Chemical Analysis Report

WAS-SECT-2019-09-18-01

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

Event Description: **G1 Streams**
Request ID: **RQ-2019-05-06-26**
Customer: **WAS-SECT**
Project ID: **SMP**

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Tallahassee, FL 32399
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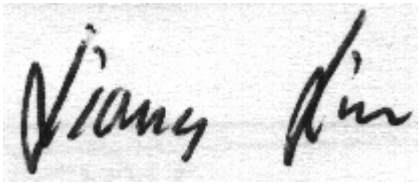
Certified by: Liang Lin, Environmental Administrator

Date Certified: 15-OCT-2019 14:11



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: Quincy Creek 100 meters upstream of Ralph Strong Rd **Collection Date/Time: 09/18/2019 12:04**

Field ID: G1WA0018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120814	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P371015	
	EPA 300.0 Rev. 2.1	Chloride	6.0		mg Cl/L	P371127	
		Sulfate	0.44	I	mg SO4/L	P371131	
	SM 2120 B	Color (true)	65	A	PCU	P371010	
	SM 2320 B-97	Total Alkalinity	20		mg CaCO3/L	P371514	
	SM 2540 C-97	TDS	48		mg/L	P371562	
	SM 2540 D-97	TSS	9	I	mg/L	P371569	
	SM 4500 F-C-97	Fluoride	0.082	I	mg F/L	P371518	
2120815	EPA 350.1 Rev. 2.0	Ammonia-N	0.023		mg N/L	P371265	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31		mg N/L	P371175	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.19		mg N/L	P371149	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P371155	
	SM 5310 B-00	Organic Carbon	3.7		mg C/L	P371199	
2120816	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.049		mg P/L	P371006	
2120851	EPA 8321B	Aldicarb	0.020	U	ug/L	P370852	
		Aldicarb Sulfone	0.0020	U	ug/L	P370852	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P370852	
		Carbaryl	0.0020	U	ug/L	P370852	
		Carbofuran	0.0020	U	ug/L	P370852	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P370852	
		Methiocarb	0.0020	U	ug/L	P370852	
		Methomyl	0.0020	U	ug/L	P370852	
		Oxamyl	0.0020	U	ug/L	P370852	
		Propoxur	0.0020	U	ug/L	P370852	
2120852		Acesulfame K**	0.10	U	ug/L	P370917	
		2,4-D	0.11		ug/L	P370852	MS
		AMPA**	0.22	I	ug/L	P370917	
		Sucralose**	0.14		ug/L	P370917	
		Acetaminophen**	0.0080	U	ug/L	P370852	
		Acetamiprid**	0.0020	U	ug/L	P370852	
		Endothall**	0.25	U	ug/L	P370917	
		Glufosinate**	0.10	U	ug/L	P370917	
		Glyphosate**	0.10	U	ug/L	P370917	
		Afidopyropen**	0.0020	UJ	ug/L	P370852	
		Bentazon	0.0011	I	ug/L	P370852	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370852	
		Carbamazepine**	8.0E-04	U	ug/L	P370852	
		Clothianidin**	0.0020	U	ug/L	P370852	
		Dinotefuran**	0.0098		ug/L	P370852	
		Diuron	0.0020	U	ug/L	P370852	
		Fenuron	0.016	U	ug/L	P370852	
		Fluridone**	8.0E-04	U	ug/L	P370852	

Field ID: G1WA0018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120852	EPA 8321B	Imazapyr**	0.0040	U	ug/L	P370852	
		Hydrocodone**	0.0020	U	ug/L	P370852	
		Ibuprofen**	0.020	U	ug/L	P370852	
		Imidacloprid	0.0066	I	ug/L	P370852	MS
		Linuron	0.0040	U	ug/L	P370852	
		Mandestrobin**	0.0020	UJ	ug/L	P370852	
		MCPP	0.0020	UJ	ug/L	P370852	LCS, MS
		Naproxen**	0.0080	U	ug/L	P370852	
		Primidone**	0.0040	U	ug/L	P370852	
		Pyraclostrobin**	0.0020	U	ug/L	P370852	
		Thiamethoxam**	0.0020	U	ug/L	P370852	
		Tolfenpyrad**	0.0020	U	ug/L	P370852	
		Triclopyr**	0.0040	U	ug/L	P370852	
2120857	EPA 8270E	Aldrin	4.2	U	ng/L	P371340	
		Alpha-BHC	2.1	U	ng/L	P371340	
		Alpha-Chlordane	1.0	U	ng/L	P371340	
		Beta-BHC	10	U	ng/L	P371340	
		Bifenthrin**	4.2	U	ng/L	P371340	
		Delta-BHC	8.4	U	ng/L	P371340	
		Gamma-BHC	8.4	U	ng/L	P371340	
		Carbophenothion	10	U	ng/L	P371340	
		Chlorothalonil	2.1	U	ng/L	P371340	
		Cis-Nonachlor**	1.0	U	ng/L	P371340	
		Cypermethrin	21	U	ng/L	P371340	
		DDD-p,p'	6.3	U	ng/L	P371340	
		DDE-p,p'	6.3	U	ng/L	P371340	
		DDT-p,p'	7.3	U	ng/L	P371340	
		Dicofol	31	U	ng/L	P371340	
		Dieldrin	4.2	U	ng/L	P371340	
		Endosulfan I	4.2	U	ng/L	P371340	
		Endosulfan II	4.2	U	ng/L	P371340	
		Endosulfan Sulfate	2.1	U	ng/L	P371340	
		Endrin	2.1	U	ng/L	P371340	
		Endrin Aldehyde	2.1	U	ng/L	P371340	
		Endrin Ketone	2.1	U	ng/L	P371340	
		Ethalfluralin**	3.1	U	ng/L	P371340	
		Gamma-Chlordane	1.0	U	ng/L	P371340	
		Heptachlor	1.6	U	ng/L	P371340	
		Heptachlor Epoxide	2.1	U	ng/L	P371340	
		Hexachlorobenzene	2.1	U	ng/L	P371340	
		Methoxychlor	4.2	U	ng/L	P371340	
		Mirex	2.1	U	ng/L	P371340	
		Permethrin	10	U	ng/L	P371340	
		Trans-Nonachlor**	1.0	U	ng/L	P371340	
		Trifluralin	2.6	U	ng/L	P371340	

Field ID: G1WA0018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120857	EPA 8276	Chlordane	5.2	U	ng/L	P371340	
		Toxaphene	31	U	ng/L	P371340	
2120858	EPA 8270E	Acetochlor	0.26	U	ng/L	P371188	
		Alachlor	0.26	U	ng/L	P371188	
		Ametryn	0.63	U	ng/L	P371188	
		Atrazine	0.26	U	ng/L	P371188	
		Atrazine Desethyl	1.6	UJ	ng/L	P371188	RPD
		Azinphos Methyl	5.3	U	ng/L	P371188	
		Bromacil	18		ng/L	P371188	
		Butylate	0.42	U	ng/L	P371188	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P371188	
		Chlorpyrifos Methyl	0.11	U	ng/L	P371188	
		Cyanazine	3.4	UJ	ng/L	P371188	RPD
		Demeton	7.4	U	ng/L	P371188	
		Diazinon	0.13	U	ng/L	P371188	
		Dimethenamid**	0.11	U	ng/L	P371188	
		Disulfoton	0.53	U	ng/L	P371188	
		Dithiopyr**	0.11	U	ng/L	P371188	
		EPTC	1.3	U	ng/L	P371188	
		Ethion	0.16	U	ng/L	P371188	
		Ethoprop	0.11	U	ng/L	P371188	
		Fenamiphos	0.53	U	ng/L	P371188	
		Fipronil	0.26	U	ng/L	P371188	
		Fipronil Desulfinyl**	0.13	U	ng/L	P371188	
		Fipronil Sulfide	0.16	U	ng/L	P371188	
		Fipronil Sulfone	0.16	U	ng/L	P371188	
		Fonofos	0.21	U	ng/L	P371188	
		Hexazinone	0.56	I	ng/L	P371188	
		Malathion	0.37	U	ng/L	P371188	
		Metalaxyl	0.32	U	ng/L	P371188	
		Metolachlor	1.7	I	ng/L	P371188	
		Metribuzin	0.79	UJ	ng/L	P371188	RPD
		Mevinphos	0.53	U	ng/L	P371188	
		Molinate	0.32	U	ng/L	P371188	
		Norflurazon	0.53	U	ng/L	P371188	
		Oxadiazon**	0.11	U	ng/L	P371188	
		Parathion Ethyl	0.26	U	ng/L	P371188	
		Parathion Methyl	0.58	U	ng/L	P371188	
		Pendimethalin	1.1	U	ng/L	P371188	
		Phorate	0.26	U	ng/L	P371188	
		Prodiamine**	0.18	U	ng/L	P371188	
		Prometon	0.95	U	ng/L	P371188	
		Prometryn	0.21	U	ng/L	P371188	
		Simazine	0.53	U	ng/L	P371188	
		Tebuconazole**	0.53	UJ	ng/L	P371188	RPD

Field ID: G1WA0018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120858	EPA 8270E	Terbufos	0.11	U	ng/L	P371188	
		Terbuthylazine	0.45	U	ng/L	P371188	
2120863	EPA 200.7 Rev. 4.4	Barium	15.5		ug/L	P371161	
		Calcium	6.00		mg/L	P371161	
		Iron	1.57E+03		ug/L	P371161	
		Magnesium	1.95		mg/L	P371161	
		Potassium	0.41	I	mg/L	P371161	
		Sodium	3.3		mg/L	P371161	
		Zinc	5.0	U	ug/L	P371161	
	EPA 200.8 Rev. 5.4	Aluminum	380		ug/L	P371161	
		Antimony	0.050	U	ug/L	P371161	
		Arsenic	0.84		ug/L	P371161	
		Boron**	10.7		ug/L	P371161	
		Cadmium	0.020	U	ug/L	P371161	
		Chromium	1.2	I	ug/L	P371161	
		Copper	0.40	U	ug/L	P371161	
		Lead	0.45		ug/L	P371161	
		Nickel	0.50	U	ug/L	P371161	
		Selenium	0.20	U	ug/L	P371161	
		Silver	0.010	U	ug/L	P371161	
		Thallium	0.10	U	ug/L	P371161	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: J - second source check standards for some analytes were not available for analysis. Refer to the narrative for an explanation of QC Codes.
EPA 8270E: Refer to the narrative for an explanation of QC Codes.

Sample Location: Swamp Creek upstream of Railroad **Collection Date/Time: 09/18/2019 10:21**

Field ID: G1WA0052 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120817	EPA 180.1 Rev. 2.0	Turbidity	13		NTU	P371015	
	EPA 300.0 Rev. 2.1	Chloride	6.6		mg Cl/L	P371127	
		Sulfate	0.51	I	mg SO4/L	P371131	
	SM 2120 B	Color (true)	120		PCU	P371010	
	SM 2320 B-97	Total Alkalinity	32		mg CaCO3/L	P371514	
	SM 2540 C-97	TDS	69		mg/L	P371562	
	SM 2540 D-97	TSS	2	I	mg/L	P371569	
	SM 4500 F-C-97	Fluoride	0.14		mg F/L	P371518	
2120818	EPA 350.1 Rev. 2.0	Ammonia-N	0.022		mg N/L	P371265	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.45		mg N/L	P371175	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.17		mg N/L	P371149	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P371155	
	SM 5310 B-00	Organic Carbon	7.9		mg C/L	P371199	
2120819	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.076		mg P/L	P371006	
2120853	EPA 8321B	Aldicarb	0.020	U	ug/L	P370852	
		Aldicarb Sulfone	0.0020	U	ug/L	P370852	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P370852	
		Carbaryl	0.0020	U	ug/L	P370852	
		Carbofuran	0.0020	U	ug/L	P370852	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P370852	
		Methiocarb	0.0020	U	ug/L	P370852	
		Methomyl	0.0020	U	ug/L	P370852	
		Oxamyl	0.0020	U	ug/L	P370852	
		Propoxur	0.0020	U	ug/L	P370852	
2120854		Acesulfame K**	0.10	U	ug/L	P370917	
		2,4-D	0.0020	U	ug/L	P370852	MS
		AMPA**	0.22	I	ug/L	P370917	
		Sucralose**	0.052		ug/L	P370917	
		Acetaminophen**	0.0080	U	ug/L	P370852	
		Acetamiprid**	0.0020	U	ug/L	P370852	
		Endothall**	0.25	U	ug/L	P370917	
		Glufosinate**	0.10	U	ug/L	P370917	
		Glyphosate**	0.10	U	ug/L	P370917	
		Afidopyropen**	0.0020	UJ	ug/L	P370852	
		Bentazon	8.0E-04	U	ug/L	P370852	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370852	
		Carbamazepine**	8.0E-04	U	ug/L	P370852	
		Clothianidin**	0.0020	U	ug/L	P370852	
		Dinotefuran**	0.0091		ug/L	P370852	
		Diuron	0.020		ug/L	P370852	
		Fenuron	0.016	U	ug/L	P370852	
		Fluridone**	8.0E-04	U	ug/L	P370852	
		Imazapyr**	0.015	I	ug/L	P370852	

Field ID: G1WA0052 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120854	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P370852	
		Ibuprofen**	0.020	U	ug/L	P370852	
		Imidacloprid	0.017		ug/L	P370852	MS
		Linuron	0.0040	U	ug/L	P370852	
		Mandestrobin**	0.0020	UJ	ug/L	P370852	
		MCPP	0.0020	UJ	ug/L	P370852	LCS, MS
		Naproxen**	0.0080	U	ug/L	P370852	
		Primidone**	0.0040	U	ug/L	P370852	
		Pyraclostrobin**	0.0020	U	ug/L	P370852	
		Thiamethoxam**	0.0020	U	ug/L	P370852	
		Tolfenpyrad**	0.0020	U	ug/L	P370852	
		Triclopyr**	0.0040	U	ug/L	P370852	
2120859	EPA 8270E	Aldrin	4.2	U	ng/L	P371340	
		Alpha-BHC	2.1	U	ng/L	P371340	
		Alpha-Chlordane	1.1	U	ng/L	P371340	
		Beta-BHC	11	U	ng/L	P371340	
		Bifenthrin**	4.2	U	ng/L	P371340	
		Delta-BHC	8.5	U	ng/L	P371340	
		Gamma-BHC	8.5	U	ng/L	P371340	
		Carbophenothion	11	U	ng/L	P371340	
		Chlorothalonil	2.1	U	ng/L	P371340	
		Cis-Nonachlor**	1.1	U	ng/L	P371340	
		Cypermethrin	21	U	ng/L	P371340	
		DDD-p,p'	6.4	U	ng/L	P371340	
		DDE-p,p'	6.4	U	ng/L	P371340	
		DDT-p,p'	7.4	U	ng/L	P371340	
		Dicofol	32	U	ng/L	P371340	
		Dieldrin	4.2	U	ng/L	P371340	
		Endosulfan I	4.2	U	ng/L	P371340	
		Endosulfan II	4.2	U	ng/L	P371340	
		Endosulfan Sulfate	2.1	U	ng/L	P371340	
		Endrin	2.1	U	ng/L	P371340	
		Endrin Aldehyde	2.1	U	ng/L	P371340	
		Endrin Ketone	2.1	U	ng/L	P371340	
		Ethalfluralin**	3.2	U	ng/L	P371340	
		Gamma-Chlordane	1.1	U	ng/L	P371340	
		Heptachlor	1.6	U	ng/L	P371340	
		Heptachlor Epoxide	2.1	U	ng/L	P371340	
		Hexachlorobenzene	2.1	U	ng/L	P371340	
		Methoxychlor	4.2	U	ng/L	P371340	
		Mirex	2.1	U	ng/L	P371340	
		Permethrin	11	U	ng/L	P371340	
		Trans-Nonachlor**	1.1	U	ng/L	P371340	
		Trifluralin	2.6	U	ng/L	P371340	
	EPA 8276	Chlordane	5.3	U	ng/L	P371340	

Field ID: G1WA0052 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120859	EPA 8276	Toxaphene	32	U	ng/L	P371340	
2120860	EPA 8270E	Acetochlor	0.26	U	ng/L	P371188	
		Alachlor	0.26	U	ng/L	P371188	
		Ametryn	0.63	U	ng/L	P371188	
		Atrazine	61		ng/L	P371188	
		Atrazine Desethyl	8.7	J	ng/L	P371188	RPD
		Azinphos Methyl	5.2	U	ng/L	P371188	
		Bromacil	0.52	U	ng/L	P371188	
		Butylate	0.42	U	ng/L	P371188	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P371188	
		Chlorpyrifos Methyl	0.10	U	ng/L	P371188	
		Cyanazine	3.4	UJ	ng/L	P371188	RPD
		Demeton	7.3	U	ng/L	P371188	
		Diazinon	0.13	U	ng/L	P371188	
		Dimethenamid**	0.10	U	ng/L	P371188	
		Disulfoton	0.52	U	ng/L	P371188	
		Dithiopyr**	0.10	U	ng/L	P371188	
		EPTC	1.3	U	ng/L	P371188	
		Ethion	0.16	U	ng/L	P371188	
		Ethoprop	0.10	U	ng/L	P371188	
		Fenamiphos	0.52	U	ng/L	P371188	
		Fipronil	0.26	U	ng/L	P371188	
		Fipronil Desulfinyl**	0.13	U	ng/L	P371188	
		Fipronil Sulfide	0.16	U	ng/L	P371188	
		Fipronil Sulfone	0.16	U	ng/L	P371188	
		Fonofos	0.21	U	ng/L	P371188	
		Hexazinone	1.8	I	ng/L	P371188	
		Malathion	0.37	U	ng/L	P371188	
		Metalaxyl	0.31	U	ng/L	P371188	
		Metolachlor	3.6		ng/L	P371188	
		Metribuzin	0.78	UJ	ng/L	P371188	RPD
		Mevinphos	0.52	U	ng/L	P371188	
		Molinate	0.31	U	ng/L	P371188	
		Norflurazon	0.52	U	ng/L	P371188	
		Oxadiazon**	0.10	U	ng/L	P371188	
		Parathion Ethyl	0.26	U	ng/L	P371188	
		Parathion Methyl	0.57	U	ng/L	P371188	
		Pendimethalin	1.0	U	ng/L	P371188	
		Phorate	0.26	U	ng/L	P371188	
		Prodiamine**	0.18	U	ng/L	P371188	
		Prometon	0.94	U	ng/L	P371188	
		Prometryn	0.21	U	ng/L	P371188	
		Simazine	0.52	U	ng/L	P371188	
		Tebuconazole**	0.52	UJ	ng/L	P371188	RPD
		Terbufos	0.10	U	ng/L	P371188	

Field ID: G1WA0052 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120860	EPA 8270E	Terbuthylazine	0.44	U	ng/L	P371188	
2120864	EPA 200.7 Rev. 4.4	Barium	23.5		ug/L	P371161	
		Calcium	9.57		mg/L	P371161	
		Iron	2.08E+03		ug/L	P371161	
		Magnesium	3.07		mg/L	P371161	
		Potassium	1.0	I	mg/L	P371161	
		Sodium	3.5		mg/L	P371161	
		Zinc	5.0	U	ug/L	P371161	
	EPA 200.8 Rev. 5.4	Aluminum	363		ug/L	P371161	
		Antimony	0.050	U	ug/L	P371161	
		Arsenic	1.36		ug/L	P371161	
		Boron**	15.4		ug/L	P371161	
		Cadmium	0.020	U	ug/L	P371161	
		Chromium	0.99	I	ug/L	P371161	
		Copper	0.40	U	ug/L	P371161	
		Lead	0.43		ug/L	P371161	
		Nickel	0.50	U	ug/L	P371161	
		Selenium	0.20	U	ug/L	P371161	
		Silver	0.010	U	ug/L	P371161	
		Thallium	0.10	U	ug/L	P371161	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: J - second source check standards for some analytes were not available for analysis. Refer to the narrative for an explanation of QC Codes.
EPA 8270E: Refer to the narrative for an explanation of QC Codes.

Sample Location: Caney Creek Downstream of 158A **Collection Date/Time: 09/18/2019 08:31**

Field ID: G1WA0060 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120820	EPA 180.1 Rev. 2.0	Turbidity	7.6		NTU	P371015	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P371127	
		Sulfate	1.5		mg SO4/L	P371131	
	SM 2120 B	Color (true)	110		PCU	P371010	
	SM 2320 B-97	Total Alkalinity	113		mg CaCO3/L	P371526	
	SM 2540 C-97	TDS	192		mg/L	P371562	
	SM 2540 D-97	TSS	4	I	mg/L	P371569	
	SM 4500 F-C-97	Fluoride	0.095	I	mg F/L	P371530	
2120821	EPA 350.1 Rev. 2.0	Ammonia-N	0.037		mg N/L	P371265	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P371301	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.3		mg N/L	P371149	
	EPA 365.1 Rev. 2.0	Total-P	3.2		mg P/L	P371155	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P371199	
2120822	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	2.9		mg P/L	P371006	
2120855	EPA 8321B	Aldicarb	0.020	U	ug/L	P370852	
		Aldicarb Sulfone	0.0020	U	ug/L	P370852	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P370852	
		Carbaryl	0.0020	U	ug/L	P370852	
		Carbofuran	0.0020	U	ug/L	P370852	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P370852	
		Methiocarb	0.0020	U	ug/L	P370852	
		Methomyl	0.0020	U	ug/L	P370852	
		Oxamyl	0.0020	U	ug/L	P370852	
		Propoxur	0.0020	U	ug/L	P370852	
2120856		Acesulfame K**	0.10	U	ug/L	P370917	
		2,4-D	0.065		ug/L	P370852	MS
		AMPA**	0.26	I	ug/L	P370917	
		Sucralose**	0.059		ug/L	P370917	
		Acetaminophen**	0.0080	U	ug/L	P370852	
		Acetamiprid**	0.0020	U	ug/L	P370852	
		Endothall**	0.25	U	ug/L	P370917	
		Glufosinate**	0.10	U	ug/L	P370917	
		Glyphosate**	0.10	U	ug/L	P370917	
		Afidopyropen**	0.0020	UJ	ug/L	P370852	
		Bentazon	8.0E-04	U	ug/L	P370852	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P370852	
		Carbamazepine**	0.0041		ug/L	P370852	
		Clothianidin**	0.0020	U	ug/L	P370852	
		Dinotefuran**	0.0020	U	ug/L	P370852	
		Diuron	0.0020	U	ug/L	P370852	
		Fenuron	0.016	U	ug/L	P370852	
		Fluridone**	0.0088		ug/L	P370852	
		Imazapyr**	0.0040	U	ug/L	P370852	

Field ID: G1WA0060 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120856	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P370852	
		Ibuprofen**	0.020	U	ug/L	P370852	
		Imidacloprid	0.0020	U	ug/L	P370852	MS
		Linuron	0.0040	U	ug/L	P370852	
		Mandestrobin**	0.0020	UJ	ug/L	P370852	
		MCPP	0.0020	UJ	ug/L	P370852	LCS, MS
		Naproxen**	0.0080	U	ug/L	P370852	
		Primidone**	0.0040	U	ug/L	P370852	
		Pyraclostrobin**	0.0020	U	ug/L	P370852	
		Thiamethoxam**	0.0020	U	ug/L	P370852	
		Tolfenpyrad**	0.0020	U	ug/L	P370852	
		Triclopyr**	0.0040	U	ug/L	P370852	
2120861	EPA 8270E	Aldrin	4.1	U	ng/L	P371340	
		Alpha-BHC	2.1	U	ng/L	P371340	
		Alpha-Chlordane	1.0	U	ng/L	P371340	
		Beta-BHC	10	U	ng/L	P371340	
		Bifenthrin**	4.1	U	ng/L	P371340	
		Delta-BHC	8.3	U	ng/L	P371340	
		Gamma-BHC	8.3	U	ng/L	P371340	
		Carbophenothion	10	U	ng/L	P371340	
		Chlorothalonil	2.1	U	ng/L	P371340	
		Cis-Nonachlor**	1.0	U	ng/L	P371340	
		Cypermethrin	21	U	ng/L	P371340	
		DDD-p,p'	6.2	U	ng/L	P371340	
		DDE-p,p'	6.2	U	ng/L	P371340	
		DDT-p,p'	7.2	U	ng/L	P371340	
		Dicofol	31	U	ng/L	P371340	
		Dieldrin	4.1	U	ng/L	P371340	
		Endosulfan I	4.1	U	ng/L	P371340	
		Endosulfan II	4.1	U	ng/L	P371340	
		Endosulfan Sulfate	2.1	U	ng/L	P371340	
		Endrin	2.1	U	ng/L	P371340	
		Endrin Aldehyde	2.1	U	ng/L	P371340	
		Endrin Ketone	2.1	U	ng/L	P371340	
		Ethalfluralin**	3.1	U	ng/L	P371340	
		Gamma-Chlordane	1.0	U	ng/L	P371340	
		Heptachlor	1.5	U	ng/L	P371340	
		Heptachlor Epoxide	2.1	U	ng/L	P371340	
		Hexachlorobenzene	2.1	U	ng/L	P371340	
		Methoxychlor	4.1	U	ng/L	P371340	
		Mirex	2.1	U	ng/L	P371340	
		Permethrin	10	U	ng/L	P371340	
		Trans-Nonachlor**	1.0	U	ng/L	P371340	
		Trifluralin	2.6	U	ng/L	P371340	
	EPA 8276	Chlordane	5.2	U	ng/L	P371340	

Field ID: G1WA0060 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120861	EPA 8276	Toxaphene	31	U	ng/L	P371340	
2120862	EPA 8270E	Acetochlor	0.27	U	ng/L	P371188	
		Alachlor	0.27	U	ng/L	P371188	
		Ametryn	0.66	U	ng/L	P371188	
		Atrazine	0.43	I	ng/L	P371188	
		Atrazine Desethyl	1.6	UJ	ng/L	P371188	RPD
		Azinphos Methyl	5.5	U	ng/L	P371188	
		Bromacil	0.55	U	ng/L	P371188	
		Butylate	0.44	U	ng/L	P371188	
		Chlorpyrifos Ethyl	0.27	U	ng/L	P371188	
		Chlorpyrifos Methyl	0.11	U	ng/L	P371188	
		Cyanazine	3.6	UJ	ng/L	P371188	RPD
		Demeton	7.7	U	ng/L	P371188	
		Diazinon	0.14	U	ng/L	P371188	
		Dimethenamid**	0.11	U	ng/L	P371188	
		Disulfoton	0.55	U	ng/L	P371188	
		Dithiopyr**	0.11	U	ng/L	P371188	
		EPTC	1.4	U	ng/L	P371188	
		Ethion	0.16	U	ng/L	P371188	
		Ethoprop	0.11	U	ng/L	P371188	
		Fenamiphos	0.55	U	ng/L	P371188	
		Fipronil	0.27	U	ng/L	P371188	
		Fipronil Desulfinyl**	0.14	U	ng/L	P371188	
		Fipronil Sulfide	0.16	U	ng/L	P371188	
		Fipronil Sulfone	0.16	U	ng/L	P371188	
		Fonofos	0.22	U	ng/L	P371188	
		Hexazinone	0.55	U	ng/L	P371188	
		Malathion	0.38	U	ng/L	P371188	
		Metalaxyl	0.33	U	ng/L	P371188	
		Metolachlor	0.55	U	ng/L	P371188	
		Metribuzin	0.82	UJ	ng/L	P371188	RPD
		Mevinphos	0.55	U	ng/L	P371188	
		Molinate	0.33	U	ng/L	P371188	
		Norflurazon	0.55	U	ng/L	P371188	
		Oxadiazon**	0.11	U	ng/L	P371188	
		Parathion Ethyl	0.27	U	ng/L	P371188	
		Parathion Methyl	0.60	U	ng/L	P371188	
		Pendimethalin	1.1	U	ng/L	P371188	
		Phorate	0.27	U	ng/L	P371188	
		Prodiamine**	0.19	U	ng/L	P371188	
		Prometon	0.99	U	ng/L	P371188	
		Prometryn	0.22	U	ng/L	P371188	
		Simazine	0.55	U	ng/L	P371188	
		Tebuconazole**	0.55	UJ	ng/L	P371188	RPD
		Terbufos	0.11	U	ng/L	P371188	

Field ID: G1WA0060 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120862	EPA 8270E	Terbuthylazine	0.47	U	ng/L	P371188	
2120865	EPA 200.7 Rev. 4.4	Barium	6.8		ug/L	P371161	
		Calcium	18.6		mg/L	P371161	
		Iron	760		ug/L	P371161	
		Magnesium	9.58		mg/L	P371161	
		Potassium	24.2		mg/L	P371161	
		Sodium	16.3		mg/L	P371161	
		Zinc	5.0	U	ug/L	P371161	
	EPA 200.8 Rev. 5.4	Aluminum	229		ug/L	P371161	
		Antimony	0.050	U	ug/L	P371161	
		Arsenic	1.32		ug/L	P371161	
		Boron**	30.9		ug/L	P371161	
		Cadmium	0.020	U	ug/L	P371161	
		Chromium	0.61	I	ug/L	P371161	
		Copper	0.61	I	ug/L	P371161	
		Lead	0.21	I	ug/L	P371161	
		Nickel	0.62	I	ug/L	P371161	
		Selenium	0.25	I	ug/L	P371161	
		Silver	0.010	U	ug/L	P371161	
		Thallium	0.10	U	ug/L	P371161	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: J - second source check standards for some analytes were not available for analysis. Refer to the narrative for an explanation of QC Codes.
EPA 8270E: Refer to the narrative for an explanation of QC Codes.

Sample Location: Tanyard Branch 100 meters upstream of Ralph Strong Rd **Collection Date/Time: 09/18/2019 12:36**

Field ID: G1WA0005 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120823	EPA 180.1 Rev. 2.0	Turbidity	8.5		NTU	P371015	
	EPA 300.0 Rev. 2.1	Chloride	29		mg Cl/L	P371127	
		Sulfate	17		mg SO4/L	P371131	
	SM 2120 B	Color (true)	34		PCU	P371010	
	SM 2320 B-97	Total Alkalinity	75		mg CaCO3/L	P371526	
	SM 2540 C-97	TDS	172		mg/L	P371562	
	SM 2540 D-97	TSS	3	I	mg/L	P371569	
	SM 4500 F-C-97	Fluoride	0.38		mg F/L	P371530	
2120827	EPA 350.1 Rev. 2.0	Ammonia-N	0.10		mg N/L	P371265	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.61		mg N/L	P371301	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.2		mg N/L	P371149	
	EPA 365.1 Rev. 2.0	Total-P	0.17		mg P/L	P371155	
	SM 5310 B-00	Organic Carbon	3.9		mg C/L	P371199	
2120831	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.094		mg P/L	P371006	
2120866	EPA 200.7 Rev. 4.4	Barium	16.8		ug/L	P371161	
		Calcium	27.1		mg/L	P371161	
		Iron	1.82E+03		ug/L	P371161	
		Magnesium	5.28		mg/L	P371161	
		Potassium	4.2		mg/L	P371161	
		Sodium	26.0		mg/L	P371161	
		Zinc	11	I	ug/L	P371161	
	EPA 200.8 Rev. 5.4	Aluminum	39		ug/L	P371161	
		Antimony	0.16	I	ug/L	P371161	
		Arsenic	0.78		ug/L	P371161	
		Boron**	77.8		ug/L	P371161	
		Cadmium	0.020	U	ug/L	P371161	
		Chromium	0.40	U	ug/L	P371161	
		Copper	1.33		ug/L	P371161	
		Lead	0.20	U	ug/L	P371161	
		Nickel	0.90	I	ug/L	P371161	
		Selenium	0.20	U	ug/L	P371161	
		Silver	0.010	U	ug/L	P371161	
		Thallium	0.10	U	ug/L	P371161	

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

Sample Location: Quincy Creek upstream of SR 65 **Collection Date/Time: 09/18/2019 13:19**

Field ID: G1WA0049 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120824	EPA 180.1 Rev. 2.0	Turbidity	8.6		NTU	P371015	
	EPA 300.0 Rev. 2.1	Chloride	5.7		mg Cl/L	P371127	
		Sulfate	0.38	I	mg SO4/L	P371131	
	SM 2120 B	Color (true)	60		PCU	P371010	
	SM 2320 B-97	Total Alkalinity	18		mg CaCO3/L	P371526	
	SM 2540 C-97	TDS	52		mg/L	P371562	
	SM 2540 D-97	TSS	5	I	mg/L	P371569	
	SM 4500 F-C-97	Fluoride	0.081	I	mg F/L	P371530	
2120828	EPA 350.1 Rev. 2.0	Ammonia-N	0.029		mg N/L	P371265	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27		mg N/L	P371301	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.19		mg N/L	P371149	
	EPA 365.1 Rev. 2.0	Total-P	0.090		mg P/L	P371155	
	SM 5310 B-00	Organic Carbon	3.7		mg C/L	P371199	
2120832	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.045		mg P/L	P371006	
2120867	EPA 200.7 Rev. 4.4	Barium	13.4		ug/L	P371161	
		Calcium	5.70		mg/L	P371161	
		Iron	1.38E+03		ug/L	P371161	
		Magnesium	1.89		mg/L	P371161	
		Potassium	0.39	I	mg/L	P371161	
		Sodium	3.3		mg/L	P371161	
		Zinc	5.0	U	ug/L	P371161	
	EPA 200.8 Rev. 5.4	Aluminum	222		ug/L	P371161	
		Antimony	0.050	U	ug/L	P371161	
		Arsenic	0.72		ug/L	P371161	
		Boron**	10.2		ug/L	P371161	
		Cadmium	0.020	U	ug/L	P371161	
		Chromium	0.72	I	ug/L	P371161	
		Copper	0.40	U	ug/L	P371161	
		Lead	0.26	I	ug/L	P371161	
		Nickel	0.50	U	ug/L	P371161	
		Selenium	0.20	U	ug/L	P371161	
		Silver	0.010	U	ug/L	P371161	
		Thallium	0.10	U	ug/L	P371161	

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

Sample Location: Little River at Highbridge Road **Collection Date/Time: 09/18/2019 13:59**

Field ID: G1WA0086 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120825	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P371015	
	EPA 300.0 Rev. 2.1	Chloride	7.2		mg Cl/L	P371127	
		Sulfate	1.3		mg SO4/L	P371131	
	SM 2120 B	Color (true)	82	A	PCU	P371011	
	SM 2320 B-97	Total Alkalinity	27		mg CaCO3/L	P371526	
	SM 2540 C-97	TDS	59		mg/L	P371562	
	SM 2540 D-97	TSS	4	I	mg/L	P371569	
	SM 4500 F-C-97	Fluoride	0.098	I	mg F/L	P371530	
2120829	EPA 350.1 Rev. 2.0	Ammonia-N	0.022		mg N/L	P371265	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37		mg N/L	P371301	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.44		mg N/L	P371150	
	EPA 365.1 Rev. 2.0	Total-P	0.099		mg P/L	P371155	
	SM 5310 B-00	Organic Carbon	4.8		mg C/L	P371199	
2120833	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.056		mg P/L	P371006	
2120868	EPA 200.7 Rev. 4.4	Barium	20.3		ug/L	P371161	
		Calcium	8.02		mg/L	P371161	
		Iron	1.61E+03		ug/L	P371161	
		Magnesium	3.02		mg/L	P371161	
		Potassium	0.90	I	mg/L	P371161	
		Sodium	4.9		mg/L	P371161	
		Zinc	5.0	U	ug/L	P371161	
	EPA 200.8 Rev. 5.4	Aluminum	364		ug/L	P371161	
		Antimony	0.050	U	ug/L	P371161	
		Arsenic	0.90		ug/L	P371161	
		Boron**	14.6		ug/L	P371161	
		Cadmium	0.020	U	ug/L	P371161	
		Chromium	0.88	I	ug/L	P371161	
		Copper	0.57	I	ug/L	P371161	
		Lead	0.41		ug/L	P371161	
		Nickel	0.50	U	ug/L	P371161	
		Selenium	0.20	U	ug/L	P371161	
		Silver	0.010	U	ug/L	P371161	
		Thallium	0.10	U	ug/L	P371161	

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

Sample Location: Willacoochee Creek at 161 **Collection Date/Time: 09/18/2019 11:19**

Field ID: G1WA0087 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2120826	EPA 180.1 Rev. 2.0	Turbidity	16	A	NTU	P371015	
	EPA 300.0 Rev. 2.1	Chloride	6.6		mg Cl/L	P371127	
		Sulfate	0.39	I	mg SO4/L	P371131	
	SM 2120 B	Color (true)	24	A	PCU	P371013	
	SM 2320 B-97	Total Alkalinity	16		mg CaCO3/L	P371526	
	SM 2540 C-97	TDS	60		mg/L	P371562	
	SM 2540 D-97	TSS	12		mg/L	P371569	
	SM 4500 F-C-97	Fluoride	0.069	I	mg F/L	P371530	
2120830	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P371265	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.40		mg N/L	P371301	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.0		mg N/L	P371150	
	EPA 365.1 Rev. 2.0	Total-P	0.060		mg P/L	P371155	
	SM 5310 B-00	Organic Carbon	3.6		mg C/L	P371199	
2120834	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.030		mg P/L	P371006	
2120869	EPA 200.7 Rev. 4.4	Barium	23.3		ug/L	P371161	
		Calcium	5.24		mg/L	P371161	
		Iron	1.20E+03		ug/L	P371161	
		Magnesium	3.01		mg/L	P371161	
		Potassium	0.67	I	mg/L	P371161	
		Sodium	3.4		mg/L	P371161	
		Zinc	5.0	U	ug/L	P371161	
	EPA 200.8 Rev. 5.4	Aluminum	334		ug/L	P371161	
		Antimony	0.050	U	ug/L	P371161	
		Arsenic	0.69		ug/L	P371161	
		Boron**	10.1		ug/L	P371161	
		Cadmium	0.020	U	ug/L	P371161	
		Chromium	0.55	I	ug/L	P371161	
		Copper	0.63	I	ug/L	P371161	
		Lead	0.37	I	ug/L	P371161	
		Nickel	0.50	U	ug/L	P371161	
		Selenium	0.20	U	ug/L	P371161	
		Silver	0.010	U	ug/L	P371161	
		Thallium	0.10	U	ug/L	P371161	

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P371015

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P371161

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P371161

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P371127

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P371131

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P371265

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P371175

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P371301

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P371149

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P371150

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P371155

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P371006

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

Reference Method: EPA 8270E
Batch ID: P371188

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P371188

Component	Result	Code	Units
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P371340

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P371340

Component	Result	Code	Units
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfluralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P371340

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

Reference Method: EPA 8321B
Batch ID: P370852

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	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
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	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
Methiocarb	0.0020	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P370852

Component	Result	Code	Units
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P370917

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

Reference Method: SM 2120 B
Batch ID: P371010

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P371011

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P371013

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P371514

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

Reference Method: SM 2320 B-97
Batch ID: P371526

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P371562

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P371569

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P371518

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P371530

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P371199

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: P371161

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	102		P	85 - 115
Calcium	103		P	85 - 115
Iron	104		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	101		P	85 - 115
Sodium	99.9		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P371161

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	94.6		P	85 - 115
Antimony	96.5		P	85 - 115
Arsenic	95.6		P	85 - 115
Boron	99.2		P	85 - 115
Cadmium	95.1		P	85 - 115
Chromium	100		P	85 - 115
Copper	94.8		P	85 - 115
Lead	97.3		P	85 - 115
Nickel	106		P	85 - 115
Selenium	104		P	85 - 115
Silver	99.2		P	85 - 115
Thallium	99.7		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P371127

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P371131

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P371265

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P371175

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.6		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P371301

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P371149

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P371150

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P371155

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.9		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P371006

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.3		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P371188

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	99.5	90.1	P/P	69 - 122
Alachlor	98.0	87.1	P/P	71 - 120
Ametryn	109	94.7	P/P	47 - 138
Atrazine	105	99.0	P/P	74 - 124
Atrazine Desethyl	105	69.7	P/P	38 - 138
Azinphos Methyl	124	111	P/P	69 - 154
Bromacil	80.3	73.0	P/P	39 - 121
Butylate	63.9	83.0	P/P	27 - 87.0
Chlorpyrifos Ethyl	98.5	91.5	P/P	69 - 118
Chlorpyrifos Methyl	105	86.2	P/P	70 - 120
Cyanazine	133	86.0	P/P	20 - 250
Demeton	81.9	72.4	P/P	39 - 118
Diazinon	108	91.1	P/P	68 - 127
Dimethenamid	99.9	87.5	P/P	66 - 125
Disulfoton	97.7	78.2	P/P	52 - 126
Dithiopyr	99.4	92.0	P/P	67 - 127
EPTC	64.1	58.9	P/P	24 - 88.0
Ethion	77.1	99.6	P/P	51 - 132
Ethoprop	96.3	75.4	P/P	58 - 117
Fenamiphos	104	90.1	P/P	38 - 139
Fipronil	104	78.5	P/P	61 - 124
Fipronil Desulfinyl	85.3	81.1	P/P	47 - 120

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P371188

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fipronil Sulfide	89.0	82.1	P/P	56 - 119
Fipronil Sulfone	80.1	62.7	P/P	50 - 117
Fonofos	98.2	74.2	P/P	60 - 121
Hexazinone	100	99.8	P/P	55 - 137
Malathion	97.3	95.4	P/P	66 - 126
Metalaxyl	93.0	91.0	P/P	33 - 140
Metolachlor	96.2	91.1	P/P	69 - 119
Metribuzin	203	106	P/P	31 - 238
Mevinphos	89.4	71.9	P/P	42 - 113
Molinate	78.8	68.0	P/P	32 - 96.0
Norflurazon	104	94.4	P/P	54 - 123
Oxadiazon	99.8	98.3	P/P	63 - 128
Parathion Ethyl	97.8	91.9	P/P	72 - 111
Parathion Methyl	106	92.5	P/P	74 - 126
Pendimethalin	90.7	87.9	P/P	61 - 131
Phorate	97.6	82.8	P/P	51 - 115
Prodiamine	79.6	87.2	P/P	38 - 144
Prometon	95.0	87.4	P/P	54 - 119
Prometryn	108	92.6	P/P	63 - 120
Simazine	106	96.4	P/P	75 - 126
Tebuconazole	62.4	92.3	P/P	20 - 119
Terbufos	101	79.2	P/P	64 - 116
Terbuthylazine	96.9	101	P/P	73 - 117

Reference Method: EPA 8270E
Batch ID: P371340

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	54.4	52.8	P/P	20 - 93.0
Alpha-BHC	90.9	86.4	P/P	55 - 133
Alpha-Chlordane	81.9	83.5	P/P	58 - 112
Beta-BHC	108	107	P/P	54 - 168
Bifenthrin	91.5	91.8	P/P	30 - 134
Carbophenothion	101	99.3	P/P	26 - 147
Chlorothalonil	73.7	76.4	P/P	20 - 155
Cis-Nonachlor	87.6	88.2	P/P	54 - 115
Cypermethrin	97.3	99.3	P/P	40 - 137
DDD-p,p'	94.2	96.6	P/P	65 - 129
DDE-p,p'	82.8	83.7	P/P	57 - 116
DDT-p,p'	79.6	82.6	P/P	53 - 133
Delta-BHC	92.4	90.6	P/P	59 - 178
Dicofol	100	94.6	P/P	24 - 138
Dieldrin	87.8	88.3	P/P	60 - 120
Endosulfan I	82.1	82.5	P/P	64 - 118
Endosulfan II	90.8	93.0	P/P	58 - 142
Endosulfan Sulfate	94.7	95.2	P/P	60 - 127
Endrin	86.6	85.6	P/P	59 - 122
Endrin Aldehyde	94.1	95.4	P/P	49 - 132
Endrin Ketone	97.9	102	P/P	64 - 121
Ethalfluralin	90.7	91.4	P/P	60 - 126
Gamma-BHC	106	100	P/P	57 - 154
Gamma-Chlordane	79.5	81.5	P/P	56 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P371340

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Heptachlor	69.2	68.4	P/P	46 - 96.0
Heptachlor Epoxide	84.0	85.1	P/P	61 - 112
Hexachlorobenzene	81.8	80.2	P/P	44 - 98.0
Methoxychlor	98.4	98.4	P/P	63 - 134
Mirex	74.7	73.1	P/P	45 - 100
Permethrin	77.4	80.4	P/P	53 - 115
Trans-Nonachlor	83.4	83.7	P/P	47 - 110
Trifluralin	89.1	93.6	P/P	39 - 142

Reference Method: EPA 8276
Batch ID: P371340

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	85.5	83.7	P/P	43 - 128
Toxaphene	79.7	79.5	P/P	38 - 140

Reference Method: EPA 8321B
Batch ID: P370852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	137		P	40 - 160
3-Hydroxycarbofuran	90.9		P	40 - 160
Acetaminophen	82.5		P	30 - 160
Acetamiprid	101		P	40 - 160
Afidopyropen	103		P	40 - 160
Aldicarb	82.6		P	30 - 160
Aldicarb Sulfone	94.5		P	40 - 160
Aldicarb Sulfoxide	83.6		P	40 - 160
Bentazon	114		P	30 - 160
Benzovindiflupyr	94.8		P	40 - 160
Carbamazepine	106		P	40 - 160
Carbaryl	78.5		P	40 - 160
Carbofuran	85.4		P	40 - 160
Clothianidin	94.7		P	40 - 160
Dinotefuran	88.9		P	40 - 160
Diuron	106		P	40 - 160
Fenuron	102		P	40 - 160
Fluridone	97.8		P	40 - 160
Hydrocodone	99.1		P	40 - 160
Ibuprofen	96.6		P	30 - 160
Imazapyr	89.4		P	40 - 160
Imidacloprid	106		P	40 - 160
Linuron	82.1		P	40 - 160
Mandestrobin	94.5		P	40 - 160
MCPP	160		F	40 - 160
Methiocarb	71.9		P	40 - 160
Methomyl	83.7		P	40 - 160
Naproxen	94.4		P	40 - 160
Oxamyl	93.2		P	40 - 160
Primidone	92.1		P	40 - 160
Propoxur	86.7		P	40 - 160
Pyraclostrobin	92.8		P	30 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P370852

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Thiamethoxam	96.7		P	40 - 160
Tolfenpyrad	69.9		P	40 - 160
Triclopyr	139		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P370917

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	74.5		P	40 - 150
AMPA	126		P	40 - 150
Endothall	145		P	40 - 150
Glufosinate	128		P	40 - 150
Glyphosate	126		P	40 - 140
Sucralose	138		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P371010

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

Reference Method: SM 2120 B
Batch ID: P371011

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.9		P	85 - 115

Reference Method: SM 2120 B
Batch ID: P371013

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.9		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P371514

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

Reference Method: SM 2320 B-97
Batch ID: P371526

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P371518

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.0		P	92 - 103

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P371530

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

Reference Method: SM 5310 B-00
Batch ID: P371199

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P371161

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120866	Barium	99.8	99.7	P/P	80 - 120
2120866	Calcium	100		P	80 - 120
2120866	Iron	97.9	100	P/P	80 - 120
2120866	Magnesium	101		P	80 - 120
2120866	Potassium	97.0		P	80 - 120
2120866	Sodium	98.9		P	80 - 120
2120866	Zinc	99.5	99.5	P/P	80 - 120
2120923	Barium	102		P	80 - 120
2120923	Calcium	112		P	80 - 120
2120923	Iron	111		P	80 - 120
2120923	Magnesium	115		P	80 - 120
2120923	Potassium	107		P	80 - 120
2120923	Sodium	110		P	80 - 120
2120923	Zinc	107		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P371161

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120866	Aluminum	97.0	96.1	P/P	80 - 120
2120866	Antimony	97.8	97.3	P/P	80 - 120
2120866	Arsenic	96.4	96.3	P/P	80 - 120
2120866	Boron	99.9	99.2	P/P	80 - 120
2120866	Cadmium	95.1	96.2	P/P	80 - 120
2120866	Chromium	101	100	P/P	80 - 120
2120866	Copper	92.1	91.6	P/P	80 - 120
2120866	Lead	98.1	97.9	P/P	80 - 120
2120866	Nickel	102	102	P/P	80 - 120
2120866	Selenium	102	100	P/P	80 - 120
2120866	Silver	99.1	99.5	P/P	80 - 120
2120866	Thallium	100	101	P/P	80 - 120
2120923	Aluminum	93.4		P	80 - 120
2120923	Antimony	96.7		P	80 - 120
2120923	Arsenic	95.2		P	80 - 120
2120923	Boron	101		P	80 - 120
2120923	Cadmium	97.3		P	80 - 120
2120923	Chromium	108		P	80 - 120
2120923	Copper	97.0		P	80 - 120
2120923	Lead	97.8		P	80 - 120
2120923	Nickel	102		P	80 - 120
2120923	Selenium	98.2		P	80 - 120
2120923	Silver	101		P	80 - 120
2120923	Thallium	101		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P371127

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120596	Chloride	104		P	90 - 110
2120820	Chloride	102		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P371131

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120596	Sulfate	105		P	90 - 110
2120820	Sulfate	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P371265

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120878	Ammonia-N	100	98.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P371175

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120601	Kjeldahl Nitrogen	103	113	P/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P371301

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120457	Kjeldahl Nitrogen	107	99.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P371149

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120815	NO2NO3-N	97.5	98.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P371150

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120887	NO2NO3-N	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P371155

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120744	Total-P	96.5	99.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P371006

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120832	O-Phosphate-P	96.5	97.4	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P371188

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120901	Acetochlor	89.4	100	P/P	63 - 129
2120901	Alachlor	88.7	97.8	P/P	65 - 127
2120901	Ametryn	96.8	97.9	P/P	40 - 164

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P371188

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120901	Atrazine	96.9	98.5	P/P	66 - 135
2120901	Atrazine Desethyl	73.5	85.5	P/P	14 - 157
2120901	Azinphos Methyl	104	108	P/P	49 - 180
2120901	Bromacil	76.8	80.2	P/P	48 - 130
2120901	Butylate	57.9	56.3	P/P	10 - 94.0
2120901	Chlorpyrifos Ethyl	90.0	91.0	P/P	58 - 123
2120901	Chlorpyrifos Methyl	85.5	91.8	P/P	58 - 125
2120901	Cyanazine	84.7	120	P/P	24 - 253
2120901	Demeton	65.1	77.0	P/P	25 - 149
2120901	Diazinon	86.5	101	P/P	59 - 144
2120901	Dimethenamid	87.7	97.3	P/P	46 - 139
2120901	Disulfoton	74.5	89.5	P/P	54 - 132
2120901	Dithiopyr	92.2	96.2	P/P	64 - 130
2120901	EPTC	58.2	58.2	P/P	10 - 92.0
2120901	Ethion	95.9	92.2	P/P	30 - 148
2120901	Ethoprop	76.6	86.5	P/P	50 - 130
2120901	Fenamiphos	92.6	82.1	P/P	49 - 142
2120901	Fipronil	95.1	97.2	P/P	46 - 140
2120901	Fipronil Desulfinyl	88.4	82.1	P/P	30 - 121
2120901	Fipronil Sulfide	91.7	79.6	P/P	31 - 136
2120901	Fipronil Sulfone	89.7	78.7	P/P	16 - 136
2120901	Fonofos	69.6	82.3	P/P	55 - 129
2120901	Hexazinone	101	94.3	P/P	56 - 141
2120901	Malathion	98.2	97.5	P/P	56 - 135
2120901	Metalaxyl	94.9	96.1	P/P	54 - 135
2120901	Metolachlor	91.4	98.1	P/P	51 - 140
2120901	Metribuzin	96.9	149	P/P	45 - 254
2120901	Mevinphos	78.4	76.9	P/P	33 - 131
2120901	Molinate	67.2	69.6	P/P	14 - 98.0
2120901	Norflurazon	94.9	93.5	P/P	34 - 136
2120901	Oxadiazon	97.0	96.3	P/P	67 - 116
2120901	Parathion Ethyl	89.2	91.2	P/P	66 - 118
2120901	Parathion Methyl	94.2	95.1	P/P	64 - 136
2120901	Pendimethalin	81.5	88.5	P/P	59 - 144
2120901	Phorate	77.8	88.3	P/P	42 - 130
2120901	Prodiamine	92.6	98.2	P/P	42 - 148
2120901	Prometon	92.1	91.2	P/P	59 - 134
2120901	Prometryn	88.2	100	P/P	54 - 135
2120901	Simazine	97.6	96.8	P/P	53 - 156
2120901	Tebuconazole	95.0	73.6	P/P	10 - 131
2120901	Terbufos	75.4	89.2	P/P	57 - 131
2120901	Terbuthylazine	94.1	91.8	P/P	68 - 125

Reference Method: EPA 8270E
Batch ID: P371340

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2121078	Aldrin	58.8	57.1	P/P	25 - 92.0
2121078	Alpha-BHC	93.5	90.9	P/P	48 - 150
2121078	Alpha-Chlordane	77.3	76.1	P/P	50 - 115
2121078	Beta-BHC	95.2	77.0	P/P	39 - 184
2121078	Bifenthrin	86.8	86.4	P/P	46 - 116

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P371340

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2121078	Carbophenothion	72.5	69.9	P/P	27 - 180
2121078	Chlorothalonil	76.9	71.1	P/P	10 - 216
2121078	Cis-Nonachlor	81.0	80.1	P/P	55 - 112
2121078	Cypermethrin	94.0	93.4	P/P	40 - 153
2121078	DDD-p,p'	84.7	86.9	P/P	53 - 128
2121078	DDE-p,p'	74.6	73.1	P/P	48 - 116
2121078	DDT-p,p'	74.8	74.9	P/P	47 - 128
2121078	Delta-BHC	81.5	78.5	P/P	48 - 221
2121078	Dicofol	84.5	82.3	P/P	10 - 147
2121078	Dieldrin	72.4	67.4	P/P	48 - 128
2121078	Endosulfan I	79.6	74.9	P/P	58 - 126
2121078	Endosulfan II	83.7	84.2	P/P	50 - 150
2121078	Endosulfan Sulfate	90.0	88.5	P/P	56 - 130
2121078	Endrin	76.1	78.7	P/P	50 - 126
2121078	Endrin Aldehyde	81.2	82.4	P/P	12 - 145
2121078	Endrin Ketone	93.2	93.6	P/P	59 - 132
2121078	Ethalfluralin	84.1	83.2	P/P	65 - 122
2121078	Gamma-BHC	102	78.1	P/P	40 - 190
2121078	Gamma-Chlordane	75.8	74.5	P/P	50 - 112
2121078	Heptachlor	68.8	64.0	P/P	41 - 98.0
2121078	Heptachlor Epoxide	86.0	84.1	P/P	55 - 117
2121078	Hexachlorobenzene	76.9	75.7	P/P	47 - 91.0
2121078	Methoxychlor	89.9	88.0	P/P	55 - 133
2121078	Mirex	73.5	72.1	P/P	44 - 101
2121078	Permethrin	62.8	63.4	P/P	52 - 124
2121078	Trans-Nonachlor	78.9	77.8	P/P	53 - 99.0
2121078	Trifluralin	84.2	83.9	P/P	10 - 201

Reference Method: EPA 8276
Batch ID: P371340

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120434	Chlordane	81.6	84.4	P/P	34 - 136
2120434	Toxaphene	82.0	84.3	P/P	22 - 152

Reference Method: EPA 8321B
Batch ID: P370852

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119069	3-Hydroxycarbofuran	94.4	95.0	P/P	40 - 160
2119069	Aldicarb	96.9	84.5	P/P	30 - 160
2119069	Aldicarb Sulfone	102	98.4	P/P	40 - 160
2119069	Aldicarb Sulfoxide	45.8	47.6	P/P	40 - 160
2119069	Carbaryl	77.9	76.0	P/P	40 - 160
2119069	Carbofuran	83.3	81.4	P/P	40 - 160
2119069	Methiocarb	72.6	73.8	P/P	40 - 160
2119069	Methomyl	85.5	87.6	P/P	40 - 160
2119069	Oxamyl	98.5	93.0	P/P	40 - 160
2119069	Propoxur	86.8	83.5	P/P	40 - 160
2120253	2,4-D	165	159	F/P	40 - 160
2120253	Acetaminophen	78.8	77.4	P/P	30 - 160
2120253	Acetamiprid	119	128	P/P	40 - 160

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P370852

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120253	Afidopyropen	113	108	P/P	40 - 160
2120253	Bentazon	79.6	77.9	P/P	30 - 160
2120253	Benzovindiflupyr	101	102	P/P	40 - 160
2120253	Carbamazepine	101	103	P/P	40 - 160
2120253	Clothianidin	103	107	P/P	40 - 160
2120253	Dinotefuran	116	118	P/P	40 - 160
2120253	Diuron	93.5	88.0	P/P	40 - 160
2120253	Fenuron	97.5	96.4	P/P	40 - 160
2120253	Fluridone	100	98.4	P/P	40 - 160
2120253	Hydrocodone	92.9	110	P/P	40 - 160
2120253	Ibuprofen	103	97.1	P/P	30 - 160
2120253	Imazapyr	128	122	P/P	40 - 160
2120253	Imidacloprid	200	200	F/F	40 - 160
2120253	Linuron	81.8	83.5	P/P	40 - 160
2120253	Mandestrobin	96.7	96.4	P/P	40 - 160
2120253	MCPP	171	167	F/F	40 - 160
2120253	Naproxen	97.9	81.4	P/P	40 - 160
2120253	Primidone	103	109	P/P	40 - 160
2120253	Pyraclostrobin	99.9	94.7	P/P	30 - 160
2120253	Thiamethoxam	144	148	P/P	40 - 160
2120253	Tolfenpyrad	80.6	75.4	P/P	40 - 160
2120253	Triclopyr	127	103	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P370917

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2119620	Acesulfame K	60.3	55.1	P/P	40 - 150
2119620	AMPA	115	108	P/P	40 - 150
2119620	Endothall	115	105	P/P	40 - 150
2119620	Glufosinate	115	116	P/P	40 - 150
2119620	Glyphosate	111	110	P/P	40 - 140
2119620	Sucralose	147	133	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P371518

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120598	Fluoride	98.9	97.0	P/P	89 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P371530

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2121426	Fluoride	97.6	96.0	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P371199

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2120602	Organic Carbon	97.3	98.8	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P371015

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120826	Turbidity	7.74	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P371161

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120866	Barium	0.164	Spike	P	0 - 20
2120866	Calcium	0.236	Spike	P	0 - 20
2120866	Iron	1.76	Spike	P	0 - 20
2120866	Magnesium	0.766	Spike	P	0 - 20
2120866	Potassium	0.313	Spike	P	0 - 20
2120866	Sodium	0.499	Spike	P	0 - 20
2120866	Zinc	0.0256	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P371161

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120866	Aluminum	0.916	Spike	P	0 - 20
2120866	Antimony	0.526	Spike	P	0 - 20
2120866	Arsenic	0.138	Spike	P	0 - 20
2120866	Boron	0.427	Spike	P	0 - 20
2120866	Cadmium	1.18	Spike	P	0 - 20
2120866	Chromium	0.443	Spike	P	0 - 20
2120866	Copper	0.509	Spike	P	0 - 20
2120866	Lead	0.166	Spike	P	0 - 20
2120866	Nickel	0.257	Spike	P	0 - 20
2120866	Selenium	2.40	Spike	P	0 - 20
2120866	Silver	0.335	Spike	P	0 - 20
2120866	Thallium	1.21	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P371127

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120596	Chloride	0.0698	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P371131

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120596	Sulfate	0.763	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P371265

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120878	Ammonia-N	1.40	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P371175

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120601	Kjeldahl Nitrogen	8.58	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P371301

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120457	Kjeldahl Nitrogen	6.93	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P371149

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120815	NO2NO3-N	0.258	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P371150

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120887	NO2NO3-N	0.976	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P371155

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120744	Total-P	2.60	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P371006

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120832	O-Phosphate-P	0.635	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P371188

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120901	Acetochlor	11.3	Spike	P	0 - 30
2120901	Alachlor	9.84	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P371188

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120901	Ametryn	1.20	Spike	P	0 - 30
2120901	Atrazine	1.60	Spike	P	0 - 30
2120901	Atrazine Desethyl	15.1	Spike	P	0 - 30
2120901	Azinphos Methyl	3.67	Spike	P	0 - 30
2120901	Bromacil	4.30	Spike	P	0 - 30
2120901	Butylate	2.69	Spike	P	0 - 30
2120901	Chlorpyrifos Ethyl	1.05	Spike	P	0 - 30
2120901	Chlorpyrifos Methyl	7.08	Spike	P	0 - 30
2120901	Cyanazine	34.2	Spike	F	0 - 30
2120901	Demeton	16.7	Spike	P	0 - 30
2120901	Diazinon	15.2	Spike	P	0 - 30
2120901	Dimethenamid	10.3	Spike	P	0 - 30
2120901	Disulfoton	18.2	Spike	P	0 - 30
2120901	Dithiopyr	4.21	Spike	P	0 - 30
2120901	EPTC	0.0661	Spike	P	0 - 30
2120901	Ethion	3.93	Spike	P	0 - 30
2120901	Ethoprop	12.1	Spike	P	0 - 30
2120901	Fenamiphos	12.0	Spike	P	0 - 30
2120901	Fipronil	2.12	Spike	P	0 - 30
2120901	Fipronil Desulfinyl	7.34	Spike	P	0 - 30
2120901	Fipronil Sulfide	14.2	Spike	P	0 - 30
2120901	Fipronil Sulfone	13.0	Spike	P	0 - 30
2120901	Fonofos	16.7	Spike	P	0 - 30
2120901	Hexazinone	7.33	Spike	P	0 - 30
2120901	Malathion	0.670	Spike	P	0 - 30
2120901	Metalaxyl	1.28	Spike	P	0 - 30
2120901	Metolachlor	7.13	Spike	P	0 - 30
2120901	Metribuzin	42.4	Spike	F	0 - 30
2120901	Mevinphos	1.96	Spike	P	0 - 30
2120901	Molinate	3.53	Spike	P	0 - 30
2120901	Norflurazon	1.53	Spike	P	0 - 30
2120901	Oxadiazon	0.678	Spike	P	0 - 30
2120901	Parathion Ethyl	2.30	Spike	P	0 - 30
2120901	Parathion Methyl	0.996	Spike	P	0 - 30
2120901	Pendimethalin	8.19	Spike	P	0 - 30
2120901	Phorate	12.6	Spike	P	0 - 30
2120901	Prodiamine	5.95	Spike	P	0 - 30
2120901	Prometon	1.05	Spike	P	0 - 30
2120901	Prometryn	12.6	Spike	P	0 - 30
2120901	Simazine	0.805	Spike	P	0 - 30
2120901	Tebuconazole	25.4	Spike	P	0 - 30
2120901	Terbufos	16.7	Spike	P	0 - 30
2120901	Terbuthylazine	2.49	Spike	P	0 - 30
LFB	Acetochlor	9.82	LCS	P	0 - 30
LFB	Alachlor	11.8	LCS	P	0 - 30
LFB	Ametryn	13.6	LCS	P	0 - 30
LFB	Atrazine	6.07	LCS	P	0 - 30
LFB	Atrazine Desethyl	40.6	LCS	F	0 - 30
LFB	Azinphos Methyl	10.9	LCS	P	0 - 30
LFB	Bromacil	9.51	LCS	P	0 - 30
LFB	Butylate	25.9	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P371188

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlorpyrifos Ethyl	7.36	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	19.2	LCS	P	0 - 30
LFB	Cyanazine	42.9	LCS	F	0 - 30
LFB	Demeton	12.3	LCS	P	0 - 30
LFB	Diazinon	16.5	LCS	P	0 - 30
LFB	Dimethenamid	13.3	LCS	P	0 - 30
LFB	Disulfoton	22.1	LCS	P	0 - 30
LFB	Dithiopyr	7.75	LCS	P	0 - 30
LFB	EPTC	8.48	LCS	P	0 - 30
LFB	Ethion	25.5	LCS	P	0 - 30
LFB	Ethoprop	24.4	LCS	P	0 - 30
LFB	Fenamiphos	14.8	LCS	P	0 - 30
LFB	Fipronil	27.9	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	5.08	LCS	P	0 - 30
LFB	Fipronil Sulfide	8.04	LCS	P	0 - 30
LFB	Fipronil Sulfone	24.3	LCS	P	0 - 30
LFB	Fonofos	27.8	LCS	P	0 - 30
LFB	Hexazinone	0.656	LCS	P	0 - 30
LFB	Malathion	2.03	LCS	P	0 - 30
LFB	Metalaxyl	2.14	LCS	P	0 - 30
LFB	Metolachlor	5.44	LCS	P	0 - 30
LFB	Metribuzin	62.6	LCS	F	0 - 30
LFB	Mevinphos	21.6	LCS	P	0 - 30
LFB	Molinate	14.8	LCS	P	0 - 30
LFB	Norflurazon	10.0	LCS	P	0 - 30
LFB	Oxadiazon	1.49	LCS	P	0 - 30
LFB	Parathion Ethyl	6.22	LCS	P	0 - 30
LFB	Parathion Methyl	13.6	LCS	P	0 - 30
LFB	Pendimethalin	3.16	LCS	P	0 - 30
LFB	Phorate	16.4	LCS	P	0 - 30
LFB	Prodiamine	9.08	LCS	P	0 - 30
LFB	Prometon	8.25	LCS	P	0 - 30
LFB	Prometryn	15.6	LCS	P	0 - 30
LFB	Simazine	8.98	LCS	P	0 - 30
LFB	Tebuconazole	38.7	LCS	F	0 - 30
LFB	Terbufos	24.2	LCS	P	0 - 30
LFB	Terbuthylazine	4.00	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P371340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121078	Aldrin	2.90	Spike	P	0 - 30
2121078	Alpha-BHC	2.85	Spike	P	0 - 30
2121078	Alpha-Chlordane	1.56	Spike	P	0 - 30
2121078	Beta-BHC	21.1	Spike	P	0 - 30
2121078	Bifenthrin	0.489	Spike	P	0 - 30
2121078	Carbophenothion	2.44	Spike	P	0 - 30
2121078	Chlorothalonil	7.82	Spike	P	0 - 30
2121078	Cis-Nonachlor	1.12	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P371340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121078	Cypermethrin	0.722	Spike	P	0 - 30
2121078	DDD-p,p'	2.55	Spike	P	0 - 30
2121078	DDE-p,p'	2.02	Spike	P	0 - 30
2121078	DDT-p,p'	0.0957	Spike	P	0 - 30
2121078	Delta-BHC	3.67	Spike	P	0 - 30
2121078	Dicofol	2.66	Spike	P	0 - 30
2121078	Dieldrin	3.83	Spike	P	0 - 30
2121078	Endosulfan I	6.18	Spike	P	0 - 30
2121078	Endosulfan II	0.545	Spike	P	0 - 30
2121078	Endosulfan Sulfate	1.66	Spike	P	0 - 30
2121078	Endrin	3.27	Spike	P	0 - 30
2121078	Endrin Aldehyde	1.54	Spike	P	0 - 30
2121078	Endrin Ketone	0.411	Spike	P	0 - 30
2121078	Ethalfluralin	1.16	Spike	P	0 - 30
2121078	Gamma-BHC	26.5	Spike	P	0 - 30
2121078	Gamma-Chlordane	1.64	Spike	P	0 - 30
2121078	Heptachlor	7.24	Spike	P	0 - 30
2121078	Heptachlor Epoxide	2.24	Spike	P	0 - 30
2121078	Hexachlorobenzene	1.59	Spike	P	0 - 30
2121078	Methoxychlor	2.08	Spike	P	0 - 30
2121078	Mirex	2.00	Spike	P	0 - 30
2121078	Permethrin	0.884	Spike	P	0 - 30
2121078	Trans-Nonachlor	1.41	Spike	P	0 - 30
2121078	Trifluralin	0.291	Spike	P	0 - 30
LFB	Aldrin	2.89	LCS	P	0 - 30
LFB	Alpha-BHC	5.14	LCS	P	0 - 30
LFB	Alpha-Chlordane	1.92	LCS	P	0 - 30
LFB	Beta-BHC	1.18	LCS	P	0 - 30
LFB	Bifenthrin	0.304	LCS	P	0 - 30
LFB	Carbophenothion	2.14	LCS	P	0 - 30
LFB	Chlorothalonil	3.61	LCS	P	0 - 30
LFB	Cis-Nonachlor	0.657	LCS	P	0 - 30
LFB	Cypermethrin	1.98	LCS	P	0 - 30
LFB	DDD-p,p'	2.53	LCS	P	0 - 30
LFB	DDE-p,p'	0.995	LCS	P	0 - 30
LFB	DDT-p,p'	3.77	LCS	P	0 - 30
LFB	Delta-BHC	1.93	LCS	P	0 - 30
LFB	Dicofol	5.48	LCS	P	0 - 30
LFB	Dieldrin	0.552	LCS	P	0 - 30
LFB	Endosulfan I	0.432	LCS	P	0 - 30
LFB	Endosulfan II	2.46	LCS	P	0 - 30
LFB	Endosulfan Sulfate	0.450	LCS	P	0 - 30
LFB	Endrin	1.17	LCS	P	0 - 30
LFB	Endrin Aldehyde	1.36	LCS	P	0 - 30
LFB	Endrin Ketone	3.78	LCS	P	0 - 30
LFB	Ethalfluralin	0.763	LCS	P	0 - 30
LFB	Gamma-BHC	5.82	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.49	LCS	P	0 - 30
LFB	Heptachlor	1.15	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.40	LCS	P	0 - 30
LFB	Hexachlorobenzene	1.98	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P371340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Methoxychlor	0.0498	LCS	P	0 - 30
LFB	Mirex	2.20	LCS	P	0 - 30
LFB	Permethrin	3.81	LCS	P	0 - 30
LFB	Trans-Nonachlor	0.281	LCS	P	0 - 30
LFB	Trifluralin	4.92	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P371340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120434	Chlordane	3.41	Spike	P	0 - 30
2120434	Toxaphene	2.79	Spike	P	0 - 30
LFB	Chlordane	2.16	LCS	P	0 - 30
LFB	Toxaphene	0.335	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P370852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119069	3-Hydroxycarbofuran	0.708	Spike	P	0 - 30
2119069	Aldicarb	13.6	Spike	P	0 - 30
2119069	Aldicarb Sulfone	4.04	Spike	P	0 - 30
2119069	Aldicarb Sulfoxide	3.91	Spike	P	0 - 30
2119069	Carbaryl	2.47	Spike	P	0 - 30
2119069	Carbofuran	2.25	Spike	P	0 - 30
2119069	Methiocarb	1.58	Spike	P	0 - 30
2119069	Methomyl	2.47	Spike	P	0 - 30
2119069	Oxamyl	5.75	Spike	P	0 - 30
2119069	Propoxur	3.86	Spike	P	0 - 30
2120253	2,4-D	3.54	Spike	P	0 - 30
2120253	Acetaminophen	1.85	Spike	P	0 - 30
2120253	Acetamiprid	6.75	Spike	P	0 - 30
2120253	Afidopyropen	3.85	Spike	P	0 - 30
2120253	Bentazon	1.54	Spike	P	0 - 30
2120253	Benzovindiflupyr	1.71	Spike	P	0 - 30
2120253	Carbamazepine	1.32	Spike	P	0 - 30
2120253	Clothianidin	2.98	Spike	P	0 - 30
2120253	Dinotefuran	2.24	Spike	P	0 - 30
2120253	Diuron	2.90	Spike	P	0 - 30
2120253	Fenuron	1.19	Spike	P	0 - 30
2120253	Fluridone	1.23	Spike	P	0 - 30
2120253	Hydrocodone	17.0	Spike	P	0 - 30
2120253	Ibuprofen	5.55	Spike	P	0 - 30
2120253	Imazapyr	3.29	Spike	P	0 - 30
2120253	Imidacloprid	0.125	Spike	P	0 - 30
2120253	Linuron	2.04	Spike	P	0 - 30
2120253	Mandestrobin	0.256	Spike	P	0 - 30
2120253	MCPP	2.62	Spike	P	0 - 30
2120253	Naproxen	18.5	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P370852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120253	Primidone	5.38	Spike	P	0 - 30
2120253	Pyraclostrobin	5.39	Spike	P	0 - 30
2120253	Thiamethoxam	3.06	Spike	P	0 - 30
2120253	Tolfenpyrad	6.67	Spike	P	0 - 30
2120253	Triclopyr	20.8	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P370917

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2119620	Acesulfame K	9.13	Spike	P	0 - 30
2119620	AMPA	6.30	Spike	P	0 - 30
2119620	Endothall	9.18	Spike	P	0 - 30
2119620	Glufosinate	0.610	Spike	P	0 - 30
2119620	Glyphosate	0.974	Spike	P	0 - 30
2119620	Sucralose	9.12	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P371010

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120814	Color (true)	1.95	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P371011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120825	Color (true)	3.02	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P371013

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120826	Color (true)	1.81	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P371514

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120598	Total Alkalinity	0.586	Sample	P	0 - 2.8

Reference Method: SM 2320 B-97
Batch ID: P371526

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

Quality Assurance Report
Precision

Reference Method: SM 2320 B-97
Batch ID: P371526

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121426	Total Alkalinity	0.129	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P371562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120598	TDS	4.40	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P371518

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120598	Fluoride	1.47	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-97
Batch ID: P371530

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2121426	Fluoride	1.41	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P371199

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2120602	Organic Carbon	1.36	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2120851
Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	86.8	P	30 - 160

Lab Sample ID: 2120852
Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	93.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	89.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	102	P	30 - 160
EPA 8321B	Diuron-d6	91.7	P	30 - 160
EPA 8321B	Endothall-d6	131	P	30 - 160
EPA 8321B	Endothall-d6	131	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	84.5	P	30 - 160
EPA 8321B	Primidone-d5	100	P	30 - 160
EPA 8321B	Sucralose-d6	134	P	30 - 160
EPA 8321B	Sucralose-d6	134	P	30 - 160

Lab Sample ID: 2120853
Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	80.7	P	30 - 160

Lab Sample ID: 2120854
Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	158	P	30 - 160
EPA 8321B	Acetaminophen-d4	81.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	97.1	P	30 - 160
EPA 8321B	Diuron-d6	93.0	P	30 - 160
EPA 8321B	Endothall-d6	129	P	30 - 160
EPA 8321B	Endothall-d6	129	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	93.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	93.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	98.9	P	30 - 160
EPA 8321B	Primidone-d5	109	P	30 - 160
EPA 8321B	Sucralose-d6	128	P	30 - 160
EPA 8321B	Sucralose-d6	128	P	30 - 160

Lab Sample ID: 2120855
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	77.4	P	30 - 160

Lab Sample ID: 2120856
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits

Quality Assurance Report
Surrogates

Lab Sample ID: 2120856
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	148	P	30 - 160
EPA 8321B	Acetaminophen-d4	68.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	90.7	P	30 - 160
EPA 8321B	Diuron-d6	90.0	P	30 - 160
EPA 8321B	Endothall-d6	118	P	30 - 160
EPA 8321B	Endothall-d6	118	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	121	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	121	P	30 - 160
EPA 8321B	Ibuprofen-d3	87.0	P	30 - 160
EPA 8321B	Primidone-d5	93.4	P	30 - 160
EPA 8321B	Sucralose-d6	145	P	30 - 160
EPA 8321B	Sucralose-d6	145	P	30 - 160

Lab Sample ID: 2120857
Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	84.5	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	61.0	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	43.4	P	30 - 103
EPA 8276	PCNB	91.7	P	37 - 143

Lab Sample ID: 2120858
Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	113	P	68 - 130
EPA 8270E	Terbufos-d10	96.4	P	61 - 136

Lab Sample ID: 2120859
Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	62.7	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	44.3	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	38.1	P	30 - 103
EPA 8276	PCNB	66.0	P	37 - 143

Lab Sample ID: 2120860
Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	124	P	68 - 130
EPA 8270E	Terbufos-d10	107	P	61 - 136

Lab Sample ID: 2120861
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	87.4	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	53.8	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	47.8	P	30 - 103

Quality Assurance Report
Surrogates

Lab Sample ID: 2120861
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	PCNB	98.1	P	37 - 143

Lab Sample ID: 2120862
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	113	P	68 - 130
EPA 8270E	Terbufos-d10	103	P	61 - 136

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A94268
Included Lab Sample IDs: 2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	103	P/P	90 - 110
Chloride	103	103	P/P	90 - 110
Sulfate	105	106	P/P	90 - 110
Sulfate	106	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A94346
Included Lab Sample IDs: 2120816, 2120819, 2120822, 2120831, 2120832, 2120833, 2120834

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.3	99.2	P/P	90 - 110
O-Phosphate-P	98.9	99.1	P/P	90 - 110
O-Phosphate-P	99.2	98.9	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A94347
Included Lab Sample IDs: 2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	90 - 115
Color (true)	101	98.0	P/P	90 - 115
Color (true)	98.6	101	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A94348
Included Lab Sample IDs: 2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A94408
Included Lab Sample IDs: 2120815, 2120818, 2120821, 2120827, 2120828, 2120829, 2120830

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	102	P/P	90 - 110
NO2NO3-N	103	102	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A94410
Included Lab Sample IDs: 2120852, 2120854, 2120856

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	83.8	89.6	P/P	50 - 150
3-Hydroxycarbofuran	94.3	106	P/P	60 - 150
Acetaminophen	110	112	P/P	60 - 160
Acetamiprid	109	110	P/P	50 - 150
Afidopyropen	105	95.9	P/P	50 - 150
Aldicarb	91.2	106	P/P	60 - 150
Aldicarb Sulfone	90.4	106	P/P	50 - 150
Aldicarb Sulfoxide	107	105	P/P	50 - 150

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Calibration Verification

Reference Method: EPA 8321B
Run ID: A94410
Included Lab Sample IDs: 2120852, 2120854, 2120856

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bentazon	111	110	P/P	50 - 160
Benzovindiflupyr	109	107	P/P	50 - 150
Carbamazepine	106	105	P/P	60 - 150
Carbaryl	107	99.6	P/P	60 - 150
Carbofuran	112	114	P/P	50 - 150
Clothianidin	104	99.7	P/P	60 - 150
Dinotefuran	95.7	99.3	P/P	50 - 150
Diuron	110	110	P/P	60 - 150
Fenuron	111	112	P/P	60 - 150
Fluridone	108	107	P/P	60 - 160
Hydrocodone	113	103	P/P	60 - 150
Ibuprofen	84.6	107	P/P	50 - 160
Imazapyr	90.7	101	P/P	50 - 150
Imidacloprid	89.3	108	P/P	60 - 150
Linuron	109	106	P/P	60 - 150
Mandestrobin	109	110	P/P	50 - 150
MCPP	100	92.6	P/P	50 - 150
Methiocarb	112	109	P/P	50 - 150
Methomyl	112	106	P/P	50 - 150
Naproxen	66.1	113	P/P	50 - 160
Oxamyl	106	105	P/P	50 - 150
Primidone	96.3	99.9	P/P	60 - 150
Propoxur	112	107	P/P	50 - 150
Pyraclostrobin	116	112	P/P	60 - 150
Thiamethoxam	102	103	P/P	50 - 150
Tolfenpyrad	121	113	P/P	60 - 150
Triclopyr	109	92.6	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A94421
Included Lab Sample IDs: 2120852, 2120854, 2120856

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	123	125	P/P	60 - 160
Glufosinate	126	136	P/P	60 - 160
Glyphosate	131	143	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A94423
Included Lab Sample IDs: 2120852, 2120854, 2120856

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	60.6	61.3	P/P	60 - 160
Endothall	147	141	P/P	60 - 160

Reference Method: SM 5310 B-00
Run ID: A94437
Included Lab Sample IDs: 2120815, 2120818, 2120821, 2120827, 2120828, 2120829, 2120830

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	93.1	P/P	90 - 110

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Reference Method: SM 5310 B-00
Run ID: A94437
Included Lab Sample IDs: 2120815, 2120818, 2120821, 2120827, 2120828, 2120829, 2120830

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A94439
Included Lab Sample IDs: 2120815, 2120818, 2120821, 2120827, 2120828, 2120829, 2120830

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	101	P/P	90 - 110
Total-P	101	100	P/P	90 - 110
Total-P	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A94460
Included Lab Sample IDs: 2120815, 2120818

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A94472
Included Lab Sample IDs: 2120863, 2120864, 2120865, 2120866, 2120867, 2120868, 2120869

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	104	P/P	90 - 110
Barium	104	101	P/P	90 - 110
Calcium	100	97.6	P/P	90 - 110
Calcium	102	100	P/P	90 - 110
Iron	100	97.3	P/P	90 - 110
Iron	102	100	P/P	90 - 110
Magnesium	102	99.3	P/P	90 - 110
Magnesium	99.3	96.8	P/P	90 - 110
Potassium	101	99.1	P/P	90 - 110
Potassium	99.1	96.0	P/P	90 - 110
Sodium	99.7	99.7	P/P	90 - 110
Sodium	99.7	96.6	P/P	90 - 110
Zinc	100	104	P/P	90 - 110
Zinc	105	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A94474
Included Lab Sample IDs: 2120815, 2120818, 2120821, 2120827, 2120828, 2120829, 2120830

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	98.3	P/P	90 - 110
Ammonia-N	98.3	97.5	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A94533
Included Lab Sample IDs: 2120852, 2120854, 2120856

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

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Reference Method: EPA 8321B
Run ID: A94533
Included Lab Sample IDs: 2120852, 2120854, 2120856

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	137	143	P/P	60 - 160
Sucralose	143	151	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A94540
Included Lab Sample IDs: 2120821, 2120827, 2120828, 2120829, 2120830

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	109	102	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A94561
Included Lab Sample IDs: 2120865

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Potassium	99.1	96.3	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A94574
Included Lab Sample IDs: 2120857, 2120859, 2120861

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	106		P	80 - 120
Alpha-BHC	112		P	80 - 120
Alpha-Chlordane	105		P	80 - 120
Beta-BHC	101		P	80 - 120
Bifenthrin	107		P	80 - 120
Carbophenothion	119		P	80 - 120
Chlorothalonil	102		P	80 - 120
Cis-Nonachlor	103		P	80 - 120
Cypermethrin	111		P	80 - 120
DDD-p,p'	107		P	80 - 120
DDE-p,p'	105		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	86.0		P	80 - 120
Dicofol	104		P	80 - 120
Dieldrin	106		P	80 - 120
Endosulfan I	101		P	80 - 120
Endosulfan II	98.5		P	80 - 120
Endosulfan Sulfate	109		P	80 - 120
Endrin	107		P	80 - 120
Endrin Aldehyde	104		P	80 - 120
Endrin Ketone	108		P	80 - 120
Ethalfluralin	113		P	80 - 120
Gamma-BHC	110		P	80 - 120
Gamma-Chlordane	106		P	80 - 120
Heptachlor	105		P	80 - 120
Heptachlor Epoxide	105		P	80 - 120
Hexachlorobenzene	111		P	80 - 120
Methoxychlor	106		P	80 - 120
Mirex	110		P	80 - 120

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Reference Method: EPA 8270E
Run ID: A94574
Included Lab Sample IDs: 2120857, 2120859, 2120861

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Permethrin	100		P	80 - 120
Trans-Nonachlor	104		P	80 - 120
Trifluralin	112		P	80 - 120

Reference Method: SM 2320 B-97
Run ID: A94575
Included Lab Sample IDs: 2120814, 2120817

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.2	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A94575
Included Lab Sample IDs: 2120814, 2120817

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

Reference Method: SM 2320 B-97
Run ID: A94582
Included Lab Sample IDs: 2120820, 2120823, 2120824, 2120825, 2120826

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	102	P/P	90 - 110
Total Alkalinity	102	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A94582
Included Lab Sample IDs: 2120820, 2120823, 2120824, 2120825, 2120826

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	100	P/P	90 - 110
Fluoride	99.0	102	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A94788
Included Lab Sample IDs: 2120858, 2120860, 2120862

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	104		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	104		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	96.7		P	80 - 120
Azinphos Methyl	104		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	97.4		P	80 - 120
Chlorpyrifos Ethyl	102		P	80 - 120
Chlorpyrifos Methyl	105		P	80 - 120
Cyanazine	93.2		P	80 - 120
Demeton	94.1		P	80 - 120

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Reference Method: EPA 8270E
Run ID: A94788
Included Lab Sample IDs: 2120858, 2120860, 2120862

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diazinon	102		P	80 - 120
Dimethenamid	104		P	80 - 120
Disulfoton	99.5		P	80 - 120
Dithiopyr	103		P	80 - 120
EPTC	98.7		P	80 - 120
Ethion	103		P	80 - 120
Ethoprop	98.9		P	80 - 120
Fenamiphos	97.9		P	80 - 120
Fipronil	100		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	97.4		P	80 - 120
Fipronil Sulfone	99.0		P	80 - 120
Fonofos	99.4		P	80 - 120
Hexazinone	99.1		P	80 - 120
Malathion	102		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	109		P	80 - 120
Metribuzin	90.4		P	80 - 120
Mevinphos	104		P	80 - 120
Molinate	95.6		P	80 - 120
Norflurazon	100		P	80 - 120
Oxadiazon	106		P	80 - 120
Parathion Ethyl	97.6		P	80 - 120
Parathion Methyl	98.9		P	80 - 120
Pendimethalin	98.9		P	80 - 120
Phorate	98.0		P	80 - 120
Prodiamine	103		P	80 - 120
Prometon	103		P	80 - 120
Prometryn	103		P	80 - 120
Simazine	99.4		P	80 - 120
Tebuconazole	102		P	80 - 120
Terbufos	98.6		P	80 - 120
Terbuthylazine	102		P	80 - 120

Reference Method: EPA 8270E
Run ID: A94789
Included Lab Sample IDs: 2120860

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	99.6		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A94851
Included Lab Sample IDs: 2120863, 2120864, 2120865, 2120866, 2120867, 2120868, 2120869

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	95.9	97.9	P/P	90 - 110
Aluminum	99.7	95.9	P/P	90 - 110
Antimony	97.5	97.8	P/P	90 - 110
Antimony	97.8	99.2	P/P	90 - 110
Arsenic	97.7	98.9	P/P	90 - 110

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Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A94851
Included Lab Sample IDs: 2120863, 2120864, 2120865, 2120866, 2120867, 2120868, 2120869

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	99.8	97.7	P/P	90 - 110
Boron	100	103	P/P	90 - 110
Boron	103	106	P/P	90 - 110
Cadmium	100	101	P/P	90 - 110
Cadmium	101	101	P/P	90 - 110
Chromium	104	106	P/P	90 - 110
Copper	101	97.8	P/P	90 - 110
Copper	97.8	99.5	P/P	90 - 110
Lead	101	103	P/P	90 - 110
Lead	102	101	P/P	90 - 110
Silver	102	102	P/P	90 - 110
Silver	103	102	P/P	90 - 110
Thallium	95.9	96.4	P/P	90 - 110
Thallium	96.4	97.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A94906
Included Lab Sample IDs: 2120863, 2120864, 2120865, 2120866, 2120867, 2120868, 2120869

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	102	102	P/P	90 - 110
Nickel	102	100	P/P	90 - 110
Nickel	102	102	P/P	90 - 110
Selenium	101	100	P/P	90 - 110
Selenium	98.9	101	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			Precision		
							LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							7.74	
EPA 200.7 Rev. 4.4	Barium	102		99.8	99.7	102			0.164
	Calcium	103		100	112				0.236
	Iron	104		97.9	100	111			1.76
	Magnesium	102		101	115				0.766
	Potassium	101		97.0	107				0.313
	Sodium	99.9		98.9	110				0.499
	Zinc	101		99.5	99.5	107			0.0256
EPA 200.8 Rev. 5.4	Aluminum	94.6		97.0	96.1	93.4			0.916
	Antimony	96.5		97.8	97.3	96.7			0.526
	Arsenic	95.6		96.4	96.3	95.2			0.138
	Boron	99.2		99.9	99.2	101			0.427
	Cadmium	95.1		95.1	96.2	97.3			1.18
	Chromium	100		101	100	108			0.443
	Copper	94.8		92.1	91.6	97.0			0.509
	Lead	97.3		98.1	97.9	97.8			0.166
	Nickel	106		102	102	102			0.257
	Selenium	104		102	100	98.2			2.40
	Silver	99.2		99.1	99.5	101			0.335
	Thallium	99.7		100	101	101			1.21
EPA 300.0 Rev. 2.1	Chloride	101		104	102			0.0698	
	Sulfate	103		105	104			0.763	
EPA 350.1 Rev. 2.0	Ammonia-N	100		100	98.7				1.40
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.6		103	113				8.58
	Kjeldahl Nitrogen	101		107	99.4				6.93
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5		97.5	98.0				0.258
	NO2NO3-N	102		103	102				0.976
EPA 365.1 Rev. 2.0	Total-P	97.9		96.5	99.2				2.60
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.3		96.5	97.4				0.635
EPA 8270E	Acetochlor	99.5	90.1	89.4	100		9.82		11.3
	Alachlor	98.0	87.1	88.7	97.8		11.8		9.84
	Aldrin	54.4	52.8	58.8	57.1		2.89		2.90
	Alpha-BHC	90.9	86.4	93.5	90.9		5.14		2.85
	Alpha-Chlordane	81.9	83.5	77.3	76.1		1.92		1.56
	Ametryn	109	94.7	96.8	97.9		13.6		1.20
	Atrazine	105	99.0	96.9	98.5		6.07		1.60
	Atrazine Desethyl	105	69.7	73.5	85.5		40.6		15.1
	Azinphos Methyl	124	111	104	108		10.9		3.67
	Beta-BHC	108	107	95.2	77.0		1.18		21.1
	Bifenthrin	91.5	91.8	86.8	86.4		0.304		0.489
	Bromacil	80.3	73.0	76.8	80.2		9.51		4.30
	Butylate	63.9	83.0	57.9	56.3		25.9		2.69
	Carbophenothion	101	99.3	72.5	69.9		2.14		2.44
	Chlorothalonil	73.7	76.4	76.9	71.1		3.61		7.82
	Chlorpyrifos Ethyl	98.5	91.5	90.0	91.0		7.36		1.05
	Chlorpyrifos Methyl	105	86.2	85.5	91.8		19.2		7.08
	Cis-Nonachlor	87.6	88.2	81.0	80.1		0.657		1.12
	Cyanazine	133	86.0	84.7	120		42.9		34.2
	Cypermethrin	97.3	99.3	94.0	93.4		1.98		0.722
	DDD-p,p'	94.2	96.6	84.7	86.9		2.53		2.55
	DDE-p,p'	82.8	83.7	74.6	73.1		0.995		2.02
	DDT-p,p'	79.6	82.6	74.8	74.9		3.77		0.0957
	Delta-BHC	92.4	90.6	81.5	78.5		1.93		3.67
	Demeton	81.9	72.4	65.1	77.0		12.3		16.7

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Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270E	Diazinon	108	91.1	86.5	101	16.5		15.2
	Dicofol	100	94.6	84.5	82.3	5.48		2.66
	Dieldrin	87.8	88.3	72.4	67.4	0.552		3.83
	Dimethenamid	99.9	87.5	87.7	97.3	13.3		10.3
	Disulfoton	97.7	78.2	74.5	89.5	22.1		18.2
	Dithiopyr	99.4	92.0	92.2	96.2	7.75		4.21
	Endosulfan I	82.1	82.5	79.6	74.9	0.432		6.18
	Endosulfan II	90.8	93.0	83.7	84.2	2.46		0.545
	Endosulfan Sulfate	94.7	95.2	90.0	88.5	0.450		1.66
	Endrin	86.6	85.6	76.1	78.7	1.17		3.27
	Endrin Aldehyde	94.1	95.4	81.2	82.4	1.36		1.54
	Endrin Ketone	97.9	102	93.2	93.6	3.78		0.411
	EPTC	64.1	58.9	58.2	58.2	8.48		0.0661
	Ethalfluralin	90.7	91.4	84.1	83.2	0.763		1.16
	Ethion	77.1	99.6	95.9	92.2	25.5		3.93
	Ethoprop	96.3	75.4	76.6	86.5	24.4		12.1
	Fenamiphos	104	90.1	92.6	82.1	14.8		12.0
	Fipronil	104	78.5	95.1	97.2	27.9		2.12
	Fipronil Desulfinyl	85.3	81.1	88.4	82.1	5.08		7.34
	Fipronil Sulfide	89.0	82.1	91.7	79.6	8.04		14.2
	Fipronil Sulfone	80.1	62.7	89.7	78.7	24.3		13.0
	Fonofos	98.2	74.2	69.6	82.3	27.8		16.7
	Gamma-BHC	106	100	102	78.1	5.82		26.5
	Gamma-Chlordane	79.5	81.5	75.8	74.5	2.49		1.64
	Heptachlor	69.2	68.4	68.8	64.0	1.15		7.24
	Heptachlor Epoxide	84.0	85.1	86.0	84.1	1.40		2.24
	Hexachlorobenzene	81.8	80.2	76.9	75.7	1.98		1.59
	Hexazinone	100	99.8	101	94.3	0.656		7.33
	Malathion	97.3	95.4	98.2	97.5	2.03		0.670
	Metalaxyl	93.0	91.0	94.9	96.1	2.14		1.28
	Methoxychlor	98.4	98.4	89.9	88.0	0.0498		2.08
	Metolachlor	96.2	91.1	91.4	98.1	5.44		7.13
	Metribuzin	203	106	96.9	149	62.6		42.4
	Mevinphos	89.4	71.9	78.4	76.9	21.6		1.96
	Mirex	74.7	73.1	73.5	72.1	2.20		2.00
	Molinate	78.8	68.0	67.2	69.6	14.8		3.53
	Norflurazon	104	94.4	94.9	93.5	10.0		1.53
	Oxadiazon	99.8	98.3	97.0	96.3	1.49		0.678
	Parathion Ethyl	97.8	91.9	89.2	91.2	6.22		2.30
	Parathion Methyl	106	92.5	94.2	95.1	13.6		0.996
	Pendimethalin	90.7	87.9	81.5	88.5	3.16		8.19
	Permethrin	77.4	80.4	62.8	63.4	3.81		0.884
	Phorate	97.6	82.8	77.8	88.3	16.4		12.6
	Prodiamine	79.6	87.2	92.6	98.2	9.08		5.95
	Prometon	95.0	87.4	92.1	91.2	8.25		1.05
	Prometryn	108	92.6	88.2	100	15.6		12.6
	Simazine	106	96.4	97.6	96.8	8.98		0.805
	Tebuconazole	62.4	92.3	95.0	73.6	38.7		25.4
	Terbufos	101	79.2	75.4	89.2	24.2		16.7
	Terbuthylazine	96.9	101	94.1	91.8	4.00		2.49
	Trans-Nonachlor	83.4	83.7	78.9	77.8	0.281		1.41
	Trifluralin	89.1	93.6	84.2	83.9	4.92		0.291
EPA 8276	Chlordane	85.5	83.7	81.6	84.4	2.16		3.41
	Toxaphene	79.7	79.5	82.0	84.3	0.335		2.79

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	2,4-D	137	165	159			3.54
	3-Hydroxycarbofuran	90.9	94.4	95.0			0.708
	Acesulfame K	74.5	60.3	55.1			9.13
	Acetaminophen	82.5	78.8	77.4			1.85
	Acetamiprid	101	119	128			6.75
	Afidopyropen	103	113	108			3.85
	Aldicarb	82.6	96.9	84.5			13.6
	Aldicarb Sulfone	94.5	102	98.4			4.04
	Aldicarb Sulfoxide	83.6	45.8	47.6			3.91
	AMPA	126	115	108			6.30
	Bentazon	114	79.6	77.9			1.54
	Benzovindiflupyr	94.8	101	102			1.71
	Carbamazepine	106	101	103			1.32
	Carbaryl	78.5	77.9	76.0			2.47
	Carbofuran	85.4	83.3	81.4			2.25
	Clothianidin	94.7	103	107			2.98
	Dinotefuran	88.9	116	118			2.24
	Diuron	106	93.5	88.0			2.90
	Endothall	145	115	105			9.18
	Fenuron	102	97.5	96.4			1.19
	Fluridone	97.8	100	98.4			1.23
	Glufosinate	128	115	116			0.610
	Glyphosate	126	111	110			0.974
	Hydrocodone	99.1	92.9	110			17.0
	Ibuprofen	96.6	103	97.1			5.55
	Imazapyr	89.4	128	122			3.29
	Imidacloprid	106	200	200			0.125
	Linuron	82.1	81.8	83.5			2.04
	Mandestrobin	94.5	96.7	96.4			0.256
	MCPP	160	171	167			2.62
	Methiocarb	71.9	72.6	73.8			1.58
	Methomyl	83.7	85.5	87.6			2.47
	Naproxen	94.4	97.9	81.4			18.5
	Oxamyl	93.2	98.5	93.0			5.75
	Primidone	92.1	103	109			5.38
	Propoxur	86.7	86.8	83.5			3.86
	Pyraclostrobin	92.8	99.9	94.7			5.39
	Sucralose	138	147	133			9.12
	Thiamethoxam	96.7	144	148			3.06
	Tolfenpyrad	69.9	80.6	75.4			6.67
	Triclopyr	139	127	103			20.8
SM 2120 B	Color (true)	99.6				1.95	
	Color (true)	99.9				3.02	
	Color (true)	99.9				1.81	
SM 2320 B-97	Total Alkalinity	102				0.586	
	Total Alkalinity	101				0.129	
SM 2540 C-97	TDS					4.40	
SM 4500 F-C-97	Fluoride	98.0	98.9	97.0			1.47
	Fluoride	97.9	97.6	96.0			1.41
SM 5310 B-00	Organic Carbon	97.8	97.3	98.8			1.36

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2120863, 2120864, 2120865, 2120866, 2120867, 2120868, 2120869
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2120863, 2120864, 2120865, 2120866, 2120867, 2120868, 2120869
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2120815, 2120818, 2120821, 2120827, 2120828, 2120829, 2120830
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2120815, 2120818, 2120821, 2120827, 2120828, 2120829, 2120830
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2120815, 2120818, 2120821, 2120827, 2120828, 2120829, 2120830
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2120815, 2120818, 2120821, 2120827, 2120828, 2120829, 2120830
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2120816, 2120819, 2120822, 2120831, 2120832, 2120833, 2120834
EPA 8270E / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2120857, 2120859, 2120861
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2120858, 2120860, 2120862
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2120857, 2120859, 2120861
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2120851, 2120853, 2120855
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2120852, 2120854, 2120856
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2120852, 2120854, 2120856
SM 2120 B / E31780	True Color measured at 450 nm	2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2120815, 2120818, 2120821, 2120827, 2120828, 2120829, 2120830

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	09/18/2019			09/19/2019 15:53	Rosalyn Ballman	2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826
EPA 200.7 Rev. 4.4	09/18/2019	09/23/2019 15:20	Elliott D. Healy	09/24/2019 14:16	Alexander Thompson	2120863
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	09/24/2019 14:24	Alexander Thompson	2120864
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	09/24/2019 14:31	Alexander Thompson	2120865
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	09/24/2019 15:03	Alexander Thompson	2120866
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	09/24/2019 15:28	Alexander Thompson	2120867
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	09/24/2019 15:36	Alexander Thompson	2120868
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	09/24/2019 15:43	Alexander Thompson	2120869
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	09/27/2019 14:40	Alexander Thompson	2120865
EPA 200.8 Rev. 5.4	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/09/2019 17:06	Robert K Palmer	2120866
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/09/2019 18:34	Robert K Palmer	2120863
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/09/2019 18:44	Robert K Palmer	2120864
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/09/2019 18:54	Robert K Palmer	2120865
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/09/2019 19:03	Robert K Palmer	2120867
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/09/2019 19:13	Robert K Palmer	2120868
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/09/2019 19:23	Robert K Palmer	2120869
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/14/2019 01:06	Robert K Palmer	2120866
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/14/2019 02:24	Robert K Palmer	2120863
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/14/2019 02:34	Robert K Palmer	2120864
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/14/2019 02:44	Robert K Palmer	2120865
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/14/2019 02:53	Robert K Palmer	2120867
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/14/2019 03:03	Robert K Palmer	2120868
	09/18/2019	09/23/2019 15:20	Elliott D. Healy	10/14/2019 03:13	Robert K Palmer	2120869
EPA 300.0 Rev. 2.1	09/18/2019			09/21/2019 12:42	Jhamieka S. Greenwood	2120820
	09/18/2019			09/21/2019 14:55	Jhamieka S. Greenwood	2120814
	09/18/2019			09/21/2019 15:07	Jhamieka S. Greenwood	2120817
	09/18/2019			09/21/2019 15:19	Jhamieka S. Greenwood	2120823
	09/18/2019			09/21/2019 15:32	Jhamieka S. Greenwood	2120824
	09/18/2019			09/21/2019 15:44	Jhamieka S. Greenwood	2120825
	09/18/2019			09/21/2019 15:56	Jhamieka S. Greenwood	2120826
EPA 350.1 Rev. 2.0	09/18/2019			09/24/2019 13:31	Ping Hua	2120815
	09/18/2019			09/24/2019 13:33	Ping Hua	2120818
	09/18/2019			09/24/2019 13:34	Ping Hua	2120821
	09/18/2019			09/24/2019 13:36	Ping Hua	2120827
	09/18/2019			09/24/2019 13:37	Ping Hua	2120828
	09/18/2019			09/24/2019 13:45	Ping Hua	2120829
	09/18/2019			09/24/2019 13:46	Ping Hua	2120830
EPA 351.2 Rev. 2.0	09/18/2019	09/23/2019 13:55	Sima Feizi	09/24/2019 13:55	Virginia P. Brown	2120815
	09/18/2019	09/23/2019 13:55	Sima Feizi	09/24/2019 13:57	Virginia P. Brown	2120818

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Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 351.2 Rev. 2.0	09/18/2019	09/25/2019 11:47	Sima Feizi	09/26/2019 15:56	Julia Storbeck	2120821
	09/18/2019	09/25/2019 11:47	Sima Feizi	09/26/2019 15:58	Julia Storbeck	2120827
	09/18/2019	09/25/2019 11:47	Sima Feizi	09/26/2019 15:59	Julia Storbeck	2120828
	09/18/2019	09/25/2019 11:47	Sima Feizi	09/26/2019 16:01	Julia Storbeck	2120829
	09/18/2019	09/25/2019 11:47	Sima Feizi	09/26/2019 16:02	Julia Storbeck	2120830
EPA 353.2 Rev. 2.0	09/18/2019			09/23/2019 11:46	Beverly Y. Sanders	2120815
	09/18/2019			09/23/2019 11:58	Beverly Y. Sanders	2120818
	09/18/2019			09/23/2019 12:08	Beverly Y. Sanders	2120829
	09/18/2019			09/23/2019 13:05	Beverly Y. Sanders	2120821
	09/18/2019			09/23/2019 13:06	Beverly Y. Sanders	2120827
	09/18/2019			09/23/2019 13:08	Beverly Y. Sanders	2120828
	09/18/2019			09/23/2019 13:11	Beverly Y. Sanders	2120830
EPA 365.1 Rev. 2.0	09/18/2019	09/23/2019 14:45	Lipi Saha	09/24/2019 10:15	Lipi Saha	2120815
	09/18/2019	09/23/2019 14:45	Lipi Saha	09/24/2019 10:16	Lipi Saha	2120818
	09/18/2019	09/23/2019 14:45	Lipi Saha	09/24/2019 10:21	Lipi Saha	2120827
	09/18/2019	09/23/2019 14:45	Lipi Saha	09/24/2019 10:22	Lipi Saha	2120828
	09/18/2019	09/23/2019 14:45	Lipi Saha	09/24/2019 10:23	Lipi Saha	2120829
	09/18/2019	09/23/2019 14:45	Lipi Saha	09/24/2019 10:24	Lipi Saha	2120830
	09/18/2019	09/23/2019 14:45	Lipi Saha	09/24/2019 12:27	Lipi Saha	2120821
EPA 365.1 Rev. 2.0 dissolved	09/18/2019			09/19/2019 15:44	Jhamieka S. Greenwood	2120832
	09/18/2019			09/19/2019 16:09	Jhamieka S. Greenwood	2120833
	09/18/2019			09/19/2019 16:10	Jhamieka S. Greenwood	2120816
	09/18/2019			09/19/2019 16:11	Jhamieka S. Greenwood	2120819
	09/18/2019			09/19/2019 16:12	Jhamieka S. Greenwood	2120834
	09/18/2019			09/19/2019 16:37	Jhamieka S. Greenwood	2120831
	09/18/2019			09/19/2019 16:38	Jhamieka S. Greenwood	2120822
EPA 8270E	09/18/2019	09/23/2019 10:00	Rasheda Ghaffari	09/27/2019 06:40	Arthur Maknenko	2120857
	09/18/2019	09/23/2019 10:00	Rasheda Ghaffari	09/27/2019 07:10	Arthur Maknenko	2120859
	09/18/2019	09/23/2019 10:00	Rasheda Ghaffari	09/27/2019 07:40	Arthur Maknenko	2120861
	09/18/2019	09/24/2019 09:00	Fe-Val Siddell	09/25/2019 19:36	Vandana T. Nagar	2120858
	09/18/2019	09/24/2019 09:00	Fe-Val Siddell	09/25/2019 20:02	Vandana T. Nagar	2120860
	09/18/2019	09/24/2019 09:00	Fe-Val Siddell	09/25/2019 20:28	Vandana T. Nagar	2120862
	09/18/2019	09/24/2019 09:00	Fe-Val Siddell	09/26/2019 17:35	Vandana T. Nagar	2120860
EPA 8276	09/18/2019	09/23/2019 10:00	Rasheda Ghaffari	09/28/2019 04:51	Julie Wi	2120857
	09/18/2019	09/23/2019 10:00	Rasheda Ghaffari	09/30/2019 15:01	Julie Wi	2120859
	09/18/2019	09/23/2019 10:00	Rasheda Ghaffari	09/30/2019 15:56	Julie Wi	2120861
EPA 8321B	09/18/2019	09/19/2019 08:30	Hoor Shaik	09/20/2019 01:30	Juyoung Kim	2120851
	09/18/2019	09/19/2019 08:30	Hoor Shaik	09/20/2019 02:40	Juyoung Kim	2120855
	09/18/2019	09/19/2019 08:30	Hoor Shaik	09/20/2019 06:07	Juyoung Kim	2120852
	09/18/2019	09/19/2019 08:30	Hoor Shaik	09/20/2019 06:42	Juyoung Kim	2120854

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Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	09/18/2019	09/19/2019 08:30	Hoor Shaik	09/20/2019 07:16	Juyoung Kim	2120856
	09/18/2019	09/19/2019 10:30	Rebecca Ware	09/19/2019 15:26	Rebecca Ware	2120852
	09/18/2019	09/19/2019 10:30	Rebecca Ware	09/19/2019 15:39	Rebecca Ware	2120854
	09/18/2019	09/19/2019 10:30	Rebecca Ware	09/19/2019 15:53	Rebecca Ware	2120856
	09/18/2019	09/19/2019 10:30	Rebecca Ware	09/20/2019 13:50	Rebecca Ware	2120852
	09/18/2019	09/19/2019 10:30	Rebecca Ware	09/20/2019 14:00	Rebecca Ware	2120854
	09/18/2019	09/19/2019 10:30	Rebecca Ware	09/20/2019 14:11	Rebecca Ware	2120856
	09/18/2019	09/19/2019 10:30	Rebecca Ware	09/25/2019 19:43	Rebecca Ware	2120852
	09/18/2019	09/19/2019 10:30	Rebecca Ware	09/25/2019 19:55	Rebecca Ware	2120854
	09/18/2019	09/19/2019 10:30	Rebecca Ware	09/26/2019 10:06	Rebecca Ware	2120856
	09/18/2019	09/19/2019 12:00	Hoor Shaik	09/20/2019 02:05	Juyoung Kim	2120853
SM 2120 B	09/18/2019			09/19/2019 16:21	Madeline Funaro	2120814
	09/18/2019			09/19/2019 16:22	Madeline Funaro	2120817
	09/18/2019			09/19/2019 16:23	Madeline Funaro	2120820, 2120823
	09/18/2019			09/19/2019 16:24	Madeline Funaro	2120824
	09/18/2019			09/19/2019 16:29	Madeline Funaro	2120825
	09/18/2019			09/19/2019 16:51	Madeline Funaro	2120826
SM 2320 B-97	09/18/2019			09/26/2019 21:37	Dale L. Simmons	2120814
	09/18/2019			09/26/2019 21:49	Dale L. Simmons	2120817
	09/18/2019			09/28/2019 00:44	Dale L. Simmons	2120820
	09/18/2019			09/28/2019 00:56	Dale L. Simmons	2120823
	09/18/2019			09/28/2019 01:08	Dale L. Simmons	2120824
	09/18/2019			09/28/2019 01:50	Dale L. Simmons	2120825
	09/18/2019			09/28/2019 02:02	Dale L. Simmons	2120826
SM 2540 C-97	09/18/2019			09/23/2019 14:16	Yijie Li	2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826
SM 2540 D-97	09/18/2019			09/23/2019 14:16	Yijie Li	2120814, 2120817, 2120820, 2120823, 2120824, 2120825, 2120826
SM 4500 F-C-97	09/18/2019			09/26/2019 21:37	Dale L. Simmons	2120814
	09/18/2019			09/26/2019 21:49	Dale L. Simmons	2120817
	09/18/2019			09/28/2019 00:44	Dale L. Simmons	2120820
	09/18/2019			09/28/2019 00:56	Dale L. Simmons	2120823
	09/18/2019			09/28/2019 01:08	Dale L. Simmons	2120824
	09/18/2019			09/28/2019 01:50	Dale L. Simmons	2120825
	09/18/2019			09/28/2019 02:02	Dale L. Simmons	2120826
SM 5310 B-00	09/18/2019			09/24/2019 02:07	Madeline Funaro	2120815
	09/18/2019			09/24/2019 02:21	Madeline Funaro	2120818
	09/18/2019			09/24/2019 02:33	Madeline Funaro	2120821
	09/18/2019			09/24/2019 02:48	Madeline Funaro	2120827
	09/18/2019			09/24/2019 03:00	Madeline Funaro	2120828

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Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-00	09/18/2019			09/24/2019 03:40	Madeline Funaro	2120829
	09/18/2019			09/24/2019 03:53	Madeline Funaro	2120830