

Chemical Analysis Report

NE-DIST-2019-10-16-02

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

Event Description: **LSJR West**
Request ID: **RQ-2019-10-14-14**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
Attn: Jeremy Parrish

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: 05-NOV-2019 15:20



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: Mccoys CR at Leland St.

Collection Date/Time: 10/15/2019 14:45

Field ID: 20030725

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2128304	EPA 180.1 Rev. 2.0	Turbidity	3.4	A	NTU	P372600	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P373245	
		Sulfate	36		mg SO4/L	P373560	
	SM 2120 B	Color (true)	20	A	PCU	P372598	
	SM 2320 B-97	Total Alkalinity	168		mg CaCO3/L	P372878	
	SM 2540 C-97	TDS	245		mg/L	P373302	
	SM 2540 D-97	TSS	3	I	mg/L	P373256	
	SM 4500 F-C-97	Fluoride	0.19		mg F/L	P372882	
2128305	EPA 350.1 Rev. 2.0	Ammonia-N	0.096		mg N/L	P372885	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P372681	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P372734	
	EPA 365.1 Rev. 2.0	Total-P	0.098		mg P/L	P372743	
	SM 5310 B-00	Organic Carbon	6.3		mg C/L	P372782	
2128306	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.046		mg P/L	P372624	

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: P372600

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373245

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373560

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372885

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372681

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372734

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372743

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372624

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

Reference Method: SM 2120 B
Batch ID: P372598

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P372878

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

Reference Method: SM 2540 C-97
Batch ID: P373302

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P373256

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P372882

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P372782

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: P373245

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373560

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: P372885

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372681

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.9		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372734

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: P372743

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	95.1		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372624

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

Reference Method: SM 2120 B
Batch ID: P372598

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.3		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P372878

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	98 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P372882

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P372782

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373245

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2128006	Chloride	103		P	90 - 110
2128482	Chloride	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373560

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2128006	Sulfate	97.6		P	90 - 110
2128482	Sulfate	98.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372885

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2128475	Ammonia-N	97.7	98.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372681

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2128305	Kjeldahl Nitrogen	101	98.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372734

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2128011	NO2NO3-N	98.8	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372743

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2128067	Total-P	96.0	98.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372624

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2128273	O-Phosphate-P	96.3	95.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P372882

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2128512	Fluoride	97.3	95.9	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P372782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127988	Organic Carbon	100	98.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P372600

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128304	Turbidity	2.33	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373245

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128006	Chloride	0.272	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373560

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128006	Sulfate	0.228	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P372885

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128475	Ammonia-N	0.664	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P372681

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128305	Kjeldahl Nitrogen	1.80	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P372734

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128011	NO2NO3-N	0.905	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P372743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128067	Total-P	2.64	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372624

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128273	O-Phosphate-P	0.633	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P372598

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128304	Color (true)	5.11	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P372878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128512	Total Alkalinity	0.554	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P373302

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128006	TDS	8.00	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P372882

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2128512	Fluoride	0.960	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P372782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127988	Organic Carbon	1.97	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: A95007

Included Lab Sample IDs: 2128306

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	99.5	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A95008

Included Lab Sample IDs: 2128304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.6	98.5	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A95009

Included Lab Sample IDs: 2128304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.0	99.5	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A95064

Included Lab Sample IDs: 2128305

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

Reference Method: SM 5310 B-00

Run ID: A95085

Included Lab Sample IDs: 2128305

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.6	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A95099

Included Lab Sample IDs: 2128305

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.4	102	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A95130

Included Lab Sample IDs: 2128304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	104	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A95130

Included Lab Sample IDs: 2128304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	98.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A95132

Included Lab Sample IDs: 2128305

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A95180

Included Lab Sample IDs: 2128305

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.0	97.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A95282

Included Lab Sample IDs: 2128304

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A95307

Included Lab Sample IDs: 2128304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	100	99.7	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					2.33	
EPA 300.0 Rev. 2.1	Chloride	105	103	105		0.272	
	Sulfate	98.2	97.6	98.7		0.228	
EPA 350.1 Rev. 2.0	Ammonia-N	99.0	97.7	98.9			0.664
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.9	101	98.6			1.80
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100	98.8	97.8			0.905
EPA 365.1 Rev. 2.0	Total-P	95.1	96.0	98.7			2.64
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	96.3	95.4			0.633
SM 2120 B	Color (true)	97.3				5.11	
SM 2320 B-97	Total Alkalinity	104				0.554	
SM 2540 C-97	TDS					8.00	
SM 4500 F-C-97	Fluoride	94.8	97.3	95.9			0.960
SM 5310 B-00	Organic Carbon	99.1	100	98.1			1.97

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2128304
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2128304
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2128304
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2128305
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2128305
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2128305
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2128305
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2128306
SM 2120 B / E31780	True Color measured at 450 nm	2128304
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2128304
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2128304
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2128304
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2128304
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2128305

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	10/16/2019			10/16/2019 16:27	Samantha Davila	2128304
EPA 300.0 Rev. 2.1	10/16/2019			10/26/2019 11:42	Julia Storbeck	2128304
	10/16/2019			10/30/2019 21:07	Julia Storbeck	2128304
EPA 350.1 Rev. 2.0	10/16/2019			10/21/2019 13:10	Ping Hua	2128305
EPA 351.2 Rev. 2.0	10/16/2019	10/17/2019 12:22	Sima Feizi	10/22/2019 21:20	Jhamieka S. Greenwood	2128305
EPA 353.2 Rev. 2.0	10/16/2019			10/18/2019 11:30	Beverly Y. Sanders	2128305
EPA 365.1 Rev. 2.0	10/16/2019	10/18/2019 15:10	Lipi Saha	10/21/2019 12:27	Beverly Y. Sanders	2128305
EPA 365.1 Rev. 2.0 dissolved	10/16/2019			10/16/2019 13:07	Virginia P. Brown	2128306
SM 2120 B	10/16/2019			10/16/2019 13:07	Madeline Funaro	2128304
SM 2320 B-97	10/16/2019			10/19/2019 14:29	Dale L. Simmons	2128304
SM 2540 C-97	10/16/2019			10/18/2019 15:45	Yijie Li	2128304
SM 2540 D-97	10/16/2019			10/18/2019 15:45	Yijie Li	2128304
SM 4500 F-C-97	10/16/2019			10/19/2019 14:29	Dale L. Simmons	2128304
SM 5310 B-00	10/16/2019			10/19/2019 01:46	Madeline Funaro	2128305