

Biological Analysis Report

NW-DIST-2016-07-19-02

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

Overflow Analyses Performed By:
University of West Florida
11000 University Parkway
Pensacola, FL 32514
DOH Accreditation E71969

Event Description: **Bayou Chico BMAP**
Request ID: **RQ-2016-06-20-10**
Customer: **NW-DIST**
Project ID: **BMAP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 308
Pensacola, FL 32502-5794
Attn: Cheryl Bunch

For additional information please contact
Cheryl Swanson - Administrator
J. Marshall Faircloth - Aquatic Toxicology
Jacqueline Savage - Bench Biology
Jacqueline Savage - Microbiology
Daisys Matthews - Molecular Biology
Cheryl Swanson - Taxonomy (Invertebrate & Algal)
Thekkekalathil Chandrasekhar, PhD, QA Officer
Phone (850) 245-8177

Certified by: Daisys Matthews,

Date Certified: 31-AUG-2016 15:59

A handwritten signature in black ink, appearing to read "D Matthews". The signature is stylized with a large, sweeping initial "D" and a cursive "Matthews".

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 groups are included in this report: Chlorophyll/Grain Size/BOD, Microbiology and Overflow.

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 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: JACKSON CREEK AT OLD CORRY ROAD

Collection Date/Time: 07/18/2016 11:55

Field ID: A

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1816784	SM 10200 H (mod.)	Chlorophyll-a, Corrected	1.3	I	ug/L	P308953	
		Phaeophytin-a	0.55	I	ug/L	P308953	
		Chlorophyll/Phaeophytin Ratio	1.5			P308953	
		Chlorophyll-a, Uncorrected	1.5	A	ug/L	P308953	
1816817	EPA 1600 (MF)	Enterococci-Membrane Filter	1300	B	cfu/100 mL		
	SM 9222 D	Fecal Coliforms-Membrane Filter	2500		cfu/100 mL		
1816827	SOP-PCR01	GULL2-qPCR**	1.4E+04	U	TSC/100 mL	P308207	
		HF183-qPCR**	1.4E+03	U	GEU/100 mL	P308207	

Ref. Method and Comment:

SM 10200 H (mod.): Lab dup result is 1.5 for Chl:Ph Ratio, 1.0 I for Chl-a Corrected and 0.46 I for Phaeophytin-a. Precision data is unavailable due to the small amount of analyte in the QC sample.

SOP-PCR01: No amplification of GULL2 marker.

SOP-PCR01: No amplification of HF183 marker.

Sample Location: BAYOU CHICO AT W STREET

Collection Date/Time: 07/18/2016 14:05

Field ID: B

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1816785	SM 10200 H (mod.)	Chlorophyll-a, Corrected	13		ug/L	P308953	
		Phaeophytin-a	3.0		ug/L	P308953	
		Chlorophyll/Phaeophytin Ratio	1.6			P308953	
		Chlorophyll-a, Uncorrected	15		ug/L	P308953	
1816818	EPA 1600 (MF)	Enterococci-Membrane Filter	76		cfu/100 mL		
	SM 9222 D	Fecal Coliforms-Membrane Filter	580		cfu/100 mL		
1816828	SOP-PCR01	GULL2-qPCR**	1.4E+04	U	TSC/100 mL	P308207	
		HF183-qPCR**	1.4E+03	U	GEU/100 mL	P308207	

Ref. Method and Comment:

SM 10200 H (mod.): Precision data is not available for at least one component due to the small amount of analyte in the QC sample. Refer to QA report for available precision data.

SOP-PCR01: No amplification of GULL2 marker.

SOP-PCR01: No amplification of HF183 marker.

Sample Location: BAYOU CHICO AT NAVY BLVD BRIDGE

Collection Date/Time: 07/18/2016 13:35

Field ID: C

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1816786	SM 10200 H (mod.)	Chlorophyll-a, Corrected	12		ug/L	P308953	
		Phaeophytin-a	0.43	I	ug/L	P308953	
		Chlorophyll/Phaeophytin Ratio	1.7			P308953	
		Chlorophyll-a, Uncorrected	13		ug/L	P308953	
1816819	EPA 1600 (MF)	Enterococci-Membrane Filter	40		cfu/100 mL		
	SM 9222 D	Fecal Coliforms-Membrane Filter	100		cfu/100 mL		
1816829	SOP-PCR01	GULL2-qPCR**	2.1E+04	U	TSC/100 mL	P308207	
		HF183-qPCR**	2.0E+03	U	GEU/100 mL	P308207	

Ref. Method and Comment:

SM 10200 H (mod.): Precision data is not available for at least one component due to the small amount of analyte in the QC sample. Refer to QA report for available precision data.

SOP-PCR01: No amplification of GULL2 marker.

SOP-PCR01: No amplification of HF183 marker.

Sample Location: JONES CREEK AT OLD CORRY ROAD

Collection Date/Time: 07/18/2016 11:30

Field ID: D

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1816787	SM 10200 H (mod.)	Chlorophyll-a, Corrected	9.2		ug/L	P308953	
		Phaeophytin-a	3.3		ug/L	P308953	
		Chlorophyll/Phaeophytin Ratio	1.5			P308953	
		Chlorophyll-a, Uncorrected	12		ug/L	P308953	
1816820	EPA 1600 (MF)	Enterococci-Membrane Filter	118		cfu/100 mL		
	SM 9222 D	Fecal Coliforms-Membrane Filter	280		cfu/100 mL		
1816830	SOP-PCR01	GULL2-qPCR**	1.4E+04	U	TSC/100 mL	P308207	
		HF183-qPCR**	1.4E+03	U	GEU/100 mL	P308207	

Ref. Method and Comment:

SM 10200 H (mod.): Precision data is not available for at least one component due to the small amount of analyte in the QC sample. Refer to QA report for available precision data.

EPA 1600 (MF): Verified

SM 9222 D: Verified

SOP-PCR01: No amplification of GULL2 marker.

SOP-PCR01: No amplification of HF183 marker.

Sample Location: BAYOU CHICO AT MANDALAY PARK

Collection Date/Time: 07/18/2016 10:50

Field ID: E

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1816788	SM 10200 H (mod.)	Chlorophyll-a, Corrected	12		ug/L	P308954	
		Phaeophytin-a	0.57	U	ug/L	P308954	
		Chlorophyll/Phaeophytin Ratio	1.7			P308954	
		Chlorophyll-a, Uncorrected	13		ug/L	P308954	
1816821	EPA 1600 (MF)	Enterococci-Membrane Filter	2	BV	cfu/100 mL		
	SM 9222 D	Fecal Coliforms-Membrane Filter	10	BV	cfu/100 mL		
1816831	SOP-PCR01	GULL2-qPCR**	6.9E+04	U	TSC/100 mL	P308207	
		HF183-qPCR**	1.4E+03	U	GEU/100 mL	P308207	

Ref. Method and Comment:

SM 10200 H (mod.): Precision data is not available for at least one component due to the small amount of analyte in the QC sample. Refer to QA report for available precision data.

EPA 1600 (MF): Analyte detected in method blank = Limit of Detection and > 1/10th the concentration in the sample.

SM 9222 D: Analyte detected in method blank = Limit of Detection and > 1/10th the concentration in the sample.

SOP-PCR01: No amplification of GULL2 marker.

SOP-PCR01: No amplification of HF183 marker.

Sample Location: PENSACOLA BAY AT SANDERS BEACH

Collection Date/Time: 07/18/2016 10:20

Field ID: F

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1816789	SM 10200 H (mod.)	Chlorophyll-a, Corrected	4.5		ug/L	P308954	
		Phaeophytin-a	0.51	I	ug/L	P308954	
		Chlorophyll/Phaeophytin Ratio	1.6			P308954	
		Chlorophyll-a, Uncorrected	5.0		ug/L	P308954	
1816822	SM 9222 D	Fecal Coliforms-Membrane Filter	7	BV	cfu/100 mL		
1816832	SOP-PCR01	GULL2-qPCR**	6.9E+04	U	TSC/100 mL	P308207	
		HF183-qPCR**	1.4E+03	U	GEU/100 mL	P308207	

Field ID: F

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
Ref. Method and Comment: SM 10200 H (mod.): Precision data is not available for at least one component due to the small amount of analyte in the QC sample. Refer to QA report for available precision data. SM 9222 D: Analyte detected in method blank = Limit of Detection and > 1/10th the concentration in the sample. SOP-PCR01: No amplification of GULL2 marker. SOP-PCR01: No amplification of HF183 marker.							

Sample Location: JACKSON CREEK AT NEW WARRINGTON ROAD

Collection Date/Time: 07/18/2016 12:20

Field ID: G

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1816790	SM 10200 H (mod.)	Chlorophyll-a, Corrected	2.2		ug/L	P308954	
		Phaeophytin-a	0.49	I	ug/L	P308954	
		Chlorophyll/Phaeophytin Ratio	1.6			P308954	
		Chlorophyll-a, Uncorrected	2.5		ug/L	P308954	
1816823	EPA 1600 (MF)	Enterococci-Membrane Filter	1300	B	cfu/100 mL		
	SM 9222 D	Fecal Coliforms-Membrane Filter	500	B	cfu/100 mL		
1816833	SOP-PCR01	GULL2-qPCR**	6.9E+04	U	TSC/100 mL	P308207	
		HF183-qPCR**	594	T	GEU/100 mL	P308207	

Ref. Method and Comment:
 SM 10200 H (mod.): Precision data is not available for at least one component due to the small amount of analyte in the QC sample. Refer to QA report for available precision data.
 SOP-PCR01: No amplification of GULL2 marker.

Sample Location: CLEAN EQUIPMENT BLANK

Collection Date/Time: 07/18/2016 10:10

Field ID: FIELD BLANK

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1816791	SM 10200 H (mod.)	Chlorophyll-a, Corrected	0.55	U	ug/L	P308954	
		Phaeophytin-a	0.40	U	ug/L	P308954	
		Chlorophyll/Phaeophytin Ratio	5.5			P308954	
		Chlorophyll-a, Uncorrected	0.40	U	ug/L	P308954	
1816824	EPA 1600 (MF)	Enterococci-Membrane Filter	1	U	cfu/100 mL		
	SM 9222 D	Fecal Coliforms-Membrane Filter	1	U	cfu/100 mL		

Ref. Method and Comment:
 SM 10200 H (mod.): Precision data is not available for at least one component due to the small amount of analyte in the QC sample. Refer to QA report for available precision data.

Quality Assurance Report Method Blank Results

Reference Method: SM 10200 H (mod.)
Batch ID: P308953

Component	Result	Code	Units
Chlorophyll-a, Corrected	0.55	U	ug/L
Chlorophyll-a, Uncorrected	0.40	U	ug/L
Phaeophytin-a	0.40	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: SM 10200 H (mod.)
 Batch ID: P308954

Component	Result	Code	Units
Chlorophyll-a, Corrected	0.55	U	ug/L
Chlorophyll-a, Uncorrected	0.40	U	ug/L
Phaeophytin-a	0.40	U	ug/L

Reference Method: SOP-PCR01
 Batch ID: P308207

Component	Result	Code	Units
GULL2-qPCR	4.2E+04	U	TSC/100 mL
HF183-qPCR	4.1E+03	U	GEU/100 mL

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 10200 H (mod.)
 Batch ID: P308953

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorophyll-a, Corrected	96.4		P	84 - 116

Reference Method: SM 10200 H (mod.)
 Batch ID: P308954

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorophyll-a, Corrected	96.9		P	84 - 116

Reference Method: SOP-PCR01
 Batch ID: P308207

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
GULL2-qPCR	112	97.8	P/P	50 - 300
HF183-qPCR	78.6	68.7	P/P	50 - 175

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SOP-PCR01
 Batch ID: P308207

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1816810	HF183-qPCR	108		P	50 - 175
1816827	GULL2-qPCR	215		P	50 - 300
1816827	HF183-qPCR	97.9		P	50 - 175
1816828	GULL2-qPCR	259		P	50 - 300
1816828	HF183-qPCR	107		P	50 - 175
1816829	GULL2-qPCR	240	242	P/P	50 - 300
1816829	HF183-qPCR	113	127	P/P	50 - 175
1816830	GULL2-qPCR	250		P	50 - 300
1816830	HF183-qPCR	98.8		P	50 - 175
1816831	GULL2-qPCR	164		P	50 - 300
1816831	HF183-qPCR	87.9		P	50 - 175

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SOP-PCR01
Batch ID: P308207

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1816832	GULL2-qPCR	170		P	50 - 300
1816832	HF183-qPCR	122		P	50 - 175
1816833	GULL2-qPCR	193		P	50 - 300
1816833	HF183-qPCR	93.9		P	50 - 175
1817603	HF183-qPCR	58.9		P	50 - 175
1817604	HF183-qPCR	61.7		P	50 - 175
1818486	HF183-qPCR	69.2		P	50 - 175

Quality Assurance Report Precision

Reference Method: SM 10200 H (mod.)
Batch ID: P308953

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1816784	Chlorophyll-a, Uncorrected	18.4	Sample	P	0 - 25

Reference Method: SOP-PCR01
Batch ID: P308207

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1816829	GULL2-qPCR	0.792	Spike	P	0 - 25
1816829	HF183-qPCR	11.6	Spike	P	0 - 25

* 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: 1816827
Field Sample ID: A

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR01	SKETA-qPCR	116	P	50 - 300
SOP-PCR01	SKETA-qPCR	121	P	50 - 300

Lab Sample ID: 1816828
Field Sample ID: B

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR01	SKETA-qPCR	109	P	50 - 300
SOP-PCR01	SKETA-qPCR	120	P	50 - 300

Lab Sample ID: 1816829
Field Sample ID: C

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR01	SKETA-qPCR	129	P	50 - 300

Quality Assurance Report Surrogates

Lab Sample ID: 1816829
Field Sample ID: C

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR01	SKETA-qPCR	132	P	50 - 300
SOP-PCR01	SKETA-qPCR	126	P	50 - 300

Lab Sample ID: 1816830
Field Sample ID: D

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR01	SKETA-qPCR	128	P	50 - 300
SOP-PCR01	SKETA-qPCR	128	P	50 - 300

Lab Sample ID: 1816831
Field Sample ID: E

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR01	SKETA-qPCR	175	P	50 - 300
SOP-PCR01	SKETA-qPCR	137	P	50 - 300

Lab Sample ID: 1816832
Field Sample ID: F

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR01	SKETA-qPCR	169	P	50 - 300
SOP-PCR01	SKETA-qPCR	140	P	50 - 300

Lab Sample ID: 1816833
Field Sample ID: G

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR01	SKETA-qPCR	156	P	50 - 300
SOP-PCR01	SKETA-qPCR	128	P	50 - 300

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
SM 10200 H (mod.)	Chlorophyll-a, Corrected	96.4							
	Chlorophyll-a, Corrected	96.9							
	Chlorophyll-a, Uncorrected							18.4	
SOP-PCR01	GULL2-qPCR	97.8	112	215	259	240			0.792
	HF183-qPCR	68.7	78.6	108	97.9	107			11.6
				242		113			

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 1600 (MF) / E71969	Enterococci by membrane filter method by UWF Overflow Laboratory for NWD	1816817, 1816818, 1816819, 1816820, 1816821, 1816823, 1816824
SM 10200 H (mod.) / E31780	Phytoplankton chlorophyll-a corrected, uncorrected, phaeophytin and ratio by spectrophotometry	1816784, 1816785, 1816786, 1816787, 1816788, 1816789, 1816790, 1816791

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 9222 D / E71969	Fecal coliforms by membrane filter method by UWF Overflow Laboratory for NWD	1816817, 1816818, 1816819, 1816820, 1816821, 1816822, 1816823, 1816824
SOP-PCR01 / E31780	Detection and quantification of coastal bird specific <i>Catellibacillus marimammalius</i> genetic marker with quantitative polymerase chain reaction	1816827, 1816828, 1816829, 1816830, 1816831, 1816832, 1816833
SOP-PCR01 / E31780	Detection and quantification of human-specific HF183 <i>Bacteroides</i> genetic marker with quantitative polymerase chain reaction	1816827, 1816828, 1816829, 1816830, 1816831, 1816832, 1816833

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 1600 (MF)	07/18/2016			07/18/2016 15:46	UWF Lab	1816824
	07/18/2016			07/18/2016 15:48	UWF Lab	1816823
	07/18/2016			07/18/2016 15:55	UWF Lab	1816821
	07/18/2016			07/18/2016 15:59	UWF Lab	1816820
	07/18/2016			07/18/2016 16:02	UWF Lab	1816819
	07/18/2016			07/18/2016 16:06	UWF Lab	1816818
	07/18/2016			07/18/2016 16:09	UWF Lab	1816817
	07/19/2016	07/19/2016 13:30	Amelia G. Rankin	08/01/2016	Kim M. Spencer	1816784, 1816785, 1816786, 1816787, 1816788, 1816789, 1816790, 1816791
SM 9222 D	07/18/2016			07/18/2016 15:50	UWF Lab	1816824
	07/18/2016			07/18/2016 15:55	UWF Lab	1816817
	07/18/2016			07/18/2016 16:00	UWF Lab	1816818
	07/18/2016			07/18/2016 16:05	UWF Lab	1816819
	07/18/2016			07/18/2016 16:10	UWF Lab	1816820
	07/18/2016			07/18/2016 16:15	UWF Lab	1816821
	07/18/2016			07/18/2016 16:20	UWF Lab	1816822
	07/18/2016			07/18/2016 16:30	UWF Lab	1816823
SOP-PCR01	07/19/2016	07/19/2016 12:00	Puja Jasrotia	07/25/2016	Sarah Menz	1816827, 1816828, 1816829, 1816830, 1816831, 1816832, 1816833
	07/19/2016	07/19/2016 12:00	Puja Jasrotia	07/26/2016	Sarah Menz	1816827, 1816828, 1816829, 1816830
	07/19/2016	07/19/2016 12:00	Puja Jasrotia	08/03/2016	Sarah Menz	1816831, 1816832, 1816833