Chemical Analysis Report

NW-DIST-2019-04-03-02

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

Event Description: **Perdido/Bridge**
Request ID: **RQ-2019-03-25-16**
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: Colin Wright, Program Administrator

Date Certified: 25-APR-2019 11:23

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: 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: SANDERS BEACH OFF I STREET DOCK **Collection Date/Time: 04/02/2019 09:30**

Field ID: G4NW0492 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074767	EPA 8321B	2,4-D	0.0020	U	ug/L	P361474	
		Acesulfame K**	0.10	UJ	ug/L	P361569	MS, SUR
		AMPA**	1.0	U	ug/L	P361569	
		Sucralose**	0.025	I	ug/L	P361569	
		Acetaminophen**	0.0080	U	ug/L	P361474	
		Endothall**	0.25	UJ	ug/L	P361569	SUR
		Glufosinate**	1.0	U	ug/L	P361569	
		Glyphosate**	1.0	U	ug/L	P361569	
		Bentazon	8.0E-04	U	ug/L	P361474	
		Carbamazepine**	8.0E-04	U	ug/L	P361474	
		Diuron	0.0020	U	ug/L	P361474	
		Fenuron	0.016	U	ug/L	P361474	
		Fluridone**	8.0E-04	U	ug/L	P361474	
		Imazapyr**	0.0040	U	ug/L	P361474	
		Hydrocodone**	0.0020	U	ug/L	P361474	
		Ibuprofen**	0.020	U	ug/L	P361474	
		Imidacloprid	0.0020	U	ug/L	P361474	
		Linuron	0.0040	U	ug/L	P361474	
		MCPP	0.0020	U	ug/L	P361474	
		Naproxen**	0.0080	U	ug/L	P361474	RPD
		Primidone**	0.0040	U	ug/L	P361474	
		Pyraclostrobin**	0.0020	U	ug/L	P361474	
		Triclopyr**	0.0040	U	ug/L	P361474	

Ref. Method and Comment:
EPA 8321B: Surrogate spike recovery exceeding the control limits. Results confirmed in re-extraction.

Sample Location: BAYOU CHICO **Collection Date/Time: 04/02/2019 10:05**

Field ID: G4NW0483 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074768	EPA 8321B	2,4-D	0.0020	U	ug/L	P361474	
		Acesulfame K**	0.10	U	ug/L	P361569	MS
		AMPA**	1.0	U	ug/L	P361569	
		Sucralose**	0.31		ug/L	P361569	
		Acetaminophen**	0.0080	U	ug/L	P361474	
		Endothall**	0.25	U	ug/L	P361569	
		Glufosinate**	1.0	U	ug/L	P361569	
		Bentazon	0.0022	I	ug/L	P361474	
		Glyphosate**	1.0	U	ug/L	P361569	
		Carbamazepine**	0.0027	I	ug/L	P361474	
		Diuron	0.0020	U	ug/L	P361474	
		Fenuron	0.016	U	ug/L	P361474	
		Fluridone**	8.0E-04	U	ug/L	P361474	
		Imazapyr**	0.0040	U	ug/L	P361474	
		Hydrocodone**	0.0020	U	ug/L	P361474	
		Ibuprofen**	0.020	U	ug/L	P361474	
		Imidacloprid	0.0081		ug/L	P361474	
		Linuron	0.0040	U	ug/L	P361474	
		MCPP	0.0020	U	ug/L	P361474	
		Naproxen**	0.0080	U	ug/L	P361474	RPD
		Primidone**	0.0040	U	ug/L	P361474	
		Pyraclostrobin**	0.0020	U	ug/L	P361474	
		Triclopyr**	0.0040	U	ug/L	P361474	

Sample Location: WEEKLY BAYOU CREEK @ COUNTY RD 293 **Collection Date/Time: 04/02/2019 11:00**

Field ID: G4NW0482 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074743	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P361525	
	EPA 300.0	Bromide	0.056		mg Br/L	P361847	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P362175	RPD
	SM 2540 D-97	TSS	3	I	mg/L	P362041	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P362181	
2074745	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P361950	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30		mg N/L	P361754	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P361735	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P361767	
	SM 5310 B-00	Organic Carbon	7.9		mg C/L	P361725	
2074747	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P361532	

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

Sample Location: BRIDGE CREEK (TIDAL PORTION) **Collection Date/Time: 04/02/2019 11:40**

Field ID: G5NW0129 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074740	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P361525	
	EPA 300.0	Bromide	16		mg Br/L	P361847	
	SM 2320 B-97	Total Alkalinity	34		mg CaCO3/L	P361854	
	SM 2540 D-97	TSS	4	I	mg/L	P362042	
	SM 4500 F-C-97	Fluoride	0.28		mg F/L	P362722	
2074741	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P361946	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.16	U	mg N/L	P361755	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.021		mg N/L	P361747	
	EPA 365.1 Rev. 2.0	Total-P	0.015		mg P/L	P361918	
	SM 5310 B-00	Organic Carbon	3.9		mg C/L	P361725	
2074742	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P361529	
2074765	EPA 8321B	Aldicarb	0.020	U	ug/L	P361474	
		Aldicarb Sulfone	0.0020	U	ug/L	P361474	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P361474	
		Carbaryl	0.0020	U	ug/L	P361474	
		Carbofuran	0.0020	U	ug/L	P361474	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P361474	
		Methiocarb	0.0020	U	ug/L	P361474	
		Methomyl	0.0020	U	ug/L	P361474	
		Oxamyl	0.0020	U	ug/L	P361474	
		Propoxur	0.0020	U	ug/L	P361474	
2074766		2,4-D	0.018		ug/L	P361474	
		Acesulfame K**	1.0	U	ug/L	P361569	MS
		AMPA**	1.0	U	ug/L	P361569	
		Sucralose**	0.66		ug/L	P361569	
		Acetaminophen**	0.0080	U	ug/L	P361474	
		Endothall**	2.5	U	ug/L	P361569	
		Glufosinate**	1.0	U	ug/L	P361569	
		Bentazon	9.9E-04	I	ug/L	P361474	
		Glyphosate**	1.0	U	ug/L	P361569	
		Carbamazepine**	0.0014	I	ug/L	P361474	
		Diuron	0.0020	U	ug/L	P361474	
		Fenuron	0.016	U	ug/L	P361474	
		Fluridone**	8.0E-04	U	ug/L	P361474	
		Imazapyr**	0.0048	I	ug/L	P361474	
		Hydrocodone**	0.0020	U	ug/L	P361474	
		Ibuprofen**	0.020	U	ug/L	P361474	
		Imidacloprid	0.015		ug/L	P361474	
		Linuron	0.0040	U	ug/L	P361474	
		MCPP	0.0020	U	ug/L	P361474	
		Naproxen**	0.0080	U	ug/L	P361474	RPD
		Primidone**	0.0040	U	ug/L	P361474	
		Pyraclostrobin**	0.0020	U	ug/L	P361474	

Field ID: G5NW0129 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074766	EPA 8321B	Triclopyr**	0.0040	U	ug/L	P361474	
2074769	EPA 8270D	Aldrin	4.0	U	ng/L	P361571	
		Alpha-BHC	2.0	U	ng/L	P361571	
		Alpha-Chlordane	1.0	U	ng/L	P361571	
		Beta-BHC	10	U	ng/L	P361571	MS
		Bifenthrin**	4.0	U	ng/L	P361571	
		Delta-BHC	10	U	ng/L	P361571	
		Gamma-BHC	10	U	ng/L	P361571	MS, RPD
		Carbophenothion	12	U	ng/L	P361571	
		Chlorothalonil	2.0	UJ	ng/L	P361571	LCS, RPD
		Cis-Nonachlor**	1.0	U	ng/L	P361571	
		Cypermethrin	20	U	ng/L	P361571	
		DDD-p,p'	8.0	U	ng/L	P361571	
		DDE-p,p'	8.0	U	ng/L	P361571	
		DDT-p,p'	10	U	ng/L	P361571	
		Dicofol	30	U	ng/L	P361571	
		Dieldrin	4.0	U	ng/L	P361571	
		Endosulfan I	4.0	U	ng/L	P361571	
		Endosulfan II	4.0	U	ng/L	P361571	
		Endosulfan Sulfate	2.0	U	ng/L	P361571	
		Endrin	2.0	U	ng/L	P361571	
		Endrin Aldehyde	2.0	U	ng/L	P361571	
		Endrin Ketone	2.0	U	ng/L	P361571	
		Ethalfluralin**	3.0	U	ng/L	P361571	
		Gamma-Chlordane	1.0	U	ng/L	P361571	
		Heptachlor	1.5	U	ng/L	P361571	
		Heptachlor Epoxide	2.0	U	ng/L	P361571	
		Hexachlorobenzene**	2.0	U	ng/L	P361571	
		Methoxychlor	4.0	U	ng/L	P361571	
		Mirex	2.0	UJ	ng/L	P361571	LCS
		Permethrin	10	UJ	ng/L	P361571	LCS
		Trans-Nonachlor**	1.0	U	ng/L	P361571	
		Trifluralin	2.5	U	ng/L	P361571	
	EPA 8276	Chlordane	5.0	U	ng/L	P361571	
		Toxaphene	30	U	ng/L	P361571	
2074770	EPA 8270D	Acetochlor	0.29	U	ng/L	P361536	
		Alachlor	0.29	U	ng/L	P361536	
		Ametryn	0.69	U	ng/L	P361536	
		Atrazine	10		ng/L	P361536	
		Atrazine Desethyl	1.7	U	ng/L	P361536	
		Azinphos Methyl	5.7	U	ng/L	P361536	
		Bromacil	0.79	I	ng/L	P361536	
		Butylate	0.46	U	ng/L	P361536	
		Chlorpyrifos Ethyl	0.29	UJ	ng/L	P361536	LCS, MS
		Chlorpyrifos Methyl	0.11	U	ng/L	P361536	MS

Field ID: G5NW0129 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074770	EPA 8270D	Cyanazine	3.7	U	ng/L	P361536	
		Demeton	8.0	U	ng/L	P361536	
		Diazinon	0.14	U	ng/L	P361536	
		Dimethenamid**	0.11	U	ng/L	P361536	
		Disulfoton	0.57	U	ng/L	P361536	
		Dithiopyr**	0.11	U	ng/L	P361536	
		EPTC	1.4	U	ng/L	P361536	RPD
		Ethion	0.17	U	ng/L	P361536	
		Ethoprop	0.11	U	ng/L	P361536	
		Fenamiphos	0.57	U	ng/L	P361536	
		Fipronil	0.29	U	ng/L	P361536	
		Fipronil Desulfinyl**	0.18	I	ng/L	P361536	
		Fipronil Sulfide	0.28	I	ng/L	P361536	
		Fipronil Sulfone	0.74		ng/L	P361536	
		Fonofos	0.23	U	ng/L	P361536	
		Hexazinone	0.84	I	ng/L	P361536	
		Malathion	0.40	UJ	ng/L	P361536	LCS, MS
		Metalaxyl	0.34	U	ng/L	P361536	
		Metolachlor	0.90	I	ng/L	P361536	
		Metribuzin	0.86	U	ng/L	P361536	
		Mevinphos	0.57	U	ng/L	P361536	
		Molinate	0.34	U	ng/L	P361536	
		Norflurazon	0.57	U	ng/L	P361536	
		Oxadiazon**	0.13	I	ng/L	P361536	
		Parathion Ethyl	0.29	U	ng/L	P361536	
		Parathion Methyl	0.63	U	ng/L	P361536	MS
		Pendimethalin	1.1	U	ng/L	P361536	
		Phorate	0.29	U	ng/L	P361536	
		Prodiamine**	0.20	U	ng/L	P361536	
		Prometon	1.0	U	ng/L	P361536	
		Prometryn	0.23	U	ng/L	P361536	
		Simazine	0.57	U	ng/L	P361536	
		Tebuconazole**	0.77	I	ng/L	P361536	MS
		Terbufos	0.11	U	ng/L	P361536	
		Terbuthylazine	0.49	U	ng/L	P361536	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8270D: Refer to the narrative for an explanation of QC Codes.
EPA 8270D: MS accuracies for atrazine, simazine, ethoprop, metolachlor, and metribuzin not assessed due to high content of these parameters in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: PERDIDO BAY (LOWER SEGMENT) OFF DU PONT POINT **Collection Date/Time: 04/02/2019 12:15**

Field ID: G5NW0130 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074744	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P361525	
	EPA 300.0	Bromide	27		mg Br/L	P361847	
	SM 2320 B-97	Total Alkalinity	54		mg CaCO3/L	P362101	
	SM 2540 D-97	TSS	4	IA	mg/L	P362044	
	SM 4500 F-C-97	Fluoride	0.54		mg F/L	P362102	
2074746	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P361945	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.16	U	mg N/L	P361755	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P361747	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P361918	
	SM 5310 B-00	Organic Carbon	3.6		mg C/L	P361615	
2074748	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P361529	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500 F-C-97: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P361525

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0
Batch ID: P361847

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361945

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361946

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361950

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361754

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361755

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361735

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361747

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361767

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361918

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361529

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361532

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

Reference Method: EPA 8270D
Batch ID: P361536

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270D
Batch ID: P361536

Component	Result	Code	Units
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 8270D
Batch ID: P361571

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	12	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	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
Ethalfluralin	3.0	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
Hexachlorobenzene	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270D
Batch ID: P361571

Component	Result	Code	Units
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P361571

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

Reference Method: EPA 8321B
Batch ID: P361474

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: P361569

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P361854

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

Reference Method: SM 2320 B-97
Batch ID: P362101

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

Reference Method: SM 2320 B-97
Batch ID: P362175

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

Reference Method: SM 2540 D-97
Batch ID: P362041

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P362042

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P362044

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P362102

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P362181

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P362722

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P361615

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

Reference Method: SM 5310 B-00
Batch ID: P361725

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0
Batch ID: P361847

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361945

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361946

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361950

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361754

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361755

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361735

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: P361747

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361767

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361918

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: P361529

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.9		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361532

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

Reference Method: EPA 8270D
Batch ID: P361536

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	102	102	P/P	71 - 121
Alachlor	89.3	95.7	P/P	72 - 119
Ametryn	102	95.7	P/P	47 - 144
Atrazine	95.3	91.3	P/P	75 - 123
Atrazine Desethyl	74.9	71.1	P/P	45 - 133
Azinphos Methyl	119	117	P/P	66 - 165
Bromacil	91.9	76.2	P/P	43 - 123
Butylate	51.1	49.7	P/P	27 - 83.0
Chlorpyrifos Ethyl	121	111	F/P	70 - 117
Chlorpyrifos Methyl	105	103	P/P	71 - 120
Cyanazine	92.4	81.9	P/P	34 - 264
Demeton	71.3	67.5	P/P	41 - 122
Diazinon	73.3	78.4	P/P	70 - 127
Dimethenamid	108	107	P/P	60 - 130
Disulfoton	91.6	80.7	P/P	56 - 127
Dithiopyr	89.5	96.9	P/P	60 - 130
EPTC	50.0	48.3	P/P	24 - 84.0
Ethion	115	97.8	P/P	53 - 132
Ethoprop	62.8	79.6	P/P	57 - 117
Fenamiphos	94.8	81.2	P/P	55 - 136
Fipronil	86.8	79.8	P/P	64 - 126
Fipronil Desulfinyl	99.1	93.3	P/P	60 - 130
Fipronil Sulfide	92.9	94.4	P/P	57 - 120
Fipronil Sulfone	105	81.1	P/P	52 - 115
Fonofos	76.3	81.3	P/P	61 - 121
Hexazinone	106	108	P/P	62 - 131
Malathion	127	109	F/P	67 - 126
Metalaxyl	89.0	93.1	P/P	54 - 128
Metolachlor	90.5	93.5	P/P	71 - 118
Metribuzin	146	117	P/P	42 - 221
Mevinphos	78.1	84.6	P/P	45 - 114
Molinate	58.6	57.9	P/P	33 - 91.0
Norflurazon	95.2	91.8	P/P	60 - 123
Oxadiazon	84.1	82.1	P/P	60 - 130

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P361536

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Parathion Ethyl	87.0	82.9	P/P	73 - 111
Parathion Methyl	111	116	P/P	74 - 126
Pendimethalin	70.4	84.2	P/P	63 - 131
Phorate	68.4	69.4	P/P	54 - 115
Prodiamine	116	114	P/P	60 - 130
Prometon	96.2	89.5	P/P	61 - 120
Prometryn	95.6	91.1	P/P	62 - 126
Simazine	104	98.6	P/P	75 - 126
Tebuconazole	94.2	86.4	P/P	30 - 100
Terbufos	80.3	78.4	P/P	65 - 116
Terbuthylazine	101	93.8	P/P	73 - 117

Reference Method: EPA 8270D
Batch ID: P361571

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	38.6	46.8	P/P	20 - 93.0
Alpha-BHC	96.1	109	P/P	57 - 119
Alpha-Chlordane	63.9	74.4	P/P	58 - 112
Beta-BHC	105	129	P/P	56 - 149
Bifenthrin	53.7	65.1	P/P	50 - 130
Carbophenothion	61.3	70.6	P/P	26 - 147
Chlorothalonil	131	174	P/F	20 - 155
Cis-Nonachlor	67.0	78.6	P/P	50 - 130
Cypermethrin	58.1	68.9	P/P	40 - 137
DDD-p,p'	93.6	108	P/P	65 - 129
DDE-p,p'	65.0	77.3	P/P	57 - 116
DDT-p,p'	71.3	85.7	P/P	53 - 133
Delta-BHC	110	138	P/P	59 - 163
Dicofol	74.1	87.4	P/P	24 - 138
Dieldrin	70.4	81.1	P/P	60 - 120
Endosulfan I	81.4	95.9	P/P	64 - 118
Endosulfan II	93.3	113	P/P	58 - 142
Endosulfan Sulfate	103	122	P/P	60 - 127
Endrin	72.9	81.9	P/P	59 - 122
Endrin Aldehyde	98.5	108	P/P	49 - 132
Endrin Ketone	87.1	99.9	P/P	64 - 121
Ethalfluralin	70.9	79.9	P/P	50 - 130
Gamma-BHC	99.7	98.5	P/P	56 - 141
Gamma-Chlordane	59.8	70.2	P/P	56 - 110
Heptachlor	63.5	72.2	P/P	46 - 96.0
Heptachlor Epoxide	75.3	85.8	P/P	61 - 112
Hexachlorobenzene	50.5	59.8	P/P	50 - 130
Methoxychlor	95.0	108	P/P	63 - 134
Mirex	41.7	52.3	F/P	45 - 100
Permethrin	48.1	56.8	F/P	53 - 115
Trans-Nonachlor	55.9	65.9	P/P	50 - 130
Trifluralin	67.8	79.5	P/P	39 - 142

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P361571

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	78.6	81.0	P/P	43 - 128
Toxaphene	72.6	74.0	P/P	38 - 140

Reference Method: EPA 8321B
Batch ID: P361474

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	61.3		P	40 - 150
3-Hydroxycarbofuran	67.0		P	40 - 150
Acetaminophen	70.0		P	30 - 150
Aldicarb	70.6		P	30 - 150
Aldicarb Sulfone	84.0		P	40 - 150
Aldicarb Sulfoxide	77.3		P	40 - 150
Bentazon	90.1		P	30 - 150
Carbamazepine	78.8		P	40 - 150
Carbaryl	73.7		P	40 - 150
Carbofuran	68.8		P	40 - 150
Diuron	70.7		P	40 - 150
Fenuron	87.6		P	40 - 150
Fluridone	126		P	40 - 150
Hydrocodone	79.5		P	40 - 150
Ibuprofen	75.5		P	40 - 150
Imazapyr	77.1		P	40 - 150
Imidacloprid	100		P	40 - 150
Linuron	74.2		P	40 - 150
MCPP	67.8		P	40 - 150
Methiocarb	71.6		P	40 - 150
Methomyl	85.0		P	40 - 150
Naproxen	56.9		P	40 - 150
Oxamyl	82.0		P	40 - 150
Primidone	73.8		P	40 - 150
Propoxur	73.9		P	40 - 150
Pyraclostrobin	50.5		P	40 - 150
Triclopyr	48.3		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P361569

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	118		P	40 - 150
AMPA	88.0		P	40 - 150
Endothall	93.0		P	40 - 150
Glufosinate	112		P	40 - 150
Glyphosate	124		P	40 - 140
Sucralose	86.2		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P361854

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P362101

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	98 - 106

Reference Method: SM 2320 B-97
Batch ID: P362175

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

Reference Method: SM 4500 F-C-97
Batch ID: P362102

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.8		P	89 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P362181

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P362722

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P361615

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	102		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P361725

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0
Batch ID: P361847

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2073272	Bromide	97.7	97.9	P/P	90 - 110
2074743	Bromide	99.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361945

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074746	Ammonia-N	101	99.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361946

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074932	Ammonia-N	103	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074745	Ammonia-N	102	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361754

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074639	Kjeldahl Nitrogen	98.2	92.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361755

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074681	Kjeldahl Nitrogen	95.9	99.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074421	NO2NO3-N	95.2	94.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361747

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074682	NO2NO3-N	98.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361767

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074637	Total-P	103	100	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361918

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074746	Total-P	90.0	96.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361529

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074869	O-Phosphate-P	95.6	96.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361532

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074967	O-Phosphate-P	97.6	99.2	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P361536

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074888	Acetochlor	118	111	P/P	63 - 129
2074888	Alachlor	106	107	P/P	65 - 127
2074888	Ametryn	150	138	P/P	40 - 164
2074888	Atrazine Desethyl	114	112	P/P	14 - 157
2074888	Azinphos Methyl	134	132	P/P	49 - 180
2074888	Bromacil	94.1	95.0	P/P	48 - 130
2074888	Butylate	27.6	36.2	P/P	10 - 94.0
2074888	Chlorpyrifos Ethyl	114	132	P/F	58 - 123
2074888	Chlorpyrifos Methyl	142	135	F/F	58 - 125
2074888	Cyanazine	92.3	97.7	P/P	24 - 253
2074888	Demeton	76.7	69.2	P/P	25 - 149
2074888	Diazinon	92.9	113	P/P	59 - 144
2074888	Dimethenamid	124	121	P/P	60 - 130
2074888	Disulfoton	117	122	P/P	54 - 132
2074888	Dithiopyr	106	104	P/P	60 - 130
2074888	EPTC	23.5	33.5	P/P	10 - 92.0
2074888	Ethion	123	117	P/P	30 - 148
2074888	Fenamiphos	107	103	P/P	49 - 142
2074888	Fipronil	93.7	83.9	P/P	46 - 140
2074888	Fipronil Desulfinyl	116	118	P/P	60 - 130
2074888	Fipronil Sulfide	105	104	P/P	31 - 136
2074888	Fipronil Sulfone	127	117	P/P	16 - 136
2074888	Fonofos	108	119	P/P	55 - 129
2074888	Hexazinone	118	115	P/P	56 - 141
2074888	Malathion	140	136	F/F	56 - 135
2074888	Metalaxyl	106	108	P/P	54 - 135
2074888	Mevinphos	95.2	107	P/P	33 - 131
2074888	Molinate	50.4	56.8	P/P	14 - 98.0
2074888	Norflurazon	108	103	P/P	34 - 136
2074888	Oxadiazon	92.7	86.1	P/P	60 - 130
2074888	Parathion Ethyl	96.7	94.3	P/P	66 - 118
2074888	Parathion Methyl	158	130	F/P	64 - 136
2074888	Pendimethalin	93.1	78.6	P/P	59 - 144
2074888	Phorate	91.9	87.8	P/P	42 - 130

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P361536

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074888	Prodiamine	127	130	P/P	60 - 130
2074888	Prometon	94.1	93.9	P/P	59 - 134
2074888	Prometryn	99.0	96.5	P/P	54 - 135
2074888	Tebuconazole	108	106	F/F	30 - 100
2074888	Terbufos	92.4	92.3	P/P	57 - 131
2074888	Terbuthylazine	98.6	96.3	P/P	68 - 125

Reference Method: EPA 8270D
Batch ID: P361571

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2075776	Aldrin	49.6	58.4	P/P	25 - 92.0
2075776	Alpha-BHC	103	111	P/P	49 - 130
2075776	Alpha-Chlordane	76.3	83.4	P/P	50 - 115
2075776	Beta-BHC	188	143	F/P	43 - 157
2075776	Bifenthrin	68.6	80.5	P/P	50 - 130
2075776	Carbophenothion	78.1	75.7	P/P	27 - 180
2075776	Chlorothalonil	132	39.7	P/P	10 - 216
2075776	Cis-Nonachlor	80.9	88.9	P/P	50 - 130
2075776	Cypermethrin	74.9	84.5	P/P	40 - 153
2075776	DDD-p,p'	89.4	97.2	P/P	53 - 128
2075776	DDE-p,p'	72.4	84.7	P/P	48 - 116
2075776	DDT-p,p'	85.9	95.0	P/P	47 - 128
2075776	Delta-BHC	172	165	P/P	51 - 196
2075776	Dicofol	83.1	92.0	P/P	10 - 147
2075776	Dieldrin	84.3	92.1	P/P	48 - 128
2075776	Endosulfan I	85.2	93.3	P/P	58 - 126
2075776	Endosulfan II	109	116	P/P	50 - 150
2075776	Endosulfan Sulfate	93.9	96.3	P/P	56 - 130
2075776	Endrin	85.7	105	P/P	50 - 126
2075776	Endrin Aldehyde	90.1	93.5	P/P	12 - 145
2075776	Endrin Ketone	90.4	99.8	P/P	59 - 132
2075776	Ethalfluralin	72.8	80.7	P/P	50 - 130
2075776	Gamma-BHC	132	227	P/F	50 - 155
2075776	Gamma-Chlordane	72.6	80.5	P/P	50 - 112
2075776	Heptachlor	56.4	66.4	P/P	41 - 98.0
2075776	Heptachlor Epoxide	80.6	88.6	P/P	55 - 117
2075776	Hexachlorobenzene	52.3	57.0	P/P	50 - 130
2075776	Methoxychlor	97.8	108	P/P	55 - 133
2075776	Mirex	56.2	64.0	P/P	44 - 101
2075776	Permethrin	59.7	67.3	P/P	52 - 124
2075776	Trans-Nonachlor	72.4	79.6	P/P	50 - 130
2075776	Trifluralin	74.9	82.9	P/P	10 - 201

Reference Method: EPA 8276
Batch ID: P361571

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2075152	Chlordane	81.6	73.4	P/P	34 - 136
2075152	Toxaphene	86.2	90.9	P/P	22 - 152

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P361474

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074597	3-Hydroxycarbofuran	80.6	97.8	P/P	40 - 150
2074597	Aldicarb	74.4	90.9	P/P	30 - 150
2074597	Aldicarb Sulfone	97.2	99.1	P/P	40 - 150
2074597	Aldicarb Sulfoxide	52.1	59.4	P/P	40 - 150
2074597	Carbaryl	71.3	76.9	P/P	40 - 150
2074597	Carbofuran	63.4	73.0	P/P	40 - 150
2074597	Methiocarb	68.8	72.5	P/P	40 - 150
2074597	Methomyl	91.9	99.3	P/P	40 - 150
2074597	Oxamyl	90.3	96.1	P/P	40 - 150
2074597	Propoxur	73.7	74.3	P/P	40 - 150
2074598	2,4-D	84.7	69.6	P/P	40 - 150
2074598	Acetaminophen	95.9	94.0	P/P	30 - 150
2074598	Bentazon	85.8	80.6	P/P	30 - 150
2074598	Carbamazepine	90.7	85.2	P/P	40 - 150
2074598	Diuron	75.7	73.1	P/P	40 - 150
2074598	Fenuron	109	108	P/P	40 - 150
2074598	Fluridone	150	121	P/P	40 - 150
2074598	Hydrocodone	94.0	86.6	P/P	40 - 150
2074598	Ibuprofen	82.6	73.0	P/P	40 - 150
2074598	Imazapyr	99.2	100	P/P	40 - 150
2074598	Imidacloprid	148	137	P/P	40 - 150
2074598	Linuron	79.7	70.9	P/P	40 - 150
2074598	MCPP	105	90.0	P/P	40 - 150
2074598	Naproxen	78.5	53.5	P/P	40 - 150
2074598	Primidone	83.5	76.6	P/P	40 - 150
2074598	Pyraclostrobin	63.7	57.1	P/P	40 - 150
2074598	Triclopyr	64.7	64.5	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P361569

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074312	Acesulfame K	154	147	F/P	40 - 150
2074312	AMPA	56.8	58.6	P/P	40 - 150
2074312	Endothall	74.8	77.6	P/P	40 - 150
2074312	Glufosinate	94.6	91.0	P/P	40 - 150
2074312	Glyphosate	90.7	69.3	P/P	40 - 140
2074312	Sucralose	102	92.0	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P362181

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2076325	Fluoride	104	103	P/P	89 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P362722

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074740	Fluoride	97.8	97.8	P/P	89 - 106

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P361615

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074683	Organic Carbon	100	99.5	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P361725

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074637	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P361525

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074814	Turbidity	3.15	Sample	P	0 - 20

Reference Method: EPA 300.0
Batch ID: P361847

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2073272	Bromide	0.117	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361945

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074746	Ammonia-N	0.705	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361946

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074932	Ammonia-N	2.47	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074745	Ammonia-N	0.507	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074639	Kjeldahl Nitrogen	3.80	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074681	Kjeldahl Nitrogen	3.73	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074421	NO2NO3-N	0.509	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361747

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074682	NO2NO3-N	0.225	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361767

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074637	Total-P	2.35	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361918

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074746	Total-P	6.27	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361529

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074869	O-Phosphate-P	0.635	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361532

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074967	O-Phosphate-P	1.63	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P361536

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074888	Acetochlor	5.57	Spike	P	0 - 30
2074888	Alachlor	0.421	Spike	P	0 - 30
2074888	Ametryn	8.11	Spike	P	0 - 30
2074888	Atrazine	17.8	Spike	P	0 - 30
2074888	Atrazine Desethyl	1.39	Spike	P	0 - 30
2074888	Azinphos Methyl	1.75	Spike	P	0 - 30
2074888	Bromacil	0.825	Spike	P	0 - 30
2074888	Butylate	27.1	Spike	P	0 - 30
2074888	Chlorpyrifos Ethyl	14.8	Spike	P	0 - 30
2074888	Chlorpyrifos Methyl	5.74	Spike	P	0 - 30
2074888	Cyanazine	5.68	Spike	P	0 - 30
2074888	Demeton	10.2	Spike	P	0 - 30
2074888	Diazinon	19.5	Spike	P	0 - 30
2074888	Dimethenamid	2.22	Spike	P	0 - 30
2074888	Disulfoton	3.41	Spike	P	0 - 30
2074888	Dithiopyr	1.11	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P361536

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074888	EPTC	34.9	Spike	F	0 - 30
2074888	Ethion	5.33	Spike	P	0 - 30
2074888	Ethoprop	2.24	Spike	P	0 - 30
2074888	Fenamiphos	3.99	Spike	P	0 - 30
2074888	Fipronil	9.11	Spike	P	0 - 30
2074888	Fipronil Desulfinyl	1.99	Spike	P	0 - 30
2074888	Fipronil Sulfide	0.731	Spike	P	0 - 30
2074888	Fipronil Sulfone	4.25	Spike	P	0 - 30
2074888	Fonofos	10.2	Spike	P	0 - 30
2074888	Hexazinone	1.33	Spike	P	0 - 30
2074888	Malathion	3.41	Spike	P	0 - 30
2074888	Metalaxyl	1.53	Spike	P	0 - 30
2074888	Metolachlor	13.6	Spike	P	0 - 30
2074888	Metribuzin	6.92	Spike	P	0 - 30
2074888	Mevinphos	12.2	Spike	P	0 - 30
2074888	Molinate	11.9	Spike	P	0 - 30
2074888	Norflurazon	4.48	Spike	P	0 - 30
2074888	Oxadiazon	6.12	Spike	P	0 - 30
2074888	Parathion Ethyl	2.58	Spike	P	0 - 30
2074888	Parathion Methyl	19.8	Spike	P	0 - 30
2074888	Pendimethalin	16.8	Spike	P	0 - 30
2074888	Phorate	4.52	Spike	P	0 - 30
2074888	Prodiamine	1.75	Spike	P	0 - 30
2074888	Prometon	0.239	Spike	P	0 - 30
2074888	Prometryn	2.56	Spike	P	0 - 30
2074888	Simazine	21.9	Spike	P	0 - 30
2074888	Tebuconazole	1.38	Spike	P	0 - 30
2074888	Terbufos	0.147	Spike	P	0 - 30
2074888	Terbuthylazine	2.33	Spike	P	0 - 30
LFB	Acetochlor	0.423	LCS	P	0 - 30
LFB	Alachlor	6.92	LCS	P	0 - 30
LFB	Ametryn	6.43	LCS	P	0 - 30
LFB	Atrazine	4.35	LCS	P	0 - 30
LFB	Atrazine Desethyl	5.31	LCS	P	0 - 30
LFB	Azinphos Methyl	1.64	LCS	P	0 - 30
LFB	Bromacil	18.7	LCS	P	0 - 30
LFB	Butylate	2.65	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	9.23	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	2.53	LCS	P	0 - 30
LFB	Cyanazine	12.1	LCS	P	0 - 30
LFB	Demeton	5.48	LCS	P	0 - 30
LFB	Diazinon	6.79	LCS	P	0 - 30
LFB	Dimethenamid	0.0430	LCS	P	0 - 30
LFB	Disulfoton	12.6	LCS	P	0 - 30
LFB	Dithiopyr	7.92	LCS	P	0 - 30
LFB	EPTC	3.48	LCS	P	0 - 30
LFB	Ethion	15.8	LCS	P	0 - 30
LFB	Ethoprop	23.6	LCS	P	0 - 30
LFB	Fenamiphos	15.4	LCS	P	0 - 30
LFB	Fipronil	8.30	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	5.98	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P361536

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Fipronil Sulfide	1.60	LCS	P	0 - 30
LFB	Fipronil Sulfone	25.3	LCS	P	0 - 30
LFB	Fonofos	6.29	LCS	P	0 - 30
LFB	Hexazinone	1.74	LCS	P	0 - 30
LFB	Malathion	15.9	LCS	P	0 - 30
LFB	Metalaxyl	4.47	LCS	P	0 - 30
LFB	Metolachlor	3.31	LCS	P	0 - 30
LFB	Metribuzin	22.2	LCS	P	0 - 30
LFB	Mevinphos	8.03	LCS	P	0 - 30
LFB	Molinate	1.19	LCS	P	0 - 30
LFB	Norflurazon	3.59	LCS	P	0 - 30
LFB	Oxadiazon	2.50	LCS	P	0 - 30
LFB	Parathion Ethyl	4.82	LCS	P	0 - 30
LFB	Parathion Methyl	4.89	LCS	P	0 - 30
LFB	Pendimethalin	17.9	LCS	P	0 - 30
LFB	Phorate	1.50	LCS	P	0 - 30
LFB	Prodiamine	2.06	LCS	P	0 - 30
LFB	Prometon	7.27	LCS	P	0 - 30
LFB	Prometryn	4.88	LCS	P	0 - 30
LFB	Simazine	5.76	LCS	P	0 - 30
LFB	Tebuconazole	8.67	LCS	P	0 - 30
LFB	Terbufos	2.41	LCS	P	0 - 30
LFB	Terbuthylazine	7.15	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P361571

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2075776	Aldrin	16.4	Spike	P	0 - 30
2075776	Alpha-BHC	8.01	Spike	P	0 - 30
2075776	Alpha-Chlordane	8.96	Spike	P	0 - 30
2075776	Beta-BHC	27.4	Spike	P	0 - 30
2075776	Bifenthrin	16.1	Spike	P	0 - 30
2075776	Carbophenothion	3.11	Spike	P	0 - 30
2075776	Chlorothalonil	107	Spike	F	0 - 30
2075776	Cis-Nonachlor	9.35	Spike	P	0 - 30
2075776	Cypermethrin	12.0	Spike	P	0 - 30
2075776	DDD-p,p'	8.39	Spike	P	0 - 30
2075776	DDE-p,p'	15.6	Spike	P	0 - 30
2075776	DDT-p,p'	10.0	Spike	P	0 - 30
2075776	Delta-BHC	3.77	Spike	P	0 - 30
2075776	Dicofol	10.1	Spike	P	0 - 30
2075776	Dieldrin	8.76	Spike	P	0 - 30
2075776	Endosulfan I	9.13	Spike	P	0 - 30
2075776	Endosulfan II	6.28	Spike	P	0 - 30
2075776	Endosulfan Sulfate	2.58	Spike	P	0 - 30
2075776	Endrin	20.2	Spike	P	0 - 30
2075776	Endrin Aldehyde	3.65	Spike	P	0 - 30
2075776	Endrin Ketone	9.84	Spike	P	0 - 30
2075776	Ethalfluralin	10.2	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P361571

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2075776	Gamma-BHC	53.3	Spike	F	0 - 30
2075776	Gamma-Chlordane	10.4	Spike	P	0 - 30
2075776	Heptachlor	16.2	Spike	P	0 - 30
2075776	Heptachlor Epoxide	9.45	Spike	P	0 - 30
2075776	Hexachlorobenzene	8.71	Spike	P	0 - 30
2075776	Methoxychlor	9.75	Spike	P	0 - 30
2075776	Mirex	12.9	Spike	P	0 - 30
2075776	Permethrin	11.9	Spike	P	0 - 30
2075776	Trans-Nonachlor	9.52	Spike	P	0 - 30
2075776	Trifluralin	10.2	Spike	P	0 - 30
LFB	Aldrin	19.1	LCS	P	0 - 30
LFB	Alpha-BHC	13.0	LCS	P	0 - 30
LFB	Alpha-Chlordane	15.1	LCS	P	0 - 30
LFB	Beta-BHC	20.5	LCS	P	0 - 30
LFB	Bifenthrin	19.1	LCS	P	0 - 30
LFB	Carbophenothion	14.1	LCS	P	0 - 30
LFB	Chlorothalonil	28.0	LCS	P	0 - 30
LFB	Cis-Nonachlor	15.8	LCS	P	0 - 30
LFB	Cypermethrin	17.0	LCS	P	0 - 30
LFB	DDD-p,p'	14.5	LCS	P	0 - 30
LFB	DDE-p,p'	17.2	LCS	P	0 - 30
LFB	DDT-p,p'	18.2	LCS	P	0 - 30
LFB	Delta-BHC	22.5	LCS	P	0 - 30
LFB	Dicofol	16.4	LCS	P	0 - 30
LFB	Dieldrin	14.1	LCS	P	0 - 30
LFB	Endosulfan I	16.3	LCS	P	0 - 30
LFB	Endosulfan II	19.2	LCS	P	0 - 30
LFB	Endosulfan Sulfate	16.1	LCS	P	0 - 30
LFB	Endrin	11.7	LCS	P	0 - 30
LFB	Endrin Aldehyde	9.53	LCS	P	0 - 30
LFB	Endrin Ketone	13.7	LCS	P	0 - 30
LFB	Ethalfluralin	11.8	LCS	P	0 - 30
LFB	Gamma-BHC	1.29	LCS	P	0 - 30
LFB	Gamma-Chlordane	16.0	LCS	P	0 - 30
LFB	Heptachlor	12.8	LCS	P	0 - 30
LFB	Heptachlor Epoxide	13.1	LCS	P	0 - 30
LFB	Hexachlorobenzene	16.9	LCS	P	0 - 30
LFB	Methoxychlor	12.3	LCS	P	0 - 30
LFB	Mirex	22.4	LCS	P	0 - 30
LFB	Permethrin	16.4	LCS	P	0 - 30
LFB	Trans-Nonachlor	16.3	LCS	P	0 - 30
LFB	Trifluralin	15.9	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P361571

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2075152	Chlordane	10.6	Spike	P	0 - 30
2075152	Toxaphene	5.28	Spike	P	0 - 30
LFB	Chlordane	2.97	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8276
Batch ID: P361571

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Toxaphene	1.86	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P361474

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074597	3-Hydroxycarbofuran	19.3	Spike	P	0 - 30
2074597	Aldicarb	20.0	Spike	P	0 - 30
2074597	Aldicarb Sulfone	1.91	Spike	P	0 - 30
2074597	Aldicarb Sulfoxide	13.0	Spike	P	0 - 30
2074597	Carbaryl	7.59	Spike	P	0 - 30
2074597	Carbofuran	14.0	Spike	P	0 - 30
2074597	Methiocarb	5.23	Spike	P	0 - 30
2074597	Methomyl	7.76	Spike	P	0 - 30
2074597	Oxamyl	6.23	Spike	P	0 - 30
2074597	Propoxur	0.807	Spike	P	0 - 30
2074598	2,4-D	19.7	Spike	P	0 - 30
2074598	Acetaminophen	2.00	Spike	P	0 - 30
2074598	Bentazon	4.61	Spike	P	0 - 30
2074598	Carbamazepine	6.25	Spike	P	0 - 30
2074598	Diuron	3.49	Spike	P	0 - 30
2074598	Fenuron	1.06	Spike	P	0 - 30
2074598	Fluridone	21.0	Spike	P	0 - 30
2074598	Hydrocodone	8.20	Spike	P	0 - 30
2074598	Ibuprofen	12.3	Spike	P	0 - 30
2074598	Imazapyr	1.02	Spike	P	0 - 30
2074598	Imidacloprid	7.54	Spike	P	0 - 30
2074598	Linuron	11.7	Spike	P	0 - 30
2074598	MCPP	15.0	Spike	P	0 - 30
2074598	Naproxen	37.8	Spike	F	0 - 30
2074598	Primidone	8.70	Spike	P	0 - 30
2074598	Pyraclostrobin	10.8	Spike	P	0 - 30
2074598	Triclopyr	0.379	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P361569

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074312	Acesulfame K	5.18	Spike	P	0 - 30
2074312	AMPA	1.22	Spike	P	0 - 30
2074312	Endothall	3.65	Spike	P	0 - 30
2074312	Glufosinate	3.95	Spike	P	0 - 30
2074312	Glyphosate	21.2	Spike	P	0 - 30
2074312	Sucralose	10.1	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: SM 2320 B-97
Batch ID: P361854

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074374	Total Alkalinity	1.01	Sample	P	0 - 1.6

Reference Method: SM 2320 B-97
Batch ID: P362101

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074613	Total Alkalinity	0.509	Sample	P	0 - 2.8

Reference Method: SM 2320 B-97
Batch ID: P362175

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2076325	Total Alkalinity	9.84	Sample	F	0 - 2.8

Reference Method: SM 4500 F-C-97
Batch ID: P362102

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2075903	Fluoride	0.935	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-97
Batch ID: P362181

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2076325	Fluoride	1.45	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-97
Batch ID: P362722

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074740	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P361615

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074683	Organic Carbon	0.743	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P361725

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074637	Organic Carbon	0.0365	Spike	P	0 - 20

Quality Assurance Report
Precision

* 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: 2074765
Field Sample ID: G5NW0129

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	61.5	P	30 - 160

Lab Sample ID: 2074766
Field Sample ID: G5NW0129

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	68.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	91.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	78.1	P	30 - 160
EPA 8321B	Diuron-d6	67.8	P	30 - 160
EPA 8321B	Endothall-d6	95.8	P	30 - 160
EPA 8321B	Endothall-d6	95.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	127	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	127	P	30 - 160
EPA 8321B	Ibuprofen-d3	93.2	P	30 - 160
EPA 8321B	Primidone-d5	85.1	P	30 - 160
EPA 8321B	Sucralose-d6	95.6	P	30 - 160
EPA 8321B	Sucralose-d6	95.6	P	30 - 160

Lab Sample ID: 2074767
Field Sample ID: G4NW0492

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	77.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	86.9	P	30 - 160
EPA 8321B	Diuron-d6	75.1	P	30 - 160
EPA 8321B	Endothall-d6	283	F	30 - 160
EPA 8321B	Endothall-d6	283	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	115	P	30 - 160
EPA 8321B	Primidone-d5	83.0	P	30 - 160
EPA 8321B	Sucralose-d6	59.8	P	30 - 160
EPA 8321B	Sucralose-d6	59.8	P	30 - 160

Lab Sample ID: 2074768
Field Sample ID: G4NW0483

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	76.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	105	P	30 - 160
EPA 8321B	Carbamazepine-d10	82.7	P	30 - 160
EPA 8321B	Diuron-d6	75.3	P	30 - 160
EPA 8321B	Endothall-d6	134	P	30 - 160
EPA 8321B	Endothall-d6	134	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	104	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	104	P	30 - 160
EPA 8321B	Ibuprofen-d3	116	P	30 - 160
EPA 8321B	Primidone-d5	66.1	P	30 - 160
EPA 8321B	Sucralose-d6	95.0	P	30 - 160
EPA 8321B	Sucralose-d6	95.0	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2074769
Field Sample ID: G5NW0129

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	71.7	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	43.5	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	48.1	P	30 - 103
EPA 8276	PCNB	125	P	37 - 143

Lab Sample ID: 2074770
Field Sample ID: G5NW0129

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	98.9	P	68 - 130
EPA 8270D	Terbufos-d10	91.4	P	61 - 136

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A90416
Included Lab Sample IDs: 2074740, 2074743, 2074744

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A90417
Included Lab Sample IDs: 2074742, 2074747, 2074748

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.1	97.6	P/P	90 - 110
O-Phosphate-P	97.6	97.7	P/P	90 - 110
O-Phosphate-P	97.9	97.1	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A90463
Included Lab Sample IDs: 2074746

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

Reference Method: SM 5310 B-00
Run ID: A90508
Included Lab Sample IDs: 2074741, 2074745

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A90516
Included Lab Sample IDs: 2074745

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A90517
Included Lab Sample IDs: 2074766, 2074767

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	71.0	91.4	P/P	60 - 160
Glufosinate	98.6	110	P/P	60 - 160
Glyphosate	99.8	115	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A90521
Included Lab Sample IDs: 2074766, 2074767, 2074768

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	122	60.1	P/P	60 - 160
Acesulfame K	157	95.4	P/P	60 - 160
Acesulfame K	60.1	75.6	P/P	60 - 160
Endothall	107	110	P/P	60 - 160
Endothall	110	106	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A90521
Included Lab Sample IDs: 2074766, 2074767, 2074768

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endothall	98.5	108	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A90524
Included Lab Sample IDs: 2074741, 2074746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	98.0	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A90550
Included Lab Sample IDs: 2074768

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	108	97.7	P/P	60 - 160
Glufosinate	108	106	P/P	60 - 160
Glyphosate	97.2	107	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A90554
Included Lab Sample IDs: 2074745

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: A90560
Included Lab Sample IDs: 2074740

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

Reference Method: EPA 300.0
Run ID: A90561
Included Lab Sample IDs: 2074740, 2074743, 2074744

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	99.3	99.0	P/P	90 - 110
Bromide	99.6	100	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A90572
Included Lab Sample IDs: 2074766, 2074767, 2074768

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	100	95.6	P/P	60 - 160
Sucralose	62.1	100	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8276
Run ID: A90584
Included Lab Sample IDs: 2074769

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.7		P	80 - 120
Toxaphene	97.6		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A90592
Included Lab Sample IDs: 2074741, 2074745, 2074746

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	98.6	P/P	90 - 110
Kjeldahl Nitrogen	99.3	105	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A90596
Included Lab Sample IDs: 2074741, 2074746

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A90598
Included Lab Sample IDs: 2074745

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

Reference Method: EPA 8270D
Run ID: A90617
Included Lab Sample IDs: 2074769

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Alpha-BHC	95.9		P	80 - 120
Alpha-Chlordane	90.7		P	80 - 120
Beta-BHC	86.5		P	80 - 120
Bifenthrin	93.3		P	80 - 120
Carbophenothion	82.8		P	80 - 120
Chlorothalonil	90.4		P	80 - 120
Cis-Nonachlor	92.2		P	80 - 120
Cypermethrin	85.3		P	80 - 120
DDD-p,p'	98.8		P	80 - 120
DDE-p,p'	95.8		P	80 - 120
DDT-p,p'	103		P	80 - 120
Delta-BHC	85.6		P	80 - 120
Dicofol	98.1		P	80 - 120
Dieldrin	94.8		P	80 - 120
Endosulfan I	91.7		P	80 - 120
Endosulfan II	98.9		P	80 - 120
Endosulfan Sulfate	93.5		P	80 - 120
Endrin	91.1		P	80 - 120
Endrin Aldehyde	92.6		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270D
Run ID: A90617
Included Lab Sample IDs: 2074769

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endrin Ketone	92.9		P	80 - 120
Ethalfluralin	93.9		P	80 - 120
Gamma-BHC	95.5		P	80 - 120
Gamma-Chlordane	90.8		P	80 - 120
Heptachlor	97.2		P	80 - 120
Heptachlor Epoxide	92.6		P	80 - 120
Hexachlorobenzene	96.5		P	80 - 120
Methoxychlor	104		P	80 - 120
Mirex	92.7		P	80 - 120
Permethrin	90.1		P	80 - 120
Trans-Nonachlor	90.9		P	80 - 120
Trifluralin	95.5		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A90691
Included Lab Sample IDs: 2074741, 2074746

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

Reference Method: SM 2320 B-97
Run ID: A90692
Included Lab Sample IDs: 2074744

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	99.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A90692
Included Lab Sample IDs: 2074744

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

Reference Method: SM 2320 B-97
Run ID: A90703
Included Lab Sample IDs: 2074743

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.3	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A90703
Included Lab Sample IDs: 2074743

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	106	105	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A90744
Included Lab Sample IDs: 2074765

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	109	112	P/P	60 - 150
Aldicarb	114	118	P/P	60 - 150
Aldicarb Sulfone	107	110	P/P	50 - 150
Aldicarb Sulfoxide	103	104	P/P	50 - 150
Carbaryl	100	100	P/P	60 - 150
Carbofuran	94.3	103	P/P	50 - 150
Methiocarb	107	105	P/P	50 - 150
Methomyl	103	117	P/P	50 - 150
Oxamyl	102	96.5	P/P	50 - 150
Propoxur	102	103	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A90784
Included Lab Sample IDs: 2074766, 2074767, 2074768

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	89.7	95.8	P/P	50 - 150
Acetaminophen	113	110	P/P	60 - 160
Bentazon	113	127	P/P	50 - 160
Carbamazepine	107	90.9	P/P	60 - 150
Diuron	105	102	P/P	60 - 150
Fenuron	109	99.4	P/P	60 - 150
Fluridone	128	102	P/P	60 - 160
Hydrocodone	104	104	P/P	60 - 150
Ibuprofen	124	99.2	P/P	50 - 160
Imazapyr	111	92.6	P/P	50 - 150
Imidacloprid	99.3	105	P/P	60 - 150
Linuron	90.8	97.2	P/P	60 - 150
MCPP	95.0	90.0	P/P	50 - 150
Naproxen	85.5	115	P/P	50 - 160
Primidone	88.9	103	P/P	60 - 150
Pyraclostrobin	99.6	96.5	P/P	60 - 150
Triclopyr	96.3	98.9	P/P	50 - 150

Reference Method: EPA 8270D
Run ID: A90911
Included Lab Sample IDs: 2074770

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	94.6		P	80 - 120
Alachlor	112		P	80 - 120
Ametryn	108		P	80 - 120
Atrazine	97.1		P	80 - 120
Atrazine Desethyl	99.4		P	80 - 120
Azinphos Methyl	109		P	80 - 120
Bromacil	97.8		P	80 - 120
Butylate	95.2		P	80 - 120
Chlorpyrifos Ethyl	104		P	80 - 120
Chlorpyrifos Methyl	100		P	80 - 120
Cyanazine	97.7		P	80 - 120
Demeton	100		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270D
Run ID: A90911
Included Lab Sample IDs: 2074770

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diazinon	95.3		P	80 - 120
Dimethenamid	98.1		P	80 - 120
Disulfoton	91.5		P	80 - 120
Dithiopyr	106		P	80 - 120
EPTC	95.2		P	80 - 120
Ethion	89.5		P	80 - 120
Ethoprop	90.7		P	80 - 120
Fenamiphos	93.4		P	80 - 120
Fipronil	107		P	80 - 120
Fipronil Desulfinyl	113		P	80 - 120
Fipronil Sulfide	115		P	80 - 120
Fipronil Sulfone	87.4		P	80 - 120
Fonofos	92.3		P	80 - 120
Hexazinone	98.3		P	80 - 120
Malathion	101		P	80 - 120
Metalaxyl	105		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	118		P	80 - 120
Mevinphos	91.3		P	80 - 120
Molinate	96.6		P	80 - 120
Norflurazon	99.8		P	80 - 120
Oxadiazon	89.7		P	80 - 120
Parathion Ethyl	96.2		P	80 - 120
Parathion Methyl	109		P	80 - 120
Pendimethalin	93.7		P	80 - 120
Phorate	89.8		P	80 - 120
Prodiamine	107		P	80 - 120
Prometon	103		P	80 - 120
Prometryn	106		P	80 - 120
Simazine	107		P	80 - 120
Tebuconazole	104		P	80 - 120
Terbufos	89.9		P	80 - 120
Terbuthylazine	102		P	80 - 120

Reference Method: SM 4500 F-C-97
Run ID: A90948
Included Lab Sample IDs: 2074740

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.6	99.0	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							3.15	
EPA 300.0	Bromide	102		97.7	97.9	99.9			0.117
EPA 350.1 Rev. 2.0	Ammonia-N	102		101	99.9				0.705
	Ammonia-N	101		103	100				2.47
	Ammonia-N	104		102	101				0.507
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100		98.2	92.4				3.80
	Kjeldahl Nitrogen	98.3		95.9	99.9				3.73
EPA 353.2 Rev. 2.0	NO2NO3-N	100		95.2	94.7				0.509
	NO2NO3-N	100		98.0					0.225
EPA 365.1 Rev. 2.0	Total-P	105		103	100				2.35
	Total-P	100		90.0	96.0				6.27
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.9		95.6	96.5				0.635
	O-Phosphate-P	98.8		97.6	99.2				1.63
EPA 8270D	Acetochlor	102	102	118	111		0.423		5.57
	Alachlor	89.3	95.7	106	107		6.92		0.421
	Aldrin	38.6	46.8	49.6	58.4		19.1		16.4
	Alpha-BHC	96.1	109	103	111		13.0		8.01
	Alpha-Chlordane	63.9	74.4	76.3	83.4		15.1		8.96
	Ametryn	102	95.7	150	138		6.43		8.11
	Atrazine	91.3	95.3				4.35		17.8
	Atrazine Desethyl	71.1	74.9	114	112		5.31		1.39
	Azinphos Methyl	117	119	134	132		1.64		1.75
	Beta-BHC	105	129	188	143		20.5		27.4
	Bifenthrin	53.7	65.1	68.6	80.5		19.1		16.1
	Bromacil	76.2	91.9	94.1	95.0		18.7		0.825
	Butylate	49.7	51.1	27.6	36.2		2.65		27.1
	Carbophenothion	61.3	70.6	78.1	75.7		14.1		3.11
	Chlorothalonil	131	174	132	39.7		28.0		107
	Chlorpyrifos Ethyl	111	121	114	132		9.23		14.8
	Chlorpyrifos Methyl	105	103	142	135		2.53		5.74
	Cis-Nonachlor	67.0	78.6	80.9	88.9		15.8		9.35
	Cyanazine	92.4	81.9	92.3	97.7		12.1		5.68
	Cypermethrin	58.1	68.9	74.9	84.5		17.0		12.0
	DDD-p,p'	93.6	108	89.4	97.2		14.5		8.39
	DDE-p,p'	65.0	77.3	72.4	84.7		17.2		15.6
	DDT-p,p'	71.3	85.7	85.9	95.0		18.2		10.0
	Delta-BHC	110	138	172	165		22.5		3.77
	Demeton	71.3	67.5	76.7	69.2		5.48		10.2
	Diazinon	73.3	78.4	92.9	113		6.79		19.5
	Dicofol	74.1	87.4	83.1	92.0		16.4		10.1
	Dieldrin	70.4	81.1	84.3	92.1		14.1		8.76
	Dimethenamid	108	107	124	121		0.0430		2.22
	Disulfoton	91.6	80.7	117	122		12.6		3.41
	Dithiopyr	89.5	96.9	106	104		7.92		1.11
	Endosulfan I	81.4	95.9	85.2	93.3		16.3		9.13
	Endosulfan II	93.3	113	109	116		19.2		6.28
	Endosulfan Sulfate	103	122	93.9	96.3		16.1		2.58
	Endrin	72.9	81.9	85.7	105		11.7		20.2
	Endrin Aldehyde	98.5	108	90.1	93.5		9.53		3.65
	Endrin Ketone	87.1	99.9	90.4	99.8		13.7		9.84
	EPTC	50.0	48.3	23.5	33.5		3.48		34.9
	Ethalfluralin	70.9	79.9	72.8	80.7		11.8		10.2
	Ethion	115	97.8	123	117		15.8		5.33
	Ethoprop	62.8	79.6				23.6		2.24

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270D	Fenamiphos	94.8	81.2	107	103	15.4		3.99
	Fipronil	86.8	79.8	93.7	83.9	8.30		9.11
	Fipronil Desulfinyl	99.1	93.3	116	118	5.98		1.99
	Fipronil Sulfide	92.9	94.4	105	104	1.60		0.731
	Fipronil Sulfone	105	81.1	127	117	25.3		4.25
	Fonofos	76.3	81.3	108	119	6.29		10.2
	Gamma-BHC	99.7	98.5	227	132	1.29		53.3
	Gamma-Chlordane	59.8	70.2	72.6	80.5	16.0		10.4
	Heptachlor	63.5	72.2	56.4	66.4	12.8		16.2
	Heptachlor Epoxide	75.3	85.8	80.6	88.6	13.1		9.45
	Hexachlorobenzene	50.5	59.8	52.3	57.0	16.9		8.71
	Hexazinone	106	108	118	115	1.74		1.33
	Malathion	127	109	140	136	15.9		3.41
	Metalaxyl	89.0	93.1	106	108	4.47		1.53
	Methoxychlor	95.0	108	97.8	108	12.3		9.75
	Metolachlor	90.5	93.5			3.31		13.6
	Metribuzin	146	117			22.2		6.92
	Mevinphos	78.1	84.6	95.2	107	8.03		12.2
	Mirex	41.7	52.3	56.2	64.0	22.4		12.9
	Molinate	58.6	57.9	50.4	56.8	1.19		11.9
	Norflurazon	95.2	91.8	108	103	3.59		4.48
	Oxadiazon	84.1	82.1	92.7	86.1	2.50		6.12
	Parathion Ethyl	87.0	82.9	96.7	94.3	4.82		2.58
	Parathion Methyl	111	116	158	130	4.89		19.8
	Pendimethalin	84.2	70.4	93.1	78.6	17.9		16.8
	Permethrin	48.1	56.8	59.7	67.3	16.4		11.9
	Phorate	69.4	68.4	91.9	87.8	1.50		4.52
	Prodiamine	114	116	127	130	2.06		1.75
	Prometon	89.5	96.2	94.1	93.9	7.27		0.239
	Prometryn	91.1	95.6	99.0	96.5	4.88		2.56
	Simazine	98.6	104			5.76		21.9
	Tebuconazole	86.4	94.2	108	106	8.67		1.38
	Terbufos	78.4	80.3	92.4	92.3	2.41		0.147
	Terbuthylazine	93.8	101	98.6	96.3	7.15		2.33
	Trans-Nonachlor	55.9	65.9	72.4	79.6	16.3		9.52
	Trifluralin	67.8	79.5	74.9	82.9	15.9		10.2
EPA 8276	Chlordane	78.6	81.0	81.6	73.4	2.97		10.6
	Toxaphene	72.6	74.0	86.2	90.9	1.86		5.28
EPA 8321B	2,4-D	61.3		69.6	84.7			19.7
	3-Hydroxycarbofuran	67.0		80.6	97.8			19.3
	Acesulfame K	118		154	147			5.18
	Acetaminophen	70.0		94.0	95.9			2.00
	Aldicarb	70.6		74.4	90.9			20.0
	Aldicarb Sulfone	84.0		97.2	99.1			1.91
	Aldicarb Sulfoxide	77.3		52.1	59.4			13.0
	AMPA	88.0		56.8	58.6			1.22
	Bentazon	90.1		80.6	85.8			4.61
	Carbamazepine	78.8		85.2	90.7			6.25
	Carbaryl	73.7		71.3	76.9			7.59
	Carbofuran	68.8		63.4	73.0			14.0
	Diuron	70.7		73.1	75.7			3.49
	Endothall	93.0		74.8	77.6			3.65
	Fenuron	87.6		108	109			1.06
	Fluridone	126		121	150			21.0

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Glufosinate	112	94.6	91.0			3.95
	Glyphosate	124	90.7	69.3			21.2
	Hydrocodone	79.5	86.6	94.0			8.20
	Ibuprofen	75.5	73.0	82.6			12.3
	Imazapyr	77.1	100	99.2			1.02
	Imidacloprid	100	137	148			7.54
	Linuron	74.2	70.9	79.7			11.7
	MCPP	67.8	90.0	105			15.0
	Methiocarb	71.6	68.8	72.5			5.23
	Methomyl	85.0	91.9	99.3			7.76
	Naproxen	56.9	53.5	78.5			37.8
	Oxamyl	82.0	90.3	96.1			6.23
	Primidone	73.8	76.6	83.5			8.70
	Propoxur	73.9	73.7	74.3			0.807
	Pyraclostrobin	50.5	57.1	63.7			10.8
	Sucralose	86.2	102	92.0			10.1
	Triclopyr	48.3	64.5	64.7			0.379
SM 2320 B-97	Total Alkalinity	101				1.01	
	Total Alkalinity	100				0.509	
	Total Alkalinity	101				9.84	
SM 4500 F-C-97	Fluoride	98.8					0.935
	Fluoride	102	104	103			1.45
	Fluoride	97.2	97.8	97.8			0.0
SM 5310 B-00	Organic Carbon	102	100	99.5			0.743
	Organic Carbon	103	101	101			0.0365

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2074740, 2074743, 2074744
EPA 300.0 / E31780	Bromide in aqueous matrices	2074740, 2074743, 2074744
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2074741, 2074745, 2074746
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2074741, 2074745, 2074746
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2074741, 2074745, 2074746
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2074741, 2074745, 2074746
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2074742, 2074747, 2074748
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2074769
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2074770
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2074769
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2074765
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2074766, 2074767, 2074768
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2074766, 2074767, 2074768
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2074740, 2074743, 2074744
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2074740, 2074743, 2074744
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2074740, 2074743, 2074744
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2074741, 2074745, 2074746

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	04/03/2019			04/03/2019 16:46	Adrian Shelby	2074740, 2074743, 2074744
EPA 300.0	04/03/2019			04/09/2019 17:32	Lipi Saha	2074743
	04/03/2019			04/09/2019 22:40	Lipi Saha	2074740
	04/03/2019			04/09/2019 22:57	Lipi Saha	2074744
EPA 350.1 Rev. 2.0	04/03/2019			04/09/2019 13:11	Ping Hua	2074745
	04/03/2019			04/09/2019 14:15	Ping Hua	2074746
	04/03/2019			04/09/2019 15:01	Ping Hua	2074741
EPA 351.2 Rev. 2.0	04/03/2019	04/08/2019 15:00	Jhamieka S. Greenwood	04/10/2019 12:31	Joseph Suarez	2074745
	04/03/2019	04/08/2019 15:00	Jhamieka S. Greenwood	04/10/2019 12:59	Joseph Suarez	2074741
	04/03/2019	04/08/2019 15:00	Jhamieka S. Greenwood	04/10/2019 13:00	Joseph Suarez	2074746
EPA 353.2 Rev. 2.0	04/03/2019			04/08/2019 10:18	Beverly Y. Sanders	2074745
	04/03/2019			04/08/2019 12:42	Beverly Y. Sanders	2074741
	04/03/2019			04/08/2019 12:44	Beverly Y. Sanders	2074746
EPA 365.1 Rev. 2.0	04/03/2019	04/08/2019 14:35	Sima Feizi	04/09/2019 15:18	Rosalyn Ballman	2074745
	04/03/2019	04/10/2019 15:35	Sima Feizi	04/12/2019 17:37	Rosalyn Ballman	2074741
	04/03/2019	04/10/2019 15:35	Sima Feizi	04/12/2019 17:38	Rosalyn Ballman	2074746
EPA 365.1 Rev. 2.0 dissolved	04/03/2019			04/03/2019 18:29	Jhamieka S. Greenwood	2074747
	04/03/2019			04/03/2019 18:47	Jhamieka S. Greenwood	2074742
	04/03/2019			04/03/2019 18:53	Jhamieka S. Greenwood	2074748
EPA 8270D	04/03/2019	04/05/2019 08:00	Fe-Val Siddell	04/09/2019 00:58	Vandana T. Nagar	2074770
	04/03/2019	04/05/2019 08:30	Rasheda Ghaffari	04/08/2019 22:48	Arthur Maknenko	2074769
EPA 8276	04/03/2019	04/05/2019 08:30	Rasheda Ghaffari	04/10/2019 02:00	Dinesh Mishra	2074769
EPA 8321B	04/03/2019	04/04/2019 13:30	Rebecca Ware	04/04/2019 19:36	Rebecca Ware	2074767
	04/03/2019	04/04/2019 13:30	Rebecca Ware	04/04/2019 20:04	Rebecca Ware	2074768
	04/03/2019	04/04/2019 13:30	Rebecca Ware	04/05/2019 10:31	Rebecca Ware	2074766
	04/03/2019	04/04/2019 13:30	Rebecca Ware	04/05/2019 16:18	Rebecca Ware	2074766
	04/03/2019	04/04/2019 13:30	Rebecca Ware	04/05/2019 16:26	Rebecca Ware	2074767
	04/03/2019	04/04/2019 13:30	Rebecca Ware	04/09/2019 08:46	Rebecca Ware	2074768
	04/03/2019	04/04/2019 13:30	Rebecca Ware	04/09/2019 21:14	Rebecca Ware	2074766
	04/03/2019	04/04/2019 13:30	Rebecca Ware	04/09/2019 21:28	Rebecca Ware	2074767
	04/03/2019	04/04/2019 13:30	Rebecca Ware	04/09/2019 21:56	Rebecca Ware	2074768
	04/03/2019	04/05/2019 10:00	Hoor Shaik	04/16/2019 00:21	Juyoung Kim	2074765
	04/03/2019	04/05/2019 10:00	Hoor Shaik	04/17/2019 03:27	Juyoung Kim	2074766
	04/03/2019	04/05/2019 10:00	Hoor Shaik	04/17/2019 04:01	Juyoung Kim	2074767
	04/03/2019	04/05/2019 10:00	Hoor Shaik	04/17/2019 04:36	Juyoung Kim	2074768
SM 2320 B-97	04/03/2019			04/09/2019 20:45	Samantha Davila	2074740
	04/03/2019			04/13/2019 04:15	Dale L. Simmons	2074744
	04/03/2019			04/14/2019 01:07	Dale L. Simmons	2074743
SM 2540 D-97	04/03/2019			04/05/2019 15:52	Yijie Li	2074740, 2074743, 2074744
SM 4500 F-C-97	04/03/2019			04/13/2019 01:44	Dale L. Simmons	2074744

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	04/03/2019			04/14/2019 01:07	Dale L. Simmons	2074743
	04/03/2019			04/23/2019 22:48	Dale L. Simmons	2074740
SM 5310 B-00	04/03/2019			04/05/2019 05:57	Julia Storbeck	2074746
	04/03/2019			04/05/2019 18:42	Julia Storbeck	2074741
	04/03/2019			04/05/2019 18:56	Julia Storbeck	2074745