

Chemical Analysis Report

CEN-DIST-2022-05-27-01

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

Event Description: **Lake Ivanhoe + Blank**
Request ID: **RQ-2022-05-23-20**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
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3319 Maguire Blvd., Suite 232
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 20-JUN-2022 10:41

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the top of the "T".

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 group are included in this report: Nutrients.

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 by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Lake Ivanhoe @ Center of W Lobe

Collection Date/Time: 05/26/2022 10:55

Field ID: G2CE0262

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330323	DEP SOP: NU-094-1	Color (true)**	7.1		PCU	P414493	
	EPA 180.1 Rev. 2.0	Turbidity	0.50	I	NTU	P414498	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P414634	
		Sulfate	22		mg SO4/L	P414637	
	SM 2320 B-2011	Total Alkalinity	34		mg CaCO3/L	P414793	
	SM 2540 C-2011	TDS	101		mg/L	P414964	
	SM 2540 D-2011	TSS	2	U	mg/L	P414966	
	SM 4500-F- C-2011	Fluoride	0.048	I	mg F/L	P414800	
2330324	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P415078	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P414622	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P414921	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P414555	
	SM 5310 B-2011	Organic Carbon	3.3		mg C/L	P414682	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: FB

Collection Date/Time: 05/26/2022 11:15

Field ID: FB_05262022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330325	DEP SOP: NU-094-1	Color (true)**	2.5	U	PCU	P414493	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P414498	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P414634	
		Sulfate	0.20	U	mg SO4/L	P414637	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P414793	
	SM 2540 C-2011	TDS	15	U	mg/L	P414964	
	SM 2540 D-2011	TSS	2	U	mg/L	P414966	
	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P414800	
2330326	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P415078	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P414622	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P414921	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P414555	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P414683	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P414493

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414498

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414634

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414637

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415078

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414622

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414921

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414555

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

Reference Method: SM 2320 B-2011
Batch ID: P414793

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-2011
Batch ID: P414964

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P414966

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P414800

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P414682

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

Reference Method: SM 5310 B-2011
Batch ID: P414683

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P414493

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414498

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414634

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414637

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415078

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414622

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414921

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: P414555

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

Reference Method: SM 2320 B-2011
Batch ID: P414793

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.3		P	94 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P414800

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.4		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P414682

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.4		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P414683

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414634

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330203	Chloride	98.2		P	90 - 110
2330323	Chloride	98.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414637

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330203	Sulfate	97.0		P	90 - 110
2330323	Sulfate	96.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415078

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330246	Ammonia-N	95.6	96.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414622

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330438	Kjeldahl Nitrogen	104	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414921

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330239	NO2NO3-N	98.0	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414555

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330319	Total-P	107	107	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P414800

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330291	Fluoride	98.1	98.7	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P414682

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330318	Organic Carbon	95.8	94.4	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P414683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330379	Organic Carbon	93.4	92.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P414493

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330316	Color (true)	0.0830	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414498

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330315	Turbidity	4.31	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414634

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330203	Chloride	0.520	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414637

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330203	Sulfate	1.04	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415078

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330246	Ammonia-N	0.780	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330438	Kjeldahl Nitrogen	1.06	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P414921

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330239	NO2NO3-N	1.02	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414555

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330319	Total-P	0.427	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P414793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330291	Total Alkalinity	0.629	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P414964

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330292	TDS	2.04	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P414800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330291	Fluoride	0.489	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P414682

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330318	Organic Carbon	0.879	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P414683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330379	Organic Carbon	0.862	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A112466

Included Lab Sample IDs: 2330323, 2330325

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	101	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A112469

Included Lab Sample IDs: 2330323, 2330325

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A112552

Included Lab Sample IDs: 2330323, 2330325

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.8	99.2	P/P	90 - 110
Chloride	99.2	99.2	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110
Sulfate	99.9	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A112574

Included Lab Sample IDs: 2330324, 2330326

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

Reference Method: SM 5310 B-2011

Run ID: A112583

Included Lab Sample IDs: 2330324, 2330326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.6	96.8	P/P	90 - 110
Organic Carbon	96.4	94.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A112631

Included Lab Sample IDs: 2330324, 2330326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	108	109	P/P	90 - 110
Kjeldahl Nitrogen	109	101	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A112633

Included Lab Sample IDs: 2330323, 2330325

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.5	97.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A112633

Included Lab Sample IDs: 2330323, 2330325

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A112683

Included Lab Sample IDs: 2330324, 2330326

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A112754

Included Lab Sample IDs: 2330324, 2330326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.1	98.0	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	MS
DEP SOP: NU-094-1	Color (true)	100			0.0830	
EPA 180.1 Rev. 2.0	Turbidity	96.8			4.31	
EPA 300.0 Rev. 2.1	Chloride	99.0	98.2	98.7	0.520	
	Sulfate	101	97.0	96.8	1.04	
EPA 350.1 Rev. 2.0	Ammonia-N	95.6	95.6	96.4		0.780
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	104	102		1.06
EPA 353.2 Rev. 2.0	NO2NO3-N	100	98.0	99.0		1.02
EPA 365.1 Rev. 2.0	Total-P	105	107	107		0.427
SM 2320 B-2011	Total Alkalinity	98.3			0.629	
SM 2540 C-2011	TDS				2.04	
SM 4500-F- C-2011	Fluoride	98.4	98.1	98.7		0.489
SM 5310 B-2011	Organic Carbon	96.4	95.8	94.4		0.879
	Organic Carbon	95.2	93.4	92.4		0.862

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2330323, 2330325
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2330323, 2330325
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2330323, 2330325
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2330323, 2330325
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2330324, 2330326
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2330324, 2330326
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2330324, 2330326
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2330324, 2330326
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2330323, 2330325
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2330323, 2330325
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2330323, 2330325
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2330323, 2330325
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2330324, 2330326

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	05/27/2022			05/27/2022 15:03	Anna M. Plaviak	2330323
	05/27/2022			05/27/2022 15:04	Anna M. Plaviak	2330325
EPA 180.1 Rev. 2.0	05/27/2022			05/27/2022 14:22	Khloe J Berg	2330323
	05/27/2022			05/27/2022 14:23	Khloe J Berg	2330325
EPA 300.0 Rev. 2.1	05/27/2022			06/02/2022 04:40	Anna M. Plaviak	2330323
	05/27/2022			06/02/2022 08:42	Anna M. Plaviak	2330325
EPA 350.1 Rev. 2.0	05/27/2022			06/10/2022 15:18	Ping Hua	2330324
	05/27/2022			06/10/2022 15:22	Ping Hua	2330326
EPA 351.2 Rev. 2.0	05/27/2022	06/03/2022 11:25	Samantha L Bates	06/06/2022 14:23	Alexandra J Mattheus	2330324
	05/27/2022	06/03/2022 11:25	Samantha L Bates	06/06/2022 14:28	Alexandra J Mattheus	2330326
EPA 353.2 Rev. 2.0	05/27/2022			06/08/2022 17:45	Nathaniel J Jones	2330326
	05/27/2022			06/08/2022 18:29	Nathaniel J Jones	2330324
EPA 365.1 Rev. 2.0	05/27/2022	06/01/2022 16:00	Adam P Silver	06/02/2022 14:41	James L Waggeberby	2330326
	05/27/2022	06/01/2022 16:00	Adam P Silver	06/02/2022 14:45	James L Waggeberby	2330324
SM 2320 B-2011	05/27/2022			06/03/2022 05:06	Dale L. Simmons	2330323
	05/27/2022			06/03/2022 05:13	Dale L. Simmons	2330325
SM 2540 C-2011	05/27/2022			06/01/2022 14:08	Yijie Li	2330323, 2330325
SM 2540 D-2011	05/27/2022			06/01/2022 14:08	Yijie Li	2330323, 2330325
SM 4500-F- C-2011	05/27/2022			06/03/2022 05:06	Dale L. Simmons	2330323
	05/27/2022			06/03/2022 05:13	Dale L. Simmons	2330325
SM 5310 B-2011	05/27/2022			06/02/2022 21:56	Judith K. Clark	2330324
	05/27/2022			06/03/2022 00:14	Judith K. Clark	2330326