

Chemical Analysis Report

CEN-DIST-2018-03-06-01

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

Event Description: **Apopka Beau / Howey / Lil Harris**
Request ID: **RQ-2018-03-05-62**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 03-APR-2018 15:29



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 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: APOPKA BEAUCLAIR CANAL @ 200M S OF LOCK

Collection Date/Time: 03/05/2018 09:50

Field ID: G1CE0025

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1972104	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P341075	
	EPA 300.0 Rev. 2.1	Chloride	38		mg Cl/L	P341225	
		Sulfate	8.4		mg SO4/L	P341229	
		Color (true)	62		PCU	P341022	
	SM 2320 B-97	Total Alkalinity	156		mg CaCO3/L	P341454	
	SM 2540 C-97	TDS	273		mg/L	P341468	
	SM 2540 D-97	TSS	6	I	mg/L	P341376	
	SM 4500 F-C-97	Fluoride	0.33		mg F/L	P341459	
1972106	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P341408	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.0		mg N/L	P341176	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.088		mg N/L	P341202	
	EPA 365.1 Rev. 2.0	Total-P	0.056		mg P/L	P341167	
	SM 5310 B-00	Organic Carbon	25		mg C/L	P341325	
1972108	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P341054	
1972134	EPA 200.7 Rev. 4.4	Calcium	47.5		mg/L	P341089	
		Iron	42	I	ug/L	P341089	
		Magnesium	17.2		mg/L	P341089	
		Potassium	10		mg/L	P341089	
		Sodium	20.9		mg/L	P341089	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P341089	
		Arsenic	3.03		ug/L	P341089	
		Cadmium	0.020	U	ug/L	P341089	
		Chromium	0.40	U	ug/L	P341089	
		Copper	0.20	U	ug/L	P341089	
		Lead	0.082	I	ug/L	P341089	
		Nickel	0.20	U	ug/L	P341089	
		Silver	0.010	U	ug/L	P341089	

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: APOPKA BEAUCLAIR CANAL @ 200M S OF LOCK

Collection Date/Time: 03/05/2018 09:50

Field ID: G1CE0025

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1972130	EPA 8321B	Aldicarb	0.020	U	ug/L	P340883	
		Aldicarb Sulfone	0.0020	U	ug/L	P340883	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P340883	
		Carbaryl	0.0020	U	ug/L	P340883	
		Carbofuran	0.0020	U	ug/L	P340883	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P340883	
		Methiocarb	0.0020	U	ug/L	P340883	
		Methomyl	0.0020	U	ug/L	P340883	
		Oxamyl	0.0020	U	ug/L	P340883	

Field ID: G1CE0025

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1972130	EPA 8321B	Propoxur	0.0020	U	ug/L	P340883	
1972131		2,4-D	0.0030	I	ug/L	P340883	
		Sucralose**	0.56		ug/L	P340984	
		Bentazon	0.0014	I	ug/L	P340883	MS
		MCP	0.0020	U	ug/L	P340883	MS
		Triclopyr**	0.0040	U	ug/L	P340883	MS
		Imidacloprid	0.0020	U	ug/L	P340883	MS
		Diuron	0.0020	U	ug/L	P340883	
		Pyraclostrobin**	0.0020	U	ug/L	P340883	
		Primidone**	0.0040	U	ug/L	P340883	
		Linuron	0.0040	U	ug/L	P340883	
		Acetaminophen**	0.0080	U	ug/L	P340883	
		Fenuron	0.0080	U	ug/L	P340883	
		Imazapyr**	0.028		ug/L	P340883	MS
		Carbamazepine**	4.0E-04	U	ug/L	P340883	
		Fluridone**	8.0E-04	U	ug/L	P340883	
		Glyphosate**	0.10	U	ug/L	P340878	
		AMPA**	0.10	U	ug/L	P340878	
1972132	EPA 8270D	Aldrin	4.2	UJ	ng/L	P341342	RPD
		Alpha-BHC	2.1	U	ng/L	P341342	
		Beta-BHC	4.2	UJ	ng/L	P341342	LCS
		Delta-BHC	4.2	U	ng/L	P341342	
		Gamma-BHC	4.2	U	ng/L	P341342	
		Carbophenothion	4.2	U	ng/L	P341342	
		Chlorothalonil	2.1	UJ	ng/L	P341342	RPD
		Cypermethrin	21	U	ng/L	P341342	
		DDD-p,p'	3.2	U	ng/L	P341342	
		DDE-p,p'	3.2	U	ng/L	P341342	
		DDT-p,p'	3.2	U	ng/L	P341342	
		Dieldrin	4.2	U	ng/L	P341342	
		Endosulfan I	4.2	U	ng/L	P341342	
		Endosulfan II	4.2	U	ng/L	P341342	
		Endosulfan Sulfate	2.1	U	ng/L	P341342	
		Endrin	2.1	U	ng/L	P341342	
		Endrin Aldehyde	2.1	U	ng/L	P341342	
		Heptachlor	1.6	U	ng/L	P341342	
		Heptachlor Epoxide	2.1	U	ng/L	P341342	
		Methoxychlor	4.2	U	ng/L	P341342	
		Mirex	2.1	U	ng/L	P341342	
		Permethrin	11	U	ng/L	P341342	
		Trifluralin	1.1	U	ng/L	P341342	
		Alpha-Chlordane	1.1	U	ng/L	P341342	
		Gamma-Chlordane	1.1	U	ng/L	P341342	
		Endrin Ketone	2.1	U	ng/L	P341342	
		Dicofol	32	U	ng/L	P341342	

Field ID: G1CE0025

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1972132	EPA 8276	Chlordane**	2.7	U	ng/L	P341342	
		Toxaphene**	32	U	ng/L	P341342	
1972133	EPA 8270D	Alachlor	0.24	U	ng/L	P341343	
		Ametryn	2.4		ng/L	P341343	
		Atrazine	3.8		ng/L	P341343	
		Atrazine Desethyl	1.5	U	ng/L	P341343	
		Azinphos Methyl	2.2	U	ng/L	P341343	
		Bromacil	0.48	U	ng/L	P341343	
		Butylate	0.39	U	ng/L	P341343	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P341343	
		Chlorpyrifos Methyl	0.097	U	ng/L	P341343	
		Demeton	1.9	U	ng/L	P341343	
		Diazinon	0.12	U	ng/L	P341343	
		Disulfoton	0.48	U	ng/L	P341343	
		EPTC	1.2	U	ng/L	P341343	
		Ethion	0.15	U	ng/L	P341343	
		Ethoprop	0.097	U	ng/L	P341343	
		Fenamiphos	0.24	U	ng/L	P341343	
		Fipronil	0.24	U	ng/L	P341343	
		Fipronil Sulfide	0.15	U	ng/L	P341343	
		Fipronil Sulfone	0.15	U	ng/L	P341343	
		Hexazinone	0.48	U	ng/L	P341343	
		Malathion	0.34	U	ng/L	P341343	
		Metribuzin	0.19	U	ng/L	P341343	
		Mevinphos	0.48	U	ng/L	P341343	
		Molinate	0.29	U	ng/L	P341343	
		Norflurazon	0.48	U	ng/L	P341343	
		Pendimethalin	0.97	U	ng/L	P341343	
		Phorate	0.24	U	ng/L	P341343	
		Prometon	0.87	U	ng/L	P341343	
		Prometryn	0.19	U	ng/L	P341343	
		Simazine	0.48	U	ng/L	P341343	
		Terbufos	0.097	U	ng/L	P341343	
		Terbuthylazine	0.41	U	ng/L	P341343	
		Fonofos	0.19	U	ng/L	P341343	
		Metalaxyl	0.24	U	ng/L	P341343	
		Metolachlor	0.84	I	ng/L	P341343	
		Acetochlor	0.24	U	ng/L	P341343	
		Cyanazine	0.48	U	ng/L	P341343	
		Parathion Ethyl	0.24	U	ng/L	P341343	
		Parathion Methyl	0.24	U	ng/L	P341343	

Ref. Method and Comment:

EPA 8321B: Fenuron was detected in the method blank slightly above the MDL.

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

Sample Location: LITTLE LAKE HARRIS @ 1000M SE OF
CENTER

Collection Date/Time: 03/05/2018 10:40

Field ID: G1CE0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1972110	EPA 180.1 Rev. 2.0	Turbidity	2.7	A	NTU	P341076	
	EPA 300.0 Rev. 2.1	Chloride	21		mg Cl/L	P341226	
		Sulfate	6.8		mg SO4/L	P341230	
		Color (true)	38		PCU	P341022	
	SM 2320 B-97	Total Alkalinity	89	A	mg CaCO3/L	P341454	
	SM 2540 C-97	TDS	157		mg/L	P341468	
	SM 2540 D-97	TSS	5	I	mg/L	P341376	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P341459	
1972114	EPA 350.1 Rev. 2.0	Ammonia-N	0.22		mg N/L	P341408	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P341177	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.035		mg N/L	P341203	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P341167	
	SM 5310 B-00	Organic Carbon	16		mg C/L	P341325	
1972118	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P341052	
1972136	EPA 200.7 Rev. 4.4	Calcium	33.9		mg/L	P341089	
		Iron	44	I	ug/L	P341089	
		Magnesium	7.11		mg/L	P341089	
		Potassium	3.3		mg/L	P341089	
		Sodium	11.8		mg/L	P341089	
		Zinc	5.0	U	ug/L	P341089	
	EPA 200.8 Rev. 5.4	Arsenic	1.22		ug/L	P341089	
		Cadmium	0.020	U	ug/L	P341089	
		Chromium	0.40	U	ug/L	P341089	
		Copper	0.29	I	ug/L	P341089	
		Lead	0.16	I	ug/L	P341089	
		Nickel	0.20	U	ug/L	P341089	
		Silver	0.010	U	ug/L	P341089	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: LITTLE LAKE HARRIS @ CENTER

Collection Date/Time: 03/05/2018 10:50

Field ID: G1CE0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1972111	EPA 180.1 Rev. 2.0	Turbidity	2.3		NTU	P341076	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P341226	
		Sulfate	6.5		mg SO4/L	P341230	
		Color (true)	38		PCU	P341022	
	SM 2320 B-97	Total Alkalinity	90		mg CaCO3/L	P341454	
	SM 2540 C-97	TDS	149		mg/L	P341468	
	SM 2540 D-97	TSS	4	I	mg/L	P341376	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P341459	
1972115	EPA 350.1 Rev. 2.0	Ammonia-N	0.19		mg N/L	P341408	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P341177	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.038		mg N/L	P341203	

Field ID: G1CE0068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1972115	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P341167	
	SM 5310 B-00	Organic Carbon	16		mg C/L	P341325	
1972119	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P341052	
1972137	EPA 200.7 Rev. 4.4	Calcium	31.8		mg/L	P341089	
		Iron	41	I	ug/L	P341089	
		Magnesium	6.69		mg/L	P341089	
		Potassium	3.1		mg/L	P341089	
		Sodium	10.9		mg/L	P341089	
		Zinc	5.0	U	ug/L	P341089	
	EPA 200.8 Rev. 5.4	Arsenic	1.17		ug/L	P341089	
		Cadmium	0.020	U	ug/L	P341089	
		Chromium	0.40	U	ug/L	P341089	
		Copper	0.25	I	ug/L	P341089	
		Lead	0.14	I	ug/L	P341089	
		Nickel	0.20	U	ug/L	P341089	
		Silver	0.010	U	ug/L	P341089	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: LITTLE LAKE HARRIS @ 1000M SW OF CENTER

Collection Date/Time: 03/05/2018 11:00

Field ID: G1CE0096

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1972112	EPA 180.1 Rev. 2.0	Turbidity	2.5		NTU	P341076	
	EPA 300.0 Rev. 2.1	Chloride	21	A	mg Cl/L	P341226	
		Sulfate	6.7	A	mg SO4/L	P341230	
	SM 2120 B	Color (true)	36		PCU	P341022	
	SM 2320 B-97	Total Alkalinity	91		mg CaCO3/L	P341454	
	SM 2540 C-97	TDS	156		mg/L	P341469	
	SM 2540 D-97	TSS	4	I	mg/L	P341377	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P341459	
1972116	EPA 350.1 Rev. 2.0	Ammonia-N	0.21		mg N/L	P341408	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P341177	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.036		mg N/L	P341203	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P341167	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P341325	
1972120	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P341052	
1972138	EPA 200.7 Rev. 4.4	Calcium	33.4		mg/L	P341089	
		Iron	44	I	ug/L	P341089	
		Magnesium	6.96		mg/L	P341089	
		Potassium	3.3		mg/L	P341089	
		Sodium	11.6		mg/L	P341089	
		Zinc	5.0	U	ug/L	P341089	

Field ID: G1CE0096

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1972138	EPA 200.8 Rev. 5.4	Arsenic	1.28		ug/L	P341089	
		Cadmium	0.020	U	ug/L	P341089	
		Chromium	0.40	U	ug/L	P341089	
		Copper	0.24	I	ug/L	P341089	
		Lead	0.15	I	ug/L	P341089	
		Nickel	0.20	U	ug/L	P341089	
		Silver	0.010	U	ug/L	P341089	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: LITTLE LAKE HARRIS @ 2500M S OF CENTER Collection Date/Time: 03/05/2018 11:10

Field ID: G1CE0098

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1972113	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P341076	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P341226	
		Sulfate	6.5		mg SO4/L	P341230	
	SM 2120 B	Color (true)	44		PCU	P341022	
	SM 2320 B-97	Total Alkalinity	89		mg CaCO3/L	P341454	
	SM 2540 C-97	TDS	162	A	mg/L	P341469	
	SM 2540 D-97	TSS	5	IA	mg/L	P341377	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P341459	
1972117	EPA 350.1 Rev. 2.0	Ammonia-N	0.17		mg N/L	P341408	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P341177	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.044		mg N/L	P341203	
	EPA 365.1 Rev. 2.0	Total-P	0.022		mg P/L	P341167	
	SM 5310 B-00	Organic Carbon	16		mg C/L	P341325	
1972121	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P341052	
1972139	EPA 200.7 Rev. 4.4	Calcium	32.4		mg/L	P341089	
		Iron	47	I	ug/L	P341089	
		Magnesium	6.99		mg/L	P341089	
		Potassium	3.0		mg/L	P341089	
		Sodium	11.1		mg/L	P341089	
		Zinc	5.0	U	ug/L	P341089	
	EPA 200.8 Rev. 5.4	Arsenic	1.19		ug/L	P341089	
		Cadmium	0.020	U	ug/L	P341089	
		Chromium	0.40	U	ug/L	P341089	
		Copper	0.26	I	ug/L	P341089	
		Lead	0.18	I	ug/L	P341089	
		Nickel	0.20	U	ug/L	P341089	
		Silver	0.010	U	ug/L	P341089	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: DOUBLE RUN @ 800M DS OF DOUBLE RUN Collection Date/Time: 03/05/2018 11:20
RD.

Field ID: G1CE0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1972105	EPA 180.1 Rev. 2.0	Turbidity	0.60		NTU	P341075	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P341226	
		Sulfate	6.6		mg SO4/L	P341230	
	SM 2120 B	Color (true)	130		PCU	P341022	
	SM 2320 B-97	Total Alkalinity	70		mg CaCO3/L	P341454	
	SM 2540 C-97	TDS	133		mg/L	P341468	
	SM 2540 D-97	TSS	3	I	mg/L	P341376	
	SM 4500 F-C-97	Fluoride	0.078	I	mg F/L	P341459	
1972107	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P341408	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.76		mg N/L	P341176	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P341202	
	EPA 365.1 Rev. 2.0	Total-P	0.026		mg P/L	P341167	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P341325	
1972109	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.010		mg P/L	P341052	
1972135	EPA 200.7 Rev. 4.4	Calcium	22.5		mg/L	P341089	
		Iron	130		ug/L	P341089	
		Magnesium	8.44		mg/L	P341089	
		Potassium	1.8		mg/L	P341089	
		Sodium	6.0		mg/L	P341089	
		Zinc	5.0	U	ug/L	P341089	
	EPA 200.8 Rev. 5.4	Arsenic	0.44		ug/L	P341089	
		Cadmium	0.020	U	ug/L	P341089	
		Chromium	0.40	U	ug/L	P341089	
		Copper	0.20	U	ug/L	P341089	
		Lead	0.050	U	ug/L	P341089	
		Nickel	0.20	U	ug/L	P341089	
		Silver	0.010	U	ug/L	P341089	

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P341075

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P341076

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P341089

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P341089

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P341089

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.20	U	ug/L
Lead	0.050	U	ug/L
Nickel	0.20	U	ug/L
Silver	0.010	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P341225

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P341226

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P341229

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P341230

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P341408

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P341176

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P341177

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P341202

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P341203

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P341167

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P341052

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P341054

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

Reference Method: EPA 8270D
Batch ID: P341342

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	4.0	U	ng/L
Carbophenothion	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	3.0	U	ng/L
DDE-p,p'	3.0	U	ng/L
DDT-p,p'	3.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D

Batch ID: P341342

Component	Result	Code	Units
Delta-BHC	4.0	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
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Gamma-BHC	4.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	1.0	U	ng/L

Reference Method: EPA 8270D

Batch ID: P341343

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.32	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.2	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	0.50	U	ng/L
Demeton	2.0	U	ng/L
Diazinon	0.12	U	ng/L
Disulfoton	0.50	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.25	U	ng/L
Fipronil	0.25	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	0.25	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D

Batch ID: P341343

Component	Result	Code	Units
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.25	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8276

Batch ID: P341342

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B

Batch ID: P340878

Component	Result	Code	Units
AMPA	0.10	U	ug/L
Glyphosate	0.10	U	ug/L

Reference Method: EPA 8321B

Batch ID: P340883

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	4.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.021	I	ug/L
Fluridone	8.0E-04	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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P340984

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P341022

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P341454

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

Reference Method: SM 2540 C-97
Batch ID: P341468

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P341469

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P341376

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P341377

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P341459

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P341325

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: P341089

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	108		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	106		P	85 - 115
Sodium	103		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P341089

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	98.0		P	85 - 115
Cadmium	100		P	85 - 115
Chromium	98.3		P	85 - 115
Copper	96.8		P	85 - 115
Lead	106		P	85 - 115
Nickel	96.9		P	85 - 115
Silver	89.2		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P341225

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P341226

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P341229

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P341230

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P341408

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P341176

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P341177

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P341202

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P341203

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P341167

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: P341052

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P341054

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

Reference Method: EPA 8270D
Batch ID: P341342

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	66.8	31.8	P/P	24 - 89.0
Alpha-BHC	85.1	81.1	P/P	58 - 117
Alpha-Chlordane	87.0	81.4	P/P	56 - 115
Beta-BHC	139	147	F/F	55 - 137
Carbophenothion	98.7	91.9	P/P	37 - 145
Chlorothalonil	48.7	29.8	P/P	26 - 163
Cypermethrin	90.3	83.7	P/P	42 - 156
DDD-p,p'	99.1	105	P/P	59 - 129
DDE-p,p'	81.5	79.7	P/P	52 - 117
DDT-p,p'	92.6	83.4	P/P	48 - 128

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270D

Batch ID: P341342

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Delta-BHC	116	135	P/P	59 - 158
Dicofol	80.5	77.1	P/P	19 - 124
Dieldrin	89.6	88.9	P/P	57 - 126
Endosulfan I	87.3	87.5	P/P	59 - 133
Endosulfan II	104	104	P/P	58 - 148
Endosulfan Sulfate	113	118	P/P	56 - 135
Endrin	86.7	83.0	P/P	50 - 140
Endrin Aldehyde	94.4	101	P/P	47 - 141
Endrin Ketone	98.6	102	P/P	63 - 123
Gamma-BHC	88.7	93.0	P/P	59 - 132
Gamma-Chlordane	85.1	78.1	P/P	55 - 112
Heptachlor	71.5	64.4	P/P	45 - 102
Heptachlor Epoxide	88.3	85.1	P/P	61 - 116
Methoxychlor	101	89.6	P/P	60 - 133
Mirex	73.3	64.4	P/P	40 - 98.0
Permethrin	88.6	81.1	P/P	45 - 131
Trifluralin	81.8	75.5	P/P	38 - 179

Reference Method: EPA 8270D

Batch ID: P341343

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	98.2	95.6	P/P	74 - 119
Alachlor	99.4	96.1	P/P	75 - 118
Ametryn	107	105	P/P	59 - 137
Atrazine	101	92.4	P/P	73 - 120
Atrazine Desethyl	93.8	91.9	P/P	19 - 129
Azinphos Methyl	108	103	P/P	65 - 181
Bromacil	91.1	76.2	P/P	43 - 123
Butylate	51.7	53.2	P/P	28 - 85.0
Chlorpyrifos Ethyl	95.4	90.0	P/P	55 - 112
Chlorpyrifos Methyl	99.0	93.8	P/P	35 - 124
Cyanazine	135	121	P/P	26 - 262
Demeton	78.2	84.0	P/P	43 - 122
Diazinon	98.2	99.1	P/P	72 - 120
Disulfoton	79.4	85.7	P/P	45 - 137
EPTC	51.0	55.5	P/P	28 - 95.0
Ethion	83.9	86.8	P/P	63 - 127
Ethoprop	91.3	91.3	P/P	63 - 109
Fenamiphos	103	99.4	P/P	66 - 136
Fipronil	104	99.0	P/P	63 - 126
Fipronil Sulfide	104	92.6	P/P	59 - 123
Fipronil Sulfone	93.3	84.2	P/P	56 - 122
Fonofos	94.0	90.8	P/P	64 - 114
Hexazinone	101	100	P/P	49 - 144
Malathion	101	92.7	P/P	68 - 131
Metalaxyl	99.7	94.7	P/P	57 - 126
Metolachlor	95.8	93.1	P/P	75 - 118
Metribuzin	160	137	P/P	46 - 169
Mevinphos	84.8	80.4	P/P	34 - 126
Molinate	60.2	60.4	P/P	37 - 101
Norflurazon	98.9	94.3	P/P	63 - 127

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270D

Batch ID: P341343

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Parathion Ethyl	93.2	93.2	P/P	78 - 109
Parathion Methyl	103	100	P/P	74 - 123
Pendimethalin	114	116	P/P	51 - 130
Phorate	90.4	88.3	P/P	53 - 116
Prometon	91.4	86.0	P/P	66 - 124
Prometryn	96.3	93.7	P/P	66 - 124
Simazine	103	98.1	P/P	62 - 134
Terbufos	88.6	89.6	P/P	59 - 115
Terbuthylazine	96.2	93.4	P/P	76 - 113

Reference Method: EPA 8276

Batch ID: P341342

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	60.7	61.0	P/P	47 - 125
Toxaphene	75.1	72.6	P/P	46 - 147

Reference Method: EPA 8321B

Batch ID: P340878

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
AMPA	104		P	40 - 150
Glyphosate	102		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P340883

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	81.0		P	40 - 150
3-Hydroxycarbofuran	91.5		P	40 - 150
Acetaminophen	91.3		P	30 - 150
Aldicarb	79.3		P	30 - 150
Aldicarb Sulfone	92.7		P	40 - 150
Aldicarb Sulfoxide	94.9		P	40 - 150
Bentazon	103		P	30 - 150
Carbamazepine	78.8		P	40 - 150
Carbaryl	66.7		P	40 - 150
Carbofuran	77.3		P	40 - 150
Diuron	65.0		P	40 - 150
Fenuron	95.5		P	40 - 150
Fluridone	66.0		P	40 - 150
Imazapyr	63.3		P	40 - 150
Imidacloprid	89.3		P	40 - 160
Linuron	73.6		P	40 - 150
MCPP	83.2		P	40 - 150
Methiocarb	72.3		P	40 - 150
Methomyl	98.0		P	40 - 150
Oxamyl	87.1		P	40 - 150
Primidone	100		P	40 - 150
Propoxur	73.4		P	40 - 150
Pyraclostrobin	67.9		P	40 - 150
Triclopyr	77.5		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P340984

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	100		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P341454

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.8		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P341459

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P341325

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P341089

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1971848	Calcium	104		P	80 - 120
1971848	Iron	110		P	80 - 120
1971848	Magnesium	105		P	80 - 120
1971848	Potassium	107		P	80 - 120
1971848	Sodium	103		P	80 - 120
1971848	Zinc	101		P	80 - 120
1972137	Calcium	107		P	80 - 120
1972137	Iron	108	110	P/P	80 - 120
1972137	Magnesium	107		P	80 - 120
1972137	Potassium	107	110	P/P	80 - 120
1972137	Sodium	105		P	80 - 120
1972137	Zinc	100	101	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P341089

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1971848	Arsenic	100		P	80 - 120
1971848	Cadmium	102		P	80 - 120
1971848	Chromium	97.8		P	80 - 120
1971848	Copper	96.9		P	80 - 120
1971848	Lead	107		P	80 - 120
1971848	Nickel	96.4		P	80 - 120
1971848	Silver	89.6		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P341089

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972137	Arsenic	101	101	P/P	80 - 120
1972137	Cadmium	105	103	P/P	80 - 120
1972137	Chromium	98.1	98.2	P/P	80 - 120
1972137	Copper	97.9	98.5	P/P	80 - 120
1972137	Lead	109	110	P/P	80 - 120
1972137	Nickel	98.1	97.9	P/P	80 - 120
1972137	Silver	90.4	90.0	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P341225

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972072	Chloride	98.2		P	90 - 110
1972073	Chloride	95.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P341226

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972112	Chloride	94.8		P	90 - 110
1972159	Chloride	96.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P341229

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972072	Sulfate	99.7		P	90 - 110
1972073	Sulfate	97.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P341230

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972112	Sulfate	95.9		P	90 - 110
1972159	Sulfate	97.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P341408

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972107	Ammonia-N	104	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P341176

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972007	Kjeldahl Nitrogen	92.4	94.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P341202

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P341202

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972007	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P341203

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972114	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P341167

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972075	Total-P	102	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P341052

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972010	O-Phosphate-P	96.6	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P341054

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972108	O-Phosphate-P	96.1	98.8	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P341342

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1973124	Aldrin	59.8	63.0	P/P	26 - 96.0
1973124	Alpha-BHC	87.6	87.3	P/P	51 - 123
1973124	Alpha-Chlordane	84.0	83.3	P/P	45 - 120
1973124	Beta-BHC	137	134	P/P	43 - 146
1973124	Carbophenothion	99.6	111	P/P	26 - 179
1973124	Chlorothalonil	63.9	107	P/P	10 - 215
1973124	Cypermethrin	77.9	87.4	P/P	35 - 169
1973124	DDD-p,p'	96.5	104	P/P	49 - 131
1973124	DDE-p,p'	84.5	83.5	P/P	39 - 127
1973124	DDT-p,p'	84.9	85.9	P/P	49 - 120
1973124	Delta-BHC	124	145	P/P	49 - 187
1973124	Dicofol	79.0	77.1	P/P	10 - 129
1973124	Dieldrin	90.2	87.3	P/P	46 - 132
1973124	Endosulfan I	87.7	94.5	P/P	57 - 130
1973124	Endosulfan II	110	117	P/P	52 - 148
1973124	Endosulfan Sulfate	103	113	P/P	55 - 129
1973124	Endrin	91.6	85.1	P/P	45 - 133
1973124	Endrin Aldehyde	92.4	76.9	P/P	26 - 140
1973124	Endrin Ketone	94.1	99.3	P/P	60 - 125
1973124	Gamma-BHC	82.6	84.7	P/P	50 - 145
1973124	Gamma-Chlordane	81.2	81.5	P/P	44 - 118
1973124	Heptachlor	66.3	66.8	P/P	35 - 106

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D

Batch ID: P341342

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1973124	Heptachlor Epoxide	87.2	86.6	P/P	52 - 123
1973124	Methoxychlor	90.7	91.7	P/P	54 - 132
1973124	Mirex	67.0	68.9	P/P	36 - 107
1973124	Permethrin	79.4	82.4	P/P	47 - 135
1973124	Trifluralin	77.9	78.1	P/P	32 - 228

Reference Method: EPA 8270D

Batch ID: P341343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972133	Acetochlor	92.8	96.6	P/P	67 - 125
1972133	Alachlor	90.1	89.0	P/P	69 - 123
1972133	Ametryn	105	110	P/P	52 - 151
1972133	Atrazine	92.5	93.5	P/P	71 - 125
1972133	Atrazine Desethyl	105	110	P/P	10 - 129
1972133	Azinphos Methyl	91.6	101	P/P	48 - 200
1972133	Bromacil	91.8	96.1	P/P	46 - 130
1972133	Butylate	34.4	42.9	P/P	10 - 85.0
1972133	Chlorpyrifos Ethyl	75.1	83.8	P/P	54 - 115
1972133	Chlorpyrifos Methyl	83.9	90.6	P/P	44 - 117
1972133	Cyanazine	115	122	P/P	10 - 262
1972133	Demeton	69.2	78.9	P/P	24 - 145
1972133	Diazinon	101	102	P/P	66 - 129
1972133	Disulfoton	71.3	72.2	P/P	45 - 139
1972133	EPTC	33.4	41.9	P/P	10 - 86.0
1972133	Ethion	89.5	84.4	P/P	59 - 133
1972133	Ethoprop	92.4	98.8	P/P	54 - 116
1972133	Fenamiphos	86.7	101	P/P	55 - 140
1972133	Fipronil	103	110	P/P	37 - 142
1972133	Fipronil Sulfide	89.9	103	P/P	37 - 130
1972133	Fipronil Sulfone	82.3	93.5	P/P	18 - 143
1972133	Fonofos	89.9	96.4	P/P	55 - 118
1972133	Hexazinone	108	117	P/P	62 - 140
1972133	Malathion	83.8	87.3	P/P	64 - 132
1972133	Metalaxyl	90.7	96.0	P/P	55 - 129
1972133	Metolachlor	83.7	90.2	P/P	56 - 137
1972133	Metribuzin	162	175	P/P	16 - 218
1972133	Mevinphos	83.5	91.6	P/P	34 - 129
1972133	Molinate	54.1	58.4	P/P	16 - 99.0
1972133	Norflurazon	93.0	103	P/P	43 - 135
1972133	Parathion Ethyl	88.4	96.2	P/P	71 - 112
1972133	Parathion Methyl	96.9	104	P/P	65 - 127
1972133	Pendimethalin	111	117	P/P	35 - 159
1972133	Phorate	79.3	77.7	P/P	41 - 129
1972133	Prometon	92.3	104	P/P	56 - 140
1972133	Prometryn	99.1	104	P/P	65 - 130
1972133	Simazine	107	116	P/P	54 - 148
1972133	Terbufos	83.9	90.0	P/P	53 - 126
1972133	Terbutylazine	94.8	103	P/P	73 - 114

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
 Batch ID: P341342

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972669	Chlordane	76.3	67.4	P/P	41 - 134
1972669	Toxaphene	87.6	81.5	P/P	39 - 158

Reference Method: EPA 8321B
 Batch ID: P340878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1971373	AMPA	81.5	78.3	P/P	40 - 150
1971373	Glyphosate	95.8	87.4	P/P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P340883

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972049	2,4-D	44.4	44.3	P/P	40 - 150
1972049	3-Hydroxycarbofuran	92.1	90.3	P/P	40 - 150
1972049	Acetaminophen	119	117	P/P	30 - 150
1972049	Aldicarb	66.6	70.8	P/P	30 - 150
1972049	Aldicarb Sulfone	110	113	P/P	40 - 150
1972049	Aldicarb Sulfoxide	86.9	87.6	P/P	40 - 150
1972049	Bentazon	27.9	28.9	F/F	30 - 150
1972049	Carbamazepine	74.3	75.3	P/P	40 - 150
1972049	Carbaryl	53.7	56.0	P/P	40 - 150
1972049	Carbofuran	59.9	61.0	P/P	40 - 150
1972049	Diuron	55.3	56.0	P/P	40 - 150
1972049	Fenuron	67.5	74.7	P/P	40 - 150
1972049	Fluridone	59.9	59.9	P/P	40 - 150
1972049	Imazapyr	52.1	37.9	P/F	40 - 150
1972049	Imidacloprid	164	161	F/F	40 - 160
1972049	Linuron	77.1	72.0	P/P	40 - 150
1972049	MCPP	30.8	31.9	F/F	40 - 150
1972049	Methiocarb	71.7	66.4	P/P	40 - 150
1972049	Methomyl	87.9	81.4	P/P	40 - 150
1972049	Oxamyl	74.9	76.5	P/P	40 - 150
1972049	Primidone	81.4	91.4	P/P	40 - 150
1972049	Propoxur	55.7	56.4	P/P	40 - 150
1972049	Pyraclostrobin	59.3	61.1	P/P	40 - 150
1972049	Triclopyr	40.0	45.0	F/P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P340984

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1971431	Sucralose	98.3	104	P/P	40 - 150

Reference Method: SM 4500 F-C-97
 Batch ID: P341459

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972110	Fluoride	95.7	96.3	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
 Batch ID: P341325

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1972106	Organic Carbon	108		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P341075

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972005	Turbidity	0.712	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P341076

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972110	Turbidity	1.11	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P341089

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972137	Calcium	1.51	Spike	P	0 - 20
1972137	Iron	2.11	Spike	P	0 - 20
1972137	Magnesium	2.28	Spike	P	0 - 20
1972137	Potassium	1.63	Spike	P	0 - 20
1972137	Sodium	1.33	Spike	P	0 - 20
1972137	Zinc	0.612	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P341089

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972137	Arsenic	0.0864	Spike	P	0 - 20
1972137	Cadmium	1.99	Spike	P	0 - 20
1972137	Chromium	0.171	Spike	P	0 - 20
1972137	Copper	0.534	Spike	P	0 - 20
1972137	Lead	0.528	Spike	P	0 - 20
1972137	Nickel	0.217	Spike	P	0 - 20
1972137	Silver	0.473	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P341225

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972072	Chloride	0.0448	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P341226

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972112	Chloride	4.35	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P341229

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972072	Sulfate	0.223	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P341230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972112	Sulfate	5.70	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P341408

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972107	Ammonia-N	0.324	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P341176

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972007	Kjeldahl Nitrogen	0.918	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P341177

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972114	Kjeldahl Nitrogen	1.77	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P341202

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972007	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P341203

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972114	NO2NO3-N	0.418	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P341167

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972075	Total-P	1.37	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P341052

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972010	O-Phosphate-P	0.928	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P341054

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972108	O-Phosphate-P	2.77	Spike	P	0 - 20

Reference Method: EPA 8270D

Batch ID: P341342

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1973124	Aldrin	5.24	Spike	P	0 - 30
1973124	Alpha-BHC	0.364	Spike	P	0 - 30
1973124	Alpha-Chlordane	0.866	Spike	P	0 - 30
1973124	Beta-BHC	2.01	Spike	P	0 - 30
1973124	Carbophenothion	10.5	Spike	P	0 - 30
1973124	Chlorothalonil	50.7	Spike	F	0 - 30
1973124	Cypermethrin	11.6	Spike	P	0 - 30
1973124	DDD-p,p'	7.60	Spike	P	0 - 30
1973124	DDE-p,p'	1.20	Spike	P	0 - 30
1973124	DDT-p,p'	1.17	Spike	P	0 - 30
1973124	Delta-BHC	15.9	Spike	P	0 - 30
1973124	Dicofol	2.33	Spike	P	0 - 30
1973124	Dieldrin	3.32	Spike	P	0 - 30
1973124	Endosulfan I	7.41	Spike	P	0 - 30
1973124	Endosulfan II	5.50	Spike	P	0 - 30
1973124	Endosulfan Sulfate	8.82	Spike	P	0 - 30
1973124	Endrin	7.38	Spike	P	0 - 30
1973124	Endrin Aldehyde	18.4	Spike	P	0 - 30
1973124	Endrin Ketone	5.31	Spike	P	0 - 30
1973124	Gamma-BHC	2.49	Spike	P	0 - 30
1973124	Gamma-Chlordane	0.308	Spike	P	0 - 30
1973124	Heptachlor	0.748	Spike	P	0 - 30
1973124	Heptachlor Epoxide	0.655	Spike	P	0 - 30
1973124	Methoxychlor	1.14	Spike	P	0 - 30
1973124	Mirex	2.79	Spike	P	0 - 30
1973124	Permethrin	3.79	Spike	P	0 - 30
1973124	Trifluralin	0.211	Spike	P	0 - 30
LFB	Aldrin	71.0	LCS	F	0 - 30
LFB	Alpha-BHC	4.89	LCS	P	0 - 30
LFB	Alpha-Chlordane	6.66	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D

Batch ID: P341342

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Beta-BHC	5.36	LCS	P	0 - 30
LFB	Carbophenothion	7.14	LCS	P	0 - 30
LFB	Chlorothalonil	48.2	LCS	F	0 - 30
LFB	Cypermethrin	7.66	LCS	P	0 - 30
LFB	DDD-p,p'	5.95	LCS	P	0 - 30
LFB	DDE-p,p'	2.26	LCS	P	0 - 30
LFB	DDT-p,p'	10.4	LCS	P	0 - 30
LFB	Delta-BHC	15.5	LCS	P	0 - 30
LFB	Dicofol	4.29	LCS	P	0 - 30
LFB	Dieldrin	0.755	LCS	P	0 - 30
LFB	Endosulfan I	0.221	LCS	P	0 - 30
LFB	Endosulfan II	0.916	LCS	P	0 - 30
LFB	Endosulfan Sulfate	4.19	LCS	P	0 - 30
LFB	Endrin	4.30	LCS	P	0 - 30
LFB	Endrin Aldehyde	6.31	LCS	P	0 - 30
LFB	Endrin Ketone	3.20	LCS	P	0 - 30
LFB	Gamma-BHC	4.78	LCS	P	0 - 30
LFB	Gamma-Chlordane	8.60	LCS	P	0 - 30
LFB	Heptachlor	10.4	LCS	P	0 - 30
LFB	Heptachlor Epoxide	3.63	LCS	P	0 - 30
LFB	Methoxychlor	11.5	LCS	P	0 - 30
LFB	Mirex	12.8	LCS	P	0 - 30
LFB	Permethrin	8.88	LCS	P	0 - 30
LFB	Trifluralin	8.05	LCS	P	0 - 30

Reference Method: EPA 8270D

Batch ID: P341343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972133	Acetochlor	4.05	Spike	P	0 - 30
1972133	Alachlor	1.30	Spike	P	0 - 30
1972133	Ametryn	2.49	Spike	P	0 - 30
1972133	Atrazine	0.489	Spike	P	0 - 30
1972133	Atrazine Desethyl	4.55	Spike	P	0 - 30
1972133	Azinphos Methyl	10.2	Spike	P	0 - 30
1972133	Bromacil	4.61	Spike	P	0 - 30
1972133	Butylate	22.1	Spike	P	0 - 30
1972133	Chlorpyrifos Ethyl	10.9	Spike	P	0 - 30
1972133	Chlorpyrifos Methyl	7.72	Spike	P	0 - 30
1972133	Cyanazine	6.21	Spike	P	0 - 30
1972133	Demeton	13.1	Spike	P	0 - 30
1972133	Diazinon	0.906	Spike	P	0 - 30
1972133	Disulfoton	1.21	Spike	P	0 - 30
1972133	EPTC	22.8	Spike	P	0 - 30
1972133	Ethion	5.88	Spike	P	0 - 30
1972133	Ethoprop	6.72	Spike	P	0 - 30
1972133	Fenamiphos	15.4	Spike	P	0 - 30
1972133	Fipronil	7.00	Spike	P	0 - 30
1972133	Fipronil Sulfide	13.3	Spike	P	0 - 30
1972133	Fipronil Sulfone	12.8	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D

Batch ID: P341343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972133	Fonofos	6.96	Spike	P	0 - 30
1972133	Hexazinone	7.85	Spike	P	0 - 30
1972133	Malathion	4.15	Spike	P	0 - 30
1972133	Metalaxyl	5.72	Spike	P	0 - 30
1972133	Metolachlor	6.88	Spike	P	0 - 30
1972133	Metribuzin	7.76	Spike	P	0 - 30
1972133	Mevinphos	9.29	Spike	P	0 - 30
1972133	Molinate	7.55	Spike	P	0 - 30
1972133	Norflurazon	10.2	Spike	P	0 - 30
1972133	Parathion Ethyl	8.43	Spike	P	0 - 30
1972133	Parathion Methyl	7.05	Spike	P	0 - 30
1972133	Pendimethalin	5.13	Spike	P	0 - 30
1972133	Phorate	1.68	Spike	P	0 - 30
1972133	Prometon	11.6	Spike	P	0 - 30
1972133	Prometryn	4.46	Spike	P	0 - 30
1972133	Simazine	7.93	Spike	P	0 - 30
1972133	Terbufos	7.02	Spike	P	0 - 30
1972133	Terbutylazine	7.90	Spike	P	0 - 30
LFB	Acetochlor	2.75	LCS	P	0 - 30
LFB	Alachlor	3.39	LCS	P	0 - 30
LFB	Ametryn	2.45	LCS	P	0 - 30
LFB	Atrazine	9.33	LCS	P	0 - 30
LFB	Atrazine Desethyl	2.07	LCS	P	0 - 30
LFB	Azinphos Methyl	5.53	LCS	P	0 - 30
LFB	Bromacil	17.8	LCS	P	0 - 30
LFB	Butylate	2.92	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	5.83	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	5.39	LCS	P	0 - 30
LFB	Cyanazine	10.7	LCS	P	0 - 30
LFB	Demeton	7.15	LCS	P	0 - 30
LFB	Diazinon	0.963	LCS	P	0 - 30
LFB	Disulfoton	7.59	LCS	P	0 - 30
LFB	EPTC	8.40	LCS	P	0 - 30
LFB	Ethion	3.48	LCS	P	0 - 30
LFB	Ethoprop	0.0397	LCS	P	0 - 30
LFB	Fenamiphos	3.71	LCS	P	0 - 30
LFB	Fipronil	5.07	LCS	P	0 - 30
LFB	Fipronil Sulfide	11.6	LCS	P	0 - 30
LFB	Fipronil Sulfone	10.2	LCS	P	0 - 30
LFB	Fonofos	3.41	LCS	P	0 - 30
LFB	Hexazinone	1.10	LCS	P	0 - 30
LFB	Malathion	8.20	LCS	P	0 - 30
LFB	Metalaxyl	5.14	LCS	P	0 - 30
LFB	Metolachlor	2.84	LCS	P	0 - 30
LFB	Metribuzin	15.4	LCS	P	0 - 30
LFB	Mevinphos	5.27	LCS	P	0 - 30
LFB	Molinate	0.246	LCS	P	0 - 30
LFB	Norflurazon	4.79	LCS	P	0 - 30
LFB	Parathion Ethyl	0.0201	LCS	P	0 - 30
LFB	Parathion Methyl	2.74	LCS	P	0 - 30
LFB	Pendimethalin	2.17	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P341343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Phorate	2.41	LCS	P	0 - 30
LFB	Prometon	6.09	LCS	P	0 - 30
LFB	Prometryn	2.79	LCS	P	0 - 30
LFB	Simazine	5.17	LCS	P	0 - 30
LFB	Terbufos	1.19	LCS	P	0 - 30
LFB	Terbutylazine	2.93	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P341342

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972669	Chlordane	12.4	Spike	P	0 - 30
1972669	Toxaphene	7.16	Spike	P	0 - 30
LFB	Chlordane	0.418	LCS	P	0 - 30
LFB	Toxaphene	3.46	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P340878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1971373	AMPA	3.05	Spike	P	0 - 30
1971373	Glyphosate	8.08	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P340883

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972049	2,4-D	0.162	Spike	P	0 - 30
1972049	3-Hydroxycarbofuran	1.97	Spike	P	0 - 30
1972049	Acetaminophen	2.37	Spike	P	0 - 30
1972049	Aldicarb	6.10	Spike	P	0 - 30
1972049	Aldicarb Sulfone	2.78	Spike	P	0 - 30
1972049	Aldicarb Sulfoxide	0.871	Spike	P	0 - 30
1972049	Bentazon	2.71	Spike	P	0 - 30
1972049	Carbamazepine	1.32	Spike	P	0 - 30
1972049	Carbaryl	4.05	Spike	P	0 - 30
1972049	Carbofuran	1.95	Spike	P	0 - 30
1972049	Diuron	1.26	Spike	P	0 - 30
1972049	Fenuron	10.2	Spike	P	0 - 30
1972049	Fluridone	0.0788	Spike	P	0 - 30
1972049	Imazapyr	13.5	Spike	P	0 - 30
1972049	Imidacloprid	1.62	Spike	P	0 - 30
1972049	Linuron	6.78	Spike	P	0 - 30
1972049	MCP	3.48	Spike	P	0 - 30
1972049	Methiocarb	7.61	Spike	P	0 - 30
1972049	Methomyl	7.62	Spike	P	0 - 30
1972049	Oxamyl	2.13	Spike	P	0 - 30
1972049	Primidone	11.7	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P340883

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972049	Propoxur	1.30	Spike	P	0 - 30
1972049	Pyraclostrobin	2.97	Spike	P	0 - 30
1972049	Triclopyr	11.9	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P340984

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1971431	Sucralose	5.28	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P341022

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972072	Color (true)	1.88	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P341454

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972110	Total Alkalinity	0.246	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P341468

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972000	TDS	2.05	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P341469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972113	TDS	6.17	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P341459

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972110	Fluoride	0.477	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P341325

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P341325

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1972106	Organic Carbon	0.161	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: 1972130
Field Sample ID: G1CE0025

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	36.8	P	30 - 160

Lab Sample ID: 1972131
Field Sample ID: G1CE0025

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	31.9	P	30 - 160
EPA 8321B	2,4-D-d3	31.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Acetaminophen-d4	108	P	30 - 160
EPA 8321B	Carbamazepine-d10	58.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	58.4	P	30 - 160
EPA 8321B	Diuron-d6	48.4	P	30 - 160
EPA 8321B	Diuron-d6	48.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.4	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	90.4	P	40 - 160
EPA 8321B	Primidone-d5	73.8	P	30 - 160
EPA 8321B	Primidone-d5	73.8	P	30 - 160
EPA 8321B	Sucralose-d6	116	P	40 - 160

Lab Sample ID: 1972132
Field Sample ID: G1CE0025

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	59.3	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	45.0	P	34 - 101
EPA 8276	Decachlorobiphenyl	48.2	P	31 - 108
EPA 8276	PCNB	116	P	62 - 142

Lab Sample ID: 1972133
Field Sample ID: G1CE0025

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	113	P	71 - 126
EPA 8270D	Terbufos-d10	99.9	P	50 - 130

Quality Assurance Report Calibration Verification

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A82460

Included Lab Sample IDs: 1972104, 1972105, 1972110, 1972111, 1972112, 1972113

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A82474

Included Lab Sample IDs: 1972108, 1972109, 1972118, 1972119, 1972120, 1972121

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	101	P/P	90 - 110
O-Phosphate-P	101	100	P/P	90 - 110
O-Phosphate-P	101	98.2	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A82476

Included Lab Sample IDs: 1972104, 1972105, 1972110, 1972111, 1972112, 1972113

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

Reference Method: EPA 8321B

Run ID: A82481

Included Lab Sample IDs: 1972131

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	70.9	109	P/P	70 - 130
Glyphosate	110	110	P/P	70 - 160

Reference Method: EPA 8321B

Run ID: A82499

Included Lab Sample IDs: 1972131

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	99.4	102	P/P	60 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A82506

Included Lab Sample IDs: 1972106, 1972107, 1972114, 1972115, 1972116, 1972117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	101	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A82509

Included Lab Sample IDs: 1972104, 1972105, 1972110, 1972111, 1972112, 1972113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	95.0	95.5	P/P	90 - 110
Chloride	95.4	95.0	P/P	90 - 110
Sulfate	96.8	96.9	P/P	90 - 110
Sulfate	97.2	96.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A82526

Included Lab Sample IDs: 1972106

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A82533

Included Lab Sample IDs: 1972107, 1972114, 1972115, 1972116, 1972117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	100	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A82537

Included Lab Sample IDs: 1972106, 1972107, 1972114, 1972115, 1972116, 1972117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.0	97.4	P/P	90 - 110
Organic Carbon	98.7	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A82539

Included Lab Sample IDs: 1972106, 1972107, 1972114, 1972115, 1972116, 1972117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	102	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A82540

Included Lab Sample IDs: 1972134, 1972135, 1972136, 1972137, 1972138, 1972139

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	101	99.2	P/P	90 - 110
Arsenic	103	101	P/P	90 - 110
Arsenic	97.8	98.5	P/P	90 - 110
Cadmium	100	101	P/P	90 - 110
Cadmium	101	99.9	P/P	90 - 110
Cadmium	99.0	99.4	P/P	90 - 110
Chromium	94.3	96.4	P/P	90 - 110
Chromium	97.8	98.2	P/P	90 - 110
Chromium	98.2	96.7	P/P	90 - 110
Copper	101	99.8	P/P	90 - 110
Copper	95.7	97.4	P/P	90 - 110
Copper	99.8	98.2	P/P	90 - 110
Lead	105	105	P/P	90 - 110
Lead	107	106	P/P	90 - 110
Lead	107	107	P/P	90 - 110
Nickel	101	99.8	P/P	90 - 110
Nickel	95.6	96.6	P/P	90 - 110
Nickel	99.8	97.8	P/P	90 - 110
Silver	101	101	P/P	90 - 110
Silver	104	104	P/P	90 - 110
Silver	104	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A82542

Included Lab Sample IDs: 1972134, 1972135, 1972136, 1972137, 1972138, 1972139

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	99.8	P/P	90 - 110
Calcium	99.8	101	P/P	90 - 110
Iron	103	99.8	P/P	90 - 110
Iron	99.8	101	P/P	90 - 110
Magnesium	101	102	P/P	90 - 110
Magnesium	104	101	P/P	90 - 110
Potassium	102	102	P/P	90 - 110
Potassium	103	102	P/P	90 - 110
Sodium	101	99.6	P/P	90 - 110
Sodium	99.6	101	P/P	90 - 110
Zinc	98.9	101	P/P	90 - 110
Zinc	99.8	98.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A82558

Included Lab Sample IDs: 1972106, 1972107, 1972114, 1972115, 1972116, 1972117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	103	P/P	90 - 110
Ammonia-N	104	103	P/P	90 - 110
Ammonia-N	105	105	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A82571

Included Lab Sample IDs: 1972104, 1972105, 1972110, 1972111, 1972112, 1972113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.8	101	P/P	90 - 110
Total Alkalinity	99.7	97.8	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A82571

Included Lab Sample IDs: 1972104, 1972105, 1972110, 1972111, 1972112, 1972113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	99.0	P/P	90 - 110
Fluoride	106	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A82580

Included Lab Sample IDs: 1972131

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	93.1	93.5	P/P	50 - 150
3-Hydroxycarbofuran	100	99.5	P/P	60 - 150
Acetaminophen	98.4	96.0	P/P	60 - 150
Aldicarb	103	93.1	P/P	60 - 150
Aldicarb Sulfone	99.1	97.2	P/P	50 - 150
Aldicarb Sulfoxide	94.4	101	P/P	50 - 150
Bentazon	127	136	P/P	50 - 150
Carbamazepine	97.6	96.6	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A82580

Included Lab Sample IDs: 1972130

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbaryl	111	109	P/P	60 - 150
Carbofuran	115	116	P/P	50 - 150
Diuron	88.6	99.0	P/P	60 - 150
Fenuron	95.6	92.8	P/P	60 - 150
Fluridone	109	105	P/P	60 - 160
Imazapyr	79.8	75.7	P/P	50 - 150
Imidacloprid	91.5	97.5	P/P	60 - 150
Linuron	107	96.0	P/P	60 - 150
MCPPP	99.2	98.4	P/P	50 - 150
Methiocarb	105	106	P/P	50 - 150
Methomyl	98.1	107	P/P	50 - 150
Oxamyl	94.9	105	P/P	50 - 150
Primidone	97.2	90.8	P/P	60 - 150
Propoxur	104	110	P/P	50 - 150
Pyraclostrobin	96.2	93.5	P/P	60 - 150
Triclopyr	96.4	93.8	P/P	50 - 150

Reference Method: EPA 8270D

Run ID: A82637

Included Lab Sample IDs: 1972132

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.1		P	80 - 120
Alpha-BHC	101		P	80 - 120
Alpha-Chlordane	98.0		P	80 - 120
Beta-BHC	105		P	80 - 120
Carbophenothion	101		P	80 - 120
Chlorothalonil	108		P	80 - 120
Cypermethrin	88.1		P	80 - 120
DDD-p,p'	100		P	80 - 120
DDE-p,p'	98.6		P	80 - 120
DDT-p,p'	106		P	80 - 120
Delta-BHC	101		P	80 - 120
Dicofol	102		P	80 - 120
Dieldrin	98.9		P	80 - 120
Endosulfan I	95.1		P	80 - 120
Endosulfan II	97.0		P	80 - 120
Endosulfan Sulfate	102		P	80 - 120
Endrin	94.5		P	80 - 120
Endrin Aldehyde	97.3		P	80 - 120
Endrin Ketone	94.6		P	80 - 120
Gamma-BHC	99.3		P	80 - 120
Gamma-Chlordane	97.5		P	80 - 120
Heptachlor	96.3		P	80 - 120
Heptachlor Epoxide	98.8		P	80 - 120
Methoxychlor	105		P	80 - 120
Mirex	96.0		P	80 - 120
Permethrin	92.1		P	80 - 120
Trifluralin	98.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8276

Run ID: A82682

Included Lab Sample IDs: 1972132

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	89.0		P	80 - 120
Toxaphene	86.7		P	80 - 120

Reference Method: EPA 8270D

Run ID: A82759

Included Lab Sample IDs: 1972133

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	108		P	80 - 120
Atrazine	92.7		P	80 - 120
Atrazine Desethyl	99.8		P	80 - 120
Azinphos Methyl	96.7		P	80 - 120
Bromacil	104		P	80 - 120
Butylate	98.2		P	80 - 120
Chlorpyrifos Ethyl	94.9		P	80 - 120
Chlorpyrifos Methyl	95.7		P	80 - 120
Cyanazine	93.5		P	80 - 120
Demeton	99.5		P	80 - 120
Diazinon	99.9		P	80 - 120
Disulfoton	92.3		P	80 - 120
EPTC	102		P	80 - 120
Ethion	85.4		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	95.5		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Sulfide	96.5		P	80 - 120
Fipronil Sulfone	96.9		P	80 - 120
Fonofos	95.9		P	80 - 120
Hexazinone	96.7		P	80 - 120
Malathion	95.9		P	80 - 120
Metalaxyl	103		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	85.7		P	80 - 120
Mevinphos	101		P	80 - 120
Molinate	102		P	80 - 120
Norflurazon	104		P	80 - 120
Parathion Ethyl	92.5		P	80 - 120
Parathion Methyl	94.1		P	80 - 120
Pendimethalin	100		P	80 - 120
Phorate	98.5		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	103		P	80 - 120
Simazine	95.8		P	80 - 120
Terbufos	94.8		P	80 - 120
Terbuthylazine	98.8		P	80 - 120

* 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 SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						0.712	
	Turbidity						1.11	
EPA 200.7 Rev. 4.4	Calcium	105		104	107			1.51
	Iron	108		110	108	110		2.11
	Magnesium	105		105	107			2.28
	Potassium	106		107	107	110		1.63
	Sodium	103		103	105			1.33
	Zinc	101		101	100	101		0.612
EPA 200.8 Rev. 5.4	Arsenic	98.0		100	101	101		0.0864
	Cadmium	100		102	105	103		1.99
	Chromium	98.3		97.8	98.1	98.2		0.171
	Copper	96.8		96.9	97.9	98.5		0.534
	Lead	106		107	109	110		0.528
	Nickel	96.9		96.4	98.1	97.9		0.217
	Silver	89.2		89.6	90.4	90.0		0.473
EPA 300.0 Rev. 2.1	Chloride	97.3		98.2	95.0		0.0448	
	Chloride	95.5		94.8	96.1		4.35	
	Sulfate	98.5		99.7	97.0		0.223	
	Sulfate	97.3		95.9	97.8		5.70	
EPA 350.1 Rev. 2.0	Ammonia-N	102		104	104			0.324
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.6		92.4	94.0			0.918
	Kjeldahl Nitrogen	104						1.77
EPA 353.2 Rev. 2.0	NO2NO3-N	103		102	102			0.0
	NO2NO3-N	104		102	102			0.418
EPA 365.1 Rev. 2.0	Total-P	100		102	100			1.37
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.8		96.6	98.0			0.928
	O-Phosphate-P	101		96.1	98.8			2.77
EPA 8270D	Acetochlor	98.2	95.6	92.8	96.6	2.75		4.05
	Alachlor	99.4	96.1	90.1	89.0	3.39		1.30
	Aldrin	66.8	31.8	59.8	63.0	71.0		5.24
	Alpha-BHC	85.1	81.1	87.6	87.3	4.89		0.364
	Alpha-Chlordane	87.0	81.4	84.0	83.3	6.66		0.866
	Ametryn	107	105	105	110	2.45		2.49
	Atrazine	101	92.4	92.5	93.5	9.33		0.489
	Atrazine Desethyl	93.8	91.9	105	110	2.07		4.55
	Azinphos Methyl	108	103	91.6	101	5.53		10.2
	Beta-BHC	139	147	137	134	5.36		2.01
	Bromacil	91.1	76.2	91.8	96.1	17.8		4.61
	Butylate	51.7	53.2	34.4	42.9	2.92		22.1
	Carbophenothion	91.9	98.7	99.6	111	7.14		10.5
	Chlorothalonil	29.8	48.7	63.9	107	48.2		50.7
	Chlorpyrifos Ethyl	95.4	90.0	75.1	83.8	5.83		10.9
	Chlorpyrifos Methyl	99.0	93.8	83.9	90.6	5.39		7.72
	Cyanazine	135	121	115	122	10.7		6.21
	Cypermethrin	83.7	90.3	77.9	87.4	7.66		11.6
	DDD-p,p'	105	99.1	96.5	104	5.95		7.60
	DDE-p,p'	81.5	79.7	84.5	83.5	2.26		1.20
	DDT-p,p'	92.6	83.4	84.9	85.9	10.4		1.17
	Delta-BHC	135	116	124	145	15.5		15.9
	Demeton	78.2	84.0	69.2	78.9	7.15		13.1
	Diazinon	98.2	99.1	101	102	0.963		0.906
	Dicofol	80.5	77.1	79.0	77.1	4.29		2.33
	Dieldrin	89.6	88.9	90.2	87.3	0.755		3.32
	Disulfoton	79.4	85.7	71.3	72.2	7.59		1.21

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270D	Endosulfan I	87.3	87.5	87.7	94.5	0.221		7.41
	Endosulfan II	104	104	110	117	0.916		5.50
	Endosulfan Sulfate	113	118	103	113	4.19		8.82
	Endrin	86.7	83.0	91.6	85.1	4.30		7.38
	Endrin Aldehyde	94.4	101	92.4	76.9	6.31		18.4
	Endrin Ketone	98.6	102	94.1	99.3	3.20		5.31
	EPTC	51.0	55.5	33.4	41.9	8.40		22.8
	Ethion	83.9	86.8	89.5	84.4	3.48		5.88
	Ethoprop	91.3	91.3	92.4	98.8	0.0397		6.72
	Fenamiphos	103	99.4	86.7	101	3.71		15.4
	Fipronil	104	99.0	103	110	5.07		7.00
	Fipronil Sulfide	104	92.6	89.9	103	11.6		13.3
	Fipronil Sulfone	93.3	84.2	82.3	93.5	10.2		12.8
	Fonofos	94.0	90.8	89.9	96.4	3.41		6.96
	Gamma-BHC	93.0	88.7	82.6	84.7	4.78		2.49
	Gamma-Chlordane	85.1	78.1	81.2	81.5	8.60		0.308
	Heptachlor	71.5	64.4	66.3	66.8	10.4		0.748
	Heptachlor Epoxide	88.3	85.1	87.2	86.6	3.63		0.655
	Hexazinone	101	100	108	117	1.10		7.85
	Malathion	101	92.7	83.8	87.3	8.20		4.15
	Metalaxyl	99.7	94.7	90.7	96.0	5.14		5.72
	Methoxychlor	101	89.6	90.7	91.7	11.5		1.14
	Metolachlor	95.8	93.1	83.7	90.2	2.84		6.88
	Metribuzin	160	137	162	175	15.4		7.76
	Mevinphos	84.8	80.4	83.5	91.6	5.27		9.29
	Mirex	73.3	64.4	67.0	68.9	12.8		2.79
	Molinate	60.2	60.4	54.1	58.4	0.246		7.55
	Norflurazon	98.9	94.3	93.0	103	4.79		10.2
	Parathion Ethyl	93.2	93.2	88.4	96.2	0.0201		8.43
	Parathion Methyl	103	100	96.9	104	2.74		7.05
	Pendimethalin	114	116	111	117	2.17		5.13
	Permethrin	88.6	81.1	79.4	82.4	8.88		3.79
	Phorate	90.4	88.3	79.3	77.7	2.41		1.68
	Prometon	91.4	86.0	92.3	104	6.09		11.6
	Prometryn	96.3	93.7	99.1	104	2.79		4.46
	Simazine	103	98.1	107	116	5.17		7.93
	Terbufos	88.6	89.6	83.9	90.0	1.19		7.02
	Terbutylazine	96.2	93.4	94.8	103	2.93		7.90
	Trifluralin	81.8	75.5	77.9	78.1	8.05		0.211
EPA 8276	Chlordane	60.7	61.0	76.3	67.4	0.418		12.4
	Toxaphene	75.1	72.6	87.6	81.5	3.46		7.16
EPA 8321B	2,4-D	81.0		44.4	44.3			0.162
	3-Hydroxycarbofuran	91.5		92.1	90.3			1.97
	Acetaminophen	91.3		119	117			2.37
	Aldicarb	79.3		66.6	70.8			6.10
	Aldicarb Sulfone	92.7		110	113			2.78
	Aldicarb Sulfoxide	94.9		86.9	87.6			0.871
	AMPA	104		81.5	78.3			3.05
	Bentazon	103		27.9	28.9			2.71
	Carbamazepine	78.8		74.3	75.3			1.32
	Carbaryl	66.7		53.7	56.0			4.05
	Carbofuran	77.3		59.9	61.0			1.95
	Diuron	65.0		55.3	56.0			1.26
	Fenuron	95.5		67.5	74.7			10.2

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Fluridone	66.0	59.9	59.9		0.0788
	Glyphosate	102	95.8	87.4		8.08
	Imazapyr	63.3	52.1	37.9		13.5
	Imidacloprid	89.3	164	161		1.62
	Linuron	73.6	77.1	72.0		6.78
	MCCP	83.2	30.8	31.9		3.48
	Methiocarb	72.3	71.7	66.4		7.61
	Methomyl	98.0	87.9	81.4		7.62
	Oxamyl	87.1	74.9	76.5		2.13
	Primidone	100	81.4	91.4		11.7
	Propoxur	73.4	55.7	56.4		1.30
	Pyraclostrobin	67.9	59.3	61.1		2.97
	Sucralose	100	98.3	104		5.28
	Triclopyr	77.5	40.0	45.0		11.9
SM 2120 B	Color (true)				1.88	
SM 2320 B-97	Total Alkalinity	99.8			0.246	
SM 2540 C-97	TDS				2.05	
	TDS				6.17	
SM 4500 F-C-97	Fluoride	96.8	95.7	96.3		0.477
SM 5310 B-00	Organic Carbon	98.6	108			0.161

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1972134, 1972135, 1972136, 1972137, 1972138, 1972139
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1972134, 1972135, 1972136, 1972137, 1972138, 1972139
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1972106, 1972107, 1972114, 1972115, 1972116, 1972117
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1972106, 1972107, 1972114, 1972115, 1972116, 1972117
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1972106, 1972107, 1972114, 1972115, 1972116, 1972117
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1972106, 1972107, 1972114, 1972115, 1972116, 1972117
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1972108, 1972109, 1972118, 1972119, 1972120, 1972121
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1972132
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1972133
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	1972132
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	1972130
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	1972131
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1972131
SM 2120 B / E31780	True Color measured at 450 nm	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1972104, 1972105, 1972110, 1972111, 1972112, 1972113

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1972106, 1972107, 1972114, 1972115, 1972116, 1972117

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	03/06/2018			03/06/2018 17:11	DeAsia Armster	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
EPA 200.7 Rev. 4.4	03/06/2018	03/07/2018	Elliott D. Healy	03/09/2018	Betina Topolski	1972134, 1972135, 1972136, 1972137, 1972138, 1972139
EPA 200.8 Rev. 5.4	03/06/2018	03/07/2018	Elliott D. Healy	03/09/2018	Nadine Brooks	1972134, 1972135, 1972136, 1972137, 1972138, 1972139
EPA 300.0 Rev. 2.1	03/06/2018			03/08/2018	Julia Storbeck	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
EPA 350.1 Rev. 2.0	03/06/2018			03/09/2018	Ping Hua	1972106, 1972107, 1972114, 1972115, 1972116, 1972117
EPA 351.2 Rev. 2.0	03/06/2018	03/08/2018	Adrian Shelby	03/09/2018	Joseph Suarez	1972106, 1972107, 1972114, 1972115, 1972116, 1972117
EPA 353.2 Rev. 2.0	03/06/2018			03/08/2018	Lauren Bottorf	1972106, 1972107, 1972114, 1972115, 1972116, 1972117
EPA 365.1 Rev. 2.0	03/06/2018	03/08/2018	Lipi Saha	03/09/2018	Lipi Saha	1972106, 1972107, 1972114, 1972115, 1972116, 1972117
EPA 365.1 Rev. 2.0 dissolved	03/06/2018			03/06/2018 16:19	Megan Treadwell	1972108
	03/06/2018			03/06/2018 17:13	Megan Treadwell	1972109
	03/06/2018			03/06/2018 17:14	Megan Treadwell	1972118
	03/06/2018			03/06/2018 17:21	Megan Treadwell	1972119, 1972120
	03/06/2018			03/06/2018 17:22	Megan Treadwell	1972121
EPA 8270D	03/06/2018	03/09/2018	Rasheda Ghaffari	03/13/2018	Marek Topolski	1972132
	03/06/2018	03/12/2018	John Kaba	03/14/2018	Vandana T. Nagar	1972133
EPA 8276	03/06/2018	03/09/2018	Rasheda Ghaffari	03/14/2018	John P. Burgos	1972132
EPA 8321B	03/06/2018	03/07/2018	Hoor Shaik	03/08/2018	Julie Michelle Frank	1972131
	03/06/2018	03/07/2018	Hoor Shaik	03/09/2018	Julie Michelle Frank	1972130
	03/06/2018	03/07/2018	Julie Michelle Frank	03/07/2018	Julie Michelle Frank	1972131
	03/06/2018	03/07/2018	Julie Michelle Frank	03/08/2018	Juyoung Kim	1972131
SM 2120 B	03/06/2018			03/06/2018 14:51	Tanya Welborn	1972104
	03/06/2018			03/06/2018 14:52	Tanya Welborn	1972105
	03/06/2018			03/06/2018 14:53	Tanya Welborn	1972110, 1972111
	03/06/2018			03/06/2018 14:54	Tanya Welborn	1972112
	03/06/2018			03/06/2018 14:55	Tanya Welborn	1972113
SM 2320 B-97	03/06/2018			03/13/2018	Dale L. Simmons	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
SM 2540 C-97	03/06/2018			03/07/2018	Yijie Li	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
SM 2540 D-97	03/06/2018			03/07/2018	Yijie Li	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
SM 4500 F-C-97	03/06/2018			03/13/2018	Dale L. Simmons	1972104, 1972105, 1972110, 1972111, 1972112, 1972113
SM 5310 B-00	03/06/2018			03/08/2018	Megan Treadwell	1972106, 1972107, 1972114, 1972115, 1972116, 1972117