

Chemical Analysis Report

NE-DIST-2019-07-26-01

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

Event Description: **LSJR West Boat**
Request ID: **RQ-2019-07-22-10**
Customer: **NE-DIST**
Project ID: **SMP**

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

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

Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 20-AUG-2019 13:31

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first name.

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: FISHING CRK AT PUBLIC BOAT RAMP OFF SEABOARD AV

Collection Date/Time: 07/25/2019 11:20

Field ID: 20030617

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2106279	EPA 180.1 Rev. 2.0	Turbidity	7.0	A	NTU	P368028	
	EPA 300.0 Rev. 2.1	Chloride	680		mg Cl/L	P368400	
		Sulfate	100		mg SO4/L	P368402	
		Color (true)	60		PCU	P368033	
	SM 2320 B-97	Total Alkalinity	71		mg CaCO3/L	P368375	
	SM 2540 C-97	TDS	1.42E+03	A	mg/L	P368475	
	SM 2540 D-97	TSS	9	IA	mg/L	P368228	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P368378	
2106281	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P368679	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.80		mg N/L	P368155	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P368132	
	EPA 365.1 Rev. 2.0	Total-P	0.18		mg P/L	P368140	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P368108	
2106283	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.087		mg P/L	P368016	
2106311	EPA 200.7 Rev. 4.4	Barium	27.4		ug/L	P368164	
		Calcium	38.7		mg/L	P368164	
		Iron	270		ug/L	P368164	
		Magnesium	48.8		mg/L	P368164	
		Potassium	15.8		mg/L	P368164	
		Sodium	413		mg/L	P368164	
		Zinc	5.0	U	ug/L	P368164	
	EPA 200.8 Rev. 5.4	Aluminum	141		ug/L	P368164	
		Antimony	0.27		ug/L	P368164	
		Arsenic	3.22		ug/L	P368164	
		Boron**	209		ug/L	P368164	
		Cadmium	0.020	U	ug/L	P368164	
		Chromium	0.46	I	ug/L	P368164	
		Copper	1.92		ug/L	P368164	
		Lead	1.14		ug/L	P368164	
		Nickel	0.50	U	ug/L	P368164	
		Selenium	0.20	U	ug/L	P368164	
		Silver	0.010	U	ug/L	P368164	
		Thallium	0.10	U	ug/L	P368164	

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: ORTEGA R BR ROOSEVELT BLVD US 17

Collection Date/Time: 07/25/2019 11:55

Field ID: 20030077

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2106273	EPA 180.1 Rev. 2.0	Turbidity	6.4		NTU	P368027	
	EPA 300.0	Bromide	3.7		mg Br/L	P368406	
	SM 2320 B-97	Total Alkalinity	69		mg CaCO3/L	P368375	
	SM 2540 D-97	TSS	9	I	mg/L	P368228	
	SM 4500 F-C-97	Fluoride	0.17		mg F/L	P368378	
2106275	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P368679	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82		mg N/L	P368155	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P368132	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P368140	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P368107	
2106277	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.064		mg P/L	P368016	
2106309	EPA 200.7 Rev. 4.4	Iron	180		ug/L	P368164	
		Manganese	20.6		ug/L	P368164	
		Zinc	5.0	U	ug/L	P368164	
	EPA 200.8 Rev. 5.4	Aluminum	169		ug/L	P368164	
		Antimony	0.20		ug/L	P368164	
		Arsenic	2.65		ug/L	P368164	
		Cadmium	0.020	U	ug/L	P368164	
		Chromium	0.41	I	ug/L	P368164	
		Copper	2.50		ug/L	P368164	
		Lead	0.89		ug/L	P368164	
		Nickel	0.50	U	ug/L	P368164	
		Selenium	0.20	U	ug/L	P368164	
		Silver	0.010	U	ug/L	P368164	
		Thallium	0.10	U	ug/L	P368164	

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: CEDAR CR BLANDING BLVD BR RT 21

Collection Date/Time: 07/25/2019 10:50

Field ID: 20030083

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2106274	EPA 180.1 Rev. 2.0	Turbidity	6.5		NTU	P368027	
	EPA 300.0	Bromide	0.88		mg Br/L	P368406	
	SM 2320 B-97	Total Alkalinity	89		mg CaCO3/L	P368375	
	SM 2540 D-97	TSS	8	I	mg/L	P368228	
	SM 4500 F-C-97	Fluoride	0.14		mg F/L	P368378	
2106276	EPA 350.1 Rev. 2.0	Ammonia-N	0.047		mg N/L	P368679	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.71		mg N/L	P368155	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.021		mg N/L	P368132	
	EPA 365.1 Rev. 2.0	Total-P	0.18		mg P/L	P368140	
	SM 5310 B-00	Organic Carbon	8.9		mg C/L	P368107	
2106278	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.11		mg P/L	P368016	
2106310	EPA 200.7 Rev. 4.4	Iron	200		ug/L	P368164	
		Manganese	20.7		ug/L	P368164	
		Zinc	6.5	I	ug/L	P368164	
	EPA 200.8 Rev. 5.4	Aluminum	173		ug/L	P368164	
		Antimony	0.44		ug/L	P368164	
		Arsenic	3.35		ug/L	P368164	
		Cadmium	0.020	U	ug/L	P368164	
		Chromium	0.51	I	ug/L	P368164	
		Copper	1.90		ug/L	P368164	
		Lead	1.40		ug/L	P368164	
		Nickel	0.57	I	ug/L	P368164	
		Selenium	0.20	U	ug/L	P368164	
		Silver	0.010	U	ug/L	P368164	
		Thallium	0.10	U	ug/L	P368164	

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: GOODBYS CR @ SR-13

Collection Date/Time: 07/25/2019 12:40

Field ID: 20030518

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes		
2106270	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P368027			
	EPA 300.0	Bromide	0.24		mg Br/L	P368406			
	SM 2320 B-97	Total Alkalinity	80		mg CaCO3/L	P368375			
	SM 2540 D-97	TSS	6	I	mg/L	P368227			
	SM 4500 F-C-97	Fluoride	0.093	I	mg F/L	P368378			
2106271	EPA 350.1 Rev. 2.0	Ammonia-N	0.046		mg N/L	P368679			
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.72		mg N/L	P368155			
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.056		mg N/L	P368132			
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P368140			
	SM 5310 B-00	Organic Carbon	11		mg C/L	P368107			
2106272	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.052		mg P/L	P368016			
2106298	EPA 8321B	Aldicarb	0.020	U	ug/L	P367818			
		Aldicarb Sulfone	0.0020	U	ug/L	P367818			
		Aldicarb Sulfoxide	0.0020	U	ug/L	P367818	RPD		
		Carbaryl	0.0020	U	ug/L	P367818			
		Carbofuran	0.0020	U	ug/L	P367818			
		3-Hydroxycarbofuran	0.0020	U	ug/L	P367818			
		Methiocarb	0.0020	U	ug/L	P367818			
		Methomyl	0.0020	U	ug/L	P367818			
		Oxamyl	0.0020	U	ug/L	P367818			
		Propoxur	0.0020	U	ug/L	P367818			
		2106299		2,4-D	0.062		ug/L	P367818	
				Acesulfame K**	0.10	U	ug/L	P368170	
				AMPA**	0.22	I	ug/L	P368170	
Sucralose**	0.11				ug/L	P368170			
Acetaminophen**	0.0080			U	ug/L	P367818			
Endothall**	0.25			U	ug/L	P368170			
Glufosinate**	0.10			U	ug/L	P368170			
Glyphosate**	0.37			I	ug/L	P368170			
Bentazon	0.060				ug/L	P367818			
Carbamazepine**	8.0E-04			U	ug/L	P367818			
Diuron	0.016				ug/L	P367818			
Fenuron	0.016			U	ug/L	P367818			
Fluridone**	0.12				ug/L	P367818			
Imazapyr**	0.33				ug/L	P367818			
Hydrocodone**	0.0020			U	ug/L	P367818			
Ibuprofen**	0.020			U	ug/L	P367818			
Imidacloprid	0.19				ug/L	P367818	MS		
Linuron	0.0040			U	ug/L	P367818			
MCPP	0.013				ug/L	P367818	MS		
Naproxen**	0.0080	U	ug/L	P367818					
Primidone**	0.0040	U	ug/L	P367818					
Pyraclostrobin**	0.0020	U	ug/L	P367818					

Field ID: 20030518

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2106299	EPA 8321B	Triclopyr**	0.0040	U	ug/L	P367818	MS
2106302	EPA 8270E	Aldrin	4.1	U	ng/L	P368067	
		Alpha-BHC	2.1	U	ng/L	P368067	MS
		Alpha-Chlordane	1.0	U	ng/L	P368067	
		Beta-BHC	10	UJ	ng/L	P368067	LCS, MS
		Bifenthrin**	4.1	U	ng/L	P368067	
		Delta-BHC	8.3	U	ng/L	P368067	
		Gamma-BHC	8.3	UJ	ng/L	P368067	LCS, MS
		Carbophenothion	10	U	ng/L	P368067	
		Chlorothalonil	2.1	U	ng/L	P368067	RPD
		Cis-Nonachlor**	1.0	U	ng/L	P368067	
		Cypermethrin	21	U	ng/L	P368067	
		DDD-p,p'	6.2	U	ng/L	P368067	
		DDE-p,p'	6.2	U	ng/L	P368067	
		DDT-p,p'	7.2	U	ng/L	P368067	
		Dicofol	31	U	ng/L	P368067	
		Dieldrin	4.1	U	ng/L	P368067	
		Endosulfan I	4.1	U	ng/L	P368067	
		Endosulfan II	4.1	U	ng/L	P368067	MS
		Endosulfan Sulfate	2.1	U	ng/L	P368067	
		Endrin	2.1	U	ng/L	P368067	
		Endrin Aldehyde	2.1	U	ng/L	P368067	
		Endrin Ketone	2.1	U	ng/L	P368067	
		Ethalfuralin**	3.1	U	ng/L	P368067	
		Gamma-Chlordane	1.0	U	ng/L	P368067	
		Heptachlor	1.5	U	ng/L	P368067	
		Heptachlor Epoxide	2.1	U	ng/L	P368067	
		Hexachlorobenzene	2.1	U	ng/L	P368067	
		Methoxychlor	4.1	U	ng/L	P368067	MS
		Mirex	2.1	U	ng/L	P368067	RPD
		Permethrin	10	U	ng/L	P368067	
		Trans-Nonachlor**	1.0	U	ng/L	P368067	
		Trifluralin	2.6	U	ng/L	P368067	
	EPA 8276	Chlordane	5.2	U	ng/L	P368067	
		Toxaphene	31	U	ng/L	P368067	
2106303	EPA 8270E	Acetochlor	0.25	U	ng/L	P367888	
		Alachlor	0.25	U	ng/L	P367888	
		Ametryn	0.60	U	ng/L	P367888	
		Atrazine	88		ng/L	P367888	
		Atrazine Desethyl	1.5	UJ	ng/L	P367888	MS, RPD
		Azinphos Methyl	5.0	U	ng/L	P367888	
		Bromacil	0.50	U	ng/L	P367888	
		Butylate	0.40	U	ng/L	P367888	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P367888	
		Chlorpyrifos Methyl	0.10	U	ng/L	P367888	

Field ID: 20030518

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2106303	EPA 8270E	Cyanazine	3.3	UJ	ng/L	P367888	RPD
		Demeton	7.0	UJ	ng/L	P367888	RPD
		Diazinon	0.13	U	ng/L	P367888	
		Dimethenamid**	0.10	U	ng/L	P367888	
		Disulfoton	0.50	UJ	ng/L	P367888	LCS, RPD
		Dithiopyr**	0.44		ng/L	P367888	
		EPTC	1.3	U	ng/L	P367888	
		Ethion	0.15	UJ	ng/L	P367888	RPD
		Ethoprop	0.10	U	ng/L	P367888	
		Fenamiphos	0.50	U	ng/L	P367888	
		Fipronil	2.9		ng/L	P367888	
		Fipronil Desulfinyl**	2.1		ng/L	P367888	
		Fipronil Sulfide	2.9		ng/L	P367888	
		Fipronil Sulfone	5.5		ng/L	P367888	
		Fonofos	0.20	U	ng/L	P367888	
		Hexazinone	8.0		ng/L	P367888	
		Malathion	0.35	U	ng/L	P367888	
		Metalaxyl	0.30	U	ng/L	P367888	
		Metolachlor	0.53	I	ng/L	P367888	
		Metribuzin	0.75	UJ	ng/L	P367888	MS, RPD
		Mevinphos	0.50	U	ng/L	P367888	
		Molinate	0.30	U	ng/L	P367888	
		Norflurazon	0.50	U	ng/L	P367888	
		Oxadiazon**	0.86		ng/L	P367888	
		Parathion Ethyl	0.25	U	ng/L	P367888	
		Parathion Methyl	0.55	U	ng/L	P367888	
		Pendimethalin	1.9	I	ng/L	P367888	
		Phorate	0.25	U	ng/L	P367888	
		Prodiamine**	0.18	U	ng/L	P367888	
		Prometon	0.91	U	ng/L	P367888	
		Prometryn	0.20	U	ng/L	P367888	MS, RPD
		Simazine	6.7		ng/L	P367888	
		Tebuconazole**	0.80	IJ	ng/L	P367888	RPD
		Terbufos	0.10	U	ng/L	P367888	
		Terbutylazine	0.43	U	ng/L	P367888	
2106308	EPA 200.7 Rev. 4.4	Iron	810		ug/L	P368164	
		Manganese	19.5		ug/L	P368164	
		Zinc	5.0	U	ug/L	P368164	
	EPA 200.8 Rev. 5.4	Aluminum	87		ug/L	P368164	
		Antimony	0.18	I	ug/L	P368164	
		Arsenic	2.62		ug/L	P368164	
		Cadmium	0.020	U	ug/L	P368164	
		Chromium	0.42	I	ug/L	P368164	
		Copper	2.11		ug/L	P368164	
		Lead	0.58		ug/L	P368164	

Field ID: 20030518

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2106308	EPA 200.8 Rev. 5.4	Nickel	0.50	U	ug/L	P368164	
		Selenium	0.20	U	ug/L	P368164	
		Silver	0.010	U	ug/L	P368164	
		Thallium	0.10	U	ug/L	P368164	

Ref. Method and Comment:

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

EPA 8321B: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270E: Refer to the narrative for an explanation of QC Codes.

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P368027

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P368028

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P368164

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
Manganese	1.0	U	ug/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: P368164

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
Batch ID: P368406

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368400

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368402

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368679

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368155

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P368132

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P368140

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P368016

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

Reference Method: EPA 8270E
Batch ID: P367888

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	5.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	7.0	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P367888

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

Reference Method: EPA 8270E

Batch ID: P368067

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P368067

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

Reference Method: EPA 8276
Batch ID: P368067

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

Reference Method: EPA 8321B
Batch ID: P367818

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	0.076		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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P367818

Component	Result	Code	Units
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P368170

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

Reference Method: SM 2120 B
Batch ID: P368033

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P368375

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

Reference Method: SM 2540 C-97
Batch ID: P368475

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P368227

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P368228

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P368378

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: P368107

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

Reference Method: SM 5310 B-00
Batch ID: P368108

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: P368164

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	101		P	85 - 115
Calcium	111		P	85 - 115
Iron	104		P	85 - 115
Magnesium	112		P	85 - 115
Manganese	100		P	85 - 115
Potassium	108		P	85 - 115
Sodium	113		P	85 - 115
Zinc	98.1		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368164

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.5		P	85 - 115
Antimony	98.7		P	85 - 115
Arsenic	102		P	85 - 115
Boron	102		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	99.9		P	85 - 115
Copper	99.7		P	85 - 115
Lead	98.2		P	85 - 115
Nickel	99.6		P	85 - 115
Selenium	98.8		P	85 - 115
Silver	102		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0
Batch ID: P368406

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368400

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	95.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368402

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368679

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368155

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.4		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P368132

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: P368140

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	90.6		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P368016

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.2		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P367888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	81.8	90.5	P/P	69 - 122
Alachlor	80.5	89.5	P/P	71 - 120
Ametryn	79.2	84.3	P/P	47 - 138
Atrazine	98.1	92.7	P/P	74 - 124
Atrazine Desethyl	137	71.0	P/P	38 - 138
Azinphos Methyl	100	89.9	P/P	69 - 154
Bromacil	67.7	60.6	P/P	39 - 121
Butylate	55.8	55.0	P/P	27 - 87.0
Chlorpyrifos Ethyl	88.4	92.5	P/P	69 - 118
Chlorpyrifos Methyl	94.6	89.1	P/P	70 - 120
Cyanazine	207	119	P/P	20 - 250
Demeton	81.8	50.2	P/P	39 - 118
Diazinon	92.8	87.7	P/P	68 - 127
Dimethenamid	72.3	90.7	P/P	66 - 125
Disulfoton	85.3	48.7	P/F	52 - 126
Dithiopyr	84.4	93.4	P/P	67 - 127
EPTC	55.5	58.8	P/P	24 - 88.0
Ethion	57.2	93.7	P/P	51 - 132
Ethoprop	96.2	80.2	P/P	58 - 117
Fenamiphos	87.2	81.5	P/P	38 - 139
Fipronil	84.0	87.9	P/P	61 - 124
Fipronil Desulfinyl	78.1	82.9	P/P	47 - 120
Fipronil Sulfide	88.6	88.0	P/P	56 - 119
Fipronil Sulfone	79.6	86.2	P/P	50 - 117
Fonofos	103	82.6	P/P	60 - 121
Hexazinone	91.7	102	P/P	55 - 137
Malathion	90.2	88.1	P/P	66 - 126
Metaxyl	89.6	91.7	P/P	33 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P367888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Metolachlor	82.5	90.3	P/P	69 - 119
Metribuzin	237	82.8	P/P	31 - 238
Mevinphos	92.9	75.8	P/P	42 - 113
Molinate	62.3	64.3	P/P	32 - 96.0
Norflurazon	84.7	88.0	P/P	54 - 123
Oxadiazon	87.0	94.4	P/P	63 - 128
Parathion Ethyl	88.0	88.5	P/P	72 - 111
Parathion Methyl	103	91.5	P/P	74 - 126
Pendimethalin	81.1	80.5	P/P	61 - 131
Phorate	82.0	66.4	P/P	51 - 115
Prodiamine	64.0	73.2	P/P	38 - 144
Prometon	78.8	84.8	P/P	54 - 119
Prometryn	82.6	87.0	P/P	63 - 120
Simazine	108	94.2	P/P	75 - 126
Tebuconazole	36.0	60.1	P/P	20 - 119
Terbufos	94.6	75.0	P/P	64 - 116
Terbutylazine	92.4	90.8	P/P	73 - 117

Reference Method: EPA 8270E
Batch ID: P368067

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	38.4	44.0	P/P	20 - 93.0
Alpha-BHC	102	113	P/P	57 - 119
Alpha-Chlordane	78.0	86.7	P/P	58 - 112
Beta-BHC	116	150	P/F	56 - 149
Bifenthrin	59.5	67.2	P/P	30 - 134
Carbophenothion	70.7	64.3	P/P	26 - 147
Chlorothalonil	131	133	P/P	20 - 155
Cis-Nonachlor	77.2	86.8	P/P	54 - 115
Cypermethrin	69.6	74.5	P/P	40 - 137
DDD-p,p'	91.0	100	P/P	65 - 129
DDE-p,p'	74.8	82.6	P/P	57 - 116
DDT-p,p'	100	106	P/P	53 - 133
Delta-BHC	133	152	P/P	59 - 163
Dicofol	94.4	99.0	P/P	24 - 138
Dieldrin	90.3	97.5	P/P	60 - 120
Endosulfan I	93.4	98.0	P/P	64 - 118
Endosulfan II	103	124	P/P	58 - 142
Endosulfan Sulfate	84.2	100	P/P	60 - 127
Endrin	116	92.7	P/P	59 - 122
Endrin Aldehyde	98.1	113	P/P	49 - 132
Endrin Ketone	82.5	95.5	P/P	64 - 121
Ethalfuralin	85.7	86.0	P/P	60 - 126
Gamma-BHC	137	146	P/F	56 - 141
Gamma-Chlordane	73.2	81.9	P/P	56 - 110
Heptachlor	62.8	73.5	P/P	46 - 96.0
Heptachlor Epoxide	87.4	95.8	P/P	61 - 112
Hexachlorobenzene	68.5	75.9	P/P	44 - 98.0
Methoxychlor	125	130	P/P	63 - 134
Mirex	45.9	51.6	P/P	45 - 100
Permethrin	55.5	60.2	P/P	53 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P368067

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Trans-Nonachlor	70.7	78.8	P/P	47 - 110
Trifluralin	91.0	96.4	P/P	39 - 142

Reference Method: EPA 8276

Batch ID: P368067

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	77.6	81.0	P/P	43 - 128
Toxaphene	58.6	59.5	P/P	38 - 140

Reference Method: EPA 8321B

Batch ID: P367818

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	157		P	40 - 160
3-Hydroxycarbofuran	108		P	40 - 150
Acetaminophen	121		P	30 - 150
Aldicarb	108		P	30 - 150
Aldicarb Sulfone	115		P	40 - 150
Aldicarb Sulfoxide	109		P	40 - 150
Bentazon	111		P	30 - 150
Carbamazepine	108		P	40 - 150
Carbaryl	95.8		P	40 - 150
Carbofuran	95.4		P	40 - 150
Diuron	109		P	40 - 150
Fenuron	109		P	40 - 150
Fluridone	103		P	40 - 150
Hydrocodone	102		P	40 - 150
Ibuprofen	104		P	30 - 150
Imazapyr	75.3		P	40 - 150
Imidacloprid	108		P	40 - 150
Linuron	93.7		P	40 - 150
MCPP	160		P	40 - 160
Methiocarb	89.4		P	40 - 150
Methomyl	94.2		P	40 - 150
Naproxen	133		P	40 - 150
Oxamyl	109		P	40 - 150
Primidone	102		P	40 - 150
Propoxur	91.5		P	40 - 150
Pyraclostrobin	101		P	30 - 150
Triclopyr	108		P	30 - 150

Reference Method: EPA 8321B

Batch ID: P368170

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	87.9		P	40 - 150
AMPA	83.4		P	40 - 150
Endothall	91.4		P	40 - 150
Glufosinate	70.1		P	40 - 150
Glyphosate	83.1		P	40 - 140
Sucralose	93.9		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P368033

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	103		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P368375

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P368378

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P368107

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

Reference Method: SM 5310 B-00
Batch ID: P368108

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P368164

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106308	Barium	96.8		P	80 - 120
2106308	Calcium	104		P	80 - 120
2106308	Iron	100		P	80 - 120
2106308	Magnesium	102		P	80 - 120
2106308	Manganese	96.8		P	80 - 120
2106308	Potassium	103		P	80 - 120
2106308	Sodium	101		P	80 - 120
2106308	Zinc	100		P	80 - 120
2106553	Barium	100	99.8	P/P	80 - 120
2106553	Calcium	108	109	P/P	80 - 120
2106553	Iron	102	103	P/P	80 - 120
2106553	Magnesium	110	111	P/P	80 - 120
2106553	Manganese	99.2	98.8	P/P	80 - 120
2106553	Potassium	109	111	P/P	80 - 120
2106553	Sodium	105	106	P/P	80 - 120
2106553	Zinc	96.8	97.0	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368164

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106308	Aluminum	103		P	80 - 120
2106308	Antimony	102		P	80 - 120
2106308	Arsenic	106		P	80 - 120
2106308	Boron	105		P	80 - 120
2106308	Cadmium	102		P	80 - 120
2106308	Chromium	99.0		P	80 - 120
2106308	Copper	99.4		P	80 - 120
2106308	Lead	101		P	80 - 120
2106308	Nickel	99.6		P	80 - 120
2106308	Selenium	104		P	80 - 120
2106308	Silver	99.9		P	80 - 120
2106308	Thallium	107		P	80 - 120
2106553	Aluminum	101	102	P/P	80 - 120
2106553	Antimony	97.6	97.6	P/P	80 - 120
2106553	Arsenic	101	101	P/P	80 - 120
2106553	Boron	102	105	P/P	80 - 120
2106553	Cadmium	99.5	101	P/P	80 - 120
2106553	Chromium	101	102	P/P	80 - 120
2106553	Copper	99.9	101	P/P	80 - 120
2106553	Lead	97.9	99.5	P/P	80 - 120
2106553	Nickel	91.9	91.9	P/P	80 - 120
2106553	Selenium	98.4	98.1	P/P	80 - 120
2106553	Silver	99.4	99.0	P/P	80 - 120
2106553	Thallium	100	103	P/P	80 - 120

Reference Method: EPA 300.0
Batch ID: P368406

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106270	Bromide	96.8	96.6	P/P	90 - 110
2106631	Bromide	98.1		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368400

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106252	Chloride	95.1		P	90 - 110
2106349	Chloride	97.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368402

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106252	Sulfate	99.5		P	90 - 110
2106349	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106256	Ammonia-N	101	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368155

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106271	Kjeldahl Nitrogen	100	109	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P368132

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106255	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P368140

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106271	Total-P	96.6	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P368016

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106258	O-Phosphate-P	93.6	95.0	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P367888

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P367888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105849	Chlorpyrifos Methyl	86.4	94.6	P/P	58 - 125
2105849	Cyanazine	179	185	P/P	24 - 253
2105849	Demeton	78.8	90.3	P/P	25 - 149
2105849	Diazinon	85.8	97.2	P/P	59 - 144
2105849	Dimethenamid	62.8	68.9	P/P	46 - 139
2105849	Disulfoton	87.1	94.2	P/P	54 - 132
2105849	Dithiopyr	71.9	83.4	P/P	64 - 130
2105849	EPTC	51.0	50.7	P/P	10 - 92.0
2105849	Ethion	52.5	51.5	P/P	30 - 148
2105849	Ethoprop	94.5	99.2	P/P	50 - 130
2105849	Fenamiphos	75.6	78.3	P/P	49 - 142
2105849	Fipronil	72.6	88.1	P/P	46 - 140
2105849	Fipronil Desulfinyl	64.1	78.0	P/P	30 - 121
2105849	Fipronil Sulfide	79.5	95.4	P/P	31 - 136
2105849	Fipronil Sulfone	70.2	89.9	P/P	16 - 136
2105849	Fonofos	103	110	P/P	55 - 129
2105849	Hexazinone	86.7	94.8	P/P	56 - 141
2105849	Malathion	83.3	99.3	P/P	56 - 135
2105849	Metalaxyl	76.2	88.3	P/P	54 - 135
2105849	Metolachlor	70.0	85.0	P/P	51 - 140
2105849	Metribuzin	214	261	P/F	45 - 254
2105849	Mevinphos	88.0	104	P/P	33 - 131
2105849	Molinate	58.2	52.7	P/P	14 - 98.0
2105849	Norflurazon	71.8	84.2	P/P	34 - 136
2105849	Oxadiazon	74.5	84.4	P/P	67 - 116
2105849	Parathion Ethyl	83.3	98.5	P/P	66 - 118
2105849	Parathion Methyl	94.8	109	P/P	64 - 136
2105849	Pendimethalin	89.0	96.8	P/P	59 - 144
2105849	Phorate	88.4	101	P/P	42 - 130
2105849	Prodiamine	47.0	59.2	P/P	42 - 148
2105849	Prometon	78.4	97.0	P/P	59 - 134
2105849	Prometryn	53.1	77.1	F/P	54 - 135
2105849	Simazine	100	116	P/P	53 - 156
2105849	Tebuconazole	30.5	30.9	P/P	10 - 131
2105849	Terbufos	96.0	112	P/P	57 - 131
2105849	Terbutylazine	82.4	96.4	P/P	68 - 125

Reference Method: EPA 8270E
Batch ID: P368067

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106474	Aldrin	68.7	51.3	P/P	25 - 92.0
2106474	Alpha-BHC	147	129	F/P	49 - 130
2106474	Alpha-Chlordane	90.1	77.5	P/P	50 - 115
2106474	Beta-BHC	160	181	F/F	43 - 157
2106474	Bifenthrin	93.7	70.7	P/P	46 - 116
2106474	Carbophenothion	109	84.0	P/P	27 - 180
2106474	Chlorothalonil	117	70.5	P/P	10 - 216
2106474	Cis-Nonachlor	90.5	76.1	P/P	55 - 112
2106474	Cypermethrin	96.4	75.9	P/P	40 - 153
2106474	DDD-p,p'	104	96.7	P/P	53 - 128
2106474	DDE-p,p'	90.8	75.2	P/P	48 - 116

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P368067

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106474	DDT-p,p'	126	107	P/P	47 - 128
2106474	Delta-BHC	193	181	P/P	51 - 196
2106474	Dicofol	101	109	P/P	10 - 147
2106474	Dieldrin	102	90.9	P/P	48 - 128
2106474	Endosulfan I	122	107	P/P	58 - 126
2106474	Endosulfan II	173	149	F/P	50 - 150
2106474	Endosulfan Sulfate	91.2	94.1	P/P	56 - 130
2106474	Endrin	122	110	P/P	50 - 126
2106474	Endrin Aldehyde	93.7	101	P/P	12 - 145
2106474	Endrin Ketone	94.7	96.3	P/P	59 - 132
2106474	Ethalfuralin	114	99.4	P/P	65 - 122
2106474	Gamma-BHC	152	174	P/F	50 - 155
2106474	Gamma-Chlordane	87.9	71.9	P/P	50 - 112
2106474	Heptachlor	79.0	62.0	P/P	41 - 98.0
2106474	Heptachlor Epoxide	95.9	88.4	P/P	55 - 117
2106474	Hexachlorobenzene	83.0	71.0	P/P	47 - 91.0
2106474	Methoxychlor	137	132	F/P	55 - 133
2106474	Mirex	70.6	50.8	P/P	44 - 101
2106474	Permethrin	78.5	59.4	P/P	52 - 124
2106474	Trans-Nonachlor	84.7	69.5	P/P	53 - 99.0
2106474	Trifluralin	109	93.7	P/P	10 - 201

Reference Method: EPA 8276
Batch ID: P368067

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106785	Chlordane	69.5	57.8	P/P	34 - 136
2106785	Toxaphene	47.0	42.1	P/P	22 - 152

Reference Method: EPA 8321B
Batch ID: P367818

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105476	3-Hydroxycarbofuran	104	115	P/P	40 - 150
2105476	Aldicarb	102	109	P/P	30 - 150
2105476	Aldicarb Sulfone	109	116	P/P	40 - 150
2105476	Aldicarb Sulfoxide	85.7	55.0	P/P	40 - 150
2105476	Carbaryl	76.8	84.9	P/P	40 - 150
2105476	Carbofuran	75.2	83.0	P/P	40 - 150
2105476	Methiocarb	72.2	85.7	P/P	40 - 150
2105476	Methomyl	70.1	81.6	P/P	40 - 150
2105476	Oxamyl	99.0	107	P/P	40 - 150
2105476	Propoxur	72.5	82.9	P/P	40 - 150
2105641	Acetaminophen	115	112	P/P	30 - 150
2105641	Bentazon	64.3	66.7	P/P	30 - 150
2105641	Carbamazepine	100	101	P/P	40 - 150
2105641	Diuron	98.8	97.3	P/P	40 - 150
2105641	Fenuron	87.1	85.4	P/P	40 - 150
2105641	Fluridone	107	111	P/P	40 - 150
2105641	Hydrocodone	108	102	P/P	40 - 150
2105641	Ibuprofen	133	125	P/P	30 - 150
2105641	Imazapyr	88.8	84.8	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P367818

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2105641	Imidacloprid	217	226	F/F	40 - 150
2105641	Linuron	94.4	93.6	P/P	40 - 150
2105641	MCP	243	239	F/F	40 - 150
2105641	Naproxen	144	142	P/P	40 - 150
2105641	Primidone	115	99.3	P/P	40 - 150
2105641	Pyraclostrobin	113	118	P/P	30 - 150
2105641	Triclopyr	186	195	F/F	30 - 150

Reference Method: EPA 8321B
Batch ID: P368170

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106299	Acesulfame K	117	96.4	P/P	40 - 150
2106299	AMPA	45.2	44.3	P/P	40 - 150
2106299	Endothall	81.6	83.0	P/P	40 - 150
2106299	Glufosinate	65.8	54.0	P/P	40 - 150
2106299	Glyphosate	61.9	63.2	P/P	40 - 140
2106299	Sucralose	104	94.9	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P368378

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106631	Fluoride	98.4	98.4	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P368107

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106255	Organic Carbon	110	96.6	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P368108

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106319	Organic Carbon	99.8	100	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P368027

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106211	Turbidity	0.404	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P368028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106279	Turbidity	0.568	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P368164

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106553	Barium	0.619	Spike	P	0 - 20
2106553	Calcium	1.01	Spike	P	0 - 20
2106553	Iron	0.438	Spike	P	0 - 20
2106553	Magnesium	1.06	Spike	P	0 - 20
2106553	Manganese	0.391	Spike	P	0 - 20
2106553	Potassium	1.64	Spike	P	0 - 20
2106553	Sodium	0.592	Spike	P	0 - 20
2106553	Zinc	0.265	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P368164

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106553	Aluminum	0.641	Spike	P	0 - 20
2106553	Antimony	0.0409	Spike	P	0 - 20
2106553	Arsenic	0.325	Spike	P	0 - 20
2106553	Boron	2.27	Spike	P	0 - 20
2106553	Cadmium	1.30	Spike	P	0 - 20
2106553	Chromium	0.783	Spike	P	0 - 20
2106553	Copper	1.12	Spike	P	0 - 20
2106553	Lead	1.33	Spike	P	0 - 20
2106553	Nickel	0.0142	Spike	P	0 - 20
2106553	Selenium	0.276	Spike	P	0 - 20
2106553	Silver	0.423	Spike	P	0 - 20
2106553	Thallium	2.19	Spike	P	0 - 20

Reference Method: EPA 300.0
Batch ID: P368406

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106270	Bromide	0.0964	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368400

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106252	Chloride	1.13	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368402

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106252	Sulfate	1.59	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106256	Ammonia-N	0.273	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368155

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106271	Kjeldahl Nitrogen	4.91	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P368132

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106255	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P368140

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106271	Total-P	0.321	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P368016

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106258	O-Phosphate-P	1.48	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P367888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105849	Acetochlor	13.3	Spike	P	0 - 30
2105849	Alachlor	7.98	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P367888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105849	Ametryn	28.6	Spike	P	0 - 30
2105849	Atrazine	13.3	Spike	P	0 - 30
2105849	Atrazine Desethyl	31.4	Spike	F	0 - 30
2105849	Azinphos Methyl	23.9	Spike	P	0 - 30
2105849	Bromacil	13.7	Spike	P	0 - 30
2105849	Butylate	6.12	Spike	P	0 - 30
2105849	Chlorpyrifos Ethyl	8.90	Spike	P	0 - 30
2105849	Chlorpyrifos Methyl	9.05	Spike	P	0 - 30
2105849	Cyanazine	3.00	Spike	P	0 - 30
2105849	Demeton	13.5	Spike	P	0 - 30
2105849	Diazinon	12.5	Spike	P	0 - 30
2105849	Dimethenamid	9.26	Spike	P	0 - 30
2105849	Disulfoton	7.86	Spike	P	0 - 30
2105849	Dithiopyr	14.9	Spike	P	0 - 30
2105849	EPTC	0.613	Spike	P	0 - 30
2105849	Ethion	2.05	Spike	P	0 - 30
2105849	Ethoprop	4.88	Spike	P	0 - 30
2105849	Fenamiphos	3.48	Spike	P	0 - 30
2105849	Fipronil	19.2	Spike	P	0 - 30
2105849	Fipronil Desulfinyl	19.6	Spike	P	0 - 30
2105849	Fipronil Sulfide	18.1	Spike	P	0 - 30
2105849	Fipronil Sulfone	24.6	Spike	P	0 - 30
2105849	Fonofos	6.55	Spike	P	0 - 30
2105849	Hexazinone	6.96	Spike	P	0 - 30
2105849	Malathion	17.5	Spike	P	0 - 30
2105849	Metaxyl	14.8	Spike	P	0 - 30
2105849	Metolachlor	15.8	Spike	P	0 - 30
2105849	Metribuzin	19.9	Spike	P	0 - 30
2105849	Mevinphos	16.6	Spike	P	0 - 30
2105849	Molinate	10.1	Spike	P	0 - 30
2105849	Norflurazon	15.9	Spike	P	0 - 30
2105849	Oxadiazon	12.6	Spike	P	0 - 30
2105849	Parathion Ethyl	16.8	Spike	P	0 - 30
2105849	Parathion Methyl	13.6	Spike	P	0 - 30
2105849	Pendimethalin	8.32	Spike	P	0 - 30
2105849	Phorate	13.5	Spike	P	0 - 30
2105849	Prodiamine	23.0	Spike	P	0 - 30
2105849	Prometon	21.2	Spike	P	0 - 30
2105849	Prometryn	36.9	Spike	F	0 - 30
2105849	Simazine	14.6	Spike	P	0 - 30
2105849	Tebuconazole	1.37	Spike	P	0 - 30
2105849	Terbufos	15.4	Spike	P	0 - 30
2105849	Terbutylazine	15.6	Spike	P	0 - 30
LFB	Acetochlor	10.1	LCS	P	0 - 30
LFB	Alachlor	10.6	LCS	P	0 - 30
LFB	Ametryn	6.17	LCS	P	0 - 30
LFB	Atrazine	5.60	LCS	P	0 - 30
LFB	Atrazine Desethyl	63.7	LCS	F	0 - 30
LFB	Azinphos Methyl	10.7	LCS	P	0 - 30
LFB	Bromacil	10.9	LCS	P	0 - 30
LFB	Butylate	1.44	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P367888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlorpyrifos Ethyl	4.51	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	6.02	LCS	P	0 - 30
LFB	Cyanazine	54.3	LCS	F	0 - 30
LFB	Demeton	47.9	LCS	F	0 - 30
LFB	Diazinon	5.65	LCS	P	0 - 30
LFB	Dimethenamid	22.5	LCS	P	0 - 30
LFB	Disulfoton	54.6	LCS	F	0 - 30
LFB	Dithiopyr	10.1	LCS	P	0 - 30
LFB	EPTC	5.67	LCS	P	0 - 30
LFB	Ethion	48.5	LCS	F	0 - 30
LFB	Ethoprop	18.1	LCS	P	0 - 30
LFB	Fenamiphos	6.80	LCS	P	0 - 30
LFB	Fipronil	4.63	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	5.92	LCS	P	0 - 30
LFB	Fipronil Sulfide	0.723	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.96	LCS	P	0 - 30
LFB	Fonofos	22.4	LCS	P	0 - 30
LFB	Hexazinone	10.4	LCS	P	0 - 30
LFB	Malathion	2.33	LCS	P	0 - 30
LFB	Metalaxyl	2.33	LCS	P	0 - 30
LFB	Metolachlor	8.96	LCS	P	0 - 30
LFB	Metribuzin	96.4	LCS	F	0 - 30
LFB	Mevinphos	20.3	LCS	P	0 - 30
LFB	Molinate	3.29	LCS	P	0 - 30
LFB	Norflurazon	3.82	LCS	P	0 - 30
LFB	Oxadiazon	8.15	LCS	P	0 - 30
LFB	Parathion Ethyl	0.565	LCS	P	0 - 30
LFB	Parathion Methyl	11.4	LCS	P	0 - 30
LFB	Pendimethalin	0.759	LCS	P	0 - 30
LFB	Phorate	21.0	LCS	P	0 - 30
LFB	Prodiamine	13.3	LCS	P	0 - 30
LFB	Prometon	7.36	LCS	P	0 - 30
LFB	Prometryn	5.22	LCS	P	0 - 30
LFB	Simazine	13.4	LCS	P	0 - 30
LFB	Tebuconazole	50.0	LCS	F	0 - 30
LFB	Terbufos	23.1	LCS	P	0 - 30
LFB	Terbutylazine	1.67	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P368067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106474	Aldrin	28.9	Spike	P	0 - 30
2106474	Alpha-BHC	12.9	Spike	P	0 - 30
2106474	Alpha-Chlordane	15.0	Spike	P	0 - 30
2106474	Beta-BHC	12.4	Spike	P	0 - 30
2106474	Bifenthrin	27.9	Spike	P	0 - 30
2106474	Carbophenothion	26.1	Spike	P	0 - 30
2106474	Chlorothalonil	49.8	Spike	F	0 - 30
2106474	Cis-Nonachlor	17.3	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P368067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106474	Cypermethrin	23.8	Spike	P	0 - 30
2106474	DDD-p,p'	7.39	Spike	P	0 - 30
2106474	DDE-p,p'	18.8	Spike	P	0 - 30
2106474	DDT-p,p'	16.8	Spike	P	0 - 30
2106474	Delta-BHC	5.94	Spike	P	0 - 30
2106474	Dicofol	8.30	Spike	P	0 - 30
2106474	Dieldrin	11.6	Spike	P	0 - 30
2106474	Endosulfan I	13.2	Spike	P	0 - 30
2106474	Endosulfan II	14.8	Spike	P	0 - 30
2106474	Endosulfan Sulfate	3.21	Spike	P	0 - 30
2106474	Endrin	11.0	Spike	P	0 - 30
2106474	Endrin Aldehyde	7.40	Spike	P	0 - 30
2106474	Endrin Ketone	1.65	Spike	P	0 - 30
2106474	Ethalfuralin	14.1	Spike	P	0 - 30
2106474	Gamma-BHC	13.4	Spike	P	0 - 30
2106474	Gamma-Chlordane	20.0	Spike	P	0 - 30
2106474	Heptachlor	24.1	Spike	P	0 - 30
2106474	Heptachlor Epoxide	8.17	Spike	P	0 - 30
2106474	Hexachlorobenzene	15.6	Spike	P	0 - 30
2106474	Methoxychlor	3.58	Spike	P	0 - 30
2106474	Mirex	32.6	Spike	F	0 - 30
2106474	Permethrin	27.8	Spike	P	0 - 30
2106474	Trans-Nonachlor	19.6	Spike	P	0 - 30
2106474	Trifluralin	15.3	Spike	P	0 - 30
LFB	Aldrin	13.6	LCS	P	0 - 30
LFB	Alpha-BHC	10.1	LCS	P	0 - 30
LFB	Alpha-Chlordane	10.6	LCS	P	0 - 30
LFB	Beta-BHC	26.1	LCS	P	0 - 30
LFB	Bifenthrin	12.2	LCS	P	0 - 30
LFB	Carbophenothion	9.52	LCS	P	0 - 30
LFB	Chlorothalonil	1.13	LCS	P	0 - 30
LFB	Cis-Nonachlor	11.8	LCS	P	0 - 30
LFB	Cypermethrin	6.78	LCS	P	0 - 30
LFB	DDD-p,p'	9.44	LCS	P	0 - 30
LFB	DDE-p,p'	9.92	LCS	P	0 - 30
LFB	DDT-p,p'	5.82	LCS	P	0 - 30
LFB	Delta-BHC	13.7	LCS	P	0 - 30
LFB	Dicofol	4.82	LCS	P	0 - 30
LFB	Dieldrin	7.75	LCS	P	0 - 30
LFB	Endosulfan I	4.81	LCS	P	0 - 30
LFB	Endosulfan II	18.5	LCS	P	0 - 30
LFB	Endosulfan Sulfate	17.3	LCS	P	0 - 30
LFB	Endrin	22.5	LCS	P	0 - 30
LFB	Endrin Aldehyde	13.8	LCS	P	0 - 30
LFB	Endrin Ketone	14.5	LCS	P	0 - 30
LFB	Ethalfuralin	0.329	LCS	P	0 - 30
LFB	Gamma-BHC	5.95	LCS	P	0 - 30
LFB	Gamma-Chlordane	11.2	LCS	P	0 - 30
LFB	Heptachlor	15.7	LCS	P	0 - 30
LFB	Heptachlor Epoxide	9.20	LCS	P	0 - 30
LFB	Hexachlorobenzene	10.4	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P368067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Methoxychlor	3.65	LCS	P	0 - 30
LFB	Mirex	11.9	LCS	P	0 - 30
LFB	Permethrin	8.08	LCS	P	0 - 30
LFB	Trans-Nonachlor	10.8	LCS	P	0 - 30
LFB	Trifluralin	5.81	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P368067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106785	Chlordane	18.3	Spike	P	0 - 30
2106785	Toxaphene	11.0	Spike	P	0 - 30
LFB	Chlordane	4.35	LCS	P	0 - 30
LFB	Toxaphene	1.51	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P367818

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2105476	3-Hydroxycarbofuran	9.98	Spike	P	0 - 30
2105476	Aldicarb	5.96	Spike	P	0 - 30
2105476	Aldicarb Sulfone	6.62	Spike	P	0 - 30
2105476	Aldicarb Sulfoxide	43.6	Spike	F	0 - 30
2105476	Carbaryl	9.97	Spike	P	0 - 30
2105476	Carbofuran	9.87	Spike	P	0 - 30
2105476	Methiocarb	17.1	Spike	P	0 - 30
2105476	Methomyl	15.1	Spike	P	0 - 30
2105476	Oxamyl	7.92	Spike	P	0 - 30
2105476	Propoxur	13.3	Spike	P	0 - 30
2105641	2,4-D	5.11	Spike	P	0 - 30
2105641	Acetaminophen	2.57	Spike	P	0 - 30
2105641	Bentazon	3.64	Spike	P	0 - 30
2105641	Carbamazepine	0.342	Spike	P	0 - 30
2105641	Diuron	1.41	Spike	P	0 - 30
2105641	Fenuron	2.00	Spike	P	0 - 30
2105641	Fluridone	4.02	Spike	P	0 - 30
2105641	Hydrocodone	5.44	Spike	P	0 - 30
2105641	Ibuprofen	6.38	Spike	P	0 - 30
2105641	Imazapyr	4.31	Spike	P	0 - 30
2105641	Imidacloprid	3.47	Spike	P	0 - 30
2105641	Linuron	0.874	Spike	P	0 - 30
2105641	MCP	1.35	Spike	P	0 - 30
2105641	Naproxen	1.83	Spike	P	0 - 30
2105641	Primidone	14.6	Spike	P	0 - 30
2105641	Pyraclostrobin	4.00	Spike	P	0 - 30
2105641	Triclopyr	5.19	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P368170

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106299	Acesulfame K	19.1	Spike	P	0 - 30
2106299	AMPA	1.29	Spike	P	0 - 30
2106299	Endothall	1.76	Spike	P	0 - 30
2106299	Glufosinate	19.6	Spike	P	0 - 30
2106299	Glyphosate	1.36	Spike	P	0 - 30
2106299	Sucralose	9.13	Spike	P	0 - 30

Reference Method: SM 2120 B
 Batch ID: P368033

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106253	Color (true)	0.674	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P368375

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106631	Total Alkalinity	0.0102	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
 Batch ID: P368475

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106279	TDS	0.281	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P368378

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106631	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
 Batch ID: P368107

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106255	Organic Carbon	6.62	Spike	P	0 - 20

Reference Method: SM 5310 B-00
 Batch ID: P368108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106319	Organic Carbon	0.163	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2106298
Field Sample ID: 20030518

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	75.9	P	30 - 160

Lab Sample ID: 2106299
Field Sample ID: 20030518

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	128	P	30 - 160
EPA 8321B	Acetaminophen-d4	93.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.5	P	30 - 160
EPA 8321B	Diuron-d6	79.1	P	30 - 160
EPA 8321B	Endothall-d6	97.2	P	30 - 160
EPA 8321B	Endothall-d6	97.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	71.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	71.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	116	P	30 - 160
EPA 8321B	Primidone-d5	98.4	P	30 - 160
EPA 8321B	Sucralose-d6	119	P	30 - 160
EPA 8321B	Sucralose-d6	119	P	30 - 160

Lab Sample ID: 2106302
Field Sample ID: 20030518

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	83.5	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	72.4	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	57.9	P	30 - 103
EPA 8276	PCNB	98.3	P	37 - 143

Lab Sample ID: 2106303
Field Sample ID: 20030518

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	98.6	P	68 - 130
EPA 8270E	Terbufos-d10	108	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A93063

Included Lab Sample IDs: 2106272, 2106277, 2106278, 2106283

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.4	98.9	P/P	90 - 110
O-Phosphate-P	98.9	95.6	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A93065

Included Lab Sample IDs: 2106270, 2106273, 2106274, 2106279

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

Reference Method: SM 2120 B

Run ID: A93066

Included Lab Sample IDs: 2106279

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

Reference Method: EPA 8321B

Run ID: A93078

Included Lab Sample IDs: 2106299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	91.0	95.9	P/P	50 - 150
3-Hydroxycarbofuran	112	119	P/P	60 - 150
Acetaminophen	139	141	P/P	60 - 160
Aldicarb	133	98.0	P/P	60 - 150
Aldicarb Sulfone	115	116	P/P	50 - 150
Aldicarb Sulfoxide	104	98.9	P/P	50 - 150
Bentazon	107	104	P/P	50 - 160
Carbamazepine	110	110	P/P	60 - 150
Carbaryl	117	111	P/P	60 - 150
Carbofuran	114	115	P/P	50 - 150
Diuron	117	115	P/P	60 - 150
Fenuron	107	109	P/P	60 - 150
Fluridone	113	111	P/P	60 - 160
Hydrocodone	108	111	P/P	60 - 150
Ibuprofen	84.6	86.7	P/P	50 - 160
Imazapyr	79.2	72.2	P/P	50 - 150
Imidacloprid	97.4	110	P/P	60 - 150
Linuron	110	106	P/P	60 - 150
MCPP	111	112	P/P	50 - 150
Methiocarb	107	114	P/P	50 - 150
Methomyl	104	103	P/P	50 - 150
Naproxen	122	122	P/P	50 - 160
Oxamyl	123	116	P/P	50 - 150
Primidone	99.3	101	P/P	60 - 150
Propoxur	114	114	P/P	50 - 150
Pyraclostrobin	120	114	P/P	60 - 150
Triclopyr	94.9	99.0	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00

Run ID: A93112

Included Lab Sample IDs: 2106271, 2106275, 2106276, 2106281

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A93127

Included Lab Sample IDs: 2106271, 2106275, 2106276, 2106281

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A93147

Included Lab Sample IDs: 2106279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	96.6	97.6	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A93148

Included Lab Sample IDs: 2106303

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A93148
Included Lab Sample IDs: 2106303

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Metribuzin	102		P	80 - 120
Mevinphos	96.1		P	80 - 120
Molinate	93.8		P	80 - 120
Norflurazon	98.9		P	80 - 120
Oxadiazon	104		P	80 - 120
Parathion Ethyl	97.6		P	80 - 120
Parathion Methyl	96.3		P	80 - 120
Pendimethalin	99.7		P	80 - 120
Phorate	96.9		P	80 - 120
Prodiamine	93.1		P	80 - 120
Prometon	98.5		P	80 - 120
Prometryn	104		P	80 - 120
Simazine	94.4		P	80 - 120
Tebuconazole	99.6		P	80 - 120
Terbufos	95.4		P	80 - 120
Terbutylazine	96.4		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A93156
Included Lab Sample IDs: 2106271, 2106275, 2106276, 2106281

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.0	95.3	P/P	90 - 110
Kjeldahl Nitrogen	96.4	95.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A93183
Included Lab Sample IDs: 2106271, 2106275, 2106276, 2106281

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A93211
Included Lab Sample IDs: 2106308, 2106309, 2106310, 2106311

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A93226
Included Lab Sample IDs: 2106299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	104	78.8	P/P	60 - 160
Endothall	79.4	95.6	P/P	60 - 160

Reference Method: SM 2320 B-97
Run ID: A93228
Included Lab Sample IDs: 2106270, 2106273, 2106274, 2106279

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

Reference Method: SM 4500 F-C-97
Run ID: A93228
Included Lab Sample IDs: 2106270, 2106273, 2106274, 2106279

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

Reference Method: EPA 8321B
Run ID: A93229
Included Lab Sample IDs: 2106299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	76.9	61.0	P/P	60 - 160
Glufosinate	74.9	69.0	P/P	60 - 160
Glyphosate	77.4	71.0	P/P	60 - 160

Reference Method: EPA 300.0
Run ID: A93239
Included Lab Sample IDs: 2106270, 2106273, 2106274

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

Reference Method: EPA 8270E
Run ID: A93286
Included Lab Sample IDs: 2106302

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	90.3		P	80 - 120
Alpha-BHC	93.1		P	80 - 120
Alpha-Chlordane	91.1		P	80 - 120
Beta-BHC	99.9		P	80 - 120
Bifenthrin	89.4		P	80 - 120
Carbophenothion	92.5		P	80 - 120
Chlorothalonil	100		P	80 - 120
Cis-Nonachlor	90.3		P	80 - 120
Cypermethrin	95.8		P	80 - 120
DDD-p,p'	92.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A93286
Included Lab Sample IDs: 2106302

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDE-p,p'	90.9		P	80 - 120
DDT-p,p'	99.1		P	80 - 120
Delta-BHC	100		P	80 - 120
Dicofol	96.6		P	80 - 120
Dieldrin	96.8		P	80 - 120
Endosulfan I	92.1		P	80 - 120
Endosulfan II	104		P	80 - 120
Endosulfan Sulfate	101		P	80 - 120
Endrin	93.0		P	80 - 120
Endrin Aldehyde	88.3		P	80 - 120
Endrin Ketone	94.6		P	80 - 120
Ethalfuralin	94.6		P	80 - 120
Gamma-BHC	94.2		P	80 - 120
Gamma-Chlordane	90.6		P	80 - 120
Heptachlor	90.3		P	80 - 120
Heptachlor Epoxide	90.3		P	80 - 120
Hexachlorobenzene	97.4		P	80 - 120
Methoxychlor	99.0		P	80 - 120
Mirex	95.6		P	80 - 120
Permethrin	85.5		P	80 - 120
Trans-Nonachlor	91.5		P	80 - 120
Trifluralin	94.7		P	80 - 120

Reference Method: EPA 8276
Run ID: A93327
Included Lab Sample IDs: 2106302

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	94.8		P	80 - 120
Toxaphene	102		P	80 - 120

Reference Method: EPA 8270E
Run ID: A93350
Included Lab Sample IDs: 2106303

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	96.5		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A93358
Included Lab Sample IDs: 2106271, 2106275, 2106276, 2106281

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A93366
Included Lab Sample IDs: 2106308, 2106309, 2106310, 2106311

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A93366

Included Lab Sample IDs: 2106308, 2106309, 2106310, 2106311

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	103	P/P	90 - 110
Aluminum	103	100	P/P	90 - 110
Antimony	95.7	96.9	P/P	90 - 110
Antimony	96.9	95.0	P/P	90 - 110
Arsenic	101	101	P/P	90 - 110
Arsenic	101	101	P/P	90 - 110
Boron	107	105	P/P	90 - 110
Cadmium	100	98.3	P/P	90 - 110
Cadmium	99.2	100	P/P	90 - 110
Chromium	101	101	P/P	90 - 110
Chromium	101	101	P/P	90 - 110
Copper	100	101	P/P	90 - 110
Copper	101	100	P/P	90 - 110
Lead	100	99.6	P/P	90 - 110
Lead	99.7	100	P/P	90 - 110
Nickel	100	101	P/P	90 - 110
Nickel	100	100	P/P	90 - 110
Selenium	100	101	P/P	90 - 110
Selenium	101	99.5	P/P	90 - 110
Silver	103	102	P/P	90 - 110
Silver	103	103	P/P	90 - 110
Thallium	98.8	99.1	P/P	90 - 110
Thallium	99.1	97.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A93385

Included Lab Sample IDs: 2106310

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Nickel	96.8	97.2	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A93447

Included Lab Sample IDs: 2106299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	107	91.1	P/P	60 - 160

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision	MS
								SMP	
EPA 180.1 Rev. 2.0	Turbidity							0.404	
	Turbidity							0.568	
EPA 200.7 Rev. 4.4	Barium	101		96.8	100	99.8			0.619
	Calcium	111		104	108	109			1.01
	Iron	104		100	102	103			0.438
	Magnesium	112		102	110	111			1.06
	Manganese	100		96.8	99.2	98.8			0.391
	Potassium	108		103	109	111			1.64
	Sodium	113		101	105	106			0.592
	Zinc	98.1		100	96.8	97.0			0.265
EPA 200.8 Rev. 5.4	Aluminum	99.5		103	101	102			0.641
	Antimony	98.7		102	97.6	97.6			0.0409
	Arsenic	102		106	101	101			0.325
	Boron	102		105	102	105			2.27
	Cadmium	102		102	99.5	101			1.30
	Chromium	99.9		99.0	101	102			0.783
	Copper	99.7		99.4	99.9	101			1.12
	Lead	98.2		101	97.9	99.5			1.33
	Nickel	99.6		99.6	91.9	91.9			0.0142
	Selenium	98.8		104	98.4	98.1			0.276
	Silver	102		99.0	99.9	99.4			0.423
	Thallium	102		107	100	103			2.19
EPA 300.0	Bromide	100		96.8	96.6	98.1			0.0964
EPA 300.0 Rev. 2.1	Chloride	95.9		95.1	97.0			1.13	
	Sulfate	99.9		99.5	101			1.59	
EPA 350.1 Rev. 2.0	Ammonia-N	101		101	101				0.273
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.4		100	109				4.91
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100		100	100				0.0
EPA 365.1 Rev. 2.0	Total-P	90.6		96.6	97.0				0.321
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.2		93.6	95.0				1.48
EPA 8270E	Acetochlor	81.8	90.5	74.6	85.2		10.1		13.3
	Alachlor	80.5	89.5	74.0	80.1		10.6		7.98
	Aldrin	38.4	44.0	68.7	51.3		13.6		28.9
	Alpha-BHC	102	113	147	129		10.1		12.9
	Alpha-Chlordane	78.0	86.7	90.1	77.5		10.6		15.0
	Ametryn	79.2	84.3	63.1	84.2		6.17		28.6
	Atrazine	98.1	92.7	94.2	111		5.60		13.3
	Atrazine Desethyl	137	71.0	116	160		63.7		31.4
	Azinphos Methyl	100	89.9	73.8	93.8		10.7		23.9
	Beta-BHC	116	150	160	181		26.1		12.4
	Bifenthrin	59.5	67.2	93.7	70.7		12.2		27.9
	Bromacil	67.7	60.6				10.9		13.7
	Butylate	55.8	55.0	49.8	52.9		1.44		6.12
	Carbophenothion	70.7	64.3	109	84.0		9.52		26.1
	Chlorothalonil	131	133	117	70.5		1.13		49.8
	Chlorpyrifos Ethyl	88.4	92.5	85.0	92.9		4.51		8.90
	Chlorpyrifos Methyl	94.6	89.1	86.4	94.6		6.02		9.05
	Cis-Nonachlor	77.2	86.8	90.5	76.1		11.8		17.3
	Cyanazine	207	119	179	185		54.3		3.00
	Cypermethrin	69.6	74.5	96.4	75.9		6.78		23.8
	DDD-p,p'	91.0	100	104	96.7		9.44		7.39
	DDE-p,p'	74.8	82.6	90.8	75.2		9.92		18.8
	DDT-p,p'	100	106	126	107		5.82		16.8
	Delta-BHC	133	152	193	181		13.7		5.94

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Demeton	81.8	50.2	78.8	90.3	47.9	13.5
	Diazinon	92.8	87.7	85.8	97.2	5.65	12.5
	Dicofol	94.4	99.0	101	109	4.82	8.30
	Dieldrin	90.3	97.5	102	90.9	7.75	11.6
	Dimethenamid	72.3	90.7	62.8	68.9	22.5	9.26
	Disulfoton	85.3	48.7	87.1	94.2	54.6	7.86
	Dithiopyr	84.4	93.4	71.9	83.4	10.1	14.9
	Endosulfan I	93.4	98.0	122	107	4.81	13.2
	Endosulfan II	103	124	173	149	18.5	14.8
	Endosulfan Sulfate	84.2	100	91.2	94.1	17.3	3.21
	Endrin	116	92.7	122	110	22.5	11.0
	Endrin Aldehyde	98.1	113	93.7	101	13.8	7.40
	Endrin Ketone	82.5	95.5	94.7	96.3	14.5	1.65
	EPTC	55.5	58.8	51.0	50.7	5.67	0.613
	Ethalfuralin	85.7	86.0	114	99.4	0.329	14.1
	Ethion	57.2	93.7	52.5	51.5	48.5	2.05
	Ethoprop	96.2	80.2	94.5	99.2	18.1	4.88
	Fenamiphos	87.2	81.5	75.6	78.3	6.80	3.48
	Fipronil	84.0	87.9	72.6	88.1	4.63	19.2
	Fipronil Desulfinyl	78.1	82.9	64.1	78.0	5.92	19.6
	Fipronil Sulfide	88.6	88.0	79.5	95.4	0.723	18.1
	Fipronil Sulfone	79.6	86.2	70.2	89.9	7.96	24.6
	Fonofos	103	82.6	103	110	22.4	6.55
	Gamma-BHC	137	146	152	174	5.95	13.4
	Gamma-Chlordane	73.2	81.9	87.9	71.9	11.2	20.0
	Heptachlor	62.8	73.5	79.0	62.0	15.7	24.1
	Heptachlor Epoxide	87.4	95.8	95.9	88.4	9.20	8.17
	Hexachlorobenzene	68.5	75.9	83.0	71.0	10.4	15.6
	Hexazinone	91.7	102	86.7	94.8	10.4	6.96
	Malathion	90.2	88.1	83.3	99.3	2.33	17.5
	Metalaxyl	89.6	91.7	76.2	88.3	2.33	14.8
	Methoxychlor	125	130	137	132	3.65	3.58
	Metolachlor	82.5	90.3	70.0	85.0	8.96	15.8
	Metribuzin	237	82.8	214	261	96.4	19.9
	Mevinphos	92.9	75.8	88.0	104	20.3	16.6
	Mirex	45.9	51.6	70.6	50.8	11.9	32.6
	Molinate	62.3	64.3	58.2	52.7	3.29	10.1
	Norflurazon	84.7	88.0	71.8	84.2	3.82	15.9
	Oxadiazon	87.0	94.4	74.5	84.4	8.15	12.6
	Parathion Ethyl	88.0	88.5	83.3	98.5	0.565	16.8
	Parathion Methyl	103	91.5	94.8	109	11.4	13.6
	Pendimethalin	81.1	80.5	89.0	96.8	0.759	8.32
	Permethrin	55.5	60.2	78.5	59.4	8.08	27.8
	Phorate	82.0	66.4	88.4	101	21.0	13.5
	Prodiamine	64.0	73.2	47.0	59.2	13.3	23.0
	Prometon	78.8	84.8	78.4	97.0	7.36	21.2
	Prometryn	82.6	87.0	53.1	77.1	5.22	36.9
	Simazine	108	94.2	100	116	13.4	14.6
	Tebuconazole	36.0	60.1	30.5	30.9	50.0	1.37
	Terbufos	94.6	75.0	96.0	112	23.1	15.4
	Terbuthylazine	92.4	90.8	82.4	96.4	1.67	15.6
	Trans-Nonachlor	70.7	78.8	84.7	69.5	10.8	19.6
	Trifluralin	91.0	96.4	109	93.7	5.81	15.3
EPA 8276	Chlordane	77.6	81.0	69.5	57.8	4.35	18.3

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 8276	Toxaphene	58.6	59.5	47.0	42.1	1.51		11.0
EPA 8321B	2,4-D	157						5.11
	3-Hydroxycarbofuran	108		104	115			9.98
	Acesulfame K	87.9		117	96.4			19.1
	Acetaminophen	121		115	112			2.57
	Aldicarb	108		102	109			5.96
	Aldicarb Sulfone	115		109	116			6.62
	Aldicarb Sulfoxide	109		85.7	55.0			43.6
	AMPA	83.4		45.2	44.3			1.29
	Bentazon	111		64.3	66.7			3.64
	Carbamazepine	108		100	101			0.342
	Carbaryl	95.8		76.8	84.9			9.97
	Carbofuran	95.4		75.2	83.0			9.87
	Diuron	109		98.8	97.3			1.41
	Endothall	91.4		81.6	83.0			1.76
	Fenuron	109		87.1	85.4			2.00
	Fluridone	103		107	111			4.02
	Glufosinate	70.1		65.8	54.0			19.6
	Glyphosate	83.1		61.9	63.2			1.36
	Hydrocodone	102		108	102			5.44
	Ibuprofen	104		133	125			6.38
	Imazapyr	75.3		88.8	84.8			4.31
	Imidacloprid	108		217	226			3.47
	Linuron	93.7		94.4	93.6			0.874
	MCPP	160		243	239			1.35
	Methiocarb	89.4		72.2	85.7			17.1
	Methomyl	94.2		70.1	81.6			15.1
	Naproxen	133		144	142			1.83
	Oxamyl	109		99.0	107			7.92
	Primidone	102		115	99.3			14.6
	Propoxur	91.5		72.5	82.9			13.3
	Pyraclostrobin	101		113	118			4.00
	Sucralose	93.9		104	94.9			9.13
	Triclopyr	108		186	195			5.19
SM 2120 B	Color (true)	103					0.674	
SM 2320 B-97	Total Alkalinity	103					0.0102	
SM 2540 C-97	TDS						0.281	
SM 4500 F-C-97	Fluoride	98.2		98.4	98.4			0.0
SM 5310 B-00	Organic Carbon	102		110	96.6			6.62
	Organic Carbon	98.4		99.8	100			0.163

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2106270, 2106273, 2106274, 2106279
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2106308, 2106309, 2106310, 2106311
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2106308, 2106309, 2106310, 2106311
EPA 300.0 / E31780	Bromide in aqueous matrices	2106270, 2106273, 2106274
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2106279

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2106279
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2106271, 2106275, 2106276, 2106281
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2106271, 2106275, 2106276, 2106281
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2106271, 2106275, 2106276, 2106281
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2106271, 2106275, 2106276, 2106281
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2106272, 2106277, 2106278, 2106283
EPA 8270E / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2106302
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2106303
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2106302
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2106298
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2106299
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2106299
SM 2120 B / E31780	True Color measured at 450 nm	2106279
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2106270, 2106273, 2106274, 2106279
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2106279
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2106270, 2106273, 2106274, 2106279
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2106270, 2106273, 2106274, 2106279
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2106271, 2106275, 2106276, 2106281

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	07/26/2019			07/26/2019 15:55	Adrian Shelby	2106270, 2106273, 2106274, 2106279
EPA 200.7 Rev. 4.4	07/26/2019	07/31/2019 08:30	Alexander Thompson	08/01/2019 14:47	Betina Topolski	2106308
	07/26/2019	07/31/2019 08:30	Alexander Thompson	08/01/2019 15:06	Betina Topolski	2106309
	07/26/2019	07/31/2019 08:30	Alexander Thompson	08/01/2019 15:14	Betina Topolski	2106310
	07/26/2019	07/31/2019 08:30	Alexander Thompson	08/01/2019 15:21	Betina Topolski	2106311
	07/26/2019	07/31/2019 08:30	Alexander Thompson	08/01/2019 15:28	Betina Topolski	2106311
EPA 200.8 Rev. 5.4	07/26/2019	07/31/2019 08:30	Alexander Thompson	08/07/2019 10:23	Robert K Palmer	2106309
	07/26/2019	07/31/2019 08:30	Alexander Thompson	08/07/2019 10:33	Robert K Palmer	2106308
	07/26/2019	07/31/2019 08:30	Alexander Thompson	08/07/2019 11:21	Robert K Palmer	2106310
	07/26/2019	07/31/2019 08:30	Alexander Thompson	08/07/2019 11:30	Robert K Palmer	2106311
	07/26/2019	07/31/2019 08:30	Alexander Thompson	08/09/2019 06:09	Robert K Palmer	2106310
EPA 300.0	07/26/2019			08/01/2019 19:19	Jhamieka S. Greenwood	2106270
	07/26/2019			08/01/2019 22:27	Jhamieka S. Greenwood	2106273
	07/26/2019			08/01/2019 22:44	Jhamieka S. Greenwood	2106274
EPA 300.0 Rev. 2.1	07/26/2019			07/31/2019 14:36	Jhamieka S. Greenwood	2106279
EPA 350.1 Rev. 2.0	07/26/2019			08/07/2019 13:37	Ping Hua	2106271
	07/26/2019			08/07/2019 13:39	Ping Hua	2106275
	07/26/2019			08/07/2019 13:40	Ping Hua	2106276
	07/26/2019			08/07/2019 13:48	Ping Hua	2106281
EPA 351.2 Rev. 2.0	07/26/2019	07/30/2019 11:45	Adrian Shelby	07/31/2019 10:11	Joseph Suarez	2106271
	07/26/2019	07/30/2019 11:45	Adrian Shelby	07/31/2019 10:19	Joseph Suarez	2106275
	07/26/2019	07/30/2019 11:45	Adrian Shelby	07/31/2019 10:21	Joseph Suarez	2106276
	07/26/2019	07/30/2019 11:45	Adrian Shelby	07/31/2019 10:22	Joseph Suarez	2106281
EPA 353.2 Rev. 2.0	07/26/2019			07/30/2019 11:11	Beverly Y. Sanders	2106271
	07/26/2019			07/30/2019 11:12	Beverly Y. Sanders	2106275
	07/26/2019			07/30/2019 11:14	Beverly Y. Sanders	2106276
	07/26/2019			07/30/2019 11:15	Beverly Y. Sanders	2106281
EPA 365.1 Rev. 2.0	07/26/2019	07/30/2019 12:01	Vijayalakshmi Reddy	08/01/2019 08:14	Lipi Saha	2106271
	07/26/2019	07/30/2019 12:01	Vijayalakshmi Reddy	08/01/2019 08:24	Lipi Saha	2106275
	07/26/2019	07/30/2019 12:01	Vijayalakshmi Reddy	08/01/2019 08:25	Lipi Saha	2106276
	07/26/2019	07/30/2019 12:01	Vijayalakshmi Reddy	08/01/2019 08:26	Lipi Saha	2106281
EPA 365.1 Rev. 2.0 dissolved	07/26/2019			07/26/2019 15:50	Jhamieka S. Greenwood	2106278
	07/26/2019			07/26/2019 15:51	Jhamieka S. Greenwood	2106283
	07/26/2019			07/26/2019 15:53	Jhamieka S. Greenwood	2106277
	07/26/2019			07/26/2019 15:58	Jhamieka S. Greenwood	2106272
EPA 8270E	07/26/2019	07/26/2019 12:30	Fe-Val Siddell	07/30/2019 21:23	Vandana T. Nagar	2106303
	07/26/2019	07/26/2019 12:30	Fe-Val Siddell	07/31/2019 08:55	Vandana T. Nagar	2106303
	07/26/2019	07/31/2019 09:00	Fe-Val Siddell	08/04/2019 22:16	Vandana T. Nagar	2106302
EPA 8276	07/26/2019	07/31/2019 09:00	Fe-Val Siddell	08/06/2019 03:17	Luis Flores	2106302
EPA 8321B	07/26/2019	07/26/2019 14:00	Hoor Shaik	07/27/2019 00:50	Juyoung Kim	2106298

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	07/26/2019	07/26/2019 14:00	Hoor Shaik	07/27/2019 08:54	Juyoung Kim	2106299
	07/26/2019	07/31/2019 10:15	Rebecca Ware	07/31/2019 14:25	Rebecca Ware	2106299
	07/26/2019	07/31/2019 10:15	Rebecca Ware	08/01/2019 09:01	Rebecca Ware	2106299
	07/26/2019	07/31/2019 10:15	Rebecca Ware	08/12/2019 13:44	Rebecca Ware	2106299
SM 2120 B	07/26/2019			07/26/2019 17:20	Madeline Funaro	2106279
SM 2320 B-97	07/26/2019			08/02/2019 04:26	Dale L. Simmons	2106270
	07/26/2019			08/02/2019 07:14	Dale L. Simmons	2106274
	07/26/2019			08/02/2019 07:27	Dale L. Simmons	2106279
	07/26/2019			08/02/2019 07:38	Dale L. Simmons	2106273
SM 2540 C-97	07/26/2019			07/30/2019 14:45	Sima Feizi	2106279
SM 2540 D-97	07/26/2019			07/30/2019 14:45	Sima Feizi	2106270, 2106273, 2106274, 2106279
SM 4500 F-C-97	07/26/2019			08/02/2019 04:26	Dale L. Simmons	2106270
	07/26/2019			08/02/2019 07:14	Dale L. Simmons	2106274
	07/26/2019			08/02/2019 07:27	Dale L. Simmons	2106279
	07/26/2019			08/02/2019 07:38	Dale L. Simmons	2106273
SM 5310 B-00	07/26/2019			07/29/2019 19:39	Madeline Funaro	2106271
	07/26/2019			07/29/2019 19:54	Madeline Funaro	2106275
	07/26/2019			07/29/2019 20:06	Madeline Funaro	2106276
	07/26/2019			07/29/2019 22:10	Madeline Funaro	2106281