

Chemical Analysis Report

CEN-DIST-2022-01-28-01

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

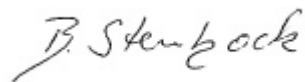
Event Description: **Lake Eaton**
Request ID: **RQ-2022-01-24-22**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Matthew Bearden

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 23-FEB-2022 13:20



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 Eton, Center

Collection Date/Time: 01/27/2022 11:14

Field ID: G1CE0119

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2302320	DEP SOP: NU-094-1	Color (true)**	380		PCU	P409159	
	EPA 180.1 Rev. 2.0	Turbidity	0.75		NTU	P409164	
	EPA 300.0 Rev. 2.1	Chloride	9.6		mg Cl/L	P409419	
		Sulfate	10		mg SO4/L	P409422	
	SM 2320 B-2011	Total Alkalinity	26		mg CaCO3/L	P409432	
	SM 2540 C-2011	TDS	121		mg/L	P409662	
	SM 2540 D-2011	TSS	2	U	mg/L	P409664	
	SM 4500 F-C-2011	Fluoride	0.055	I	mg F/L	P409435	
2302321	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P409635	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P409240	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.017		mg N/L	P409244	
	EPA 365.1 Rev. 2.0	Total-P	0.047		mg P/L	P409183	
	SM 5310 B-2011	Organic Carbon	30		mg C/L	P409915	
2302322	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.022		mg P/L	P409157	

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: P409159

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P409164

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409419

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409422

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409635

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409240

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409244

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409183

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409157

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P409432

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

Reference Method: SM 2540 C-2011
Batch ID: P409662

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P409664

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P409435

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P409915

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: P409159

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.2		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409419

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409422

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409635

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	93.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409240

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: P409244

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409183

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409157

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

Reference Method: SM 2320 B-2011
Batch ID: P409432

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.3		P	94 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P409435

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P409915

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409419

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302141	Chloride	98.9		P	90 - 110
2302392	Chloride	98.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409422

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302141	Sulfate	98.7		P	90 - 110
2302392	Sulfate	95.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409635

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302195	Ammonia-N	97.4	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409240

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302258	Kjeldahl Nitrogen	101	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409244

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302312	NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409183

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302298	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409157

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302285	O-Phosphate-P	97.4	98.3	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P409435

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302832	Fluoride	98.2	97.6	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P409915

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302429	Organic Carbon	93.3	93.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P409159

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302257	Color (true)	3.53	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P409164

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302257	Turbidity	3.42	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409419

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302141	Chloride	0.524	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409422

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302141	Sulfate	1.02	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409635

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302195	Ammonia-N	2.02	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409240

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302258	Kjeldahl Nitrogen	0.0340	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409244

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302312	NO2NO3-N	0.482	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409183

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302298	Total-P	0.263	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409157

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302285	O-Phosphate-P	0.920	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P409432

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302832	Total Alkalinity	0.585	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P409662

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302392	TDS	0.930	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P409435

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302832	Fluoride	0.484	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P409915

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302429	Organic Carbon	0.0878	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A110106

Included Lab Sample IDs: 2302322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.4	99.9	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A110107

Included Lab Sample IDs: 2302320

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A110111

Included Lab Sample IDs: 2302320

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A110144

Included Lab Sample IDs: 2302321

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A110154

Included Lab Sample IDs: 2302320

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

Reference Method: SM 2320 B-2011

Run ID: A110225

Included Lab Sample IDs: 2302320

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.1	98.4	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A110225

Included Lab Sample IDs: 2302320

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A110239

Included Lab Sample IDs: 2302321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.1	96.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A110283

Included Lab Sample IDs: 2302321

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A110313

Included Lab Sample IDs: 2302321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.9	97.2	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A110436

Included Lab Sample IDs: 2302321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	92.0	94.6	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)	99.2			3.53	
EPA 180.1 Rev. 2.0	Turbidity				3.42	
EPA 300.0 Rev. 2.1	Chloride	102	98.9	98.7	0.524	
	Sulfate	100	98.7	95.6	1.02	
EPA 350.1 Rev. 2.0	Ammonia-N	93.6	97.4	100		2.02
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	101	101		0.0340
EPA 353.2 Rev. 2.0	NO2NO3-N	102	101	102		0.482
EPA 365.1 Rev. 2.0	Total-P	98.2	102	102		0.263
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.1	97.4	98.3		0.920
SM 2320 B-2011	Total Alkalinity	97.3			0.585	
SM 2540 C-2011	TDS				0.930	
SM 4500 F-C-2011	Fluoride	98.2	98.2	97.6		0.484
SM 5310 B-2011	Organic Carbon	93.8	93.3	93.2		0.0878

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2302320
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2302320
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2302320
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2302320
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2302321
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2302321
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2302321
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2302321
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2302322
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2302320
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2302320
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2302320
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2302320
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2302321

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	01/28/2022			01/28/2022 15:25	Blanca Fach	2302320
EPA 180.1 Rev. 2.0	01/28/2022			01/28/2022 16:17	Khloe J Berg	2302320
EPA 300.0 Rev. 2.1	01/28/2022			02/04/2022 04:10	James L Waggeberby	2302320
EPA 350.1 Rev. 2.0	01/28/2022			02/09/2022 13:04	Roberta Tatti	2302321
EPA 351.2 Rev. 2.0	01/28/2022	02/02/2022 10:16	Alexandra J Mattheus	02/04/2022 10:30	Alexandra J Mattheus	2302321
EPA 353.2 Rev. 2.0	01/28/2022			02/01/2022 09:58	Beverly Y. Sanders	2302321
EPA 365.1 Rev. 2.0	01/28/2022	02/01/2022 11:50	Simonne.V. Calhoun	02/08/2022 12:06	Shengyu Ding	2302321
EPA 365.1 Rev. 2.0 dissolved	01/28/2022			01/28/2022 15:05	James L Waggeberby	2302322
SM 2320 B-2011	01/28/2022			02/03/2022 20:56	Dale L. Simmons	2302320
SM 2540 C-2011	01/28/2022			02/01/2022 14:37	Yijie Li	2302320
SM 2540 D-2011	01/28/2022			02/01/2022 14:37	Yijie Li	2302320
SM 4500 F-C-2011	01/28/2022			02/03/2022 20:56	Dale L. Simmons	2302320
SM 5310 B-2011	01/28/2022			02/15/2022 00:52	Khloe J Berg	2302321