

Chemical Analysis Report

NW-DIST-2017-11-02-02

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

Event Description: **ENR C WBID 49A 722 742 789 712**

Request ID: **RQ-2017-10-09-21**

Customer: **NW-DIST**

Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208A
Pensacola, FL 32502-5794
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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 07-DEC-2017 13:23



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited 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: LA GRANGE BAYOU MIDDLE

Collection Date/Time: 11/01/2017 11:35

Field ID: G3NW0036

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942546	EPA 180.1 Rev. 2.0	Turbidity	4.5		NTU	P334589	
	EPA 300.0 Rev. 2.1	Chloride	5.8E+03		mg Cl/L	P334974	
		Sulfate	800		mg SO4/L	P334976	
	SM 2120 B	Color (true)	16	A	PCU	P334661	
	SM 2320 B-97	Total Alkalinity	50		mg CaCO3/L	P335162	
	SM 2540 C-97	TDS	1.25E+04		mg/L	P335224	
	SM 2540 D-97	TSS	5	I	mg/L	P335137	
	SM 4500 F-C-97	Fluoride	0.37		mg F/L	P334862	
1942553	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P335571	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.26	I	mg N/L	P335019	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.035		mg N/L	P335089	
	EPA 365.1 Rev. 2.0	Total-P	0.027		mg P/L	P334762	
	SM 5310 B-00	Organic Carbon	3.7		mg C/L	P335198	
1942560	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.01	I	mg P/L	P334597	

Sample Location: BASIN BAYOU AT INLET

Collection Date/Time: 11/01/2017 12:30

Field ID: G3NW0101

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942584	EPA 8321B	Sucralose**	0.010	U	ug/L	P334540	
	USGS O-2060-01	2,4-D	0.0020	UQ	ug/L	P335857	
		Diuron	8.0E-04	U	ug/L	P334541	
		Fenuron	0.0080	U	ug/L	P334541	
		Imidacloprid	8.0E-04	U	ug/L	P334541	MS
		Bentazon	8.0E-04	UQ	ug/L	P335857	
		Linuron	0.0040	U	ug/L	P334541	
		Acetaminophen**	0.0080	U	ug/L	P334541	
		MCP	0.0020	UQ	ug/L	P335857	
		Carbamazepine**	4.0E-04	U	ug/L	P334541	
		Triclopyr**	0.0040	UQ	ug/L	P335857	
		Primidone**	0.0040	U	ug/L	P334541	
		Fluridone**	4.0E-04	U	ug/L	P334541	

Ref. Method and Comment:

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Sample Location: BASIN BAYOU AT INLET

Collection Date/Time: 11/01/2017 12:30

Field ID: G3NW0101

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942547	EPA 180.1 Rev. 2.0	Turbidity	0.80		NTU	P334590	
	EPA 300.0 Rev. 2.1	Chloride	880		mg Cl/L	P334974	
		Sulfate	120		mg SO4/L	P334976	
	SM 2120 B	Color (true)	38	A	PCU	P334660	
	SM 2320 B-97	Total Alkalinity	7.5		mg CaCO3/L	P335162	

Field ID: G3NW0101

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942547	SM 2540 C-97	TDS	1.70E+03		mg/L	P335223	
	SM 2540 D-97	TSS	2	I	mg/L	P335134	
	SM 4500 F-C-97	Fluoride	0.073	I	mg F/L	P335166	
1942554	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P335187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.095	I	mg N/L	P335022	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P335330	
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P334866	
	SM 5310 B-00	Organic Carbon	3.7		mg C/L	P335235	
1942561	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P334602	

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: MULLET CREEK UPSTREAM OF HWY 20

Collection Date/Time: 11/01/2017 13:10

Field ID: G3NW0137

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942585	EPA 8321B	Sucralose**	0.017	I	ug/L	P334540	
	USGS O-2060-01	2,4-D	0.0020	UQ	ug/L	P335857	
		Diuron	8.0E-04	U	ug/L	P334541	
		Fenuron	0.0080	U	ug/L	P334541	
		Imidacloprid	0.0030	I	ug/L	P334541	MS
		Bentazon	8.0E-04	UQ	ug/L	P335857	
		Linuron	0.0040	U	ug/L	P334541	
		Acetaminophen**	0.0080	U	ug/L	P334541	
		MCP	0.0020	UQ	ug/L	P335857	
		Carbamazepine**	4.0E-04	U	ug/L	P334541	
		Triclopyr**	0.0040	UQ	ug/L	P335857	
		Primidone**	0.0040	U	ug/L	P334541	
		Fluridone**	4.0E-04	U	ug/L	P334541	

Ref. Method and Comment:

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Sample Location: MULLET CREEK UPSTREAM OF HWY 20

Collection Date/Time: 11/01/2017 13:10

Field ID: G3NW0137

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942548	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P334590	
	EPA 300.0 Rev. 2.1	Chloride	7.9		mg Cl/L	P334975	
		Sulfate	2.5		mg SO4/L	P334977	
		Color (true)	21		PCU	P334661	
	SM 2320 B-97	Total Alkalinity	2.3	I	mg CaCO3/L	P335162	
	SM 2540 C-97	TDS	34		mg/L	P335223	
	SM 2540 D-97	TSS	3	I	mg/L	P335134	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P335166	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P335187	
		Kjeldahl Nitrogen	0.086	I	mg N/L	P335023	

Field ID: G3NW0137

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942555	EPA 353.2 Rev. 2.0	NO2NO3-N	0.016		mg N/L	P335330	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P334868	
	SM 5310 B-00	Organic Carbon	2.0		mg C/L	P335235	
1942562	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.009	I	mg P/L	P334602	

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: MULLET CREEK UPSTREAM OF HWY 20

Collection Date/Time: 11/01/2017 13:15

Field ID: G3NW0137DUPLICATE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942586	EPA 8321B	Sucralose**	0.017	I	ug/L	P334540	
	USGS O-2060-01	2,4-D	0.0020	UQ	ug/L	P335857	
		Diuron	8.0E-04	U	ug/L	P334541	
		Fenuron	0.0080	U	ug/L	P334541	
		Imidacloprid	0.0025	I	ug/L	P334541	MS
		Bentazon	8.0E-04	UQ	ug/L	P335857	
		Linuron	0.0040	U	ug/L	P334541	
		Acetaminophen**	0.0080	U	ug/L	P334541	
		MCP	0.0020	UQ	ug/L	P335857	
		Carbamazepine**	4.0E-04	U	ug/L	P334541	
		Triclopyr**	0.0040	UQ	ug/L	P335857	
		Primidone**	0.0040	U	ug/L	P334541	
		Fluridone**	4.0E-04	U	ug/L	P334541	

Ref. Method and Comment:

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Sample Location: MULLET CREEK UPSTREAM OF HWY 20

Collection Date/Time: 11/01/2017 13:15

Field ID: G3NW0137DUPLICATE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942549	EPA 180.1 Rev. 2.0	Turbidity	0.65		NTU	P334590	
	EPA 300.0 Rev. 2.1	Chloride	8.1		mg Cl/L	P334975	
		Sulfate	2.6		mg SO4/L	P334977	
		Color (true)	21		PCU	P334661	
	SM 2320 B-97	Total Alkalinity	2.5	I	mg CaCO3/L	P335163	
	SM 2540 C-97	TDS	36		mg/L	P335223	
	SM 2540 D-97	TSS	3	I	mg/L	P335134	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P335167	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.015		mg N/L	P335187	
		Kjeldahl Nitrogen	0.080	U	mg N/L	P335023	
1942556	EPA 353.2 Rev. 2.0	NO2NO3-N	0.016		mg N/L	P335330	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P334868	
	SM 5310 B-00	Organic Carbon	2.0		mg C/L	P335235	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.01	I	mg P/L	P334602	

Field ID: G3NW0137DUPLICATE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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: MULLET CREEK UPSTREAM OF HWY 20

Collection Date/Time: 11/01/2017 13:20

Field ID: FIELD BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942587	EPA 8321B	Sucralose**	0.010	U	ug/L	P334540	
	USGS O-2060-01	2,4-D	0.0020	UQ	ug/L	P335857	
		Diuron	8.0E-04	U	ug/L	P334541	
		Fenuron	0.0080	U	ug/L	P334541	
		Imidacloprid	8.0E-04	U	ug/L	P334541	MS
		Bentazon	8.0E-04	UQ	ug/L	P335857	
		Linuron	0.0040	U	ug/L	P334541	
		Acetaminophen**	0.0080	U	ug/L	P334541	
		MCP	0.0020	UQ	ug/L	P335857	
		Carbamazepine**	4.0E-04	U	ug/L	P334541	
		Triclopyr**	0.0040	UQ	ug/L	P335857	
		Primidone**	0.0040	U	ug/L	P334541	
		Fluridone**	4.0E-04	U	ug/L	P334541	

Ref. Method and Comment:
 USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Sample Location: MULLET CREEK UPSTREAM OF HWY 20

Collection Date/Time: 11/01/2017 13:20

Field ID: FIELD BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942550	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P334590	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P334975	
		Sulfate	0.20	U	mg SO4/L	P334977	
	SM 2120 B	Color (true)	2.5	U	PCU	P334661	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P335163	
	SM 2540 C-97	TDS	15	U	mg/L	P335220	
	SM 2540 D-97	TSS	2	U	mg/L	P335131	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P335167	
1942557	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P335570	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P335023	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P335330	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P334868	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P335426	
1942564	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P334602	
	dissolved						

Ref. Method and Comment:
 SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
 EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: ROCKY BAYOU MOUTH

Collection Date/Time: 11/01/2017 14:10

Field ID: G3NW0031

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942588	EPA 8321B	Sucralose**	0.027	I	ug/L	P334540	
	USGS O-2060-01	2,4-D	0.0020	UQ	ug/L	P335857	
		Diuron	8.0E-04	U	ug/L	P334541	
		Fenuron	0.0080	U	ug/L	P334541	
		Imidacloprid	8.0E-04	U	ug/L	P334541	MS
		Bentazon	8.0E-04	UQ	ug/L	P335857	
		Linuron	0.0040	U	ug/L	P334541	
		Acetaminophen**	0.0080	U	ug/L	P334541	
		MCP	0.0020	UQ	ug/L	P335857	
		Carbamazepine**	4.0E-04	U	ug/L	P334541	
		Triclopyr**	0.0040	UQ	ug/L	P335857	
		Primidone**	0.0040	U	ug/L	P334541	
		Fluridone**	4.0E-04	U	ug/L	P334541	

Ref. Method and Comment:

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

Sample Location: ROCKY BAYOU MOUTH

Collection Date/Time: 11/01/2017 14:10

Field ID: G3NW0031

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942551	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P334590	
	EPA 300.0 Rev. 2.1	Chloride	9.9E+03		mg Cl/L	P334975	
		Sulfate	1.4E+03		mg SO4/L	P334977	
	SM 2120 B	Color (true)	6.4		PCU	P334661	
	SM 2320 B-97	Total Alkalinity	79		mg CaCO3/L	P335163	
	SM 2540 C-97	TDS	1.86E+04		mg/L	P335224	
	SM 2540 D-97	TSS	3	U	mg/L	P335137	
	SM 4500 F-C-97	Fluoride	0.66		mg F/L	P334862	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P335571	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.88		mg N/L	P335019	
1942558	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P335089	
	EPA 365.1 Rev. 2.0	Total-P	0.008	I	mg P/L	P334867	
	SM 5310 B-00	Organic Carbon	3.3		mg C/L	P335198	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P334597	

Sample Location: CINCO BAYOU WEST OF CINCO BRIDGE

Collection Date/Time: 11/01/2017 15:15

Field ID: G3NW0088

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942589	EPA 8321B	Sucralose**	0.64		ug/L	P334540	
	USGS O-2060-01	2,4-D	0.0020	UQ	ug/L	P335857	
		Diuron	8.0E-04	U	ug/L	P334541	
		Fenuron	0.0080	U	ug/L	P334541	
		Imidacloprid	0.0047		ug/L	P334541	MS
		Bentazon	8.0E-04	UQ	ug/L	P335857	
		Linuron	0.0040	U	ug/L	P334541	

Field ID: G3NW0088

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942589	USGS O-2060-01	Acetaminophen**	0.0080	UJ	ug/L	P334541	SUR
		MCP	0.0020	UQ	ug/L	P335857	
		Carbamazepine**	0.0013	I	ug/L	P334541	
		Triclopyr**	0.0040	UQ	ug/L	P335857	
		Primidone**	0.0040	U	ug/L	P334541	
		Fluridone**	4.0E-04	U	ug/L	P334541	

Ref. Method and Comment:

USGS O-2060-01: Sample required re-extraction beyond normal holding time due to reagent performance inconsistencies.

USGS O-2060-01: Refer to the narrative for an explanation of QC Codes. Acetaminophen-d4 surrogate spike recovery exceeding the control limits. Results confirmed in re-extraction.

Sample Location: CINCO BAYOU WEST OF CINCO BRIDGE

Collection Date/Time: 11/01/2017 15:15

Field ID: G3NW0088

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1942552	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P334590	
	EPA 300.0 Rev. 2.1	Chloride	1.1E+04		mg Cl/L	P334975	
		Sulfate	1.5E+03		mg SO4/L	P334977	
	SM 2120 B	Color (true)	2.5	U	PCU	P334661	
	SM 2320 B-97	Total Alkalinity	83		mg CaCO3/L	P335163	
	SM 2540 C-97	TDS	1.91E+04		mg/L	P335224	
	SM 2540 D-97	TSS	4	I	mg/L	P335138	
	SM 4500 F-C-97	Fluoride	0.72		mg F/L	P334862	
1942559	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P335571	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28	I	mg N/L	P335019	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.018		mg N/L	P335089	
	EPA 365.1 Rev. 2.0	Total-P	0.008	I	mg P/L	P334867	
	SM 5310 B-00	Organic Carbon	3.0		mg C/L	P335198	
1942566	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P334597	
	dissolved						

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: P334589

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P334590

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334974

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334975

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334976

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334977

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P335187

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P335570

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P335571

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335019

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335022

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335023

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335089

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: P335330

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: P334762

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334866

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334867

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334868

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P334597

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P334602

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P334540

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P334660

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P334661

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P335162

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

Reference Method: SM 2320 B-97
Batch ID: P335163

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

Reference Method: SM 2540 C-97
Batch ID: P335220

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P335223

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P335224

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P335131

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P335134

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P335137

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P335138

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P334862

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P335166

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P335167

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P335198

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

Reference Method: SM 5310 B-00
Batch ID: P335235

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

Reference Method: SM 5310 B-00
Batch ID: P335426

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

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
Batch ID: P334541

Component	Result	Code	Units
Acetaminophen	0.0080	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	8.0E-04	U	ug/L
Fenuron	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	8.0E-04	U	ug/L
Linuron	0.0040	U	ug/L
Primidone	0.0040	U	ug/L

Reference Method: USGS O-2060-01
Batch ID: P335857

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
MCPP	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334974

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334975

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334976

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334977

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P335187

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.7		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P335570

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P335571

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335019

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335022

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335023

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335089

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	105		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335330

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334762

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334866

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334867

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334868

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P334597

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P334602

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	95.2		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P334540

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	83.2		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P335162

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 108

Reference Method: SM 2320 B-97
Batch ID: P335163

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	107		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P334862

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.1		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P335166

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P335167

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P335198

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

Reference Method: SM 5310 B-00
Batch ID: P335235

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.6		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P335426

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.7		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P334541

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetaminophen	103		P	30 - 150
Carbamazepine	110		P	40 - 150
Diuron	95.7		P	40 - 150
Fenuron	115		P	40 - 150
Fluridone	112		P	40 - 150
Imidacloprid	112		P	40 - 160
Linuron	105		P	40 - 150
Primidone	102		P	40 - 150

Reference Method: USGS O-2060-01
Batch ID: P335857

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	94.9		P	40 - 150
Bentazon	97.8		P	30 - 150
MCPP	92.8		P	40 - 150
Triclopyr	94.0		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334974

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942402	Chloride	92.1		P	90 - 110
1942421	Chloride	95.5		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334975

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942830	Chloride	98.3		P	90 - 110
1942968	Chloride	93.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942402	Sulfate	91.7		P	90 - 110
1942421	Sulfate	96.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334977

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942830	Sulfate	98.2		P	90 - 110
1942968	Sulfate	94.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P335187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942555	Ammonia-N	102	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P335571

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942558	Ammonia-N	105	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335019

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942343	Kjeldahl Nitrogen	94.9	97.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335022

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942554	Kjeldahl Nitrogen	106	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335023

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942555	Kjeldahl Nitrogen	105	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335089

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942348	NO2NO3-N	107	105	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335330

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942554	NO2NO3-N	107	109	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334762

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942344	Total-P	91.8	93.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334866

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942554	Total-P	103	98.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334867

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942559	Total-P	98.5	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334868

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942782	Total-P	98.6	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P334597

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942245	O-Phosphate-P	94.4	99.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P334602

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942561	O-Phosphate-P	95.9	92.1	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P334540

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942103	Sucralose	69.4	64.9	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P334862

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942546	Fluoride	95.1	95.8	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
 Batch ID: P335166

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1943171	Fluoride	99.4	100	P/P	91 - 105

Reference Method: SM 4500 F-C-97
 Batch ID: P335167

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942957	Fluoride	99.0	99.0	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P335198

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942234	Organic Carbon	91.7	91.8	P/P	85 - 115

Reference Method: SM 5310 B-00
 Batch ID: P335235

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942482	Organic Carbon	96.6		P	85 - 115

Reference Method: SM 5310 B-00
 Batch ID: P335426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1941679	Organic Carbon	99.3	98.9	P/P	85 - 115

Reference Method: USGS O-2060-01
 Batch ID: P334541

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1941999	Acetaminophen	98.8	118	P/P	30 - 150
1941999	Carbamazepine	103	107	P/P	40 - 150
1941999	Diuron	75.6	80.9	P/P	40 - 150
1941999	Fenuron	112	108	P/P	40 - 150
1941999	Fluridone	87.6	85.3	P/P	40 - 150
1941999	Imidacloprid	186	198	F/F	40 - 160
1941999	Linuron	86.2	86.8	P/P	40 - 150
1941999	Primidone	125	119	P/P	40 - 150

Reference Method: USGS O-2060-01
 Batch ID: P335857

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1942197	2,4-D	83.8	88.3	P/P	40 - 150
1942197	Bentazon	62.6	66.1	P/P	30 - 150
1942197	MCP	68.5	70.1	P/P	40 - 150
1942197	Triclopyr	65.6	71.2	P/P	40 - 150

Quality Assurance Report Precision

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P334589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942438	Turbidity	1.10	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P334590

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942637	Turbidity	9.02	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334974

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942402	Chloride	0.610	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334975

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942968	Chloride	0.802	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334976

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942402	Sulfate	0.450	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P334977

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942968	Sulfate	1.77	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P335187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942555	Ammonia-N	0.853	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P335570

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942271	Ammonia-N	0.494	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P335571

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942558	Ammonia-N	0.0126	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P335019

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942343	Kjeldahl Nitrogen	1.93	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P335022

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942554	Kjeldahl Nitrogen	0.183	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P335023

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942555	Kjeldahl Nitrogen	3.95	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P335089

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942348	NO2NO3-N	1.28	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P335330

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942554	NO2NO3-N	1.86	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P334762

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942344	Total-P	2.00	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P334866

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942554	Total-P	3.81	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334867

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942559	Total-P	1.61	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P334868

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942782	Total-P	0.160	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P334597

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942245	O-Phosphate-P	3.84	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P334602

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942561	O-Phosphate-P	4.04	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P334540

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942103	Sucralose	6.77	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P334660

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942547	Color (true)	0.0266	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P334661

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942546	Color (true)	5.52	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P335162

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1943171	Total Alkalinity	0.127	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P335163

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942957	Total Alkalinity	1.14	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P335220

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942067	TDS	6.94	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P335223

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942475	TDS	5.13	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P335224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942829	TDS	3.00	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P335137

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942257	TSS	8.70	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P334862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942546	Fluoride	0.467	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P335166

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1943171	Fluoride	0.466	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P335167

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942957	Fluoride	0.0	Spike	P	0 - 3.0

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
 Batch ID: P335198

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942234	Organic Carbon	0.117	Spike	P	0 - 20

Reference Method: SM 5310 B-00
 Batch ID: P335235

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942482	Organic Carbon	0.353	Spike	P	0 - 20

Reference Method: SM 5310 B-00
 Batch ID: P335426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1941679	Organic Carbon	0.314	Spike	P	0 - 20

Reference Method: USGS O-2060-01
 Batch ID: P334541

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1941999	Acetaminophen	5.95	Spike	P	0 - 30
1941999	Carbamazepine	4.37	Spike	P	0 - 30
1941999	Diuron	3.58	Spike	P	0 - 30
1941999	Fenuron	3.75	Spike	P	0 - 30
1941999	Fluridone	2.39	Spike	P	0 - 30
1941999	Imidacloprid	5.35	Spike	P	0 - 30
1941999	Linuron	0.670	Spike	P	0 - 30
1941999	Primidone	4.43	Spike	P	0 - 30

Reference Method: USGS O-2060-01
 Batch ID: P335857

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1942197	2,4-D	5.29	Spike	P	0 - 30
1942197	Bentazon	4.96	Spike	P	0 - 30
1942197	MCPP	2.41	Spike	P	0 - 30
1942197	Triclopyr	8.26	Spike	P	0 - 30

* 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: 1942584
 Field Sample ID: G3NW0101

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
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Quality Assurance Report Surrogates

Lab Sample ID: 1942584
Field Sample ID: G3NW0101

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	112	P	30 - 160
EPA 8321B	Carbamazepine-d10	122	P	30 - 160
EPA 8321B	Diuron-d6	90.3	P	30 - 160
EPA 8321B	Primidone-d5	123	P	30 - 160
EPA 8321B	Sucralose-d6	61.2	P	40 - 160
USGS O-2060-01	2,4-D-d3	85.7	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	112	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	122	P	30 - 160
USGS O-2060-01	Diuron-d6	90.3	P	30 - 160
USGS O-2060-01	Primidone-d5	123	P	30 - 160
USGS O-2060-01	Sucralose-d6	61.2	P	40 - 160

Lab Sample ID: 1942585
Field Sample ID: G3NW0137

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	114	P	30 - 160
EPA 8321B	Carbamazepine-d10	126	P	30 - 160
EPA 8321B	Diuron-d6	100	P	30 - 160
EPA 8321B	Primidone-d5	117	P	30 - 160
EPA 8321B	Sucralose-d6	83.8	P	40 - 160
USGS O-2060-01	2,4-D-d3	74.2	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	114	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	126	P	30 - 160
USGS O-2060-01	Diuron-d6	100	P	30 - 160
USGS O-2060-01	Primidone-d5	117	P	30 - 160
USGS O-2060-01	Sucralose-d6	83.8	P	40 - 160

Lab Sample ID: 1942586
Field Sample ID: G3NW0137DUPLICATE

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	110	P	30 - 160
EPA 8321B	Carbamazepine-d10	98.4	P	30 - 160
EPA 8321B	Diuron-d6	80.1	P	30 - 160
EPA 8321B	Primidone-d5	124	P	30 - 160
EPA 8321B	Sucralose-d6	89.5	P	40 - 160
USGS O-2060-01	2,4-D-d3	71.9	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	110	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	98.4	P	30 - 160
USGS O-2060-01	Diuron-d6	80.1	P	30 - 160
USGS O-2060-01	Primidone-d5	124	P	30 - 160
USGS O-2060-01	Sucralose-d6	89.5	P	40 - 160

Lab Sample ID: 1942587
Field Sample ID: FIELD BLANK

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	87.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	106	P	30 - 160
EPA 8321B	Diuron-d6	92.4	P	30 - 160
EPA 8321B	Primidone-d5	115	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1942587
 Field Sample ID: FIELD BLANK

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	93.1	P	40 - 160
USGS O-2060-01	2,4-D-d3	77.8	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	87.4	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	106	P	30 - 160
USGS O-2060-01	Diuron-d6	92.4	P	30 - 160
USGS O-2060-01	Primidone-d5	115	P	30 - 160
USGS O-2060-01	Sucralose-d6	93.1	P	40 - 160

Lab Sample ID: 1942588
 Field Sample ID: G3NW0031

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	90.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	110	P	30 - 160
EPA 8321B	Diuron-d6	90.0	P	30 - 160
EPA 8321B	Primidone-d5	109	P	30 - 160
EPA 8321B	Sucralose-d6	41.0	P	40 - 160
USGS O-2060-01	2,4-D-d3	68.9	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	90.2	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	110	P	30 - 160
USGS O-2060-01	Diuron-d6	90.0	P	30 - 160
USGS O-2060-01	Primidone-d5	109	P	30 - 160
USGS O-2060-01	Sucralose-d6	41.0	P	40 - 160

Lab Sample ID: 1942589
 Field Sample ID: G3NW0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	8.75	F	30 - 160
EPA 8321B	Carbamazepine-d10	112	P	30 - 160
EPA 8321B	Diuron-d6	89.5	P	30 - 160
EPA 8321B	Primidone-d5	131	P	30 - 160
EPA 8321B	Sucralose-d6	153	P	40 - 160
EPA 8321B	Sucralose-d6	157	P	40 - 160
USGS O-2060-01	2,4-D-d3	62.9	P	30 - 160
USGS O-2060-01	Acetaminophen-d4	8.75	F	30 - 160
USGS O-2060-01	Carbamazepine-d10	112	P	30 - 160
USGS O-2060-01	Diuron-d6	89.5	P	30 - 160
USGS O-2060-01	Primidone-d5	131	P	30 - 160
USGS O-2060-01	Sucralose-d6	153	P	40 - 160
USGS O-2060-01	Sucralose-d6	157	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
 Run ID: A80005
 Included Lab Sample IDs: 1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A80005

Included Lab Sample IDs: 1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A80009

Included Lab Sample IDs: 1942560, 1942561, 1942562, 1942563, 1942564, 1942565, 1942566

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.8	95.8	P/P	90 - 110
O-Phosphate-P	97.1	95.8	P/P	90 - 110
O-Phosphate-P	99.1	94.3	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A80032

Included Lab Sample IDs: 1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	103	P/P	85 - 115
Color (true)	98.9	103	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80097

Included Lab Sample IDs: 1942553

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	99.5	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A80108

Included Lab Sample IDs: 1942546, 1942551, 1942552

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	98.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A80134

Included Lab Sample IDs: 1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80180

Included Lab Sample IDs: 1942554, 1942555, 1942556, 1942557, 1942558, 1942559

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A80193

Included Lab Sample IDs: 1942553, 1942558, 1942559

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A80216

Included Lab Sample IDs: 1942553, 1942558, 1942559

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	107	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A80224

Included Lab Sample IDs: 1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	102	P/P	90 - 110
Total Alkalinity	102	101	P/P	90 - 110
Total Alkalinity	104	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A80224

Included Lab Sample IDs: 1942547, 1942548, 1942549, 1942550

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

Reference Method: USGS O-2060-01

Run ID: A80228

Included Lab Sample IDs: 1942584, 1942585, 1942586, 1942587, 1942588, 1942589

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	93.7	96.3	P/P	60 - 150
Carbamazepine	108	104	P/P	60 - 150
Diuron	111	110	P/P	60 - 150
Fenuron	106	105	P/P	60 - 150
Fluridone	105	102	P/P	60 - 160
Imidacloprid	88.1	90.6	P/P	60 - 150
Linuron	105	102	P/P	60 - 150
Primidone	95.1	95.8	P/P	60 - 150

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A80229

Included Lab Sample IDs: 1942554, 1942555, 1942556

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	102	P/P	90 - 110
Ammonia-N	102	103	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00

Run ID: A80236

Included Lab Sample IDs: 1942553, 1942558, 1942559

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	97.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A80249

Included Lab Sample IDs: 1942554, 1942555, 1942556, 1942557

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	106	106	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A80250

Included Lab Sample IDs: 1942554, 1942555, 1942556

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.9	95.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A80274

Included Lab Sample IDs: 1942584, 1942585, 1942586, 1942587, 1942588

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	118	96.5	P/P	60 - 150
Sucralose	121	121	P/P	60 - 150
Sucralose	121	102	P/P	60 - 150

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A80291

Included Lab Sample IDs: 1942554, 1942555, 1942556, 1942557

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.1	96.1	P/P	90 - 110
Kjeldahl Nitrogen	96.1	96.4	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A80314

Included Lab Sample IDs: 1942557

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A80368

Included Lab Sample IDs: 1942553, 1942557, 1942558, 1942559

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	103	P/P	90 - 110
Ammonia-N	103	102	P/P	90 - 110
Ammonia-N	99.3	97.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A80527

Included Lab Sample IDs: 1942584, 1942585, 1942586, 1942587, 1942588, 1942589

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.4	88.6	P/P	50 - 150
2,4-D	97.0	87.4	P/P	50 - 150
Bentazon	112	113	P/P	50 - 150
Bentazon	113	114	P/P	50 - 150
MCP	82.5	80.4	P/P	50 - 150
MCP	96.6	82.5	P/P	50 - 150
Tricopyr	83.4	78.3	P/P	50 - 150
Tricopyr	92.8	83.4	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A80568

Included Lab Sample IDs: 1942589

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	123	101	P/P	60 - 150

* 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				1.10	
	Turbidity				9.02	
EPA 300.0 Rev. 2.1	Chloride	98.5	92.1 95.5		0.610	
	Chloride	98.9	93.9 98.3		0.802	
	Sulfate	98.1	91.7 96.5		0.450	
	Sulfate	99.1	94.1 98.2		1.77	
EPA 350.1 Rev. 2.0	Ammonia-N	98.7	102 101			0.853
	Ammonia-N	99.2				0.494
	Ammonia-N	97.6	105 105			0.0126
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.6	94.9 97.3			1.93
	Kjeldahl Nitrogen	102	106 106			0.183
	Kjeldahl Nitrogen	98.8	105 100			3.95
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	105	107 105			1.28
	NO ₂ NO ₃ -N	110	107 109			1.86
EPA 365.1 Rev. 2.0	Total-P	99.5	91.8 93.8			2.00
	Total-P	102	103 98.9			3.81
	Total-P	103	98.5 97.0			1.61
	Total-P	105	98.6 98.8			0.160
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.3	94.4 99.2			3.84
	O-Phosphate-P	95.2	95.9 92.1			4.04
EPA 8321B	Sucralose	83.2	69.4 64.9			6.77
SM 2120 B	Color (true)				0.0266	
	Color (true)				5.52	
SM 2320 B-97	Total Alkalinity	102			0.127	
	Total Alkalinity	107			1.14	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 2540 C-97	TDS				6.94	
	TDS				5.13	
	TDS				3.00	
SM 2540 D-97	TSS				8.70	
SM 4500 F-C-97	Fluoride	97.1	95.1	95.8		0.467
	Fluoride	98.2	99.4	100		0.466
	Fluoride	99.2	99.0	99.0		0.0
SM 5310 B-00	Organic Carbon	100	91.7	91.8		0.117
	Organic Carbon	94.6	96.6			0.353
	Organic Carbon	99.7	99.3	98.9		0.314
USGS O-2060-01	2,4-D	94.9	83.8	88.3		5.29
	Acetaminophen	103	98.8	118		5.95
	Bentazon	97.8	62.6	66.1		4.96
	Carbamazepine	110	103	107		4.37
	Diuron	95.7	75.6	80.9		3.58
	Fenuron	115	112	108		3.75
	Fluridone	112	87.6	85.3		2.39
	Imidacloprid	112	186	198		5.35
	Linuron	105	86.2	86.8		0.670
	MCPD	92.8	68.5	70.1		2.41
	Primidone	102	125	119		4.43
	Triclopyr	94.0	65.6	71.2		8.26

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1942553, 1942554, 1942555, 1942556, 1942557, 1942558, 1942559
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1942553, 1942554, 1942555, 1942556, 1942557, 1942558, 1942559
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1942553, 1942554, 1942555, 1942556, 1942557, 1942558, 1942559
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1942553, 1942554, 1942555, 1942556, 1942557, 1942558, 1942559
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1942560, 1942561, 1942562, 1942563, 1942564, 1942565, 1942566
EPA 8321B / E31780	Analysis of sucralose in water matrices by HPLC/MS/MS	1942584, 1942585, 1942586, 1942587, 1942588, 1942589
SM 2120 B / E31780	True Color measured at 450 nm	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1942553, 1942554, 1942555, 1942556, 1942557, 1942558, 1942559

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1942584, 1942585, 1942586, 1942587, 1942588, 1942589
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1942584, 1942585, 1942586, 1942587, 1942588, 1942589

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	11/02/2017			11/02/2017 17:33	DeAsia Armster	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
EPA 300.0 Rev. 2.1	11/02/2017			11/08/2017	Julia Storbeck	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
EPA 350.1 Rev. 2.0	11/02/2017			11/13/2017	Sofia Elnemr	1942554, 1942555, 1942556
	11/02/2017			11/17/2017	Sofia Elnemr	1942553, 1942557, 1942558, 1942559
EPA 351.2 Rev. 2.0	11/02/2017	11/09/2017	Adrian Shelby	11/13/2017	Joseph Suarez	1942553, 1942558, 1942559
	11/02/2017	11/09/2017	Adrian Shelby	11/15/2017	Tanya Welborn	1942554, 1942555, 1942556, 1942557
EPA 353.2 Rev. 2.0	11/02/2017			11/13/2017	Beverly Y. Sanders	1942553, 1942558, 1942559
	11/02/2017			11/14/2017	Beverly Y. Sanders	1942554, 1942555, 1942556, 1942557
EPA 365.1 Rev. 2.0	11/02/2017	11/06/2017	Sima Feizi	11/07/2017	Lipi Saha	1942553
	11/02/2017	11/07/2017	Sima Feizi	11/09/2017	Lipi Saha	1942554, 1942555, 1942556, 1942557, 1942558, 1942559
EPA 365.1 Rev. 2.0 dissolved	11/02/2017			11/02/2017 14:01	Megan Treadwell	1942560
	11/02/2017			11/02/2017 14:02	Megan Treadwell	1942565
	11/02/2017			11/02/2017 14:03	Megan Treadwell	1942566
	11/02/2017			11/02/2017 14:29	Megan Treadwell	1942561
	11/02/2017			11/02/2017 14:56	Megan Treadwell	1942562
	11/02/2017			11/02/2017 14:57	Megan Treadwell	1942563
	11/02/2017			11/02/2017 14:58	Megan Treadwell	1942564
EPA 8321B	11/02/2017	11/02/2017	Juyoung Kim	11/13/2017	Juyoung Kim	1942584, 1942585, 1942586, 1942587
	11/02/2017	11/02/2017	Juyoung Kim	11/14/2017	Juyoung Kim	1942588
	11/02/2017	11/22/2017	Mohammad Ghaffari	11/29/2017	Mohammad Ghaffari	1942589
SM 2120 B	11/02/2017			11/02/2017 16:34	Tanya Welborn	1942547
	11/02/2017			11/02/2017 16:41	Tanya Welborn	1942546, 1942548
	11/02/2017			11/02/2017 16:42	Tanya Welborn	1942549
	11/02/2017			11/02/2017 16:43	Tanya Welborn	1942550
	11/02/2017			11/02/2017 16:44	Tanya Welborn	1942551, 1942552
SM 2320 B-97	11/02/2017			11/10/2017	Dale L. Simmons	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
SM 2540 C-97	11/02/2017			11/06/2017	Yijie Li	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
SM 2540 D-97	11/02/2017			11/06/2017	Yijie Li	1942546, 1942547, 1942548, 1942549, 1942550, 1942551, 1942552
SM 4500 F-C-97	11/02/2017			11/07/2017	Dale L. Simmons	1942546, 1942551, 1942552
	11/02/2017			11/10/2017	Dale L. Simmons	1942547, 1942548, 1942549, 1942550
SM 5310 B-00	11/02/2017			11/13/2017	Ping Hua	1942554, 1942555, 1942556
	11/02/2017			11/14/2017	Ping Hua	1942553, 1942558, 1942559
	11/02/2017			11/15/2017	Ping Hua	1942557
USGS O-2060-01	11/02/2017	11/02/2017	Hoor Shaik	11/10/2017	S. M. Reddy	1942584, 1942585, 1942586, 1942587, 1942588
	11/02/2017	11/02/2017	Hoor Shaik	11/11/2017	S. M. Reddy	1942589

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
USGS O-2060-01	11/02/2017	11/27/2017	Hoor Shaik	11/29/2017	Julie Michelle Frank	1942584, 1942585, 1942586, 1942587, 1942588, 1942589