4: The sample required dilution due to matrix interference.

EPA 200.8 Rev. 5.4: The sample required dilution due to matrix interference.

**Sample Location: OPEN CREEK 200 METERS ABOVE MOUTH
DUPLICATE**

Collection Date/Time: 07/23/2019 09:15

Field ID: G2NE1178DUP

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105453	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P367856	
	EPA 300.0	Bromide	40		mg Br/L	P367963	
	SM 2320 B-97	Total Alkalinity	118		mg CaCO3/L	P368376	
	SM 2540 D-97	TSS	13	Q	mg/L	P368399	
	SM 4500 F-C-97	Fluoride	0.74		mg F/L	P368238	
2105455	EPA 350.1 Rev. 2.0	Ammonia-N	0.022		mg N/L	P368343	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P368084	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.017		mg N/L	P367876	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P367982	
	SM 5310 B-00	Organic Carbon	9.2		mg C/L	P367970	
2105457	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.048		mg P/L	P367844	
2105477	EPA 8321B	Aldicarb	0.020	U	ug/L	P367818	
		Aldicarb Sulfone	0.0020	U	ug/L	P367818	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P367818	RPD
		Carbaryl	0.0020	U	ug/L	P367818	
		Carbofuran	0.0020	U	ug/L	P367818	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P367818	
		Methiocarb	0.0020	U	ug/L	P367818	
		Methomyl	0.0020	U	ug/L	P367818	
		Oxamyl	0.0020	U	ug/L	P367818	
		Propoxur	0.0020	U	ug/L	P367818	
2105479		2,4-D	0.0080	I	ug/L	P367470	
		Acesulfame K**	0.10	UJ	ug/L	P367852	SUR
		AMPA**	0.10	UJ	ug/L	P367852	MS, SUR
		Sucralose**	0.41		ug/L	P367852	
		Acetaminophen**	0.0080	U	ug/L	P367470	
		Endothall**	0.25	UJ	ug/L	P367852	SUR
		Acetamiprid**	0.0020	UJ	ug/L	P367470	
		Glufosinate**	0.10	UJ	ug/L	P367852	SUR
		Glyphosate**	0.10	UJ	ug/L	P367852	SUR
		Afidopyropen**	0.0020	UJ	ug/L	P367470	
		Bentazon	0.032		ug/L	P367470	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P367470	
		Carbamazepine**	8.0E-04	U	ug/L	P367470	
		Clothianidin**	0.0032	IJ	ug/L	P367470	
		Dinotefuran**	0.0020	UJ	ug/L	P367470	
		Diuron	0.0087		ug/L	P367470	
		Fenuron	0.016	U	ug/L	P367470	
		Fluridone**	0.095		ug/L	P367470	
		Imazapyr**	0.073		ug/L	P367470	
		Hydrocodone**	0.0020	U	ug/L	P367470	
		Ibuprofen**	0.020	U	ug/L	P367470	

Field ID: G2NE1178DUP

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105479	EPA 8321B	Imidacloprid	0.011		ug/L	P367470	MS
		Linuron	0.0040	U	ug/L	P367470	
		Mandestrobins**	0.0020	UJ	ug/L	P367470	
		MCP	0.0020	U	ug/L	P367470	MS
		Naproxen**	0.0080	U	ug/L	P367470	
		Primidone**	0.0040	U	ug/L	P367470	
		Pyraclostrobin**	0.0020	U	ug/L	P367470	
		Thiamethoxam**	0.0020	UJ	ug/L	P367470	
		Tolfeprad**	0.0020	UJ	ug/L	P367470	
		Triclopr**	0.0040	U	ug/L	P367470	
2105485	EPA 8270E	Aldrin	4.3	U	ng/L	P368103	
		Alpha-BHC	2.2	U	ng/L	P368103	
		Alpha-Chlordane	1.1	U	ng/L	P368103	
		Beta-BHC	11	U	ng/L	P368103	
		Bifenthrin**	4.3	U	ng/L	P368103	
		Delta-BHC	8.7	U	ng/L	P368103	
		Gamma-BHC	8.7	U	ng/L	P368103	
		Carbophenothion	11	U	ng/L	P368103	
		Chlorothalonil	2.2	U	ng/L	P368103	
		Cis-Nonachlor**	1.1	U	ng/L	P368103	
		Cypermethrin	22	U	ng/L	P368103	
		DDD-p,p'	6.5	U	ng/L	P368103	
		DDE-p,p'	6.5	U	ng/L	P368103	
		DDT-p,p'	7.6	U	ng/L	P368103	
		Dicofol	33	U	ng/L	P368103	
		Dieldrin	4.3	U	ng/L	P368103	
		Endosulfan I	4.3	U	ng/L	P368103	
		Endosulfan II	4.3	U	ng/L	P368103	
		Endosulfan Sulfate	2.2	U	ng/L	P368103	
		Endrin	2.2	U	ng/L	P368103	
		Endrin Aldehyde	2.2	U	ng/L	P368103	
		Endrin Ketone	2.2	U	ng/L	P368103	
		Ethalfuralin**	3.3	U	ng/L	P368103	
		Gamma-Chlordane	1.1	U	ng/L	P368103	
		Heptachlor	1.6	U	ng/L	P368103	
		Heptachlor Epoxide	2.2	U	ng/L	P368103	
		Hexachlorobenzene	2.2	U	ng/L	P368103	
		Methoxychlor	4.3	U	ng/L	P368103	
		Mirex	2.2	U	ng/L	P368103	
		Permethrin	11	U	ng/L	P368103	
		Trans-Nonachlor**	1.1	U	ng/L	P368103	
		Trifluralin	2.7	U	ng/L	P368103	
	EPA 8276	Chlordane	5.4	U	ng/L	P368103	
		Toxaphene	33	U	ng/L	P368103	
2105487	EPA 8270E	Acetochlor	0.29	U	ng/L	P367888	

Field ID: G2NE1178DUP

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105487	EPA 8270E	Alachlor	0.29	U	ng/L	P367888	
		Ametryn	0.70	U	ng/L	P367888	
		Atrazine	9.8		ng/L	P367888	
		Atrazine Desethyl	4.4	IJ	ng/L	P367888	MS, RPD
		Azinphos Methyl	5.8	U	ng/L	P367888	
		Bromacil	0.58	U	ng/L	P367888	
		Butylate	0.46	U	ng/L	P367888	
		Chlorpyrifos Ethyl	0.29	U	ng/L	P367888	
		Chlorpyrifos Methyl	0.12	U	ng/L	P367888	
		Cyanazine	3.8	UJ	ng/L	P367888	RPD
		Demeton	8.1	UJ	ng/L	P367888	RPD
		Diazinon	0.14	U	ng/L	P367888	
		Dimethenamid**	0.12	U	ng/L	P367888	
		Disulfoton	0.58	UJ	ng/L	P367888	LCS, RPD
		Dithiopyr**	0.21	I	ng/L	P367888	
		EPTC	1.4	U	ng/L	P367888	
		Ethion	0.17	UJ	ng/L	P367888	RPD
		Ethoprop	0.12	U	ng/L	P367888	
		Fenamiphos	0.58	U	ng/L	P367888	
		Fipronil	0.29	U	ng/L	P367888	
		Fipronil Desulfinyl**	0.27	I	ng/L	P367888	
		Fipronil Sulfide	0.26	I	ng/L	P367888	
		Fipronil Sulfone	0.86		ng/L	P367888	
		Fonofos	0.23	U	ng/L	P367888	
		Hexazinone	0.78	I	ng/L	P367888	
		Malathion	0.41	U	ng/L	P367888	
		Metalaxyl	0.35	U	ng/L	P367888	
		Metolachlor	1.3	I	ng/L	P367888	
		Metribuzin	2.2	IJ	ng/L	P367888	MS, RPD
		Mevinphos	0.58	U	ng/L	P367888	
		Molinate	0.35	U	ng/L	P367888	
		Norflurazon	0.58	U	ng/L	P367888	
		Oxadiazon**	3.9		ng/L	P367888	
		Parathion Ethyl	0.29	U	ng/L	P367888	
		Parathion Methyl	0.64	U	ng/L	P367888	
		Pendimethalin	1.2	U	ng/L	P367888	
		Phorate	0.29	U	ng/L	P367888	
		Prodiamine**	0.20	U	ng/L	P367888	
		Prometon	1.0	U	ng/L	P367888	
		Prometryn	0.23	U	ng/L	P367888	MS, RPD
		Simazine	1.8	I	ng/L	P367888	
		Tebuconazole**	0.71	IJ	ng/L	P367888	RPD
		Terbufos	0.12	U	ng/L	P367888	
		Terbuthylazine	0.49	U	ng/L	P367888	
2105491	EPA 200.7 Rev. 4.4	Iron	290	I	ug/L	P368222	

Field ID: G2NE1178DUP

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105491	EPA 200.7 Rev. 4.4	Manganese	37		ug/L	P368222	
		Zinc	20	U	ug/L	P368222	
	EPA 200.8 Rev. 5.4	Aluminum	347		ug/L	P368222	
		Antimony	0.21	I	ug/L	P368222	
		Arsenic	4.48		ug/L	P368222	
		Cadmium	0.080	U	ug/L	P368222	
		Chromium	4.0	U	ug/L	P368222	
		Copper	1.6	U	ug/L	P368222	
		Lead	0.80	U	ug/L	P368222	
		Nickel	2.0	U	ug/L	P368222	
		Selenium	2.0	U	ug/L	P368222	
		Silver	0.040	U	ug/L	P368222	
		Thallium	0.40	U	ug/L	P368222	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample reanalyzed out of holding time because of analytical difficulties.

EPA 350.1 Rev. 2.0: The result was confirmed on 08/02/2019.

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample. Results confirmed in re-extraction.

EPA 8321B: Refer to the narrative for an explanation of QC Codes. Surrogate spike recovery exceeding the control limits. Results confirmed in sample duplicate.

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

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

EPA 200.7 Rev. 4.4: The sample required dilution due to matrix interference.

EPA 200.8 Rev. 5.4: The sample required dilution due to matrix interference.

Sample Location: OPEN CREEK 200 METERS ABOVE MOUTH

Collection Date/Time: 07/23/2019 09:25

Field ID: FB072319

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105461	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P367856	
	EPA 300.0	Bromide	0.013	U	mg Br/L	P367963	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P367975	
	SM 2540 D-97	TSS	2	U	mg/L	P368004	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P367977	
2105462	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P368533	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P368012	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P367986	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P367889	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P367969	
2105463	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P367843	
2105481	EPA 8321B	Aldicarb	0.020	U	ug/L	P367818	
		Aldicarb Sulfone	0.0020	U	ug/L	P367818	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P367818	RPD
		Carbaryl	0.0020	U	ug/L	P367818	
		Carbofuran	0.0020	U	ug/L	P367818	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P367818	
		Methiocarb	0.0020	U	ug/L	P367818	
		Methomyl	0.0020	U	ug/L	P367818	
		Oxamyl	0.0020	U	ug/L	P367818	
		Propoxur	0.0020	U	ug/L	P367818	
		2,4-D	0.0020	U	ug/L	P367470	
		Acesulfame K**	0.10	U	ug/L	P367852	
		AMPA**	0.10	U	ug/L	P367852	MS
2105482		Sucralose**	0.010	U	ug/L	P367852	
		Acetaminophen**	0.0080	U	ug/L	P367470	
		Endothall**	0.25	U	ug/L	P367852	
		Acetamiprid**	0.0020	UJ	ug/L	P367470	
		Glufosinate**	0.10	U	ug/L	P367852	
		Glyphosate**	0.10	U	ug/L	P367852	
		Afidopyropen**	0.0020	UJ	ug/L	P367470	
		Bentazon	8.0E-04	U	ug/L	P367470	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P367470	
		Carbamazepine**	8.0E-04	U	ug/L	P367470	
		Clothianidin**	0.0020	UJ	ug/L	P367470	
		Dinotefuran**	0.0020	UJ	ug/L	P367470	
		Diuron	0.0020	U	ug/L	P367470	
		Fenuron	0.016	U	ug/L	P367470	
		Fluridone**	8.0E-04	U	ug/L	P367470	
		Imazapyr**	0.0040	U	ug/L	P367470	
		Hydrocodone**	0.0020	U	ug/L	P367470	
		Ibuprofen**	0.020	U	ug/L	P367470	
		Imidacloprid	0.0020	U	ug/L	P367470	MS

Field ID: FB072319

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105482	EPA 8321B	Linuron	0.0040	U	ug/L	P367470	
		Mandestrobin**	0.0020	UJ	ug/L	P367470	
		MCP	0.0020	U	ug/L	P367470	MS
		Naproxen**	0.0080	U	ug/L	P367470	
		Primidone**	0.0040	U	ug/L	P367470	
		Pyraclostrobin**	0.0020	U	ug/L	P367470	
		Thiamethoxam**	0.0020	UJ	ug/L	P367470	
		Tolfenpyrad**	0.0020	UJ	ug/L	P367470	
		Triclopyr**	0.0040	U	ug/L	P367470	
2105488	EPA 8270E	Aldrin	4.1	U	ng/L	P368103	
		Alpha-BHC	2.1	U	ng/L	P368103	
		Alpha-Chlordane	1.0	U	ng/L	P368103	
		Beta-BHC	10	U	ng/L	P368103	
		Bifenthrin**	4.1	U	ng/L	P368103	
		Delta-BHC	8.3	U	ng/L	P368103	
		Gamma-BHC	8.3	U	ng/L	P368103	
		Carbophenothion	10	U	ng/L	P368103	
		Chlorothalonil	2.1	U	ng/L	P368103	
		Cis-Nonachlor**	1.0	U	ng/L	P368103	
		Cypermethrin	21	U	ng/L	P368103	
		DDD-p,p'	6.2	U	ng/L	P368103	
		DDE-p,p'	6.2	U	ng/L	P368103	
		DDT-p,p'	7.3	U	ng/L	P368103	
		Dicofol	31	U	ng/L	P368103	
		Dieldrin	4.1	U	ng/L	P368103	
		Endosulfan I	4.1	U	ng/L	P368103	
		Endosulfan II	4.1	U	ng/L	P368103	
		Endosulfan Sulfate	2.1	U	ng/L	P368103	
		Endrin	2.1	U	ng/L	P368103	
		Endrin Aldehyde	2.1	U	ng/L	P368103	
		Endrin Ketone	2.1	U	ng/L	P368103	
		Ethalfuralin**	3.1	U	ng/L	P368103	
		Gamma-Chlordane	1.0	U	ng/L	P368103	
		Heptachlor	1.6	U	ng/L	P368103	
		Heptachlor Epoxide	2.1	U	ng/L	P368103	
		Hexachlorobenzene	2.1	U	ng/L	P368103	
		Methoxychlor	4.1	U	ng/L	P368103	
		Mirex	2.1	U	ng/L	P368103	
		Permethrin	10	U	ng/L	P368103	
		Trans-Nonachlor**	1.0	U	ng/L	P368103	
		Trifluralin	2.6	U	ng/L	P368103	
	EPA 8276	Chlordane	5.2	U	ng/L	P368103	
		Toxaphene	31	U	ng/L	P368103	
2105489	EPA 8270E	Acetochlor	0.25	U	ng/L	P367888	
		Alachlor	0.25	U	ng/L	P367888	

Field ID: FB072319

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105489	EPA 8270E	Ametryn	0.60	U	ng/L	P367888	
		Atrazine	0.25	U	ng/L	P367888	
		Atrazine Desethyl	1.5	UJ	ng/L	P367888	MS, RPD
		Azinphos Methyl	5.0	U	ng/L	P367888	
		Bromacil	0.50	U	ng/L	P367888	
		Butylate	0.40	U	ng/L	P367888	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P367888	
		Chlorpyrifos Methyl	0.10	U	ng/L	P367888	
		Cyanazine	3.3	UJ	ng/L	P367888	RPD
		Demeton	7.0	UJ	ng/L	P367888	RPD
		Diazinon	0.13	U	ng/L	P367888	
		Dimethenamid**	0.10	U	ng/L	P367888	
		Disulfoton	0.50	UJ	ng/L	P367888	LCS, RPD
		Dithiopyr**	0.10	U	ng/L	P367888	
		EPTC	1.3	U	ng/L	P367888	
		Ethion	0.15	UJ	ng/L	P367888	RPD
		Ethoprop	0.10	U	ng/L	P367888	
		Fenamiphos	0.50	U	ng/L	P367888	
		Fipronil	0.25	U	ng/L	P367888	
		Fipronil Desulfinyl**	0.13	U	ng/L	P367888	
		Fipronil Sulfide	0.15	U	ng/L	P367888	
		Fipronil Sulfone	0.15	U	ng/L	P367888	
		Fonofos	0.20	U	ng/L	P367888	
		Hexazinone	0.50	U	ng/L	P367888	
		Malathion	0.35	U	ng/L	P367888	
		Metalaxyl	0.30	U	ng/L	P367888	
		Metolachlor	0.50	U	ng/L	P367888	
		Metribuzin	0.75	UJ	ng/L	P367888	MS, RPD
		Mevinphos	0.50	U	ng/L	P367888	
		Molinate	0.30	U	ng/L	P367888	
		Norflurazon	0.50	U	ng/L	P367888	
		Oxadiazon**	0.10	U	ng/L	P367888	
		Parathion Ethyl	0.25	U	ng/L	P367888	
		Parathion Methyl	0.55	U	ng/L	P367888	
		Pendimethalin	1.0	U	ng/L	P367888	
		Phorate	0.25	U	ng/L	P367888	
		Prodiamine**	0.18	U	ng/L	P367888	
		Prometon	0.91	U	ng/L	P367888	
		Prometryn	0.20	U	ng/L	P367888	MS, RPD
		Simazine	0.50	U	ng/L	P367888	
		Tebuconazole**	0.50	UJ	ng/L	P367888	RPD
		Terbufos	0.10	U	ng/L	P367888	
		Terbutylazine	0.43	U	ng/L	P367888	
2105493	EPA 200.7 Rev. 4.4	Iron	30	U	ug/L	P367921	
		Manganese	1.0	U	ug/L	P367921	

Field ID: FB072319

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105493	EPA 200.7 Rev. 4.4	Zinc	5.0	U	ug/L	P367921	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P367921	
		Antimony	0.050	U	ug/L	P367921	
		Arsenic	0.050	U	ug/L	P367921	
		Cadmium	0.020	U	ug/L	P367921	
		Chromium	0.40	U	ug/L	P367921	
		Copper	0.40	U	ug/L	P367921	
		Lead	0.20	U	ug/L	P367921	
		Nickel	0.50	U	ug/L	P367921	
		Selenium	0.20	U	ug/L	P367921	
		Silver	0.010	U	ug/L	P367921	
		Thallium	0.10	U	ug/L	P367921	

Ref. Method and Comment:

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

SM 4500 F-C-97: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

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

EPA 8270E: MS accuracy for bromacil 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: OPEN CREEK 0.5 MI UPSTREAM OF MOUTH

Collection Date/Time: 07/23/2019 09:55

Field ID: G2NE1186

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105458	EPA 180.1 Rev. 2.0	Turbidity	9.3	A	NTU	P367856	
	EPA 300.0	Bromide	40		mg Br/L	P367963	
	SM 2320 B-97	Total Alkalinity	115		mg CaCO3/L	P368376	
	SM 2540 D-97	TSS	13	Q	mg/L	P368399	
	SM 4500 F-C-97	Fluoride	0.74		mg F/L	P368238	
2105459	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P368343	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.83		mg N/L	P368008	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.014		mg N/L	P367876	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P367982	
	SM 5310 B-00	Organic Carbon	8.8		mg C/L	P367970	
2105460	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.046		mg P/L	P367844	
2105480	EPA 8321B	2,4-D	0.0086		ug/L	P367470	
		Acesulfame K**	0.10	UJ	ug/L	P367852	SUR
		AMPA**	0.10	UJ	ug/L	P367852	MS, SUR
		Sucralose**	0.45		ug/L	P367852	
		Acetaminophen**	0.0080	U	ug/L	P367470	
		Endothall**	0.25	UJ	ug/L	P367852	SUR
		Acetamiprid**	0.0020	UJ	ug/L	P367470	
		Glufosinate**	0.10	UJ	ug/L	P367852	SUR
		Glyphosate**	0.10	UJ	ug/L	P367852	SUR
		Afidopyropen**	0.0020	UJ	ug/L	P367470	
		Bentazon	0.033		ug/L	P367470	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P367470	
		Carbamazepine**	8.0E-04	U	ug/L	P367470	
		Clothianidin**	0.0030	IJ	ug/L	P367470	
		Dinotefuran**	0.0020	UJ	ug/L	P367470	
		Diuron	0.0094		ug/L	P367470	
		Fenuron	0.016	U	ug/L	P367470	
		Fluridone**	0.12		ug/L	P367470	
		Imazapyr**	0.084		ug/L	P367470	
		Hydrocodone**	0.0020	U	ug/L	P367470	
		Ibuprofen**	0.020	U	ug/L	P367470	
		Imidacloprid	0.013		ug/L	P367470	MS
		Linuron	0.0040	U	ug/L	P367470	
		Mandestrobin**	0.0020	UJ	ug/L	P367470	
		MCP	0.0020	U	ug/L	P367470	MS
		Naproxen**	0.0080	U	ug/L	P367470	
		Primidone**	0.0040	U	ug/L	P367470	
		Pyraclostrobin**	0.0020	U	ug/L	P367470	
		Thiamethoxam**	0.0020	UJ	ug/L	P367470	
		Tolfenpyrad**	0.0020	UJ	ug/L	P367470	
		Triclopyr**	0.0040	U	ug/L	P367470	
2105492	EPA 200.7 Rev. 4.4	Iron	180	I	ug/L	P368222	

Field ID: G2NE1186

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2105492	EPA 200.7 Rev. 4.4	Manganese	33		ug/L	P368222	
		Zinc	20	U	ug/L	P368222	
	EPA 200.8 Rev. 5.4	Aluminum	210		ug/L	P368222	
		Antimony	0.20	U	ug/L	P368222	
		Arsenic	4.64		ug/L	P368222	
		Cadmium	0.080	U	ug/L	P368222	
		Chromium	4.0	U	ug/L	P368222	
		Copper	1.6	I	ug/L	P368222	
		Lead	0.80	U	ug/L	P368222	
		Nickel	5.0	U	ug/L	P368222	
		Selenium	2.0	U	ug/L	P368222	
		Silver	0.040	U	ug/L	P368222	
		Thallium	0.40	U	ug/L	P368222	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample reanalyzed out of holding time because of analytical difficulties.

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8321B: Refer to the narrative for an explanation of QC Codes. Surrogate spike recovery exceeding the control limits. Results confirmed in sample duplicate.

EPA 200.7 Rev. 4.4: The sample required dilution due to matrix interference.

EPA 200.8 Rev. 5.4: The sample required dilution due to matrix interference.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P367856

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P367921

Component	Result	Code	Units
Iron	30	U	ug/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P368222

Component	Result	Code	Units
Iron	30	U	ug/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P367921

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368222

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0
Batch ID: P367963

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368343

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368533

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368008

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368012

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368084

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367876

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367986

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367889

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367982

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P367843

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P367844

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

Reference Method: EPA 8270E
Batch ID: P367888

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P367888

Component	Result	Code	Units
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P368103

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8276
Batch ID: P368103

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

Reference Method: EPA 8321B
Batch ID: P367470

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: P367818

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

Reference Method: EPA 8321B
Batch ID: P367852

Component	Result	Code	Units
-----------	--------	------	-------

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P367852

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

Reference Method: SM 2320 B-97
Batch ID: P367975

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

Reference Method: SM 2320 B-97
Batch ID: P368376

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

Reference Method: SM 2540 D-97
Batch ID: P368004

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P368399

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P367977

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P368238

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P367969

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

Quality Assurance Report Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P367970

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: P367921

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	101		P	85 - 115
Manganese	97.9		P	85 - 115
Zinc	95.8		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P368222

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	104		P	85 - 115
Manganese	100		P	85 - 115
Zinc	98.4		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P367921

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	93.0		P	85 - 115
Arsenic	103		P	85 - 115
Cadmium	99.3		P	85 - 115
Chromium	95.4		P	85 - 115
Copper	100		P	85 - 115
Lead	94.3		P	85 - 115
Nickel	101		P	85 - 115
Selenium	103		P	85 - 115
Silver	93.8		P	85 - 115
Thallium	99.3		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368222

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	99.5		P	85 - 115
Arsenic	101		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	97.5		P	85 - 115
Copper	97.7		P	85 - 115
Lead	102		P	85 - 115
Nickel	99.6		P	85 - 115
Selenium	96.0		P	85 - 115
Silver	103		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0
Batch ID: P367963

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bromide	95.2		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368343

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368533

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368008

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368012

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368084

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367876

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367986

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367889

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.1		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367982

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P367843

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P367844

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

Reference Method: EPA 8270E
Batch ID: P367888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	81.8	90.5	P/P	69 - 122
Alachlor	80.5	89.5	P/P	71 - 120
Ametryn	79.2	84.3	P/P	47 - 138
Atrazine	98.1	92.7	P/P	74 - 124
Atrazine Desethyl	137	71.0	P/P	38 - 138
Azinphos Methyl	100	89.9	P/P	69 - 154
Bromacil	67.7	60.6	P/P	39 - 121
Butylate	55.8	55.0	P/P	27 - 87.0
Chlorpyrifos Ethyl	88.4	92.5	P/P	69 - 118
Chlorpyrifos Methyl	94.6	89.1	P/P	70 - 120
Cyanazine	207	119	P/P	20 - 250
Demeton	81.8	50.2	P/P	39 - 118
Diazinon	92.8	87.7	P/P	68 - 127
Dimethenamid	72.3	90.7	P/P	66 - 125
Disulfoton	85.3	48.7	P/F	52 - 126
Dithiopyr	84.4	93.4	P/P	67 - 127
EPTC	55.5	58.8	P/P	24 - 88.0
Ethion	57.2	93.7	P/P	51 - 132
Ethoprop	96.2	80.2	P/P	58 - 117
Fenamiphos	87.2	81.5	P/P	38 - 139
Fipronil	84.0	87.9	P/P	61 - 124
Fipronil Desulfinyl	78.1	82.9	P/P	47 - 120
Fipronil Sulfide	88.6	88.0	P/P	56 - 119
Fipronil Sulfone	79.6	86.2	P/P	50 - 117
Fonofos	103	82.6	P/P	60 - 121
Hexazinone	91.7	102	P/P	55 - 137
Malathion	90.2	88.1	P/P	66 - 126
Metaxyl	89.6	91.7	P/P	33 - 140
Metolachlor	82.5	90.3	P/P	69 - 119
Metribuzin	237	82.8	P/P	31 - 238
Mevinphos	92.9	75.8	P/P	42 - 113
Molinate	62.3	64.3	P/P	32 - 96.0
Norflurazon	84.7	88.0	P/P	54 - 123
Oxadiazon	87.0	94.4	P/P	63 - 128
Parathion Ethyl	88.0	88.5	P/P	72 - 111
Parathion Methyl	103	91.5	P/P	74 - 126
Pendimethalin	81.1	80.5	P/P	61 - 131
Phorate	82.0	66.4	P/P	51 - 115
Prodiamine	64.0	73.2	P/P	38 - 144
Prometon	78.8	84.8	P/P	54 - 119

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P367888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prometryn	82.6	87.0	P/P	63 - 120
Simazine	108	94.2	P/P	75 - 126
Tebuconazole	36.0	60.1	P/P	20 - 119
Terbufos	94.6	75.0	P/P	64 - 116
Terbutylazine	92.4	90.8	P/P	73 - 117

Reference Method: EPA 8270E
Batch ID: P368103

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	58.2	58.6	P/P	20 - 93.0
Alpha-BHC	107	102	P/P	57 - 119
Alpha-Chlordane	78.5	77.5	P/P	58 - 112
Beta-BHC	111	101	P/P	56 - 149
Bifenthrin	82.4	77.4	P/P	30 - 134
Carbophenothion	26.4	33.1	P/P	26 - 147
Chlorothalonil	117	117	P/P	20 - 155
Cis-Nonachlor	76.5	76.1	P/P	54 - 115
Cypermethrin	82.6	78.1	P/P	40 - 137
DDD-p,p'	84.3	83.7	P/P	65 - 129
DDE-p,p'	79.6	77.8	P/P	57 - 116
DDT-p,p'	104	97.7	P/P	53 - 133
Delta-BHC	112	105	P/P	59 - 163
Dicofol	79.1	73.4	P/P	24 - 138
Dieldrin	82.2	83.0	P/P	60 - 120
Endosulfan I	82.9	84.2	P/P	64 - 118
Endosulfan II	86.1	87.7	P/P	58 - 142
Endosulfan Sulfate	78.5	73.6	P/P	60 - 127
Endrin	79.6	87.0	P/P	59 - 122
Endrin Aldehyde	81.3	82.9	P/P	49 - 132
Endrin Ketone	79.9	74.3	P/P	64 - 121
Ethalfuralin	95.7	92.1	P/P	60 - 126
Gamma-BHC	118	110	P/P	56 - 141
Gamma-Chlordane	77.4	75.7	P/P	56 - 110
Heptachlor	71.9	72.5	P/P	46 - 96.0
Heptachlor Epoxide	79.7	80.2	P/P	61 - 112
Hexachlorobenzene	75.4	68.1	P/P	44 - 98.0
Methoxychlor	110	106	P/P	63 - 134
Mirex	65.1	57.6	P/P	45 - 100
Permethrin	72.8	69.4	P/P	53 - 115
Trans-Nonachlor	75.7	74.6	P/P	47 - 110
Trifluralin	95.6	87.7	P/P	39 - 142

Reference Method: EPA 8276
Batch ID: P368103

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	83.1	86.7	P/P	43 - 128
Toxaphene	68.4	73.8	P/P	38 - 140

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P367470

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	143		P	40 - 150
Acetaminophen	95.8		P	30 - 150
Acetamiprid	101		P	40 - 150
Afidopyropen	89.0		P	40 - 150
Bentazon	127		P	30 - 150
Benzovindiflupyr	107		P	40 - 150
Carbamazepine	94.4		P	40 - 150
Clothianidin	107		P	40 - 150
Dinotefuran	106		P	40 - 150
Diuron	101		P	40 - 150
Fenuron	107		P	40 - 150
Fluridone	102		P	40 - 150
Hydrocodone	106		P	40 - 150
Ibuprofen	93.4		P	30 - 150
Imazapyr	93.8		P	40 - 150
Imidacloprid	101		P	40 - 150
Linuron	84.6		P	40 - 150
Mandestrobin	104		P	40 - 150
MCPP	145		P	40 - 150
Naproxen	106		P	40 - 150
Primidone	91.6		P	40 - 150
Pyraclostrobin	95.4		P	30 - 150
Thiamethoxam	105		P	40 - 150
Tolfenpyrad	64.4		P	40 - 150
Triclopyr	93.0		P	30 - 150

Reference Method: EPA 8321B
Batch ID: P367818

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	108		P	40 - 150
Aldicarb	108		P	30 - 150
Aldicarb Sulfone	115		P	40 - 150
Aldicarb Sulfoxide	109		P	40 - 150
Carbaryl	95.8		P	40 - 150
Carbofuran	95.4		P	40 - 150
Methiocarb	89.4		P	40 - 150
Methomyl	94.2		P	40 - 150
Oxamyl	109		P	40 - 150
Propoxur	91.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P367852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	133		P	40 - 150
AMPA	81.2		P	40 - 150
Endothall	97.0		P	40 - 150
Glufosinate	78.4		P	40 - 150
Glyphosate	67.8		P	40 - 140
Sucralose	77.0		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P367975

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

Reference Method: SM 2320 B-97
Batch ID: P368376

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P367977

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.6		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P368238

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.5		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P367969

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P367970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P367921

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105067	Iron	102		P	80 - 120
2105067	Manganese	96.7		P	80 - 120
2105067	Zinc	96.4		P	80 - 120
2105320	Iron	106	107	P/P	80 - 120
2105320	Manganese	101	101	P/P	80 - 120
2105320	Zinc	101	101	P/P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P368222

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105061	Iron	99.1		P	70 - 130
2105061	Manganese	93.9		P	70 - 130
2105061	Zinc	101		P	70 - 130
2106936	Iron	98.3	97.6	P/P	70 - 130
2106936	Manganese	93.9	94.0	P/P	70 - 130
2106936	Zinc	99.4	100	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P367921

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105067	Aluminum	98.7		P	80 - 120
2105067	Antimony	95.1		P	80 - 120
2105067	Arsenic	104		P	80 - 120
2105067	Cadmium	100		P	80 - 120
2105067	Chromium	93.1		P	80 - 120
2105067	Copper	97.2		P	80 - 120
2105067	Lead	95.8		P	80 - 120
2105067	Nickel	97.6		P	80 - 120
2105067	Selenium	99.7		P	80 - 120
2105067	Silver	92.6		P	80 - 120
2105067	Thallium	103		P	80 - 120
2105320	Aluminum	99.8	97.5	P/P	80 - 120
2105320	Antimony	94.2	93.0	P/P	80 - 120
2105320	Arsenic	105	104	P/P	80 - 120
2105320	Cadmium	98.8	96.1	P/P	80 - 120
2105320	Chromium	92.9	91.1	P/P	80 - 120
2105320	Copper	99.4	98.3	P/P	80 - 120
2105320	Lead	97.0	94.2	P/P	80 - 120
2105320	Nickel	98.6	97.2	P/P	80 - 120
2105320	Selenium	99.7	97.9	P/P	80 - 120
2105320	Silver	93.4	92.4	P/P	80 - 120
2105320	Thallium	103	100	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368222

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105061	Aluminum	113		P	70 - 130
2105061	Antimony	107		P	70 - 130
2105061	Arsenic	117		P	70 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368222

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105061	Cadmium	102		P	70 - 130
2105061	Chromium	91.0		P	70 - 130
2105061	Copper	71.5		P	70 - 130
2105061	Lead	110		P	70 - 130
2105061	Nickel	107		P	70 - 130
2105061	Selenium	101		P	70 - 130
2105061	Silver	101		P	70 - 130
2105061	Thallium	109		P	70 - 130
2106936	Aluminum	98.7	92.0	P/P	70 - 130
2106936	Antimony	101	94.5	P/P	70 - 130
2106936	Arsenic	108	102	P/P	70 - 130
2106936	Cadmium	99.2	93.5	P/P	70 - 130
2106936	Chromium	91.1	86.3	P/P	70 - 130
2106936	Copper	98.7	94.3	P/P	70 - 130
2106936	Lead	101	94.1	P/P	70 - 130
2106936	Nickel	98.1	94.1	P/P	70 - 130
2106936	Selenium	103	101	P/P	80 - 120
2106936	Silver	97.4	93.3	P/P	70 - 130
2106936	Thallium	100	94.3	P/P	70 - 130

Reference Method: EPA 300.0
Batch ID: P367963

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105130	Bromide	92.9		P	90 - 110
2105217	Bromide	91.3	91.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105376	Ammonia-N	98.9	96.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368533

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105366	Ammonia-N	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368008

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105219	Kjeldahl Nitrogen	102	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368012

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105424	Kjeldahl Nitrogen	98.6	90.7	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368084

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105395	Kjeldahl Nitrogen	98.4	97.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367876

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105397	NO2NO3-N	100	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367986

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105350	NO2NO3-N	98.4	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367889

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105350	Total-P	105	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367982

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105395	Total-P	97.6	93.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P367843

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105591	O-Phosphate-P	96.8	97.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P367844

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105456	O-Phosphate-P	95.2	93.7	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P367888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105849	Acetochlor	74.6	85.2	P/P	63 - 129
2105849	Alachlor	74.0	80.1	P/P	65 - 127
2105849	Ametryn	63.1	84.2	P/P	40 - 164
2105849	Atrazine	94.2	111	P/P	66 - 135
2105849	Atrazine Desethyl	116	160	P/F	14 - 157
2105849	Azinphos Methyl	73.8	93.8	P/P	49 - 180
2105849	Butylate	49.8	52.9	P/P	10 - 94.0
2105849	Chlorpyrifos Ethyl	85.0	92.9	P/P	58 - 123
2105849	Chlorpyrifos Methyl	86.4	94.6	P/P	58 - 125
2105849	Cyanazine	179	185	P/P	24 - 253

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P367888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105849	Demeton	78.8	90.3	P/P	25 - 149
2105849	Diazinon	85.8	97.2	P/P	59 - 144
2105849	Dimethenamid	62.8	68.9	P/P	46 - 139
2105849	Disulfoton	87.1	94.2	P/P	54 - 132
2105849	Dithiopyr	71.9	83.4	P/P	64 - 130
2105849	EPTC	51.0	50.7	P/P	10 - 92.0
2105849	Ethion	52.5	51.5	P/P	30 - 148
2105849	Ethoprop	94.5	99.2	P/P	50 - 130
2105849	Fenamiphos	75.6	78.3	P/P	49 - 142
2105849	Fipronil	72.6	88.1	P/P	46 - 140
2105849	Fipronil Desulfinyl	64.1	78.0	P/P	30 - 121
2105849	Fipronil Sulfide	79.5	95.4	P/P	31 - 136
2105849	Fipronil Sulfone	70.2	89.9	P/P	16 - 136
2105849	Fonofos	103	110	P/P	55 - 129
2105849	Hexazinone	86.7	94.8	P/P	56 - 141
2105849	Malathion	83.3	99.3	P/P	56 - 135
2105849	Metaxyl	76.2	88.3	P/P	54 - 135
2105849	Metolachlor	70.0	85.0	P/P	51 - 140
2105849	Metribuzin	214	261	P/F	45 - 254
2105849	Mevinphos	88.0	104	P/P	33 - 131
2105849	Molinate	58.2	52.7	P/P	14 - 98.0
2105849	Norflurazon	71.8	84.2	P/P	34 - 136
2105849	Oxadiazon	74.5	84.4	P/P	67 - 116
2105849	Parathion Ethyl	83.3	98.5	P/P	66 - 118
2105849	Parathion Methyl	94.8	109	P/P	64 - 136
2105849	Pendimethalin	89.0	96.8	P/P	59 - 144
2105849	Phorate	88.4	101	P/P	42 - 130
2105849	Prodiamine	47.0	59.2	P/P	42 - 148
2105849	Prometon	78.4	97.0	P/P	59 - 134
2105849	Prometryn	53.1	77.1	F/P	54 - 135
2105849	Simazine	100	116	P/P	53 - 156
2105849	Tebuconazole	30.5	30.9	P/P	10 - 131
2105849	Terbufos	96.0	112	P/P	57 - 131
2105849	Terbuthylazine	82.4	96.4	P/P	68 - 125

Reference Method: EPA 8270E
Batch ID: P368103

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106131	Aldrin	62.0	61.0	P/P	25 - 92.0
2106131	Alpha-BHC	112	114	P/P	49 - 130
2106131	Alpha-Chlordane	76.8	77.4	P/P	50 - 115
2106131	Beta-BHC	118	113	P/P	43 - 157
2106131	Bifenthrin	83.9	84.2	P/P	46 - 116
2106131	Carbophenothion	98.2	75.3	P/P	27 - 180
2106131	Chlorothalonil	140	151	P/P	10 - 216
2106131	Cis-Nonachlor	75.3	75.2	P/P	55 - 112
2106131	Cypermethrin	83.5	84.1	P/P	40 - 153
2106131	DDD-p,p'	84.7	85.6	P/P	53 - 128
2106131	DDE-p,p'	79.1	79.8	P/P	48 - 116
2106131	DDT-p,p'	104	101	P/P	47 - 128
2106131	Delta-BHC	122	119	P/P	51 - 196

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P368103

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106131	Dicofol	73.9	81.9	P/P	10 - 147
2106131	Dieldrin	80.4	80.5	P/P	48 - 128
2106131	Endosulfan I	94.2	88.3	P/P	58 - 126
2106131	Endosulfan II	91.5	93.2	P/P	50 - 150
2106131	Endosulfan Sulfate	79.5	81.5	P/P	56 - 130
2106131	Endrin	85.2	88.6	P/P	50 - 126
2106131	Endrin Aldehyde	79.6	76.5	P/P	12 - 145
2106131	Endrin Ketone	79.9	78.9	P/P	59 - 132
2106131	Ethalfuralin	96.6	100	P/P	65 - 122
2106131	Gamma-BHC	114	117	P/P	50 - 155
2106131	Gamma-Chlordane	75.2	75.3	P/P	50 - 112
2106131	Heptachlor	72.3	73.2	P/P	41 - 98.0
2106131	Heptachlor Epoxide	79.3	79.3	P/P	55 - 117
2106131	Hexachlorobenzene	75.7	76.3	P/P	47 - 91.0
2106131	Methoxychlor	108	116	P/P	55 - 133
2106131	Mirex	64.9	64.1	P/P	44 - 101
2106131	Permethrin	73.7	73.6	P/P	52 - 124
2106131	Trans-Nonachlor	75.0	74.4	P/P	53 - 99.0
2106131	Trifluralin	96.9	95.4	P/P	10 - 201

Reference Method: EPA 8276
Batch ID: P368103

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105642	Chlordane	57.1		P	34 - 136
2105642	Toxaphene	46.8		P	22 - 152

Reference Method: EPA 8321B
Batch ID: P367470

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105151	Acetaminophen	98.2	96.3	P/P	30 - 150
2105151	Acetamiprid	89.6	86.3	P/P	40 - 150
2105151	Afidopyropen	84.0	76.5	P/P	40 - 150
2105151	Benzovindiflupyr	93.7	95.7	P/P	40 - 150
2105151	Carbamazepine	76.3	78.4	P/P	40 - 150
2105151	Clothianidin	95.2	98.5	P/P	40 - 150
2105151	Dinotefuran	99.5	112	P/P	40 - 150
2105151	Diuron	78.9	76.1	P/P	40 - 150
2105151	Fenuron	74.2	69.5	P/P	40 - 150
2105151	Fluridone	87.0	90.5	P/P	40 - 150
2105151	Hydrocodone	99.4	83.9	P/P	40 - 150
2105151	Ibuprofen	101	101	P/P	30 - 150
2105151	Imazapyr	78.7	80.9	P/P	40 - 150
2105151	Imidacloprid	164	175	F/F	40 - 150
2105151	Linuron	75.8	75.4	P/P	40 - 150
2105151	Mandestrobin	90.6	87.3	P/P	40 - 150
2105151	MCPP	197	202	F/F	40 - 150
2105151	Naproxen	111	121	P/P	40 - 150
2105151	Primidone	90.4	94.5	P/P	40 - 150
2105151	Pyraclostrobin	87.9	88.6	P/P	30 - 150
2105151	Thiamethoxam	118	126	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P367470

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105151	Tolfenpyrad	64.3	60.0	P/P	40 - 150
2105151	Triclopyr	113	125	P/P	30 - 150

Reference Method: EPA 8321B
Batch ID: P367818

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105476	3-Hydroxycarbofuran	104	115	P/P	40 - 150
2105476	Aldicarb	102	109	P/P	30 - 150
2105476	Aldicarb Sulfone	109	116	P/P	40 - 150
2105476	Aldicarb Sulfoxide	85.7	55.0	P/P	40 - 150
2105476	Carbaryl	76.8	84.9	P/P	40 - 150
2105476	Carbofuran	75.2	83.0	P/P	40 - 150
2105476	Methiocarb	72.2	85.7	P/P	40 - 150
2105476	Methomyl	70.1	81.6	P/P	40 - 150
2105476	Oxamyl	99.0	107	P/P	40 - 150
2105476	Propoxur	72.5	82.9	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P367852

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105151	Acesulfame K	65.5	70.8	P/P	40 - 150
2105151	AMPA	32.1	30.9	F/F	40 - 150
2105151	Endothall	83.2	91.4	P/P	40 - 150
2105151	Glufosinate	48.8	48.3	P/P	40 - 150
2105151	Glyphosate	66.1	65.1	P/P	40 - 140
2105151	Sucralose	129	125	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P368238

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106005	Fluoride	93.5	95.0	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P367969

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105514	Organic Carbon	98.0	97.8	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P367970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105459	Organic Carbon	100	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P367856

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105458	Turbidity	1.19	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P367921

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105320	Iron	0.544	Spike	P	0 - 20
2105320	Manganese	0.223	Spike	P	0 - 20
2105320	Zinc	0.0139	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P368222

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106936	Iron	0.714	Spike	P	0 - 20
2106936	Manganese	0.122	Spike	P	0 - 20
2106936	Zinc	0.644	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P367921

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105320	Aluminum	1.81	Spike	P	0 - 20
2105320	Antimony	1.27	Spike	P	0 - 20
2105320	Arsenic	1.27	Spike	P	0 - 20
2105320	Cadmium	2.78	Spike	P	0 - 20
2105320	Chromium	1.87	Spike	P	0 - 20
2105320	Copper	1.12	Spike	P	0 - 20
2105320	Lead	2.92	Spike	P	0 - 20
2105320	Nickel	1.40	Spike	P	0 - 20
2105320	Selenium	1.77	Spike	P	0 - 20
2105320	Silver	1.03	Spike	P	0 - 20
2105320	Thallium	2.46	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368222

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106936	Aluminum	7.02	Spike	P	0 - 20
2106936	Antimony	6.76	Spike	P	0 - 20
2106936	Arsenic	5.47	Spike	P	0 - 20
2106936	Cadmium	5.91	Spike	P	0 - 20
2106936	Chromium	5.31	Spike	P	0 - 20
2106936	Copper	4.59	Spike	P	0 - 20
2106936	Lead	6.75	Spike	P	0 - 20
2106936	Nickel	4.18	Spike	P	0 - 20
2106936	Selenium	1.97	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368222

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106936	Silver	4.29	Spike	P	0 - 20
2106936	Thallium	5.85	Spike	P	0 - 20

Reference Method: EPA 300.0
Batch ID: P367963

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105217	Bromide	0.403	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105376	Ammonia-N	1.66	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368533

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105366	Ammonia-N	0.890	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368008

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105219	Kjeldahl Nitrogen	1.23	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368012

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105424	Kjeldahl Nitrogen	4.23	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368084

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105395	Kjeldahl Nitrogen	1.00	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367876

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105397	NO2NO3-N	0.463	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P367986

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105350	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367889

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105350	Total-P	4.39	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P367982

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105395	Total-P	3.95	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P367843

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105591	O-Phosphate-P	1.13	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P367844

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105456	O-Phosphate-P	1.02	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P367888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105849	Acetochlor	13.3	Spike	P	0 - 30
2105849	Alachlor	7.98	Spike	P	0 - 30
2105849	Ametryn	28.6	Spike	P	0 - 30
2105849	Atrazine	13.3	Spike	P	0 - 30
2105849	Atrazine Desethyl	31.4	Spike	F	0 - 30
2105849	Azinphos Methyl	23.9	Spike	P	0 - 30
2105849	Bromacil	13.7	Spike	P	0 - 30
2105849	Butylate	6.12	Spike	P	0 - 30
2105849	Chlorpyrifos Ethyl	8.90	Spike	P	0 - 30
2105849	Chlorpyrifos Methyl	9.05	Spike	P	0 - 30
2105849	Cyanazine	3.00	Spike	P	0 - 30
2105849	Demeton	13.5	Spike	P	0 - 30
2105849	Diazinon	12.5	Spike	P	0 - 30
2105849	Dimethenamid	9.26	Spike	P	0 - 30
2105849	Disulfoton	7.86	Spike	P	0 - 30
2105849	Dithiopyr	14.9	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P367888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105849	EPTC	0.613	Spike	P	0 - 30
2105849	Ethion	2.05	Spike	P	0 - 30
2105849	Ethoprop	4.88	Spike	P	0 - 30
2105849	Fenamiphos	3.48	Spike	P	0 - 30
2105849	Fipronil	19.2	Spike	P	0 - 30
2105849	Fipronil Desulfinyl	19.6	Spike	P	0 - 30
2105849	Fipronil Sulfide	18.1	Spike	P	0 - 30
2105849	Fipronil Sulfone	24.6	Spike	P	0 - 30
2105849	Fonofos	6.55	Spike	P	0 - 30
2105849	Hexazinone	6.96	Spike	P	0 - 30
2105849	Malathion	17.5	Spike	P	0 - 30
2105849	Metaxyl	14.8	Spike	P	0 - 30
2105849	Metolachlor	15.8	Spike	P	0 - 30
2105849	Metribuzin	19.9	Spike	P	0 - 30
2105849	Mevinphos	16.6	Spike	P	0 - 30
2105849	Molinate	10.1	Spike	P	0 - 30
2105849	Norflurazon	15.9	Spike	P	0 - 30
2105849	Oxadiazon	12.6	Spike	P	0 - 30
2105849	Parathion Ethyl	16.8	Spike	P	0 - 30
2105849	Parathion Methyl	13.6	Spike	P	0 - 30
2105849	Pendimethalin	8.32	Spike	P	0 - 30
2105849	Phorate	13.5	Spike	P	0 - 30
2105849	Prodiamine	23.0	Spike	P	0 - 30
2105849	Prometon	21.2	Spike	P	0 - 30
2105849	Prometryn	36.9	Spike	F	0 - 30
2105849	Simazine	14.6	Spike	P	0 - 30
2105849	Tebuconazole	1.37	Spike	P	0 - 30
2105849	Terbufos	15.4	Spike	P	0 - 30
2105849	Terbutylazine	15.6	Spike	P	0 - 30
LFB	Acetochlor	10.1	LCS	P	0 - 30
LFB	Alachlor	10.6	LCS	P	0 - 30
LFB	Ametryn	6.17	LCS	P	0 - 30
LFB	Atrazine	5.60	LCS	P	0 - 30
LFB	Atrazine Desethyl	63.7	LCS	F	0 - 30
LFB	Azinphos Methyl	10.7	LCS	P	0 - 30
LFB	Bromacil	10.9	LCS	P	0 - 30
LFB	Butylate	1.44	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.51	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	6.02	LCS	P	0 - 30
LFB	Cyanazine	54.3	LCS	F	0 - 30
LFB	Demeton	47.9	LCS	F	0 - 30
LFB	Diazinon	5.65	LCS	P	0 - 30
LFB	Dimethenamid	22.5	LCS	P	0 - 30
LFB	Disulfoton	54.6	LCS	F	0 - 30
LFB	Dithiopyr	10.1	LCS	P	0 - 30
LFB	EPTC	5.67	LCS	P	0 - 30
LFB	Ethion	48.5	LCS	F	0 - 30
LFB	Ethoprop	18.1	LCS	P	0 - 30
LFB	Fenamiphos	6.80	LCS	P	0 - 30
LFB	Fipronil	4.63	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	5.92	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P367888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Fipronil Sulfide	0.723	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.96	LCS	P	0 - 30
LFB	Fonofos	22.4	LCS	P	0 - 30
LFB	Hexazinone	10.4	LCS	P	0 - 30
LFB	Malathion	2.33	LCS	P	0 - 30
LFB	Metalaxyl	2.33	LCS	P	0 - 30
LFB	Metolachlor	8.96	LCS	P	0 - 30
LFB	Metribuzin	96.4	LCS	F	0 - 30
LFB	Mevinphos	20.3	LCS	P	0 - 30
LFB	Molinate	3.29	LCS	P	0 - 30
LFB	Norflurazon	3.82	LCS	P	0 - 30
LFB	Oxadiazon	8.15	LCS	P	0 - 30
LFB	Parathion Ethyl	0.565	LCS	P	0 - 30
LFB	Parathion Methyl	11.4	LCS	P	0 - 30
LFB	Pendimethalin	0.759	LCS	P	0 - 30
LFB	Phorate	21.0	LCS	P	0 - 30
LFB	Prodiamine	13.3	LCS	P	0 - 30
LFB	Prometon	7.36	LCS	P	0 - 30
LFB	Prometryn	5.22	LCS	P	0 - 30
LFB	Simazine	13.4	LCS	P	0 - 30
LFB	Tebuconazole	50.0	LCS	F	0 - 30
LFB	Terbufos	23.1	LCS	P	0 - 30
LFB	Terbutylazine	1.67	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P368103

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106131	Aldrin	1.61	Spike	P	0 - 30
2106131	Alpha-BHC	1.97	Spike	P	0 - 30
2106131	Alpha-Chlordane	0.713	Spike	P	0 - 30
2106131	Beta-BHC	4.25	Spike	P	0 - 30
2106131	Bifenthrin	0.361	Spike	P	0 - 30
2106131	Carbophenothion	26.4	Spike	P	0 - 30
2106131	Chlorothalonil	7.28	Spike	P	0 - 30
2106131	Cis-Nonachlor	0.156	Spike	P	0 - 30
2106131	Cypermethrin	0.671	Spike	P	0 - 30
2106131	DDD-p,p'	1.03	Spike	P	0 - 30
2106131	DDE-p,p'	0.984	Spike	P	0 - 30
2106131	DDT-p,p'	3.56	Spike	P	0 - 30
2106131	Delta-BHC	2.37	Spike	P	0 - 30
2106131	Dicofol	10.3	Spike	P	0 - 30
2106131	Dieldrin	0.216	Spike	P	0 - 30
2106131	Endosulfan I	6.42	Spike	P	0 - 30
2106131	Endosulfan II	1.91	Spike	P	0 - 30
2106131	Endosulfan Sulfate	2.48	Spike	P	0 - 30
2106131	Endrin	3.90	Spike	P	0 - 30
2106131	Endrin Aldehyde	3.99	Spike	P	0 - 30
2106131	Endrin Ketone	1.18	Spike	P	0 - 30
2106131	Ethalfuralin	3.88	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P368103

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106131	Gamma-BHC	3.02	Spike	P	0 - 30
2106131	Gamma-Chlordane	0.115	Spike	P	0 - 30
2106131	Heptachlor	1.24	Spike	P	0 - 30
2106131	Heptachlor Epoxide	0.00693	Spike	P	0 - 30
2106131	Hexachlorobenzene	0.685	Spike	P	0 - 30
2106131	Methoxychlor	6.62	Spike	P	0 - 30
2106131	Mirex	1.26	Spike	P	0 - 30
2106131	Permethrin	0.0813	Spike	P	0 - 30
2106131	Trans-Nonachlor	0.817	Spike	P	0 - 30
2106131	Trifluralin	1.50	Spike	P	0 - 30
LFB	Aldrin	0.676	LCS	P	0 - 30
LFB	Alpha-BHC	5.00	LCS	P	0 - 30
LFB	Alpha-Chlordane	1.34	LCS	P	0 - 30
LFB	Beta-BHC	9.08	LCS	P	0 - 30
LFB	Bifenthrin	6.25	LCS	P	0 - 30
LFB	Carbophenothion	22.6	LCS	P	0 - 30
LFB	Chlorothalonil	0.0810	LCS	P	0 - 30
LFB	Cis-Nonachlor	0.609	LCS	P	0 - 30
LFB	Cypermethrin	5.55	LCS	P	0 - 30
LFB	DDD-p,p'	0.741	LCS	P	0 - 30
LFB	DDE-p,p'	2.37	LCS	P	0 - 30
LFB	DDT-p,p'	6.61	LCS	P	0 - 30
LFB	Delta-BHC	6.29	LCS	P	0 - 30
LFB	Dicofol	7.47	LCS	P	0 - 30
LFB	Dieldrin	0.984	LCS	P	0 - 30
LFB	Endosulfan I	1.58	LCS	P	0 - 30
LFB	Endosulfan II	1.84	LCS	P	0 - 30
LFB	Endosulfan Sulfate	6.32	LCS	P	0 - 30
LFB	Endrin	8.85	LCS	P	0 - 30
LFB	Endrin Aldehyde	1.90	LCS	P	0 - 30
LFB	Endrin Ketone	7.25	LCS	P	0 - 30
LFB	Ethalfuralin	3.84	LCS	P	0 - 30
LFB	Gamma-BHC	7.06	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.26	LCS	P	0 - 30
LFB	Heptachlor	0.857	LCS	P	0 - 30
LFB	Heptachlor Epoxide	0.640	LCS	P	0 - 30
LFB	Hexachlorobenzene	10.2	LCS	P	0 - 30
LFB	Methoxychlor	4.19	LCS	P	0 - 30
LFB	Mirex	12.3	LCS	P	0 - 30
LFB	Permethrin	4.70	LCS	P	0 - 30
LFB	Trans-Nonachlor	1.50	LCS	P	0 - 30
LFB	Trifluralin	8.61	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P368103

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlordane	4.25	LCS	P	0 - 30
LFB	Toxaphene	7.56	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P367470

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105151	2,4-D	0.987	Spike	P	0 - 30
2105151	Acetaminophen	1.98	Spike	P	0 - 30
2105151	Acetamiprid	3.78	Spike	P	0 - 30
2105151	Afidopyropen	9.35	Spike	P	0 - 30
2105151	Bentazon	3.29	Spike	P	0 - 30
2105151	Benzovindiflupyr	2.13	Spike	P	0 - 30
2105151	Carbamazepine	2.73	Spike	P	0 - 30
2105151	Clothianidin	3.21	Spike	P	0 - 30
2105151	Dinotefuran	9.24	Spike	P	0 - 30
2105151	Diuron	3.27	Spike	P	0 - 30
2105151	Fenuron	6.49	Spike	P	0 - 30
2105151	Fluridone	2.97	Spike	P	0 - 30
2105151	Hydrocodone	16.9	Spike	P	0 - 30
2105151	Ibuprofen	0.0193	Spike	P	0 - 30
2105151	Imazapyr	1.43	Spike	P	0 - 30
2105151	Imidacloprid	5.51	Spike	P	0 - 30
2105151	Linuron	0.617	Spike	P	0 - 30
2105151	Mandestrobin	3.66	Spike	P	0 - 30
2105151	MCPP	2.68	Spike	P	0 - 30
2105151	Naproxen	9.06	Spike	P	0 - 30
2105151	Primidone	4.51	Spike	P	0 - 30
2105151	Pyraclostrobin	0.821	Spike	P	0 - 30
2105151	Thiamethoxam	5.10	Spike	P	0 - 30
2105151	Tolfenpyrad	6.79	Spike	P	0 - 30
2105151	Triclopyr	9.89	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P367818

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105476	3-Hydroxycarbofuran	9.98	Spike	P	0 - 30
2105476	Aldicarb	5.96	Spike	P	0 - 30
2105476	Aldicarb Sulfone	6.62	Spike	P	0 - 30
2105476	Aldicarb Sulfoxide	43.6	Spike	F	0 - 30
2105476	Carbaryl	9.97	Spike	P	0 - 30
2105476	Carbofuran	9.87	Spike	P	0 - 30
2105476	Methiocarb	17.1	Spike	P	0 - 30
2105476	Methomyl	15.1	Spike	P	0 - 30
2105476	Oxamyl	7.92	Spike	P	0 - 30
2105476	Propoxur	13.3	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P367852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105151	Acesulfame K	7.82	Spike	P	0 - 30
2105151	AMPA	2.63	Spike	P	0 - 30
2105151	Endothall	9.40	Spike	P	0 - 30
2105151	Glufosinate	0.992	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P367852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105151	Glyphosate	1.50	Spike	P	0 - 30
2105151	Sucralose	2.51	Spike	P	0 - 30

Reference Method: SM 2320 B-97
 Batch ID: P367975

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105288	Total Alkalinity	0.922	Sample	P	0 - 2.8

Reference Method: SM 2320 B-97
 Batch ID: P368376

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106001	Total Alkalinity	1.41	Sample	P	0 - 2.8

Reference Method: SM 4500 F-C-97
 Batch ID: P367977

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105288	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-97
 Batch ID: P368238

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106005	Fluoride	0.986	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
 Batch ID: P367969

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105514	Organic Carbon	0.143	Spike	P	0 - 20

Reference Method: SM 5310 B-00
 Batch ID: P367970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105459	Organic Carbon	0.163	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
 Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Surrogates

Lab Sample ID: 2105476
Field Sample ID: G2NE1178

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	88.5	P	30 - 160

Lab Sample ID: 2105477
Field Sample ID: G2NE1178DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	81.5	P	30 - 160

Lab Sample ID: 2105478
Field Sample ID: G2NE1178

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	117	P	30 - 160
EPA 8321B	2,4-D-d3	117	P	30 - 160
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	103	P	30 - 160
EPA 8321B	Diuron-d6	91.3	P	30 - 160
EPA 8321B	Diuron-d6	91.3	P	30 - 160
EPA 8321B	Endothall-d6	449	F	30 - 160
EPA 8321B	Endothall-d6	449	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	0.0110	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	0.0110	F	30 - 160
EPA 8321B	Ibuprofen-d3	116	P	30 - 160
EPA 8321B	Ibuprofen-d3	116	P	30 - 160
EPA 8321B	Primidone-d5	113	P	30 - 160
EPA 8321B	Primidone-d5	113	P	30 - 160
EPA 8321B	Sucralose-d6	147	P	30 - 160
EPA 8321B	Sucralose-d6	147	P	30 - 160

Lab Sample ID: 2105479
Field Sample ID: G2NE1178DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	145	P	30 - 160
EPA 8321B	2,4-D-d3	145	P	30 - 160
EPA 8321B	Acetaminophen-d4	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	104	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.6	P	30 - 160
EPA 8321B	Diuron-d6	96.0	P	30 - 160
EPA 8321B	Diuron-d6	96.0	P	30 - 160
EPA 8321B	Endothall-d6	431	F	30 - 160
EPA 8321B	Endothall-d6	431	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	0.0	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	0.0	F	30 - 160
EPA 8321B	Ibuprofen-d3	118	P	30 - 160
EPA 8321B	Ibuprofen-d3	118	P	30 - 160
EPA 8321B	Primidone-d5	108	P	30 - 160
EPA 8321B	Primidone-d5	108	P	30 - 160
EPA 8321B	Sucralose-d6	155	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2105479
Field Sample ID: G2NE1178DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	155	P	30 - 160

Lab Sample ID: 2105480
Field Sample ID: G2NE1186

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	150	P	30 - 160
EPA 8321B	2,4-D-d3	150	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	106	P	30 - 160
EPA 8321B	Diuron-d6	92.5	P	30 - 160
EPA 8321B	Diuron-d6	92.5	P	30 - 160
EPA 8321B	Endothall-d6	460	F	30 - 160
EPA 8321B	Endothall-d6	460	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	0.0820	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	0.0820	F	30 - 160
EPA 8321B	Ibuprofen-d3	126	P	30 - 160
EPA 8321B	Ibuprofen-d3	126	P	30 - 160
EPA 8321B	Primidone-d5	123	P	30 - 160
EPA 8321B	Primidone-d5	123	P	30 - 160
EPA 8321B	Sucralose-d6	153	P	30 - 160
EPA 8321B	Sucralose-d6	153	P	30 - 160

Lab Sample ID: 2105481
Field Sample ID: FB072319

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	98.5	P	30 - 160

Lab Sample ID: 2105482
Field Sample ID: FB072319

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	93.1	P	30 - 160
EPA 8321B	2,4-D-d3	93.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	86.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	86.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.1	P	30 - 160
EPA 8321B	Diuron-d6	86.8	P	30 - 160
EPA 8321B	Diuron-d6	86.8	P	30 - 160
EPA 8321B	Endothall-d6	117	P	30 - 160
EPA 8321B	Endothall-d6	117	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	50.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	50.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	91.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	91.9	P	30 - 160
EPA 8321B	Primidone-d5	95.9	P	30 - 160
EPA 8321B	Primidone-d5	95.9	P	30 - 160
EPA 8321B	Sucralose-d6	96.5	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2105482
Field Sample ID: FB072319

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	96.5	P	30 - 160

Lab Sample ID: 2105484
Field Sample ID: G2NE1178

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	68.2	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	62.9	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	45.6	P	30 - 103
EPA 8276	PCNB	71.1	P	37 - 143

Lab Sample ID: 2105485
Field Sample ID: G2NE1178DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	67.7	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	62.8	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	46.3	P	30 - 103
EPA 8276	PCNB	70.3	P	37 - 143

Lab Sample ID: 2105486
Field Sample ID: G2NE1178

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	114	P	68 - 130
EPA 8270E	Terbufos-d10	118	P	61 - 136

Lab Sample ID: 2105487
Field Sample ID: G2NE1178DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	111	P	68 - 130
EPA 8270E	Terbufos-d10	114	P	61 - 136

Lab Sample ID: 2105488
Field Sample ID: FB072319

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	86.1	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	82.8	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	59.8	P	30 - 103
EPA 8276	PCNB	81.9	P	37 - 143

Lab Sample ID: 2105489
Field Sample ID: FB072319

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	98.1	P	68 - 130
EPA 8270E	Terbufos-d10	98.2	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0

Run ID: A92993

Included Lab Sample IDs: 2105452, 2105453, 2105458, 2105461

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A92997

Included Lab Sample IDs: 2105456, 2105457, 2105460, 2105463

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	98.8	P/P	90 - 110
O-Phosphate-P	98.8	98.3	P/P	90 - 110
O-Phosphate-P	99.3	98.8	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A93008

Included Lab Sample IDs: 2105452, 2105453, 2105458, 2105461

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	100	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A93017

Included Lab Sample IDs: 2105454, 2105455, 2105459

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

Reference Method: SM 5310 B-00

Run ID: A93042

Included Lab Sample IDs: 2105454, 2105455, 2105459, 2105462

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

Reference Method: SM 2320 B-97

Run ID: A93046

Included Lab Sample IDs: 2105461

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

Reference Method: SM 4500 F-C-97

Run ID: A93046

Included Lab Sample IDs: 2105461

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A93049

Included Lab Sample IDs: 2105462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A93050

Included Lab Sample IDs: 2105462

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A93076

Included Lab Sample IDs: 2105493

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

Reference Method: EPA 8321B

Run ID: A93078

Included Lab Sample IDs: 2105478, 2105479, 2105480, 2105482

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	98.9	89.2	P/P	50 - 150
3-Hydroxycarbofuran	113	112	P/P	60 - 150
Acetaminophen	115	114	P/P	60 - 160
Acetamiprid	104	101	P/P	50 - 150
Afidopyropen	96.2	97.1	P/P	50 - 150
Aldicarb	106	133	P/P	60 - 150
Aldicarb Sulfone	116	115	P/P	50 - 150
Aldicarb Sulfoxide	101	104	P/P	50 - 150
Bentazon	114	114	P/P	50 - 160
Benzovindiflupyr	116	114	P/P	50 - 150
Carbamazepine	97.5	95.7	P/P	60 - 150
Carbaryl	108	117	P/P	60 - 150
Carbofuran	113	114	P/P	50 - 150
Clothianidin	106	104	P/P	60 - 150
Dinotefuran	109	104	P/P	50 - 150
Diuron	110	110	P/P	60 - 150
Fenuron	104	103	P/P	60 - 150
Fluridone	112	116	P/P	60 - 160
Hydrocodone	105	101	P/P	60 - 150
Ibuprofen	77.6	87.4	P/P	50 - 160
Imazapyr	90.7	93.9	P/P	50 - 150
Imidacloprid	101	92.5	P/P	60 - 150
Linuron	109	107	P/P	60 - 150
Mandestrobin	104	102	P/P	50 - 150
MCPP	97.3	99.9	P/P	50 - 150
Methiocarb	106	107	P/P	50 - 150
Methomyl	104	104	P/P	50 - 150
Naproxen	123	74.9	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A93078

Included Lab Sample IDs: 2105476, 2105477, 2105481

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxamyl	118	123	P/P	50 - 150
Primidone	102	93.2	P/P	60 - 150
Propoxur	114	114	P/P	50 - 150
Pyraclostrobin	106	105	P/P	60 - 150
Thiamethoxam	94.6	93.0	P/P	50 - 150
Tolfenpyrad	96.1	92.1	P/P	60 - 150
Triclopyr	116	96.8	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A93085

Included Lab Sample IDs: 2105454, 2105459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A93094

Included Lab Sample IDs: 2105455

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

Reference Method: EPA 8321B

Run ID: A93099

Included Lab Sample IDs: 2105478, 2105479, 2105480, 2105482

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	128	122	P/P	60 - 160
Endothall	104	107	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A93102

Included Lab Sample IDs: 2105459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.3	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A93116

Included Lab Sample IDs: 2105462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	95.2	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A93119

Included Lab Sample IDs: 2105478, 2105479, 2105480, 2105482

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	77.3	89.6	P/P	60 - 160
Glufosinate	76.6	80.7	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A93119

Included Lab Sample IDs: 2105478, 2105479, 2105480, 2105482

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	83.2	88.3	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A93125

Included Lab Sample IDs: 2105454, 2105455

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.5	102	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A93148

Included Lab Sample IDs: 2105486, 2105487, 2105489

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	103		P	80 - 120
Ametryn	96.6		P	80 - 120
Atrazine	98.3		P	80 - 120
Atrazine Desethyl	104		P	80 - 120
Azinphos Methyl	96.9		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	98.1		P	80 - 120
Chlorpyrifos Ethyl	98.4		P	80 - 120
Chlorpyrifos Methyl	99.4		P	80 - 120
Cyanazine	103		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	99.8		P	80 - 120
Dimethenamid	100		P	80 - 120
Disulfoton	94.8		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	99.1		P	80 - 120
Ethion	96.4		P	80 - 120
Ethoprop	97.4		P	80 - 120
Fenamiphos	95.6		P	80 - 120
Fipronil	98.0		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	98.0		P	80 - 120
Fipronil Sulfone	97.8		P	80 - 120
Fonofos	97.9		P	80 - 120
Hexazinone	102		P	80 - 120
Malathion	95.5		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	102		P	80 - 120
Mevinphos	96.1		P	80 - 120
Molinate	93.8		P	80 - 120
Norflurazon	98.9		P	80 - 120
Oxadiazon	104		P	80 - 120
Parathion Ethyl	97.6		P	80 - 120
Parathion Methyl	96.3		P	80 - 120
Pendimethalin	99.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A93148

Included Lab Sample IDs: 2105486, 2105487, 2105489

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phorate	96.9		P	80 - 120
Prodiamine	93.1		P	80 - 120
Prometon	98.5		P	80 - 120
Prometryn	104		P	80 - 120
Simazine	94.4		P	80 - 120
Tebuconazole	99.6		P	80 - 120
Terbufos	95.4		P	80 - 120
Terbutylazine	96.4		P	80 - 120

Reference Method: SM 4500 F-C-97

Run ID: A93171

Included Lab Sample IDs: 2105452, 2105453, 2105458

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	97.6	98.1	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A93179

Included Lab Sample IDs: 2105484, 2105485, 2105488

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	92.2		P	80 - 120
Alpha-BHC	95.3		P	80 - 120
Alpha-Chlordane	89.5		P	80 - 120
Beta-BHC	94.1		P	80 - 120
Bifenthrin	92.8		P	80 - 120
Carbophenothion	106		P	80 - 120
Chlorothalonil	87.4		P	80 - 120
Cis-Nonachlor	87.9		P	80 - 120
Cypermethrin	90.2		P	80 - 120
DDD-p,p'	90.6		P	80 - 120
DDE-p,p'	90.5		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	83.9		P	80 - 120
Dicofol	99.9		P	80 - 120
Dieldrin	94.3		P	80 - 120
Endosulfan I	88.0		P	80 - 120
Endosulfan II	86.0		P	80 - 120
Endosulfan Sulfate	93.8		P	80 - 120
Endrin	90.1		P	80 - 120
Endrin Aldehyde	86.4		P	80 - 120
Endrin Ketone	95.4		P	80 - 120
Ethalfuralin	94.4		P	80 - 120
Gamma-BHC	93.8		P	80 - 120
Gamma-Chlordane	90.6		P	80 - 120
Heptachlor	89.1		P	80 - 120
Heptachlor Epoxide	89.2		P	80 - 120
Hexachlorobenzene	94.3		P	80 - 120
Methoxychlor	95.8		P	80 - 120
Mirex	95.0		P	80 - 120
Permethrin	87.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A93179

Included Lab Sample IDs: 2105484, 2105485, 2105488

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Trans-Nonachlor	88.8		P	80 - 120
Trifluralin	93.9		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A93211

Included Lab Sample IDs: 2105490, 2105491, 2105492

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	101	100	P/P	90 - 110
Manganese	102	102	P/P	90 - 110
Zinc	99.8	99.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A93214

Included Lab Sample IDs: 2105454, 2105455, 2105459

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

Reference Method: SM 2320 B-97

Run ID: A93228

Included Lab Sample IDs: 2105452, 2105453, 2105458

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	105	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A93246

Included Lab Sample IDs: 2105491, 2105492

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Zinc	100	99.6	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A93260

Included Lab Sample IDs: 2105484, 2105485, 2105488

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.1		P	80 - 120
Toxaphene	97.9		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A93262

Included Lab Sample IDs: 2105493

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	102	P/P	90 - 110
Antimony	91.0	91.1	P/P	90 - 110
Arsenic	101	100	P/P	90 - 110
Cadmium	98.6	98.8	P/P	90 - 110
Chromium	96.2	96.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A93262

Included Lab Sample IDs: 2105493

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	102	102	P/P	90 - 110
Lead	98.2	97.8	P/P	90 - 110
Nickel	102	102	P/P	90 - 110
Selenium	99.3	99.4	P/P	90 - 110
Silver	95.9	96.0	P/P	90 - 110
Thallium	97.7	95.9	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A93264

Included Lab Sample IDs: 2105478, 2105479

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	105	101	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A93301

Included Lab Sample IDs: 2105462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	105	104	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A93331

Included Lab Sample IDs: 2105478, 2105479, 2105480, 2105482

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	81.3	79.6	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A93596

Included Lab Sample IDs: 2105490, 2105491, 2105492

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	105	105	P/P	90 - 110
Aluminum	105	105	P/P	90 - 110
Aluminum	105	105	P/P	90 - 110
Antimony	96.5	97.3	P/P	90 - 110
Antimony	97.3	97.1	P/P	90 - 110
Arsenic	101	102	P/P	90 - 110
Arsenic	102	102	P/P	90 - 110
Cadmium	100	99.5	P/P	90 - 110
Cadmium	99.9	100	P/P	90 - 110
Chromium	96.3	94.5	P/P	90 - 110
Chromium	98.2	96.3	P/P	90 - 110
Copper	100	101	P/P	90 - 110
Copper	101	101	P/P	90 - 110
Lead	102	102	P/P	90 - 110
Lead	102	101	P/P	90 - 110
Nickel	100	99.8	P/P	90 - 110
Nickel	102	100	P/P	90 - 110
Nickel	99.8	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A93596

Included Lab Sample IDs: 2105490, 2105491, 2105492

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	105	105	P/P	90 - 110
Silver	105	104	P/P	90 - 110
Thallium	96.5	97.0	P/P	90 - 110
Thallium	97.0	96.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A93660

Included Lab Sample IDs: 2105490, 2105491, 2105492

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Selenium	98.9	97.3	P/P	90 - 110
Selenium	99.3	98.9	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A93666

Included Lab Sample IDs: 2105492

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	98.8	100	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							1.19	
EPA 200.7 Rev. 4.4	Iron	101		102	106	107			0.544
	Iron	104		99.1	98.3	97.6			0.714
	Manganese	97.9		96.7	101	101			0.223
	Manganese	100		93.9	93.9	94.0			0.122
	Zinc	95.8		96.4	101	101			0.0139
	Zinc	98.4		101	99.4	100			0.644
EPA 200.8 Rev. 5.4	Aluminum	100		98.7	99.8	97.5			1.81
	Aluminum	100		113	98.7	92.0			7.02
	Antimony	93.0		95.1	94.2	93.0			1.27
	Antimony	99.5		107	101	94.5			6.76
	Arsenic	103		104	105	104			1.27
	Arsenic	101		117	108	102			5.47
	Cadmium	99.3		100	98.8	96.1			2.78
	Cadmium	101		102	99.2	93.5			5.91
	Chromium	95.4		93.1	92.9	91.1			1.87
	Chromium	97.5		91.0	91.1	86.3			5.31
	Copper	100		97.2	99.4	98.3			1.12
	Copper	97.7		71.5	98.7	94.3			4.59
	Lead	94.3		95.8	97.0	94.2			2.92
	Lead	102		110	101	94.1			6.75
	Nickel	101		97.6	98.6	97.2			1.40
	Nickel	99.6		107	98.1	94.1			4.18
	Selenium	103		99.7	99.7	97.9			1.77
	Selenium	96.0		101	103	101			1.97
	Silver	93.8		92.6	93.4	92.4			1.03
	Silver	103		101	97.4	93.3			4.29
	Thallium	99.3		103	103	100			2.46
	Thallium	102		109	100	94.3			5.85
EPA 300.0	Bromide	95.2		91.3	91.8	92.9			0.403
EPA 350.1 Rev. 2.0	Ammonia-N	110		98.9	96.6				1.66
	Ammonia-N	103		103	102				0.890
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104		102	104				1.23
	Kjeldahl Nitrogen	103		90.7	98.6				4.23
	Kjeldahl Nitrogen	108		98.4	97.1				1.00
EPA 353.2 Rev. 2.0	NO2NO3-N	100		100	101				0.463
	NO2NO3-N	99.5		98.4	98.4				0.0
EPA 365.1 Rev. 2.0	Total-P	98.1		105	98.6				4.39
	Total-P	100		97.6	93.6				3.95
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.1		96.8	97.9				1.13
	O-Phosphate-P	100		95.2	93.7				1.02
EPA 8270E	Acetochlor	81.8	90.5	74.6	85.2		10.1		13.3
	Alachlor	80.5	89.5	74.0	80.1		10.6		7.98
	Aldrin	58.2	58.6	61.0	62.0		0.676		1.61
	Alpha-BHC	107	102	114	112		5.00		1.97
	Alpha-Chlordane	78.5	77.5	76.8	77.4		1.34		0.713
	Ametryn	79.2	84.3	63.1	84.2		6.17		28.6
	Atrazine	98.1	92.7	94.2	111		5.60		13.3
	Atrazine Desethyl	137	71.0	116	160		63.7		31.4
	Azinphos Methyl	100	89.9	73.8	93.8		10.7		23.9
	Beta-BHC	111	101	118	113		9.08		4.25
	Bifenthrin	82.4	77.4	83.9	84.2		6.25		0.361
	Bromacil	67.7	60.6				10.9		13.7
	Butylate	55.8	55.0	49.8	52.9		1.44		6.12

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Carbophenothion	26.4	33.1	98.2	75.3	22.6	26.4
	Chlorothalonil	117	117	140	151	0.0810	7.28
	Chlorpyrifos Ethyl	88.4	92.5	85.0	92.9	4.51	8.90
	Chlorpyrifos Methyl	94.6	89.1	86.4	94.6	6.02	9.05
	Cis-Nonachlor	76.5	76.1	75.2	75.3	0.609	0.156
	Cyanazine	207	119	179	185	54.3	3.00
	Cypermethrin	82.6	78.1	84.1	83.5	5.55	0.671
	DDD-p,p'	84.3	83.7	85.6	84.7	0.741	1.03
	DDE-p,p'	79.6	77.8	79.8	79.1	2.37	0.984
	DDT-p,p'	104	97.7	101	104	6.61	3.56
	Delta-BHC	112	105	122	119	6.29	2.37
	Demeton	81.8	50.2	78.8	90.3	47.9	13.5
	Diazinon	92.8	87.7	85.8	97.2	5.65	12.5
	Dicofol	79.1	73.4	81.9	73.9	7.47	10.3
	Dieldrin	82.2	83.0	80.5	80.4	0.984	0.216
	Dimethenamid	72.3	90.7	62.8	68.9	22.5	9.26
	Disulfoton	85.3	48.7	87.1	94.2	54.6	7.86
	Dithiopyr	84.4	93.4	71.9	83.4	10.1	14.9
	Endosulfan I	82.9	84.2	88.3	94.2	1.58	6.42
	Endosulfan II	86.1	87.7	93.2	91.5	1.84	1.91
	Endosulfan Sulfate	78.5	73.6	81.5	79.5	6.32	2.48
	Endrin	79.6	87.0	88.6	85.2	8.85	3.90
	Endrin Aldehyde	81.3	82.9	76.5	79.6	1.90	3.99
	Endrin Ketone	79.9	74.3	78.9	79.9	7.25	1.18
	EPTC	55.5	58.8	51.0	50.7	5.67	0.613
	Ethalfuralin	95.7	92.1	100	96.6	3.84	3.88
	Ethion	57.2	93.7	52.5	51.5	48.5	2.05
	Ethoprop	96.2	80.2	94.5	99.2	18.1	4.88
	Fenamiphos	87.2	81.5	75.6	78.3	6.80	3.48
	Fipronil	84.0	87.9	72.6	88.1	4.63	19.2
	Fipronil Desulfinyl	78.1	82.9	64.1	78.0	5.92	19.6
	Fipronil Sulfide	88.6	88.0	79.5	95.4	0.723	18.1
	Fipronil Sulfone	79.6	86.2	70.2	89.9	7.96	24.6
	Fonofos	103	82.6	103	110	22.4	6.55
	Gamma-BHC	118	110	114	117	7.06	3.02
	Gamma-Chlordane	77.4	75.7	75.3	75.2	2.26	0.115
	Heptachlor	71.9	72.5	73.2	72.3	0.857	1.24
	Heptachlor Epoxide	79.7	80.2	79.3	79.3	0.640	0.0069
	Hexachlorobenzene	75.4	68.1	75.7	76.3	10.2	0.685
	Hexazinone	91.7	102	86.7	94.8	10.4	6.96
	Malathion	90.2	88.1	83.3	99.3	2.33	17.5
	Metalaxyl	89.6	91.7	76.2	88.3	2.33	14.8
	Methoxychlor	110	106	108	116	4.19	6.62
	Metolachlor	82.5	90.3	70.0	85.0	8.96	15.8
	Metribuzin	237	82.8	214	261	96.4	19.9
	Mevinphos	92.9	75.8	88.0	104	20.3	16.6
	Mirex	65.1	57.6	64.9	64.1	12.3	1.26
	Molinate	62.3	64.3	58.2	52.7	3.29	10.1
	Norflurazon	84.7	88.0	71.8	84.2	3.82	15.9
	Oxadiazon	87.0	94.4	74.5	84.4	8.15	12.6
	Parathion Ethyl	88.0	88.5	83.3	98.5	0.565	16.8
	Parathion Methyl	103	91.5	94.8	109	11.4	13.6
	Pendimethalin	81.1	80.5	89.0	96.8	0.759	8.32
	Permethrin	72.8	69.4	73.7	73.6	4.70	0.0813

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Phorate	82.0	66.4	88.4	101	21.0	13.5
	Prodiamine	64.0	73.2	47.0	59.2	13.3	23.0
	Prometon	78.8	84.8	78.4	97.0	7.36	21.2
	Prometryn	82.6	87.0	53.1	77.1	5.22	36.9
	Simazine	108	94.2	100	116	13.4	14.6
	Tebuconazole	36.0	60.1	30.5	30.9	50.0	1.37
	Terbufos	94.6	75.0	96.0	112	23.1	15.4
	Terbutylazine	92.4	90.8	82.4	96.4	1.67	15.6
	Trans-Nonachlor	75.7	74.6	75.0	74.4	1.50	0.817
	Trifluralin	95.6	87.7	96.9	95.4	8.61	1.50
EPA 8276	Chlordane	83.1	86.7	57.1		4.25	
	Toxaphene	68.4	73.8	46.8		7.56	
EPA 8321B	2,4-D	143					0.987
	3-Hydroxycarbofuran	108		104	115		9.98
	Acesulfame K	133		65.5	70.8		7.82
	Acetaminophen	95.8		98.2	96.3		1.98
	Acetamiprid	101		89.6	86.3		3.78
	Afidopyropen	89.0		84.0	76.5		9.35
	Aldicarb	108		102	109		5.96
	Aldicarb Sulfone	115		109	116		6.62
	Aldicarb Sulfoxide	109		85.7	55.0		43.6
	AMPA	81.2		32.1	30.9		2.63
	Bentazon	127					3.29
	Benzovindiflupyr	107		93.7	95.7		2.13
	Carbamazepine	94.4		76.3	78.4		2.73
	Carbaryl	95.8		76.8	84.9		9.97
	Carbofuran	95.4		75.2	83.0		9.87
	Clothianidin	107		95.2	98.5		3.21
	Dinotefuran	106		99.5	112		9.24
	Diuron	101		78.9	76.1		3.27
	Endothall	97.0		83.2	91.4		9.40
	Fenuron	107		74.2	69.5		6.49
	Fluridone	102		87.0	90.5		2.97
	Glufosinate	78.4		48.8	48.3		0.992
	Glyphosate	67.8		66.1	65.1		1.50
	Hydrocodone	106		99.4	83.9		16.9
	Ibuprofen	93.4		101	101		0.0193
	Imazapyr	93.8		78.7	80.9		1.43
	Imidacloprid	101		164	175		5.51
	Linuron	84.6		75.8	75.4		0.617
	Mandestrobin	104		90.6	87.3		3.66
	MCPP	145		197	202		2.68
	Methiocarb	89.4		72.2	85.7		17.1
	Methomyl	94.2		70.1	81.6		15.1
	Naproxen	106		111	121		9.06
	Oxamyl	109		99.0	107		7.92
	Primidone	91.6		90.4	94.5		4.51
	Propoxur	91.5		72.5	82.9		13.3
	Pyraclostrobin	95.4		87.9	88.6		0.821
	Sucralose	77.0		129	125		2.51
	Thiamethoxam	105		118	126		5.10
	Tolfenpyrad	64.4		64.3	60.0		6.79
	Triclopyr	93.0		113	125		9.89
	Total Alkalinity	104				0.922	
SM 2320 B-97							

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 2320 B-97	Total Alkalinity	102			1.41	
SM 4500 F-C-97	Fluoride	97.6				0.0
	Fluoride	95.5	93.5	95.0		0.986
SM 5310 B-00	Organic Carbon	100	98.0	97.8		0.143
	Organic Carbon	99.6	100	101		0.163

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2105452, 2105453, 2105458, 2105461
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2105490, 2105491, 2105492, 2105493
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2105490, 2105491, 2105492, 2105493
EPA 300.0 / E31780	Bromide in aqueous matrices	2105452, 2105453, 2105458, 2105461
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2105454, 2105455, 2105459, 2105462
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2105454, 2105455, 2105459, 2105462
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2105454, 2105455, 2105459, 2105462
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2105454, 2105455, 2105459, 2105462
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2105456, 2105457, 2105460, 2105463
EPA 8270E / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2105484, 2105485, 2105488
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2105486, 2105487, 2105489
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2105484, 2105485, 2105488
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2105476, 2105477, 2105481
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2105478, 2105479, 2105480, 2105482
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2105478, 2105479, 2105480, 2105482
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2105452, 2105453, 2105458, 2105461
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2105452, 2105453, 2105458, 2105461
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2105452, 2105453, 2105458, 2105461
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2105454, 2105455, 2105459, 2105462

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	07/24/2019			07/24/2019 17:04	Adrian Shelby	2105452, 2105453, 2105458, 2105461
EPA 200.7 Rev. 4.4	07/24/2019	07/25/2019 16:40	Elliott D. Healy	07/26/2019 13:40	Betina Topolski	2105493
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/01/2019 18:53	Betina Topolski	2105490
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/01/2019 19:00	Betina Topolski	2105491
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/01/2019 19:08	Betina Topolski	2105492
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/02/2019 17:43	Betina Topolski	2105491
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/02/2019 17:51	Betina Topolski	2105492
EPA 200.8 Rev. 5.4	07/24/2019	07/25/2019 16:40	Elliott D. Healy	08/03/2019 03:05	Robert K Palmer	2105493
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/16/2019 18:20	Martin Acosta	2105490
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/16/2019 18:59	Martin Acosta	2105491
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/16/2019 19:08	Martin Acosta	2105492
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/16/2019 23:26	Martin Acosta	2105490
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/17/2019 00:23	Martin Acosta	2105491
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/17/2019 00:33	Martin Acosta	2105492
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/20/2019 10:33	Martin Acosta	2105492
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/20/2019 21:57	Martin Acosta	2105490
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/20/2019 22:35	Martin Acosta	2105491
	07/24/2019	07/31/2019 15:35	Elliott D. Healy	08/20/2019 22:45	Martin Acosta	2105492
EPA 300.0	07/24/2019			07/25/2019 19:09	Jhamieka S. Greenwood	2105452
	07/24/2019			07/25/2019 19:26	Jhamieka S. Greenwood	2105453
	07/24/2019			07/25/2019 19:43	Jhamieka S. Greenwood	2105458
	07/24/2019			07/25/2019 20:00	Jhamieka S. Greenwood	2105461
EPA 350.1 Rev. 2.0	07/24/2019			08/01/2019 16:51	Virginia P. Brown	2105454
	07/24/2019			08/01/2019 16:53	Virginia P. Brown	2105455
	07/24/2019			08/01/2019 16:54	Virginia P. Brown	2105459
	07/24/2019			08/06/2019 16:39	Virginia P. Brown	2105462
EPA 351.2 Rev. 2.0	07/24/2019	07/26/2019 13:00	Adrian Shelby	07/29/2019 10:52	Joseph Suarez	2105459
	07/24/2019	07/26/2019 13:00	Adrian Shelby	07/29/2019 15:04	Joseph Suarez	2105462
	07/24/2019	07/29/2019 13:00	Adrian Shelby	07/30/2019 09:58	Joseph Suarez	2105454
	07/24/2019	07/29/2019 13:00	Adrian Shelby	07/30/2019 09:59	Joseph Suarez	2105455
EPA 353.2 Rev. 2.0	07/24/2019			07/25/2019 10:37	Beverly Y. Sanders	2105454
	07/24/2019			07/25/2019 10:39	Beverly Y. Sanders	2105459
	07/24/2019			07/25/2019 10:40	Beverly Y. Sanders	2105455
	07/24/2019			07/26/2019 09:41	Beverly Y. Sanders	2105462
EPA 365.1 Rev. 2.0	07/24/2019	07/25/2019 12:40	Vijayalakshmi Reddy	07/26/2019 12:04	Lipi Saha	2105462
	07/24/2019	07/26/2019 11:58	Vijayalakshmi Reddy	07/29/2019 08:14	Lipi Saha	2105454
	07/24/2019	07/26/2019 11:58	Vijayalakshmi Reddy	07/29/2019 08:16	Lipi Saha	2105459
	07/24/2019	07/26/2019 11:58	Vijayalakshmi Reddy	07/29/2019 10:59	Lipi Saha	2105455
EPA 365.1 Rev. 2.0 dissolved	07/24/2019			07/24/2019 16:22	Jhamieka S. Greenwood	2105456
	07/24/2019			07/24/2019 16:41	Jhamieka S. Greenwood	2105463

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 dissolved	07/24/2019			07/24/2019 16:55	Jhamieka S. Greenwood	2105457
	07/24/2019			07/24/2019 16:56	Jhamieka S. Greenwood	2105460
EPA 8270E	07/24/2019	07/26/2019 09:00	Rasheda Ghaffari	07/31/2019 23:32	Arthur Maknenko	2105484
	07/24/2019	07/26/2019 09:00	Rasheda Ghaffari	08/01/2019 00:04	Arthur Maknenko	2105485
	07/24/2019	07/26/2019 09:00	Rasheda Ghaffari	08/01/2019 00:36	Arthur Maknenko	2105488
	07/24/2019	07/26/2019 12:30	Fe-Val Siddell	07/30/2019 18:47	Vandana T. Nagar	2105486
	07/24/2019	07/26/2019 12:30	Fe-Val Siddell	07/30/2019 19:13	Vandana T. Nagar	2105487
	07/24/2019	07/26/2019 12:30	Fe-Val Siddell	07/30/2019 19:39	Vandana T. Nagar	2105489
EPA 8276	07/24/2019	07/26/2019 09:00	Rasheda Ghaffari	08/03/2019 00:53	Luis Flores	2105484
	07/24/2019	07/26/2019 09:00	Rasheda Ghaffari	08/03/2019 01:49	Luis Flores	2105485
	07/24/2019	07/26/2019 09:00	Rasheda Ghaffari	08/03/2019 02:44	Luis Flores	2105488
EPA 8321B	07/24/2019	07/25/2019 10:00	Hoor Shaik	07/26/2019 11:34	Juyoung Kim	2105478
	07/24/2019	07/25/2019 10:00	Hoor Shaik	07/26/2019 12:09	Juyoung Kim	2105479
	07/24/2019	07/25/2019 10:00	Hoor Shaik	07/26/2019 12:43	Juyoung Kim	2105480
	07/24/2019	07/25/2019 10:00	Hoor Shaik	07/26/2019 13:18	Juyoung Kim	2105482
	07/24/2019	07/25/2019 10:00	Hoor Shaik	08/02/2019 01:29	Juyoung Kim	2105478
	07/24/2019	07/25/2019 10:00	Hoor Shaik	08/02/2019 02:04	Juyoung Kim	2105479
	07/24/2019	07/25/2019 11:00	Rebecca Ware	07/27/2019 22:42	Rebecca Ware	2105478
	07/24/2019	07/25/2019 11:00	Rebecca Ware	07/27/2019 22:56	Rebecca Ware	2105479
	07/24/2019	07/25/2019 11:00	Rebecca Ware	07/27/2019 23:09	Rebecca Ware	2105480
	07/24/2019	07/25/2019 11:00	Rebecca Ware	07/27/2019 23:23	Rebecca Ware	2105482
	07/24/2019	07/25/2019 11:00	Rebecca Ware	07/29/2019 12:20	Rebecca Ware	2105478
	07/24/2019	07/25/2019 11:00	Rebecca Ware	07/29/2019 12:30	Rebecca Ware	2105479
	07/24/2019	07/25/2019 11:00	Rebecca Ware	07/29/2019 12:41	Rebecca Ware	2105480
	07/24/2019	07/25/2019 11:00	Rebecca Ware	07/29/2019 12:52	Rebecca Ware	2105482
	07/24/2019	07/25/2019 11:00	Rebecca Ware	08/06/2019 16:43	Rebecca Ware	2105478
	07/24/2019	07/25/2019 11:00	Rebecca Ware	08/06/2019 16:54	Rebecca Ware	2105479
	07/24/2019	07/25/2019 11:00	Rebecca Ware	08/06/2019 17:06	Rebecca Ware	2105480
	07/24/2019	07/25/2019 11:00	Rebecca Ware	08/06/2019 17:18	Rebecca Ware	2105482
	07/24/2019	07/26/2019 14:00	Hoor Shaik	07/26/2019 20:13	Juyoung Kim	2105476
	07/24/2019	07/26/2019 14:00	Hoor Shaik	07/26/2019 20:48	Juyoung Kim	2105477
	07/24/2019	07/26/2019 14:00	Hoor Shaik	07/26/2019 21:22	Juyoung Kim	2105481
SM 2320 B-97	07/24/2019			07/26/2019 06:58	Dale L. Simmons	2105461
	07/24/2019			08/02/2019 10:01	Dale L. Simmons	2105452
	07/24/2019			08/02/2019 10:12	Dale L. Simmons	2105453
	07/24/2019			08/02/2019 10:22	Dale L. Simmons	2105458
SM 2540 D-97	07/24/2019			07/25/2019 13:30	Sima Feizi	2105461
	07/24/2019			07/30/2019 16:50	Rosalyn Ballman	2105452, 2105453, 2105458
SM 4500 F-C-97	07/24/2019			07/26/2019 06:58	Dale L. Simmons	2105461
	07/24/2019			07/31/2019 09:10	Dale L. Simmons	2105452

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500 F-C-97	07/24/2019			07/31/2019 09:14	Dale L. Simmons	2105453
	07/24/2019			07/31/2019 09:18	Dale L. Simmons	2105458
SM 5310 B-00	07/24/2019			07/25/2019 23:57	Madeline Funaro	2105462
	07/24/2019			07/26/2019 03:16	Madeline Funaro	2105459
	07/24/2019			07/26/2019 05:13	Madeline Funaro	2105454
	07/24/2019			07/26/2019 05:27	Madeline Funaro	2105455