

Chemical Analysis Report

CEN-DIST-2020-11-10-02

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

Event Description: **Puzzle Lake Drain/Ruth/Adelaide**
Request ID: **RQ-2020-11-09-39**
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: Kalina Warren

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: 02-DEC-2020 17:00



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 Adelaide @ Center

Collection Date/Time: 11/09/2020 12:22

Field ID: G2CE0151

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2207326	EPA 180.1 Rev. 2.0	Turbidity	3.1		NTU	P389982	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P390049	
		Sulfate	5.5		mg SO4/L	P390051	
	SM 2120 B-2011	Color (true)	77	A	PCU	P389974	
	SM 2320 B-2011	Total Alkalinity	42		mg CaCO3/L	P390069	
	SM 2540 C-2011	TDS	87		mg/L	P390312	
	SM 2540 D-2011	TSS	4	I	mg/L	P390205	
	SM 4500 F-C-2011	Fluoride	0.067	I	mg F/L	P390070	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P389990	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P390109	
2207327	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P389997	
	EPA 365.1 Rev. 2.0	Total-P	0.050		mg P/L	P390106	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P390048	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P389984	
2207328	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P389984	

Ref. Method and Comment:

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P389982

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390049

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390051

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389990

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P390109

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389997

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P390106

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389984

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

Reference Method: SM 2120 B-2011
Batch ID: P389974

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P390069

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

Reference Method: SM 2540 C-2011
Batch ID: P390312

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P390205

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P390070

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P390048

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: P390049

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

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P390051

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

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P389990

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P390109

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P389997

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P390106

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P389984

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

Reference Method: SM 2120 B-2011
 Batch ID: P389974

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	105		P	85 - 115

Reference Method: SM 2320 B-2011
 Batch ID: P390069

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.2		P	93 - 104

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P390070

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.9		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P390048

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	104		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390049

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207240	Chloride	97.2		P	90 - 110
2207326	Chloride	98.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207240	Sulfate	96.7		P	90 - 110
2207326	Sulfate	98.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389990

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207327	Ammonia-N	100	94.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389997

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207258	NO2NO3-N	97.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P390106

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207259	Total-P	107	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389984

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207328	O-Phosphate-P	99.0	100	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P390070

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207240	Fluoride	102	100	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P390048

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2207318	Organic Carbon	103	103	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P389982

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207316	Turbidity	10.7	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390049

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207240	Chloride	0.789	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207240	Sulfate	1.30	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389990

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207327	Ammonia-N	5.12	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P390109

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207327	Kjeldahl Nitrogen	1.90	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389997

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207258	NO2NO3-N	0.388	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P390106

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207259	Total-P	0.600	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389984

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207328	O-Phosphate-P	1.40	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
 Batch ID: P389974

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207326	Color (true)	3.93	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P390069

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207240	Total Alkalinity	1.17	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
 Batch ID: P390312

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207317	TDS	1.30	Sample	P	0 - 10

Reference Method: SM 2540 D-2011
 Batch ID: P390205

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207317	TSS	8.00	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
 Batch ID: P390070

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207240	Fluoride	1.46	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
 Batch ID: P390048

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2207318	Organic Carbon	0.0314	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A102065

Included Lab Sample IDs: 2207326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.2	97.5	P/P	90 - 110
Sulfate	99.2	96.9	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A102075

Included Lab Sample IDs: 2207326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	107	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A102082

Included Lab Sample IDs: 2207326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.0	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A102083

Included Lab Sample IDs: 2207328

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A102089

Included Lab Sample IDs: 2207327

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A102096

Included Lab Sample IDs: 2207327

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.0	100	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A102121

Included Lab Sample IDs: 2207327

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

Reference Method: SM 2320 B-2011

Run ID: A102131

Included Lab Sample IDs: 2207326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.9	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A102131

Included Lab Sample IDs: 2207326

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A102172

Included Lab Sample IDs: 2207327

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A102192

Included Lab Sample IDs: 2207327

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	99.0	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		LCS	Precision	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					10.7	
EPA 300.0 Rev. 2.1	Chloride	98.2	97.2	98.1		0.789	
	Sulfate	98.2	96.7	98.0		1.30	
EPA 350.1 Rev. 2.0	Ammonia-N	101	100	94.7			5.12
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108					1.90
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.0	97.0				0.388
EPA 365.1 Rev. 2.0	Total-P	104	107	107			0.600
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	104	99.0	100			1.40
SM 2120 B-2011	Color (true)	105				3.93	
SM 2320 B-2011	Total Alkalinity	99.2				1.17	
SM 2540 C-2011	TDS					1.30	
SM 2540 D-2011	TSS					8.00	
SM 4500 F-C-2011	Fluoride	99.9	102	100			1.46
SM 5310 B-2011	Organic Carbon	104	103	103			0.0314

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2207326
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2207326
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2207326
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2207327
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2207327
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2207327
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2207327
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2207328
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2207326
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2207326
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2207326
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2207326
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2207326
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2207327

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	11/10/2020			11/10/2020 14:20	Yen Ta	2207326
EPA 300.0 Rev. 2.1	11/10/2020			11/12/2020 15:07	Lipi Saha	2207326
EPA 350.1 Rev. 2.0	11/10/2020			11/11/2020 13:13	Ping Hua	2207327
EPA 351.2 Rev. 2.0	11/10/2020	11/16/2020 13:40	David Boose	11/17/2020 11:14	Elliott Rodriguez	2207327
EPA 353.2 Rev. 2.0	11/10/2020			11/12/2020 09:27	Beverly Y. Sanders	2207327
EPA 365.1 Rev. 2.0	11/10/2020	11/16/2020 13:34	Yen Ta	11/18/2020 10:51	Shengyu Wang	2207327
EPA 365.1 Rev. 2.0 dissolved	11/10/2020			11/10/2020 16:49	Ping Hua	2207328
SM 2120 B-2011	11/10/2020			11/10/2020 14:54	Benjamin T. Nordmann	2207326
SM 2320 B-2011	11/10/2020			11/12/2020 19:54	Dale L. Simmons	2207326
SM 2540 C-2011	11/10/2020			11/13/2020 14:25	Yijie Li	2207326
SM 2540 D-2011	11/10/2020			11/13/2020 14:25	Yijie Li	2207326
SM 4500 F-C-2011	11/10/2020			11/12/2020 19:54	Dale L. Simmons	2207326
SM 5310 B-2011	11/10/2020			11/12/2020 23:33	Touraj Touran	2207327