Chemical Analysis Report

WAS-SECT-2019-02-13-01

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-2019-02-11-23**
Customer: **WAS-SECT**
Project ID: **SMP**

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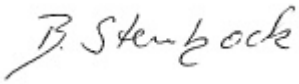
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 08-MAR-2019 12:07



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: Caney Creek Downstream of 158A **Collection Date/Time: 02/13/2019 09:04**

Field ID: G1WA0060 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062359	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P358889	
	EPA 300.0 Rev. 2.1	Chloride	6.5		mg Cl/L	P359451	
		Sulfate	0.80		mg SO4/L	P359455	
	SM 2120 B	Color (true)	120		PCU	P358960	
	SM 2320 B-97	Total Alkalinity	16		mg CaCO3/L	P359108	
	SM 2540 C-97	TDS	47		mg/L	P359434	
	SM 2540 D-97	TSS	12		mg/L	P359334	
	SM 4500 F-C-97	Fluoride	0.049	I	mg F/L	P359110	
2062360	EPA 350.1 Rev. 2.0	Ammonia-N	0.040		mg N/L	P359266	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P359020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P359145	
	EPA 365.1 Rev. 2.0	Total-P	0.27		mg P/L	P359003	
	SM 5310 B-00	Organic Carbon	8.7		mg C/L	P359403	
2062361	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.18		mg P/L	P358892	
2062401	EPA 8321B	Aldicarb	0.020	U	ug/L	P358820	
		Aldicarb Sulfone	0.0020	U	ug/L	P358820	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P358820	
		Carbaryl	0.0020	U	ug/L	P358820	
		Carbofuran	0.0020	U	ug/L	P358820	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P358820	
		Methiocarb	0.0020	U	ug/L	P358820	
		Methomyl	0.0020	U	ug/L	P358820	
		Oxamyl	0.0020	U	ug/L	P358820	
		Propoxur	0.0020	U	ug/L	P358820	
2062402		2,4-D	0.0023	I	ug/L	P358820	
		Acesulfame K**	0.10	U	ug/L	P358978	
		AMPA**	0.10	U	ug/L	P358978	
		Sucralose**	0.028	I	ug/L	P358978	
		Acetaminophen**	0.0080	U	ug/L	P358820	
		Endothall**	0.25	U	ug/L	P358978	
		Glufosinate**	0.10	U	ug/L	P358978	
		Bentazon	8.0E-04	U	ug/L	P358820	
		Glyphosate**	0.10	U	ug/L	P358978	
		Carbamazepine**	8.0E-04	U	ug/L	P358820	
		Diuron	0.0020	U	ug/L	P358820	
		Fenuron	0.016	U	ug/L	P358820	
		Imazapyr**	0.0053	I	ug/L	P358820	
		Imidacloprid	0.0030	I	ug/L	P358820	MS
		Linuron	0.0040	U	ug/L	P358820	
		MCPP	0.0020	U	ug/L	P358820	
		Primidone**	0.0040	U	ug/L	P358820	
		Pyraclostrobin**	0.0020	U	ug/L	P358820	
		Triclopyr**	0.0040	U	ug/L	P358820	

Field ID: G1WA0060 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062402	EPA 8321B	Fluridone**	0.016		ug/L	P358820	
		Hydrocodone**	0.0020	U	ug/L	P358820	
		Naproxen**	0.0080	U	ug/L	P358820	
		Ibuprofen**	0.020	U	ug/L	P358820	
2062411	EPA 8270D	Aldrin	4.2	U	ng/L	P358685	
		Alpha-BHC	2.1	U	ng/L	P358685	
		Alpha-Chlordane	1.0	U	ng/L	P358685	
		Beta-BHC	10	U	ng/L	P358685	
		Delta-BHC	10	U	ng/L	P358685	
		Gamma-BHC	10	U	ng/L	P358685	
		Carbophenothion	13	U	ng/L	P358685	
		Chlorothalonil	2.1	U	ng/L	P358685	RPD
		Cypermethrin	21	U	ng/L	P358685	
		DDD-p,p'	8.4	U	ng/L	P358685	
		DDE-p,p'	8.4	U	ng/L	P358685	
		DDT-p,p'	10	U	ng/L	P358685	
		Dicofol	31	U	ng/L	P358685	
		Dieldrin	4.2	U	ng/L	P358685	
		Endosulfan I	4.2	U	ng/L	P358685	
		Endosulfan II	4.2	U	ng/L	P358685	
		Endosulfan Sulfate	2.1	U	ng/L	P358685	
		Endrin	2.1	U	ng/L	P358685	
		Endrin Aldehyde	2.1	U	ng/L	P358685	RPD
		Endrin Ketone	2.1	U	ng/L	P358685	
		Gamma-Chlordane	1.0	U	ng/L	P358685	
		Heptachlor	1.6	U	ng/L	P358685	
		Heptachlor Epoxide	2.1	U	ng/L	P358685	
		Methoxychlor	4.2	U	ng/L	P358685	
		Mirex	2.1	U	ng/L	P358685	
		Permethrin	10	U	ng/L	P358685	
		Trifluralin	2.6	U	ng/L	P358685	
	EPA 8276	Chlordane	5.2	U	ng/L	P358685	
		Toxaphene	31	U	ng/L	P358685	
2062412	EPA 8270D	Acetochlor	0.27	U	ng/L	P359172	
		Alachlor	0.27	U	ng/L	P359172	
		Ametryn	0.64	U	ng/L	P359172	
		Atrazine	0.27	UJ	ng/L	P359172	RPD
		Atrazine Desethyl	1.6	U	ng/L	P359172	
		Azinphos Methyl	2.4	U	ng/L	P359172	
		Bromacil	0.53	U	ng/L	P359172	
		Butylate	0.43	U	ng/L	P359172	
		Chlorpyrifos Ethyl	0.27	U	ng/L	P359172	
		Chlorpyrifos Methyl	0.11	U	ng/L	P359172	
		Cyanazine	3.5	U	ng/L	P359172	
		Demeton	7.5	U	ng/L	P359172	

Field ID: G1WA0060 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062412	EPA 8270D	Diazinon	0.13	U	ng/L	P359172	
		Dimethenamid**	0.11	U	ng/L	P359172	
		Disulfoton	0.53	U	ng/L	P359172	
		Dithiopyr**	0.11	U	ng/L	P359172	
		EPTC	1.3	U	ng/L	P359172	
		Ethion	0.16	U	ng/L	P359172	
		Ethoprop	0.11	U	ng/L	P359172	
		Fenamiphos	0.53	U	ng/L	P359172	
		Fipronil	0.27	U	ng/L	P359172	
		Fipronil Desulfinyl**	0.13	UJ	ng/L	P359172	LCS, MS
		Fipronil Sulfide	0.16	U	ng/L	P359172	
		Fipronil Sulfone	0.16	U	ng/L	P359172	
		Fonofos	0.21	U	ng/L	P359172	
		Hexazinone	0.53	U	ng/L	P359172	
		Malathion	0.37	U	ng/L	P359172	
		Metalaxyl	0.32	U	ng/L	P359172	
		Metolachlor	0.53	U	ng/L	P359172	
		Metribuzin	0.80	U	ng/L	P359172	
		Mevinphos	0.53	U	ng/L	P359172	
		Molinate	0.32	U	ng/L	P359172	
		Norflurazon	0.53	U	ng/L	P359172	
		Oxadiazon**	0.11	U	ng/L	P359172	
		Parathion Ethyl	0.27	U	ng/L	P359172	
		Parathion Methyl	0.59	U	ng/L	P359172	
		Pendimethalin	1.1	U	ng/L	P359172	
		Phorate	0.27	U	ng/L	P359172	
		Prodiamine**	0.19	U	ng/L	P359172	
		Prometon	0.96	U	ng/L	P359172	
		Prometryn	0.21	U	ng/L	P359172	
		Simazine	0.53	U	ng/L	P359172	
		Tebuconazole**	0.53	U	ng/L	P359172	
		Terbufos	0.11	U	ng/L	P359172	
		Terbuthylazine	0.45	U	ng/L	P359172	
2062419	EPA 200.7 Rev. 4.4	Barium	9.43		ug/L	P359073	
		Calcium	5.57		mg/L	P359073	
		Iron	969		ug/L	P359073	
		Magnesium	1.95		mg/L	P359073	
		Potassium	1.52		mg/L	P359073	
		Sodium	4.19		mg/L	P359073	
		Zinc	5.0	U	ug/L	P359073	
	EPA 200.8 Rev. 5.4	Aluminum	415		ug/L	P359073	
		Antimony	0.050	U	ug/L	P359073	
		Arsenic	0.44		ug/L	P359073	
		Boron**	11.8		ug/L	P359073	
		Cadmium	0.020	U	ug/L	P359073	

Field ID: G1WA0060 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062419	EPA 200.8 Rev. 5.4	Chromium	0.93	I	ug/L	P359073	
		Copper	0.41	I	ug/L	P359073	
		Lead	0.35	I	ug/L	P359073	
		Nickel	0.50	U	ug/L	P359073	
		Selenium	0.20	U	ug/L	P359073	
		Silver	0.010	U	ug/L	P359073	
		Thallium	0.10	U	ug/L	P359073	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8270D: Refer to the narrative for an explanation of QC Codes.

Sample Location: Alford Arm Tributary At Miccosukee **Collection Date/Time: 02/13/2019 10:23**

Field ID: G1WA0066 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062368	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P358889	
	EPA 300.0 Rev. 2.1	Chloride	5.7		mg Cl/L	P359451	
		Sulfate	0.26	I	mg SO4/L	P359455	
	SM 2120 B	Color (true)	69		PCU	P358960	
	SM 2320 B-97	Total Alkalinity	10		mg CaCO3/L	P359109	
	SM 2540 C-97	TDS	32		mg/L	P359434	
	SM 2540 D-97	TSS	2	I	mg/L	P359334	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P359111	
2062369	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P359211	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.50		mg N/L	P359020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P359146	
	EPA 365.1 Rev. 2.0	Total-P	0.052		mg P/L	P359003	
	SM 5310 B-00	Organic Carbon	7.7		mg C/L	P359403	
2062370	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.016		mg P/L	P358893	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Swamp Creek upstream of Railroad **Collection Date/Time: 02/13/2019 12:02**

Field ID: G1WA0052 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062356	EPA 180.1 Rev. 2.0	Turbidity	23	A	NTU	P358889	
	EPA 300.0 Rev. 2.1	Chloride	6.7		mg Cl/L	P359451	
		Sulfate	0.93		mg SO4/L	P359455	
	SM 2120 B	Color (true)	27		PCU	P358964	
	SM 2320 B-97	Total Alkalinity	14		mg CaCO3/L	P359108	
	SM 2540 C-97	TDS	51		mg/L	P359434	
	SM 2540 D-97	TSS	22		mg/L	P359334	
	SM 4500 F-C-97	Fluoride	0.088	I	mg F/L	P359110	
2062357	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P359266	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P359020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.24		mg N/L	P359145	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P358959	
	SM 5310 B-00	Organic Carbon	7.7		mg C/L	P359403	
2062358	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.039		mg P/L	P358892	
2062399	EPA 8321B	Aldicarb	0.020	U	ug/L	P358820	
		Aldicarb Sulfone	0.0020	U	ug/L	P358820	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P358820	
		Carbaryl	0.0020	U	ug/L	P358820	
		Carbofuran	0.0020	U	ug/L	P358820	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P358820	
		Methiocarb	0.0020	U	ug/L	P358820	
		Methomyl	0.0020	U	ug/L	P358820	
		Oxamyl	0.017		ug/L	P358820	
		Propoxur	0.0020	U	ug/L	P358820	
2062400		2,4-D	0.0020	U	ug/L	P358820	
		Acesulfame K**	0.10	U	ug/L	P358978	
		AMPA**	0.10	U	ug/L	P358978	
		Sucralose**	0.016	I	ug/L	P358978	
		Acetaminophen**	0.0080	U	ug/L	P358820	
		Endothall**	0.25	U	ug/L	P358978	
		Glufosinate**	0.10	U	ug/L	P358978	
		Bentazon	0.0038		ug/L	P358820	
		Glyphosate**	0.10	U	ug/L	P358978	
		Carbamazepine**	8.0E-04	U	ug/L	P358820	
		Diuron	0.0020	I	ug/L	P358820	
		Fenuron	0.016	U	ug/L	P358820	
		Imazapyr**	0.0081	I	ug/L	P358820	
		Imidacloprid	0.0031	I	ug/L	P358820	MS
		Linuron	0.0040	U	ug/L	P358820	
		MCPP	0.0020	U	ug/L	P358820	
		Primidone**	0.0040	U	ug/L	P358820	
		Pyraclostrobin**	0.0020	U	ug/L	P358820	
		Triclopyr**	0.0040	U	ug/L	P358820	

Field ID: G1WA0052 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062400	EPA 8321B	Fluridone**	8.0E-04	U	ug/L	P358820	
		Hydrocodone**	0.0020	U	ug/L	P358820	
		Naproxen**	0.0080	U	ug/L	P358820	
		Ibuprofen**	0.020	U	ug/L	P358820	
2062409	EPA 8270D	Aldrin	4.4	U	ng/L	P358685	
		Alpha-BHC	2.2	U	ng/L	P358685	
		Alpha-Chlordane	1.1	U	ng/L	P358685	
		Beta-BHC	11	U	ng/L	P358685	
		Delta-BHC	11	U	ng/L	P358685	
		Gamma-BHC	11	U	ng/L	P358685	
		Carbophenothion	13	U	ng/L	P358685	
		Chlorothalonil	2.2	U	ng/L	P358685	RPD
		Cypermethrin	22	U	ng/L	P358685	
		DDD-p,p'	8.8	U	ng/L	P358685	
		DDE-p,p'	8.8	U	ng/L	P358685	
		DDT-p,p'	11	U	ng/L	P358685	
		Dicofol	33	U	ng/L	P358685	
		Dieldrin	4.4	U	ng/L	P358685	
		Endosulfan I	4.4	U	ng/L	P358685	
		Endosulfan II	4.4	U	ng/L	P358685	
		Endosulfan Sulfate	2.2	U	ng/L	P358685	
		Endrin	2.2	U	ng/L	P358685	
		Endrin Aldehyde	2.2	U	ng/L	P358685	RPD
		Endrin Ketone	2.2	U	ng/L	P358685	
		Gamma-Chlordane	1.1	U	ng/L	P358685	
		Heptachlor	1.6	U	ng/L	P358685	
		Heptachlor Epoxide	2.2	U	ng/L	P358685	
		Methoxychlor	4.4	U	ng/L	P358685	
		Mirex	2.2	U	ng/L	P358685	
		Permethrin	11	U	ng/L	P358685	
		Trifluralin	2.7	U	ng/L	P358685	
	EPA 8276	Chlordane	5.5	U	ng/L	P358685	
		Toxaphene	33	U	ng/L	P358685	
2062410	EPA 8270D	Acetochlor	0.26	U	ng/L	P359172	
		Alachlor	0.26	U	ng/L	P359172	
		Ametryn	0.61	U	ng/L	P359172	
		Atrazine	1.0	IJ	ng/L	P359172	RPD
		Atrazine Desethyl	1.5	U	ng/L	P359172	
		Azinphos Methyl	2.3	U	ng/L	P359172	
		Bromacil	0.51	U	ng/L	P359172	
		Butylate	0.41	U	ng/L	P359172	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P359172	
		Chlorpyrifos Methyl	0.10	U	ng/L	P359172	
		Cyanazine	3.3	U	ng/L	P359172	
		Demeton	7.2	U	ng/L	P359172	

Field ID: G1WA0052 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062410	EPA 8270D	Diazinon	0.13	U	ng/L	P359172	
		Dimethenamid**	0.10	U	ng/L	P359172	
		Disulfoton	0.51	U	ng/L	P359172	
		Dithiopyr**	0.10	U	ng/L	P359172	
		EPTC	1.3	U	ng/L	P359172	
		Ethion	0.15	U	ng/L	P359172	
		Ethoprop	0.10	U	ng/L	P359172	
		Fenamiphos	0.51	U	ng/L	P359172	
		Fipronil	0.26	U	ng/L	P359172	
		Fipronil Desulfinyl**	0.13	UJ	ng/L	P359172	LCS, MS
		Fipronil Sulfide	0.15	U	ng/L	P359172	
		Fipronil Sulfone	0.15	U	ng/L	P359172	
		Fonofos	0.20	U	ng/L	P359172	
		Hexazinone	0.54	I	ng/L	P359172	
		Malathion	0.36	U	ng/L	P359172	
		Metalaxyl	0.31	U	ng/L	P359172	
		Metolachlor	6.9		ng/L	P359172	
		Metribuzin	1.7	I	ng/L	P359172	
		Mevinphos	0.51	U	ng/L	P359172	
		Molinate	0.31	U	ng/L	P359172	
		Norflurazon	0.51	U	ng/L	P359172	
		Oxadiazon**	0.10	U	ng/L	P359172	
		Parathion Ethyl	0.26	U	ng/L	P359172	
		Parathion Methyl	0.56	U	ng/L	P359172	
		Pendimethalin	1.0	U	ng/L	P359172	
		Phorate	0.26	U	ng/L	P359172	
		Prodiamine**	0.18	U	ng/L	P359172	
		Prometon	0.92	U	ng/L	P359172	
		Prometryn	0.20	U	ng/L	P359172	
		Simazine	0.51	U	ng/L	P359172	
		Tebuconazole**	0.96	I	ng/L	P359172	
		Terbufos	0.10	U	ng/L	P359172	
		Terbuthylazine	0.43	U	ng/L	P359172	
2062418	EPA 200.7 Rev. 4.4	Barium	20.2		ug/L	P359073	
		Calcium	5.50		mg/L	P359073	
		Iron	1.85E+03		ug/L	P359073	
		Magnesium	2.38		mg/L	P359073	
		Potassium	1.21		mg/L	P359073	
		Sodium	3.38		mg/L	P359073	
		Zinc	5.0	U	ug/L	P359073	
	EPA 200.8 Rev. 5.4	Aluminum	514		ug/L	P359073	
		Antimony	0.050	U	ug/L	P359073	
		Arsenic	0.83		ug/L	P359073	
		Boron**	10.5		ug/L	P359073	
		Cadmium	0.020	U	ug/L	P359073	

Field ID: G1WA0052 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062418	EPA 200.8 Rev. 5.4	Chromium	1.0	I	ug/L	P359073	
		Copper	0.56	I	ug/L	P359073	
		Lead	0.83		ug/L	P359912	
		Nickel	0.50	U	ug/L	P359073	
		Selenium	0.21	I	ug/L	P359073	
		Silver	0.010	U	ug/L	P359073	
		Thallium	0.10	U	ug/L	P359073	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8270D: Refer to the narrative for an explanation of QC Codes.
EPA 200.8 Rev. 5.4: The lead result was confirmed on 03/01/2019.

Sample Location: Quincy Creek upstream of SR 65 **Collection Date/Time: 02/13/2019 15:00**

Field ID: G1WA0049 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062362	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P358889	
	EPA 300.0 Rev. 2.1	Chloride	5.1		mg Cl/L	P359451	
		Sulfate	0.74		mg SO4/L	P359455	
	SM 2120 B	Color (true)	54		PCU	P358960	
	SM 2320 B-97	Total Alkalinity	20		mg CaCO3/L	P359109	
	SM 2540 C-97	TDS	35		mg/L	P359434	
	SM 2540 D-97	TSS	13		mg/L	P359334	
	SM 4500 F-C-97	Fluoride	0.075	I	mg F/L	P359111	
2062364	EPA 350.1 Rev. 2.0	Ammonia-N	0.039		mg N/L	P359263	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31		mg N/L	P359020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.27		mg N/L	P359146	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P359003	
	SM 5310 B-00	Organic Carbon	3.9		mg C/L	P359403	
2062366	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.031		mg P/L	P358893	
2062420	EPA 200.7 Rev. 4.4	Barium	15.3		ug/L	P359073	
		Calcium	6.02		mg/L	P359073	
		Iron	1.39E+03		ug/L	P359073	
		Magnesium	2.19		mg/L	P359073	
		Potassium	0.43	I	mg/L	P359073	
		Sodium	3.18		mg/L	P359073	
		Zinc	5.0	U	ug/L	P359073	
	EPA 200.8 Rev. 5.4	Aluminum	329		ug/L	P359073	
		Antimony	0.050	U	ug/L	P359073	
		Arsenic	0.80		ug/L	P359073	
		Boron**	9.2		ug/L	P359073	
		Cadmium	0.020	U	ug/L	P359073	
		Chromium	0.80	I	ug/L	P359073	
		Copper	0.40	U	ug/L	P359073	
		Lead	0.38	I	ug/L	P359073	
		Nickel	0.50	U	ug/L	P359073	
		Selenium	0.20	U	ug/L	P359073	
		Silver	0.010	U	ug/L	P359073	
		Thallium	0.10	U	ug/L	P359073	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Tanyard Branch 100 meters upstream of Ralph Strong Rd **Collection Date/Time: 02/13/2019 13:21**

Field ID: G1WA0005 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062363	EPA 180.1 Rev. 2.0	Turbidity	6.5		NTU	P358889	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P359451	
		Sulfate	5.6		mg SO4/L	P359455	
	SM 2120 B	Color (true)	41	A	PCU	P358960	
	SM 2320 B-97	Total Alkalinity	47		mg CaCO3/L	P359109	
	SM 2540 C-97	TDS	80	A	mg/L	P359435	
	SM 2540 D-97	TSS	3	IA	mg/L	P359335	
	SM 4500 F-C-97	Fluoride	0.17		mg F/L	P359111	
2062365	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P359263	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32		mg N/L	P359020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P359146	
	EPA 365.1 Rev. 2.0	Total-P	0.073		mg P/L	P359003	
	SM 5310 B-00	Organic Carbon	4.5		mg C/L	P359403	
2062367	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.031		mg P/L	P358893	
2062421	EPA 200.7 Rev. 4.4	Barium	14.0		ug/L	P359073	
		Calcium	14.9		mg/L	P359073	
		Iron	1.37E+03		ug/L	P359073	
		Magnesium	3.64		mg/L	P359073	
		Potassium	1.85		mg/L	P359073	
		Sodium	11.6		mg/L	P359073	
		Zinc	5.6	I	ug/L	P359073	
	EPA 200.8 Rev. 5.4	Aluminum	83		ug/L	P359073	
		Antimony	0.068	I	ug/L	P359073	
		Arsenic	0.53		ug/L	P359073	
		Boron**	26.6		ug/L	P359073	
		Cadmium	0.020	U	ug/L	P359073	
		Chromium	0.40	U	ug/L	P359073	
		Copper	0.54	I	ug/L	P359073	
		Lead	0.27	I	ug/L	P359073	
		Nickel	0.50	U	ug/L	P359073	
		Selenium	0.20	U	ug/L	P359073	
		Silver	0.010	U	ug/L	P359073	
		Thallium	0.10	U	ug/L	P359073	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Quincy Creek 100 meters Upstream of Ralph Strong Rd **Collection Date/Time: 02/13/2019 13:45**

Field ID: G1WA0018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062353	EPA 180.1 Rev. 2.0	Turbidity	15		NTU	P358888	
	EPA 300.0 Rev. 2.1	Chloride	5.2		mg Cl/L	P359451	
		Sulfate	0.76		mg SO4/L	P359455	
	SM 2120 B	Color (true)	55	A	PCU	P358964	
	SM 2320 B-97	Total Alkalinity	20		mg CaCO3/L	P359108	
	SM 2540 C-97	TDS	41		mg/L	P359434	
	SM 2540 D-97	TSS	19		mg/L	P359334	
	SM 4500 F-C-97	Fluoride	0.077	I	mg F/L	P359110	
2062354	EPA 350.1 Rev. 2.0	Ammonia-N	0.038		mg N/L	P359266	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.40		mg N/L	P359020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.28		mg N/L	P359145	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P358959	
	SM 5310 B-00	Organic Carbon	4.2		mg C/L	P359403	
2062355	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.039		mg P/L	P358892	
2062397	EPA 8321B	Aldicarb	0.020	U	ug/L	P358820	
		Aldicarb Sulfone	0.0020	U	ug/L	P358820	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P358820	
		Carbaryl	0.0020	U	ug/L	P358820	
		Carbofuran	0.0020	U	ug/L	P358820	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P358820	
		Methiocarb	0.0020	U	ug/L	P358820	
		Methomyl	0.0020	U	ug/L	P358820	
		Oxamyl	0.0020	U	ug/L	P358820	
		Propoxur	0.0020	U	ug/L	P358820	
2062398		2,4-D	0.0020	U	ug/L	P358820	
		Acesulfame K**	0.10	U	ug/L	P358978	
		AMPA**	0.10	U	ug/L	P358978	
		Sucralose**	0.072		ug/L	P358978	
		Acetaminophen**	0.0080	U	ug/L	P358820	
		Endothall**	0.25	U	ug/L	P358978	
		Glufosinate**	0.10	U	ug/L	P358978	
		Bentazon	8.0E-04	U	ug/L	P358820	
		Glyphosate**	0.10	U	ug/L	P358978	
		Carbamazepine**	8.0E-04	U	ug/L	P358820	
		Diuron	0.0020	U	ug/L	P358820	
		Fenuron	0.016	U	ug/L	P358820	
		Imazapyr**	0.0040	U	ug/L	P358820	
		Imidacloprid	0.0034	IJ	ug/L	P358820	MS
		Linuron	0.0040	U	ug/L	P358820	
		MCPP	0.0020	U	ug/L	P358820	
		Primidone**	0.0040	U	ug/L	P358820	
		Pyraclostrobin**	0.0020	U	ug/L	P358820	

Field ID: G1WA0018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062398	EPA 8321B	Triclopyr**	0.0040	U	ug/L	P358820	
		Fluridone**	8.0E-04	U	ug/L	P358820	
		Hydrocodone**	0.0020	U	ug/L	P358820	
		Naproxen**	0.0080	U	ug/L	P358820	
		Ibuprofen**	0.020	U	ug/L	P358820	
2062407	EPA 8270D	Aldrin	4.2	U	ng/L	P358685	
		Alpha-BHC	2.1	U	ng/L	P358685	
		Alpha-Chlordane	1.0	U	ng/L	P358685	
		Beta-BHC	10	U	ng/L	P358685	
		Delta-BHC	10	U	ng/L	P358685	
		Gamma-BHC	10	U	ng/L	P358685	
		Carbophenothion	13	U	ng/L	P358685	
		Chlorothalonil	2.1	U	ng/L	P358685	RPD
		Cypermethrin	21	U	ng/L	P358685	
		DDD-p,p'	8.4	U	ng/L	P358685	
		DDE-p,p'	8.4	U	ng/L	P358685	
		DDT-p,p'	10	U	ng/L	P358685	
		Dicofol	31	U	ng/L	P358685	
		Dieldrin	4.2	U	ng/L	P358685	
		Endosulfan I	4.2	U	ng/L	P358685	
		Endosulfan II	4.2	U	ng/L	P358685	
		Endosulfan Sulfate	2.1	U	ng/L	P358685	
		Endrin	2.1	U	ng/L	P358685	
		Endrin Aldehyde	2.1	U	ng/L	P358685	RPD
		Endrin Ketone	2.1	U	ng/L	P358685	
		Gamma-Chlordane	1.0	U	ng/L	P358685	
		Heptachlor	1.6	U	ng/L	P358685	
		Heptachlor Epoxide	2.1	U	ng/L	P358685	
		Methoxychlor	4.2	U	ng/L	P358685	
		Mirex	2.1	U	ng/L	P358685	
		Permethrin	10	U	ng/L	P358685	
		Trifluralin	2.6	U	ng/L	P358685	
	EPA 8276	Chlordane	5.2	U	ng/L	P358685	
		Toxaphene	31	U	ng/L	P358685	
2062408	EPA 8270D	Acetochlor	0.26	U	ng/L	P359172	
		Alachlor	0.26	U	ng/L	P359172	
		Ametryn	0.62	U	ng/L	P359172	
		Atrazine	0.55	IJ	ng/L	P359172	RPD
		Atrazine Desethyl	1.5	U	ng/L	P359172	
		Azinphos Methyl	2.3	U	ng/L	P359172	
		Bromacil	7.1		ng/L	P359172	
		Butylate	0.41	U	ng/L	P359172	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P359172	
		Chlorpyrifos Methyl	0.10	U	ng/L	P359172	
		Cyanazine	3.3	U	ng/L	P359172	

Field ID: G1WA0018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062408	EPA 8270D	Demeton	7.2	U	ng/L	P359172	
		Diazinon	0.13	U	ng/L	P359172	
		Dimethenamid**	0.10	U	ng/L	P359172	
		Disulfoton	0.51	U	ng/L	P359172	
		Dithiopyr**	0.10	U	ng/L	P359172	
		EPTC	1.3	U	ng/L	P359172	
		Ethion	0.15	U	ng/L	P359172	
		Ethoprop	0.10	U	ng/L	P359172	
		Fenamiphos	0.51	U	ng/L	P359172	
		Fipronil	0.26	U	ng/L	P359172	
		Fipronil Desulfinyl**	0.13	UJ	ng/L	P359172	LCS, MS
		Fipronil Sulfide	0.15	U	ng/L	P359172	
		Fipronil Sulfone	0.15	U	ng/L	P359172	
		Fonofos	0.21	U	ng/L	P359172	
		Hexazinone	0.51	U	ng/L	P359172	
		Malathion	0.36	U	ng/L	P359172	
		Metalaxyl	0.31	U	ng/L	P359172	
		Metolachlor	0.51	U	ng/L	P359172	
		Metribuzin	0.77	U	ng/L	P359172	
		Mevinphos	0.51	U	ng/L	P359172	
		Molinate	0.31	U	ng/L	P359172	
		Norflurazon	0.51	U	ng/L	P359172	
		Oxadiazon**	0.10	U	ng/L	P359172	
		Parathion Ethyl	0.26	U	ng/L	P359172	
		Parathion Methyl	0.57	U	ng/L	P359172	
		Pendimethalin	1.0	U	ng/L	P359172	
		Phorate	0.26	U	ng/L	P359172	
		Prodiamine**	0.18	U	ng/L	P359172	
		Prometon	0.93	U	ng/L	P359172	
		Prometryn	0.21	U	ng/L	P359172	
		Simazine	2.9		ng/L	P359172	
		Tebuconazole**	0.51	U	ng/L	P359172	
		Terbufos	0.10	U	ng/L	P359172	
		Terbuthylazine	0.44	U	ng/L	P359172	
2062417	EPA 200.7 Rev. 4.4	Barium	19.4		ug/L	P359073	
		Calcium	6.36		mg/L	P359073	
		Iron	1.86E+03		ug/L	P359073	
		Magnesium	2.22		mg/L	P359073	
		Potassium	0.53	I	mg/L	P359073	
		Sodium	3.25		mg/L	P359073	
		Zinc	5.5	I	ug/L	P359073	
	EPA 200.8 Rev. 5.4	Aluminum	562		ug/L	P359073	
		Antimony	0.050	U	ug/L	P359073	
		Arsenic	0.69		ug/L	P359073	
		Boron**	9.5		ug/L	P359073	

Field ID: G1WA0018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062417	EPA 200.8 Rev. 5.4	Cadmium	0.020	U	ug/L	P359073	
		Chromium	1.0	I	ug/L	P359073	
		Copper	0.46	I	ug/L	P359073	
		Lead	0.82		ug/L	P359912	
		Nickel	0.50	U	ug/L	P359073	
		Selenium	0.20	U	ug/L	P359073	
		Silver	0.010	U	ug/L	P359073	
		Thallium	0.10	U	ug/L	P359073	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: Refer to the narrative for an explanation of QC Codes.
EPA 8270D: Refer to the narrative for an explanation of QC Codes.
EPA 200.8 Rev. 5.4: The lead result was confirmed on 03/01/2019.

Sample Location: Quincy Creek 100 meters Upstream of Ralph Strong Rd **Collection Date/Time: 02/13/2019 13:45**

Field ID: G1WA0018_DUP Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062371	EPA 180.1 Rev. 2.0	Turbidity	15	Q	NTU	P359188	
	EPA 300.0 Rev. 2.1	Chloride	5.2		mg Cl/L	P359451	
		Sulfate	0.75		mg SO4/L	P359455	
	SM 2120 B	Color (true)	62		PCU	P358960	
	SM 2320 B-97	Total Alkalinity	20		mg CaCO3/L	P359109	
	SM 2540 C-97	TDS	39		mg/L	P359435	
	SM 2540 D-97	TSS	18		mg/L	P359335	
	SM 4500 F-C-97	Fluoride	0.076	I	mg F/L	P359111	
2062372	EPA 350.1 Rev. 2.0	Ammonia-N	0.037		mg N/L	P359263	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38		mg N/L	P359020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.28		mg N/L	P359145	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P358959	
	SM 5310 B-00	Organic Carbon	4.3		mg C/L	P359403	
2062373	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.040		mg P/L	P358892	
2062403	EPA 8321B	Aldicarb	0.020	U	ug/L	P358820	
		Aldicarb Sulfone	0.0020	U	ug/L	P358820	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P358820	
		Carbaryl	0.0020	U	ug/L	P358820	
		Carbofuran	0.0020	U	ug/L	P358820	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P358820	
		Methiocarb	0.0020	U	ug/L	P358820	
		Methomyl	0.0020	U	ug/L	P358820	
		Oxamyl	0.0020	U	ug/L	P358820	
		Propoxur	0.0020	U	ug/L	P358820	
2062404		2,4-D	0.0020	U	ug/L	P358820	
		Acesulfame K**	0.10	U	ug/L	P358978	
		AMPA**	0.10	U	ug/L	P358978	
		Sucralose**	0.073		ug/L	P358978	
		Acetaminophen**	0.0080	U	ug/L	P358820	
		Endothall**	0.25	U	ug/L	P358978	
		Glufosinate**	0.10	U	ug/L	P358978	
		Bentazon	8.0E-04	U	ug/L	P358820	
		Glyphosate**	0.10	U	ug/L	P358978	
		Carbamazepine**	8.0E-04	U	ug/L	P358820	
		Diuron	0.0020	U	ug/L	P358820	
		Fenuron	0.016	U	ug/L	P358820	
		Imazapyr**	0.0040	U	ug/L	P358820	
		Imidacloprid	0.0038	I	ug/L	P358820	MS
		Linuron	0.0040	U	ug/L	P358820	
		MCPP	0.0020	U	ug/L	P358820	
		Primidone**	0.0040	U	ug/L	P358820	
		Pyraclostrobin**	0.0020	U	ug/L	P358820	

Field ID: G1WA0018_DUP Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062404	EPA 8321B	Triclopyr**	0.0040	U	ug/L	P358820	
		Fluridone**	8.0E-04	U	ug/L	P358820	
		Hydrocodone**	0.0020	U	ug/L	P358820	
		Naproxen**	0.0080	U	ug/L	P358820	
		Ibuprofen**	0.020	U	ug/L	P358820	
2062413	EPA 8270D	Aldrin	4.2	U	ng/L	P358685	
		Alpha-BHC	2.1	U	ng/L	P358685	
		Alpha-Chlordane	1.0	U	ng/L	P358685	
		Beta-BHC	10	U	ng/L	P358685	
		Delta-BHC	10	U	ng/L	P358685	
		Gamma-BHC	10	U	ng/L	P358685	
		Carbophenothion	12	U	ng/L	P358685	
		Chlorothalonil	2.1	U	ng/L	P358685	RPD
		Cypermethrin	21	U	ng/L	P358685	
		DDD-p,p'	8.3	U	ng/L	P358685	
		DDE-p,p'	8.3	U	ng/L	P358685	
		DDT-p,p'	10	U	ng/L	P358685	
		Dicofol	31	U	ng/L	P358685	
		Dieldrin	4.2	U	ng/L	P358685	
		Endosulfan I	4.2	U	ng/L	P358685	
		Endosulfan II	4.2	U	ng/L	P358685	
		Endosulfan Sulfate	2.1	U	ng/L	P358685	
		Endrin	2.1	U	ng/L	P358685	
		Endrin Aldehyde	2.1	U	ng/L	P358685	RPD
		Endrin Ketone	2.1	U	ng/L	P358685	
		Gamma-Chlordane	1.0	U	ng/L	P358685	
		Heptachlor	1.6	U	ng/L	P358685	
		Heptachlor Epoxide	2.1	U	ng/L	P358685	
		Methoxychlor	4.2	U	ng/L	P358685	
		Mirex	2.1	U	ng/L	P358685	
		Permethrin	10	U	ng/L	P358685	
		Trifluralin	2.6	U	ng/L	P358685	
	EPA 8276	Chlordane	5.2	U	ng/L	P358685	
		Toxaphene	31	U	ng/L	P358685	
2062414	EPA 8270D	Acetochlor	0.26	U	ng/L	P359172	
		Alachlor	0.26	U	ng/L	P359172	
		Ametryn	0.62	U	ng/L	P359172	
		Atrazine	0.56	IJ	ng/L	P359172	RPD
		Atrazine Desethyl	1.6	U	ng/L	P359172	
		Azinphos Methyl	2.3	U	ng/L	P359172	
		Bromacil	7.9		ng/L	P359172	
		Butylate	0.41	U	ng/L	P359172	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P359172	
		Chlorpyrifos Methyl	0.10	U	ng/L	P359172	
		Cyanazine	3.4	U	ng/L	P359172	

Field ID: G1WA0018_DUP Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062414	EPA 8270D	Demeton	7.2	U	ng/L	P359172	
		Diazinon	0.13	U	ng/L	P359172	
		Dimethenamid**	0.10	U	ng/L	P359172	
		Disulfoton	0.52	U	ng/L	P359172	
		Dithiopyr**	0.10	U	ng/L	P359172	
		EPTC	1.3	U	ng/L	P359172	
		Ethion	0.16	U	ng/L	P359172	
		Ethoprop	0.10	U	ng/L	P359172	
		Fenamiphos	0.52	U	ng/L	P359172	
		Fipronil	0.26	U	ng/L	P359172	
		Fipronil Desulfinyl**	0.13	UJ	ng/L	P359172	LCS, MS
		Fipronil Sulfide	0.16	U	ng/L	P359172	
		Fipronil Sulfone	0.16	U	ng/L	P359172	
		Fonofos	0.21	U	ng/L	P359172	
		Hexazinone	0.52	U	ng/L	P359172	
		Malathion	0.36	U	ng/L	P359172	
		Metalaxyl	0.31	U	ng/L	P359172	
		Metolachlor	0.61	I	ng/L	P359172	
		Metribuzin	0.78	U	ng/L	P359172	
		Mevinphos	0.52	U	ng/L	P359172	
		Molinate	0.31	U	ng/L	P359172	
		Norflurazon	0.52	U	ng/L	P359172	
		Oxadiazon**	0.10	U	ng/L	P359172	
		Parathion Ethyl	0.26	U	ng/L	P359172	
		Parathion Methyl	0.57	U	ng/L	P359172	
		Pendimethalin	1.0	U	ng/L	P359172	
		Phorate	0.26	U	ng/L	P359172	
		Prodiamine**	0.18	U	ng/L	P359172	
		Prometon	0.93	U	ng/L	P359172	
		Prometryn	0.21	U	ng/L	P359172	
		Simazine	3.4		ng/L	P359172	
		Tebuconazole**	0.52	U	ng/L	P359172	
		Terbufos	0.10	U	ng/L	P359172	
		Terbuthylazine	0.44	U	ng/L	P359172	
2062422	EPA 200.7 Rev. 4.4	Barium	16.9		ug/L	P359073	
		Calcium	6.36		mg/L	P359073	
		Iron	1.79E+03		ug/L	P359073	
		Magnesium	2.21		mg/L	P359073	
		Potassium	0.52	I	mg/L	P359073	
		Sodium	3.26		mg/L	P359073	
		Zinc	5.0	U	ug/L	P359073	
	EPA 200.8 Rev. 5.4	Aluminum	473		ug/L	P359073	
		Antimony	0.050	U	ug/L	P359073	
		Arsenic	0.68		ug/L	P359073	
		Boron**	9.1		ug/L	P359073	

Field ID: G1WA0018_DUP Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062422	EPA 200.8 Rev. 5.4	Cadmium	0.020	U	ug/L	P359073	
		Chromium	0.89	I	ug/L	P359073	
		Copper	0.41	I	ug/L	P359912	
		Lead	0.82		ug/L	P359912	
		Nickel	0.50	U	ug/L	P359073	
		Selenium	0.20	U	ug/L	P359073	
		Silver	0.010	U	ug/L	P359073	
		Thallium	0.10	U	ug/L	P359073	

Ref. Method and Comment:
EPA 180.1 Rev. 2.0: The sample was analyzed out of holding time because of analytical difficulties.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8270D: Refer to the narrative for an explanation of QC Codes.
EPA 200.8 Rev. 5.4: The lead result was confirmed on 03/01/2019.

Sample Location: Field Blank **Collection Date/Time: 02/13/2019 09:31**

Field ID: FB_02132019 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062374	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P358889	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P359451	
		Sulfate	0.20	U	mg SO4/L	P359455	
	SM 2120 B	Color (true)	2.5	U	PCU	P358960	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P359109	
	SM 2540 C-97	TDS	15	U	mg/L	P359433	
	SM 2540 D-97	TSS	2	U	mg/L	P359333	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P359111	
2062375	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P359263	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P359020	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P359146	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P359003	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P359403	
2062376	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P358893	
2062405	EPA 8321B	Aldicarb	0.020	U	ug/L	P358820	
		Aldicarb Sulfone	0.0020	U	ug/L	P358820	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P358820	
		Carbaryl	0.0020	U	ug/L	P358820	
		Carbofuran	0.0020	U	ug/L	P358820	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P358820	
		Methiocarb	0.0020	U	ug/L	P358820	
		Methomyl	0.0020	U	ug/L	P358820	
		Oxamyl	0.0020	U	ug/L	P358820	
		Propoxur	0.0020	U	ug/L	P358820	
2062406		2,4-D	0.0020	U	ug/L	P358913	
		Acesulfame K**	0.10	U	ug/L	P358978	
		AMPA**	0.10	U	ug/L	P358978	
		Sucralose**	0.010	U	ug/L	P358978	
		Acetaminophen**	0.0080	U	ug/L	P358913	
		Endothall**	0.25	U	ug/L	P358978	
		Glufosinate**	0.10	U	ug/L	P358978	
		Glyphosate**	0.10	U	ug/L	P358978	
		Bentazon	8.0E-04	U	ug/L	P358913	MS
		Carbamazepine**	8.0E-04	U	ug/L	P358913	
		Diuron	0.0020	U	ug/L	P358913	
		Fenuron	0.016	U	ug/L	P358913	
		Imazapyr**	0.0040	U	ug/L	P358913	
		Imidacloprid	0.0020	U	ug/L	P358913	MS
		Linuron	0.0040	U	ug/L	P358913	
		MCPP	0.0020	U	ug/L	P358913	
		Primidone**	0.0040	U	ug/L	P358913	
		Pyraclostrobin**	0.0020	U	ug/L	P358913	
		Triclopyr**	0.0040	U	ug/L	P358913	

Field ID: FB_02132019 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062406	EPA 8321B	Fluridone**	8.0E-04	U	ug/L	P358913	
		Hydrocodone**	0.0020	U	ug/L	P358913	
		Naproxen**	0.0080	U	ug/L	P358913	
		Ibuprofen**	0.020	U	ug/L	P358913	
2062415	EPA 8270D	Aldrin	4.5	U	ng/L	P358685	
		Alpha-BHC	2.2	U	ng/L	P358685	
		Alpha-Chlordane	1.1	U	ng/L	P358685	
		Beta-BHC	11	U	ng/L	P358685	
		Delta-BHC	11	U	ng/L	P358685	
		Gamma-BHC	11	U	ng/L	P358685	
		Carbophenothion	13	U	ng/L	P358685	
		Chlorothalonil	2.2	U	ng/L	P358685	RPD
		Cypermethrin	22	U	ng/L	P358685	
		DDD-p,p'	8.9	U	ng/L	P358685	
		DDE-p,p'	8.9	U	ng/L	P358685	
		DDT-p,p'	11	U	ng/L	P358685	
		Dicofol	33	U	ng/L	P358685	
		Dieldrin	4.5	U	ng/L	P358685	
		Endosulfan I	4.5	U	ng/L	P358685	
		Endosulfan II	4.5	U	ng/L	P358685	
		Endosulfan Sulfate	2.2	U	ng/L	P358685	
		Endrin	2.2	U	ng/L	P358685	
		Endrin Aldehyde	2.2	U	ng/L	P358685	RPD
		Endrin Ketone	2.2	U	ng/L	P358685	
		Gamma-Chlordane	1.1	U	ng/L	P358685	
		Heptachlor	1.7	U	ng/L	P358685	
		Heptachlor Epoxide	2.2	U	ng/L	P358685	
		Methoxychlor	4.5	U	ng/L	P358685	
		Mirex	2.2	U	ng/L	P358685	
		Permethrin	11	U	ng/L	P358685	
		Trifluralin	2.8	U	ng/L	P358685	
	EPA 8276	Chlordane	5.6	U	ng/L	P358685	
		Toxaphene	33	U	ng/L	P358685	
2062416	EPA 8270D	Acetochlor	0.26	U	ng/L	P359172	
		Alachlor	0.26	U	ng/L	P359172	
		Ametryn	0.63	U	ng/L	P359172	
		Atrazine	0.26	UJ	ng/L	P359172	RPD
		Atrazine Desethyl	1.6	U	ng/L	P359172	
		Azinphos Methyl	2.4	U	ng/L	P359172	
		Bromacil	0.53	U	ng/L	P359172	
		Butylate	0.42	U	ng/L	P359172	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P359172	
		Chlorpyrifos Methyl	0.11	U	ng/L	P359172	
		Cyanazine	3.4	U	ng/L	P359172	
		Demeton	7.4	U	ng/L	P359172	

Field ID: FB_02132019 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062416	EPA 8270D	Diazinon	0.13	U	ng/L	P359172	
		Dimethenamid**	0.11	U	ng/L	P359172	
		Disulfoton	0.53	U	ng/L	P359172	
		Dithiopyr**	0.11	U	ng/L	P359172	
		EPTC	1.3	U	ng/L	P359172	
		Ethion	0.16	U	ng/L	P359172	
		Ethoprop	0.11	U	ng/L	P359172	
		Fenamiphos	0.53	U	ng/L	P359172	
		Fipronil	0.26	U	ng/L	P359172	
		Fipronil Desulfinyl**	0.13	UJ	ng/L	P359172	LCS, MS
		Fipronil Sulfide	0.16	U	ng/L	P359172	
		Fipronil Sulfone	0.16	U	ng/L	P359172	
		Fonofos	0.21	U	ng/L	P359172	
		Hexazinone	0.53	U	ng/L	P359172	
		Malathion	0.37	U	ng/L	P359172	
		Metalaxyl	0.32	U	ng/L	P359172	
		Metolachlor	0.53	U	ng/L	P359172	
		Metribuzin	0.79	U	ng/L	P359172	
		Mevinphos	0.53	U	ng/L	P359172	
		Molinate	0.32	U	ng/L	P359172	
		Norflurazon	0.53	U	ng/L	P359172	
		Oxadiazon**	0.11	U	ng/L	P359172	
		Parathion Ethyl	0.26	U	ng/L	P359172	
		Parathion Methyl	0.58	U	ng/L	P359172	
		Pendimethalin	1.1	U	ng/L	P359172	
		Phorate	0.26	U	ng/L	P359172	
		Prodiamine**	0.18	U	ng/L	P359172	
		Prometon	0.95	U	ng/L	P359172	
		Prometryn	0.21	U	ng/L	P359172	
		Simazine	0.53	U	ng/L	P359172	
		Tebuconazole**	0.53	U	ng/L	P359172	
		Terbufos	0.11	U	ng/L	P359172	
		Terbuthylazine	0.45	U	ng/L	P359172	
2062423	EPA 200.7 Rev. 4.4	Barium	1.0	U	ug/L	P359073	
		Calcium	0.075	U	mg/L	P359073	
		Iron	30	U	ug/L	P359073	
		Magnesium	0.040	U	mg/L	P359073	
		Potassium	0.30	U	mg/L	P359073	
		Sodium	0.50	U	mg/L	P359073	
		Zinc	5.0	U	ug/L	P359073	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P359073	
		Antimony	0.050	U	ug/L	P359073	
		Arsenic	0.050	U	ug/L	P359073	
		Boron**	2.0	U	ug/L	P359073	
		Cadmium	0.020	U	ug/L	P359073	

Field ID: FB_02132019 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2062423	EPA 200.8 Rev. 5.4	Chromium	0.40	U	ug/L	P359073	
		Copper	0.40	U	ug/L	P359073	
		Lead	0.20	U	ug/L	P359073	
		Nickel	0.50	U	ug/L	P359073	
		Selenium	0.20	U	ug/L	P359073	
		Silver	0.010	U	ug/L	P359073	
		Thallium	0.10	U	ug/L	P359073	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8270D: Refer to the narrative for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P358888

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P358889

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P359188

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P359073

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: P359073

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 200.8 Rev. 5.4
Batch ID: P359912

Component	Result	Code	Units
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359451

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359455

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359211

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359263

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359266

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P359020

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359145

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359146

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358959

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P359003

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358892

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358893

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

Reference Method: EPA 8270D
Batch ID: P358685

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
Carbophenothion	12	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	8.0	U	ng/L
DDE-p,p'	8.0	U	ng/L
DDT-p,p'	10	U	ng/L
Delta-BHC	10	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Gamma-BHC	10	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8270D
Batch ID: P359172

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270D
Batch ID: P359172

Component	Result	Code	Units
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.2	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	7.0	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8276
Batch ID: P358685

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P358820

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P358913

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P358978

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: P358960

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P358964

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P359108

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

Reference Method: SM 2320 B-97
Batch ID: P359109

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

Reference Method: SM 2540 C-97
Batch ID: P359433

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P359434

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P359435

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P359333

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P359334

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P359335

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P359110

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P359111

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P359403

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: P359073

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	104		P	85 - 115
Calcium	105		P	85 - 115
Iron	108		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	109		P	85 - 115
Sodium	106		P	85 - 115
Zinc	103		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P359073

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.7		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	101		P	85 - 115
Boron	101		P	85 - 115
Cadmium	99.6		P	85 - 115
Chromium	94.9		P	85 - 115
Copper	98.1		P	85 - 115
Lead	94.4		P	85 - 115
Nickel	95.1		P	85 - 115
Selenium	100		P	85 - 115
Silver	102		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P359912

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Copper	99.0		P	85 - 115
Lead	95.0		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359451

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359455

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359211

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359263

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359266

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P359020

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359145

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359146

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358959

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P359003

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358892

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.9		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358893

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P358685

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	58.0	52.8	P/P	25 - 92.0
Alpha-BHC	87.6	106	P/P	49 - 130
Alpha-Chlordane	84.4	86.6	P/P	50 - 115
Beta-BHC	109	124	P/P	43 - 157
Carbophenothion	70.1	77.2	P/P	27 - 180
Chlorothalonil	118	134	P/P	10 - 216
Cypermethrin	72.6	75.7	P/P	40 - 153
DDD-p,p'	93.7	97.5	P/P	53 - 128
DDE-p,p'	86.7	88.6	P/P	48 - 116
DDT-p,p'	96.2	94.2	P/P	47 - 128
Delta-BHC	125	132	P/P	51 - 196
Dicofol	87.8	99.9	P/P	10 - 147
Dieldrin	89.4	91.8	P/P	48 - 128
Endosulfan I	90.3	92.1	P/P	58 - 126
Endosulfan II	85.0	95.0	P/P	50 - 150
Endosulfan Sulfate	69.6	81.6	P/P	56 - 130
Endrin	94.4	86.0	P/P	50 - 126
Endrin Aldehyde	85.5	96.7	P/P	12 - 145
Endrin Ketone	71.6	81.1	P/P	59 - 132
Gamma-BHC	115	118	P/P	50 - 155
Gamma-Chlordane	82.2	84.7	P/P	50 - 112
Heptachlor	67.4	67.0	P/P	41 - 98.0
Heptachlor Epoxide	85.1	88.7	P/P	55 - 117
Methoxychlor	104	113	P/P	55 - 133
Mirex	64.0	63.2	P/P	44 - 101
Permethrin	66.0	67.8	P/P	52 - 124
Trifluralin	85.4	91.8	P/P	10 - 201

Reference Method: EPA 8270D
Batch ID: P359172

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	87.0	107	P/P	71 - 121
Alachlor	86.5	101	P/P	72 - 119
Ametryn	87.5	111	P/P	47 - 144
Atrazine	79.9	122	P/P	75 - 123
Atrazine Desethyl	72.7	86.8	P/P	45 - 133
Azinphos Methyl	105	126	P/P	66 - 165
Bromacil	69.6	78.6	P/P	43 - 123
Butylate	46.8	57.4	P/P	27 - 83.0
Chlorpyrifos Ethyl	90.0	107	P/P	70 - 117
Chlorpyrifos Methyl	86.4	103	P/P	71 - 120
Cyanazine	97.0	109	P/P	34 - 264
Demeton	77.3	93.0	P/P	41 - 122
Diazinon	84.7	104	P/P	70 - 127
Dimethenamid	86.9	103	P/P	60 - 130
Disulfoton	90.2	109	P/P	56 - 127
Dithiopyr	85.5	102	P/P	60 - 130
EPTC	42.2	52.8	P/P	24 - 84.0
Ethion	81.6	87.3	P/P	53 - 132
Ethoprop	77.9	95.0	P/P	57 - 117
Fenamiphos	72.2	78.6	P/P	55 - 136

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P359172

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fipronil	65.9	74.6	P/P	64 - 126
Fipronil Desulfinyl	57.6	64.7	F/P	60 - 130
Fipronil Sulfide	65.6	69.5	P/P	57 - 120
Fipronil Sulfone	66.7	70.7	P/P	52 - 115
Fonofos	80.1	99.8	P/P	61 - 121
Hexazinone	87.8	113	P/P	62 - 131
Malathion	90.6	107	P/P	67 - 126
Metalaxyl	83.3	98.8	P/P	54 - 128
Metolachlor	85.1	103	P/P	71 - 118
Metribuzin	161	189	P/P	42 - 221
Mevinphos	66.4	80.8	P/P	45 - 114
Molinate	62.3	75.3	P/P	33 - 91.0
Norflurazon	68.3	76.8	P/P	60 - 123
Oxadiazon	80.8	97.4	P/P	60 - 130
Parathion Ethyl	80.0	95.1	P/P	73 - 111
Parathion Methyl	92.9	117	P/P	74 - 126
Pendimethalin	85.5	105	P/P	63 - 131
Phorate	86.7	106	P/P	54 - 115
Prodiamine	83.5	90.1	P/P	60 - 130
Prometon	78.8	94.4	P/P	61 - 120
Prometryn	82.0	91.6	P/P	62 - 126
Simazine	91.0	114	P/P	75 - 126
Tebuconazole	60.1	68.0	P/P	30 - 100
Terbufos	83.7	102	P/P	65 - 116
Terbuthylazine	85.3	107	P/P	73 - 117

Reference Method: EPA 8276
Batch ID: P358685

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	77.7	81.0	P/P	43 - 128
Toxaphene	57.9	66.6	P/P	38 - 140

Reference Method: EPA 8321B
Batch ID: P358820

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	74.1		P	40 - 150
3-Hydroxycarbofuran	104		P	40 - 150
Acetaminophen	99.9		P	30 - 150
Aldicarb	74.0		P	30 - 150
Aldicarb Sulfone	106		P	40 - 150
Aldicarb Sulfoxide	108		P	40 - 150
Bentazon	79.2		P	30 - 150
Carbamazepine	85.4		P	40 - 150
Carbaryl	83.4		P	40 - 150
Carbofuran	77.5		P	40 - 150
Diuron	76.2		P	40 - 150
Fenuron	116		P	40 - 150
Fluridone	111		P	40 - 150
Hydrocodone	99.0		P	40 - 150
Ibuprofen	104		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P358820

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imazapyr	89.6		P	40 - 150
Imidacloprid	101		P	40 - 150
Linuron	75.1		P	40 - 150
MCPP	113		P	40 - 150
Methiocarb	84.0		P	40 - 150
Methomyl	109		P	40 - 150
Naproxen	79.8		P	40 - 150
Oxamyl	121		P	40 - 150
Primidone	107		P	40 - 150
Propoxur	80.1		P	40 - 150
Pyraclostrobin	82.0		P	40 - 150
Triclopyr	75.7		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P358913

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	84.4		P	40 - 150
Acetaminophen	97.9		P	30 - 150
Bentazon	78.6		P	30 - 150
Carbamazepine	82.4		P	40 - 150
Diuron	73.1		P	40 - 150
Fenuron	110		P	40 - 150
Fluridone	101		P	40 - 150
Hydrocodone	91.1		P	40 - 150
Ibuprofen	75.9		P	40 - 150
Imazapyr	87.4		P	40 - 150
Imidacloprid	95.6		P	40 - 150
Linuron	77.7		P	40 - 150
MCPP	104		P	40 - 150
Naproxen	74.5		P	40 - 150
Primidone	103		P	40 - 150
Pyraclostrobin	82.8		P	40 - 150
Triclopyr	63.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P358978

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	77.5		P	40 - 150
AMPA	101		P	40 - 150
Endothall	93.7		P	40 - 150
Glufosinate	87.4		P	40 - 150
Glyphosate	91.1		P	40 - 140
Sucralose	125		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P358960

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P358964

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P359108

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 107

Reference Method: SM 2320 B-97
Batch ID: P359109

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P359110

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.4		P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P359111

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.8		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P359403

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P359073

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062446	Barium	102	103	P/P	80 - 120
2062446	Calcium	94.2		P	80 - 120
2062446	Iron	107	107	P/P	80 - 120
2062446	Magnesium	98.4		P	80 - 120
2062446	Potassium	107	107	P/P	80 - 120
2062446	Sodium	98.0		P	80 - 120
2062446	Zinc	102	102	P/P	80 - 120
2062578	Barium	101		P	80 - 120
2062578	Calcium	101		P	80 - 120
2062578	Iron	109		P	80 - 120
2062578	Magnesium	105		P	80 - 120
2062578	Potassium	105		P	80 - 120
2062578	Sodium	103		P	80 - 120
2062578	Zinc	107		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P359073

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062446	Aluminum	98.7	97.6	P/P	80 - 120
2062446	Antimony	104	101	P/P	80 - 120
2062446	Arsenic	100	98.0	P/P	80 - 120
2062446	Boron	96.4	95.7	P/P	80 - 120
2062446	Cadmium	105	101	P/P	80 - 120
2062446	Chromium	96.7	94.4	P/P	80 - 120
2062446	Copper	96.7	95.7	P/P	80 - 120
2062446	Lead	95.7	93.6	P/P	80 - 120
2062446	Nickel	93.8	91.0	P/P	80 - 120
2062446	Selenium	98.3	95.3	P/P	80 - 120
2062446	Silver	102	101	P/P	80 - 120
2062446	Thallium	105	103	P/P	80 - 120
2062578	Aluminum	97.5		P	80 - 120
2062578	Antimony	104		P	80 - 120
2062578	Arsenic	103		P	80 - 120
2062578	Boron	90.0		P	80 - 120
2062578	Cadmium	102		P	80 - 120
2062578	Chromium	94.3		P	80 - 120
2062578	Copper	95.5		P	80 - 120
2062578	Lead	96.4		P	80 - 120
2062578	Nickel	96.8		P	80 - 120
2062578	Selenium	99.6		P	80 - 120
2062578	Silver	101		P	80 - 120
2062578	Thallium	106		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P359912

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2065812	Copper	92.1		P	80 - 120
2065812	Lead	93.7		P	80 - 120
2065815	Copper	94.8	96.1	P/P	80 - 120
2065815	Lead	95.4	95.4	P/P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359451

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062087	Chloride	102		P	90 - 110
2062359	Chloride	99.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359455

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062087	Sulfate	101		P	90 - 110
2062359	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359211

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2061950	Ammonia-N	102	94.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359263

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062364	Ammonia-N	98.6	98.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359266

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062310	Ammonia-N	103	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P359020

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062310	Kjeldahl Nitrogen	101	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359145

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062091	NO2NO3-N	96.5	96.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359146

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062364	NO2NO3-N	96.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358959

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062309	Total-P	105	103	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P359003

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062365	Total-P	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358892

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062312	O-Phosphate-P	95.4	96.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358893

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062366	O-Phosphate-P	95.0	96.9	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P358685

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2061578	Aldrin	68.8	64.4	P/P	25 - 92.0
2061578	Alpha-BHC	117	101	P/P	49 - 130
2061578	Alpha-Chlordane	82.7	78.2	P/P	50 - 115
2061578	Beta-BHC	89.9	83.8	P/P	43 - 157
2061578	Carbophenothion	94.7	93.5	P/P	27 - 180
2061578	Chlorothalonil	71.0	172	P/P	10 - 216
2061578	Cypermethrin	81.0	83.0	P/P	40 - 153
2061578	DDD-p,p'	85.1	81.1	P/P	53 - 128
2061578	DDE-p,p'	80.4	76.7	P/P	48 - 116
2061578	DDT-p,p'	117	96.6	P/P	47 - 128
2061578	Delta-BHC	143	118	P/P	51 - 196
2061578	Dicofol	78.0	77.2	P/P	10 - 147
2061578	Dieldrin	84.5	80.6	P/P	48 - 128
2061578	Endosulfan I	85.3	87.3	P/P	58 - 126
2061578	Endosulfan II	103	96.1	P/P	50 - 150
2061578	Endosulfan Sulfate	75.3	74.5	P/P	56 - 130
2061578	Endrin	85.1	84.5	P/P	50 - 126
2061578	Endrin Aldehyde	58.7	86.3	P/P	12 - 145
2061578	Endrin Ketone	78.1	74.9	P/P	59 - 132
2061578	Gamma-BHC	123	109	P/P	50 - 155
2061578	Gamma-Chlordane	82.9	77.9	P/P	50 - 112
2061578	Heptachlor	74.3	69.8	P/P	41 - 98.0
2061578	Heptachlor Epoxide	88.9	84.9	P/P	55 - 117
2061578	Methoxychlor	91.5	101	P/P	55 - 133
2061578	Mirex	67.7	65.4	P/P	44 - 101
2061578	Permethrin	81.9	81.5	P/P	52 - 124
2061578	Trifluralin	93.1	87.7	P/P	10 - 201

Reference Method: EPA 8270D
Batch ID: P359172

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062408	Acetochlor	90.1	101	P/P	63 - 129
2062408	Alachlor	85.9	98.6	P/P	65 - 127

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P359172

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062408	Ametryn	86.6	99.5	P/P	40 - 164
2062408	Atrazine	106	117	P/P	66 - 135
2062408	Atrazine Desethyl	57.7	69.0	P/P	14 - 157
2062408	Azinphos Methyl	99.7	118	P/P	49 - 180
2062408	Bromacil	65.6	66.7	P/P	48 - 130
2062408	Butylate	36.4	42.6	P/P	10 - 94.0
2062408	Chlorpyrifos Ethyl	92.5	103	P/P	58 - 123
2062408	Chlorpyrifos Methyl	87.4	100	P/P	58 - 125
2062408	Cyanazine	83.7	90.3	P/P	24 - 253
2062408	Demeton	75.2	87.9	P/P	25 - 149
2062408	Diazinon	84.8	104	P/P	59 - 144
2062408	Dimethenamid	87.9	99.0	P/P	60 - 130
2062408	Disulfoton	96.6	101	P/P	54 - 132
2062408	Dithiopyr	86.7	98.0	P/P	60 - 130
2062408	EPTC	33.5	38.5	P/P	10 - 92.0
2062408	Ethion	86.6	79.9	P/P	30 - 148
2062408	Ethoprop	77.3	88.7	P/P	50 - 130
2062408	Fenamiphos	66.1	76.0	P/P	49 - 142
2062408	Fipronil	58.4	65.2	P/P	46 - 140
2062408	Fipronil Desulfinyl	47.1	54.4	F/F	60 - 130
2062408	Fipronil Sulfide	54.9	61.6	P/P	31 - 136
2062408	Fipronil Sulfone	50.4	57.7	P/P	16 - 136
2062408	Fonofos	81.1	91.0	P/P	55 - 129
2062408	Hexazinone	92.6	99.9	P/P	56 - 141
2062408	Malathion	95.1	104	P/P	56 - 135
2062408	Metalaxyl	82.8	93.1	P/P	54 - 135
2062408	Metolachlor	86.7	100	P/P	51 - 140
2062408	Metribuzin	157	192	P/P	45 - 254
2062408	Mevinphos	65.5	76.8	P/P	33 - 131
2062408	Molinate	58.5	67.2	P/P	14 - 98.0
2062408	Norflurazon	55.5	63.6	P/P	34 - 136
2062408	Oxadiazon	85.3	93.6	P/P	60 - 130
2062408	Parathion Ethyl	86.9	94.9	P/P	66 - 118
2062408	Parathion Methyl	98.4	110	P/P	64 - 136
2062408	Pendimethalin	90.3	99.6	P/P	59 - 144
2062408	Phorate	86.9	94.8	P/P	42 - 130
2062408	Prodiamine	82.9	103	P/P	60 - 130
2062408	Prometon	83.3	85.1	P/P	59 - 134
2062408	Prometryn	78.8	86.7	P/P	54 - 135
2062408	Simazine	102	110	P/P	53 - 156
2062408	Tebuconazole	63.0	64.1	P/P	30 - 100
2062408	Terbufos	87.3	98.7	P/P	57 - 131
2062408	Terbuthylazine	86.8	100	P/P	68 - 125

Reference Method: EPA 8276
Batch ID: P358685

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062407	Chlordane	62.7	54.7	P/P	34 - 136
2062407	Toxaphene	50.5	39.4	P/P	22 - 152

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P358820

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062397	3-Hydroxycarbofuran	111	122	P/P	40 - 150
2062397	Aldicarb	76.2	71.8	P/P	30 - 150
2062397	Aldicarb Sulfone	108	112	P/P	40 - 150
2062397	Aldicarb Sulfoxide	46.8	50.2	P/P	40 - 150
2062397	Carbaryl	80.3	68.7	P/P	40 - 150
2062397	Carbofuran	72.4	64.5	P/P	40 - 150
2062397	Methiocarb	84.7	76.3	P/P	40 - 150
2062397	Methomyl	103	123	P/P	40 - 150
2062397	Oxamyl	112	110	P/P	40 - 150
2062397	Propoxur	77.4	65.6	P/P	40 - 150
2062398	2,4-D	88.2	91.8	P/P	40 - 150
2062398	Acetaminophen	113	126	P/P	30 - 150
2062398	Bentazon	60.0	65.0	P/P	30 - 150
2062398	Carbamazepine	80.9	88.6	P/P	40 - 150
2062398	Diuron	72.3	79.6	P/P	40 - 150
2062398	Fenuron	101	112	P/P	40 - 150
2062398	Fluridone	91.6	104	P/P	40 - 150
2062398	Hydrocodone	74.6	85.0	P/P	40 - 150
2062398	Ibuprofen	89.2	107	P/P	40 - 150
2062398	Imazapyr	118	122	P/P	40 - 150
2062398	Imidacloprid	174	191	F/F	40 - 150
2062398	Linuron	77.3	81.9	P/P	40 - 150
2062398	MCPP	117	131	P/P	40 - 150
2062398	Naproxen	98.6	81.2	P/P	40 - 150
2062398	Primidone	118	139	P/P	40 - 150
2062398	Pyraclostrobin	81.8	93.4	P/P	40 - 150
2062398	Triclopyr	60.7	68.3	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P358913

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062555	2,4-D	88.1	92.1	P/P	40 - 150
2062555	Acetaminophen	109	115	P/P	30 - 150
2062555	Bentazon	26.4	29.0	F/F	30 - 150
2062555	Carbamazepine	62.6	64.3	P/P	40 - 150
2062555	Diuron	55.4	53.7	P/P	40 - 150
2062555	Fenuron	78.2	82.7	P/P	40 - 150
2062555	Fluridone	52.8	64.2	P/P	40 - 150
2062555	Hydrocodone	82.0	74.8	P/P	40 - 150
2062555	Ibuprofen	83.1	71.9	P/P	40 - 150
2062555	Imazapyr	68.2	78.4	P/P	40 - 150
2062555	Imidacloprid	151	162	F/F	40 - 150
2062555	Linuron	59.4	61.2	P/P	40 - 150
2062555	MCPP	118	122	P/P	40 - 150
2062555	Naproxen	77.1	75.5	P/P	40 - 150
2062555	Primidone	97.6	103	P/P	40 - 150
2062555	Pyraclostrobin	70.0	76.8	P/P	40 - 150
2062555	Triclopyr	65.9	75.0	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P358978

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062398	Acesulfame K	91.0	101	P/P	40 - 150
2062398	AMPA	84.9	81.2	P/P	40 - 150
2062398	Endothall	91.8	101	P/P	40 - 150
2062398	Glufosinate	68.7	67.2	P/P	40 - 150
2062398	Glyphosate	71.1	72.7	P/P	40 - 140
2062398	Sucralose	105	103	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P359110

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062460	Fluoride	100	98.9	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P359111

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2062601	Fluoride	100	99.2	P/P	91 - 105

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P358888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062125	Turbidity	6.49	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P358889

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062356	Turbidity	6.14	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P359188

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2063243	Turbidity	3.64	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P359073

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062446	Barium	0.428	Spike	P	0 - 20
2062446	Calcium	0.199	Spike	P	0 - 20
2062446	Iron	0.193	Spike	P	0 - 20
2062446	Magnesium	0.154	Spike	P	0 - 20
2062446	Potassium	0.228	Spike	P	0 - 20
2062446	Sodium	1.26	Spike	P	0 - 20
2062446	Zinc	0.698	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P359073

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062446	Aluminum	1.17	Spike	P	0 - 20
2062446	Antimony	2.01	Spike	P	0 - 20
2062446	Arsenic	2.28	Spike	P	0 - 20
2062446	Boron	0.678	Spike	P	0 - 20
2062446	Cadmium	3.47	Spike	P	0 - 20
2062446	Chromium	2.35	Spike	P	0 - 20
2062446	Copper	1.02	Spike	P	0 - 20
2062446	Lead	2.21	Spike	P	0 - 20
2062446	Nickel	3.04	Spike	P	0 - 20
2062446	Selenium	3.05	Spike	P	0 - 20
2062446	Silver	0.406	Spike	P	0 - 20
2062446	Thallium	2.00	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P359912

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2065815	Copper	1.37	Spike	P	0 - 20
2065815	Lead	0.0386	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359451

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062087	Chloride	0.438	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359455

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062087	Sulfate	0.848	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359211

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2061950	Ammonia-N	7.01	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359263

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062364	Ammonia-N	0.183	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P359266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062310	Ammonia-N	1.26	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P359020

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062310	Kjeldahl Nitrogen	5.05	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359145

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062091	NO2NO3-N	0.317	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P359146

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062364	NO2NO3-N	0.213	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358959

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062309	Total-P	1.52	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P359003

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062365	Total-P	0.314	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358892

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062312	O-Phosphate-P	1.02	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358893

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062366	O-Phosphate-P	1.49	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P358685

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2061578	Aldrin	6.58	Spike	P	0 - 30
2061578	Alpha-BHC	15.0	Spike	P	0 - 30
2061578	Alpha-Chlordane	5.61	Spike	P	0 - 30
2061578	Beta-BHC	7.02	Spike	P	0 - 30
2061578	Carbophenothion	1.23	Spike	P	0 - 30
2061578	Chlorothalonil	82.9	Spike	F	0 - 30
2061578	Cypermethrin	2.46	Spike	P	0 - 30
2061578	DDD-p,p'	4.87	Spike	P	0 - 30
2061578	DDE-p,p'	4.62	Spike	P	0 - 30
2061578	DDT-p,p'	19.4	Spike	P	0 - 30
2061578	Delta-BHC	18.9	Spike	P	0 - 30
2061578	Dicofol	1.03	Spike	P	0 - 30
2061578	Dieldrin	4.71	Spike	P	0 - 30
2061578	Endosulfan I	2.36	Spike	P	0 - 30
2061578	Endosulfan II	6.88	Spike	P	0 - 30
2061578	Endosulfan Sulfate	1.14	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P358685

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2061578	Endrin	0.778	Spike	P	0 - 30
2061578	Endrin Aldehyde	38.1	Spike	F	0 - 30
2061578	Endrin Ketone	4.16	Spike	P	0 - 30
2061578	Gamma-BHC	12.0	Spike	P	0 - 30
2061578	Gamma-Chlordane	6.31	Spike	P	0 - 30
2061578	Heptachlor	6.25	Spike	P	0 - 30
2061578	Heptachlor Epoxide	4.62	Spike	P	0 - 30
2061578	Methoxychlor	9.46	Spike	P	0 - 30
2061578	Mirex	3.46	Spike	P	0 - 30
2061578	Permethrin	0.557	Spike	P	0 - 30
2061578	Trifluralin	6.06	Spike	P	0 - 30
LFB	Aldrin	9.34	LCS	P	0 - 30
LFB	Alpha-BHC	19.2	LCS	P	0 - 30
LFB	Alpha-Chlordane	2.57	LCS	P	0 - 30
LFB	Beta-BHC	13.2	LCS	P	0 - 30
LFB	Carbophenothion	9.70	LCS	P	0 - 30
LFB	Chlorothalonil	12.4	LCS	P	0 - 30
LFB	Cypermethrin	4.21	LCS	P	0 - 30
LFB	DDD-p,p'	3.96	LCS	P	0 - 30
LFB	DDE-p,p'	2.17	LCS	P	0 - 30
LFB	DDT-p,p'	2.06	LCS	P	0 - 30
LFB	Delta-BHC	6.01	LCS	P	0 - 30
LFB	Dicofol	12.9	LCS	P	0 - 30
LFB	Dieldrin	2.65	LCS	P	0 - 30
LFB	Endosulfan I	1.92	LCS	P	0 - 30
LFB	Endosulfan II	11.1	LCS	P	0 - 30
LFB	Endosulfan Sulfate	15.9	LCS	P	0 - 30
LFB	Endrin	9.21	LCS	P	0 - 30
LFB	Endrin Aldehyde	12.4	LCS	P	0 - 30
LFB	Endrin Ketone	12.5	LCS	P	0 - 30
LFB	Gamma-BHC	2.07	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.95	LCS	P	0 - 30
LFB	Heptachlor	0.494	LCS	P	0 - 30
LFB	Heptachlor Epoxide	4.08	LCS	P	0 - 30
LFB	Methoxychlor	7.88	LCS	P	0 - 30
LFB	Mirex	1.14	LCS	P	0 - 30
LFB	Permethrin	2.72	LCS	P	0 - 30
LFB	Trifluralin	7.25	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P359172

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062408	Acetochlor	11.6	Spike	P	0 - 30
2062408	Alachlor	13.8	Spike	P	0 - 30
2062408	Ametryn	13.8	Spike	P	0 - 30
2062408	Atrazine	8.78	Spike	P	0 - 30
2062408	Atrazine Desethyl	17.9	Spike	P	0 - 30
2062408	Azinphos Methyl	16.7	Spike	P	0 - 30
2062408	Bromacil	0.723	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P359172

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062408	Butylate	15.7	Spike	P	0 - 30
2062408	Chlorpyrifos Ethyl	11.1	Spike	P	0 - 30
2062408	Chlorpyrifos Methyl	13.8	Spike	P	0 - 30
2062408	Cyanazine	7.56	Spike	P	0 - 30
2062408	Demeton	15.5	Spike	P	0 - 30
2062408	Diazinon	20.3	Spike	P	0 - 30
2062408	Dimethenamid	11.9	Spike	P	0 - 30
2062408	Disulfoton	3.91	Spike	P	0 - 30
2062408	Dithiopyr	12.3	Spike	P	0 - 30
2062408	EPTC	13.9	Spike	P	0 - 30
2062408	Ethion	8.05	Spike	P	0 - 30
2062408	Ethoprop	13.7	Spike	P	0 - 30
2062408	Fenamiphos	14.0	Spike	P	0 - 30
2062408	Fipronil	11.0	Spike	P	0 - 30
2062408	Fipronil Desulfinyl	14.4	Spike	P	0 - 30
2062408	Fipronil Sulfide	11.4	Spike	P	0 - 30
2062408	Fipronil Sulfone	13.4	Spike	P	0 - 30
2062408	Fonofos	11.4	Spike	P	0 - 30
2062408	Hexazinone	7.63	Spike	P	0 - 30
2062408	Malathion	9.24	Spike	P	0 - 30
2062408	Metalaxyl	11.8	Spike	P	0 - 30
2062408	Metolachlor	13.7	Spike	P	0 - 30
2062408	Metribuzin	19.7	Spike	P	0 - 30
2062408	Mevinphos	15.9	Spike	P	0 - 30
2062408	Molinate	13.9	Spike	P	0 - 30
2062408	Norflurazon	13.6	Spike	P	0 - 30
2062408	Oxadiazon	9.34	Spike	P	0 - 30
2062408	Parathion Ethyl	8.87	Spike	P	0 - 30
2062408	Parathion Methyl	11.5	Spike	P	0 - 30
2062408	Pendimethalin	9.82	Spike	P	0 - 30
2062408	Phorate	8.64	Spike	P	0 - 30
2062408	Prodiamine	21.5	Spike	P	0 - 30
2062408	Prometon	2.07	Spike	P	0 - 30
2062408	Prometryn	9.55	Spike	P	0 - 30
2062408	Simazine	4.97	Spike	P	0 - 30
2062408	Tebuconazole	1.63	Spike	P	0 - 30
2062408	Terbufos	12.2	Spike	P	0 - 30
2062408	Terbuthylazine	14.1	Spike	P	0 - 30
LFB	Acetochlor	20.8	LCS	P	0 - 30
LFB	Alachlor	15.7	LCS	P	0 - 30
LFB	Ametryn	24.0	LCS	P	0 - 30
LFB	Atrazine	41.7	LCS	F	0 - 30
LFB	Atrazine Desethyl	17.6	LCS	P	0 - 30
LFB	Azinphos Methyl	18.0	LCS	P	0 - 30
LFB	Bromacil	12.1	LCS	P	0 - 30
LFB	Butylate	20.3	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	17.4	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	17.3	LCS	P	0 - 30
LFB	Cyanazine	11.3	LCS	P	0 - 30
LFB	Demeton	18.4	LCS	P	0 - 30
LFB	Diazinon	20.0	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P359172

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dimethenamid	17.2	LCS	P	0 - 30
LFB	Disulfoton	19.1	LCS	P	0 - 30
LFB	Dithiopyr	17.7	LCS	P	0 - 30
LFB	EPTC	22.2	LCS	P	0 - 30
LFB	Ethion	6.70	LCS	P	0 - 30
LFB	Ethoprop	19.7	LCS	P	0 - 30
LFB	Fenamiphos	8.47	LCS	P	0 - 30
LFB	Fipronil	12.3	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	11.6	LCS	P	0 - 30
LFB	Fipronil Sulfide	5.69	LCS	P	0 - 30
LFB	Fipronil Sulfone	5.81	LCS	P	0 - 30
LFB	Fonofos	21.9	LCS	P	0 - 30
LFB	Hexazinone	24.8	LCS	P	0 - 30
LFB	Malathion	16.9	LCS	P	0 - 30
LFB	Metalaxyl	17.0	LCS	P	0 - 30
LFB	Metolachlor	18.7	LCS	P	0 - 30
LFB	Metribuzin	16.0	LCS	P	0 - 30
LFB	Mevinphos	19.5	LCS	P	0 - 30
LFB	Molinate	18.8	LCS	P	0 - 30
LFB	Norflurazon	11.7	LCS	P	0 - 30
LFB	Oxadiazon	18.6	LCS	P	0 - 30
LFB	Parathion Ethyl	17.3	LCS	P	0 - 30
LFB	Parathion Methyl	23.1	LCS	P	0 - 30
LFB	Pendimethalin	20.6	LCS	P	0 - 30
LFB	Phorate	19.9	LCS	P	0 - 30
LFB	Prodiamine	7.69	LCS	P	0 - 30
LFB	Prometon	18.0	LCS	P	0 - 30
LFB	Prometryn	11.0	LCS	P	0 - 30
LFB	Simazine	22.5	LCS	P	0 - 30
LFB	Tebuconazole	12.3	LCS	P	0 - 30
LFB	Terbufos	19.8	LCS	P	0 - 30
LFB	Terbuthylazine	22.6	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P358685

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062407	Chlordane	13.6	Spike	P	0 - 30
2062407	Toxaphene	24.8	Spike	P	0 - 30
LFB	Chlordane	4.23	LCS	P	0 - 30
LFB	Toxaphene	13.8	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P358820

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062397	3-Hydroxycarbofuran	8.96	Spike	P	0 - 30
2062397	Aldicarb	6.04	Spike	P	0 - 30
2062397	Aldicarb Sulfone	3.37	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P358820

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062397	Aldicarb Sulfoxide	6.96	Spike	P	0 - 30
2062397	Carbaryl	15.7	Spike	P	0 - 30
2062397	Carbofuran	11.5	Spike	P	0 - 30
2062397	Methiocarb	10.5	Spike	P	0 - 30
2062397	Methomyl	17.3	Spike	P	0 - 30
2062397	Oxamyl	1.67	Spike	P	0 - 30
2062397	Propoxur	16.4	Spike	P	0 - 30
2062398	2,4-D	3.99	Spike	P	0 - 30
2062398	Acetaminophen	10.8	Spike	P	0 - 30
2062398	Bentazon	7.94	Spike	P	0 - 30
2062398	Carbamazepine	9.13	Spike	P	0 - 30
2062398	Diuron	9.56	Spike	P	0 - 30
2062398	Fenuron	10.2	Spike	P	0 - 30
2062398	Fluridone	12.4	Spike	P	0 - 30
2062398	Hydrocodone	13.0	Spike	P	0 - 30
2062398	Ibuprofen	17.7	Spike	P	0 - 30
2062398	Imazapyr	3.66	Spike	P	0 - 30
2062398	Imidacloprid	9.12	Spike	P	0 - 30
2062398	Linuron	5.88	Spike	P	0 - 30
2062398	MCPP	11.3	Spike	P	0 - 30
2062398	Naproxen	19.3	Spike	P	0 - 30
2062398	Primidone	16.3	Spike	P	0 - 30
2062398	Pyraclostrobin	13.3	Spike	P	0 - 30
2062398	Triclopyr	11.8	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P358913

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062555	2,4-D	3.93	Spike	P	0 - 30
2062555	Acetaminophen	5.61	Spike	P	0 - 30
2062555	Bentazon	0.786	Spike	P	0 - 30
2062555	Carbamazepine	2.60	Spike	P	0 - 30
2062555	Diuron	2.94	Spike	P	0 - 30
2062555	Fenuron	5.51	Spike	P	0 - 30
2062555	Fluridone	2.59	Spike	P	0 - 30
2062555	Hydrocodone	9.19	Spike	P	0 - 30
2062555	Ibuprofen	14.4	Spike	P	0 - 30
2062555	Imazapyr	3.74	Spike	P	0 - 30
2062555	Imidacloprid	3.30	Spike	P	0 - 30
2062555	Linuron	2.84	Spike	P	0 - 30
2062555	MCPP	3.52	Spike	P	0 - 30
2062555	Naproxen	2.12	Spike	P	0 - 30
2062555	Primidone	5.09	Spike	P	0 - 30
2062555	Pyraclostrobin	8.33	Spike	P	0 - 30
2062555	Triclopyr	12.9	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P358978

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062398	Acesulfame K	10.2	Spike	P	0 - 30
2062398	AMPA	4.45	Spike	P	0 - 30
2062398	Endothall	9.83	Spike	P	0 - 30
2062398	Glufosinate	2.24	Spike	P	0 - 30
2062398	Glyphosate	2.22	Spike	P	0 - 30
2062398	Sucralose	2.24	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P358960

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062363	Color (true)	1.74	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P358964

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062353	Color (true)	3.16	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P359108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062460	Total Alkalinity	0.0984	Sample	P	0 - 1.6

Reference Method: SM 2320 B-97
Batch ID: P359109

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062601	Total Alkalinity	0.559	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P359433

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2061975	TDS	3.84	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P359434

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062125	TDS	2.21	Sample	P	0 - 10

Quality Assurance Report
Precision

Reference Method: SM 2540 C-97
Batch ID: P359435

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062363	TDS	7.50	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P359110

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062460	Fluoride	0.964	Spike	P	0 - 3.5

Reference Method: SM 4500 F-C-97
Batch ID: P359111

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062601	Fluoride	0.933	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P359403

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2062097	Organic Carbon	0.802	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2062397
Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	51.1	P	30 - 160

Lab Sample ID: 2062398
Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	77.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Carbamazepine-d10	73.8	P	30 - 160
EPA 8321B	Diuron-d6	76.5	P	30 - 160
EPA 8321B	Endothall-d6	113	P	40 - 160
EPA 8321B	Endothall-d6	113	P	40 - 160
EPA 8321B	Ibuprofen-d3	88.1	P	30 - 160
EPA 8321B	Primidone-d5	127	P	30 - 160
EPA 8321B	Sucralose-d6	113	P	40 - 160
EPA 8321B	Sucralose-d6	113	P	40 - 160

Lab Sample ID: 2062399
Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	58.3	P	30 - 160

Lab Sample ID: 2062400
Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	88.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	120	P	30 - 160
EPA 8321B	Carbamazepine-d10	69.5	P	30 - 160
EPA 8321B	Diuron-d6	67.6	P	30 - 160
EPA 8321B	Endothall-d6	113	P	40 - 160
EPA 8321B	Endothall-d6	113	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	83.1	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	83.1	P	40 - 160
EPA 8321B	Ibuprofen-d3	81.9	P	30 - 160
EPA 8321B	Primidone-d5	128	P	30 - 160
EPA 8321B	Sucralose-d6	109	P	40 - 160
EPA 8321B	Sucralose-d6	109	P	40 - 160

Lab Sample ID: 2062401
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	63.9	P	30 - 160

Lab Sample ID: 2062402
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	69.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	107	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2062402
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbamazepine-d10	66.5	P	30 - 160
EPA 8321B	Diuron-d6	65.1	P	30 - 160
EPA 8321B	Endothall-d6	101	P	40 - 160
EPA 8321B	Endothall-d6	101	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	96.8	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	96.8	P	40 - 160
EPA 8321B	Ibuprofen-d3	75.7	P	30 - 160
EPA 8321B	Primidone-d5	108	P	30 - 160
EPA 8321B	Sucralose-d6	109	P	40 - 160
EPA 8321B	Sucralose-d6	109	P	40 - 160

Lab Sample ID: 2062403
Field Sample ID: G1WA0018_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	63.3	P	30 - 160

Lab Sample ID: 2062404
Field Sample ID: G1WA0018_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	78.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	70.0	P	30 - 160
EPA 8321B	Diuron-d6	66.3	P	30 - 160
EPA 8321B	Endothall-d6	101	P	40 - 160
EPA 8321B	Endothall-d6	101	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	92.3	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	92.3	P	40 - 160
EPA 8321B	Ibuprofen-d3	85.5	P	30 - 160
EPA 8321B	Primidone-d5	113	P	30 - 160
EPA 8321B	Sucralose-d6	111	P	40 - 160
EPA 8321B	Sucralose-d6	111	P	40 - 160

Lab Sample ID: 2062405
Field Sample ID: FB_02132019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	79.8	P	30 - 160

Lab Sample ID: 2062406
Field Sample ID: FB_02132019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	62.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	86.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	76.3	P	30 - 160
EPA 8321B	Diuron-d6	87.4	P	30 - 160
EPA 8321B	Endothall-d6	79.1	P	40 - 160
EPA 8321B	Endothall-d6	79.1	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	110	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	110	P	40 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2062406
Field Sample ID: FB_02132019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Ibuprofen-d3	76.9	P	30 - 160
EPA 8321B	Primidone-d5	110	P	30 - 160
EPA 8321B	Sucralose-d6	110	P	40 - 160
EPA 8321B	Sucralose-d6	110	P	40 - 160

Lab Sample ID: 2062407
Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	44.1	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	31.2	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	30.2	P	30 - 103
EPA 8276	PCNB	53.4	P	37 - 143

Lab Sample ID: 2062408
Field Sample ID: G1WA0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	95.7	P	68 - 130
EPA 8270D	Terbufos-d10	89.8	P	61 - 136

Lab Sample ID: 2062409
Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	56.8	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	37.6	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	38.5	P	30 - 103
EPA 8276	PCNB	61.8	P	37 - 143

Lab Sample ID: 2062410
Field Sample ID: G1WA0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	91.6	P	68 - 130
EPA 8270D	Terbufos-d10	85.7	P	61 - 136

Lab Sample ID: 2062411
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	51.6	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	38.8	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	34.1	P	30 - 103
EPA 8276	PCNB	61.3	P	37 - 143

Lab Sample ID: 2062412
Field Sample ID: G1WA0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	94.8	P	68 - 130
EPA 8270D	Terbufos-d10	88.2	P	61 - 136

Quality Assurance Report
Surrogates

Lab Sample ID: 2062413
Field Sample ID: G1WA0018_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	57.5	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	41.0	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	37.5	P	30 - 103
EPA 8276	PCNB	68.3	P	37 - 143

Lab Sample ID: 2062414
Field Sample ID: G1WA0018_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	88.4	P	68 - 130
EPA 8270D	Terbufos-d10	79.6	P	61 - 136

Lab Sample ID: 2062415
Field Sample ID: FB_02132019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	83.6	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	82.9	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	61.9	P	30 - 103
EPA 8276	PCNB	85.7	P	37 - 143

Lab Sample ID: 2062416
Field Sample ID: FB_02132019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	96.5	P	68 - 130
EPA 8270D	Terbufos-d10	92.8	P	61 - 136

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A89400
Included Lab Sample IDs: 2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062374

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A89401
Included Lab Sample IDs: 2062355, 2062358, 2062361, 2062366, 2062367, 2062370, 2062373, 2062376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.8	97.1	P/P	90 - 110
O-Phosphate-P	97.1	96.2	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A89427
Included Lab Sample IDs: 2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	90 - 115
Color (true)	104	102	P/P	90 - 115

Reference Method: EPA 8321B
Run ID: A89461
Included Lab Sample IDs: 2062398, 2062400, 2062402, 2062404, 2062406

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	104	101	P/P	60 - 160
Sucralose	98.2	104	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A89464
Included Lab Sample IDs: 2062398, 2062400, 2062402, 2062404, 2062406

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	152	75.6	P/P	60 - 160
Acesulfame K	75.6	75.5	P/P	60 - 160
Endothall	104	101	P/P	60 - 160
Endothall	80.2	104	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A89481
Included Lab Sample IDs: 2062354, 2062357, 2062360, 2062364, 2062365, 2062369, 2062372, 2062375

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A89483
Included Lab Sample IDs: 2062360, 2062364, 2062365, 2062369

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A89483
Included Lab Sample IDs: 2062360, 2062364, 2062365, 2062369

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.9	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A89484
Included Lab Sample IDs: 2062375

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

Reference Method: SM 2320 B-97
Run ID: A89489
Included Lab Sample IDs: 2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.7	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A89489
Included Lab Sample IDs: 2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374

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

Reference Method: EPA 8276
Run ID: A89496
Included Lab Sample IDs: 2062407, 2062409, 2062411, 2062413, 2062415

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	101		P	80 - 120
Chlordane	97.9		P	80 - 120
Toxaphene	84.7		P	80 - 120
Toxaphene	91.8		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A89498
Included Lab Sample IDs: 2062354, 2062357, 2062360, 2062364, 2062365, 2062369, 2062372, 2062375

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	98.5	P/P	90 - 110
NO2NO3-N	98.5	99.0	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A89502
Included Lab Sample IDs: 2062398, 2062400, 2062402, 2062404, 2062406

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	104	90.6	P/P	50 - 150
2,4-D	67.4	94.4	P/P	50 - 150
2,4-D	90.6	125	P/P	50 - 150
3-Hydroxycarbofuran	119	118	P/P	60 - 150
Acetaminophen	107	113	P/P	60 - 160

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Reference Method: EPA 8321B
Run ID: A89502
Included Lab Sample IDs: 2062398, 2062400, 2062402, 2062404, 2062406

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	109	114	P/P	60 - 160
Acetaminophen	114	120	P/P	60 - 160
Aldicarb	107	128	P/P	60 - 150
Aldicarb Sulfone	107	121	P/P	50 - 150
Aldicarb Sulfoxide	111	108	P/P	50 - 150
Bentazon	88.0	84.9	P/P	50 - 160
Bentazon	92.5	85.1	P/P	50 - 160
Bentazon	92.6	92.5	P/P	50 - 160
Carbamazepine	101	90.8	P/P	60 - 150
Carbamazepine	109	101	P/P	60 - 150
Carbamazepine	99.5	101	P/P	60 - 150
Carbaryl	105	113	P/P	60 - 150
Carbofuran	92.3	90.2	P/P	50 - 150
Diuron	101	101	P/P	60 - 150
Diuron	103	102	P/P	60 - 150
Diuron	111	101	P/P	60 - 150
Fenuron	107	100	P/P	60 - 150
Fenuron	115	99.3	P/P	60 - 150
Fenuron	99.3	101	P/P	60 - 150
Fluridone	101	103	P/P	60 - 160
Fluridone	103	101	P/P	60 - 160
Fluridone	104	105	P/P	60 - 160
Hydrocodone	103	98.8	P/P	60 - 150
Hydrocodone	96.2	99.2	P/P	60 - 150
Hydrocodone	98.8	97.5	P/P	60 - 150
Ibuprofen	113	109	P/P	50 - 160
Ibuprofen	76.3	90.8	P/P	50 - 160
Ibuprofen	98.7	113	P/P	50 - 160
Imazapyr	102	83.3	P/P	50 - 150
Imazapyr	83.3	85.5	P/P	50 - 150
Imazapyr	97.6	84.8	P/P	50 - 150
Imidacloprid	109	96.9	P/P	60 - 150
Imidacloprid	86.1	101	P/P	60 - 150
Imidacloprid	96.9	94.6	P/P	60 - 150
Linuron	105	99.2	P/P	60 - 150
Linuron	96.5	105	P/P	60 - 150
Linuron	98.6	106	P/P	60 - 150
MCPP	89.7	88.5	P/P	50 - 150
MCPP	90.6	93.5	P/P	50 - 150
MCPP	97.7	90.6	P/P	50 - 150
Methiocarb	115	124	P/P	50 - 150
Methomyl	107	118	P/P	50 - 150
Naproxen	112	76.2	P/P	50 - 160
Naproxen	76.2	113	P/P	50 - 160
Naproxen	90.0	66.7	P/P	50 - 160
Oxamyl	101	114	P/P	50 - 150
Primidone	102	91.6	P/P	60 - 150
Primidone	108	105	P/P	60 - 150
Primidone	113	102	P/P	60 - 150
Propoxur	99.2	115	P/P	50 - 150
Pyraclostrobin	116	116	P/P	60 - 150

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Reference Method: EPA 8321B
Run ID: A89502
Included Lab Sample IDs: 2062398, 2062400, 2062402, 2062404, 2062406

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	119	115	P/P	60 - 150
Pyraclostrobin	122	119	P/P	60 - 150
Triclopyr	82.0	76.0	P/P	50 - 150
Triclopyr	96.4	91.9	P/P	50 - 150
Triclopyr	97.9	96.4	P/P	50 - 150

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A89511
Included Lab Sample IDs: 2062371

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	101	P/P	95 - 105

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A89521
Included Lab Sample IDs: 2062417, 2062418, 2062419, 2062420, 2062421, 2062422, 2062423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	99.7	99.9	P/P	95 - 105
Barium	99.9	100	P/P	90 - 110
Calcium	100	101	P/P	95 - 105
Calcium	101	101	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Iron	101	101	P/P	95 - 105
Magnesium	102	102	P/P	95 - 105
Magnesium	102	101	P/P	90 - 110
Potassium	101	99.6	P/P	95 - 105
Potassium	99.6	99.6	P/P	90 - 110
Sodium	102	104	P/P	95 - 105
Sodium	104	103	P/P	90 - 110
Zinc	99.5	99.9	P/P	95 - 105
Zinc	99.9	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A89524
Included Lab Sample IDs: 2062369

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A89542
Included Lab Sample IDs: 2062354, 2062357, 2062360, 2062364, 2062365, 2062372, 2062375

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

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Reference Method: EPA 8270D
Run ID: A89543
Included Lab Sample IDs: 2062408, 2062410, 2062412, 2062414, 2062416

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.9		P	80 - 120
Alachlor	102		P	80 - 120
Ametryn	98.6		P	80 - 120
Atrazine	103		P	80 - 120
Atrazine Desethyl	97.2		P	80 - 120
Azinphos Methyl	98.5		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	95.5		P	80 - 120
Chlorpyrifos Ethyl	96.8		P	80 - 120
Chlorpyrifos Methyl	97.1		P	80 - 120
Cyanazine	90.4		P	80 - 120
Demeton	98.7		P	80 - 120
Diazinon	98.5		P	80 - 120
Dimethenamid	100		P	80 - 120
Disulfoton	98.2		P	80 - 120
Dithiopyr	99.8		P	80 - 120
EPTC	97.5		P	80 - 120
Ethion	99.8		P	80 - 120
Ethoprop	98.2		P	80 - 120
Fenamiphos	100		P	80 - 120
Fipronil	98.2		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	96.8		P	80 - 120
Fipronil Sulfone	99.5		P	80 - 120
Fonofos	97.5		P	80 - 120
Hexazinone	100		P	80 - 120
Malathion	95.6		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	99.6		P	80 - 120
Metribuzin	90.4		P	80 - 120
Mevinphos	99.1		P	80 - 120
Molinate	96.6		P	80 - 120
Norflurazon	98.1		P	80 - 120
Oxadiazon	100		P	80 - 120
Parathion Ethyl	94.5		P	80 - 120
Parathion Methyl	98.2		P	80 - 120
Pendimethalin	100		P	80 - 120
Phorate	97.0		P	80 - 120
Prodiamine	97.6		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	98.7		P	80 - 120
Simazine	101		P	80 - 120
Tebuconazole	97.9		P	80 - 120
Terbufos	96.6		P	80 - 120
Terbuthylazine	98.4		P	80 - 120

Reference Method: EPA 8270D
Run ID: A89546
Included Lab Sample IDs: 2062407, 2062409, 2062411, 2062413, 2062415

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

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Reference Method: EPA 8270D
Run ID: A89546
Included Lab Sample IDs: 2062407, 2062409, 2062411, 2062413, 2062415

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	94.4		P	80 - 120
Alpha-BHC	97.0		P	80 - 120
Alpha-Chlordane	95.8		P	80 - 120
Beta-BHC	89.7		P	80 - 120
Carbophenothion	89.7		P	80 - 120
Chlorothalonil	97.0		P	80 - 120
Cypermethrin	87.9		P	80 - 120
DDD-p,p'	98.5		P	80 - 120
DDE-p,p'	97.6		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	90.6		P	80 - 120
Dicofol	99.6		P	80 - 120
Dieldrin	96.6		P	80 - 120
Endosulfan I	94.4		P	80 - 120
Endosulfan II	91.5		P	80 - 120
Endosulfan Sulfate	96.3		P	80 - 120
Endrin	92.3		P	80 - 120
Endrin Aldehyde	91.1		P	80 - 120
Endrin Ketone	95.2		P	80 - 120
Gamma-BHC	96.9		P	80 - 120
Gamma-Chlordane	96.0		P	80 - 120
Heptachlor	92.9		P	80 - 120
Heptachlor Epoxide	96.0		P	80 - 120
Methoxychlor	99.7		P	80 - 120
Mirex	97.3		P	80 - 120
Permethrin	90.1		P	80 - 120
Trifluralin	96.6		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A89551
Included Lab Sample IDs: 2062417, 2062418, 2062419, 2062420, 2062421, 2062422, 2062423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	101	100	P/P	90 - 110
Antimony	103	101	P/P	90 - 110
Arsenic	98.7	97.1	P/P	90 - 110
Arsenic	99.1	98.7	P/P	90 - 110
Boron	90.9	93.6	P/P	90 - 110
Cadmium	101	99.1	P/P	90 - 110
Cadmium	99.1	98.7	P/P	90 - 110
Chromium	95.8	96.5	P/P	90 - 110
Chromium	96.6	95.8	P/P	90 - 110
Lead	95.3	95.3	P/P	90 - 110
Lead	95.5	95.3	P/P	90 - 110
Nickel	94.9	96.1	P/P	90 - 110
Nickel	96.1	95.6	P/P	90 - 110
Selenium	99.9	99.9	P/P	90 - 110
Selenium	99.9	98.7	P/P	90 - 110
Thallium	94.9	95.3	P/P	90 - 110
Thallium	95.3	95.1	P/P	90 - 110

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Reference Method: EPA 365.1 Rev. 2.0
Run ID: A89560
Included Lab Sample IDs: 2062354, 2062357, 2062372

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

Reference Method: EPA 8321B
Run ID: A89576
Included Lab Sample IDs: 2062398, 2062400, 2062402, 2062404, 2062406

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	108	111	P/P	60 - 160
AMPA	83.0	108	P/P	60 - 160
Glufosinate	107	118	P/P	60 - 160
Glufosinate	74.8	107	P/P	60 - 160
Glyphosate	108	115	P/P	60 - 160
Glyphosate	72.2	108	P/P	60 - 160

Reference Method: SM 5310 B-00
Run ID: A89596
Included Lab Sample IDs: 2062354, 2062357, 2062360, 2062364, 2062365, 2062369, 2062372, 2062375

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.0	96.8	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A89617
Included Lab Sample IDs: 2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A89668
Included Lab Sample IDs: 2062417, 2062418, 2062419, 2062420, 2062421, 2062422, 2062423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.5	99.2	P/P	90 - 110
Aluminum	99.6	98.5	P/P	90 - 110
Boron	100	97.9	P/P	90 - 110
Copper	101	100	P/P	90 - 110
Silver	102	102	P/P	90 - 110
Silver	102	102	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A89852
Included Lab Sample IDs: 2062417, 2062418, 2062422

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	96.0	91.7	P/P	90 - 110
Lead	94.7	91.8	P/P	90 - 110

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* 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							6.49	
	Turbidity							6.14	
	Turbidity							3.64	
EPA 200.7 Rev. 4.4	Barium	104		102	103	101			0.428
	Calcium	105		94.2	101				0.199
	Iron	108		107	107	109			0.193
	Magnesium	105		98.4	105				0.154
	Potassium	109		107	107	105			0.228
	Sodium	106		98.0	103				1.26
	Zinc	103		102	102	107			0.698
EPA 200.8 Rev. 5.4	Aluminum	97.7		98.7	97.6	97.5			1.17
	Antimony	101		104	101	104			2.01
	Arsenic	101		100	98.0	103			2.28
	Boron	101		96.4	95.7	90.0			0.678
	Cadmium	99.6		105	101	102			3.47
	Chromium	94.9		96.7	94.4	94.3			2.35
	Copper	98.1		96.7	95.7	95.5			1.02
	Copper	99.0		92.1	94.8	96.1			1.37
	Lead	94.4		95.7	93.6	96.4			2.21
	Lead	95.0		93.7	95.4	95.4			0.0386
	Nickel	95.1		93.8	91.0	96.8			3.04
	Selenium	100		98.3	95.3	99.6			3.05
	Silver	102		102	101	101			0.406
	Thallium	102		105	103	106			2.00
EPA 300.0 Rev. 2.1	Chloride	103		102	99.8			0.438	
	Sulfate	104		101	103			0.848	
EPA 350.1 Rev. 2.0	Ammonia-N	101		102	94.5				7.01
	Ammonia-N	99.3		98.6	98.9				0.183
	Ammonia-N	101		103	104				1.26
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100		101	106				5.05
EPA 353.2 Rev. 2.0	NO2NO3-N	100		96.5	96.0				0.317
	NO2NO3-N	97.5		96.5					0.213
EPA 365.1 Rev. 2.0	Total-P	104		105	103				1.52
	Total-P	105		101	101				0.314
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.9		95.4	96.7				1.02
	O-Phosphate-P	99.1		95.0	96.9				1.49
EPA 8270D	Acetochlor	87.0	107	90.1	101		20.8		11.6
	Alachlor	86.5	101	85.9	98.6		15.7		13.8
	Aldrin	58.0	52.8	68.8	64.4		9.34		6.58
	Alpha-BHC	87.6	106	117	101		19.2		15.0
	Alpha-Chlordane	84.4	86.6	82.7	78.2		2.57		5.61
	Ametryn	87.5	111	86.6	99.5		24.0		13.8
	Atrazine	79.9	122	106	117		41.7		8.78
	Atrazine Desethyl	72.7	86.8	57.7	69.0		17.6		17.9
	Azinphos Methyl	105	126	99.7	118		18.0		16.7
	Beta-BHC	109	124	89.9	83.8		13.2		7.02
	Bromacil	69.6	78.6	65.6	66.7		12.1		0.723
	Butylate	46.8	57.4	36.4	42.6		20.3		15.7
	Carbophenothion	70.1	77.2	94.7	93.5		9.70		1.23
	Chlorothalonil	118	134	71.0	172		12.4		82.9
	Chlorpyrifos Ethyl	90.0	107	92.5	103		17.4		11.1
	Chlorpyrifos Methyl	86.4	103	87.4	100		17.3		13.8
	Cyanazine	97.0	109	83.7	90.3		11.3		7.56
	Cypermethrin	72.6	75.7	81.0	83.0		4.21		2.46

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Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270D	DDD-p,p'	93.7	97.5	85.1	81.1	3.96		4.87
	DDE-p,p'	86.7	88.6	80.4	76.7	2.17		4.62
	DDT-p,p'	96.2	94.2	117	96.6	2.06		19.4
	Delta-BHC	125	132	143	118	6.01		18.9
	Demeton	77.3	93.0	75.2	87.9	18.4		15.5
	Diazinon	84.7	104	84.8	104	20.0		20.3
	Dicofol	87.8	99.9	78.0	77.2	12.9		1.03
	Dieldrin	89.4	91.8	84.5	80.6	2.65		4.71
	Dimethenamid	86.9	103	87.9	99.0	17.2		11.9
	Disulfoton	90.2	109	96.6	101	19.1		3.91
	Dithiopyr	85.5	102	86.7	98.0	17.7		12.3
	Endosulfan I	90.3	92.1	85.3	87.3	1.92		2.36
	Endosulfan II	85.0	95.0	103	96.1	11.1		6.88
	Endosulfan Sulfate	69.6	81.6	75.3	74.5	15.9		1.14
	Endrin	94.4	86.0	85.1	84.5	9.21		0.778
	Endrin Aldehyde	85.5	96.7	58.7	86.3	12.4		38.1
	Endrin Ketone	71.6	81.1	78.1	74.9	12.5		4.16
	EPTC	42.2	52.8	33.5	38.5	22.2		13.9
	Ethion	81.6	87.3	86.6	79.9	6.70		8.05
	Ethoprop	77.9	95.0	77.3	88.7	19.7		13.7
	Fenamiphos	72.2	78.6	66.1	76.0	8.47		14.0
	Fipronil	65.9	74.6	58.4	65.2	12.3		11.0
	Fipronil Desulfinyl	57.6	64.7	47.1	54.4	11.6		14.4
	Fipronil Sulfide	65.6	69.5	54.9	61.6	5.69		11.4
	Fipronil Sulfone	66.7	70.7	50.4	57.7	5.81		13.4
	Fonofos	80.1	99.8	81.1	91.0	21.9		11.4
	Gamma-BHC	115	118	123	109	2.07		12.0
	Gamma-Chlordane	82.2	84.7	82.9	77.9	2.95		6.31
	Heptachlor	67.4	67.0	74.3	69.8	0.494		6.25
	Heptachlor Epoxide	85.1	88.7	88.9	84.9	4.08		4.62
	Hexazinone	87.8	113	92.6	99.9	24.8		7.63
	Malathion	90.6	107	95.1	104	16.9		9.24
	Metalaxyl	83.3	98.8	82.8	93.1	17.0		11.8
	Methoxychlor	104	113	91.5	101	7.88		9.46
	Metolachlor	85.1	103	86.7	100	18.7		13.7
	Metribuzin	161	189	157	192	16.0		19.7
	Mevinphos	66.4	80.8	65.5	76.8	19.5		15.9
	Mirex	64.0	63.2	67.7	65.4	1.14		3.46
	Molinate	62.3	75.3	58.5	67.2	18.8		13.9
	Norflurazon	68.3	76.8	55.5	63.6	11.7		13.6
	Oxadiazon	80.8	97.4	85.3	93.6	18.6		9.34
	Parathion Ethyl	80.0	95.1	86.9	94.9	17.3		8.87
	Parathion Methyl	92.9	117	98.4	110	23.1		11.5
	Pendimethalin	85.5	105	90.3	99.6	20.6		9.82
	Permethrin	66.0	67.8	81.9	81.5	2.72		0.557
	Phorate	86.7	106	86.9	94.8	19.9		8.64
	Prodiamine	83.5	90.1	82.9	103	7.69		21.5
	Prometon	78.8	94.4	83.3	85.1	18.0		2.07
	Prometryn	82.0	91.6	78.8	86.7	11.0		9.55
	Simazine	91.0	114	102	110	22.5		4.97
	Tebuconazole	60.1	68.0	63.0	64.1	12.3		1.63
	Terbufos	83.7	102	87.3	98.7	19.8		12.2
	Terbuthylazine	85.3	107	86.8	100	22.6		14.1
	Trifluralin	85.4	91.8	93.1	87.7	7.25		6.06

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8276	Chlordane	77.7	81.0	62.7	54.7	4.23		13.6
	Toxaphene	57.9	66.6	50.5	39.4	13.8		24.8
EPA 8321B	2,4-D	74.1		88.2	91.8			3.99
	2,4-D	84.4		88.1	92.1			3.93
	3-Hydroxycarbofuran	104		111	122			8.96
	Acesulfame K	77.5		91.0	101			10.2
	Acetaminophen	99.9		113	126			10.8
	Acetaminophen	97.9		109	115			5.61
	Aldicarb	74.0		76.2	71.8			6.04
	Aldicarb Sulfone	106		108	112			3.37
	Aldicarb Sulfoxide	108		46.8	50.2			6.96
	AMPA	101		84.9	81.2			4.45
	Bentazon	79.2		60.0	65.0			7.94
	Bentazon	78.6		26.4	29.0			0.786
	Carbamazepine	85.4		80.9	88.6			9.13
	Carbamazepine	82.4		62.6	64.3			2.60
	Carbaryl	83.4		80.3	68.7			15.7
	Carbofuran	77.5		72.4	64.5			11.5
	Diuron	76.2		72.3	79.6			9.56
	Diuron	73.1		55.4	53.7			2.94
	Endothall	93.7		91.8	101			9.83
	Fenuron	116		101	112			10.2
	Fenuron	110		78.2	82.7			5.51
	Fluridone	111		91.6	104			12.4
	Fluridone	101		52.8	64.2			2.59
	Glufosinate	87.4		68.7	67.2			2.24
	Glyphosate	91.1		71.1	72.7			2.22
	Hydrocodone	99.0		74.6	85.0			13.0
	Hydrocodone	91.1		82.0	74.8			9.19
	Ibuprofen	104		89.2	107			17.7
	Ibuprofen	75.9		83.1	71.9			14.4
	Imazapyr	89.6		118	122			3.66
	Imazapyr	87.4		68.2	78.4			3.74
	Imidacloprid	101		174	191			9.12
	Imidacloprid	95.6		151	162			3.30
	Linuron	75.1		77.3	81.9			5.88
	Linuron	77.7		59.4	61.2			2.84
	MCPP	113		117	131			11.3
	MCPP	104		118	122			3.52
	Methiocarb	84.0		84.7	76.3			10.5
	Methomyl	109		103	123			17.3
	Naproxen	79.8		98.6	81.2			19.3
	Naproxen	74.5		77.1	75.5			2.12
	Oxamyl	121		112	110			1.67
	Primidone	107		118	139			16.3
	Primidone	103		97.6	103			5.09
	Propoxur	80.1		77.4	65.6			16.4
	Pyraclostrobin	82.0		81.8	93.4			13.3
	Pyraclostrobin	82.8		70.0	76.8			8.33
	Sucralose	125		105	103			2.24
	Triclopyr	75.7		60.7	68.3			11.8
	Triclopyr	63.4		65.9	75.0			12.9
SM 2120 B	Color (true)	100					1.74	
	Color (true)	102					3.16	

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
SM 2320 B-97	Total Alkalinity	101				0.0984	
	Total Alkalinity	102				0.559	
SM 2540 C-97	TDS					3.84	
	TDS					2.21	
	TDS					7.50	
SM 4500 F-C-97	Fluoride	97.4	100	98.9			0.964
	Fluoride	99.8	100	99.2			0.933
SM 5310 B-00	Organic Carbon	98.2					0.802

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2062417, 2062418, 2062419, 2062420, 2062421, 2062422, 2062423
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2062417, 2062418, 2062419, 2062420, 2062421, 2062422, 2062423
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2062354, 2062357, 2062360, 2062364, 2062365, 2062369, 2062372, 2062375
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2062354, 2062357, 2062360, 2062364, 2062365, 2062369, 2062372, 2062375
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2062354, 2062357, 2062360, 2062364, 2062365, 2062369, 2062372, 2062375
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2062354, 2062357, 2062360, 2062364, 2062365, 2062369, 2062372, 2062375
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2062355, 2062358, 2062361, 2062366, 2062367, 2062370, 2062373, 2062376
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2062407, 2062409, 2062411, 2062413, 2062415
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2062408, 2062410, 2062412, 2062414, 2062416
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2062407, 2062409, 2062411, 2062413, 2062415
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2062397, 2062399, 2062401, 2062403, 2062405
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2062398, 2062400, 2062402, 2062404, 2062406
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2062398, 2062400, 2062402, 2062404, 2062406
SM 2120 B / E31780	True Color measured at 450 nm	2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2062354, 2062357, 2062360, 2062364, 2062365, 2062369, 2062372, 2062375

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	02/13/2019			02/13/2019 16:57	Adrian Shelby	2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062374
	02/13/2019			02/19/2019 17:21	Adrian Shelby	2062371
EPA 200.7 Rev. 4.4	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/19/2019 13:24	Martin Acosta	2062423
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/19/2019 14:11	Martin Acosta	2062417
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/19/2019 14:16	Martin Acosta	2062418
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/19/2019 14:21	Martin Acosta	2062419
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/19/2019 14:26	Martin Acosta	2062420
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/19/2019 14:31	Martin Acosta	2062421
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/19/2019 14:36	Martin Acosta	2062422
EPA 200.8 Rev. 5.4	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/21/2019 01:23	Robert K Palmer	2062423
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/21/2019 02:21	Robert K Palmer	2062417
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/21/2019 02:30	Robert K Palmer	2062418
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/21/2019 02:40	Robert K Palmer	2062419
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/21/2019 03:08	Robert K Palmer	2062420
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/21/2019 03:18	Robert K Palmer	2062421
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/21/2019 03:27	Robert K Palmer	2062422
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/26/2019 17:28	Robert K Palmer	2062423
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/26/2019 18:06	Robert K Palmer	2062417
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/26/2019 18:16	Robert K Palmer	2062418
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/26/2019 18:25	Robert K Palmer	2062419
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/26/2019 18:35	Robert K Palmer	2062420
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/26/2019 18:45	Robert K Palmer	2062421
	02/13/2019	02/18/2019 13:20	Elliott D. Healy	02/26/2019 19:13	Robert K Palmer	2062422
	02/13/2019	03/05/2019 16:50	Elliott D. Healy	03/06/2019 16:51	Robert K Palmer	2062417
	02/13/2019	03/05/2019 16:50	Elliott D. Healy	03/06/2019 16:57	Robert K Palmer	2062418
	02/13/2019	03/05/2019 16:50	Elliott D. Healy	03/06/2019 17:04	Robert K Palmer	2062422
EPA 300.0 Rev. 2.1	02/13/2019			02/23/2019 15:11	Lipi Saha	2062359
	02/13/2019			02/23/2019 17:54	Lipi Saha	2062353
	02/13/2019			02/23/2019 18:08	Lipi Saha	2062356
	02/13/2019			02/23/2019 18:23	Lipi Saha	2062362
	02/13/2019			02/23/2019 18:38	Lipi Saha	2062363
	02/13/2019			02/23/2019 18:53	Lipi Saha	2062368
	02/13/2019			02/23/2019 19:07	Lipi Saha	2062371
	02/13/2019			02/23/2019 19:22	Lipi Saha	2062374
EPA 350.1 Rev. 2.0	02/13/2019			02/18/2019 15:07	Ping Hua	2062369
	02/13/2019			02/20/2019 10:58	Ping Hua	2062364
	02/13/2019			02/20/2019 11:03	Ping Hua	2062365
	02/13/2019			02/20/2019 11:04	Ping Hua	2062375
	02/13/2019			02/20/2019 11:12	Ping Hua	2062372

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 350.1 Rev. 2.0	02/13/2019			02/20/2019 12:42	Ping Hua	2062354
	02/13/2019			02/20/2019 12:49	Ping Hua	2062360
	02/13/2019			02/20/2019 12:51	Ping Hua	2062357
EPA 351.2 Rev. 2.0	02/13/2019	02/15/2019 12:45	Adrian Shelby	02/18/2019 12:58	Joseph Suarez	2062354
	02/13/2019	02/15/2019 12:45	Adrian Shelby	02/18/2019 12:59	Joseph Suarez	2062357
	02/13/2019	02/15/2019 12:45	Adrian Shelby	02/18/2019 13:01	Joseph Suarez	2062360
	02/13/2019	02/15/2019 12:45	Adrian Shelby	02/18/2019 13:06	Joseph Suarez	2062364
	02/13/2019	02/15/2019 12:45	Adrian Shelby	02/18/2019 13:07	Joseph Suarez	2062365
	02/13/2019	02/15/2019 12:45	Adrian Shelby	02/18/2019 13:09	Joseph Suarez	2062369
	02/13/2019	02/15/2019 12:45	Adrian Shelby	02/18/2019 13:10	Joseph Suarez	2062372
	02/13/2019	02/15/2019 12:45	Adrian Shelby	02/18/2019 13:12	Joseph Suarez	2062375
EPA 353.2 Rev. 2.0	02/13/2019			02/19/2019 10:26	Beverly Y. Sanders	2062354
	02/13/2019			02/19/2019 10:28	Beverly Y. Sanders	2062372
	02/13/2019			02/19/2019 10:29	Beverly Y. Sanders	2062357
	02/13/2019			02/19/2019 10:30	Beverly Y. Sanders	2062360
	02/13/2019			02/19/2019 10:37	Beverly Y. Sanders	2062364
	02/13/2019			02/19/2019 10:43	Beverly Y. Sanders	2062365
	02/13/2019			02/19/2019 10:44	Beverly Y. Sanders	2062369
	02/13/2019			02/19/2019 10:45	Beverly Y. Sanders	2062375
EPA 365.1 Rev. 2.0	02/13/2019	02/14/2019 13:40	Sima Feizi	02/20/2019 18:59	Rosalyn Ballman	2062354
	02/13/2019	02/14/2019 13:40	Sima Feizi	02/20/2019 19:00	Rosalyn Ballman	2062372
	02/13/2019	02/14/2019 13:40	Sima Feizi	02/20/2019 19:01	Rosalyn Ballman	2062357
	02/13/2019	02/15/2019 13:25	Sima Feizi	02/18/2019 14:39	Rosalyn Ballman	2062365
	02/13/2019	02/15/2019 13:25	Sima Feizi	02/18/2019 14:44	Rosalyn Ballman	2062360
	02/13/2019	02/15/2019 13:25	Sima Feizi	02/18/2019 14:46	Rosalyn Ballman	2062364
	02/13/2019	02/15/2019 13:25	Sima Feizi	02/18/2019 14:47	Rosalyn Ballman	2062369
	02/13/2019	02/15/2019 13:25	Sima Feizi	02/18/2019 16:12	Rosalyn Ballman	2062375
EPA 365.1 Rev. 2.0 dissolved	02/13/2019			02/13/2019 17:01	Jhamieka S. Greenwood	2062355
	02/13/2019			02/13/2019 17:02	Jhamieka S. Greenwood	2062373
	02/13/2019			02/13/2019 17:03	Jhamieka S. Greenwood	2062358
	02/13/2019			02/13/2019 17:04	Jhamieka S. Greenwood	2062361
	02/13/2019			02/13/2019 17:06	Jhamieka S. Greenwood	2062366
	02/13/2019			02/13/2019 17:09	Jhamieka S. Greenwood	2062367
	02/13/2019			02/13/2019 17:14	Jhamieka S. Greenwood	2062370
	02/13/2019			02/13/2019 17:15	Jhamieka S. Greenwood	2062376
EPA 8270D	02/13/2019	02/14/2019 08:00	Fe-Val Siddell	02/20/2019 01:37	Dinesh Mishra	2062407
	02/13/2019	02/14/2019 08:00	Fe-Val Siddell	02/20/2019 02:07	Dinesh Mishra	2062409
	02/13/2019	02/14/2019 08:00	Fe-Val Siddell	02/20/2019 02:37	Dinesh Mishra	2062411
	02/13/2019	02/14/2019 08:00	Fe-Val Siddell	02/20/2019 03:07	Dinesh Mishra	2062413
	02/13/2019	02/14/2019 08:00	Fe-Val Siddell	02/20/2019 03:38	Dinesh Mishra	2062415

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270D	02/13/2019	02/18/2019 08:30	Dinesh Mishra	02/20/2019 15:48	Vandana T. Nagar	2062408
	02/13/2019	02/18/2019 08:30	Dinesh Mishra	02/20/2019 16:12	Vandana T. Nagar	2062410
	02/13/2019	02/18/2019 08:30	Dinesh Mishra	02/20/2019 16:36	Vandana T. Nagar	2062412
	02/13/2019	02/18/2019 08:30	Dinesh Mishra	02/20/2019 17:00	Vandana T. Nagar	2062414
	02/13/2019	02/18/2019 08:30	Dinesh Mishra	02/20/2019 17:23	Vandana T. Nagar	2062416
EPA 8276	02/13/2019	02/14/2019 08:00	Fe-Val Siddell	02/19/2019 02:12	Arthur Maknenko	2062407
	02/13/2019	02/14/2019 08:00	Fe-Val Siddell	02/19/2019 06:49	Arthur Maknenko	2062409
	02/13/2019	02/14/2019 08:00	Fe-Val Siddell	02/19/2019 08:40	Arthur Maknenko	2062411
	02/13/2019	02/14/2019 08:00	Fe-Val Siddell	02/19/2019 09:35	Arthur Maknenko	2062413
	02/13/2019	02/14/2019 08:00	Fe-Val Siddell	02/19/2019 10:31	Arthur Maknenko	2062415
EPA 8321B	02/13/2019	02/15/2019 10:00	Hoor Shaik	02/20/2019 10:42	Juyoung Kim	2062397
	02/13/2019	02/15/2019 10:00	Hoor Shaik	02/20/2019 11:17	Juyoung Kim	2062399
	02/13/2019	02/15/2019 10:00	Hoor Shaik	02/20/2019 11:51	Juyoung Kim	2062401
	02/13/2019	02/15/2019 10:00	Hoor Shaik	02/20/2019 12:26	Juyoung Kim	2062403
	02/13/2019	02/15/2019 10:00	Hoor Shaik	02/20/2019 13:00	Juyoung Kim	2062405
	02/13/2019	02/15/2019 10:00	Hoor Shaik	02/20/2019 17:37	Juyoung Kim	2062398
	02/13/2019	02/15/2019 10:00	Hoor Shaik	02/21/2019 01:07	Juyoung Kim	2062400
	02/13/2019	02/15/2019 10:00	Hoor Shaik	02/21/2019 01:41	Juyoung Kim	2062402
	02/13/2019	02/15/2019 10:00	Hoor Shaik	02/21/2019 02:16	Juyoung Kim	2062404
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/16/2019 18:04	Mohammad Ghaffari	2062398
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/16/2019 18:17	Mohammad Ghaffari	2062400
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/16/2019 18:31	Mohammad Ghaffari	2062402
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/16/2019 18:45	Mohammad Ghaffari	2062404
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/16/2019 19:12	Mohammad Ghaffari	2062406
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/17/2019 11:43	Mohammad Ghaffari	2062398
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/17/2019 11:53	Mohammad Ghaffari	2062400
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/17/2019 12:04	Mohammad Ghaffari	2062402
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/17/2019 12:15	Mohammad Ghaffari	2062404
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/17/2019 12:36	Mohammad Ghaffari	2062406
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/17/2019 13:08	Mohammad Ghaffari	2062398
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/17/2019 13:22	Mohammad Ghaffari	2062400
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/17/2019 13:36	Mohammad Ghaffari	2062402
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/17/2019 13:49	Mohammad Ghaffari	2062404
	02/13/2019	02/15/2019 17:30	Mohammad Ghaffari	02/17/2019 14:17	Mohammad Ghaffari	2062406
	02/13/2019	02/18/2019 10:00	Hoor Shaik	02/21/2019 09:46	Juyoung Kim	2062406
SM 2120 B	02/13/2019			02/14/2019 15:56	Chelsea Hernandez	2062359
	02/13/2019			02/14/2019 15:57	Chelsea Hernandez	2062362
	02/13/2019			02/14/2019 15:58	Chelsea Hernandez	2062363
	02/13/2019			02/14/2019 15:59	Chelsea Hernandez	2062368
	02/13/2019			02/14/2019 16:00	Chelsea Hernandez	2062371

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2120 B	02/13/2019			02/14/2019 16:01	Chelsea Hernandez	2062374
	02/13/2019			02/14/2019 16:30	Chelsea Hernandez	2062353, 2062356
SM 2320 B-97	02/13/2019			02/19/2019 01:21	Dale L. Simmons	2062353
	02/13/2019			02/19/2019 01:33	Dale L. Simmons	2062356
	02/13/2019			02/19/2019 01:44	Dale L. Simmons	2062359
	02/13/2019			02/19/2019 03:07	Dale L. Simmons	2062362
	02/13/2019			02/19/2019 03:19	Dale L. Simmons	2062363
	02/13/2019			02/19/2019 03:30	Dale L. Simmons	2062368
	02/13/2019			02/19/2019 03:42	Dale L. Simmons	2062371
	02/13/2019			02/19/2019 03:56	Dale L. Simmons	2062374
SM 2540 C-97	02/13/2019			02/16/2019 22:18	Yijie Li	2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374
SM 2540 D-97	02/13/2019			02/16/2019 22:18	Yijie Li	2062353, 2062356, 2062359, 2062362, 2062363, 2062368, 2062371, 2062374
SM 4500 F-C-97	02/13/2019			02/19/2019 01:21	Dale L. Simmons	2062353
	02/13/2019			02/19/2019 01:33	Dale L. Simmons	2062356
	02/13/2019			02/19/2019 01:44	Dale L. Simmons	2062359
	02/13/2019			02/19/2019 03:07	Dale L. Simmons	2062362
	02/13/2019			02/19/2019 03:19	Dale L. Simmons	2062363
	02/13/2019			02/19/2019 03:30	Dale L. Simmons	2062368
	02/13/2019			02/19/2019 03:42	Dale L. Simmons	2062371
	02/13/2019			02/19/2019 03:56	Dale L. Simmons	2062374
SM 5310 B-00	02/13/2019			02/21/2019 06:51	Julia Storbeck	2062354
	02/13/2019			02/21/2019 07:04	Julia Storbeck	2062357
	02/13/2019			02/21/2019 07:18	Julia Storbeck	2062360
	02/13/2019			02/21/2019 07:31	Julia Storbeck	2062364
	02/13/2019			02/21/2019 07:49	Julia Storbeck	2062365
	02/13/2019			02/21/2019 08:03	Julia Storbeck	2062369
	02/13/2019			02/21/2019 08:16	Julia Storbeck	2062372
	02/13/2019			02/21/2019 08:29	Julia Storbeck	2062375