

Biological Analysis Report

NE-DIST-2017-10-19-02

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

Overflow Analyses Performed By:
Advanced Environmental Laboratories - Gainesville
6815 SW Archer Road
Gainesville, Florida 32608
DOH Accreditation E82001

Event Description: **SUW 5- 9/20/17**
Request ID: **RQ-2017-09-18-19**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way W
Suite 100
Jacksonville, FL 32256-7577
Attn: Nicole Frederick

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

Certified by: Cheryl A. Swanson, Program Administrator

Date Certified: 12-APR-2018 15:39



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, Molecular 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: ALLIGATOR CREEK ABOVE STARKE WWTP
ON US 301**

Collection Date/Time: 10/18/2017 09:35

Field ID: G1NE0557 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938827	SM 10200 H (mod.)	Chlorophyll-a, Corrected	0.69	U	ug/L	P334396	
		Phaeophytin-a	0.50	U	ug/L	P334396	
		Chlorophyll-a, Uncorrected	0.50	U	ug/L	P334396	

**Sample Location: ALLIGATOR CREEK ABOVE STARKE WWTP
ON US 301**

Collection Date/Time: 10/18/2017 09:35

Field ID: G1NE0557 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938832	EPA 1603	Escherichia coli-Membrane Filter	140	BQ	cfu/100 mL		

**Sample Location: ALLIGATOR CREEK ABOVE STARKE WWTP
ON US 301**

Collection Date/Time: 10/18/2017 09:35

Field ID: G1NE0557 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938838	SOP-PCR-1.0	HF183-qPCR**	160	T	GEU/100 mL	P333482	
	SOP-PCR-4.0	HF183 - Human Source Marker**	Below Threshold				

Sample Location: MONTEOCHA CREEK CR 340 (NE 156TH AVE)

Collection Date/Time: 10/18/2017 10:00

Field ID: G1NE0591 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938828	SM 10200 H (mod.)	Chlorophyll-a, Corrected	0.55	U	ug/L	P334396	
		Phaeophytin-a	0.40	U	ug/L	P334396	
		Chlorophyll-a, Uncorrected	0.40	U	ug/L	P334396	

Sample Location: MONTEOCHA CREEK CR 340 (NE 156TH AVE)

Collection Date/Time: 10/18/2017 10:00

Field ID: G1NE0591 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938833	EPA 1603	Escherichia coli-Membrane Filter	30	BQ	cfu/100 mL		

Sample Location: MONTEOCHA CREEK CR 340 (NE 156TH AVE)

Collection Date/Time: 10/18/2017 10:00

Field ID: G1NE0591 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938839	SOP-PCR-1.0	HF183-qPCR**	29	T	GEU/100 mL	P333482	
	SOP-PCR-4.0	HF183 - Human Source Marker**	Below Threshold				

Sample Location: TURKEY CREEK @ NW 59TH

Collection Date/Time: 10/18/2017 11:10

Field ID: G1NE0018 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938829	SM 10200 H (mod.)	Chlorophyll-a, Corrected	0.55	U	ug/L	P334396	
		Phaeophytin-a	0.40	U	ug/L	P334396	

Field ID: G1NE0018 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938829	SM 10200 H (mod.)	Chlorophyll-a, Uncorrected	0.40	U	ug/L	P334396	

Sample Location: TURKEY CREEK @ NW 59TH

Collection Date/Time: 10/18/2017 11:10

Field ID: G1NE0018 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938834	EPA 1603	Escherichia coli-Membrane Filter	3100		cfu/100 mL		

Sample Location: TURKEY CREEK @ NW 59TH

Collection Date/Time: 10/18/2017 11:10

Field ID: G1NE0018 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938840	SOP-PCR-1.0	HF183-qPCR**	38	T	GEU/100 mL	P333715	
	SOP-PCR-4.0	HF183 - Human Source Marker**	Above Threshold				

Sample Location: HAGUE BRANCH TRIB @ US 441 80M W 77TH TERRACE

Collection Date/Time: 10/18/2017 10:40

Field ID: G1NE0631 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938830	SM 10200 H (mod.)	Chlorophyll-a, Corrected	0.58	I	ug/L	P334396	
		Phaeophytin-a	0.40	U	ug/L	P334396	
		Chlorophyll-a, Uncorrected	0.56	I	ug/L	P334396	

Sample Location: HAGUE BRANCH TRIB @ US 441 80M W 77TH TERRACE

Collection Date/Time: 10/18/2017 10:40

Field ID: G1NE0631 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938835	EPA 1603	Escherichia coli-Membrane Filter	460	A	cfu/100 mL		

Sample Location: HAGUE BRANCH TRIB @ US 441 80M W 77TH TERRACE

Collection Date/Time: 10/18/2017 10:40

Field ID: G1NE0631 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938841	SOP-PCR-1.0	HF183-qPCR**	140	U	GEU/100 mL	P333715	
	SOP-PCR-1.2	GULL2-purified-qPCR**	1.4E+03	UJ	TSC/100 mL	P334951	LCS, SUR
	SOP-PCR-1.3	GFD-purified-qPCR**	60	T	TSC/100 mL	P334951	LCS, MS
	SOP-PCR-1.4	BacR-qPCR**	1.5E+03	U	TSC/100 mL	P333715	
	SOP-PCR-4.0	HF183 - Human Source Marker**	Above Threshold				

Ref. Method and Comment:

SOP-PCR-1.0: No amplification of HF183 marker.

SOP-PCR-1.2: No amplification of PURG2 marker. Quality control failure(s) observed. See QA report for details. Precision data unavailable.

SOP-PCR-1.4: No amplification of BACR marker. Precision data unavailable.

Sample Location: LAKE ALICE OUTLET @ GALE LEMMERON RD Collection Date/Time: 10/18/2017 13:10

Field ID: G1NE0206 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938831	SM 10200 H (mod.)	Chlorophyll-a, Corrected	13		ug/L	P334396	
		Phaeophytin-a	2.4		ug/L	P334396	
		Chlorophyll-a, Uncorrected	14		ug/L	P334396	

Sample Location: LAKE ALICE OUTLET @ GALE LEMMERON RD Collection Date/Time: 10/18/2017 13:10

Field ID: G1NE0206 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938836	EPA 1603	Escherichia coli-Membrane Filter	90	B	cfu/100 mL		

Sample Location: LAKE ALICE OUTLET @ GALE LEMMERON RD Collection Date/Time: 10/18/2017 13:10

Field ID: G1NE0206 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938842	SOP-PCR-1.0	HF183-qPCR**	140	U	GEU/100 mL	P333715	
	SOP-PCR-4.0	HF183 - Human Source Marker**	Below Threshold				

Ref. Method and Comment:
 SOP-PCR-1.0: No amplification of HF183 marker.

Sample Location: HOGTOWN CREEK @ SW 20TH AVE

Collection Date/Time: 10/18/2017 12:30

Field ID: GINE0027 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938837	EPA 1603	Escherichia coli-Membrane Filter	1600	B	cfu/100 mL		

Sample Location: HOGTOWN CREEK @ SW 20TH AVE

Collection Date/Time: 10/18/2017 12:30

Field ID: GINE0027 10182017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1938843	SOP-PCR-1.0	HF183-qPCR**	38	T	GEU/100 mL	P333715	
	SOP-PCR-4.0	HF183 - Human Source Marker**	Above Threshold				

Quality Assurance Report Method Blank Results

Reference Method: SM 10200 H (mod.)
 Batch ID: P334396

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-PCR-1.0
 Batch ID: P333482

Component	Result	Code	Units
HF183-qPCR	280	U	GEU/100 mL

Quality Assurance Report Method Blank Results

Reference Method: SOP-PCR-1.0
Batch ID: P333715

Component	Result	Code	Units
HF183-qPCR	280	U	GEU/100 mL
HF183-qPCR	280	U	GEU/100 mL

Reference Method: SOP-PCR-1.2
Batch ID: P334951

Component	Result	Code	Units
GULL2-purified-qPCR	2.8E+03	U	TSC/100 mL

Reference Method: SOP-PCR-1.3
Batch ID: P334951

Component	Result	Code	Units
GFD-purified-qPCR	340	U	TSC/100 mL

Reference Method: SOP-PCR-1.4
Batch ID: P333715

Component	Result	Code	Units
BacR-qPCR	3.0E+03	U	TSC/100 mL

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 10200 H (mod.)
Batch ID: P334396

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorophyll-a, Corrected	102		P	84 - 116

Reference Method: SOP-PCR-1.0
Batch ID: P333482

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
HF183-qPCR	116	131	P/P	50 - 175

Reference Method: SOP-PCR-1.0
Batch ID: P333715

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
HF183-qPCR	117	105	P/P	50 - 175
HF183-qPCR	88.9	90.4	P/P	50 - 175

Reference Method: SOP-PCR-1.2
Batch ID: P334951

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
GULL2-purified-qPCR	97.7	7.65	P/F	50 - 300

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SOP-PCR-1.3
Batch ID: P334951

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
GFD-purified-qPCR	149	26.7	P/F	50 - 175

Reference Method: SOP-PCR-1.4
Batch ID: P333715

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
BacR-qPCR	113	129	P/P	50 - 175

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SOP-PCR-1.0
Batch ID: P333482

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932386	HF183-qPCR	113		P	50 - 175
1937040	HF183-qPCR	91.5		P	50 - 175
1937041	HF183-qPCR	100		P	50 - 175
1937042	HF183-qPCR	107		P	50 - 175
1937043	HF183-qPCR	114	91.2	P/P	50 - 175
1937053	HF183-qPCR	102		P	50 - 175
1937847	HF183-qPCR	94.6		P	50 - 175
1938090	HF183-qPCR	96.2		P	50 - 175
1938091	HF183-qPCR	104		P	50 - 175
1938788	HF183-qPCR	74.9		P	50 - 175
1938789	HF183-qPCR	106		P	50 - 175
1938838	HF183-qPCR	87.3		P	50 - 175
1938839	HF183-qPCR	86.9		P	50 - 175

Reference Method: SOP-PCR-1.0
Batch ID: P333715

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1938840	HF183-qPCR	83.1		P	50 - 175
1938841	HF183-qPCR	92.8		P	50 - 175
1938842	HF183-qPCR	102	80.5	P/P	50 - 175
1938843	HF183-qPCR	80.7		P	50 - 175
1938972	HF183-qPCR	81.0		P	50 - 175
1938973	HF183-qPCR	93.2		P	50 - 175
1938974	HF183-qPCR	81.2		P	50 - 175
1939007	HF183-qPCR	62.1		P	50 - 175
1939008	HF183-qPCR	99.6		P	50 - 175
1939009	HF183-qPCR	82.6		P	50 - 175
1939010	HF183-qPCR	82.9		P	50 - 175
1939200	HF183-qPCR	70.9		P	50 - 175
1939201	HF183-qPCR	71.3		P	50 - 175

Reference Method: SOP-PCR-1.2
Batch ID: P334951

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

Reference Method: SOP-PCR-1.2

Batch ID: P334951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1938841	GULL2-purified-qPCR	80.5		P	50 - 300
1939201	GULL2-purified-qPCR	75.7		P	50 - 300

Reference Method: SOP-PCR-1.3

Batch ID: P334951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1938091	GFD-purified-qPCR	82.1		P	50 - 175
1938841	GFD-purified-qPCR	66.4		P	50 - 175
1938972	GFD-purified-qPCR	46.4		F	50 - 175
1939201	GFD-purified-qPCR	48.6		F	50 - 175
1944329	GFD-purified-qPCR	21.6		F	50 - 175
1944330	GFD-purified-qPCR	18.3		F	50 - 175
1944815	GFD-purified-qPCR	53.7		P	50 - 175
1945751	GFD-purified-qPCR	57.8		P	50 - 175
1946394	GFD-purified-qPCR	122	27.6	P/F	50 - 175
1946395	GFD-purified-qPCR	9.14		F	50 - 175
1946396	GFD-purified-qPCR	57.8		P	50 - 175
1946397	GFD-purified-qPCR	21.8		F	50 - 175
1946398	GFD-purified-qPCR	15.2		F	50 - 175
1946905	GFD-purified-qPCR	58.0		P	50 - 175
1946907	GFD-purified-qPCR	30.1		F	50 - 175
1946908	GFD-purified-qPCR	27.0		F	50 - 175

Reference Method: SOP-PCR-1.4

Batch ID: P333715

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1938841	BacR-qPCR	54.2		P	50 - 175
1938972	BacR-qPCR	58.3		P	50 - 175

Quality Assurance Report Precision

Reference Method: SM 10200 H (mod.)

Batch ID: P334396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1938905	Chlorophyll-a, Corrected	3.12	Sample	P	0 - 25
1938905	Chlorophyll-a, Uncorrected	3.26	Sample	P	0 - 25
1938905	Phaeophytin-a	3.48	Sample	P	0 - 25

Reference Method: SOP-PCR-1.0

Batch ID: P333482

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1937043	HF183-qPCR	22.5	Spike	P	0 - 25

Quality Assurance Report Precision

Reference Method: SOP-PCR-1.0
Batch ID: P333715

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1938842	HF183-qPCR	23.2	Spike	P	0 - 25
1943571	HF183-qPCR	5.40	Spike	P	0 - 25

Reference Method: SOP-PCR-1.3
Batch ID: P334951

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1946394	GFD-purified-qPCR	13.5	Sample	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: 1938838
Field Sample ID: G1NE0557 10182017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR-1.0	SKETA-qPCR	79.9	P	50 - 300

Lab Sample ID: 1938839
Field Sample ID: G1NE0591 10182017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR-1.0	SKETA-qPCR	77.6	P	50 - 300

Lab Sample ID: 1938840
Field Sample ID: G1NE0018 10182017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR-1.0	SKETA-qPCR	81.6	P	50 - 300

Lab Sample ID: 1938841
Field Sample ID: G1NE0631 10182017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR-1.0	SKETA-qPCR	94.8	P	50 - 300
SOP-PCR-1.2	SKETA-qPCR	0.904	F	30 - 300
SOP-PCR-1.4	SKETA-qPCR	79.6	P	50 - 300

Lab Sample ID: 1938842
Field Sample ID: G1NE0206 10182017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR-1.0	SKETA-qPCR	87.5	P	50 - 300

Quality Assurance Report Surrogates

Lab Sample ID: 1938843
 Field Sample ID: GINE0027 10182017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
SOP-PCR-1.0	SKETA-qPCR	94.2	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	102							3.12	
	Chlorophyll-a, Uncorrected								3.26	
	Phaeophytin-a								3.48	
SOP-PCR-1.0	HF183-qPCR	131	116		91.5	100	107			22.5
	HF183-qPCR	117	90.4	88.9	83.1	92.8	102			23.2 5.40
SOP-PCR-1.2	GULL2-purified-qPCR	7.65	97.7		80.5	75.7				
SOP-PCR-1.3	GFD-purified-qPCR	26.7	149		21.6	18.3	53.7		13.5	
SOP-PCR-1.4	BacR-qPCR	129	113		54.2	58.3				

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 1603 / E82001	Escherichia coli by membrane filter method using modified mTEC by Advanced Environmental Gainesville Overflow Laboratories for NED	1938832, 1938833, 1938834, 1938835, 1938836, 1938837
SM 10200 H (mod.) / E31780	Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry	1938827, 1938828, 1938829, 1938830, 1938831
SOP-PCR-1.0 / E31780	Detection and quantification of human-specific HF183 Bacteroides genetic marker with quantitative polymerase chain reaction	1938838, 1938839, 1938840, 1938841, 1938842, 1938843
SOP-PCR-1.2 / E31780	Detection and quantification of coastal bird specific Catellicoccus marimammalium Gull2 genetic marker with quantitative polymerase chain reaction	1938841
SOP-PCR-1.3 / E31780	Detection and quantification of bird specific Helicobacter GFD genetic marker with quantitative polymerase chain reaction	1938841
SOP-PCR-1.4 / E31780	Detection and quantification of Ruminant specific Bacteroidetes BacR genetic marker with quantitative polymerase chain reaction	1938841
SOP-PCR-4.0 / E31780	Preparation of Samples by Filtration and held for qPCR Analysis	1938838, 1938839, 1938840, 1938841, 1938842, 1938843

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 1603	10/18/2017	10/18/2017 18:30		10/19/2017 19:40	AEL - Gainesville	1938832, 1938833, 1938834, 1938835, 1938836, 1938837
SM 10200 H (mod.)	10/19/2017	10/19/2017 14:25	Herbert Johnson	10/31/2017 07:20	Kim M. Spencer	1938827, 1938828, 1938829, 1938830, 1938831
SOP-PCR-1.0	10/19/2017	10/19/2017 15:30	Sarah Menz	10/23/2017 13:31	Sarah Menz	1938838, 1938839
	10/19/2017	10/19/2017 15:30	Sarah Menz	11/03/2017 13:13	Sarah Menz	1938841
	10/19/2017	10/20/2017 08:30	Sarah Menz	11/03/2017 13:13	Sarah Menz	1938840, 1938842, 1938843
SOP-PCR-1.2	10/19/2017	10/19/2017 15:30	Sarah Menz	11/29/2017 11:13	Sarah Menz	1938841
SOP-PCR-1.3	10/19/2017	10/19/2017 15:30	Sarah Menz	11/22/2017 13:08	Sarah Menz	1938841
SOP-PCR-1.4	10/19/2017	10/19/2017 15:30	Sarah Menz	11/20/2017 09:50	Sarah Menz	1938841
SOP-PCR-4.0	10/19/2017	10/19/2017 15:30	Sarah Menz	11/14/2017 12:09	Puja Jasrotia	1938838, 1938839, 1938841
	10/19/2017	10/20/2017 08:30	Sarah Menz	11/14/2017 12:09	Puja Jasrotia	1938840, 1938842, 1938843