

Chemical Analysis Report

WTRSHD-MGT-2013-08-22-02

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

Event Description: **SPRS1305 - Santa Fe Springs/GW Restoration**
Request ID: **RQ-2013-08-19-37**
Customer: **WTRSHD-MGT**
Project ID: **TMDL**

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Date Certified: 09-SEP-2013 14:57



Abbreviations and data remark codes

CERT # - NELAP (National Environmental Laboratory Accreditation Program) Certification Number of the laboratory that performed the analysis.

LCS – Laboratory Control Sample; in the QC Failures column, this notation indicates a batch recovery failure.

MS – Matrix Spike; in the QC Failures column, this notation indicates a batch recovery failure.

RPD – Relative Percent Difference; in the QC Failures column, this notation indicates a batch failure for precision.

CCV – Continuing Calibration Verification; in the QC Failures column, this notation indicates a failure of the calibration verification check sample.

SUR – Surrogate; in the QC Failures column, this notation indicates a recovery failure for the associated surrogate.

RSD – Relative Standard Deviation expressed as a percentage.

SMP – Sample.

** - The laboratory is not NELAP certified for this analyte/method, or certification is not applicable.

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

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).

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.

Precision is reported as relative percent difference unless otherwise noted.

Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published test performance acceptance criteria.

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.

All sample collection performed by Bureau of Laboratories staff followed the field Standard Operating Procedures adopted by reference in Rule 62-160 FAC unless otherwise noted.

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.

Results for NELAP accredited tests contained in this report meet the requirements specified by the National Environmental Laboratory Accreditation Conference (NELAC). All samples received were in acceptable condition and met NELAC requirements unless otherwise noted. Results generated in this report pertain to the samples collected and submitted for analysis.

Job: TLH-2013-08-22-79

Job: TLH-2013-08-22-80

Job: TLH-2013-08-22-81

Group: Nutrients

Group: Metals

Group: Pesticides

Sample Location: AAK7015**Collection Date/Time: 08/21/2013 10:41 AM****Field ID: AAK7015****Matrix: W-GROUND**

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1528295	EPA 180.1 Rev. 2.0	Turbidity	0.15		NTU	P256783	
	EPA 300.0	Bromide**	0.048		mg Br/L	P256906	
	EPA 300.0 Rev. 2.1	Chloride	24		mg Cl/L	P256867	
		Sulfate	11		mg SO4/L	P256870	
	SM 2120 B	Color (true)	2.5	U	PCU	P256754	
	SM 2320 B-97	Alkalinity	185		mg CaCO3/L	P256892	
	SM 2540 C-97	TDS	258		mg/L	P257073	
	SM 2540 D-97	TSS	2	U	mg/L	P257141	
	SM 4500 F-C-97	Fluoride	0.056	I	mg F/L	P257000	
1528300	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P256885	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.14	I	mg N/L	P256979	
	EPA 353.2 Rev. 2.0	NO2NO3-N	3.4		mg N/L	P257120	
	EPA 365.1 Rev. 2.0	Total-P	0.037		mg P/L	P256984	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P256835	
1528305	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.037		mg P/L	P256756	
1528310	EPA 200.7 Rev. 4.4	Calcium	80.3		mg/L	P257068	
		Magnesium	2.90		mg/L	P257068	
		Potassium	1.9		mg/L	P257068	
		Sodium	22.2		mg/L	P257068	
	EPA 200.8 Rev. 5.4	Boron**	72.2		ug/L	P257098	
1528315	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.079		ug/L	P256898	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

EPA 200.7 Rev. 4.4: The calcium matrix spike recoveries are unavailable due to high analyte concentration in the QC sample.

Sample Location: MSFMW14**Collection Date/Time: 08/21/2013 01:41 PM****Field ID: MSFMW14****Matrix: W-GROUND**

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1528297	EPA 180.1 Rev. 2.0	Turbidity	7.4	A	NTU	P256783	
	EPA 300.0	Bromide**	0.048		mg Br/L	P256906	
	EPA 300.0 Rev. 2.1	Chloride	7.2		mg Cl/L	P256867	
		Sulfate	5.1		mg SO4/L	P256870	
	SM 2120 B	Color (true)	2.5	U	PCU	P256754	
	SM 2320 B-97	Alkalinity	243		mg CaCO3/L	P256892	
	SM 2540 C-97	TDS	357		mg/L	P257073	
	SM 2540 D-97	TSS	6	I	mg/L	P257141	
	SM 4500 F-C-97	Fluoride	0.071	I	mg F/L	P257000	
1528302	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P256885	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P256979	
	EPA 353.2 Rev. 2.0	NO2NO3-N	9.4		mg N/L	P257120	
	EPA 365.1 Rev. 2.0	Total-P	0.045		mg P/L	P256984	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P256835	

Field ID: MSFMW14

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1528307	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.038		mg P/L	P256756	
1528312	EPA 200.7 Rev. 4.4	Calcium	122		mg/L	P257068	
		Magnesium	1.85		mg/L	P257068	
		Potassium	0.62	I	mg/L	P257068	
		Sodium	3.0		mg/L	P257068	
	EPA 200.8 Rev. 5.4	Boron**	10.3		ug/L	P257098	
1528317	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.010	U	ug/L	P256898	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

EPA 200.7 Rev. 4.4: The calcium matrix spike recoveries are unavailable due to high analyte concentration in the QC sample.

Sample Location: MSFMW16**Collection Date/Time: 08/21/2013 03:45 PM****Field ID: MSFMW16**

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1528299	EPA 180.1 Rev. 2.0	Turbidity	0.25		NTU	P256783	
	EPA 300.0	Bromide**	0.016	U	mg Br/L	P256906	
	EPA 300.0 Rev. 2.1	Chloride	5.0		mg Cl/L	P256867	
		Sulfate	0.50		mg SO4/L	P256870	
	SM 2120 B	Color (true)	2.5	U	PCU	P256754	
	SM 2320 B-97	Alkalinity	146		mg CaCO3/L	P256892	
	SM 2540 C-97	TDS	158	A	mg/L	P257073	
	SM 2540 D-97	TSS	3	I	mg/L	P257141	
	SM 4500 F-C-97	Fluoride	0.069	I	mg F/L	P256836	
1528304	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P256885	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.10	I	mg N/L	P256980	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P257120	
	EPA 365.1 Rev. 2.0	Total-P	0.074	J	mg P/L	P256985	MS
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P256835	
1528309	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.069		mg P/L	P256756	
1528314	EPA 200.7 Rev. 4.4	Calcium	52.7		mg/L	P257068	
		Magnesium	6.34		mg/L	P257068	
		Potassium	0.34	I	mg/L	P257068	
		Sodium	3.2		mg/L	P257068	
	EPA 200.8 Rev. 5.4	Boron**	8.7		ug/L	P257098	
1528319	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.010	U	ug/L	P256898	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0: Quality control failure(s) observed.

EPA 200.7 Rev. 4.4: The calcium matrix spike recoveries are unavailable due to high analyte concentration in the QC sample.

DEP SOP: LC-001-2 (based on EPA 8321B): Sucralose result confirmed in re-extraction.

Sample Location: MSFMW17**Collection Date/Time: 08/21/2013 02:38 PM**

Field ID: MSFMW17

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1528298	EPA 180.1 Rev. 2.0	Turbidity	0.40		NTU	P256783	
	EPA 300.0	Bromide**	0.046		mg Br/L	P256906	
	EPA 300.0 Rev. 2.1	Chloride	3.5		mg Cl/L	P256867	
		Sulfate	81		mg SO4/L	P256870	
	SM 2120 B	Color (true)	2.5	U	PCU	P256754	
	SM 2320 B-97	Alkalinity	315		mg CaCO3/L	P256892	
	SM 2540 C-97	TDS	550		mg/L	P257073	
	SM 2540 D-97	TSS	2	I	mg/L	P257141	
	SM 4500 F-C-97	Fluoride	0.078	I	mg F/L	P256836	
1528303	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P256885	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.15	I	mg N/L	P256980	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.1		mg N/L	P257120	
	EPA 365.1 Rev. 2.0	Total-P	0.080		mg P/L	P256985	MS
	SM 5310 B-00	Organic Carbon	0.66	I	mg C/L	P256835	
1528308	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.073		mg P/L	P256756	
1528313	EPA 200.7 Rev. 4.4	Calcium	79.5		mg/L	P257068	
		Magnesium	1.57		mg/L	P257068	
		Potassium	120		mg/L	P257068	
		Sodium	36.7		mg/L	P257068	
	EPA 200.8 Rev. 5.4	Boron**	10.3		ug/L	P257098	
1528318	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.010	U	ug/L	P256898	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 200.7 Rev. 4.4: The calcium matrix spike recoveries are unavailable due to high analyte concentration in the QC sample.

Sample Location: MSFMW18**Collection Date/Time: 08/21/2013 11:42 AM****Field ID: MSFMW18**

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1528296	EPA 180.1 Rev. 2.0	Turbidity	0.55		NTU	P256783	
	EPA 300.0	Bromide**	0.097		mg Br/L	P256906	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P256867	
		Sulfate	230		mg SO4/L	P256870	
	SM 2120 B	Color (true)	2.5	U	PCU	P256754	
	SM 2320 B-97	Alkalinity	227		mg CaCO3/L	P256892	
	SM 2540 C-97	TDS	612		mg/L	P257073	
	SM 2540 D-97	TSS	2	I	mg/L	P257141	
	SM 4500 F-C-97	Fluoride	0.056	I	mg F/L	P257000	
1528301	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P256885	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.19	I	mg N/L	P256979	
	EPA 353.2 Rev. 2.0	NO2NO3-N	7.1		mg N/L	P257120	
	EPA 365.1 Rev. 2.0	Total-P	0.041		mg P/L	P256984	
	SM 5310 B-00	Organic Carbon	0.59	I	mg C/L	P256835	
1528306	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.040		mg P/L	P256756	

Field ID: MSFMW18

Matrix: W-GROUND

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Failures
1528311	EPA 200.7 Rev. 4.4	Calcium	199		mg/L	P257068	
		Magnesium	5.41		mg/L	P257068	
		Potassium	3.6		mg/L	P257068	
		Sodium	3.8		mg/L	P257068	
	EPA 200.8 Rev. 5.4	Boron**	23.7		ug/L	P257098	
1528316	DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose**	0.010	U	ug/L	P256898	

Ref. Method and Comment:

SM 2120 B: The precision data is unavailable due to the low analyte concentration in the QC sample.

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

EPA 200.7 Rev. 4.4: The calcium matrix spike recoveries are unavailable due to high analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: LC-001-2 (based on EPA 8321B)

Batch ID: P256898

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P256783

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P257068

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P257098

Component	Result	Code	Units
Boron	2.0	U	ug/L

Reference Method: EPA 300.0

Batch ID: P256906

Component	Result	Code	Units
Bromide	0.016	U	mg Br/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P256867

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P256870

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P256885

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P256979

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P256980

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P257120

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P256984

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P256985

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P256756

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

Reference Method: SM 2120 B

Batch ID: P256754

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97

Batch ID: P256892

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

Reference Method: SM 2540 C-97

Batch ID: P257073

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97

Batch ID: P257141

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97

Batch ID: P256836

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97

Batch ID: P257000

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00

Batch ID: P256835

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: DEP SOP: LC-001-2 (based on EPA 8321B)

Batch ID: P256898

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	57.6	48.4	P/P	40 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P257068

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	102		P	85 - 115
Sodium	105		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P257098

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Boron	101		P	85 - 115

Reference Method: EPA 300.0

Batch ID: P256906

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P256867

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P256870

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P256885

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P256979

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	92.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P256980

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	91.2		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P257120

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P256984

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P256985

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P256756

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

Reference Method: SM 2320 B-97

Batch ID: P256892

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alkalinity	97.0		P	85 - 115

Reference Method: SM 4500 F-C-97

Batch ID: P256836

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.9		P	85 - 115

Reference Method: SM 4500 F-C-97

Batch ID: P257000

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	85 - 115

Reference Method: SM 5310 B-00

Batch ID: P256835

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: DEP SOP: LC-001-2 (based on EPA 8321B)

Batch ID: P256898

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1527609	Sucralose	55.6	66.8	P/P	40 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P257068

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1528310	Magnesium	104	105	P/P	80 - 120
1528310	Potassium	107	107	P/P	80 - 120
1528310	Sodium	104		P	80 - 120
1528487	Magnesium	102		P	80 - 120
1528487	Potassium	107		P	80 - 120
1528487	Sodium	110		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P257098

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1528310	Boron	97.3	96.6	P/P	80 - 120
1528487	Boron	105		P	80 - 120

Reference Method: EPA 300.0

Batch ID: P256906

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1527876	Bromide	98.8		P	90 - 110
1528299	Bromide	91.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P256867

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1527876	Chloride	97.6		P	90 - 110
1528299	Chloride	97.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P256870

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1527876	Sulfate	92.6		P	90 - 110
1528299	Sulfate	94.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P256885

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1528328	Ammonia-N	98.5	98.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P256980

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1528303	Kjeldahl Nitrogen	95.5	96.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P257120

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1528043	NO2NO3-N	99.0	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P256984

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1528026	Total-P	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P256985

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P256985

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1528304	Total-P	111	109	F/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P256756

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1528305	O-Phosphate-P	101	99.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Batch ID: P256836

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1528327	Fluoride	95.7	96.5	P/P	85 - 115

Reference Method: SM 4500 F-C-97

Batch ID: P257000

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1528063	Fluoride	98.7	99.3	P/P	85 - 115

Reference Method: SM 5310 B-00

Batch ID: P256835

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1527981	Organic Carbon	99.0	97.7	P/P	85 - 115

Quality Assurance Report

Precision

Reference Method: DEP SOP: LC-001-2 (based on EPA 8321B)

Batch ID: P256898

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1527609	Sucralose	11.0	Spike	P	0 - 30
LFB	Sucralose	17.4	LCS	P	0 - 30

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P256783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528297	Turbidity	0.270	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P257068

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528310	Calcium	1.89	Spike	P	0 - 20
1528310	Magnesium	0.549	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P257068

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528310	Potassium	0.400	Spike	P	0 - 20
1528310	Sodium	1.08	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P257098

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528310	Boron	0.407	Spike	P	0 - 20

Reference Method: EPA 300.0

Batch ID: P256906

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1527876	Bromide	1.11	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P256867

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1527876	Chloride	0.110	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P256870

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1527876	Sulfate	0.868	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P256885

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528328	Ammonia-N	0.304	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P256979

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528025	Kjeldahl Nitrogen	1.28	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P256980

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528303	Kjeldahl Nitrogen	0.752	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P257120

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528043	NO2NO3-N	3.96	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P256984

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528026	Total-P	0.207	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P256985

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528304	Total-P	1.86	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P256756

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528305	O-Phosphate-P	1.39	Spike	P	0 - 20

Reference Method: SM 2320 B-97

Batch ID: P256892

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528361	Alkalinity	0.0573	Sample	P	0 - 20
1528386	Alkalinity	1.58	Sample	P	0 - 20

Reference Method: SM 2540 C-97

Batch ID: P257073

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528299	TDS	3.17	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97

Batch ID: P256836

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528327	Fluoride	0.467	Spike	P	0 - 20

Reference Method: SM 4500 F-C-97

Batch ID: P257000

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1528063	Fluoride	0.470	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 5310 B-00

Batch ID: P256835

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1527981	Organic Carbon	0.706	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: 1528315

Field Sample ID: AAK7015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	53.4	P	40 - 150

Lab Sample ID: 1528316

Field Sample ID: MSFMW18

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	69.3	P	40 - 150

Lab Sample ID: 1528317

Field Sample ID: MSFMW14

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	65.9	P	40 - 150

Lab Sample ID: 1528318

Field Sample ID: MSFMW17

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	64.3	P	40 - 150

Lab Sample ID: 1528319

Field Sample ID: MSFMW16

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose-d6	52.7	P	40 - 150

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A52065

Included Lab Sample IDs: 1528295, 1528296, 1528297, 1528298, 1528299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	94.1	97.0	P/P	85 - 115

Quality Assurance Report

Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A52067

Included Lab Sample IDs: 1528305, 1528306, 1528307, 1528308, 1528309

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.8	99.1	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A52074

Included Lab Sample IDs: 1528295, 1528296, 1528297, 1528298, 1528299

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

Reference Method: SM 5310 B-00

Run ID: A52096

Included Lab Sample IDs: 1528300, 1528301, 1528302, 1528303, 1528304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.0	95.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A52097

Included Lab Sample IDs: 1528298, 1528299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.1	101	P/P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A52109

Included Lab Sample IDs: 1528295, 1528296, 1528297, 1528298, 1528299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.1	99.5	P/P	90 - 110
Chloride	99.5	99.3	P/P	90 - 110
Sulfate	96.6	97.3	P/P	90 - 110
Sulfate	99.6	96.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A52115

Included Lab Sample IDs: 1528300, 1528301, 1528302, 1528303, 1528304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.1	101	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A52119

Included Lab Sample IDs: 1528295, 1528296, 1528297, 1528298, 1528299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alkalinity	101	98.8	P/P	85 - 115

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: LC-001-2 (based on EPA 8321B)

Run ID: A52122

Included Lab Sample IDs: 1528315, 1528316, 1528317, 1528318, 1528319

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	109	108	P/P	70 - 150
Sucralose	94.0	109	P/P	70 - 150

Reference Method: EPA 300.0

Run ID: A52123

Included Lab Sample IDs: 1528296, 1528299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	92.0	96.1	P/P	90 - 110
Bromide	96.1	93.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A52159

Included Lab Sample IDs: 1528300, 1528301, 1528302, 1528303, 1528304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	105	P/P	90 - 110
Kjeldahl Nitrogen	108	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A52162

Included Lab Sample IDs: 1528303, 1528304

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A52163

Included Lab Sample IDs: 1528300, 1528301, 1528302

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	95.0	96.8	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A52171

Included Lab Sample IDs: 1528295, 1528296, 1528297

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A52197

Included Lab Sample IDs: 1528310, 1528311, 1528312, 1528313, 1528314

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	103	P/P	90 - 110
Calcium	103	103	P/P	90 - 110
Magnesium	101	102	P/P	90 - 110
Magnesium	102	99.7	P/P	90 - 110
Potassium	102	102	P/P	90 - 110
Potassium	102	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A52197

Included Lab Sample IDs: 1528310, 1528311, 1528312, 1528313, 1528314

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A52220

Included Lab Sample IDs: 1528300, 1528301, 1528302, 1528303, 1528304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.6	99.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A52243

Included Lab Sample IDs: 1528296

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	96.2	98.4	P/P	90 - 110

Reference Method: EPA 300.0

Run ID: A52244

Included Lab Sample IDs: 1528295, 1528297, 1528298

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	95.0	97.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A52248

Included Lab Sample IDs: 1528313

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A52258

Included Lab Sample IDs: 1528310, 1528311, 1528312, 1528313, 1528314

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	93.7	93.9	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 SMP	MS
DEP SOP: LC-001-2 (based on EPA 8321B)	Sucralose	57.6	48.4	55.6	66.8	17.4		11.0
EPA 180.1 Rev. 2.0	Turbidity						0.270	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision		
						LCS	SMP	MS
EPA 200.7 Rev. 4.4	Calcium	103						1.89
	Magnesium	104	104	105	102			0.549
	Potassium	102	107	107	107			0.400
	Sodium	105	104	110				1.08
EPA 200.8 Rev. 5.4	Boron	101	97.3	96.6	105			0.407
EPA 300.0	Bromide	100	98.8	91.7			1.11	
EPA 300.0 Rev. 2.1	Chloride	97.8	97.6	97.4			0.110	
	Sulfate	94.4	92.6	94.7			0.868	
	Ammonia-N	97.7	98.5	98.9				0.304
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	92.6						1.28
	Kjeldahl Nitrogen	91.2	95.5	96.3				0.752
EPA 353.2 Rev. 2.0	NO2NO3-N	106	99.0	103				3.96
EPA 365.1 Rev. 2.0	Total-P	102	105	105				0.207
	Total-P	107	111	109				1.86
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.4	101	99.0				1.39
SM 2320 B-97	Alkalinity	97.0					1.58 0.0573	
SM 2540 C-97	TDS						3.17	
SM 4500 F-C-97	Fluoride	99.9	95.7	96.5				0.467
	Fluoride	100	98.7	99.3				0.470
SM 5310 B-00	Organic Carbon	96.0	99.0	97.7				0.706

Reference Method Descriptions

Method / NELAC Cert. #	Description	Associated Samples
DEP SOP: LC-001-2 (based on EPA 8321B) / E31780	Analysis of sucralose in water matrices by HPLC/MS/MS	1528315, 1528316, 1528317, 1528318, 1528319
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1528295, 1528296, 1528297, 1528298, 1528299
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1528310, 1528311, 1528312, 1528313, 1528314
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1528310, 1528311, 1528312, 1528313, 1528314
EPA 300.0 / E31780	Bromide in aqueous matrices	1528295, 1528296, 1528297, 1528298, 1528299
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1528295, 1528296, 1528297, 1528298, 1528299
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1528295, 1528296, 1528297, 1528298, 1528299
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1528300, 1528301, 1528302, 1528303, 1528304
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1528300, 1528301, 1528302, 1528303, 1528304
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1528300, 1528301, 1528302, 1528303, 1528304
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1528300, 1528301, 1528302, 1528303, 1528304
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1528305, 1528306, 1528307, 1528308, 1528309
SM 2120 B / E31780	True Color measured at 450 nm	1528295, 1528296, 1528297, 1528298, 1528299
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1528295, 1528296, 1528297, 1528298, 1528299
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1528295, 1528296, 1528297, 1528298, 1528299

Reference Method Descriptions

Method / NELAC Cert. #	Description	<u>Associated Samples</u>
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1528295, 1528296, 1528297, 1528298, 1528299
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1528295, 1528296, 1528297, 1528298, 1528299
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1528300, 1528301, 1528302, 1528303, 1528304

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: LC-001-2 (based on EPA 8321B)	08/22/2013	08/26/2013	Hoor Shaik	08/26/2013	S. M. Reddy	1528315
	08/22/2013	08/26/2013	Hoor Shaik	08/27/2013	S. M. Reddy	1528316, 1528317, 1528318, 1528319
EPA 180.1 Rev. 2.0	08/22/2013			08/22/2013 16:31	Blanca Fach	1528295, 1528296, 1528297, 1528298, 1528299
EPA 200.7 Rev. 4.4	08/22/2013	08/27/2013	Elliott D. Healy	08/29/2013	Joshua Ayres	1528310, 1528311, 1528312, 1528313, 1528314
	08/22/2013	08/27/2013	Elliott D. Healy	09/03/2013	Joshua Ayres	1528313
EPA 200.8 Rev. 5.4	08/22/2013	08/27/2013	Elliott D. Healy	09/03/2013	Charles J. Peterson	1528310, 1528311, 1528312, 1528313, 1528314
EPA 300.0	08/22/2013			08/23/2013	Gary Dearman	1528296, 1528299
	08/22/2013			08/28/2013	Gary Dearman	1528295, 1528297, 1528298
EPA 300.0 Rev. 2.1	08/22/2013			08/23/2013	Gary Dearman	1528295, 1528296, 1528297, 1528298, 1528299
	08/22/2013			08/29/2013	Gary Dearman	1528296
EPA 350.1 Rev. 2.0	08/22/2013			08/26/2013	Diana M. Turner	1528300, 1528301, 1528302, 1528303, 1528304
EPA 351.2 Rev. 2.0	08/22/2013	08/27/2013	Christopher Armour	08/28/2013	Bryan A. Werth	1528300, 1528301, 1528302, 1528303, 1528304
EPA 353.2 Rev. 2.0	08/22/2013			08/30/2013	Sima Feizi	1528300, 1528301, 1528302, 1528303, 1528304
EPA 365.1 Rev. 2.0	08/22/2013	08/27/2013	Christopher Armour	08/28/2013	Pallavi R. Gadwal	1528300, 1528301, 1528302, 1528303, 1528304
EPA 365.1 Rev. 2.0 dissolved	08/22/2013			08/22/2013 16:36	Bryan A. Werth	1528305
	08/22/2013			08/22/2013 16:39	Bryan A. Werth	1528306, 1528307
	08/22/2013			08/22/2013 16:40	Bryan A. Werth	1528308
	08/22/2013			08/22/2013 16:41	Bryan A. Werth	1528309
SM 2120 B	08/22/2013			08/22/2013 16:19	Rochelle Y Jackson	1528295
	08/22/2013			08/22/2013 16:20	Rochelle Y Jackson	1528296
	08/22/2013			08/22/2013 16:21	Rochelle Y Jackson	1528297
	08/22/2013			08/22/2013 16:22	Rochelle Y Jackson	1528298, 1528299
SM 2320 B-97	08/22/2013			08/26/2013	Dale L. Simmons	1528295, 1528296, 1528297, 1528298, 1528299
SM 2540 C-97	08/22/2013			08/26/2013	Yijie Li	1528295, 1528296, 1528297, 1528298, 1528299
SM 2540 D-97	08/22/2013			08/26/2013	Yijie Li	1528295, 1528296, 1528297, 1528298, 1528299
SM 4500 F-C-97	08/22/2013			08/23/2013	Dale L. Simmons	1528298, 1528299
	08/22/2013			08/28/2013	Dale L. Simmons	1528295, 1528296, 1528297
SM 5310 B-00	08/22/2013			08/24/2013	Rochelle Y Jackson	1528300, 1528301, 1528302, 1528303, 1528304