Chemical Analysis Report

NE-DIST-2018-03-22-01

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

Event Description: **Bmap Tribs 1**
Request ID: **RQ-2018-03-19-15**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 12-APR-2018 12:59

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: BUTCHER PEN CR AT WESCONNETT **Collection Date/Time: 03/21/2018 09:25**

Field ID: 20030760 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1976631	EPA 180.1 Rev. 2.0	Turbidity	6.4	A	NTU	P342048	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P342138	
		Sulfate	14		mg SO4/L	P342142	
	SM 2120 B	Color (true)	77		PCU	P342025	
	SM 2320 B-97	Total Alkalinity	99		mg CaCO3/L	P342475	
	SM 2540 C-97	TDS	182	A	mg/L	P342379	
	SM 2540 D-97	TSS	4	I	mg/L	P342220	
	SM 4500 F-C-97	Fluoride	0.14		mg F/L	P342297	
1976636	EPA 350.1 Rev. 2.0	Ammonia-N	0.19		mg N/L	P342593	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.73		mg N/L	P342066	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.096		mg N/L	P342161	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P342109	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P342553	
1976641	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.044		mg P/L	P342084	
1976667	EPA 8321B	2,4-D	0.033		ug/L	P341805	
		Sucralose**	0.40		ug/L	P341684	
		Bentazon	0.0023	I	ug/L	P341805	MS
		MCPP	0.0082		ug/L	P341805	
		Triclopyr**	0.0040	U	ug/L	P341805	
		Imidacloprid	0.035		ug/L	P341805	MS
		Diuron	0.011		ug/L	P341805	
		Pyraclostrobin**	0.0020	U	ug/L	P341805	
		Primidone**	0.0040	U	ug/L	P341805	
		Linuron	0.0040	U	ug/L	P341805	
		Acetaminophen**	0.029	I	ug/L	P341805	
		Fenuron	0.016	U	ug/L	P341805	
		Imazapyr**	40		ug/L	P341805	MS
		Carbamazepine**	4.0E-04	U	ug/L	P341805	
		Fluridone**	8.0E-04	U	ug/L	P341805	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500 F-C-97: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MS accuracy and precision for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample. Fenuron was detected in the method blank slightly above the MDL.

Sample Location: BUTCHER PEN CR @ CONFEDERATE PT ROAD **Collection Date/Time: 03/21/2018 09:50**

Field ID: 20030082 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1976632	EPA 180.1 Rev. 2.0	Turbidity	7.8		NTU	P342048	
	EPA 300.0 Rev. 2.1	Chloride	1.4E+03		mg Cl/L	P342138	
		Sulfate	220		mg SO4/L	P342142	
	SM 2120 B	Color (true)	86		PCU	P342025	

Field ID: 20030082 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1976632	SM 2320 B-97	Total Alkalinity	95		mg CaCO3/L	P342476	
	SM 2540 C-97	TDS	2.71E+03		mg/L	P342379	
	SM 2540 D-97	TSS	8	I	mg/L	P342220	
	SM 4500 F-C-97	Fluoride	0.19		mg F/L	P342298	
1976637	EPA 350.1 Rev. 2.0	Ammonia-N	0.20		mg N/L	P342680	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.92		mg N/L	P342069	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.090		mg N/L	P342190	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P342112	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P342553	
1976642	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.046		mg P/L	P342086	
1976668	EPA 8321B	2,4-D	0.040		ug/L	P341805	
		Sucralose**	0.54		ug/L	P341684	
		Bentazon	0.0079		ug/L	P341805	MS
		MCPP	0.0063	I	ug/L	P341805	
		Triclopyr**	0.0040	U	ug/L	P341805	
		Imidacloprid	0.023		ug/L	P342060	MS
		Diuron	0.012		ug/L	P342060	
		Pyraclostrobin**	0.0020	U	ug/L	P342060	
		Primidone**	0.0040	U	ug/L	P342060	
		Linuron	0.0040	U	ug/L	P342060	
		Acetaminophen**	0.044		ug/L	P342060	
		Fenuron	0.016	U	ug/L	P342060	
		Imazapyr**	6.6		ug/L	P342060	
		Carbamazepine**	8.7E-04	I	ug/L	P342060	
		Fluridone**	0.0011	I	ug/L	P342060	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy and precision for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: BIG FISHWEIR CR @ HAMILTON ST **Collection Date/Time: 03/21/2018 10:15**

Field ID: 20030801 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1976633	EPA 180.1 Rev. 2.0	Turbidity	5.3		NTU	P342048	
	EPA 300.0 Rev. 2.1	Chloride	55		mg Cl/L	P342138	
		Sulfate	26		mg SO4/L	P342142	
	SM 2120 B	Color (true)	51		PCU	P342025	
	SM 2320 B-97	Total Alkalinity	121		mg CaCO3/L	P342476	
	SM 2540 C-97	TDS	283		mg/L	P342379	
	SM 2540 D-97	TSS	3	I	mg/L	P342220	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P342298	
1976638	EPA 350.1 Rev. 2.0	Ammonia-N	0.15		mg N/L	P342593	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.69		mg N/L	P342168	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.20		mg N/L	P342161	

Field ID: 20030801 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1976638	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P342109	
	SM 5310 B-00	Organic Carbon	8.8		mg C/L	P342553	
1976643	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.059		mg P/L	P342084	
1976669	EPA 8321B	2,4-D	0.051		ug/L	P341805	
		Sucralose**	0.40		ug/L	P341684	
		Bentazon	0.0022	I	ug/L	P341805	MS
		MCPP	0.023		ug/L	P341805	
		Triclopyr**	0.0040	U	ug/L	P341805	
		Imidacloprid	0.038		ug/L	P342060	MS
		Diuron	0.0067	I	ug/L	P342060	
		Pyraclostrobin**	0.0020	U	ug/L	P342060	
		Primidone**	0.0040	U	ug/L	P342060	
		Linuron	0.0040	U	ug/L	P342060	
		Acetaminophen**	0.12		ug/L	P342060	
		Fenuron	0.026	I	ug/L	P342060	
		Imazapyr**	0.33		ug/L	P342060	
		Carbamazepine**	8.1E-04	I	ug/L	P342060	
		Fluridone**	8.0E-04	U	ug/L	P342060	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy and precision for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: BIG FISHWEIR CR HERSCHELL ST **Collection Date/Time: 03/21/2018 11:00**

Field ID: 20030139 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1976646	EPA 180.1 Rev. 2.0	Turbidity	6.9		NTU	P342048	
	SM 2320 B-97	Total Alkalinity	101		mg CaCO3/L	P342532	
	SM 2540 D-97	TSS	8	I	mg/L	P342221	
	SM 4500 F-C-97	Fluoride	0.25		mg F/L	P342477	
1976647	EPA 350.1 Rev. 2.0	Ammonia-N	0.056		mg N/L	P342680	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.88		mg N/L	P342069	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P342190	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P342112	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P342553	
1976648	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.070		mg P/L	P342086	
1976672	EPA 8321B	2,4-D	0.048		ug/L	P341805	
		Sucralose**	0.47		ug/L	P342018	
		Bentazon	0.0045		ug/L	P341805	MS
		MCPP	0.019		ug/L	P341805	
		Triclopyr**	0.0040	U	ug/L	P341805	
		Imidacloprid	0.046		ug/L	P341805	MS
		Diuron	0.0090		ug/L	P341805	
		Pyraclostrobin**	0.0020	U	ug/L	P341805	

Field ID: 20030139 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1976672	EPA 8321B	Primidone**	0.0040	U	ug/L	P341805	
		Linuron	0.014	I	ug/L	P341805	
		Acetaminophen**	0.065		ug/L	P341805	
		Fenuron	0.016	U	ug/L	P341805	
		Imazapyr**	0.083		ug/L	P341805	MS
		Carbamazepine**	0.0015	I	ug/L	P341805	
		Fluridone**	8.0E-04	U	ug/L	P341805	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy and precision for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample. Fenuron was detected in the method blank slightly above the MDL.

Sample Location: LITTLE FISHWEIR @ PARK ST **Collection Date/Time: 03/21/2018 11:35**

Field ID: 20030798 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1976634	EPA 180.1 Rev. 2.0	Turbidity	3.3		NTU	P342048	
	EPA 300.0 Rev. 2.1	Chloride	14	A	mg Cl/L	P342138	
		Sulfate	38	A	mg SO4/L	P342142	
	SM 2120 B	Color (true)	49		PCU	P342025	
	SM 2320 B-97	Total Alkalinity	100	A	mg CaCO3/L	P342476	
	SM 2540 C-97	TDS	200	A	mg/L	P342380	
	SM 2540 D-97	TSS	2	U	mg/L	P342220	
	SM 4500 F-C-97	Fluoride	0.23		mg F/L	P342298	
1976639	EPA 350.1 Rev. 2.0	Ammonia-N	0.078		mg N/L	P342593	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.63		mg N/L	P342071	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.028		mg N/L	P342161	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P342110	
	SM 5310 B-00	Organic Carbon	7.5		mg C/L	P342553	
1976644	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.067		mg P/L	P342084	
1976670	EPA 8321B	2,4-D	0.029		ug/L	P341805	
		Sucralose**	0.13		ug/L	P342018	
		Bentazon	0.0077		ug/L	P341805	MS
		MCPP	0.0020	U	ug/L	P341805	
		Triclopyr**	0.0040	U	ug/L	P341805	
		Imidacloprid	0.039		ug/L	P342060	MS
		Diuron	0.0067	I	ug/L	P342060	
		Pyraclostrobin**	0.0020	U	ug/L	P342060	
		Primidone**	0.0040	U	ug/L	P342060	
		Linuron	0.0040	U	ug/L	P342060	
		Acetaminophen**	0.16		ug/L	P342060	
		Fenuron	0.016	U	ug/L	P342060	
		Imazapyr**	0.026		ug/L	P342060	
		Carbamazepine**	4.0E-04	U	ug/L	P342060	
		Fluridone**	8.0E-04	U	ug/L	P342060	

Field ID: 20030798 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy and precision for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: CRAIG CR. 100M DOWN FROM FOOTBRIDGE IN PARK **Collection Date/Time: 03/21/2018 12:10**

Field ID: 20030958 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1976635	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P342048	
	EPA 300.0 Rev. 2.1	Chloride	1.3E+03		mg Cl/L	P342138	
		Sulfate	210		mg SO4/L	P342142	
	SM 2120 B	Color (true)	97		PCU	P342025	
	SM 2320 B-97	Total Alkalinity	107		mg CaCO3/L	P342476	
	SM 2540 C-97	TDS	2.36E+03		mg/L	P342380	
	SM 2540 D-97	TSS	10		mg/L	P342221	
	SM 4500 F-C-97	Fluoride	0.21		mg F/L	P342298	
1976640	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P342593	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.89		mg N/L	P342071	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P342163	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P342110	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P342553	
1976645	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.051		mg P/L	P342084	
1976671	EPA 8321B	2,4-D	0.61		ug/L	P341805	
		Sucralose**	0.42		ug/L	P342018	
		Bentazon	0.018		ug/L	P341805	MS
		MCPP	0.0042	I	ug/L	P341805	
		Triclopyr**	0.0040	U	ug/L	P341805	
		Imidacloprid	0.041		ug/L	P341805	MS
		Diuron	0.0078	I	ug/L	P341805	
		Pyraclostrobin**	0.0020	U	ug/L	P341805	
		Primidone**	0.0040	U	ug/L	P341805	
		Linuron	0.011	I	ug/L	P341805	
		Acetaminophen**	0.031	I	ug/L	P341805	
		Fenuron	0.016	U	ug/L	P341805	
		Imazapyr**	0.039		ug/L	P341805	MS
		Carbamazepine**	4.7E-04	I	ug/L	P341805	
		Fluridone**	0.0036		ug/L	P341805	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy and precision for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample. Fenuron was detected in the method blank slightly above the MDL.

Quality Assurance Report
Method Blank Results

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P342048

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P342138

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P342142

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P342593

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P342680

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342066

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342069

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342071

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342168

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P342161

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P342163

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P342190

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342109

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342110

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342112

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P342084

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P342086

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

Reference Method: EPA 8321B
Batch ID: P341684

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P341805

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	0.018	I	ug/L
Fluridone	8.0E-04	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P342018

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P342060

Component	Result	Code	Units
Acetaminophen	0.0080	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L

Reference Method: SM 2120 B
Batch ID: P342025

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P342475

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

Reference Method: SM 2320 B-97
Batch ID: P342476

Component	Result	Code	Units

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P342476

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

Reference Method: SM 2320 B-97
Batch ID: P342532

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

Reference Method: SM 2540 C-97
Batch ID: P342379

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P342380

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P342220

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P342221

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P342297

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P342298

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P342477

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P342553

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P342138

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P342142

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	108		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P342593

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P342680

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342066

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.9		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342069

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: P342071

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342168

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342168

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P342161

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P342163

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: P342190

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342109

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342110

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342112

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P342084

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P342086

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.0		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P341684

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	115		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P341805

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	80.4		P	40 - 150
Acetaminophen	100		P	30 - 150
Bentazon	74.9		P	30 - 150
Carbamazepine	68.5		P	40 - 150
Diuron	69.1		P	40 - 150
Fenuron	106		P	40 - 150
Fluridone	62.5		P	40 - 150
Imazapyr	61.0		P	40 - 150
Imidacloprid	91.2		P	40 - 160
Linuron	71.4		P	40 - 150
MCPP	82.0		P	40 - 150
Primidone	97.7		P	40 - 150
Pyraclostrobin	62.8		P	40 - 150
Triclopyr	73.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P342018

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

Reference Method: EPA 8321B
Batch ID: P342060

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetaminophen	102		P	30 - 150
Carbamazepine	63.9		P	40 - 150
Diuron	62.3		P	40 - 150
Fenuron	112		P	40 - 150
Fluridone	56.9		P	40 - 150
Imazapyr	73.3		P	40 - 150
Imidacloprid	95.8		P	40 - 160
Linuron	76.5		P	40 - 150
Primidone	107		P	40 - 150
Pyraclostrobin	67.4		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P342475

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.1		P	98 - 107

Reference Method: SM 2320 B-97
Batch ID: P342476

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P342476

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	98 - 107

Reference Method: SM 2320 B-97
Batch ID: P342532

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P342297

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	93.9		P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P342298

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.3		P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P342477

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.2		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P342553

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P342138

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976465	Chloride	105		P	90 - 110
1976634	Chloride	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P342142

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976465	Sulfate	108		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P342593

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976535	Ammonia-N	97.9	98.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P342680

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976613	Ammonia-N	97.3	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342066

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976527	Kjeldahl Nitrogen	98.4	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342069

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976611	Kjeldahl Nitrogen	103	97.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342071

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976690	Kjeldahl Nitrogen	91.0	95.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342168

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976979	Kjeldahl Nitrogen	103	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P342161

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976534	NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P342163

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976640	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P342190

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976607	NO2NO3-N	104	105	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342109

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976536	Total-P	101	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342110

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976639	Total-P	97.4	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976608	Total-P	95.2	95.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P342084

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976519	O-Phosphate-P	97.2	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P342086

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976642	O-Phosphate-P	97.0	98.4	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P341684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1975318	Sucralose	110	97.2	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P341805

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976131	Acetaminophen	128	128	P/P	30 - 150
1976131	Bentazon	21.6	20.0	F/F	30 - 150
1976131	Carbamazepine	87.3	74.3	P/P	40 - 150
1976131	Diuron	62.6	61.2	P/P	40 - 150
1976131	Fenuron	93.7	95.2	P/P	40 - 150
1976131	Fluridone	47.8	46.5	P/P	40 - 150
1976131	Imazapyr	38.5	53.0	F/P	40 - 150
1976131	Imidacloprid	179	179	F/F	40 - 160
1976131	Linuron	69.0	75.2	P/P	40 - 150
1976131	MCPP	53.2	52.8	P/P	40 - 150
1976131	Primidone	110	113	P/P	40 - 150
1976131	Pyraclostrobin	61.0	52.7	P/P	40 - 150
1976131	Triclopyr	46.8	42.5	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P342018

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976670	Sucralose	94.0	104	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P342060

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976869	Acetaminophen	127	122	P/P	30 - 150
1976869	Carbamazepine	76.4	71.8	P/P	40 - 150
1976869	Diuron	69.4	72.3	P/P	40 - 150
1976869	Fenuron	96.0	86.2	P/P	40 - 150
1976869	Fluridone	58.0	59.2	P/P	40 - 150
1976869	Imazapyr	46.7	57.6	P/P	40 - 150
1976869	Imidacloprid	192	196	F/F	40 - 160
1976869	Linuron	80.5	85.5	P/P	40 - 150
1976869	Primidone	115	111	P/P	40 - 150
1976869	Pyraclostrobin	70.9	70.0	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P342298

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976634	Fluoride	94.6	96.0	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P342477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1977074	Fluoride	95.4	97.3	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P342553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1976148	Organic Carbon	108	105	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P342048

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976631	Turbidity	2.80	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P342138

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976634	Chloride	0.00215	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P342142

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976634	Sulfate	0.252	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P342593

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976535	Ammonia-N	0.0957	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P342680

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976613	Ammonia-N	0.428	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342066

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976527	Kjeldahl Nitrogen	1.39	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342069

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976611	Kjeldahl Nitrogen	4.98	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342071

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976690	Kjeldahl Nitrogen	3.63	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P342168

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976979	Kjeldahl Nitrogen	3.36	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P342161

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976534	NO2NO3-N	0.458	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P342163

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976640	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P342190

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976607	NO2NO3-N	1.31	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342109

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976536	Total-P	1.69	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342110

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976639	Total-P	0.742	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P342112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976608	Total-P	0.680	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P342084

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976519	O-Phosphate-P	0.615	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P342086

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976642	O-Phosphate-P	0.972	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P341684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1975318	Sucralose	9.71	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P341805

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976131	Acetaminophen	0.0564	Spike	P	0 - 30
1976131	Bentazon	5.65	Spike	P	0 - 30
1976131	Carbamazepine	15.9	Spike	P	0 - 30
1976131	Diuron	2.07	Spike	P	0 - 30
1976131	Fenuron	1.56	Spike	P	0 - 30
1976131	Fluridone	2.41	Spike	P	0 - 30
1976131	Imazapyr	15.0	Spike	P	0 - 30
1976131	Imidacloprid	0.0	Spike	P	0 - 30
1976131	Linuron	8.54	Spike	P	0 - 30
1976131	MCPP	0.734	Spike	P	0 - 30
1976131	Primidone	2.60	Spike	P	0 - 30
1976131	Pyraclostrobin	14.5	Spike	P	0 - 30
1976131	Triclopyr	9.72	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P342018

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976670	Sucralose	9.21	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P342060

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976869	Acetaminophen	3.77	Spike	P	0 - 30
1976869	Carbamazepine	6.26	Spike	P	0 - 30
1976869	Diuron	4.12	Spike	P	0 - 30
1976869	Fenuron	10.7	Spike	P	0 - 30
1976869	Fluridone	2.03	Spike	P	0 - 30
1976869	Imazapyr	15.2	Spike	P	0 - 30
1976869	Imidacloprid	1.96	Spike	P	0 - 30
1976869	Linuron	6.00	Spike	P	0 - 30
1976869	Primidone	3.27	Spike	P	0 - 30
1976869	Pyraclostrobin	1.21	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P342025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976532	Color (true)	0.426	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P342475

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976526	Total Alkalinity	0.0786	Sample	P	0 - 1.6

Quality Assurance Report
Precision

Reference Method: SM 2320 B-97
Batch ID: P342476

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976634	Total Alkalinity	0.404	Sample	P	0 - 1.6

Reference Method: SM 2320 B-97
Batch ID: P342532

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1977074	Total Alkalinity	0.336	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P342379

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976631	TDS	1.10	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P342380

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976634	TDS	2.51	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P342297

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976526	Fluoride	0.974	Spike	P	0 - 3.5

Reference Method: SM 4500 F-C-97
Batch ID: P342298

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976634	Fluoride	0.946	Spike	P	0 - 3.5

Reference Method: SM 4500 F-C-97
Batch ID: P342477

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1977074	Fluoride	1.39	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P342553

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1976148	Organic Carbon	1.20	Spike	P	0 - 20

Quality Assurance Report
Precision

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

Quality Assurance Report
Surrogates

Lab Sample ID: 1976667
Field Sample ID: 20030760

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	60.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	112	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.7	P	30 - 160
EPA 8321B	Diuron-d6	60.0	P	30 - 160
EPA 8321B	Primidone-d5	110	P	30 - 160
EPA 8321B	Sucralose-d6	121	P	40 - 160

Lab Sample ID: 1976668
Field Sample ID: 20030082

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	68.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	116	P	30 - 160
EPA 8321B	Carbamazepine-d10	81.5	P	30 - 160
EPA 8321B	Diuron-d6	69.8	P	30 - 160
EPA 8321B	Primidone-d5	113	P	30 - 160
EPA 8321B	Sucralose-d6	127	P	40 - 160

Lab Sample ID: 1976669
Field Sample ID: 20030801

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	32.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	120	P	30 - 160
EPA 8321B	Carbamazepine-d10	69.3	P	30 - 160
EPA 8321B	Diuron-d6	61.4	P	30 - 160
EPA 8321B	Primidone-d5	112	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	40 - 160

Lab Sample ID: 1976670
Field Sample ID: 20030798

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	45.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	124	P	30 - 160
EPA 8321B	Carbamazepine-d10	80.6	P	30 - 160
EPA 8321B	Diuron-d6	65.6	P	30 - 160
EPA 8321B	Primidone-d5	122	P	30 - 160
EPA 8321B	Sucralose-d6	124	P	40 - 160

Lab Sample ID: 1976671
Field Sample ID: 20030958

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	56.2	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 1976671
Field Sample ID: 20030958

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	116	P	30 - 160
EPA 8321B	Carbamazepine-d10	64.0	P	30 - 160
EPA 8321B	Diuron-d6	62.2	P	30 - 160
EPA 8321B	Primidone-d5	110	P	30 - 160
EPA 8321B	Sucralose-d6	115	P	40 - 160

Lab Sample ID: 1976672
Field Sample ID: 20030139

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	46.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	117	P	30 - 160
EPA 8321B	Carbamazepine-d10	87.8	P	30 - 160
EPA 8321B	Diuron-d6	68.1	P	30 - 160
EPA 8321B	Primidone-d5	116	P	30 - 160
EPA 8321B	Sucralose-d6	107	P	40 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A82750
Included Lab Sample IDs: 1976631, 1976632, 1976633, 1976634, 1976635

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.0	97.9	P/P	90 - 110
Chloride	97.9	98.4	P/P	90 - 110
Sulfate	97.4	97.8	P/P	90 - 110
Sulfate	97.8	100	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A82789
Included Lab Sample IDs: 1976631, 1976632, 1976633, 1976634, 1976635

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.0	99.8	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A82792
Included Lab Sample IDs: 1976631, 1976632, 1976633, 1976634, 1976635, 1976646

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A82801
Included Lab Sample IDs: 1976641, 1976642, 1976643, 1976644, 1976645, 1976648

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A82801
Included Lab Sample IDs: 1976641, 1976642, 1976643, 1976644, 1976645, 1976648

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A82832
Included Lab Sample IDs: 1976636, 1976638, 1976639, 1976640

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	101	P/P	90 - 110
NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A82836
Included Lab Sample IDs: 1976636, 1976637, 1976638, 1976639, 1976640, 1976647

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	104	100	P/P	90 - 110
Total-P	99.9	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A82845
Included Lab Sample IDs: 1976637, 1976647

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A82864
Included Lab Sample IDs: 1976636

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.2	107	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A82866
Included Lab Sample IDs: 1976667, 1976668, 1976669, 1976670, 1976671, 1976672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	115	99.1	P/P	60 - 150
Sucralose	93.5	115	P/P	60 - 150
Sucralose	99.1	94.1	P/P	60 - 150

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A82880
Included Lab Sample IDs: 1976637, 1976638, 1976639, 1976640, 1976647

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.1	97.6	P/P	90 - 110
Kjeldahl Nitrogen	97.6	100	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A82884
Included Lab Sample IDs: 1976667, 1976668, 1976669, 1976670, 1976671, 1976672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	105	96.5	P/P	50 - 150
2,4-D	109	105	P/P	50 - 150
Acetaminophen	102	104	P/P	60 - 150
Acetaminophen	104	113	P/P	60 - 150
Acetaminophen	113	100	P/P	60 - 150
Bentazon	93.6	99.6	P/P	50 - 150
Bentazon	99.6	93.6	P/P	50 - 150
Carbamazepine	100	111	P/P	60 - 150
Carbamazepine	111	85.7	P/P	60 - 150
Carbamazepine	92.8	95.3	P/P	60 - 150
Diuron	112	121	P/P	60 - 150
Diuron	116	114	P/P	60 - 150
Diuron	121	113	P/P	60 - 150
Fenuron	98.3	104	P/P	60 - 150
Fenuron	99.6	103	P/P	60 - 150
Fenuron	100	99.6	P/P	60 - 150
Fluridone	108	109	P/P	60 - 160
Fluridone	109	108	P/P	60 - 160
Fluridone	113	107	P/P	60 - 160
Imazapyr	80.6	85.7	P/P	50 - 150
Imazapyr	91.6	80.6	P/P	50 - 150
Imazapyr	98.8	113	P/P	50 - 150
Imidacloprid	103	97.5	P/P	60 - 150
Imidacloprid	109	106	P/P	60 - 150
Imidacloprid	97.5	100	P/P	60 - 150
Linuron	116	118	P/P	60 - 150
Linuron	118	112	P/P	60 - 150
Linuron	119	114	P/P	60 - 150
MCPP	110	96.8	P/P	50 - 150
MCPP	96.8	107	P/P	50 - 150
Primidone	104	99.1	P/P	60 - 150
Primidone	94.8	113	P/P	60 - 150
Primidone	99.1	113	P/P	60 - 150
Pyraclostrobin	100	105	P/P	60 - 150
Pyraclostrobin	102	101	P/P	60 - 150
Pyraclostrobin	98.5	102	P/P	60 - 150
Triclopyr	106	93.7	P/P	50 - 150
Triclopyr	93.7	104	P/P	50 - 150

Reference Method: SM 4500 F-C-97
Run ID: A82888
Included Lab Sample IDs: 1976631, 1976632, 1976633, 1976634, 1976635

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.1	96.7	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A82890
Included Lab Sample IDs: 1976668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A82890
Included Lab Sample IDs: 1976668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazapyr	97.0	71.8	P/P	50 - 150

Reference Method: SM 2320 B-97
Run ID: A82950
Included Lab Sample IDs: 1976631, 1976632, 1976633, 1976634, 1976635

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	97.2	P/P	90 - 110
Total Alkalinity	97.2	99.6	P/P	90 - 110
Total Alkalinity	99.6	97.8	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A82950
Included Lab Sample IDs: 1976646

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.6	98.1	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A82967
Included Lab Sample IDs: 1976646

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.3	101	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A82980
Included Lab Sample IDs: 1976636, 1976637, 1976638, 1976639, 1976640, 1976647

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A82997
Included Lab Sample IDs: 1976636, 1976638, 1976639, 1976640

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	101	P/P	90 - 110
Ammonia-N	101	99.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A83017
Included Lab Sample IDs: 1976637, 1976647

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

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					2.80	
EPA 300.0 Rev. 2.1	Chloride	105	106	105		0.0021	
	Sulfate	108	108			0.252	
EPA 350.1 Rev. 2.0	Ammonia-N	97.7	97.9	98.0			0.0957
	Ammonia-N	97.2	97.3	96.8			0.428
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.9	98.4	96.8			1.39
	Kjeldahl Nitrogen	102	103	97.3			4.98
	Kjeldahl Nitrogen	99.8	91.0	95.6			3.63
	Kjeldahl Nitrogen	103	103	98.2			3.36
EPA 353.2 Rev. 2.0	NO2NO3-N	103	102	103			0.458
	NO2NO3-N	104	102	102			0.0
	NO2NO3-N	104	104	105			1.31
EPA 365.1 Rev. 2.0	Total-P	102	101	103			1.69
	Total-P	104	97.4	98.4			0.742
	Total-P	103	95.2	95.9			0.680
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.9	97.2	97.8			0.615
	O-Phosphate-P	99.0	97.0	98.4			0.972
EPA 8321B	2,4-D	80.4					
	Acetaminophen	100	128	128			0.0564
	Acetaminophen	102	127	122			3.77
	Bentazon	74.9	21.6	20.0			5.65
	Carbamazepine	68.5	87.3	74.3			15.9
	Carbamazepine	63.9	76.4	71.8			6.26
	Diuron	69.1	62.6	61.2			2.07
	Diuron	62.3	69.4	72.3			4.12
	Fenuron	106	93.7	95.2			1.56
	Fenuron	112	96.0	86.2			10.7
	Fluridone	62.5	47.8	46.5			2.41
	Fluridone	56.9	58.0	59.2			2.03
	Imazapyr	61.0	38.5	53.0			15.0
	Imazapyr	73.3	46.7	57.6			15.2
	Imidacloprid	91.2	179	179			0.0
	Imidacloprid	95.8	192	196			1.96
	Linuron	71.4	69.0	75.2			8.54
	Linuron	76.5	80.5	85.5			6.00
	MCPP	82.0	53.2	52.8			0.734
	Primidone	97.7	110	113			2.60
	Primidone	107	115	111			3.27
	Pyraclostrobin	62.8	61.0	52.7			14.5
	Pyraclostrobin	67.4	70.9	70.0			1.21
	Sucralose	115	110	97.2			9.71
	Sucralose	102	94.0	104			9.21
	Triclopyr	73.5	46.8	42.5			9.72
SM 2120 B	Color (true)					0.426	
SM 2320 B-97	Total Alkalinity	99.1				0.0786	
	Total Alkalinity	100				0.404	
	Total Alkalinity	100				0.336	
SM 2540 C-97	TDS					1.10	
	TDS					2.51	
SM 4500 F-C-97	Fluoride	93.9					0.974
	Fluoride	95.3	94.6	96.0			0.946
	Fluoride	95.2	95.4	97.3			1.39
SM 5310 B-00	Organic Carbon	101	108	105			1.20

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1976631, 1976632, 1976633, 1976634, 1976635, 1976646
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1976631, 1976632, 1976633, 1976634, 1976635
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1976631, 1976632, 1976633, 1976634, 1976635
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1976636, 1976637, 1976638, 1976639, 1976640, 1976647
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1976636, 1976637, 1976638, 1976639, 1976640, 1976647
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1976636, 1976637, 1976638, 1976639, 1976640, 1976647
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1976636, 1976637, 1976638, 1976639, 1976640, 1976647
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1976641, 1976642, 1976643, 1976644, 1976645, 1976648
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	1976667, 1976668, 1976669, 1976670, 1976671, 1976672
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1976667, 1976668, 1976669, 1976670, 1976671, 1976672
SM 2120 B / E31780	True Color measured at 450 nm	1976631, 1976632, 1976633, 1976634, 1976635
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1976631, 1976632, 1976633, 1976634, 1976635, 1976646
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1976631, 1976632, 1976633, 1976634, 1976635
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1976631, 1976632, 1976633, 1976634, 1976635, 1976646
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1976631, 1976632, 1976633, 1976634, 1976635, 1976646
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1976636, 1976637, 1976638, 1976639, 1976640, 1976647

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	03/22/2018			03/22/2018 16:28	DeAsia Armster	1976631, 1976632, 1976633, 1976634, 1976635, 1976646
EPA 300.0 Rev. 2.1	03/22/2018			03/23/2018 10:24	Julia Storbeck	1976634
	03/22/2018			03/23/2018 13:11	Julia Storbeck	1976631
	03/22/2018			03/23/2018 13:23	Julia Storbeck	1976632
	03/22/2018			03/23/2018 13:35	Julia Storbeck	1976633
	03/22/2018			03/23/2018 13:47	Julia Storbeck	1976635
EPA 350.1 Rev. 2.0	03/22/2018			04/02/2018 14:38	Ping Hua	1976636
	03/22/2018			04/02/2018 14:39	Ping Hua	1976638
	03/22/2018			04/02/2018 14:41	Ping Hua	1976639
	03/22/2018			04/02/2018 14:50	Ping Hua	1976640
	03/22/2018			04/03/2018 13:01	Ping Hua	1976637
	03/22/2018			04/03/2018 13:13	Ping Hua	1976647
EPA 351.2 Rev. 2.0	03/22/2018	03/23/2018 11:30	Adrian Shelby	03/27/2018 09:57	Joseph Suarez	1976636
	03/22/2018	03/23/2018 11:30	Adrian Shelby	03/27/2018 13:11	Joseph Suarez	1976637
	03/22/2018	03/23/2018 11:30	Adrian Shelby	03/27/2018 13:13	Joseph Suarez	1976647
	03/22/2018	03/23/2018 11:30	Adrian Shelby	03/27/2018 13:22	Joseph Suarez	1976639
	03/22/2018	03/23/2018 11:30	Adrian Shelby	03/27/2018 13:24	Joseph Suarez	1976640
	03/22/2018	03/26/2018 11:30	Adrian Shelby	03/27/2018 14:18	Joseph Suarez	1976638
EPA 353.2 Rev. 2.0	03/22/2018			03/23/2018 10:36	Beverly Y. Sanders	1976636
	03/22/2018			03/23/2018 10:37	Beverly Y. Sanders	1976638
	03/22/2018			03/23/2018 10:38	Beverly Y. Sanders	1976639
	03/22/2018			03/23/2018 11:45	Beverly Y. Sanders	1976640
	03/22/2018			03/26/2018 11:45	Lauren Bottorf	1976637
	03/22/2018			03/26/2018 11:46	Lauren Bottorf	1976647
EPA 365.1 Rev. 2.0	03/22/2018	03/23/2018 11:55	Sima Feizi	03/26/2018 08:40	Beverly Y. Sanders	1976636
	03/22/2018	03/23/2018 11:55	Sima Feizi	03/26/2018 08:41	Beverly Y. Sanders	1976638
	03/22/2018	03/23/2018 11:55	Sima Feizi	03/26/2018 08:44	Beverly Y. Sanders	1976639
	03/22/2018	03/23/2018 11:55	Sima Feizi	03/26/2018 08:48	Beverly Y. Sanders	1976640
	03/22/2018	03/23/2018 11:55	Sima Feizi	03/26/2018 09:35	Beverly Y. Sanders	1976637
	03/22/2018	03/23/2018 11:55	Sima Feizi	03/26/2018 09:36	Beverly Y. Sanders	1976647
EPA 365.1 Rev. 2.0 dissolved	03/22/2018			03/22/2018 15:04	Megan Treadwell	1976642
	03/22/2018			03/22/2018 15:09	Megan Treadwell	1976641
	03/22/2018			03/22/2018 15:10	Megan Treadwell	1976643
	03/22/2018			03/22/2018 15:15	Megan Treadwell	1976644
	03/22/2018			03/22/2018 15:16	Megan Treadwell	1976645
	03/22/2018			03/22/2018 15:33	Megan Treadwell	1976648
EPA 8321B	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/23/2018 06:11	Julie Michelle Frank	1976667
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/23/2018 08:29	Julie Michelle Frank	1976671
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/23/2018 09:04	Julie Michelle Frank	1976672

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/23/2018 11:22	Julie Michelle Frank	1976667
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/23/2018 22:54	Julie Michelle Frank	1976667
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/23/2018 23:29	Julie Michelle Frank	1976668
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/24/2018 00:03	Julie Michelle Frank	1976669
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/24/2018 01:13	Julie Michelle Frank	1976670
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/24/2018 01:47	Julie Michelle Frank	1976671
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/24/2018 02:22	Julie Michelle Frank	1976672
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/25/2018 07:12	Julie Michelle Frank	1976668
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/25/2018 07:46	Julie Michelle Frank	1976669
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/25/2018 08:55	Julie Michelle Frank	1976670
	03/22/2018	03/22/2018 14:00	Hoor Shaik	03/26/2018 23:51	Julie Michelle Frank	1976668
	03/22/2018	03/23/2018 11:00	Hoor Shaik	03/25/2018 07:12	Julie Michelle Frank	1976668
	03/22/2018	03/23/2018 11:00	Hoor Shaik	03/25/2018 07:46	Julie Michelle Frank	1976669
	03/22/2018	03/23/2018 11:00	Hoor Shaik	03/25/2018 08:55	Julie Michelle Frank	1976670
	03/22/2018	03/26/2018 14:00	Julie Michelle Frank	03/27/2018 02:29	Juyoung Kim	1976667
	03/22/2018	03/26/2018 14:00	Julie Michelle Frank	03/27/2018 02:45	Juyoung Kim	1976668
	03/22/2018	03/26/2018 14:00	Julie Michelle Frank	03/27/2018 03:00	Juyoung Kim	1976669
	03/22/2018	03/26/2018 14:00	Julie Michelle Frank	03/27/2018 04:35	Juyoung Kim	1976670
	03/22/2018	03/26/2018 14:00	Julie Michelle Frank	03/27/2018 04:51	Juyoung Kim	1976671
	03/22/2018	03/26/2018 14:00	Julie Michelle Frank	03/27/2018 05:22	Juyoung Kim	1976672
SM 2120 B	03/22/2018			03/22/2018 12:45	Tanya Welborn	1976632, 1976634
	03/22/2018			03/22/2018 12:46	Tanya Welborn	1976633
	03/22/2018			03/22/2018 12:47	Tanya Welborn	1976631
	03/22/2018			03/22/2018 12:49	Tanya Welborn	1976635
SM 2320 B-97	03/22/2018			03/30/2018 01:57	Dale L. Simmons	1976631
	03/22/2018			03/30/2018 02:43	Dale L. Simmons	1976634
	03/22/2018			03/30/2018 04:25	Dale L. Simmons	1976633
	03/22/2018			03/30/2018 05:10	Dale L. Simmons	1976635
	03/22/2018			03/30/2018 05:17	Dale L. Simmons	1976632
	03/22/2018			03/31/2018 07:51	Lauren Bottorf	1976646
SM 2540 C-97	03/22/2018			03/23/2018 15:30	DeAsia Armster	1976631, 1976632, 1976633, 1976634, 1976635
SM 2540 D-97	03/22/2018			03/23/2018 15:30	DeAsia Armster	1976631, 1976632, 1976633, 1976634, 1976635, 1976646
SM 4500 F-C-97	03/22/2018			03/27/2018 22:03	Dale L. Simmons	1976631
	03/22/2018			03/27/2018 22:37	Dale L. Simmons	1976634
	03/22/2018			03/27/2018 23:20	Dale L. Simmons	1976633
	03/22/2018			03/27/2018 23:31	Dale L. Simmons	1976635
	03/22/2018			03/27/2018 23:41	Dale L. Simmons	1976632
	03/22/2018			03/29/2018 16:56	Dale L. Simmons	1976646

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-00	03/22/2018			03/31/2018 07:02	Megan Treadwell	1976636
	03/22/2018			03/31/2018 07:15	Megan Treadwell	1976637
	03/22/2018			03/31/2018 07:32	Megan Treadwell	1976638
	03/22/2018			03/31/2018 07:45	Megan Treadwell	1976639
	03/22/2018			03/31/2018 08:01	Megan Treadwell	1976640
	03/22/2018			03/31/2018 08:16	Megan Treadwell	1976647