Chemical Analysis Report

NW-DIST-2019-02-05-02

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

Event Description: **Escambia River Run**
Request ID: **RQ-2019-01-28-09**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 308
Pensacola, FL 32502-5794
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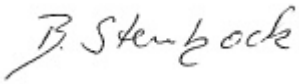
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 27-FEB-2019 13:08



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: ESCAMBIA RIVER UPSTREAM OF MITCHELL CREEK **Collection Date/Time: 02/04/2019 11:00**

Field ID: G4NW0404 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2059652	EPA 180.1 Rev. 2.0	Turbidity	18		NTU	P358363	
	EPA 300.0 Rev. 2.1	Chloride	4.5		mg Cl/L	P359037	
		Sulfate	5.8		mg SO4/L	P359039	
	SM 2120 B	Color (true)	19		PCU	P358354	
	SM 2320 B-97	Total Alkalinity	23		mg CaCO3/L	P358921	RPD
	SM 2540 C-97	TDS	51		mg/L	P358789	
	SM 2540 D-97	TSS	15		mg/L	P358782	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P358925	
2059653	EPA 350.1 Rev. 2.0	Ammonia-N	0.050		mg N/L	P358644	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25		mg N/L	P358534	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.26		mg N/L	P358755	
	EPA 365.1 Rev. 2.0	Total-P	0.041		mg P/L	P358518	
	SM 5310 B-00	Organic Carbon	3.9		mg C/L	P359405	
2059654	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.012		mg P/L	P358348	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: ESCAMBIA RIVER DOWNSTREAM OF COTTON LAKE **Collection Date/Time: 02/04/2019 11:40**

Field ID: G4NW0403 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2059649	EPA 180.1 Rev. 2.0	Turbidity	19		NTU	P358363	
	EPA 300.0 Rev. 2.1	Chloride	4.4		mg Cl/L	P359037	
		Sulfate	5.4		mg SO4/L	P359039	
	SM 2120 B	Color (true)	21	A	PCU	P358354	
	SM 2320 B-97	Total Alkalinity	22		mg CaCO3/L	P358921	RPD
	SM 2540 C-97	TDS	54		mg/L	P358789	
	SM 2540 D-97	TSS	13		mg/L	P358782	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P358925	
2059650	EPA 350.1 Rev. 2.0	Ammonia-N	0.040		mg N/L	P358644	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24		mg N/L	P358534	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P358849	
	EPA 365.1 Rev. 2.0	Total-P	0.038		mg P/L	P358482	
	SM 5310 B-00	Organic Carbon	4.1		mg C/L	P359405	
2059651	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.01	I	mg P/L	P358348	
2059667	EPA 200.7 Rev. 4.4	Barium	25.4		ug/L	P358446	
		Calcium	9.03		mg/L	P358446	
		Iron	1.21E+03		ug/L	P358446	
		Magnesium	1.21		mg/L	P358446	
		Potassium	0.89	I	mg/L	P358446	
		Sodium	4.6		mg/L	P358446	
		Zinc	5.0	U	ug/L	P358446	
	EPA 200.8 Rev. 5.4	Aluminum	260		ug/L	P358446	
		Antimony	0.050	U	ug/L	P358446	
		Arsenic	0.48		ug/L	P358446	
		Boron**	8.4		ug/L	P358446	
		Cadmium	0.020	U	ug/L	P358446	
		Chromium	0.73	I	ug/L	P358446	
		Copper	0.47	I	ug/L	P358446	
		Lead	0.44		ug/L	P358446	
		Nickel	0.62	I	ug/L	P358446	
		Selenium	0.20	U	ug/L	P358446	MS
		Silver	0.010	U	ug/L	P358446	
		Thallium	0.10	U	ug/L	P358446	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for magnesium and sodium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: ESCAMBIA RIVER 100 METERS UPSTREAM OF HWY 90 BRIDGE **Collection Date/Time: 02/04/2019 12:50**

Field ID: G4NW0009 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2059655	EPA 180.1 Rev. 2.0	Turbidity	21	A	NTU	P358363	
	EPA 300.0 Rev. 2.1	Chloride	5.2		mg Cl/L	P359037	
		Sulfate	5.0		mg SO4/L	P359039	
	SM 2120 B	Color (true)	28		PCU	P358354	
	SM 2320 B-97	Total Alkalinity	18		mg CaCO3/L	P358921	RPD
	SM 2540 C-97	TDS	58		mg/L	P358789	
	SM 2540 D-97	TSS	7	I	mg/L	P358782	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P358925	
2059656	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P358645	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P358534	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.23		mg N/L	P358755	
	EPA 365.1 Rev. 2.0	Total-P	0.038		mg P/L	P358518	
	SM 5310 B-00	Organic Carbon	4.7		mg C/L	P358668	
2059657	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.009	I	mg P/L	P358348	
2059663	EPA 8321B	Aldicarb	0.020	U	ug/L	P358394	
		Aldicarb Sulfone	0.0020	U	ug/L	P358394	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P358394	
		Carbaryl	0.0020	U	ug/L	P358394	
		Carbofuran	0.0020	U	ug/L	P358394	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P358394	
		Methiocarb	0.0020	U	ug/L	P358394	
		Methomyl	0.0020	U	ug/L	P358394	
		Oxamyl	0.0020	U	ug/L	P358394	
		Propoxur	0.0020	U	ug/L	P358394	
2059664		2,4-D	0.0038	I	ug/L	P358394	
		Sucralose**	0.042		ug/L	P358378	
		Bentazon	8.0E-04	U	ug/L	P358394	
		MCPP	0.0020	U	ug/L	P358394	
		Triclopyr**	0.0040	U	ug/L	P358394	
		Imidacloprid	0.0026	I	ug/L	P358394	MS
		Diuron	0.0020	U	ug/L	P358394	
		Pyraclostrobin**	0.0020	U	ug/L	P358394	
		Primidone**	0.0040	U	ug/L	P358394	
		Linuron	0.0040	U	ug/L	P358394	
		Acetaminophen**	0.0080	U	ug/L	P358394	
		Fenuron	0.016	U	ug/L	P358394	
		Imazapyr**	0.023		ug/L	P358394	
		Carbamazepine**	8.0E-04	U	ug/L	P358394	
		Fluridone**	8.0E-04	U	ug/L	P358394	
		Hydrocodone**	0.0020	U	ug/L	P358394	
		Naproxen**	0.0080	U	ug/L	P358394	
		Ibuprofen**	0.020	U	ug/L	P358394	

Field ID: G4NW0009 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2059664	EPA 8321B	Glyphosate**	0.10	U	ug/L	P358378	
		AMPA**	0.10	U	ug/L	P358378	
		Endothall**	0.25	U	ug/L	P358378	
		Glufosinate**	0.10	U	ug/L	P358378	
		Acesulfame K**	0.10	U	ug/L	P358378	
2059665	EPA 8270D	Aldrin	4.5	U	ng/L	P358321	
		Alpha-BHC	2.2	U	ng/L	P358321	
		Alpha-Chlordane	1.1	U	ng/L	P358321	
		Beta-BHC	11	U	ng/L	P358321	
		Delta-BHC	11	U	ng/L	P358321	
		Gamma-BHC	11	U	ng/L	P358321	
		Carbophenothion	13	U	ng/L	P358321	
		Chlorothalonil	2.2	U	ng/L	P358321	RPD
		Cypermethrin	22	U	ng/L	P358321	
		DDD-p,p'	9.0	U	ng/L	P358321	
		DDE-p,p'	9.0	U	ng/L	P358321	
		DDT-p,p'	11	U	ng/L	P358321	
		Dicofol	34	U	ng/L	P358321	
		Dieldrin	4.5	U	ng/L	P358321	
		Endosulfan I	4.5	U	ng/L	P358321	
		Endosulfan II	4.5	U	ng/L	P358321	
		Endosulfan Sulfate	2.2	U	ng/L	P358321	
		Endrin	2.2	U	ng/L	P358321	
		Endrin Aldehyde	2.2	U	ng/L	P358321	
		Endrin Ketone	2.2	U	ng/L	P358321	
		Gamma-Chlordane	1.1	U	ng/L	P358321	
		Heptachlor	1.7	U	ng/L	P358321	
		Heptachlor Epoxide	2.2	U	ng/L	P358321	
		Methoxychlor	4.5	U	ng/L	P358321	
		Mirex	2.2	U	ng/L	P358321	
		Permethrin	11	U	ng/L	P358321	
		Trifluralin	2.8	U	ng/L	P358321	
	EPA 8276	Chlordane	5.6	U	ng/L	P358321	
		Toxaphene	34	U	ng/L	P358321	
2059666	EPA 8270D	Acetochlor	0.26	U	ng/L	P358410	
		Alachlor	0.26	U	ng/L	P358410	
		Ametryn	0.63	U	ng/L	P358410	
		Atrazine	1.7		ng/L	P358410	
		Atrazine Desethyl	1.6	U	ng/L	P358410	
		Azinphos Methyl	2.4	U	ng/L	P358410	
		Bromacil	0.52	U	ng/L	P358410	
		Butylate	0.42	U	ng/L	P358410	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P358410	
		Chlorpyrifos Methyl	0.10	U	ng/L	P358410	
		Cyanazine	3.4	UJ	ng/L	P358410	RPD

Field ID: G4NW0009 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2059666	EPA 8270D	Demeton	7.3	U	ng/L	P358410	
		Diazinon	0.13	U	ng/L	P358410	
		Dimethenamid**	0.10	U	ng/L	P358410	
		Disulfoton	0.52	U	ng/L	P358410	
		Dithiopyr**	0.10	U	ng/L	P358410	
		EPTC	1.3	U	ng/L	P358410	
		Ethion	0.16	UJ	ng/L	P358410	RPD
		Ethoprop	0.10	U	ng/L	P358410	
		Fenamiphos	0.52	U	ng/L	P358410	
		Fipronil	0.26	U	ng/L	P358410	
		Fipronil Desulfinyl**	0.13	U	ng/L	P358410	
		Fipronil Sulfide	0.16	U	ng/L	P358410	
		Fipronil Sulfone	0.16	U	ng/L	P358410	
		Fonofos	0.21	U	ng/L	P358410	
		Hexazinone	0.52	U	ng/L	P358410	
		Malathion	0.37	U	ng/L	P358410	
		Metalaxyl	0.31	U	ng/L	P358410	
		Metolachlor	0.90	I	ng/L	P358410	
		Metribuzin	0.21	UJ	ng/L	P358410	CCV
		Mevinphos	0.52	U	ng/L	P358410	
		Molinate	0.31	U	ng/L	P358410	
		Norflurazon	0.52	U	ng/L	P358410	
		Oxadiazon**	0.10	U	ng/L	P358410	
		Parathion Ethyl	0.26	U	ng/L	P358410	
		Parathion Methyl	0.57	U	ng/L	P358410	
		Pendimethalin	1.0	U	ng/L	P358410	
		Phorate	0.26	U	ng/L	P358410	
		Prodiamine**	0.18	U	ng/L	P358410	
		Prometon	0.94	U	ng/L	P358410	
		Prometryn	0.21	U	ng/L	P358410	
		Simazine	0.52	U	ng/L	P358410	
		Tebuconazole**	0.52	U	ng/L	P358410	
		Terbufos	0.10	U	ng/L	P358410	
		Terbuthylazine	0.44	U	ng/L	P358410	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8270D: MS accuracies for Atrazine and Simazine not assessed due to high content of these parameters in the sample spiked. 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: P358363

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P358446

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: P358446

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359037

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359039

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358644

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358645

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358534

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358755

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358849

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358482

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358518

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358348

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

Reference Method: EPA 8270D
Batch ID: P358321

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270D
Batch ID: P358321

Component	Result	Code	Units
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: P358410

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	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	0.20	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270D
Batch ID: P358410

Component	Result	Code	Units
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: P358321

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

Reference Method: EPA 8321B
Batch ID: P358378

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

Reference Method: EPA 8321B
Batch ID: P358394

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P358394

Component	Result	Code	Units
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: SM 2120 B
Batch ID: P358354

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P358921

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

Reference Method: SM 2540 C-97
Batch ID: P358789

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P358782

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P358925

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P358668

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P359405

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: P358446

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	100		P	85 - 115
Calcium	103		P	85 - 115
Iron	103		P	85 - 115
Magnesium	107		P	85 - 115
Potassium	99.2		P	85 - 115
Sodium	104		P	85 - 115
Zinc	97.9		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P358446

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.8		P	85 - 115
Antimony	98.7		P	85 - 115
Arsenic	106		P	85 - 115
Boron	94.3		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	97.6		P	85 - 115
Copper	98.9		P	85 - 115
Lead	96.3		P	85 - 115
Nickel	101		P	85 - 115
Selenium	101		P	85 - 115
Silver	99.8		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359037

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	96.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359039

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358644

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358645

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358534

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358755

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358849

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358482

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: P358518

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358348

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

Reference Method: EPA 8270D
Batch ID: P358321

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	54.9	63.2	P/P	20 - 93.0
Alpha-BHC	103	109	P/P	57 - 119
Alpha-Chlordane	76.9	79.7	P/P	58 - 112
Beta-BHC	125	121	P/P	56 - 149
Carbophenothion	93.6	105	P/P	26 - 147
Chlorothalonil	80.4	75.1	P/P	20 - 155
Cypermethrin	71.5	82.2	P/P	40 - 137
DDD-p,p'	85.6	89.9	P/P	65 - 129
DDE-p,p'	73.3	83.1	P/P	57 - 116
DDT-p,p'	88.7	100	P/P	53 - 133
Delta-BHC	137	137	P/P	59 - 163
Dicofol	90.8	94.6	P/P	24 - 138
Dieldrin	86.2	87.1	P/P	60 - 120
Endosulfan I	88.8	81.5	P/P	64 - 118
Endosulfan II	94.6	92.1	P/P	58 - 142
Endosulfan Sulfate	81.0	85.5	P/P	60 - 127

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P358321

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin	83.2	81.4	P/P	59 - 122
Endrin Aldehyde	102	93.0	P/P	49 - 132
Endrin Ketone	84.8	84.4	P/P	64 - 121
Gamma-BHC	124	125	P/P	56 - 141
Gamma-Chlordane	73.8	79.6	P/P	56 - 110
Heptachlor	58.9	67.5	P/P	46 - 96.0
Heptachlor Epoxide	82.1	87.8	P/P	61 - 112
Methoxychlor	110	110	P/P	63 - 134
Mirex	46.3	62.5	P/P	45 - 100
Permethrin	61.5	70.5	P/P	53 - 115
Trifluralin	82.1	92.7	P/P	39 - 142

Reference Method: EPA 8270D
Batch ID: P358410

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	88.4	112	P/P	71 - 121
Alachlor	89.8	106	P/P	72 - 119
Ametryn	105	121	P/P	47 - 144
Atrazine	115	118	P/P	75 - 123
Atrazine Desethyl	84.0	95.6	P/P	45 - 133
Azinphos Methyl	104	135	P/P	66 - 165
Bromacil	56.6	60.1	P/P	43 - 123
Butylate	59.7	63.3	P/P	27 - 83.0
Chlorpyrifos Ethyl	86.6	87.4	P/P	70 - 117
Chlorpyrifos Methyl	85.9	93.7	P/P	71 - 120
Cyanazine	110	162	P/P	34 - 264
Demeton	84.0	102	P/P	41 - 122
Diazinon	89.4	113	P/P	70 - 127
Dimethenamid	84.5	106	P/P	60 - 130
Disulfoton	88.2	98.8	P/P	56 - 127
Dithiopyr	88.8	106	P/P	60 - 130
EPTC	57.8	62.2	P/P	24 - 84.0
Ethion	92.4	61.1	P/P	53 - 132
Ethoprop	87.0	95.3	P/P	57 - 117
Fenamiphos	86.6	69.1	P/P	55 - 136
Fipronil	81.7	90.0	P/P	64 - 126
Fipronil Desulfinyl	78.6	79.1	P/P	60 - 130
Fipronil Sulfide	86.0	69.6	P/P	57 - 120
Fipronil Sulfone	83.7	83.0	P/P	52 - 115
Fonofos	84.7	89.3	P/P	61 - 121
Hexazinone	108	99.1	P/P	62 - 131
Malathion	94.8	82.7	P/P	67 - 126
Metalaxyl	93.5	91.3	P/P	54 - 128
Metolachlor	90.1	106	P/P	71 - 118
Metribuzin	142	160	P/P	42 - 221
Mevinphos	81.2	74.6	P/P	45 - 114
Molinate	67.8	78.7	P/P	33 - 91.0
Norflurazon	84.0	91.6	P/P	60 - 123
Oxadiazon	91.1	83.0	P/P	60 - 130
Parathion Ethyl	88.2	85.4	P/P	73 - 111
Parathion Methyl	102	122	P/P	74 - 126

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P358410

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pendimethalin	89.9	92.0	P/P	63 - 131
Phorate	92.7	107	P/P	54 - 115
Prodiamine	104	98.3	P/P	60 - 130
Prometon	88.4	91.5	P/P	61 - 120
Prometryn	90.7	87.8	P/P	62 - 126
Simazine	101	94.4	P/P	75 - 126
Tebuconazole	85.9	72.0	P/P	30 - 100
Terbufos	88.7	97.3	P/P	65 - 116
Terbuthylazine	95.9	99.0	P/P	73 - 117

Reference Method: EPA 8276
Batch ID: P358321

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	85.9	92.5	P/P	43 - 128
Toxaphene	67.7	69.7	P/P	38 - 140

Reference Method: EPA 8321B
Batch ID: P358378

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	113		P	40 - 150
AMPA	91.1		P	40 - 150
Endothall	98.8		P	40 - 150
Glufosinate	71.3		P	40 - 150
Glyphosate	79.3		P	40 - 140
Sucralose	99.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P358394

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	87.2		P	40 - 150
3-Hydroxycarbofuran	110		P	40 - 150
Acetaminophen	89.9		P	30 - 150
Aldicarb	117		P	30 - 150
Aldicarb Sulfone	100		P	40 - 150
Aldicarb Sulfoxide	107		P	40 - 150
Bentazon	98.3		P	30 - 150
Carbamazepine	88.5		P	40 - 150
Carbaryl	82.9		P	40 - 150
Carbofuran	79.8		P	40 - 150
Diuron	78.2		P	40 - 150
Fenuron	117		P	40 - 150
Fluridone	104		P	40 - 150
Hydrocodone	98.7		P	40 - 150
Ibuprofen	85.3		P	40 - 150
Imazapyr	92.7		P	40 - 150
Imidacloprid	94.4		P	40 - 150
Linuron	77.0		P	40 - 150
MCPP	115		P	40 - 150
Methiocarb	79.6		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P358394

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Methomyl	102		P	40 - 150
Naproxen	95.6		P	40 - 150
Oxamyl	110		P	40 - 150
Primidone	95.5		P	40 - 150
Propoxur	85.1		P	40 - 150
Pyraclostrobin	65.5		P	40 - 150
Triclopyr	75.5		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P358354

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P358921

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P358925

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.1		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P358668

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.8		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P359405

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P358446

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059585	Barium	99.1		P	80 - 120
2059585	Calcium	94.3		P	80 - 120
2059585	Iron	105		P	80 - 120
2059585	Potassium	97.9		P	80 - 120
2059585	Zinc	98.6		P	80 - 120
2059672	Barium	95.0	100	P/P	80 - 120
2059672	Calcium	93.3	101	P/P	80 - 120
2059672	Iron	95.3	102	P/P	80 - 120
2059672	Magnesium	96.5	105	P/P	80 - 120
2059672	Potassium	89.9	96.2	P/P	80 - 120
2059672	Sodium	92.3	101	P/P	80 - 120
2059672	Zinc	93.4	97.7	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P358446

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059585	Aluminum	97.8		P	80 - 120
2059585	Antimony	103		P	80 - 120
2059585	Arsenic	110		P	80 - 120
2059585	Boron	98.6		P	80 - 120
2059585	Cadmium	103		P	80 - 120
2059585	Chromium	97.3		P	80 - 120
2059585	Copper	102		P	80 - 120
2059585	Lead	99.1		P	80 - 120
2059585	Nickel	94.2		P	80 - 120
2059585	Selenium	77.2		F	80 - 120
2059585	Silver	98.7		P	80 - 120
2059585	Thallium	106		P	80 - 120
2059672	Aluminum	101	101	P/P	80 - 120
2059672	Antimony	99.0	100	P/P	80 - 120
2059672	Arsenic	104	106	P/P	80 - 120
2059672	Boron	101	103	P/P	80 - 120
2059672	Cadmium	102	103	P/P	80 - 120
2059672	Chromium	101	103	P/P	80 - 120
2059672	Copper	101	102	P/P	80 - 120
2059672	Lead	99.7	100	P/P	80 - 120
2059672	Nickel	103	104	P/P	80 - 120
2059672	Selenium	104	104	P/P	80 - 120
2059672	Silver	101	102	P/P	80 - 120
2059672	Thallium	106	109	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359037

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059499	Chloride	94.1		P	90 - 110
2059618	Chloride	94.2		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359039

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059499	Sulfate	93.3		P	90 - 110
2059618	Sulfate	96.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358644

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059626	Ammonia-N	103	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358645

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059794	Ammonia-N	99.4	98.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358534

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059656	Kjeldahl Nitrogen	104	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358755

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059626	NO2NO3-N	96.8	97.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358849

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059650	NO2NO3-N	98.5	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358482

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059596	Total-P	101	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358518

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059792	Total-P	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358348

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059628	O-Phosphate-P	100	100	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P358321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059160	Aldrin	70.3	64.6	P/P	25 - 92.0
2059160	Alpha-BHC	109	113	P/P	49 - 130
2059160	Alpha-Chlordane	86.0	84.8	P/P	50 - 115
2059160	Beta-BHC	142	131	P/P	43 - 157
2059160	Carbophenothion	112	117	P/P	27 - 180
2059160	Chlorothalonil	71.7	105	P/P	10 - 216
2059160	Cypermethrin	87.0	77.2	P/P	40 - 153
2059160	DDD-p,p'	95.8	95.1	P/P	53 - 128
2059160	DDE-p,p'	84.4	83.4	P/P	48 - 116
2059160	DDT-p,p'	106	103	P/P	47 - 128
2059160	Delta-BHC	147	147	P/P	51 - 196
2059160	Dicofol	116	98.9	P/P	10 - 147
2059160	Dieldrin	91.3	90.3	P/P	48 - 128
2059160	Endosulfan I	97.2	100	P/P	58 - 126
2059160	Endosulfan II	104	103	P/P	50 - 150
2059160	Endosulfan Sulfate	92.9	86.2	P/P	56 - 130
2059160	Endrin	89.5	90.1	P/P	50 - 126
2059160	Endrin Aldehyde	98.1	98.1	P/P	12 - 145
2059160	Endrin Ketone	92.0	89.7	P/P	59 - 132
2059160	Gamma-BHC	138	129	P/P	50 - 155
2059160	Gamma-Chlordane	83.2	80.9	P/P	50 - 112
2059160	Heptachlor	71.4	67.5	P/P	41 - 98.0
2059160	Heptachlor Epoxide	89.3	89.4	P/P	55 - 117
2059160	Methoxychlor	91.8	100	P/P	55 - 133
2059160	Mirex	57.8	49.8	P/P	44 - 101
2059160	Permethrin	84.1	75.7	P/P	52 - 124
2059160	Trifluralin	97.6	95.8	P/P	10 - 201

Reference Method: EPA 8270D
Batch ID: P358410

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060276	Acetochlor	117	97.9	P/P	63 - 129
2060276	Alachlor	110	88.3	P/P	65 - 127
2060276	Ametryn	137	101	P/P	40 - 164
2060276	Atrazine Desethyl	90.7	71.8	P/P	14 - 157
2060276	Azinphos Methyl	144	124	P/P	49 - 180
2060276	Bromacil	90.8	74.9	P/P	48 - 130
2060276	Butylate	63.0	54.8	P/P	10 - 94.0
2060276	Chlorpyrifos Ethyl	86.0	79.2	P/P	58 - 123
2060276	Chlorpyrifos Methyl	92.6	83.6	P/P	58 - 125
2060276	Cyanazine	159	134	P/P	24 - 253
2060276	Demeton	103	88.7	P/P	25 - 149
2060276	Diazinon	119	96.4	P/P	59 - 144
2060276	Dimethenamid	111	86.5	P/P	60 - 130
2060276	Disulfoton	102	86.8	P/P	54 - 132
2060276	Dithiopyr	114	92.0	P/P	60 - 130
2060276	EPTC	56.8	49.1	P/P	10 - 92.0
2060276	Ethion	56.7	52.7	P/P	30 - 148
2060276	Ethoprop	100	82.8	P/P	50 - 130
2060276	Fenamiphos	80.6	76.1	P/P	49 - 142
2060276	Fipronil	98.2	76.0	P/P	46 - 140

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P358410

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060276	Fipronil Desulfinyl	83.7	70.6	P/P	60 - 130
2060276	Fipronil Sulfide	69.9	59.7	P/P	31 - 136
2060276	Fipronil Sulfone	77.7	65.5	P/P	16 - 136
2060276	Fonofos	90.9	84.5	P/P	55 - 129
2060276	Hexazinone	103	92.0	P/P	56 - 141
2060276	Malathion	77.5	75.7	P/P	56 - 135
2060276	Metalaxyl	98.8	83.5	P/P	54 - 135
2060276	Metolachlor	106	90.0	P/P	51 - 140
2060276	Metribuzin	154	132	P/P	45 - 254
2060276	Mevinphos	81.2	69.7	P/P	33 - 131
2060276	Molinate	79.1	70.5	P/P	14 - 98.0
2060276	Norflurazon	99.7	85.7	P/P	34 - 136
2060276	Oxadiazon	89.3	78.8	P/P	60 - 130
2060276	Parathion Ethyl	90.2	77.4	P/P	66 - 118
2060276	Parathion Methyl	117	106	P/P	64 - 136
2060276	Pendimethalin	101	85.9	P/P	59 - 144
2060276	Phorate	113	91.2	P/P	42 - 130
2060276	Prodiamine	95.7	77.0	P/P	60 - 130
2060276	Prometon	94.9	78.8	P/P	59 - 134
2060276	Prometryn	79.9	68.5	P/P	54 - 135
2060276	Tebuconazole	78.8	66.1	P/P	30 - 100
2060276	Terbufos	102	86.6	P/P	57 - 131
2060276	Terbuthylazine	106	85.5	P/P	68 - 125

Reference Method: EPA 8276
Batch ID: P358321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059665	Chlordane	62.9	66.5	P/P	34 - 136
2059665	Toxaphene	51.9	58.5	P/P	22 - 152

Reference Method: EPA 8321B
Batch ID: P358378

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059643	Acesulfame K	113	116	P/P	40 - 150
2059643	AMPA	140	144	P/P	40 - 150
2059643	Endothall	109	114	P/P	40 - 150
2059643	Glufosinate	70.4	68.9	P/P	40 - 150
2059643	Glyphosate	77.3	78.3	P/P	40 - 140
2059643	Sucralose	94.4	103	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P358394

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059339	2,4-D	102	97.0	P/P	40 - 150
2059339	Acetaminophen	132	127	P/P	30 - 150
2059339	Bentazon	65.4	54.1	P/P	30 - 150
2059339	Carbamazepine	81.6	68.4	P/P	40 - 150
2059339	Diuron	71.1	60.3	P/P	40 - 150
2059339	Fenuron	87.8	77.7	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P358394

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2059339	Fluridone	95.1	74.8	P/P	40 - 150
2059339	Hydrocodone	95.5	82.4	P/P	40 - 150
2059339	Ibuprofen	94.3	91.2	P/P	40 - 150
2059339	Imazapyr	100	88.8	P/P	40 - 150
2059339	Imidacloprid	192	175	F/F	40 - 150
2059339	Linuron	73.9	62.8	P/P	40 - 150
2059339	MCPP	145	121	P/P	40 - 150
2059339	Naproxen	101	99.2	P/P	40 - 150
2059339	Primidone	101	100	P/P	40 - 150
2059339	Pyraclostrobin	83.3	69.9	P/P	40 - 150
2059339	Triclopyr	86.2	77.7	P/P	40 - 150
2059641	3-Hydroxycarbofuran	110	119	P/P	40 - 150
2059641	Aldicarb	84.2	105	P/P	30 - 150
2059641	Aldicarb Sulfone	111	123	P/P	40 - 150
2059641	Aldicarb Sulfoxide	56.3	68.6	P/P	40 - 150
2059641	Carbaryl	71.2	78.9	P/P	40 - 150
2059641	Carbofuran	62.3	75.8	P/P	40 - 150
2059641	Methiocarb	80.0	79.4	P/P	40 - 150
2059641	Methomyl	107	114	P/P	40 - 150
2059641	Oxamyl	112	127	P/P	40 - 150
2059641	Propoxur	75.2	83.2	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P358925

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060059	Fluoride	96.4	96.4	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P358668

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2057079	Organic Carbon	100	100	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P359405

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2060778	Organic Carbon	97.0	98.7	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P358363

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059655	Turbidity	0.948	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P358446

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059672	Barium	4.62	Spike	P	0 - 20
2059672	Calcium	5.75	Spike	P	0 - 20
2059672	Iron	6.33	Spike	P	0 - 20
2059672	Magnesium	6.38	Spike	P	0 - 20
2059672	Potassium	5.31	Spike	P	0 - 20
2059672	Sodium	5.55	Spike	P	0 - 20
2059672	Zinc	4.49	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P358446

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059672	Aluminum	0.00600	Spike	P	0 - 20
2059672	Antimony	1.08	Spike	P	0 - 20
2059672	Arsenic	1.52	Spike	P	0 - 20
2059672	Boron	1.92	Spike	P	0 - 20
2059672	Cadmium	1.08	Spike	P	0 - 20
2059672	Chromium	2.26	Spike	P	0 - 20
2059672	Copper	1.76	Spike	P	0 - 20
2059672	Lead	0.834	Spike	P	0 - 20
2059672	Nickel	1.24	Spike	P	0 - 20
2059672	Selenium	0.0618	Spike	P	0 - 20
2059672	Silver	0.815	Spike	P	0 - 20
2059672	Thallium	2.39	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P359037

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059499	Chloride	0.504	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358644

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059626	Ammonia-N	0.292	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P358645

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059794	Ammonia-N	0.682	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P358534

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059656	Kjeldahl Nitrogen	1.28	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059626	NO2NO3-N	0.626	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P358849

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059650	NO2NO3-N	0.930	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358482

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059596	Total-P	3.86	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P358518

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059792	Total-P	0.768	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P358348

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059628	O-Phosphate-P	0.299	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P358321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059160	Aldrin	8.47	Spike	P	0 - 30
2059160	Alpha-BHC	3.99	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P358321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059160	Alpha-Chlordane	1.48	Spike	P	0 - 30
2059160	Beta-BHC	7.88	Spike	P	0 - 30
2059160	Carbophenothion	3.88	Spike	P	0 - 30
2059160	Chlorothalonil	38.0	Spike	F	0 - 30
2059160	Cypermethrin	12.0	Spike	P	0 - 30
2059160	DDD-p,p'	0.651	Spike	P	0 - 30
2059160	DDE-p,p'	1.15	Spike	P	0 - 30
2059160	DDT-p,p'	2.78	Spike	P	0 - 30
2059160	Delta-BHC	0.160	Spike	P	0 - 30
2059160	Dicofol	15.9	Spike	P	0 - 30
2059160	Dieldrin	1.19	Spike	P	0 - 30
2059160	Endosulfan I	2.89	Spike	P	0 - 30
2059160	Endosulfan II	0.551	Spike	P	0 - 30
2059160	Endosulfan Sulfate	7.55	Spike	P	0 - 30
2059160	Endrin	0.652	Spike	P	0 - 30
2059160	Endrin Aldehyde	0.0224	Spike	P	0 - 30
2059160	Endrin Ketone	2.48	Spike	P	0 - 30
2059160	Gamma-BHC	6.93	Spike	P	0 - 30
2059160	Gamma-Chlordane	2.79	Spike	P	0 - 30
2059160	Heptachlor	5.59	Spike	P	0 - 30
2059160	Heptachlor Epoxide	0.209	Spike	P	0 - 30
2059160	Methoxychlor	8.93	Spike	P	0 - 30
2059160	Mirex	14.8	Spike	P	0 - 30
2059160	Permethrin	10.4	Spike	P	0 - 30
2059160	Trifluralin	1.81	Spike	P	0 - 30
LFB	Aldrin	14.1	LCS	P	0 - 30
LFB	Alpha-BHC	5.25	LCS	P	0 - 30
LFB	Alpha-Chlordane	3.52	LCS	P	0 - 30
LFB	Beta-BHC	3.59	LCS	P	0 - 30
LFB	Carbophenothion	11.0	LCS	P	0 - 30
LFB	Chlorothalonil	6.79	LCS	P	0 - 30
LFB	Cypermethrin	13.9	LCS	P	0 - 30
LFB	DDD-p,p'	4.90	LCS	P	0 - 30
LFB	DDE-p,p'	12.6	LCS	P	0 - 30
LFB	DDT-p,p'	12.0	LCS	P	0 - 30
LFB	Delta-BHC	0.0587	LCS	P	0 - 30
LFB	Dicofol	4.12	LCS	P	0 - 30
LFB	Dieldrin	1.06	LCS	P	0 - 30
LFB	Endosulfan I	8.59	LCS	P	0 - 30
LFB	Endosulfan II	2.61	LCS	P	0 - 30
LFB	Endosulfan Sulfate	5.44	LCS	P	0 - 30
LFB	Endrin	2.15	LCS	P	0 - 30
LFB	Endrin Aldehyde	9.20	LCS	P	0 - 30
LFB	Endrin Ketone	0.511	LCS	P	0 - 30
LFB	Gamma-BHC	1.32	LCS	P	0 - 30
LFB	Gamma-Chlordane	7.62	LCS	P	0 - 30
LFB	Heptachlor	13.6	LCS	P	0 - 30
LFB	Heptachlor Epoxide	6.75	LCS	P	0 - 30
LFB	Methoxychlor	0.160	LCS	P	0 - 30
LFB	Mirex	29.8	LCS	P	0 - 30
LFB	Permethrin	13.6	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P358321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Trifluralin	12.1	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P358410

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060276	Acetochlor	18.1	Spike	P	0 - 30
2060276	Alachlor	21.8	Spike	P	0 - 30
2060276	Ametryn	29.8	Spike	P	0 - 30
2060276	Atrazine	16.2	Spike	P	0 - 30
2060276	Atrazine Desethyl	20.4	Spike	P	0 - 30
2060276	Azinphos Methyl	14.6	Spike	P	0 - 30
2060276	Bromacil	16.3	Spike	P	0 - 30
2060276	Butylate	13.9	Spike	P	0 - 30
2060276	Chlorpyrifos Ethyl	8.19	Spike	P	0 - 30
2060276	Chlorpyrifos Methyl	10.3	Spike	P	0 - 30
2060276	Cyanazine	17.1	Spike	P	0 - 30
2060276	Demeton	15.2	Spike	P	0 - 30
2060276	Diazinon	21.1	Spike	P	0 - 30
2060276	Dimethenamid	16.5	Spike	P	0 - 30
2060276	Disulfoton	16.4	Spike	P	0 - 30
2060276	Dithiopyr	21.7	Spike	P	0 - 30
2060276	EPTC	14.6	Spike	P	0 - 30
2060276	Ethion	7.26	Spike	P	0 - 30
2060276	Ethoprop	18.8	Spike	P	0 - 30
2060276	Fenamiphos	5.78	Spike	P	0 - 30
2060276	Fipronil	17.9	Spike	P	0 - 30
2060276	Fipronil Desulfinyl	16.0	Spike	P	0 - 30
2060276	Fipronil Sulfide	12.2	Spike	P	0 - 30
2060276	Fipronil Sulfone	10.4	Spike	P	0 - 30
2060276	Fonofos	7.28	Spike	P	0 - 30
2060276	Hexazinone	11.0	Spike	P	0 - 30
2060276	Malathion	2.35	Spike	P	0 - 30
2060276	Metalaxyl	16.9	Spike	P	0 - 30
2060276	Metolachlor	14.3	Spike	P	0 - 30
2060276	Metribuzin	15.4	Spike	P	0 - 30
2060276	Mevinphos	15.2	Spike	P	0 - 30
2060276	Molinate	11.5	Spike	P	0 - 30
2060276	Norflurazon	15.1	Spike	P	0 - 30
2060276	Oxadiazon	12.1	Spike	P	0 - 30
2060276	Parathion Ethyl	15.3	Spike	P	0 - 30
2060276	Parathion Methyl	10.3	Spike	P	0 - 30
2060276	Pendimethalin	16.2	Spike	P	0 - 30
2060276	Phorate	21.0	Spike	P	0 - 30
2060276	Prodiamine	21.7	Spike	P	0 - 30
2060276	Prometon	18.5	Spike	P	0 - 30
2060276	Prometryn	13.6	Spike	P	0 - 30
2060276	Simazine	18.2	Spike	P	0 - 30
2060276	Tebuconazole	16.0	Spike	P	0 - 30
2060276	Terbufos	16.4	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P358410

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060276	Terbuthylazine	21.8	Spike	P	0 - 30
LFB	Acetochlor	23.2	LCS	P	0 - 30
LFB	Alachlor	16.2	LCS	P	0 - 30
LFB	Ametryn	13.9	LCS	P	0 - 30
LFB	Atrazine	3.24	LCS	P	0 - 30
LFB	Atrazine Desethyl	12.9	LCS	P	0 - 30
LFB	Azinphos Methyl	25.6	LCS	P	0 - 30
LFB	Bromacil	6.09	LCS	P	0 - 30
LFB	Butylate	5.84	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	1.01	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	8.67	LCS	P	0 - 30
LFB	Cyanazine	38.4	LCS	F	0 - 30
LFB	Demeton	19.9	LCS	P	0 - 30
LFB	Diazinon	23.1	LCS	P	0 - 30
LFB	Dimethenamid	22.4	LCS	P	0 - 30
LFB	Disulfoton	11.4	LCS	P	0 - 30
LFB	Dithiopyr	17.6	LCS	P	0 - 30
LFB	EPTC	7.28	LCS	P	0 - 30
LFB	Ethion	40.7	LCS	F	0 - 30
LFB	Ethoprop	9.12	LCS	P	0 - 30
LFB	Fenamiphos	22.5	LCS	P	0 - 30
LFB	Fipronil	9.66	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	0.635	LCS	P	0 - 30
LFB	Fipronil Sulfide	21.2	LCS	P	0 - 30
LFB	Fipronil Sulfone	0.842	LCS	P	0 - 30
LFB	Fonofos	5.34	LCS	P	0 - 30
LFB	Hexazinone	8.86	LCS	P	0 - 30
LFB	Malathion	13.7	LCS	P	0 - 30
LFB	Metalaxyl	2.38	LCS	P	0 - 30
LFB	Metolachlor	15.8	LCS	P	0 - 30
LFB	Metribuzin	11.9	LCS	P	0 - 30
LFB	Mevinphos	8.54	LCS	P	0 - 30
LFB	Molinate	14.9	LCS	P	0 - 30
LFB	Norflurazon	8.67	LCS	P	0 - 30
LFB	Oxadiazon	9.37	LCS	P	0 - 30
LFB	Parathion Ethyl	3.19	LCS	P	0 - 30
LFB	Parathion Methyl	18.3	LCS	P	0 - 30
LFB	Pendimethalin	2.30	LCS	P	0 - 30
LFB	Phorate	14.5	LCS	P	0 - 30
LFB	Prodiamine	5.88	LCS	P	0 - 30
LFB	Prometon	3.43	LCS	P	0 - 30
LFB	Prometryn	3.18	LCS	P	0 - 30
LFB	Simazine	6.59	LCS	P	0 - 30
LFB	Tebuconazole	17.6	LCS	P	0 - 30
LFB	Terbufos	9.20	LCS	P	0 - 30
LFB	Terbuthylazine	3.18	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8276
Batch ID: P358321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059665	Chlordane	5.51	Spike	P	0 - 30
2059665	Toxaphene	11.9	Spike	P	0 - 30
LFB	Chlordane	7.43	LCS	P	0 - 30
LFB	Toxaphene	2.85	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P358378

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059643	Acesulfame K	2.45	Spike	P	0 - 30
2059643	AMPA	2.99	Spike	P	0 - 30
2059643	Endothall	4.98	Spike	P	0 - 30
2059643	Glufosinate	2.15	Spike	P	0 - 30
2059643	Glyphosate	1.27	Spike	P	0 - 30
2059643	Sucralose	8.45	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P358394

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059339	2,4-D	4.22	Spike	P	0 - 30
2059339	Acetaminophen	3.76	Spike	P	0 - 30
2059339	Bentazon	2.58	Spike	P	0 - 30
2059339	Carbamazepine	16.5	Spike	P	0 - 30
2059339	Diuron	15.7	Spike	P	0 - 30
2059339	Fenuron	12.2	Spike	P	0 - 30
2059339	Fluridone	4.94	Spike	P	0 - 30
2059339	Hydrocodone	14.7	Spike	P	0 - 30
2059339	Ibuprofen	3.34	Spike	P	0 - 30
2059339	Imazapyr	6.29	Spike	P	0 - 30
2059339	Imidacloprid	9.05	Spike	P	0 - 30
2059339	Linuron	16.2	Spike	P	0 - 30
2059339	MCPP	18.0	Spike	P	0 - 30
2059339	Naproxen	1.31	Spike	P	0 - 30
2059339	Primidone	0.471	Spike	P	0 - 30
2059339	Pyraclostrobin	17.6	Spike	P	0 - 30
2059339	Triclopyr	10.4	Spike	P	0 - 30
2059641	3-Hydroxycarbofuran	7.71	Spike	P	0 - 30
2059641	Aldicarb	21.9	Spike	P	0 - 30
2059641	Aldicarb Sulfone	10.4	Spike	P	0 - 30
2059641	Aldicarb Sulfoxide	19.8	Spike	P	0 - 30
2059641	Carbaryl	10.3	Spike	P	0 - 30
2059641	Carbofuran	19.5	Spike	P	0 - 30
2059641	Methiocarb	0.671	Spike	P	0 - 30
2059641	Methomyl	5.71	Spike	P	0 - 30
2059641	Oxamyl	12.2	Spike	P	0 - 30
2059641	Propoxur	10.0	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: SM 2120 B
Batch ID: P358354

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059649	Color (true)	1.42	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P358921

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060059	Total Alkalinity	2.05	Sample	F	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P358789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2059776	TDS	2.61	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P358925

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060059	Fluoride	0.0	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P358668

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2057079	Organic Carbon	0.144	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P359405

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2060778	Organic Carbon	1.09	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: 2059663
Field Sample ID: G4NW0009

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	71.1	P	30 - 160

Lab Sample ID: 2059664
Field Sample ID: G4NW0009

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	79.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.9	P	30 - 160
EPA 8321B	Diuron-d6	68.7	P	30 - 160
EPA 8321B	Endothall-d6	91.4	P	40 - 160
EPA 8321B	Endothall-d6	91.4	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	47.6	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	47.6	P	40 - 160
EPA 8321B	Ibuprofen-d3	85.9	P	30 - 160
EPA 8321B	Primidone-d5	107	P	30 - 160
EPA 8321B	Sucralose-d6	97.5	P	40 - 160
EPA 8321B	Sucralose-d6	97.5	P	40 - 160

Lab Sample ID: 2059665
Field Sample ID: G4NW0009

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	64.0	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	40.0	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	46.6	P	30 - 103
EPA 8276	PCNB	59.4	P	37 - 143

Lab Sample ID: 2059666
Field Sample ID: G4NW0009

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	104	P	68 - 130
EPA 8270D	Terbufos-d10	103	P	61 - 136

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A89199
Included Lab Sample IDs: 2059651, 2059654, 2059657

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.8	98.1	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A89200
Included Lab Sample IDs: 2059649, 2059652, 2059655

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	103	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A89202
Included Lab Sample IDs: 2059649, 2059652, 2059655

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

Reference Method: EPA 8321B
Run ID: A89271
Included Lab Sample IDs: 2059664

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	119	125	P/P	60 - 160
Endothall	98.3	112	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A89275
Included Lab Sample IDs: 2059667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.7	100	P/P	90 - 110
Antimony	99.2	99.6	P/P	90 - 110
Arsenic	103	104	P/P	90 - 110
Boron	98.8	102	P/P	90 - 110
Cadmium	99.8	99.9	P/P	90 - 110
Chromium	101	101	P/P	90 - 110
Lead	100	101	P/P	90 - 110
Nickel	102	104	P/P	90 - 110
Selenium	102	101	P/P	90 - 110
Silver	101	101	P/P	90 - 110
Thallium	98.7	100	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A89280
Included Lab Sample IDs: 2059667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	100	101	P/P	90 - 110
Calcium	102	101	P/P	90 - 110
Iron	102	102	P/P	90 - 110
Magnesium	103	103	P/P	90 - 110
Potassium	100	100	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A89280
Included Lab Sample IDs: 2059667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sodium	103	102	P/P	90 - 110
Zinc	99.4	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A89294
Included Lab Sample IDs: 2059650, 2059653, 2059656

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A89297
Included Lab Sample IDs: 2059650, 2059653, 2059656

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.5	99.2	P/P	90 - 110
Total-P	98.8	101	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A89304
Included Lab Sample IDs: 2059667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	94.9	94.4	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A89307
Included Lab Sample IDs: 2059664

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	94.0	99.4	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A89308
Included Lab Sample IDs: 2059664

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	119	135	P/P	60 - 160
Glufosinate	78.4	81.3	P/P	60 - 160
Glyphosate	92.7	94.0	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A89313
Included Lab Sample IDs: 2059650, 2059653, 2059656

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

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-00
Run ID: A89320
Included Lab Sample IDs: 2059656

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.4	98.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A89360
Included Lab Sample IDs: 2059653, 2059656

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

Reference Method: EPA 8270D
Run ID: A89389
Included Lab Sample IDs: 2059665

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	93.3		P	80 - 120
Alpha-BHC	94.4		P	80 - 120
Alpha-Chlordane	95.6		P	80 - 120
Beta-BHC	93.4		P	80 - 120
Carbophenothion	104		P	80 - 120
Chlorothalonil	83.2		P	80 - 120
Cypermethrin	89.2		P	80 - 120
DDD-p,p'	93.7		P	80 - 120
DDE-p,p'	94.0		P	80 - 120
DDT-p,p'	102		P	80 - 120
Delta-BHC	93.2		P	80 - 120
Dicofol	95.3		P	80 - 120
Dieldrin	93.1		P	80 - 120
Endosulfan I	93.4		P	80 - 120
Endosulfan II	87.8		P	80 - 120
Endosulfan Sulfate	96.2		P	80 - 120
Endrin	90.1		P	80 - 120
Endrin Aldehyde	91.9		P	80 - 120
Endrin Ketone	94.6		P	80 - 120
Gamma-BHC	94.3		P	80 - 120
Gamma-Chlordane	95.2		P	80 - 120
Heptachlor	92.9		P	80 - 120
Heptachlor Epoxide	94.3		P	80 - 120
Methoxychlor	102		P	80 - 120
Mirex	96.3		P	80 - 120
Permethrin	84.4		P	80 - 120
Trifluralin	95.7		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A89395
Included Lab Sample IDs: 2059650

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8276
Run ID: A89407
Included Lab Sample IDs: 2059665

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.4		P	80 - 120
Toxaphene	95.9		P	80 - 120

Reference Method: SM 2320 B-97
Run ID: A89417
Included Lab Sample IDs: 2059649, 2059652, 2059655

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.9	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A89417
Included Lab Sample IDs: 2059649, 2059652, 2059655

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.1	99.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A89435
Included Lab Sample IDs: 2059649, 2059652, 2059655

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.0	98.6	P/P	90 - 110
Sulfate	98.3	98.1	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A89502
Included Lab Sample IDs: 2059664

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	150	70.7	P/P	50 - 150
3-Hydroxycarbofuran	119	117	P/P	60 - 150
Acetaminophen	126	113	P/P	60 - 160
Aldicarb	93.4	126	P/P	60 - 150
Aldicarb Sulfone	100	106	P/P	50 - 150
Aldicarb Sulfoxide	101	97.1	P/P	50 - 150
Bentazon	97.6	88.4	P/P	50 - 160
Carbamazepine	95.6	98.8	P/P	60 - 150
Carbaryl	107	109	P/P	60 - 150
Carbofuran	95.2	100	P/P	50 - 150
Diuron	106	98.1	P/P	60 - 150
Fenuron	95.1	92.8	P/P	60 - 150
Fluridone	101	102	P/P	60 - 160
Hydrocodone	112	108	P/P	60 - 150
Ibuprofen	122	113	P/P	50 - 160
Imazapyr	89.2	78.0	P/P	50 - 150
Imidacloprid	121	120	P/P	60 - 150
Linuron	75.4	97.3	P/P	60 - 150
MCPP	88.3	93.3	P/P	50 - 150
Methiocarb	115	119	P/P	50 - 150
Methomyl	100	101	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A89502
Included Lab Sample IDs: 2059664

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Naproxen	91.9	128	P/P	50 - 160
Oxamyl	94.7	98.9	P/P	50 - 150
Primidone	96.9	90.4	P/P	60 - 150
Propoxur	101	104	P/P	50 - 150
Pyraclostrobin	114	111	P/P	60 - 150
Triclopyr	83.5	106	P/P	50 - 150

Reference Method: EPA 8270D
Run ID: A89520
Included Lab Sample IDs: 2059666

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	102		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	97.7		P	80 - 120
Atrazine	98.2		P	80 - 120
Atrazine Desethyl	95.4		P	80 - 120
Azinphos Methyl	94.0		P	80 - 120
Bromacil	102		P	80 - 120
Butylate	101		P	80 - 120
Chlorpyrifos Ethyl	100		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Cyanazine	83.5		P	80 - 120
Demeton	96.8		P	80 - 120
Diazinon	98.5		P	80 - 120
Dimethenamid	103		P	80 - 120
Disulfoton	99.1		P	80 - 120
Dithiopyr	102		P	80 - 120
EPTC	98.9		P	80 - 120
Ethion	99.7		P	80 - 120
Ethoprop	99.2		P	80 - 120
Fenamiphos	98.1		P	80 - 120
Fipronil	99.9		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	100		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fonofos	98.2		P	80 - 120
Hexazinone	100		P	80 - 120
Malathion	98.1		P	80 - 120
Metalaxyl	103		P	80 - 120
Metolachlor	106		P	80 - 120
Metribuzin	79.9*		F	80 - 120
Mevinphos	102		P	80 - 120
Molinate	106		P	80 - 120
Norflurazon	100		P	80 - 120
Oxadiazon	103		P	80 - 120
Parathion Ethyl	93.9		P	80 - 120
Parathion Methyl	96.2		P	80 - 120
Pendimethalin	95.7		P	80 - 120
Phorate	98.3		P	80 - 120
Prodiamine	99.4		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270D
Run ID: A89520
Included Lab Sample IDs: 2059666

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Prometon	99.2		P	80 - 120
Prometryn	99.7		P	80 - 120
Simazine	96.8		P	80 - 120
Tebuconazole	99.7		P	80 - 120
Terbufos	97.7		P	80 - 120
Terbuthylazine	99.7		P	80 - 120

Reference Method: SM 5310 B-00
Run ID: A89598
Included Lab Sample IDs: 2059650, 2059653

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.2	93.6	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision		
							LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							0.948	
EPA 200.7 Rev. 4.4	Barium	100		99.1	95.0	100			4.62
	Calcium	103		94.3	93.3	101			5.75
	Iron	103		105	95.3	102			6.33
	Magnesium	107		96.5	105				6.38
	Potassium	99.2		97.9	89.9	96.2			5.31
	Sodium	104		92.3	101				5.55
	Zinc	97.9		98.6	93.4	97.7			4.49
EPA 200.8 Rev. 5.4	Aluminum	97.8		97.8	101	101			0.0060
	Antimony	98.7		103	99.0	100			1.08
	Arsenic	106		110	104	106			1.52
	Boron	94.3		98.6	101	103			1.92
	Cadmium	101		103	102	103			1.08
	Chromium	97.6		97.3	101	103			2.26
	Copper	98.9		102	101	102			1.76
	Lead	96.3		99.1	99.7	100			0.834
	Nickel	101		94.2	103	104			1.24
	Selenium	101		77.2	104	104			0.0618
	Silver	99.8		98.7	101	102			0.815
	Thallium	101		106	106	109			2.39
EPA 300.0 Rev. 2.1	Chloride	96.8		94.1	94.2			0.504	
	Sulfate	95.5		93.3	96.3				
EPA 350.1 Rev. 2.0	Ammonia-N	97.6		103	103				0.292
	Ammonia-N	97.3		99.4	98.6				0.682
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105		104	103				1.28
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5		96.8	97.8				0.626
	NO2NO3-N	99.5		98.5	97.0				0.930
EPA 365.1 Rev. 2.0	Total-P	104		101	105				3.86
	Total-P	100		103	102				0.768
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100		100	100				0.299
EPA 8270D	Acetochlor	112	88.4	117	97.9		23.2		18.1
	Alachlor	89.8	106	110	88.3		16.2		21.8
	Aldrin	54.9	63.2	70.3	64.6		14.1		8.47
	Alpha-BHC	103	109	109	113		5.25		3.99
	Alpha-Chlordane	76.9	79.7	86.0	84.8		3.52		1.48
	Ametryn	105	121	137	101		13.9		29.8
	Atrazine	115	118				3.24		16.2
	Atrazine Desethyl	84.0	95.6	90.7	71.8		12.9		20.4
	Azinphos Methyl	104	135	144	124		25.6		14.6
	Beta-BHC	125	121	142	131		3.59		7.88
	Bromacil	56.6	60.1	90.8	74.9		6.09		16.3
	Butylate	63.3	59.7	63.0	54.8		5.84		13.9
	Carbophenothion	93.6	105	112	117		11.0		3.88
	Chlorothalonil	80.4	75.1	71.7	105		6.79		38.0
	Chlorpyrifos Ethyl	87.4	86.6	86.0	79.2		1.01		8.19
	Chlorpyrifos Methyl	85.9	93.7	92.6	83.6		8.67		10.3
	Cyanazine	110	162	159	134		38.4		17.1
	Cypermethrin	71.5	82.2	87.0	77.2		13.9		12.0
	DDD-p,p'	85.6	89.9	95.8	95.1		4.90		0.651
	DDE-p,p'	73.3	83.1	84.4	83.4		12.6		1.15
	DDT-p,p'	88.7	100	106	103		12.0		2.78
	Delta-BHC	137	137	147	147		0.0587		0.160
	Demeton	84.0	102	103	88.7		19.9		15.2
	Diazinon	89.4	113	119	96.4		23.1		21.1

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270D	Dicofol	90.8	94.6	116	98.9	4.12		15.9
	Dieldrin	86.2	87.1	91.3	90.3	1.06		1.19
	Dimethenamid	84.5	106	111	86.5	22.4		16.5
	Disulfoton	88.2	98.8	102	86.8	11.4		16.4
	Dithiopyr	88.8	106	114	92.0	17.6		21.7
	Endosulfan I	88.8	81.5	97.2	100	8.59		2.89
	Endosulfan II	94.6	92.1	104	103	2.61		0.551
	Endosulfan Sulfate	81.0	85.5	92.9	86.2	5.44		7.55
	Endrin	83.2	81.4	89.5	90.1	2.15		0.652
	Endrin Aldehyde	102	93.0	98.1	98.1	9.20		0.0224
	Endrin Ketone	84.8	84.4	92.0	89.7	0.511		2.48
	EPTC	57.8	62.2	56.8	49.1	7.28		14.6
	Ethion	92.4	61.1	56.7	52.7	40.7		7.26
	Ethoprop	87.0	95.3	100	82.8	9.12		18.8
	Fenamiphos	86.6	69.1	80.6	76.1	22.5		5.78
	Fipronil	81.7	90.0	98.2	76.0	9.66		17.9
	Fipronil Desulfinyl	78.6	79.1	83.7	70.6	0.635		16.0
	Fipronil Sulfide	86.0	69.6	69.9	59.7	21.2		12.2
	Fipronil Sulfone	83.7	83.0	77.7	65.5	0.842		10.4
	Fonofos	84.7	89.3	90.9	84.5	5.34		7.28
	Gamma-BHC	124	125	138	129	1.32		6.93
	Gamma-Chlordane	73.8	79.6	83.2	80.9	7.62		2.79
	Heptachlor	58.9	67.5	71.4	67.5	13.6		5.59
	Heptachlor Epoxide	82.1	87.8	89.3	89.4	6.75		0.209
	Hexazinone	108	99.1	103	92.0	8.86		11.0
	Malathion	94.8	82.7	77.5	75.7	13.7		2.35
	Metalaxyl	93.5	91.3	98.8	83.5	2.38		16.9
	Methoxychlor	110	110	91.8	100	0.160		8.93
	Metolachlor	90.1	106	106	90.0	15.8		14.3
	Metribuzin	142	160	154	132	11.9		15.4
	Mevinphos	81.2	74.6	81.2	69.7	8.54		15.2
	Mirex	46.3	62.5	57.8	49.8	29.8		14.8
	Molinate	67.8	78.7	79.1	70.5	14.9		11.5
	Norflurazon	84.0	91.6	99.7	85.7	8.67		15.1
	Oxadiazon	91.1	83.0	89.3	78.8	9.37		12.1
	Parathion Ethyl	88.2	85.4	90.2	77.4	3.19		15.3
	Parathion Methyl	102	122	117	106	18.3		10.3
	Pendimethalin	89.9	92.0	101	85.9	2.30		16.2
	Permethrin	61.5	70.5	84.1	75.7	13.6		10.4
	Phorate	92.7	107	113	91.2	14.5		21.0
	Prodiamine	104	98.3	95.7	77.0	5.88		21.7
	Prometon	88.4	91.5	94.9	78.8	3.43		18.5
	Prometryn	90.7	87.8	79.9	68.5	3.18		13.6
	Simazine	101	94.4			6.59		18.2
	Tebuconazole	85.9	72.0	78.8	66.1	17.6		16.0
	Terbufos	88.7	97.3	102	86.6	9.20		16.4
	Terbuthylazine	95.9	99.0	106	85.5	3.18		21.8
	Trifluralin	82.1	92.7	97.6	95.8	12.1		1.81
EPA 8276	Chlordane	85.9	92.5	62.9	66.5	7.43		5.51
	Toxaphene	67.7	69.7	51.9	58.5	2.85		11.9
EPA 8321B	2,4-D	87.2		102	97.0			4.22
	3-Hydroxycarbofuran	110		110	119			7.71
	Acesulfame K	113		113	116			2.45
	Acetaminophen	89.9		132	127			3.76

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Aldicarb	117	84.2	105			21.9
	Aldicarb Sulfone	100	111	123			10.4
	Aldicarb Sulfoxide	107	56.3	68.6			19.8
	AMPA	91.1	140	144			2.99
	Bentazon	98.3	65.4	54.1			2.58
	Carbamazepine	88.5	81.6	68.4			16.5
	Carbaryl	82.9	71.2	78.9			10.3
	Carbofuran	79.8	62.3	75.8			19.5
	Diuron	78.2	71.1	60.3			15.7
	Endothall	98.8	109	114			4.98
	Fenuron	117	87.8	77.7			12.2
	Fluridone	104	95.1	74.8			4.94
	Glufosinate	71.3	70.4	68.9			2.15
	Glyphosate	79.3	77.3	78.3			1.27
	Hydrocodone	98.7	95.5	82.4			14.7
	Ibuprofen	85.3	94.3	91.2			3.34
	Imazapyr	92.7	100	88.8			6.29
	Imidacloprid	94.4	192	175			9.05
	Linuron	77.0	73.9	62.8			16.2
	MCPP	115	145	121			18.0
	Methiocarb	79.6	80.0	79.4			0.671
	Methomyl	102	107	114			5.71
	Naproxen	95.6	101	99.2			1.31
	Oxamyl	110	112	127			12.2
	Primidone	95.5	101	100			0.471
	Propoxur	85.1	75.2	83.2			10.0
	Pyraclostrobin	65.5	83.3	69.9			17.6
	Sucralose	99.4	94.4	103			8.45
	Triclopyr	75.5	86.2	77.7			10.4
SM 2120 B	Color (true)	101				1.42	
SM 2320 B-97	Total Alkalinity	103				2.05	
SM 2540 C-97	TDS					2.61	
SM 4500 F-C-97	Fluoride	97.1	96.4	96.4			0.0
SM 5310 B-00	Organic Carbon	99.8	100	100			0.144
	Organic Carbon	95.2	97.0	98.7			1.09

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2059649, 2059652, 2059655
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2059667
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2059667
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2059649, 2059652, 2059655
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2059649, 2059652, 2059655
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2059650, 2059653, 2059656
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2059650, 2059653, 2059656
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2059650, 2059653, 2059656

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2059650, 2059653, 2059656
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2059651, 2059654, 2059657
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2059665
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2059666
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2059665
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2059663
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2059664
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2059664
SM 2120 B / E31780	True Color measured at 450 nm	2059649, 2059652, 2059655
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2059649, 2059652, 2059655
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2059649, 2059652, 2059655
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2059649, 2059652, 2059655
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2059649, 2059652, 2059655
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2059650, 2059653, 2059656

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	02/05/2019			02/05/2019 17:23	Adrian Shelby	2059649, 2059652, 2059655
EPA 200.7 Rev. 4.4	02/05/2019	02/06/2019 16:45	Elliott D. Healy	02/07/2019 16:41	Martin Acosta	2059667
EPA 200.8 Rev. 5.4	02/05/2019	02/06/2019 16:45	Elliott D. Healy	02/07/2019 22:08	Robert K Palmer	2059667
	02/05/2019	02/06/2019 16:45	Elliott D. Healy	02/08/2019 21:21	Robert K Palmer	2059667
EPA 300.0 Rev. 2.1	02/05/2019			02/16/2019 13:15	Lipi Saha	2059649
	02/05/2019			02/16/2019 13:33	Lipi Saha	2059652
	02/05/2019			02/16/2019 13:50	Lipi Saha	2059655
EPA 350.1 Rev. 2.0	02/05/2019			02/08/2019 12:41	Ping Hua	2059650
	02/05/2019			02/08/2019 12:42	Ping Hua	2059653
	02/05/2019			02/08/2019 13:00	Ping Hua	2059656
EPA 351.2 Rev. 2.0	02/05/2019	02/07/2019 10:50	Adrian Shelby	02/08/2019 11:57	Joseph Suarez	2059650
	02/05/2019	02/07/2019 10:50	Adrian Shelby	02/08/2019 11:58	Joseph Suarez	2059653
	02/05/2019	02/07/2019 10:50	Adrian Shelby	02/08/2019 12:00	Joseph Suarez	2059656
EPA 353.2 Rev. 2.0	02/05/2019			02/12/2019 11:10	Beverly Y. Sanders	2059653
	02/05/2019			02/12/2019 11:11	Beverly Y. Sanders	2059656
	02/05/2019			02/13/2019 09:39	Beverly Y. Sanders	2059650
EPA 365.1 Rev. 2.0	02/05/2019	02/07/2019 13:25	Sima Feizi	02/08/2019 12:54	Rosalyn Ballman	2059650
	02/05/2019	02/07/2019 13:25	Sima Feizi	02/08/2019 13:27	Rosalyn Ballman	2059653
	02/05/2019	02/07/2019 13:25	Sima Feizi	02/08/2019 13:28	Rosalyn Ballman	2059656
EPA 365.1 Rev. 2.0 dissolved	02/05/2019			02/05/2019 15:28	Jhamieka S. Greenwood	2059651
	02/05/2019			02/05/2019 15:29	Jhamieka S. Greenwood	2059654
	02/05/2019			02/05/2019 15:30	Jhamieka S. Greenwood	2059657
EPA 8270D	02/05/2019	02/06/2019 08:00	Fe-Val Siddell	02/11/2019 23:24	Dinesh Mishra	2059665
	02/05/2019	02/07/2019 08:30	Rasheda Ghaffari	02/08/2019 21:11	Vandana T. Nagar	2059666
EPA 8276	02/05/2019	02/06/2019 08:00	Fe-Val Siddell	02/13/2019 06:29	Arthur Maknenko	2059665
EPA 8321B	02/05/2019	02/07/2019 12:00	Hoor Shaik	02/19/2019 02:25	Juyoung Kim	2059663
	02/05/2019	02/07/2019 12:00	Hoor Shaik	02/19/2019 07:36	Juyoung Kim	2059664
	02/05/2019	02/07/2019 15:30	Mohammad Ghaffari	02/08/2019 00:33	Mohammad Ghaffari	2059664
	02/05/2019	02/07/2019 15:30	Mohammad Ghaffari	02/08/2019 09:11	Mohammad Ghaffari	2059664
	02/05/2019	02/07/2019 15:30	Mohammad Ghaffari	02/08/2019 20:14	Mohammad Ghaffari	2059664
SM 2120 B	02/05/2019			02/05/2019 16:19	Chelsea Hernandez	2059649
	02/05/2019			02/05/2019 16:20	Chelsea Hernandez	2059652
	02/05/2019			02/05/2019 16:21	Chelsea Hernandez	2059655
SM 2320 B-97	02/05/2019			02/13/2019 06:32	Dale L. Simmons	2059649
	02/05/2019			02/13/2019 06:43	Dale L. Simmons	2059652
	02/05/2019			02/13/2019 06:55	Dale L. Simmons	2059655
SM 2540 C-97	02/05/2019			02/06/2019 15:36	Yijie Li	2059649, 2059652, 2059655
SM 2540 D-97	02/05/2019			02/06/2019 15:36	Yijie Li	2059649, 2059652, 2059655
SM 4500 F-C-97	02/05/2019			02/13/2019 06:32	Dale L. Simmons	2059649
	02/05/2019			02/13/2019 06:43	Dale L. Simmons	2059652

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500 F-C-97	02/05/2019			02/13/2019 06:55	Dale L. Simmons	2059655
SM 5310 B-00	02/05/2019			02/07/2019 17:14	Chelsea Hernandez	2059656
	02/05/2019			02/22/2019 08:23	Julia Storbeck	2059650
	02/05/2019			02/22/2019 09:37	Julia Storbeck	2059653