

Chemical Analysis Report

CEN-DIST-2018-02-13-01

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

Event Description: **McCoy X4 / Hope / Kasey X2 / Dot X2 / Tilden X4**

Request ID: **RQ-2018-02-12-56**

Customer: **CEN-DIST**

Project ID: **SMP**

Send Reports to:

FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 12-MAR-2018 13:00



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: Lake Dot @ Center

Collection Date/Time: 02/12/2018 09:37

Field ID: G2CE0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966534	EPA 180.1 Rev. 2.0	Turbidity	2.3		NTU	P339889	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P340127	
		Sulfate	20		mg SO4/L	P340132	
	SM 2120 B	Color (true)	9.8		PCU	P339868	
	SM 2320 B-97	Total Alkalinity	67		mg CaCO3/L	P340308	
	SM 2540 C-97	TDS	114		mg/L	P340330	
	SM 2540 D-97	TSS	2	U	mg/L	P340225	
	SM 4500 F-C-97	Fluoride	0.059	I	mg F/L	P340767	
1966535	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P340316	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.42		mg N/L	P339896	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.009	I	mg N/L	P340240	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P339910	
	SM 5310 B-00	Organic Carbon	4.2		mg C/L	P340252	
1966536	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P339880	
1966576	EPA 8321B	2,4-D	0.0020	UJ	ug/L	P339874	MS
		Sucralose**	0.17		ug/L	P339742	
		Bentazon	0.0056	J	ug/L	P339874	MS
		MCP	0.0020	UJ	ug/L	P339874	MS
		Triclopyr**	0.0040	UJ	ug/L	P339874	MS
		Imidacloprid	0.0090		ug/L	P339874	
		Diuron	0.0093		ug/L	P339874	
		Primidone**	0.0040	U	ug/L	P339874	
		Linuron	0.0040	U	ug/L	P339874	
		Acetaminophen**	0.0093	I	ug/L	P339874	
		Fenuron	0.0080	U	ug/L	P339874	
		Carbamazepine**	4.0E-04	U	ug/L	P339874	
		Fluridone**	0.0030		ug/L	P339874	

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

Sample Location: Lake McCoy @ 220m SW of Center of Southern Lobe Collection Date/Time: 02/12/2018 13:10

Field ID: G2CE0144

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966507	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P339888	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P340015	
		Sulfate	19		mg SO4/L	P340018	
	SM 2120 B	Color (true)	60	A	PCU	P339867	
	SM 2320 B-97	Total Alkalinity	36		mg CaCO3/L	P340308	
	SM 2540 C-97	TDS	108		mg/L	P340329	
	SM 2540 D-97	TSS	2	U	mg/L	P340224	
	SM 4500 F-C-97	Fluoride	0.047	I	mg F/L	P340767	
1966516	EPA 350.1 Rev. 2.0	Ammonia-N	0.094		mg N/L	P340315	

Field ID: G2CE0144

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966516	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.86		mg N/L	P339895	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.042		mg N/L	P340239	
	EPA 365.1 Rev. 2.0	Total-P	0.039		mg P/L	P339910	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P340251	
1966525	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P339880	
1966592	EPA 200.7 Rev. 4.4	Calcium	20.1		mg/L	P339958	
		Iron	52	I	ug/L	P339958	
		Magnesium	3.47		mg/L	P339958	
		Potassium	3.1		mg/L	P339958	
		Sodium	10		mg/L	P339958	
		Zinc	5.0	U	ug/L	P339958	
	EPA 200.8 Rev. 5.4	Arsenic	1.85		ug/L	P339958	
		Cadmium	0.020	U	ug/L	P339958	
		Chromium	0.44	I	ug/L	P340360	
		Copper	0.66	I	ug/L	P339958	
		Lead	0.10	I	ug/L	P339958	
		Nickel	0.20	U	ug/L	P339958	
		Silver	0.010	U	ug/L	P340360	

Ref. Method and Comment:

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

SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lake McCoy @ 245m NE of Center of Southern Lobe **Collection Date/Time: 02/12/2018 13:15**

Field ID: G2CE0145

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966508	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P339888	
	EPA 300.0 Rev. 2.1	Chloride	17	A	mg Cl/L	P340015	
		Sulfate	19	A	mg SO4/L	P340018	
	SM 2120 B	Color (true)	58		PCU	P339867	
	SM 2320 B-97	Total Alkalinity	36		mg CaCO3/L	P340308	
	SM 2540 C-97	TDS	115		mg/L	P340330	
	SM 2540 D-97	TSS	2	U	mg/L	P340224	
	SM 4500 F-C-97	Fluoride	0.046	I	mg F/L	P340767	
1966517	EPA 350.1 Rev. 2.0	Ammonia-N	0.075		mg N/L	P340315	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.87		mg N/L	P339895	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.036		mg N/L	P340239	
	EPA 365.1 Rev. 2.0	Total-P	0.037		mg P/L	P339910	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P340251	
1966526	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P339879	
1966593	EPA 200.7 Rev. 4.4	Calcium	19.7		mg/L	P339958	
		Iron	50	I	ug/L	P339958	
		Magnesium	3.44		mg/L	P339958	
		Potassium	3.1		mg/L	P339958	

Field ID: G2CE0145

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966593	EPA 200.7 Rev. 4.4	Sodium	9.9		mg/L	P339958	
		Zinc	5.0	U	ug/L	P339958	
	EPA 200.8 Rev. 5.4	Arsenic	1.85		ug/L	P339958	
		Cadmium	0.020	U	ug/L	P339958	
		Chromium	0.64	I	ug/L	P340360	
		Copper	0.65	I	ug/L	P339958	
		Lead	0.094	I	ug/L	P339958	
		Nickel	0.20	U	ug/L	P339958	
		Silver	0.010	U	ug/L	P340360	

Ref. Method and Comment:

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

SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lake McCoy @ Center of North Lobe

Collection Date/Time: 02/12/2018 13:28

Field ID: G2CE0171

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966509	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P339888	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P340015	
		Sulfate	20		mg SO4/L	P340018	
	SM 2120 B	Color (true)	59	A	PCU	P339868	
	SM 2320 B-97	Total Alkalinity	36		mg CaCO3/L	P340308	
	SM 2540 C-97	TDS	117		mg/L	P340330	
	SM 2540 D-97	TSS	2	U	mg/L	P340225	
	SM 4500 F-C-97	Fluoride	0.046	I	mg F/L	P340767	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.062		mg N/L	P340316	
		Kjeldahl Nitrogen	0.88		mg N/L	P339895	
1966518	EPA 353.2 Rev. 2.0	NO2NO3-N	0.035		mg N/L	P340239	
	EPA 365.1 Rev. 2.0	Total-P	0.037		mg P/L	P339910	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P340251	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P339879	
1966594	EPA 200.7 Rev. 4.4	Calcium	20.5		mg/L	P339958	
		Iron	48	I	ug/L	P339958	
		Magnesium	3.50		mg/L	P339958	
		Potassium	3.1		mg/L	P339958	
		Sodium	10.3		mg/L	P339958	
		Zinc	5.0	U	ug/L	P339958	
		Arsenic	1.70		ug/L	P339958	
	EPA 200.8 Rev. 5.4	Cadmium	0.020	U	ug/L	P339958	
		Chromium	0.47	I	ug/L	P340360	
		Copper	0.92		ug/L	P339958	
		Lead	0.071	I	ug/L	P339958	
		Nickel	0.20	U	ug/L	P339958	
		Silver	0.010	U	ug/L	P340360	

Ref. Method and Comment:

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

SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lake Tilden @ 140m NW of Center

Collection Date/Time: 02/12/2018 11:28

Field ID: G1CE0087

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966510	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P339888	
	EPA 300.0 Rev. 2.1	Chloride	35		mg Cl/L	P340015	
		Sulfate	11		mg SO4/L	P340018	
	SM 2120 B	Color (true)	320		PCU	P339868	
	SM 2320 B-97	Total Alkalinity	33		mg CaCO3/L	P340308	
	SM 2540 C-97	TDS	158		mg/L	P340330	
	SM 2540 D-97	TSS	2	U	mg/L	P340225	
	SM 4500 F-C-97	Fluoride	0.090	I	mg F/L	P340767	
1966519	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P340316	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P339896	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P340239	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P339910	
	SM 5310 B-00	Organic Carbon	24		mg C/L	P340251	
1966528	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.079		mg P/L	P339880	
1966595	EPA 200.7 Rev. 4.4	Calcium	13.5		mg/L	P339958	
		Iron	210		ug/L	P339958	
		Magnesium	5.10		mg/L	P339958	
		Potassium	7.5		mg/L	P339958	
		Sodium	19.5		mg/L	P339958	
		Zinc	5.0	U	ug/L	P339958	
	EPA 200.8 Rev. 5.4	Arsenic	0.96		ug/L	P339958	
		Cadmium	0.020	U	ug/L	P339958	
		Chromium	0.64	I	ug/L	P340360	
		Copper	1.34		ug/L	P339958	
		Lead	0.33		ug/L	P339958	
		Nickel	0.45	I	ug/L	P339958	
		Silver	0.010	U	ug/L	P340360	

Ref. Method and Comment:

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

SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lake Tilden @ 165m NE of Center

Collection Date/Time: 02/12/2018 11:35

Field ID: G1CE0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966511	EPA 180.1 Rev. 2.0	Turbidity	0.60		NTU	P339888	
	EPA 300.0 Rev. 2.1	Chloride	34		mg Cl/L	P340015	
		Sulfate	11		mg SO4/L	P340018	
	SM 2120 B	Color (true)	320		PCU	P339868	
	SM 2320 B-97	Total Alkalinity	33		mg CaCO3/L	P340308	
	SM 2540 C-97	TDS	154		mg/L	P340330	
	SM 2540 D-97	TSS	2	U	mg/L	P340225	
	SM 4500 F-C-97	Fluoride	0.091	I	mg F/L	P340767	
1966520	EPA 350.1 Rev. 2.0	Ammonia-N	0.022		mg N/L	P340316	

Field ID: G1CE0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966520	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.95		mg N/L	P339896	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P340239	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P339910	
	SM 5310 B-00	Organic Carbon	24		mg C/L	P340251	
1966529	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.082		mg P/L	P339880	
1966596	EPA 200.7 Rev. 4.4	Calcium	13.5		mg/L	P339958	
		Iron	210		ug/L	P339958	
		Magnesium	5.09		mg/L	P339958	
		Potassium	7.5		mg/L	P339958	
		Sodium	19.3		mg/L	P339958	
		Zinc	5.0	U	ug/L	P339958	
	EPA 200.8 Rev. 5.4	Arsenic	0.95		ug/L	P339958	
		Cadmium	0.020	U	ug/L	P339958	
		Chromium	0.53	I	ug/L	P340360	
		Copper	1.29		ug/L	P339958	
		Lead	0.33		ug/L	P339958	
		Nickel	0.45	I	ug/L	P339958	
		Silver	0.010	U	ug/L	P340360	

Ref. Method and Comment:

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

SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lake Tilden @ 150m SE of Center

Collection Date/Time: 02/12/2018 11:45

Field ID: G1CE0089

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966512	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P339888	
	EPA 300.0 Rev. 2.1	Chloride	34		mg Cl/L	P340015	
		Sulfate	11		mg SO4/L	P340018	
	SM 2120 B	Color (true)	320		PCU	P339868	
	SM 2320 B-97	Total Alkalinity	33		mg CaCO3/L	P340308	
	SM 2540 C-97	TDS	152		mg/L	P340330	
	SM 2540 D-97	TSS	2	U	mg/L	P340225	
	SM 4500 F-C-97	Fluoride	0.091	I	mg F/L	P340767	
1966521	EPA 350.1 Rev. 2.0	Ammonia-N	0.022		mg N/L	P340316	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P339896	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P340239	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P339910	
	SM 5310 B-00	Organic Carbon	24		mg C/L	P340252	
1966530	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.080		mg P/L	P339880	
1966597	EPA 200.7 Rev. 4.4	Calcium	13.2		mg/L	P339958	
		Iron	200		ug/L	P339958	
		Magnesium	5.01		mg/L	P339958	
		Potassium	7.3		mg/L	P339958	
		Sodium	19.0		mg/L	P339958	

Field ID: G1CE0089

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966597	EPA 200.7 Rev. 4.4	Zinc	5.0	U	ug/L	P339958	
	EPA 200.8 Rev. 5.4	Arsenic	0.93		ug/L	P339958	
		Cadmium	0.020	U	ug/L	P339958	
		Chromium	0.54	I	ug/L	P340360	
		Copper	1.34		ug/L	P339958	
		Lead	0.32		ug/L	P339958	
		Nickel	0.51	I	ug/L	P339958	
		Silver	0.010	U	ug/L	P340360	

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: Lake Tilden @ 225m S of Center

Collection Date/Time: 02/12/2018 11:55

Field ID: G1CE0090

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966513	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P339888	
	EPA 300.0 Rev. 2.1	Chloride	34		mg Cl/L	P340015	
		Sulfate	11		mg SO4/L	P340018	
	SM 2120 B	Color (true)	320		PCU	P339868	
	SM 2320 B-97	Total Alkalinity	33		mg CaCO3/L	P340308	
	SM 2540 C-97	TDS	156		mg/L	P340330	
	SM 2540 D-97	TSS	2	U	mg/L	P340225	
	SM 4500 F-C-97	Fluoride	0.091	I	mg F/L	P340767	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.027		mg N/L	P340316	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P339896	
1966522	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P340240	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P339910	
	SM 5310 B-00	Organic Carbon	24		mg C/L	P340252	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.082		mg P/L	P339880	
	EPA 200.7 Rev. 4.4	Calcium	13.4		mg/L	P339958	
1966598		Iron	200		ug/L	P339958	
		Magnesium	5.06		mg/L	P339958	
		Potassium	7.4		mg/L	P339958	
		Sodium	19.2		mg/L	P339958	
		Zinc	5.0	U	ug/L	P339958	
	EPA 200.8 Rev. 5.4	Arsenic	0.94		ug/L	P339958	
		Cadmium	0.020	U	ug/L	P339958	
		Chromium	0.55	I	ug/L	P340360	
		Copper	1.42		ug/L	P339958	
		Lead	0.33		ug/L	P339958	
		Nickel	0.51	I	ug/L	P339958	
		Silver	0.010	U	ug/L	P340360	

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: Lake McCoy @ Center of Southern Lobe

Collection Date/Time: 02/12/2018 13:03

Field ID: G2CE0098

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966514	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P339888	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P340015	
		Sulfate	19		mg SO4/L	P340018	
		Color (true)	59		PCU	P339868	
	SM 2320 B-97	Total Alkalinity	36		mg CaCO3/L	P340308	
	SM 2540 C-97	TDS	114		mg/L	P340330	
	SM 2540 D-97	TSS	2	U	mg/L	P340225	
	SM 4500 F-C-97	Fluoride	0.047	I	mg F/L	P340767	
1966523	EPA 350.1 Rev. 2.0	Ammonia-N	0.090		mg N/L	P340316	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.91		mg N/L	P339896	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.041		mg N/L	P340240	
	EPA 365.1 Rev. 2.0	Total-P	0.038		mg P/L	P339910	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P340252	
1966532	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P339880	
1966599	EPA 200.7 Rev. 4.4	Calcium	19.6		mg/L	P339958	
		Iron	220		ug/L	P339958	
		Magnesium	3.32		mg/L	P339958	
		Potassium	3.0		mg/L	P339958	
		Sodium	9.7		mg/L	P339958	
		Zinc	5.0	U	ug/L	P339958	
	EPA 200.8 Rev. 5.4	Arsenic	1.78		ug/L	P339958	
		Cadmium	0.020	U	ug/L	P339958	
		Chromium	0.46	I	ug/L	P340360	
		Copper	1.69		ug/L	P339958	
		Lead	0.11	I	ug/L	P339958	
		Nickel	0.20	I	ug/L	P340360	
		Silver	0.010	U	ug/L	P340360	

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: Kasey Lake @ Center

Collection Date/Time: 02/12/2018 10:20

Field ID: G2CE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966515	EPA 180.1 Rev. 2.0	Turbidity	4.5	A	NTU	P339889	
	EPA 300.0 Rev. 2.1	Chloride	10		mg Cl/L	P340015	
		Sulfate	5.6		mg SO4/L	P340018	
		Color (true)	33		PCU	P339868	
	SM 2320 B-97	Total Alkalinity	27	A	mg CaCO3/L	P340308	
	SM 2540 C-97	TDS	59		mg/L	P340330	
	SM 2540 D-97	TSS	7	I	mg/L	P340225	
	SM 4500 F-C-97	Fluoride	0.051	I	mg F/L	P340767	
1966524	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P340316	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P339896	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P340240	

Field ID: G2CE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966524	EPA 365.1 Rev. 2.0	Total-P	0.059		mg P/L	P339910	
	SM 5310 B-00	Organic Carbon	8.9		mg C/L	P340252	
1966533	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P339880	
1966600	EPA 200.7 Rev. 4.4	Calcium	11.6		mg/L	P339958	
		Iron	59	I	ug/L	P339958	
		Magnesium	1.76		mg/L	P339958	
		Potassium	1.8		mg/L	P339958	
		Sodium	6.1		mg/L	P339958	
		Zinc	5.0	U	ug/L	P339958	
	EPA 200.8 Rev. 5.4	Arsenic	0.22		ug/L	P339958	
		Cadmium	0.020	U	ug/L	P339958	
		Chromium	0.40	U	ug/L	P340360	
		Copper	0.81		ug/L	P339958	
		Lead	0.12	I	ug/L	P339958	
		Nickel	0.22	I	ug/L	P340360	
		Silver	0.010	U	ug/L	P340360	

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: Kasey Lake @ Center

Collection Date/Time: 02/12/2018 10:20

Field ID: G2CE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966574	EPA 8321B	2,4-D	0.0020	U	ug/L	P339538	
		Sucralose**	2.9		ug/L	P339742	
		Bentazon	0.016		ug/L	P339538	
		MCP	0.0020	U	ug/L	P339538	
		Triclopyr**	0.0040	U	ug/L	P339538	
		Imidacloprid	0.0020	U	ug/L	P339538	
		Diuron	0.0020	U	ug/L	P339538	
		Pyraclostrobin**	0.0020	U	ug/L	P339538	
		Primidone**	0.0040	U	ug/L	P339538	
		Linuron	0.0040	U	ug/L	P339538	
		Acetaminophen**	0.0080	U	ug/L	P339538	
		Fenuron	0.0080	U	ug/L	P339538	
		Carbamazepine**	5.1E-04	I	ug/L	P339538	
		Fluridone**	4.0E-04	U	ug/L	P339538	
		Glyphosate**	0.15	I	ug/L	P339813	
		AMPA**	0.10	U	ug/L	P339813	
1966575		Aldicarb	0.020	U	ug/L	P339874	
		Aldicarb Sulfone	0.0020	U	ug/L	P339874	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P339874	
		Carbaryl	0.0020	U	ug/L	P339874	
		Carbofuran	0.0020	U	ug/L	P339874	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P339874	

Field ID: G2CE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966575	EPA 8321B	Methiocarb	0.0020	U	ug/L	P339874	
		Methomyl	0.0020	U	ug/L	P339874	
		Oxamyl	0.0020	U	ug/L	P339874	
		Propoxur	0.0020	U	ug/L	P339874	
1966590	EPA 8270D	Aldrin	4.5	U	ng/L	P340189	
		Alpha-BHC	2.3	U	ng/L	P340189	
		Beta-BHC	4.5	U	ng/L	P340189	
		Delta-BHC	4.5	U	ng/L	P340189	
		Gamma-BHC	4.5	UJ	ng/L	P340189	RPD
		Carbophenothion	4.5	U	ng/L	P340189	
		Chlorothalonil	2.3	U	ng/L	P340189	
		Cypermethrin	23	U	ng/L	P340189	
		DDD-p,p'	3.4	U	ng/L	P340189	
		DDE-p,p'	3.4	U	ng/L	P340189	
		DDT-p,p'	3.4	U	ng/L	P340189	
		Dieldrin	4.5	U	ng/L	P340189	
		Endosulfan I	4.5	U	ng/L	P340189	
		Endosulfan II	4.5	U	ng/L	P340189	
		Endosulfan Sulfate	2.3	U	ng/L	P340189	
		Endrin	2.3	U	ng/L	P340189	
		Endrin Aldehyde	2.3	U	ng/L	P340189	
		Heptachlor	1.7	U	ng/L	P340189	
		Heptachlor Epoxide	2.3	U	ng/L	P340189	
		Methoxychlor	4.5	U	ng/L	P340189	
		Mirex	2.3	U	ng/L	P340189	
		Permethrin	11	U	ng/L	P340189	
		Trifluralin	1.1	U	ng/L	P340189	
		Alpha-Chlordane	1.1	U	ng/L	P340189	
		Gamma-Chlordane	1.1	U	ng/L	P340189	
		Endrin Ketone	2.3	U	ng/L	P340189	
		Dicofol	34	U	ng/L	P340189	
		Chlordane**	2.8	U	ng/L	P340189	
		Toxaphene**	34	U	ng/L	P340189	
1966591	EPA 8270D	Alachlor	0.24	U	ng/L	P340051	
		Ametryn	3.7		ng/L	P340051	MS
		Atrazine	620		ng/L	P340051	
		Atrazine Desethyl	34		ng/L	P340051	
		Azinphos Methyl	2.2	U	ng/L	P340051	
		Bromacil	0.48	UJ	ng/L	P340051	LCS
		Butylate	0.39	U	ng/L	P340051	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P340051	
		Chlorpyrifos Methyl	0.096	U	ng/L	P340051	MS
		Demeton	1.9	U	ng/L	P340051	MS
		Diazinon	0.12	U	ng/L	P340051	
		Disulfoton	0.48	U	ng/L	P340051	

Field ID: G2CE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1966591	EPA 8270D	EPTC	1.2	U	ng/L	P340051	
		Ethion	0.14	U	ng/L	P340051	
		Ethoprop	0.096	U	ng/L	P340051	
		Fenamiphos	0.24	U	ng/L	P340051	RPD
		Fipronil	0.75	I	ng/L	P340051	
		Fipronil Sulfide	2.3		ng/L	P340051	
		Fipronil Sulfone	11	J	ng/L	P340051	CCV
		Hexazinone	0.48	U	ng/L	P340051	
		Malathion	0.47	I	ng/L	P340051	MS
		Metribuzin	0.33	I	ng/L	P340051	
		Mevinphos	0.48	UJ	ng/L	P340051	CCV, MS
		Molinate	0.29	U	ng/L	P340051	
		Norflurazon	0.48	U	ng/L	P340051	
		Pendimethalin	1.5	I	ng/L	P340051	
		Phorate	0.24	U	ng/L	P340051	
		Prometon	0.87	U	ng/L	P340051	
		Prometryn	0.19	U	ng/L	P340051	
		Simazine	0.48	U	ng/L	P340051	
		Terbufos	0.096	U	ng/L	P340051	
		Terbuthylazine	0.41	U	ng/L	P340051	
		Fonofos	0.19	U	ng/L	P340051	MS
		Metalaxyl	0.24	U	ng/L	P340051	
		Metolachlor	1.0		ng/L	P340051	
		Acetochlor	0.24	U	ng/L	P340051	
		Cyanazine	0.48	U	ng/L	P340051	
		Parathion Ethyl	0.24	U	ng/L	P340051	
		Parathion Methyl	0.24	U	ng/L	P340051	MS

Ref. Method and Comment:

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

EPA 8270D: MS accuracy for Atrazine , Simazine, and Fipronil Sulfone 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: P339888

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P339889

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P339958

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: P339958

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340360

Component	Result	Code	Units
Chromium	0.40	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: P340015

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340018

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340127

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340132

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340315

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340316

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339895

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339896

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340239

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340240

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339910

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339879

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339880

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D

Batch ID: P340051

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
Metaxyl	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
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 8270D

Batch ID: P340189

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D

Batch ID: P340189

Component	Result	Code	Units
DDE-p,p'	3.0	U	ng/L
DDT-p,p'	3.0	U	ng/L
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 8276

Batch ID: P340189

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

Reference Method: EPA 8321B

Batch ID: P339538

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B

Batch ID: P339742

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P339813

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

Reference Method: EPA 8321B
Batch ID: P339874

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	0.0080	U	ug/L
Fluridone	4.0E-04	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
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2120 B
Batch ID: P339867

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P339868

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P340308

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

Reference Method: SM 2540 C-97
Batch ID: P340329

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P340329

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P340330

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P340224

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P340225

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P340767

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P340251

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

Reference Method: SM 5310 B-00
Batch ID: P340252

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: P339958

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	108		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	103		P	85 - 115
Sodium	101		P	85 - 115
Zinc	100		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P339958

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	99.8		P	85 - 115
Cadmium	102		P	85 - 115
Copper	99.7		P	85 - 115
Lead	104		P	85 - 115
Nickel	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340360

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chromium	102		P	85 - 115
Nickel	102		P	85 - 115
Silver	97.5		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340015

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340018

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340127

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340132

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340315

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340316

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P339895

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P339896

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P340239

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P340240

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P339910

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.7		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P339879

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P339880

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

Reference Method: EPA 8270D

Batch ID: P340051

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	81.4	94.8	P/P	74 - 119
Alachlor	87.6	99.2	P/P	75 - 118
Ametryn	78.0	95.6	P/P	59 - 137
Atrazine	107	112	P/P	73 - 120
Atrazine Desethyl	97.6	95.2	P/P	19 - 129
Azinphos Methyl	147	164	P/P	65 - 181
Bromacil	32.8	32.3	F/F	43 - 123
Butylate	67.6	56.4	P/P	28 - 85.0
Chlorpyrifos Ethyl	91.6	95.2	P/P	55 - 112
Chlorpyrifos Methyl	106	118	P/P	35 - 124

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270D

Batch ID: P340051

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cyanazine	108	111	P/P	26 - 262
Demeton	84.6	80.9	P/P	43 - 122
Diazinon	96.5	96.6	P/P	72 - 120
Disulfoton	112	110	P/P	45 - 137
EPTC	67.7	54.8	P/P	28 - 95.0
Ethion	120	115	P/P	63 - 127
Ethoprop	104	100	P/P	63 - 109
Fenamiphos	106	97.2	P/P	66 - 136
Fipronil	95.3	94.6	P/P	63 - 126
Fipronil Sulfide	92.3	94.1	P/P	59 - 123
Fipronil Sulfone	88.6	89.6	P/P	56 - 122
Fonofos	111	111	P/P	64 - 114
Hexazinone	113	120	P/P	49 - 144
Malathion	121	115	P/P	68 - 131
Metalaxyl	84.3	90.3	P/P	57 - 126
Metolachlor	95.2	91.8	P/P	75 - 118
Metribuzin	126	141	P/P	46 - 169
Mevinphos	93.4	89.0	P/P	34 - 126
Molinate	88.3	80.9	P/P	37 - 101
Norflurazon	80.9	84.7	P/P	63 - 127
Parathion Ethyl	92.5	95.6	P/P	78 - 109
Parathion Methyl	98.7	103	P/P	74 - 123
Pendimethalin	102	115	P/P	51 - 130
Phorate	110	109	P/P	53 - 116
Prometon	88.0	88.9	P/P	66 - 124
Prometryn	83.2	81.5	P/P	66 - 124
Simazine	124	113	P/P	62 - 134
Terbufos	108	108	P/P	59 - 115
Terbutylazine	96.9	105	P/P	76 - 113

Reference Method: EPA 8270D

Batch ID: P340189

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	56.2	58.2	P/P	24 - 89.0
Alpha-BHC	70.8	74.9	P/P	58 - 117
Alpha-Chlordane	72.6	75.5	P/P	56 - 115
Beta-BHC	92.9	91.1	P/P	55 - 137
Carbophenothion	72.6	79.9	P/P	37 - 145
Chlorothalonil	76.6	79.6	P/P	26 - 163
Cypermethrin	84.3	75.8	P/P	42 - 156
DDD-p,p'	89.1	87.3	P/P	59 - 129
DDE-p,p'	75.3	78.0	P/P	52 - 117
DDT-p,p'	78.8	75.8	P/P	48 - 128
Delta-BHC	99.5	102	P/P	59 - 158
Dicofol	78.0	69.8	P/P	19 - 124
Dieldrin	76.0	76.4	P/P	57 - 126
Endosulfan I	84.0	86.9	P/P	59 - 133
Endosulfan II	107	113	P/P	58 - 148
Endosulfan Sulfate	90.1	84.0	P/P	56 - 135
Endrin	77.7	75.5	P/P	50 - 140
Endrin Aldehyde	60.2	61.8	P/P	47 - 141

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D

Batch ID: P340189

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin Ketone	86.1	82.5	P/P	63 - 123
Gamma-BHC	93.8	64.1	P/P	59 - 132
Gamma-Chlordane	71.7	73.9	P/P	55 - 112
Heptachlor	57.4	60.1	P/P	45 - 102
Heptachlor Epoxide	74.2	75.3	P/P	61 - 116
Methoxychlor	86.3	84.9	P/P	60 - 133
Mirex	66.0	62.4	P/P	40 - 98.0
Permethrin	82.8	78.8	P/P	45 - 131
Trifluralin	66.3	65.0	P/P	38 - 179

Reference Method: EPA 8276

Batch ID: P340189

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	76.2	77.0	P/P	47 - 125
Toxaphene	106	95.5	P/P	46 - 147

Reference Method: EPA 8321B

Batch ID: P339538

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	75.4		P	40 - 150
Acetaminophen	102		P	30 - 150
Bentazon	82.0		P	30 - 150
Carbamazepine	99.7		P	40 - 150
Diuron	80.9		P	40 - 150
Fenuron	110		P	40 - 150
Fluridone	89.3		P	40 - 150
Imidacloprid	93.1		P	40 - 160
Linuron	79.0		P	40 - 150
MCPP	79.7		P	40 - 150
Primidone	113		P	40 - 150
Pyraclostrobin	83.7		P	40 - 150
Triclopyr	83.4		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P339742

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	111		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P339813

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
AMPA	106		P	40 - 150
Glyphosate	105		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P339874

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

Reference Method: EPA 8321B
 Batch ID: P339874

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	63.5		P	40 - 150
3-Hydroxycarbofuran	102		P	40 - 150
Acetaminophen	92.8		P	30 - 150
Aldicarb	81.7		P	30 - 150
Aldicarb Sulfone	93.4		P	40 - 150
Aldicarb Sulfoxide	93.4		P	40 - 150
Bentazon	73.9		P	30 - 150
Carbamazepine	73.3		P	40 - 150
Carbaryl	72.6		P	40 - 150
Carbofuran	73.4		P	40 - 150
Diuron	76.0		P	40 - 150
Fenuron	103		P	40 - 150
Fluridone	72.9		P	40 - 150
Imidacloprid	87.8		P	40 - 160
Linuron	75.5		P	40 - 150
MCPP	70.6		P	40 - 150
Methiocarb	69.8		P	40 - 150
Methomyl	96.8		P	40 - 150
Oxamyl	96.2		P	40 - 150
Primidone	88.3		P	40 - 150
Propoxur	67.5		P	40 - 150
Triclopyr	65.5		P	40 - 150

Reference Method: SM 2320 B-97
 Batch ID: P340308

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.5		P	95 - 108

Reference Method: SM 4500 F-C-97
 Batch ID: P340767

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.1		P	92 - 103

Reference Method: SM 5310 B-00
 Batch ID: P340251

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

Reference Method: SM 5310 B-00
 Batch ID: P340252

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

Quality Assurance Report Matrix Spike Accuracy

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P339958

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966594	Calcium	106		P	80 - 120
1966594	Iron	103		P	80 - 120
1966594	Magnesium	102		P	80 - 120
1966594	Potassium	98.0		P	80 - 120
1966594	Sodium	102		P	80 - 120
1966594	Zinc	97.8		P	80 - 120
1966787	Calcium	104		P	80 - 120
1966787	Iron	105	102	P/P	80 - 120
1966787	Magnesium	102		P	80 - 120
1966787	Potassium	101	100	P/P	80 - 120
1966787	Sodium	101		P	80 - 120
1966787	Zinc	97.9	96.2	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P339958

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966594	Arsenic	99.0		P	80 - 120
1966594	Cadmium	105		P	80 - 120
1966594	Copper	99.7		P	80 - 120
1966594	Lead	105		P	80 - 120
1966594	Nickel	101		P	80 - 120
1966787	Arsenic	96.5	97.3	P/P	80 - 120
1966787	Cadmium	103	103	P/P	80 - 120
1966787	Copper	97.8	99.7	P/P	80 - 120
1966787	Lead	102	104	P/P	80 - 120
1966787	Nickel	99.2	109	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340360

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966594	Chromium	101		P	80 - 120
1966594	Nickel	102		P	80 - 120
1966594	Silver	97.4		P	80 - 120
1966652	Chromium	98.1	97.1	P/P	80 - 120
1966652	Nickel	102	101	P/P	80 - 120
1966652	Silver	95.9	95.3	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340015

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966508	Chloride	105		P	90 - 110
1966515	Chloride	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340018

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966508	Sulfate	105		P	90 - 110
1966515	Sulfate	106		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340127

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966643	Chloride	104		P	90 - 110
1966644	Chloride	107		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340132

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966643	Sulfate	105		P	90 - 110
1966644	Sulfate	108		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340315

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966459	Ammonia-N	100	99.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340316

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966520	Ammonia-N	96.1	95.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966516	Kjeldahl Nitrogen	104	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339896

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966535	Kjeldahl Nitrogen	102	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966483	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340240

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966522	NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339910

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966535	Total-P	99.8	97.3	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339879

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966461	O-Phosphate-P	94.7	96.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339880

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966525	O-Phosphate-P	97.3	97.4	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P340051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1967723	Acetochlor	90.3	93.3	P/P	67 - 125
1967723	Alachlor	81.4	96.0	P/P	69 - 123
1967723	Ametryn	51.9	66.5	F/P	52 - 151
1967723	Atrazine Desethyl	60.1	65.2	P/P	10 - 129
1967723	Azinphos Methyl	174	198	P/P	48 - 200
1967723	Bromacil	62.8	82.7	P/P	46 - 130
1967723	Butylate	62.6	59.0	P/P	10 - 85.0
1967723	Chlorpyrifos Ethyl	83.3	111	P/P	54 - 115
1967723	Chlorpyrifos Methyl	113	127	P/F	44 - 117
1967723	Cyanazine	103	124	P/P	10 - 262
1967723	Demeton	143	154	P/F	24 - 145
1967723	Diazinon	96.1	97.1	P/P	66 - 129
1967723	Disulfoton	101	98.4	P/P	45 - 139
1967723	EPTC	58.8	53.5	P/P	10 - 86.0
1967723	Ethion	99.6	123	P/P	59 - 133
1967723	Ethoprop	101	114	P/P	54 - 116
1967723	Fenamiphos	77.7	111	P/P	55 - 140
1967723	Fipronil	93.0	72.6	P/P	37 - 142
1967723	Fipronil Sulfide	87.4	76.8	P/P	37 - 130
1967723	Fonofos	107	124	P/F	55 - 118
1967723	Hexazinone	108	127	P/P	62 - 140
1967723	Malathion	118	135	P/F	64 - 132
1967723	Metalaxyl	87.7	86.9	P/P	55 - 129
1967723	Metolachlor	92.3	104	P/P	56 - 137
1967723	Metribuzin	145	146	P/P	16 - 218
1967723	Mevinphos	139	160	F/F	34 - 129
1967723	Molinate	87.3	86.7	P/P	16 - 99.0
1967723	Norflurazon	88.7	106	P/P	43 - 135
1967723	Parathion Ethyl	102	112	P/P	71 - 112
1967723	Parathion Methyl	143	143	F/F	65 - 127
1967723	Pendimethalin	114	106	P/P	35 - 159
1967723	Phorate	99.7	109	P/P	41 - 129
1967723	Prometon	87.0	95.5	P/P	56 - 140
1967723	Prometryn	71.2	77.7	P/P	65 - 130
1967723	Terbufos	103	104	P/P	53 - 126
1967723	Terbutylazine	93.0	89.3	P/P	73 - 114

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P340189

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966228	Aldrin	65.2	57.9	P/P	26 - 96.0
1966228	Alpha-BHC	91.6	91.6	P/P	51 - 123
1966228	Alpha-Chlordane	80.1	73.3	P/P	45 - 120
1966228	Beta-BHC	92.9	99.3	P/P	43 - 146
1966228	Carbophenothion	81.2	81.9	P/P	26 - 179
1966228	Chlorothalonil	109	99.7	P/P	10 - 215
1966228	Cypermethrin	90.5	89.2	P/P	35 - 169
1966228	DDD-p,p'	89.7	85.9	P/P	49 - 131
1966228	DDE-p,p'	83.4	78.0	P/P	39 - 127
1966228	DDT-p,p'	92.3	88.0	P/P	49 - 120
1966228	Delta-BHC	117	128	P/P	49 - 187
1966228	Dicofol	84.5	78.7	P/P	10 - 129
1966228	Dieldrin	82.8	75.6	P/P	46 - 132
1966228	Endosulfan I	97.8	88.5	P/P	57 - 130
1966228	Endosulfan II	118	109	P/P	52 - 148
1966228	Endosulfan Sulfate	89.4	87.2	P/P	55 - 129
1966228	Endrin	86.0	80.0	P/P	45 - 133
1966228	Endrin Aldehyde	72.6	67.5	P/P	26 - 140
1966228	Endrin Ketone	95.5	92.6	P/P	60 - 125
1966228	Gamma-BHC	90.4	101	P/P	50 - 145
1966228	Gamma-Chlordane	78.0	71.8	P/P	44 - 118
1966228	Heptachlor	65.4	57.8	P/P	35 - 106
1966228	Heptachlor Epoxide	80.7	73.9	P/P	52 - 123
1966228	Methoxychlor	96.6	91.5	P/P	54 - 132
1966228	Mirex	78.5	73.8	P/P	36 - 107
1966228	Permethrin	92.1	87.6	P/P	47 - 135
1966228	Trifluralin	77.5	73.0	P/P	32 - 228

Reference Method: EPA 8276
Batch ID: P340189

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966228	Chlordane	58.9	58.4	P/P	41 - 134
1966228	Toxaphene	71.4	72.1	P/P	39 - 158

Reference Method: EPA 8321B
Batch ID: P339538

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965802	2,4-D	84.3	83.1	P/P	40 - 150
1965802	Acetaminophen	119	112	P/P	30 - 150
1965802	Bentazon	58.1	50.2	P/P	30 - 150
1965802	Carbamazepine	120	110	P/P	40 - 150
1965802	Diuron	82.2	80.6	P/P	40 - 150
1965802	Fenuron	103	107	P/P	40 - 150
1965802	Fluridone	83.8	79.6	P/P	40 - 150
1965802	Imidacloprid	135	136	P/P	40 - 160
1965802	Linuron	82.6	88.1	P/P	40 - 150
1965802	MCP	69.2	64.8	P/P	40 - 150
1965802	Primidone	105	111	P/P	40 - 150
1965802	Pyraclostrobin	85.0	81.4	P/P	40 - 150
1965802	Triclopyr	71.2	60.6	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P339742

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966475	Sucralose	143	145	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P339813

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966342	AMPA	92.6	96.7	P/P	40 - 150
1966342	Glyphosate	97.3	93.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P339874

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966576	2,4-D	38.1	40.6	F/P	40 - 150
1966576	3-Hydroxycarbofuran	105	103	P/P	40 - 150
1966576	Acetaminophen	120	114	P/P	30 - 150
1966576	Aldicarb	77.9	63.1	P/P	30 - 150
1966576	Aldicarb Sulfone	117	112	P/P	40 - 150
1966576	Aldicarb Sulfoxide	87.4	89.6	P/P	40 - 150
1966576	Bentazon	24.8	29.5	F/F	30 - 150
1966576	Carbamazepine	71.5	71.1	P/P	40 - 150
1966576	Carbaryl	53.6	53.2	P/P	40 - 150
1966576	Carbofuran	52.8	52.8	P/P	40 - 150
1966576	Diuron	58.3	62.4	P/P	40 - 150
1966576	Fenuron	88.5	83.6	P/P	40 - 150
1966576	Fluridone	60.2	60.1	P/P	40 - 150
1966576	Imidacloprid	135	131	P/P	40 - 160
1966576	Linuron	70.9	64.7	P/P	40 - 150
1966576	MCPP	32.2	40.5	F/P	40 - 150
1966576	Methiocarb	63.0	59.8	P/P	40 - 150
1966576	Methomyl	92.0	85.5	P/P	40 - 150
1966576	Oxamyl	88.4	87.8	P/P	40 - 150
1966576	Primidone	102	103	P/P	40 - 150
1966576	Propoxur	52.2	49.1	P/P	40 - 150
1966576	Triclopyr	34.8	38.5	F/F	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P340767

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966534	Fluoride	94.2	95.8	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P340252

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1966521	Organic Carbon	110		P	85 - 115

Quality Assurance Report Precision

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P339888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966480	Turbidity	2.23	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P339889

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966515	Turbidity	1.10	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P339958

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966787	Calcium	1.31	Spike	P	0 - 20
1966787	Iron	2.10	Spike	P	0 - 20
1966787	Magnesium	1.70	Spike	P	0 - 20
1966787	Potassium	0.578	Spike	P	0 - 20
1966787	Sodium	1.57	Spike	P	0 - 20
1966787	Zinc	1.74	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P339958

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966787	Arsenic	0.836	Spike	P	0 - 20
1966787	Cadmium	0.0521	Spike	P	0 - 20
1966787	Copper	1.94	Spike	P	0 - 20
1966787	Lead	2.20	Spike	P	0 - 20
1966787	Nickel	9.20	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P340360

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966652	Chromium	1.07	Spike	P	0 - 20
1966652	Nickel	0.284	Spike	P	0 - 20
1966652	Silver	0.701	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340015

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966508	Chloride	0.188	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340018

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966508	Sulfate	0.184	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340127

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966644	Chloride	2.81	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P340132

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966644	Sulfate	2.91	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340315

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966459	Ammonia-N	0.781	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P340316

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966520	Ammonia-N	0.157	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966516	Kjeldahl Nitrogen	0.257	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P339896

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966535	Kjeldahl Nitrogen	0.0486	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340239

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966483	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P340240

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966522	NO2NO3-N	0.588	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339910

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966535	Total-P	2.45	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339879

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966461	O-Phosphate-P	1.89	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339880

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966525	O-Phosphate-P	0.0975	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P340051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967723	Acetochlor	3.29	Spike	P	0 - 30
1967723	Alachlor	16.4	Spike	P	0 - 30
1967723	Ametryn	24.7	Spike	P	0 - 30
1967723	Atrazine	6.48	Spike	P	0 - 30
1967723	Atrazine Desethyl	6.00	Spike	P	0 - 30
1967723	Azinphos Methyl	13.1	Spike	P	0 - 30
1967723	Bromacil	20.5	Spike	P	0 - 30
1967723	Butylate	5.92	Spike	P	0 - 30
1967723	Chlorpyrifos Ethyl	28.7	Spike	P	0 - 30
1967723	Chlorpyrifos Methyl	11.9	Spike	P	0 - 30
1967723	Cyanazine	18.5	Spike	P	0 - 30
1967723	Demeton	7.03	Spike	P	0 - 30
1967723	Diazinon	1.05	Spike	P	0 - 30
1967723	Disulfoton	2.10	Spike	P	0 - 30
1967723	EPTC	9.53	Spike	P	0 - 30
1967723	Ethion	21.3	Spike	P	0 - 30
1967723	Ethoprop	11.6	Spike	P	0 - 30
1967723	Fenamiphos	35.4	Spike	F	0 - 30
1967723	Fipronil	14.7	Spike	P	0 - 30
1967723	Fipronil Sulfide	8.78	Spike	P	0 - 30
1967723	Fipronil Sulfone	15.9	Spike	P	0 - 30
1967723	Fonofos	15.2	Spike	P	0 - 30
1967723	Hexazinone	16.0	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P340051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1967723	Malathion	13.7	Spike	P	0 - 30
1967723	Metalaxyl	0.975	Spike	P	0 - 30
1967723	Metolachlor	11.9	Spike	P	0 - 30
1967723	Metribuzin	0.613	Spike	P	0 - 30
1967723	Mevinphos	14.1	Spike	P	0 - 30
1967723	Molinate	0.691	Spike	P	0 - 30
1967723	Norflurazon	17.4	Spike	P	0 - 30
1967723	Parathion Ethyl	8.89	Spike	P	0 - 30
1967723	Parathion Methyl	0.121	Spike	P	0 - 30
1967723	Pendimethalin	7.70	Spike	P	0 - 30
1967723	Phorate	9.16	Spike	P	0 - 30
1967723	Prometon	9.31	Spike	P	0 - 30
1967723	Prometryn	8.80	Spike	P	0 - 30
1967723	Simazine	17.6	Spike	P	0 - 30
1967723	Terbufos	1.15	Spike	P	0 - 30
1967723	Terbutylazine	4.10	Spike	P	0 - 30
LFB	Acetochlor	15.2	LCS	P	0 - 30
LFB	Alachlor	12.4	LCS	P	0 - 30
LFB	Ametryn	20.3	LCS	P	0 - 30
LFB	Atrazine	4.11	LCS	P	0 - 30
LFB	Atrazine Desethyl	2.58	LCS	P	0 - 30
LFB	Azinphos Methyl	11.4	LCS	P	0 - 30
LFB	Bromacil	1.35	LCS	P	0 - 30
LFB	Butylate	18.0	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	3.87	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	10.7	LCS	P	0 - 30
LFB	Cyanazine	3.31	LCS	P	0 - 30
LFB	Demeton	4.53	LCS	P	0 - 30
LFB	Diazinon	0.0362	LCS	P	0 - 30
LFB	Disulfoton	1.15	LCS	P	0 - 30
LFB	EPTC	21.1	LCS	P	0 - 30
LFB	Ethion	3.95	LCS	P	0 - 30
LFB	Ethoprop	3.42	LCS	P	0 - 30
LFB	Fenamiphos	8.47	LCS	P	0 - 30
LFB	Fipronil	0.773	LCS	P	0 - 30
LFB	Fipronil Sulfide	1.98	LCS	P	0 - 30
LFB	Fipronil Sulfone	1.06	LCS	P	0 - 30
LFB	Fonofos	0.757	LCS	P	0 - 30
LFB	Hexazinone	5.96	LCS	P	0 - 30
LFB	Malathion	5.21	LCS	P	0 - 30
LFB	Metalaxyl	6.81	LCS	P	0 - 30
LFB	Metolachlor	3.56	LCS	P	0 - 30
LFB	Metribuzin	11.1	LCS	P	0 - 30
LFB	Mevinphos	4.79	LCS	P	0 - 30
LFB	Molinate	8.68	LCS	P	0 - 30
LFB	Norflurazon	4.70	LCS	P	0 - 30
LFB	Parathion Ethyl	3.33	LCS	P	0 - 30
LFB	Parathion Methyl	3.92	LCS	P	0 - 30
LFB	Pendimethalin	12.4	LCS	P	0 - 30
LFB	Phorate	1.22	LCS	P	0 - 30
LFB	Prometon	1.08	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D

Batch ID: P340051

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Prometryn	2.14	LCS	P	0 - 30
LFB	Simazine	8.94	LCS	P	0 - 30
LFB	Terbufos	0.233	LCS	P	0 - 30
LFB	Terbutylazine	8.48	LCS	P	0 - 30

Reference Method: EPA 8270D

Batch ID: P340189

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966228	Aldrin	11.8	Spike	P	0 - 30
1966228	Alpha-BHC	0.0614	Spike	P	0 - 30
1966228	Alpha-Chlordane	8.93	Spike	P	0 - 30
1966228	Beta-BHC	6.72	Spike	P	0 - 30
1966228	Carbophenothion	0.863	Spike	P	0 - 30
1966228	Chlorothalonil	8.78	Spike	P	0 - 30
1966228	Cypermethrin	1.37	Spike	P	0 - 30
1966228	DDD-p,p'	4.41	Spike	P	0 - 30
1966228	DDE-p,p'	6.66	Spike	P	0 - 30
1966228	DDT-p,p'	4.70	Spike	P	0 - 30
1966228	Delta-BHC	8.82	Spike	P	0 - 30
1966228	Dicofol	7.06	Spike	P	0 - 30
1966228	Dieldrin	9.06	Spike	P	0 - 30
1966228	Endosulfan I	9.96	Spike	P	0 - 30
1966228	Endosulfan II	7.93	Spike	P	0 - 30
1966228	Endosulfan Sulfate	2.47	Spike	P	0 - 30
1966228	Endrin	7.24	Spike	P	0 - 30
1966228	Endrin Aldehyde	7.16	Spike	P	0 - 30
1966228	Endrin Ketone	3.06	Spike	P	0 - 30
1966228	Gamma-BHC	11.1	Spike	P	0 - 30
1966228	Gamma-Chlordane	8.25	Spike	P	0 - 30
1966228	Heptachlor	12.3	Spike	P	0 - 30
1966228	Heptachlor Epoxide	8.77	Spike	P	0 - 30
1966228	Methoxychlor	5.42	Spike	P	0 - 30
1966228	Mirex	6.14	Spike	P	0 - 30
1966228	Permethrin	4.96	Spike	P	0 - 30
1966228	Trifluralin	5.96	Spike	P	0 - 30
LFB	Aldrin	3.47	LCS	P	0 - 30
LFB	Alpha-BHC	5.59	LCS	P	0 - 30
LFB	Alpha-Chlordane	3.89	LCS	P	0 - 30
LFB	Beta-BHC	2.03	LCS	P	0 - 30
LFB	Carbophenothion	9.50	LCS	P	0 - 30
LFB	Chlorothalonil	3.83	LCS	P	0 - 30
LFB	Cypermethrin	10.7	LCS	P	0 - 30
LFB	DDD-p,p'	2.04	LCS	P	0 - 30
LFB	DDE-p,p'	3.58	LCS	P	0 - 30
LFB	DDT-p,p'	3.94	LCS	P	0 - 30
LFB	Delta-BHC	2.68	LCS	P	0 - 30
LFB	Dicofol	11.1	LCS	P	0 - 30
LFB	Dieldrin	0.486	LCS	P	0 - 30
LFB	Endosulfan I	3.35	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270D

Batch ID: P340189

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endosulfan II	5.46	LCS	P	0 - 30
LFB	Endosulfan Sulfate	7.01	LCS	P	0 - 30
LFB	Endrin	2.83	LCS	P	0 - 30
LFB	Endrin Aldehyde	2.69	LCS	P	0 - 30
LFB	Endrin Ketone	4.24	LCS	P	0 - 30
LFB	Gamma-BHC	37.6	LCS	F	0 - 30
LFB	Gamma-Chlordane	3.02	LCS	P	0 - 30
LFB	Heptachlor	4.63	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.47	LCS	P	0 - 30
LFB	Methoxychlor	1.56	LCS	P	0 - 30
LFB	Mirex	5.67	LCS	P	0 - 30
LFB	Permethrin	4.98	LCS	P	0 - 30
LFB	Trifluralin	2.04	LCS	P	0 - 30

Reference Method: EPA 8276

Batch ID: P340189

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966228	Chlordane	0.786	Spike	P	0 - 30
1966228	Toxaphene	0.917	Spike	P	0 - 30
LFB	Chlordane	1.06	LCS	P	0 - 30
LFB	Toxaphene	10.5	LCS	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P339538

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965802	2,4-D	1.39	Spike	P	0 - 30
1965802	Acetaminophen	6.16	Spike	P	0 - 30
1965802	Bentazon	14.4	Spike	P	0 - 30
1965802	Carbamazepine	8.79	Spike	P	0 - 30
1965802	Diuron	2.01	Spike	P	0 - 30
1965802	Fenuron	3.79	Spike	P	0 - 30
1965802	Fluridone	5.13	Spike	P	0 - 30
1965802	Imidacloprid	1.16	Spike	P	0 - 30
1965802	Linuron	6.46	Spike	P	0 - 30
1965802	MCPP	6.53	Spike	P	0 - 30
1965802	Primidone	5.73	Spike	P	0 - 30
1965802	Pyraclostrobin	4.38	Spike	P	0 - 30
1965802	Triclopyr	16.2	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P339742

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966475	Sucralose	1.74	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P339813

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966342	AMPA	3.57	Spike	P	0 - 30
1966342	Glyphosate	3.80	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P339874

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966576	2,4-D	6.21	Spike	P	0 - 30
1966576	3-Hydroxycarbofuran	2.31	Spike	P	0 - 30
1966576	Acetaminophen	5.14	Spike	P	0 - 30
1966576	Aldicarb	21.0	Spike	P	0 - 30
1966576	Aldicarb Sulfone	4.36	Spike	P	0 - 30
1966576	Aldicarb Sulfoxide	2.46	Spike	P	0 - 30
1966576	Bentazon	13.8	Spike	P	0 - 30
1966576	Carbamazepine	0.575	Spike	P	0 - 30
1966576	Carbaryl	0.880	Spike	P	0 - 30
1966576	Carbofuran	0.0379	Spike	P	0 - 30
1966576	Diuron	5.78	Spike	P	0 - 30
1966576	Fenuron	5.73	Spike	P	0 - 30
1966576	Fluridone	0.141	Spike	P	0 - 30
1966576	Imidacloprid	2.68	Spike	P	0 - 30
1966576	Linuron	9.16	Spike	P	0 - 30
1966576	MCPP	22.8	Spike	P	0 - 30
1966576	Methiocarb	5.16	Spike	P	0 - 30
1966576	Methomyl	7.32	Spike	P	0 - 30
1966576	Oxamyl	0.601	Spike	P	0 - 30
1966576	Primidone	1.10	Spike	P	0 - 30
1966576	Propoxur	6.08	Spike	P	0 - 30
1966576	Triclopyr	10.1	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P339867

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966507	Color (true)	1.40	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P339868

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966509	Color (true)	2.93	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P340308

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966515	Total Alkalinity	0.572	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
 Batch ID: P340329

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966458	TDS	0.794	Sample	P	0 - 10

Reference Method: SM 2540 C-97
 Batch ID: P340330

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966557	TDS	3.33	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P340767

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966534	Fluoride	1.48	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
 Batch ID: P340251

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965512	Organic Carbon	0.599	Spike	P	0 - 20

Reference Method: SM 5310 B-00
 Batch ID: P340252

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1966521	Organic Carbon	1.57	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: 1966574
 Field Sample ID: G2CE0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	39.5	P	30 - 160
EPA 8321B	2,4-D-d3	39.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	126	P	30 - 160
EPA 8321B	Acetaminophen-d4	126	P	30 - 160
EPA 8321B	Carbamazepine-d10	83.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	83.9	P	30 - 160
EPA 8321B	Diuron-d6	73.6	P	30 - 160
EPA 8321B	Diuron-d6	73.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.0	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	97.0	P	40 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1966574
Field Sample ID: G2CE0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Primidone-d5	98.9	P	30 - 160
EPA 8321B	Primidone-d5	98.9	P	30 - 160
EPA 8321B	Sucralose-d6	142	P	40 - 160

Lab Sample ID: 1966575
Field Sample ID: G2CE0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	40.1	P	30 - 160

Lab Sample ID: 1966576
Field Sample ID: G2CE0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	39.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	123	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.9	P	30 - 160
EPA 8321B	Diuron-d6	72.5	P	30 - 160
EPA 8321B	Primidone-d5	112	P	30 - 160
EPA 8321B	Sucralose-d6	108	P	40 - 160

Lab Sample ID: 1966590
Field Sample ID: G2CE0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	58.3	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	41.6	P	34 - 101
EPA 8276	Decachlorobiphenyl	53.8	P	31 - 108
EPA 8276	PCNB	81.6	P	62 - 142

Lab Sample ID: 1966591
Field Sample ID: G2CE0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	107	P	71 - 126
EPA 8270D	Terbufos-d10	109	P	50 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A82003

Included Lab Sample IDs: 1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A82003

Included Lab Sample IDs: 1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534

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

Reference Method: SM 2120 B

Run ID: A82033

Included Lab Sample IDs: 1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	95.6	99.5	P/P	85 - 115
Color (true)	99.5	98.8	P/P	85 - 115
Color (true)	99.6	100	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A82036

Included Lab Sample IDs: 1966525, 1966526, 1966527, 1966528, 1966529, 1966530, 1966531, 1966532, 1966533, 1966536

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	101	P/P	90 - 110
O-Phosphate-P	101	99.8	P/P	90 - 110
O-Phosphate-P	99.2	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A82039

Included Lab Sample IDs: 1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534

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: A82048

Included Lab Sample IDs: 1966574

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	109	102	P/P	70 - 130
Glyphosate	97.4	104	P/P	70 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A82089

Included Lab Sample IDs: 1966519, 1966520, 1966521, 1966522, 1966524

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	104	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A82100

Included Lab Sample IDs: 1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	103	P/P	95 - 105
Calcium	103	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A82100

Included Lab Sample IDs: 1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	100	99.0	P/P	90 - 110
Iron	102	100	P/P	95 - 105
Magnesium	100	98.9	P/P	90 - 110
Magnesium	102	100	P/P	95 - 105
Potassium	97.6	96.6	P/P	90 - 110
Potassium	98.7	97.6	P/P	95 - 105
Sodium	100	101	P/P	95 - 105
Sodium	101	99.9	P/P	90 - 110
Zinc	98.5	99.7	P/P	95 - 105
Zinc	99.7	97.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A82101

Included Lab Sample IDs: 1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cadmium	102	102	P/P	90 - 110
Cadmium	102	103	P/P	90 - 110
Copper	102	101	P/P	90 - 110
Copper	102	102	P/P	90 - 110
Nickel	102	101	P/P	90 - 110
Nickel	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A82107

Included Lab Sample IDs: 1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	102	P/P	90 - 110
Kjeldahl Nitrogen	98.9	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A82112

Included Lab Sample IDs: 1966516, 1966517, 1966518

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	99.2	P/P	90 - 110
Kjeldahl Nitrogen	99.3	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A82118

Included Lab Sample IDs: 1966516, 1966517, 1966518, 1966523, 1966535

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A82143

Included Lab Sample IDs: 1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600

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: A82143

Included Lab Sample IDs: 1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	96.2	95.9	P/P	90 - 110
Arsenic	99.2	96.2	P/P	90 - 110
Lead	103	105	P/P	90 - 110
Lead	105	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A82148

Included Lab Sample IDs: 1966516, 1966517, 1966518, 1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535

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

Reference Method: EPA 8321B

Run ID: A82157

Included Lab Sample IDs: 1966574, 1966576

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	110	110	P/P	60 - 150
Sucralose	95.9	110	P/P	60 - 150

Reference Method: SM 5310 B-00

Run ID: A82160

Included Lab Sample IDs: 1966516, 1966517, 1966518, 1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.6	99.9	P/P	90 - 110
Organic Carbon	99.9	98.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A82180

Included Lab Sample IDs: 1966516, 1966517, 1966518, 1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535

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

Reference Method: SM 2320 B-97

Run ID: A82186

Included Lab Sample IDs: 1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.7	102	P/P	90 - 110
Total Alkalinity	100	96.7	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A82197

Included Lab Sample IDs: 1966574

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

Reference Method: EPA 8321B

Run ID: A82197

Included Lab Sample IDs: 1966574

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.7	90.8	P/P	50 - 150
Bentazon	98.4	96.1	P/P	50 - 150
MCPP	94.4	92.1	P/P	50 - 150
Triclopyr	99.1	94.8	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A82205

Included Lab Sample IDs: 1966574, 1966576

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	79.1	90.2	P/P	50 - 150
3-Hydroxycarbofuran	121	112	P/P	60 - 150
Acetaminophen	117	116	P/P	60 - 150
Acetaminophen	117	117	P/P	60 - 150
Aldicarb	118	90.2	P/P	60 - 150
Aldicarb Sulfone	111	110	P/P	50 - 150
Aldicarb Sulfoxide	112	109	P/P	50 - 150
Bentazon	99.2	94.8	P/P	50 - 150
Carbamazepine	109	92.9	P/P	60 - 150
Carbamazepine	92.9	95.7	P/P	60 - 150
Carbaryl	111	114	P/P	60 - 150
Carbofuran	108	103	P/P	50 - 150
Diuron	116	122	P/P	60 - 150
Diuron	119	116	P/P	60 - 150
Fenuron	115	116	P/P	60 - 150
Fenuron	116	116	P/P	60 - 150
Fluridone	102	99.3	P/P	60 - 160
Fluridone	99.3	98.9	P/P	60 - 160
Imidacloprid	106	104	P/P	60 - 150
Imidacloprid	96.8	106	P/P	60 - 150
Linuron	100	94.6	P/P	60 - 150
Linuron	94.6	108	P/P	60 - 150
MCPP	93.7	99.0	P/P	50 - 150
Methiocarb	106	116	P/P	50 - 150
Methomyl	108	108	P/P	50 - 150
Oxamyl	111	115	P/P	50 - 150
Primidone	104	95.8	P/P	60 - 150
Primidone	95.8	126	P/P	60 - 150
Propoxur	110	97.9	P/P	50 - 150
Pyraclostrobin	109	108	P/P	60 - 150
Triclopyr	99.0	97.3	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A82238

Included Lab Sample IDs: 1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	95.1	96.0	P/P	90 - 110
Chromium	96.0	94.0	P/P	90 - 110
Nickel	99.7	101	P/P	90 - 110
Silver	96.0	96.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A82238

Included Lab Sample IDs: 1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	96.3	96.0	P/P	90 - 110

Reference Method: EPA 8270D

Run ID: A82250

Included Lab Sample IDs: 1966590

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.1		P	80 - 120
Alpha-BHC	106		P	80 - 120
Alpha-Chlordane	94.6		P	80 - 120
Beta-BHC	97.1		P	80 - 120
Carbophenothion	86.1		P	80 - 120
Chlorothalonil	118		P	80 - 120
Cypermethrin	90.4		P	80 - 120
DDD-p,p'	97.6		P	80 - 120
DDE-p,p'	97.1		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	109		P	80 - 120
Dicofol	107		P	80 - 120
Dieldrin	94.1		P	80 - 120
Endosulfan I	97.0		P	80 - 120
Endosulfan II	103		P	80 - 120
Endosulfan Sulfate	104		P	80 - 120
Endrin	92.2		P	80 - 120
Endrin Aldehyde	92.7		P	80 - 120
Endrin Ketone	98.5		P	80 - 120
Gamma-BHC	105		P	80 - 120
Gamma-Chlordane	93.7		P	80 - 120
Heptachlor	93.0		P	80 - 120
Heptachlor Epoxide	94.8		P	80 - 120
Methoxychlor	104		P	80 - 120
Mirex	98.5		P	80 - 120
Permethrin	95.6		P	80 - 120
Trifluralin	98.9		P	80 - 120

Reference Method: EPA 8276

Run ID: A82261

Included Lab Sample IDs: 1966590

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	100		P	80 - 120
Toxaphene	106		P	80 - 120

Reference Method: SM 4500 F-C-97

Run ID: A82351

Included Lab Sample IDs: 1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	96.2	97.6	P/P	90 - 110
Fluoride	96.7	96.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
 Run ID: A82432
 Included Lab Sample IDs: 1966591

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	103		P	80 - 120
Alachlor	109		P	80 - 120
Ametryn	109		P	80 - 120
Atrazine Desethyl	110		P	80 - 120
Azinphos Methyl	116		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	107		P	80 - 120
Chlorpyrifos Ethyl	99.5		P	80 - 120
Chlorpyrifos Methyl	111		P	80 - 120
Cyanazine	99.9		P	80 - 120
Demeton	112		P	80 - 120
Diazinon	97.6		P	80 - 120
Disulfoton	110		P	80 - 120
EPTC	111		P	80 - 120
Ethion	116		P	80 - 120
Ethoprop	108		P	80 - 120
Fenamiphos	99.7		P	80 - 120
Fipronil	115		P	80 - 120
Fipronil Sulfide	106		P	80 - 120
Fipronil Sulfone	135*		F	80 - 120
Fonofos	114		P	80 - 120
Hexazinone	111		P	80 - 120
Malathion	113		P	80 - 120
Metalaxyl	107		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	107		P	80 - 120
Mevinphos	126*		F	80 - 120
Molinate	107		P	80 - 120
Norflurazon	105		P	80 - 120
Parathion Ethyl	112		P	80 - 120
Parathion Methyl	119		P	80 - 120
Pendimethalin	114		P	80 - 120
Phorate	118		P	80 - 120
Prometon	106		P	80 - 120
Prometryn	108		P	80 - 120
Simazine	117		P	80 - 120
Terbufos	108		P	80 - 120
Terbuthylazine	107		P	80 - 120

Reference Method: EPA 8270D
 Run ID: A82444
 Included Lab Sample IDs: 1966591

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	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							2.23	
	Turbidity							1.10	
EPA 200.7 Rev. 4.4	Calcium	105		106	104				1.31
	Iron	108		103	105	102			2.10
	Magnesium	103		102	102				1.70
	Potassium	103		98.0	101	100			0.578
	Sodium	101		102	101				1.57
	Zinc	100		97.8	97.9	96.2			1.74
EPA 200.8 Rev. 5.4	Arsenic	99.8		99.0	96.5	97.3			0.836
	Cadmium	102		105	103	103			0.0521
	Chromium	102		101	98.1	97.1			1.07
	Copper	99.7		99.7	97.8	99.7			1.94
	Lead	104		105	102	104			2.20
	Nickel	102		101	99.2	109			9.20
	Nickel	102		102	102	101			0.284
	Silver	97.5		97.4	95.9	95.3			0.701
EPA 300.0 Rev. 2.1	Chloride	104		105	105			0.188	
	Chloride	104		107	104			2.81	
	Sulfate	105		105	106			0.184	
	Sulfate	104		108	105			2.91	
EPA 350.1 Rev. 2.0	Ammonia-N	103		100	99.6				0.781
	Ammonia-N	105		96.1	95.9				0.157
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.0		104	104				0.257
	Kjeldahl Nitrogen	101		102	102				0.0486
EPA 353.2 Rev. 2.0	NO2NO3-N	104		100	100				0.0
	NO2NO3-N	103		102	103				0.588
EPA 365.1 Rev. 2.0	Total-P	96.7		99.8	97.3				2.45
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.8		94.7	96.6				1.89
	O-Phosphate-P	103		97.3	97.4				0.0975
EPA 8270D	Acetochlor	81.4	94.8	90.3	93.3		15.2		3.29
	Alachlor	87.6	99.2	81.4	96.0		12.4		16.4
	Aldrin	56.2	58.2	65.2	57.9		3.47		11.8
	Alpha-BHC	70.8	74.9	91.6	91.6		5.59		0.0614
	Alpha-Chlordane	72.6	75.5	80.1	73.3		3.89		8.93
	Ametryn	78.0	95.6	51.9	66.5		20.3		24.7
	Atrazine	107	112				4.11		6.48
	Atrazine Desethyl	97.6	95.2	60.1	65.2		2.58		6.00
	Azinphos Methyl	147	164	174	198		11.4		13.1
	Beta-BHC	92.9	91.1	92.9	99.3		2.03		6.72
	Bromacil	32.8	32.3	62.8	82.7		1.35		20.5
	Butylate	67.6	56.4	62.6	59.0		18.0		5.92
	Carbophenothion	72.6	79.9	81.2	81.9		9.50		0.863
	Chlorothalonil	76.6	79.6	109	99.7		3.83		8.78
	Chlorpyrifos Ethyl	91.6	95.2	83.3	111		3.87		28.7
	Chlorpyrifos Methyl	106	118	113	127		10.7		11.9
	Cyanazine	108	111	103	124		3.31		18.5
	Cypermethrin	84.3	75.8	90.5	89.2		10.7		1.37
	DDD-p,p'	89.1	87.3	89.7	85.9		2.04		4.41
	DDE-p,p'	75.3	78.0	83.4	78.0		3.58		6.66
	DDT-p,p'	78.8	75.8	92.3	88.0		3.94		4.70
	Delta-BHC	99.5	102	117	128		2.68		8.82
	Demeton	84.6	80.9	143	154		4.53		7.03
	Diazinon	96.5	96.6	96.1	97.1		0.0362		1.05
	Dicofol	78.0	69.8	84.5	78.7		11.1		7.06

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Dieldrin	76.0	76.4	82.8	75.6	0.486	9.06
	Disulfoton	112	110	101	98.4	1.15	2.10
	Endosulfan I	84.0	86.9	97.8	88.5	3.35	9.96
	Endosulfan II	107	113	118	109	5.46	7.93
	Endosulfan Sulfate	90.1	84.0	89.4	87.2	7.01	2.47
	Endrin	77.7	75.5	86.0	80.0	2.83	7.24
	Endrin Aldehyde	60.2	61.8	72.6	67.5	2.69	7.16
	Endrin Ketone	86.1	82.5	95.5	92.6	4.24	3.06
	EPTC	67.7	54.8	58.8	53.5	21.1	9.53
	Ethion	120	115	99.6	123	3.95	21.3
	Ethoprop	104	100	101	114	3.42	11.6
	Fenamiphos	106	97.2	77.7	111	8.47	35.4
	Fipronil	95.3	94.6	93.0	72.6	0.773	14.7
	Fipronil Sulfide	92.3	94.1	87.4	76.8	1.98	8.78
	Fipronil Sulfone	88.6	89.6			1.06	15.9
	Fonofos	111	111	107	124	0.757	15.2
	Gamma-BHC	93.8	64.1	90.4	101	37.6	11.1
	Gamma-Chlordane	71.7	73.9	78.0	71.8	3.02	8.25
	Heptachlor	57.4	60.1	65.4	57.8	4.63	12.3
	Heptachlor Epoxide	74.2	75.3	80.7	73.9	1.47	8.77
	Hexazinone	113	120	108	127	5.96	16.0
	Malathion	121	115	118	135	5.21	13.7
	Metalaxyl	84.3	90.3	87.7	86.9	6.81	0.975
	Methoxychlor	86.3	84.9	96.6	91.5	1.56	5.42
	Metolachlor	95.2	91.8	92.3	104	3.56	11.9
	Metribuzin	126	141	145	146	11.1	0.613
	Mevinphos	93.4	89.0	139	160	4.79	14.1
	Mirex	66.0	62.4	78.5	73.8	5.67	6.14
	Molinate	88.3	80.9	87.3	86.7	8.68	0.691
	Norflurazon	80.9	84.7	88.7	106	4.70	17.4
	Parathion Ethyl	92.5	95.6	102	112	3.33	8.89
	Parathion Methyl	98.7	103	143	143	3.92	0.121
	Pendimethalin	102	115	114	106	12.4	7.70
	Permethrin	82.8	78.8	92.1	87.6	4.98	4.96
	Phorate	110	109	99.7	109	1.22	9.16
	Prometon	88.0	88.9	87.0	95.5	1.08	9.31
	Prometryn	83.2	81.5	71.2	77.7	2.14	8.80
	Simazine	124	113			8.94	17.6
	Terbufos	108	108	103	104	0.233	1.15
	Terbutylazine	96.9	105	93.0	89.3	8.48	4.10
	Trifluralin	66.3	65.0	77.5	73.0	2.04	5.96
EPA 8276	Chlordane	76.2	77.0	58.9	58.4	1.06	0.786
	Toxaphene	106	95.5	71.4	72.1	10.5	0.917
EPA 8321B	2,4-D	75.4		84.3	83.1		1.39
	2,4-D	63.5		38.1	40.6		6.21
	3-Hydroxycarbofuran	102		103	105		2.31
	Acetaminophen	102		119	112		6.16
	Acetaminophen	92.8		120	114		5.14
	Aldicarb	81.7		63.1	77.9		21.0
	Aldicarb Sulfone	93.4		112	117		4.36
	Aldicarb Sulfoxide	93.4		89.6	87.4		2.46
	AMPA	106		92.6	96.7		3.57
	Bentazon	82.0		58.1	50.2		14.4
	Bentazon	73.9		24.8	29.5		13.8

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Carbamazepine	99.7	120	110		8.79
	Carbamazepine	73.3	71.5	71.1		0.575
	Carbaryl	72.6	53.6	53.2		0.880
	Carbofuran	73.4	52.8	52.8		0.0379
	Diuron	80.9	82.2	80.6		2.01
	Diuron	76.0	58.3	62.4		5.78
	Fenuron	110	103	107		3.79
	Fenuron	103	88.5	83.6		5.73
	Fluridone	89.3	83.8	79.6		5.13
	Fluridone	72.9	60.2	60.1		0.141
	Glyphosate	105	97.3	93.0		3.80
	Imidacloprid	93.1	135	136		1.16
	Imidacloprid	87.8	135	131		2.68
	Linuron	79.0	82.6	88.1		6.46
	Linuron	75.5	70.9	64.7		9.16
	MCPP	79.7	69.2	64.8		6.53
	MCPP	70.6	32.2	40.5		22.8
	Methiocarb	69.8	63.0	59.8		5.16
	Methomyl	96.8	85.5	92.0		7.32
	Oxamyl	96.2	87.8	88.4		0.601
	Primidone	113	105	111		5.73
	Primidone	88.3	102	103		1.10
	Propoxur	67.5	49.1	52.2		6.08
	Pyraclostrobin	83.7	85.0	81.4		4.38
	Sucralose	111	143	145		1.74
	Triclopyr	83.4	71.2	60.6		16.2
	Triclopyr	65.5	34.8	38.5		10.1
SM 2120 B	Color (true)				1.40	
	Color (true)				2.93	
SM 2320 B-97	Total Alkalinity	99.5			0.572	
SM 2540 C-97	TDS				0.794	
	TDS				3.33	
SM 4500 F-C-97	Fluoride	95.1	94.2	95.8		1.48
SM 5310 B-00	Organic Carbon	101				0.599
	Organic Carbon	101	110			1.57

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1966516, 1966517, 1966518, 1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1966516, 1966517, 1966518, 1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1966516, 1966517, 1966518, 1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1966516, 1966517, 1966518, 1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1966525, 1966526, 1966527, 1966528, 1966529, 1966530, 1966531, 1966532, 1966533, 1966536
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1966590
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1966591
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	1966590
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	1966575
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	1966574
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	1966574, 1966576
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1966574, 1966576
SM 2120 B / E31780	True Color measured at 450 nm	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1966516, 1966517, 1966518, 1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	02/13/2018			02/13/2018 17:01	Sima Feizi	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
EPA 200.7 Rev. 4.4	02/13/2018	02/14/2018	Elliott D. Healy	02/15/2018	Betina Topolski	1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600
EPA 200.8 Rev. 5.4	02/13/2018	02/14/2018	Elliott D. Healy	02/15/2018	Robert K Palmer	1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600
	02/13/2018	02/14/2018	Elliott D. Healy	02/16/2018	Robert K Palmer	1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600
	02/13/2018	02/21/2018	Elliott D. Healy	02/22/2018	Nadine Brooks	1966592, 1966593, 1966594, 1966595, 1966596, 1966597, 1966598, 1966599, 1966600
EPA 300.0 Rev. 2.1	02/13/2018			02/15/2018	Julia Storbeck	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
EPA 350.1 Rev. 2.0	02/13/2018			02/20/2018	Ping Hua	1966516, 1966517, 1966518, 1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535
EPA 351.2 Rev. 2.0	02/13/2018	02/14/2018	Adrian Shelby	02/15/2018	Joseph Suarez	1966516, 1966517, 1966518
	02/13/2018	02/14/2018	Adrian Shelby	02/16/2018	Joseph Suarez	1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535
EPA 353.2 Rev. 2.0	02/13/2018			02/19/2018	Lauren Bottorf	1966516, 1966517, 1966518, 1966519, 1966520, 1966521, 1966522, 1966523, 1966524, 1966535
EPA 365.1 Rev. 2.0	02/13/2018	02/14/2018	Sima Feizi	02/15/2018	Lipi Saha	1966519, 1966520, 1966521, 1966522, 1966524
	02/13/2018	02/14/2018	Sima Feizi	02/16/2018	Lipi Saha	1966516, 1966517, 1966518, 1966523, 1966535
EPA 365.1 Rev. 2.0 dissolved	02/13/2018			02/13/2018 16:59	Megan Treadwell	1966525
	02/13/2018			02/13/2018 17:33	Megan Treadwell	1966526
	02/13/2018			02/13/2018 17:34	Megan Treadwell	1966527, 1966528
	02/13/2018			02/13/2018 17:35	Megan Treadwell	1966529
	02/13/2018			02/13/2018 17:36	Megan Treadwell	1966530
	02/13/2018			02/13/2018 17:37	Megan Treadwell	1966531
	02/13/2018			02/13/2018 17:38	Megan Treadwell	1966532
	02/13/2018			02/13/2018 17:39	Megan Treadwell	1966533
	02/13/2018			02/13/2018 17:44	Megan Treadwell	1966536
EPA 8270D	02/13/2018	02/14/2018	Rasheda Ghaffari	02/15/2018	Marek Topolski	1966590
	02/13/2018	02/16/2018	Rasheda Ghaffari	02/20/2018	Vandana T. Nagar	1966591
	02/13/2018	02/16/2018	Rasheda Ghaffari	02/28/2018	Vandana T. Nagar	1966591
EPA 8276	02/13/2018	02/14/2018	Rasheda Ghaffari	02/22/2018	John P. Burgos	1966590

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	02/13/2018	02/13/2018	Hoor Shaik	02/14/2018	Julie Michelle Frank	1966574
	02/13/2018	02/13/2018	Hoor Shaik	02/15/2018	Julie Michelle Frank	1966574
	02/13/2018	02/14/2018	Hoor Shaik	02/15/2018	Julie Michelle Frank	1966576
	02/13/2018	02/14/2018	Hoor Shaik	02/16/2018	Julie Michelle Frank	1966575
	02/13/2018	02/14/2018	Julie Michelle Frank	02/14/2018	Julie Michelle Frank	1966574
	02/13/2018	02/15/2018	Julie Michelle Frank	02/16/2018	Juyoung Kim	1966574, 1966576
SM 2120 B	02/13/2018			02/13/2018 16:37	Tanya Welborn	1966507
	02/13/2018			02/13/2018 16:38	Tanya Welborn	1966508
	02/13/2018			02/13/2018 16:42	Tanya Welborn	1966509
	02/13/2018			02/13/2018 16:46	Tanya Welborn	1966514, 1966515
	02/13/2018			02/13/2018 16:47	Tanya Welborn	1966534
	02/13/2018			02/13/2018 17:26	Tanya Welborn	1966510, 1966511
SM 2320 B-97	02/13/2018			02/13/2018 17:27	Tanya Welborn	1966512
	02/13/2018			02/13/2018 17:28	Tanya Welborn	1966513
	02/13/2018			02/20/2018	Lauren Bottorf	1966515
	02/13/2018			02/21/2018	Lauren Bottorf	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966534
SM 2540 C-97	02/13/2018			02/14/2018	DeAsia Armster	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
SM 2540 D-97	02/13/2018			02/14/2018	DeAsia Armster	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
SM 4500 F-C-97	02/13/2018			02/28/2018	Dale L. Simmons	1966507, 1966508, 1966509, 1966510, 1966511, 1966512, 1966513, 1966514, 1966515, 1966534
SM 5310 B-00	02/13/2018			02/19/2018	Megan Treadwell	1966516, 1966517, 1966518, 1966519, 1966520, 1966521
	02/13/2018			02/20/2018	Megan Treadwell	1966522, 1966523, 1966524, 1966535