

Chemical Analysis Report

NE-DIST-2018-09-18-01

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

Event Description: **LSJR East**
Request ID: **RQ-2018-09-17-13**
Customer: **NE-DIST**
Project ID: **SMP**

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Date Certified: 08-OCT-2018 12:24



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: Puncheon Br @ Deerwood Pk Blvd

Collection Date/Time: 09/17/2018 08:45

Field ID: 20030866

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2025897	EPA 180.1 Rev. 2.0	Turbidity	5.1		NTU	P351867	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P352257	
		Sulfate	21		mg SO4/L	P352260	
	SM 2120 B	Color (true)	110	A	PCU	P351835	
	SM 2320 B-97	Total Alkalinity	34		mg CaCO3/L	P352050	
	SM 2540 C-97	TDS	125		mg/L	P352288	
	SM 2540 D-97	TSS	4	I	mg/L	P352449	
	SM 4500 F-C-97	Fluoride	0.036	I	mg F/L	P352232	
2025899	EPA 350.1 Rev. 2.0	Ammonia-N	0.068		mg N/L	P352108	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.69		mg N/L	P351953	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.28		mg N/L	P351995	
	EPA 365.1 Rev. 2.0	Total-P	0.031		mg P/L	P351897	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P352124	
2025901	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P351847	

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: Strawberry Cr at End of Bowlan Rd.

Collection Date/Time: 09/17/2018 10:05

Field ID: 20030579

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2025898	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P351867	
	EPA 300.0 Rev. 2.1	Chloride	42		mg Cl/L	P352257	
		Sulfate	29		mg SO4/L	P352260	
		Color (true)	33		PCU	P351835	
	SM 2320 B-97	Total Alkalinity	77		mg CaCO3/L	P352050	
	SM 2540 C-97	TDS	205		mg/L	P352288	
	SM 2540 D-97	TSS	4	I	mg/L	P352449	
	SM 4500 F-C-97	Fluoride	0.057	I	mg F/L	P352232	
2025900	EPA 350.1 Rev. 2.0	Ammonia-N	0.055		mg N/L	P352108	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.57		mg N/L	P351953	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.51		mg N/L	P351995	
	EPA 365.1 Rev. 2.0	Total-P	0.052		mg P/L	P351897	
	SM 5310 B-00	Organic Carbon	6.9		mg C/L	P352124	
2025902	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.029		mg P/L	P351847	

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: Greenfield Cr at Hodges Rd.

Collection Date/Time: 09/17/2018 09:40

Field ID: G2NE1145

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2025928	EPA 8321B	2,4-D	0.0020	U	ug/L	P351783	
		Bentazon	0.052		ug/L	P351783	
		MCP	0.0020	U	ug/L	P351783	
		Triclopyr**	0.0040	U	ug/L	P351783	
		Imidacloprid	0.017		ug/L	P351783	
		Diuron	0.0066	I	ug/L	P351783	
		Pyraclostrobin**	0.0020	U	ug/L	P351783	
		Primidone**	0.0040	U	ug/L	P351783	
		Linuron	0.0040	U	ug/L	P351783	
		Acetaminophen**	0.0080	U	ug/L	P351783	
		Fenuron	0.016	U	ug/L	P351783	
		Imazapyr**	0.012	I	ug/L	P351783	
		Carbamazepine**	8.0E-04	U	ug/L	P351783	
		Fluridone**	0.026		ug/L	P351783	
		Hydrocodone**	8.0E-04	U	ug/L	P351783	
		Naproxen**	0.0080	U	ug/L	P351783	
		Ibuprofen**	0.020	U	ug/L	P351783	
		Sucralose**	0.20		ug/L	P351652	
		Acesulfame K**	0.10	U	ug/L	P351652	

Sample Location: Newcastle Cr @ Millcrest Dr

Collection Date/Time: 09/17/2018 11:10

Field ID: 20030805

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2025929	EPA 8321B	2,4-D	0.0020	U	ug/L	P351783	
		Bentazon	8.0E-04	U	ug/L	P351783	
		MCP	0.0020	U	ug/L	P351783	
		Triclopyr**	0.0040	U	ug/L	P351783	
		Imidacloprid	0.052		ug/L	P351783	
		Diuron	0.0033	I	ug/L	P351783	
		Pyraclostrobin**	0.0020	U	ug/L	P351783	
		Primidone**	0.0040	U	ug/L	P351783	
		Linuron	0.0040	U	ug/L	P351783	
		Acetaminophen**	0.0080	U	ug/L	P351783	
		Fenuron	0.016	U	ug/L	P351783	
		Imazapyr**	0.036		ug/L	P351783	
		Carbamazepine**	8.0E-04	U	ug/L	P351783	
		Fluridone**	6.9E-04	I	ug/L	P351783	
		Hydrocodone**	8.0E-04	U	ug/L	P351783	
		Naproxen**	0.0080	U	ug/L	P351783	
		Ibuprofen**	0.020	U	ug/L	P351783	
		Sucralose**	0.051		ug/L	P351652	
		Acesulfame K**	0.10	U	ug/L	P351652	

Sample Location: Greenfield Creek at Atlantic Blvd

Collection Date/Time: 09/17/2018 09:20

Field ID: 20030657

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2025891	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P351867	
	EPA 300.0 Rev. 2.1	Chloride	40		mg Cl/L	P352257	
		Sulfate	52		mg SO4/L	P352260	
	SM 2120 B	Color (true)	42		PCU	P351828	
	SM 2320 B-97	Total Alkalinity	93		mg CaCO3/L	P352050	
	SM 2540 C-97	TDS	272		mg/L	P352288	
	SM 2540 D-97	TSS	2	I	mg/L	P352449	
	SM 4500 F-C-97	Fluoride	0.076	I	mg F/L	P352232	
2025893	EPA 350.1 Rev. 2.0	Ammonia-N	0.18		mg N/L	P352107	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P351953	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.29		mg N/L	P351994	
	EPA 365.1 Rev. 2.0	Total-P	0.072		mg P/L	P351897	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P352124	
2025895	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.047		mg P/L	P351846	
2025926	EPA 8321B	2,4-D	0.0020	U	ug/L	P351783	
		Bentazon	0.047		ug/L	P351783	
		MCP	0.0020	U	ug/L	P351783	
		Triclopyr**	0.0040	U	ug/L	P351783	
		Imidacloprid	0.014		ug/L	P351783	
		Diuron	0.011		ug/L	P351783	
		Pyraclostrobin**	0.0020	U	ug/L	P351783	
		Primidone**	0.0040	U	ug/L	P351783	
		Linuron	0.0040	U	ug/L	P351783	
		Acetaminophen**	0.0080	U	ug/L	P351783	
		Fenuron	0.016	U	ug/L	P351783	
		Imazapyr**	0.062		ug/L	P351783	
		Carbamazepine**	8.0E-04	U	ug/L	P351783	
		Fluridone**	0.043		ug/L	P351783	
		Hydrocodone**	8.0E-04	U	ug/L	P351783	
		Naproxen**	0.0080	U	ug/L	P351783	
		Ibuprofen**	0.020	U	ug/L	P351783	
		Sucralose**	0.12		ug/L	P351652	
		Acesulfame K**	0.10	U	ug/L	P351652	

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: Newcastle Cr @ Ft Caroline Hills Rd

Collection Date/Time: 09/17/2018 10:50

Field ID: 20030872

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2025892	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P351867	
	EPA 300.0 Rev. 2.1	Chloride	38		mg Cl/L	P352257	
		Sulfate	31		mg SO4/L	P352260	
	SM 2120 B	Color (true)	11		PCU	P351828	
	SM 2320 B-97	Total Alkalinity	37	A	mg CaCO3/L	P352050	
	SM 2540 C-97	TDS	152		mg/L	P352288	
	SM 2540 D-97	TSS	3	I	mg/L	P352449	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P352232	
2025894	EPA 350.1 Rev. 2.0	Ammonia-N	0.10		mg N/L	P352108	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34		mg N/L	P351953	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.31		mg N/L	P351995	
	EPA 365.1 Rev. 2.0	Total-P	0.035		mg P/L	P351897	
	SM 5310 B-00	Organic Carbon	2.6		mg C/L	P352124	
2025896	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.018		mg P/L	P351846	
2025927	EPA 8321B	2,4-D	0.0020	U	ug/L	P351783	
		Bentazon	0.074		ug/L	P351783	
		MCP	0.0068	I	ug/L	P351783	
		Triclopyr**	0.0040	U	ug/L	P351783	
		Imidacloprid	0.027		ug/L	P351783	
		Diuron	0.0020	U	ug/L	P351783	
		Pyraclostrobin**	0.0020	U	ug/L	P351783	
		Primidone**	0.0040	U	ug/L	P351783	
		Linuron	0.0040	U	ug/L	P351783	
		Acetaminophen**	0.0080	U	ug/L	P351783	
		Fenuron	0.016	U	ug/L	P351783	
		Imazapyr**	0.020		ug/L	P351783	
		Carbamazepine**	8.0E-04	U	ug/L	P351783	
		Fluridone**	4.0E-04	U	ug/L	P351783	
		Hydrocodone**	8.0E-04	U	ug/L	P351783	
		Naproxen**	0.0080	U	ug/L	P351783	
		Ibuprofen**	0.020	U	ug/L	P351783	
		Sucralose**	0.045		ug/L	P351652	
		Acesulfame K**	0.10	U	ug/L	P351652	

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: P351867

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352257

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352260

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P352107

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P352108

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351953

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351994

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351995

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351897

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351846

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351847

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

Reference Method: EPA 8321B
Batch ID: P351652

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P351783

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	8.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	4.0E-04	U	ug/L
Hydrocodone	8.0E-04	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2120 B
Batch ID: P351828

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P351835

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P352050

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-97
Batch ID: P352288

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P352449

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P352232

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P352124

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: P352257

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: P352260

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P352107

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P352108

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351953

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351994

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351995

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351897

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351846

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351847

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

Reference Method: EPA 8321B
Batch ID: P351652

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	91.4		P	40 - 150
Sucralose	122		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P351783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	77.6		P	40 - 150
Acetaminophen	77.3		P	30 - 150
Bentazon	70.6		P	30 - 150
Carbamazepine	70.9		P	40 - 150
Diuron	63.7		P	40 - 150
Fenuron	93.5		P	40 - 150
Fluridone	85.5		P	40 - 150
Hydrocodone	89.5		P	40 - 150
Ibuprofen	89.7		P	40 - 150
Imazapyr	74.5		P	40 - 150
Imidacloprid	77.6		P	40 - 160
Linuron	56.8		P	40 - 150
MCPP	101		P	40 - 150
Naproxen	70.2		P	40 - 150
Primidone	63.8		P	40 - 150
Pyraclostrobin	68.4		P	40 - 150
Triclopyr	94.0		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P351828

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.8		P	85 - 115

Reference Method: SM 2120 B
Batch ID: P351835

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.7		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P352050

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 107

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P352232

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.1		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P352124

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352257

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025864	Chloride	96.1		P	90 - 110
2026007	Chloride	99.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025864	Sulfate	95.1		P	90 - 110
2026007	Sulfate	99.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P352107

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025828	Ammonia-N	95.7	98.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P352108

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2026008	Ammonia-N	99.3	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351953

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025831	Kjeldahl Nitrogen	87.8	86.2	F/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351994

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025828	NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351995

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025894	NO2NO3-N	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351897

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025894	Total-P	97.3	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351846

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025895	O-Phosphate-P	95.6	99.0	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351847

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025902	O-Phosphate-P	96.7	97.8	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P351652

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025880	Acesulfame K	54.9	56.4	P/P	40 - 150
2025880	Sucralose	122	127	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P351783

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025880	2,4-D	116	95.7	P/P	40 - 150
2025880	Acetaminophen	76.8	91.9	P/P	30 - 150
2025880	Bentazon	81.4	53.0	P/P	30 - 150
2025880	Carbamazepine	55.7	56.8	P/P	40 - 150
2025880	Diuron	45.9	50.3	P/P	40 - 150
2025880	Fenuron	60.5	64.8	P/P	40 - 150
2025880	Fluridone	77.4	91.4	P/P	40 - 150
2025880	Hydrocodone	77.5	93.3	P/P	40 - 150
2025880	Ibuprofen	116	121	P/P	40 - 150
2025880	Imazapyr	79.7	94.2	P/P	40 - 150
2025880	Imidacloprid	96.5	119	P/P	40 - 160
2025880	Linuron	47.2	53.3	P/P	40 - 150
2025880	MCPP	127	135	P/P	40 - 150
2025880	Naproxen	92.2	88.3	P/P	40 - 150
2025880	Primidone	62.0	65.9	P/P	40 - 150
2025880	Pyraclostrobin	80.8	93.5	P/P	40 - 150
2025880	Triclopyr	138	135	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P352232

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025892	Fluoride	103	104	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P352124

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2025782	Organic Carbon	99.1	98.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P351867

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025865	Turbidity	5.04	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025864	Chloride	0.455	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025864	Sulfate	0.398	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P352107

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025828	Ammonia-N	2.16	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P352108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2026008	Ammonia-N	2.50	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351953

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025831	Kjeldahl Nitrogen	1.47	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351994

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025828	NO2NO3-N	0.897	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351995

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025894	NO2NO3-N	0.389	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351897

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025894	Total-P	1.91	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351846

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025895	O-Phosphate-P	2.35	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351847

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025902	O-Phosphate-P	0.874	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P351652

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025880	Acesulfame K	2.84	Spike	P	0 - 30
2025880	Sucralose	1.80	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P351783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025880	2,4-D	16.6	Spike	P	0 - 30
2025880	Acetaminophen	17.9	Spike	P	0 - 30
2025880	Bentazon	25.0	Spike	P	0 - 30
2025880	Carbamazepine	1.98	Spike	P	0 - 30
2025880	Diuron	9.19	Spike	P	0 - 30
2025880	Fenuron	6.88	Spike	P	0 - 30
2025880	Fluridone	16.4	Spike	P	0 - 30
2025880	Hydrocodone	18.6	Spike	P	0 - 30
2025880	Ibuprofen	4.44	Spike	P	0 - 30
2025880	Imazapyr	9.36	Spike	P	0 - 30
2025880	Imidacloprid	16.1	Spike	P	0 - 30
2025880	Linuron	12.0	Spike	P	0 - 30
2025880	MCPP	6.08	Spike	P	0 - 30
2025880	Naproxen	4.32	Spike	P	0 - 30
2025880	Primidone	5.41	Spike	P	0 - 30
2025880	Pyraclostrobin	14.5	Spike	P	0 - 30
2025880	Triclopyr	1.95	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B
 Batch ID: P351828

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025823	Color (true)	1.96	Sample	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P351835

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025897	Color (true)	2.51	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P352050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025892	Total Alkalinity	0.0542	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
 Batch ID: P352288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025865	TDS	4.00	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P352232

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025892	Fluoride	0.487	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
 Batch ID: P352124

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2025782	Organic Carbon	0.662	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2025926
Field Sample ID: 20030657

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	95.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	96.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	66.7	P	30 - 160
EPA 8321B	Diuron-d6	58.7	P	30 - 160
EPA 8321B	Endothall-d6	156	P	40 - 160
EPA 8321B	Ibuprofen-d3	69.3	P	30 - 160
EPA 8321B	Primidone-d5	80.9	P	30 - 160
EPA 8321B	Sucralose-d6	117	P	40 - 160

Lab Sample ID: 2025927
Field Sample ID: 20030872

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	105	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	83.8	P	30 - 160
EPA 8321B	Diuron-d6	82.3	P	30 - 160
EPA 8321B	Endothall-d6	128	P	40 - 160
EPA 8321B	Ibuprofen-d3	85.5	P	30 - 160
EPA 8321B	Primidone-d5	91.8	P	30 - 160
EPA 8321B	Sucralose-d6	128	P	40 - 160

Lab Sample ID: 2025928
Field Sample ID: G2NE1145

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	92.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	89.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.1	P	30 - 160
EPA 8321B	Diuron-d6	53.0	P	30 - 160
EPA 8321B	Endothall-d6	153	P	40 - 160
EPA 8321B	Ibuprofen-d3	88.7	P	30 - 160
EPA 8321B	Primidone-d5	76.6	P	30 - 160
EPA 8321B	Sucralose-d6	123	P	40 - 160

Lab Sample ID: 2025929
Field Sample ID: 20030805

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	103	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	63.0	P	30 - 160
EPA 8321B	Diuron-d6	57.2	P	30 - 160
EPA 8321B	Endothall-d6	130	P	40 - 160
EPA 8321B	Ibuprofen-d3	82.4	P	30 - 160
EPA 8321B	Primidone-d5	71.3	P	30 - 160
EPA 8321B	Sucralose-d6	128	P	40 - 160

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A86560

Included Lab Sample IDs: 2025891, 2025892, 2025897, 2025898

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.3	99.3	P/P	90 - 115
Color (true)	99.3	101	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A86562

Included Lab Sample IDs: 2025895, 2025896, 2025901, 2025902

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.5	98.7	P/P	90 - 110
O-Phosphate-P	98.8	98.6	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A86567

Included Lab Sample IDs: 2025891, 2025892, 2025897, 2025898

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	102	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A86591

Included Lab Sample IDs: 2025926, 2025927, 2025928, 2025929

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	89.6	90.7	P/P	60 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A86596

Included Lab Sample IDs: 2025893

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A86610

Included Lab Sample IDs: 2025894, 2025899, 2025900

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A86615

Included Lab Sample IDs: 2025893, 2025894, 2025899, 2025900

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

Reference Method: SM 2320 B-97

Run ID: A86631

Included Lab Sample IDs: 2025891, 2025892, 2025897, 2025898

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

Reference Method: SM 2320 B-97

Run ID: A86631

Included Lab Sample IDs: 2025891, 2025892, 2025897, 2025898

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	99.4	P/P	90 - 110
Total Alkalinity	99.4	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A86641

Included Lab Sample IDs: 2025893, 2025894, 2025899, 2025900

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A86651

Included Lab Sample IDs: 2025893, 2025894, 2025899, 2025900

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

Reference Method: EPA 8321B

Run ID: A86652

Included Lab Sample IDs: 2025926, 2025927, 2025928, 2025929

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	113	116	P/P	60 - 160

Reference Method: SM 5310 B-00

Run ID: A86661

Included Lab Sample IDs: 2025893, 2025894, 2025899, 2025900

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.4	98.0	P/P	90 - 110
Organic Carbon	98.0	96.8	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A86696

Included Lab Sample IDs: 2025926, 2025927, 2025928, 2025929

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	71.6	77.5	P/P	60 - 160
Carbamazepine	106	103	P/P	60 - 160
Diuron	101	98.9	P/P	60 - 150
Fenuron	95.9	98.5	P/P	60 - 150
Fluridone	108	109	P/P	60 - 160
Hydrocodone	94.0	94.9	P/P	60 - 150
Imazapyr	85.1	70.0	P/P	50 - 150
Imidacloprid	79.9	80.2	P/P	60 - 150
Linuron	99.2	101	P/P	60 - 150
Primidone	72.0	76.5	P/P	60 - 150
Pyraclostrobin	97.8	112	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A86715

Included Lab Sample IDs: 2025891, 2025892, 2025897, 2025898

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	96.7	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A86718

Included Lab Sample IDs: 2025891, 2025892, 2025897, 2025898

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

Reference Method: EPA 8321B

Run ID: A86770

Included Lab Sample IDs: 2025926, 2025927, 2025928, 2025929

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.4	118	P/P	50 - 150
Bentazon	94.9	135	P/P	50 - 160
Ibuprofen	89.5	89.8	P/P	50 - 160
MCP	102	110	P/P	50 - 150
Naproxen	70.6	103	P/P	50 - 160
Triclopyr	94.1	123	P/P	50 - 160

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 180.1 Rev. 2.0	Turbidity				5.04	
EPA 300.0 Rev. 2.1	Chloride	98.5	96.1	99.8	0.455	
	Sulfate	97.3	95.1	99.7	0.398	
EPA 350.1 Rev. 2.0	Ammonia-N	95.0	95.7	98.2		2.16
	Ammonia-N	96.8	99.3	102		2.50
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.1	87.8	86.2		1.47
EPA 353.2 Rev. 2.0	NO2NO3-N	98.0	100	102		0.897
	NO2NO3-N	100	102			0.389
EPA 365.1 Rev. 2.0	Total-P	101	97.3	99.4		1.91
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.3	95.6	99.0		2.35
	O-Phosphate-P	102	96.7	97.8		0.874
EPA 8321B	2,4-D	77.6	116	95.7		16.6
	Acesulfame K	91.4	54.9	56.4		2.84
	Acetaminophen	77.3	76.8	91.9		17.9
	Bentazon	70.6	81.4	53.0		25.0
	Carbamazepine	70.9	55.7	56.8		1.98
	Diuron	63.7	45.9	50.3		9.19
	Fenuron	93.5	60.5	64.8		6.88
	Fluridone	85.5	77.4	91.4		16.4
	Hydrocodone	89.5	77.5	93.3		18.6
	Ibuprofen	89.7	116	121		4.44
	Imazapyr	74.5	79.7	94.2		9.36
	Imidacloprid	77.6	96.5	119		16.1
	Linuron	56.8	47.2	53.3		12.0
	MCPP	101	127	135		6.08
	Naproxen	70.2	92.2	88.3		4.32
	Primidone	63.8	62.0	65.9		5.41
	Pyraclostrobin	68.4	80.8	93.5		14.5
	Sucralose	122	122	127		1.80
	Triclopyr	94.0	138	135		1.95
SM 2120 B	Color (true)	97.8			1.96	
	Color (true)	99.7			2.51	
SM 2320 B-97	Total Alkalinity	102			0.0542	
SM 2540 C-97	TDS				4.00	
SM 4500 F-C-97	Fluoride	96.1	103	104		0.487
SM 5310 B-00	Organic Carbon	96.8	99.1	98.2		0.662

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2025891, 2025892, 2025897, 2025898
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2025891, 2025892, 2025897, 2025898
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2025891, 2025892, 2025897, 2025898
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2025893, 2025894, 2025899, 2025900
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2025893, 2025894, 2025899, 2025900
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2025893, 2025894, 2025899, 2025900
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2025893, 2025894, 2025899, 2025900

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2025895, 2025896, 2025901, 2025902
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2025926, 2025927, 2025928, 2025929
SM 2120 B / E31780	True Color measured at 450 nm	2025891, 2025892, 2025897, 2025898
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2025891, 2025892, 2025897, 2025898
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2025891, 2025892, 2025897, 2025898
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2025891, 2025892, 2025897, 2025898
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2025891, 2025892, 2025897, 2025898
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2025893, 2025894, 2025899, 2025900

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	09/18/2018			09/18/2018 16:36	Blanca Fach	2025891, 2025892, 2025897, 2025898
EPA 300.0 Rev. 2.1	09/18/2018			09/26/2018 00:12	Lipi Saha	2025891
	09/18/2018			09/26/2018 00:48	Lipi Saha	2025892
	09/18/2018			09/26/2018 01:00	Lipi Saha	2025897
	09/18/2018			09/26/2018 01:12	Lipi Saha	2025898
EPA 350.1 Rev. 2.0	09/18/2018			09/21/2018 10:58	Julia Storbeck	2025893
	09/18/2018			09/21/2018 11:11	Julia Storbeck	2025900
	09/18/2018			09/21/2018 11:16	Julia Storbeck	2025894
	09/18/2018			09/21/2018 11:17	Julia Storbeck	2025899
EPA 351.2 Rev. 2.0	09/18/2018	09/20/2018 15:00	Adrian Shelby	09/21/2018 12:29	Joseph Suarez	2025893
	09/18/2018	09/20/2018 15:00	Adrian Shelby	09/21/2018 12:30	Joseph Suarez	2025894
	09/18/2018	09/20/2018 15:00	Adrian Shelby	09/21/2018 12:32	Joseph Suarez	2025899
	09/18/2018	09/20/2018 15:00	Adrian Shelby	09/21/2018 12:33	Joseph Suarez	2025900
EPA 353.2 Rev. 2.0	09/18/2018			09/20/2018 11:35	Lauren Bottorf	2025893
	09/18/2018			09/20/2018 11:42	Lauren Bottorf	2025894
	09/18/2018			09/20/2018 11:49	Lauren Bottorf	2025899
	09/18/2018			09/20/2018 11:51	Lauren Bottorf	2025900
EPA 365.1 Rev. 2.0	09/18/2018	09/19/2018 12:55	Sima Feizi	09/20/2018 09:13	Beverly Y. Sanders	2025893
	09/18/2018	09/19/2018 12:55	Sima Feizi	09/20/2018 13:21	Beverly Y. Sanders	2025894
	09/18/2018	09/19/2018 12:55	Sima Feizi	09/20/2018 13:22	Beverly Y. Sanders	2025899
	09/18/2018	09/19/2018 12:55	Sima Feizi	09/20/2018 13:23	Beverly Y. Sanders	2025900
EPA 365.1 Rev. 2.0 dissolved	09/18/2018			09/18/2018 17:04	Julia Storbeck	2025895
	09/18/2018			09/18/2018 17:08	Julia Storbeck	2025902
	09/18/2018			09/18/2018 17:47	Julia Storbeck	2025896, 2025901
EPA 8321B	09/18/2018	09/19/2018 15:30	Mohammad Ghaffari	09/19/2018 18:08	Mohammad Ghaffari	2025926
	09/18/2018	09/19/2018 15:30	Mohammad Ghaffari	09/19/2018 18:22	Mohammad Ghaffari	2025927
	09/18/2018	09/19/2018 15:30	Mohammad Ghaffari	09/19/2018 18:37	Mohammad Ghaffari	2025928
	09/18/2018	09/19/2018 15:30	Mohammad Ghaffari	09/19/2018 18:52	Mohammad Ghaffari	2025929
	09/18/2018	09/19/2018 15:30	Mohammad Ghaffari	09/21/2018 19:44	Mohammad Ghaffari	2025926
	09/18/2018	09/19/2018 15:30	Mohammad Ghaffari	09/21/2018 19:59	Mohammad Ghaffari	2025927
	09/18/2018	09/19/2018 15:30	Mohammad Ghaffari	09/21/2018 20:14	Mohammad Ghaffari	2025928
	09/18/2018	09/19/2018 15:30	Mohammad Ghaffari	09/21/2018 20:28	Mohammad Ghaffari	2025929
	09/18/2018	09/20/2018 10:00	Hoor Shaik	09/24/2018 03:49	Mohammad Ghaffari	2025926
	09/18/2018	09/20/2018 10:00	Hoor Shaik	09/24/2018 04:24	Mohammad Ghaffari	2025927
	09/18/2018	09/20/2018 10:00	Hoor Shaik	09/24/2018 04:59	Mohammad Ghaffari	2025928
	09/18/2018	09/20/2018 10:00	Hoor Shaik	09/24/2018 05:34	Mohammad Ghaffari	2025929
	09/18/2018	09/20/2018 10:00	Hoor Shaik	09/27/2018 11:31	Juyoung Kim	2025926
	09/18/2018	09/20/2018 10:00	Hoor Shaik	09/27/2018 12:06	Juyoung Kim	2025927
	09/18/2018	09/20/2018 10:00	Hoor Shaik	09/27/2018 12:40	Juyoung Kim	2025928
	09/18/2018	09/20/2018 10:00	Hoor Shaik	09/27/2018 13:15	Juyoung Kim	2025929

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2120 B	09/18/2018			09/18/2018 15:30	DeAsia Armster	2025891
	09/18/2018			09/18/2018 15:31	DeAsia Armster	2025892
	09/18/2018			09/18/2018 15:36	DeAsia Armster	2025897
	09/18/2018			09/18/2018 15:37	DeAsia Armster	2025898
SM 2320 B-97	09/18/2018			09/20/2018 01:08	Dale L. Simmons	2025892
	09/18/2018			09/20/2018 02:09	Dale L. Simmons	2025891
	09/18/2018			09/20/2018 02:19	Dale L. Simmons	2025897
	09/18/2018			09/20/2018 02:57	Dale L. Simmons	2025898
SM 2540 C-97	09/18/2018			09/21/2018 16:15	Yijie Li	2025891, 2025892, 2025897, 2025898
SM 2540 D-97	09/18/2018			09/21/2018 16:15	Yijie Li	2025891, 2025892, 2025897, 2025898
SM 4500 F-C-97	09/18/2018			09/25/2018 20:23	Dale L. Simmons	2025892
	09/18/2018			09/25/2018 20:58	Dale L. Simmons	2025891
	09/18/2018			09/25/2018 21:02	Dale L. Simmons	2025897
	09/18/2018			09/25/2018 21:06	Dale L. Simmons	2025898
SM 5310 B-00	09/18/2018			09/21/2018 10:25	Megan Treadwell	2025893
	09/18/2018			09/21/2018 10:37	Megan Treadwell	2025894
	09/18/2018			09/21/2018 10:50	Megan Treadwell	2025899
	09/18/2018			09/21/2018 11:27	Megan Treadwell	2025900