



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

WIN Station Name: Black Creek upstream of CR158

Date: 42/31/2018 1-31-18
(mm/dd/yyyy) CM

WIN/ Field ID: G1WA0072

WBID: 628

Latitude: 30.472981

(Decimal Degrees)

County: Leon

ORG ID: 21FLWQA

Longitude: -84.057057

(Decimal Degrees)

Receiving Body of Water: Wacissa Springs

RQ-2018- 01-29-33

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
Curtis Musson						X	X	X	X	☒ Sample Container	☐ Van Dorn	☐ Pole		
Will Lasley					X	X	X	X	X	☐ Carboy	☒ Syringe			
										☐ Dipper	☐ Other			
										Depth Measured with <u>meter stick</u>				
										Equipment ID				
										Collection Method				
										☒ Wading	☐ Canoe/Kayak			
										☐ From Shore	☐ Electric Motor			
										☐ Other	☐ Gasoline Motor			
Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded					Meter ID# <u>Bio #2</u>					Matrix: <u>Fresh</u> / Marine / DI				
Photos: Yes / <u>No</u> / Flow: No Flow / Intestinal / <u>Flowing</u> / NA					Tide: Rising/ Falling/ Slack/ <u>NA</u>					Tide Times: High NA Low NA				
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTH)	Sp COND (µmhos/cm)	Temp. (C°)				
<u>EST</u>	<u>1210</u>	<u>0.4</u>	<u>0.2</u>	<u>VOB</u>	<u>9.57</u>	<u>83.3</u>	<u>6.69</u>	<u>0.03</u>	<u>64</u>	<u>9.28</u>				
CEN														
Biological Samples Collected: <u>None</u> HA SCI RPS Algae ID LVS LVI Other:														
SBIO ID Numbers: SBIO-ID: <u>78223</u> HA-ID: <u>15020</u> RPS-ID: <u>8909</u> Macrophyte-ID: <u>C2m2</u> LIMS#: <u>1963363</u>														
Parameter Suite		Parameter Methods				Preservation		Lot#	Expiration	pH Check				
Preserved Nutrients		☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☐ H2SO4		<u>7275010</u>	<u>10/4/18</u>	<u><2</u>				
Metals		☒ W-ICPMS ☒ W-ICP				☒ Ice ☒ HNO3		<u>7261120</u>	<u>9-18-18</u>	<u><2</u>				
Filtered Nutrients		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice								
Chlorophyll		☒ CHLSUITE-W				☒ Ice								
Physical/Aggregate (Fresh)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice								
Physical/Aggregate (Marine)		☐ Alkalinity / W-F / W-TSS / TURBIDITY				☐ Ice								
Macroinvertebrates		☐ MI-FW-QLDC				☐ Formalin								
Periphyton		☐ ALGAE-ID				☒ Ice								
Microbiology		☒ E Coli ☐ F Coli ☐ Enterococci				☒ Ice								
Molecular		☒ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD				☒ Ice								
Tracers		☒ W-SUC-AA-R ☒ W-UHERB-AA ☒ W-AHERB-AA				☒ Ice								
Pesticides		☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA				☐ Ice								
		☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R				☐ Other								

Notes:
Kit C
RPS/LVS
E.coli
Tracers
PCR-Filter

STORET FILED/WIN ID →

Black Creek
upstream of CR158



G1WA0072

Signature: Curtis Musson

Date: 1-31-18

Enter Field Parameters, Verify Station ID in LIMS DMT: 2/20/18

QC Station ID, Field Parameters in LIMS DMT: CM 4/10/18

Scan/Save Field Sheets 2/4/18

Migrate Data to WIN: 2/4/18

Verify Data in WIN: 2/4/18

(Initials/Date)

(Initials/Date)

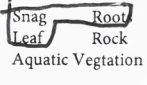
(Initials/Date)

SBIO: 79223

HA: 15020

DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

SAMPLING AGENCY: Florida Department of Environmental Protection		STORET STATION NUMBER: <u>GLW0072</u>	DATE (MM/DD/YY): <u>1/31/18</u>	RECEIVING BODY OF WATER: <u>Wassuck Springs</u>
REMARKS:	COUNTY: <u>Leon</u>	LOCATION: <u>Black Creek upstream of CR 158</u>		FIELD ID/NAME:

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components  Substrate Diversity <u>12</u>	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 <u>12</u> 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 5 4 3 2 1
Substrate Availability <u>8</u> <u>11</u> %	Major productive habitat present at site (>30% 27.2% 25.8% 24.4% 26.6%) 20 19 18 17 16	Major productive habitat, by aerial extent (21.6% 20.2% 18.8% 17.4% 16%) 15 14 13 12 11	6% to 15% major productive habitat (15% 13% 11% 9% 6%) 10 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>17</u> <u>0.27</u> m/s	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 20 19 18 <u>17</u> 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering <u>19</u> ----- Primary Score <u>56</u>	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 <u>19</u> 18 17 16	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae. 15 14 13 12 11	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth). 10 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components Artificial Channelization <u>20</u>	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. <u>20</u> 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. 10 9 8 7 6	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. 5 4 3 2 1
Bank Stability Right Bank <u>10</u> <u>10</u> Left Bank If Banks are PipeClay, BedRock or Concrete at Bank full: Optimal	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the root zone with few raw, eroded areas. (+,+,+) 10 9	Only meets 2 of the 3 requirements for optimal bank stability. (+,-,-) 8 7 6	Only meets 1 of the 3 requirements for optimal bank stability. (+,-,-) 5 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas. (-,-,-) 3 2 1
Riparian Buffer Zone Width Right Bank <u>5</u> Left Bank <u>10</u>	Width of vegetation greater than 18 m 10 9	Width of vegetation >12 to 18m 8 7 6 (18m 15m 12m)	Width of vegetation 6 to 12 m. human activities close to system 5 4 (9m)	Less than 6 m of buffer zone due to intensive human activities 3 2 1 (6-5m) (4-3m) (<2m)
Riparian Zone Vegetation Quality Right Bank <u>10</u> <u>10</u> Left Bank ----- Secondary Score <u>75</u>	Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance. 10 9	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. 8 7 6	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious. 5 4	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 1

TOTAL SCORE

131

Date: <u>1/31/18</u>	Analyst: <u>CORTIS MULLIN</u>	Signature: <u>Cortis Mullin</u>
----------------------	-------------------------------	---------------------------------

Entered by: Blake 2/20/18QC, CM 4-10-2018

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet

Left Bank

Upstream

Right Bank

100

100

S 1 L 8

R 4 M

P

90

90

S 3 L 6

R 3 M

P 1

80

80

S 2 L 12

R 2 M

P

70

70

S 2 L 23

R 13 M

P

60

60

S L 5

R 5 M

P 3

50

50

S L 11

R 12 M

P

40

40

S 1 L

R 4 M

P 1

30

30

S 5 L 5

R 17 M

P

20

20

S 3 L 10

R 5 M

P

10

10

S 1 L 2

R 13 M

P 1

0

0

 Location: Black Creek

 Date: 1-31-18

Sampler:

100 m: Latitude

Longitude

0 m: Latitude

Longitude

Substrates: Code key, draw proportionate habitat abundance. %

S Snags 1% 3%

R Roots/undercut banks 4% 11%

L Leaf Packs (or mats) 6% 17%

M Aquatic Macrophytes -

Rc Rock -

Total 11%

P Pools total # observed = 3 # range expected = 3-6

Average width 2.7 m

Average depth 0.4 m

Velocity measured at 10 meter mark.

Velocity 0.35 m/s 0.27 m/s

WQ & chemistry taken at 0 meter mark.

 Habitat Smothering:
Note areas (on map) where sand or silt is smothering substrates, limiting habitability.

 Bank Stability:
Note areas (on map) with unstable, eroding banks.

 Riparian Buffer Width:
Note areas (on map) where natural vegetation is altered or eliminated.

Notes/Plants Observed:

 2m² = 16 Sweeps

÷ 6.67

# of Sweeps	Conversion	m ²	%
Snag 18	÷ 8	2.7 m ²	
Root 14	÷ 8	1.3 m ²	
Leaf 112	÷ 8	16.8 m ²	
Macrophyte	÷ 8	m ²	
Rock	÷ 8	m ²	
Total Available Habitat		30 m ²	
Total Area		m ²	
Total Unavailable Habitat		m ²	

Meter Mark	Depth (m)	Width (m)	Velocity Measurement (Sec)
			0.38
			0.38
			0.30
Avg.			

Length of grid represents 100 m of stream (not linear meters). (Horizontal scale is double vertical scale, draw proportionately).

$$\text{Expected Number of Pools} = \left(\frac{100}{12 \times W} \right) + 1 = 3$$

$$\left(\frac{100}{12 \times W} \right) + 2 = 6$$

SBIO: 78223 RPS: 8908

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Black Creek upstream of CRISB County: Leon Date: 1/31/2018 Investigators: Curtis Mussen

STORET Station Number: 6140072

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	
0	1	N	N		60	1	N	N		
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
10	1				70	1				
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
20	1				80	1				
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
30	1				90	1				
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
40	1				100	1				
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
50	1					1				
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8	X	X			8	X	X		
	9					9				

Secchi depth 100B
Estimated? NO

points ranked 4-6 0
total points assessed 99
% points ranked 4-6 0%

Check accompanying data collected at same site/date.

Algal mat sample NO
Linear Veg Survey Yes
Habitat Assessment Yes
SCI/Biorecon NO
Water sample Yes

RO 2018-01-29-01

Algal Thickness Rank

N	rough, no algae, slimy, algae up to 1mm
3	>1mm - 6mm
4	>6mm - 20mm
5	>20mm - 10 cm
6	>10 cm



Record "N" and check "Estimated" for points deeper than the Secchi depth; algae are presumed absent. Check "Estimated" if thickness estimated for deep points which can be seen but not reached.

Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank.

Record canopy cover as the number of small densiometer quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6.

Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.

Entered by: Brian Br 2/20/18

QC, CM: 4/10/2018

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly "X" this box if there is qualified data on this page.

Meter ID: Bio #2

RQ: 2018-01-29-33

Project: Smp

Notes: (1) Always wait for meter to stabilize before recording any readings.

(2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).

(3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site _____

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification _____

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Curtis Mussen	1/31/18	714	19.15	9.239	9.25	100.0	46	-	P/F	L/F
ICV	Curtis Mussen	1/31/18	715	19.15	9.239	9.25	100.0	46	-	P/F	L/F
CCV	Curtis Mussen	1-31-18	1351	19.5	9.25	9.25	100.7	46	-	P/F	L/F
CCV					9.154					P/F	L/F

DO Acceptance criteria from Table ± 0.3 mg/L.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Curtis Mussen	1/31/18	717	171005D	10/2018	1000	1000	P/F	L/F
ICV	Curtis Mussen	1/31/18	717	171005D	10/2018	1000	1001	P/F	L/F
CCV	Curtis Mussen	1-31-18	1353	171005E	10/2018	100	101	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Curtis Mussen	1-31-18	720	170614B	12/2018	7.0	7.00	19	P/F	L/F
Calibr.	Curtis Mussen	1-31-18	721	170615A	10/2018	4.01	4.01	185	P/F	L/F
Calibr.	Curtis Mussen	1-31-18	723	171005C	4/2019	10.01	9.98	-140	P/F	L/F
ICV	Curtis Mussen	1-31-18	725	171005A	10/2018	4.01	4.01	184	P/F	L/F
CCV	Curtis Mussen	1-31-18	1354	171005C	4/2019	10.01	10.00	-144	P/F	L/F
CCV									P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 $\pm$ 50;

mV pH 4 Range +180 $\pm$ 50;

mV pH 10 Range -180 $\pm$ 50;

If mV are recorded: slope from 7 to 10 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth verification _____

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value meters	Pass / Fail	Lab / Field
Pressure mode in air	Curtis Mussen	1-31-18	718	0.00	0.00	P/F	L/F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

Page 1 of 3
last revised Jan 3, 2018

FD

[illegible]

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Customer: WAS-SECT

Requester: Curtis Musson

Field Report Prepared By: Curtis Musson

Project ID: SMP

Collected By: Curtis Musson, Will Lester

Sampling Agency: FDEP

Location	WIN ID/Field ID	☐ Comp	Collection (comp begin or grab)	Time	Eastern Central	Composite end	Time	Bottle Group(s)
Field ID	Little River 100 meters upstream of US 90	☒ Grab	Date 1-31-2018	835				ABCD
WIN/STORET #	grwa0073	Matrix (type, e.g., Salt, Fresh, etc)	Fresh					(See pg 2)
Latitude	☐ dd ☐ dms	Temp (C)	9.70	pH	6.89	Diss. Oxygen	9.47	
Longitude	☐ dd ☐ dms	Salinity (ppt)	0.04	Sample Depth	0.3	% sat (mg/L)		
Location	Meginis Arm Run	☐ Comp	Collection (comp begin or grab)	Time	Eastern Central	Composite end	Time	Bottle Group(s)
Field ID	Downstream of Sharek	☒ Grab	Date 1-31-2018	925				A, C, D
WIN/STORET #	grwa0033	Matrix (type, e.g., Salt, Fresh, etc)	Fresh					
Latitude	☐ dd ☐ dms	Temp (C)	7.44	pH	7.27	Diss. Oxygen	90.7	
Longitude	☐ dd ☐ dms	Salinity (ppt)	0.07	Sample Depth	0.1	% sat (mg/L)		
Location	Harbinwood	☐ Comp	Collection (comp begin or grab)	Time	Eastern Central	Composite end	Time	Bottle Group(s)
Field ID	Estates Drain	☒ Grab	Date 1-31-2018	1000				A, B
WIN/STORET #	grwa0034	Matrix (type, e.g., Salt, Fresh, etc)	Fresh					
Latitude	☐ dd ☐ dms	Temp (C)	9.94	pH	7.65	Diss. Oxygen	87.3	
Longitude	☐ dd ☐ dms	Salinity (ppt)	0.06	Sample Depth	0.1	% sat (mg/L)		
Location	Ward's Creek	☐ Comp	Collection (comp begin or grab)	Time	Eastern Central	Composite end	Time	Bottle Group(s)
Field ID	upstream of bridge at CR 259	☒ Grab	Date 1-31-18	1100				A, B, C, D, E
WIN/STORET #	grwa0002	Matrix (type, e.g., Salt, Fresh, etc)	Fresh					
Latitude	☐ dd ☐ dms	Temp (C)	6.99	pH	5.78	Diss. Oxygen	27.7	
Longitude	☐ dd ☐ dms	Salinity (ppt)	0.02	Sample Depth	0.2	% sat (mg/L)		
Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:			Received By:	Date/Time	
Curtis Musson	1-31-18 / 1331	Drop Off	3			ABP	1-3-18 / 1331	

Group: F	Bottle Type: QPCR-P-250ML	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab
	PCR-HF183			2
Group: G	Bottle Type: QPCR-P-250ML	# of Bottles: 8	Preservative: ICE	Enter Number of Bottles Sent to Lab
	PCR-FILTER			8

Cooler Packing Worksheet for Request: RQ-2018-01-29-33**Black, Wards, Caney, Harbiwood, Little R., Meginis****Ship Cooler On: 1/26/2018****Customer/Project: WAS-SECT/SMP**

Assigned To: SEARSON_C

Requester: Curtis Musson

Priority: 3

850-245-8453

2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:

No preservatives needed.

Group A: Freshwater Kit

Group B: Metals

Group C: E. coli

Group D: Tracers (AHERB Short List)

Group E: PCR_FILTER, HF183

Group F: HF183, BacR

Group G: PCR-filter

Requested Analyses:**Bottle Group: A****# of Sites: 6****Container ID: P-1L****Qty: 6 Preservation: ICE****Lot #** 00069741**Description: Plastic Bottle 1L****Analysis**

ALKALINITY

TURBIDITY

W-CL-IC

W-COLOR

W-F

W-SO4-IC

W-TDS

W-TSS

Description

Alkalinity in aqueous matrices as mg CaCO3/L

Turbidity in aqueous matrices

Chloride in aqueous matrices

True Color measured at 450 nm

Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)

Sulfate in aqueous matrices

Total Dissolved Solids in aqueous matrices

Total Suspended Solids in aqueous matrices

Container ID: BP-1L**Qty: 6 Preservation: ICE****Lot #** 1214297**Description: Brown Plastic Bottle 1L****Analysis**

CHLSUITE-W

Description

Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Container ID: BG-1L

Qty: 6 Preservation: ICE

Lot # 00069911

Description: Brown Glass Bottle 1L

Affix BLUE dot to container.

Analysis

W-AHERB-AA

W-SUC-AA-R

W-UHERB-AA

Description

Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS

Analysis of sucralose in water matrices by HPLC/MS/MS

Urea herbicides and other chemicals in water matrices by HPLC/MS/MS

Bottle Group: E

of Sites: 1

Container ID: QPCR-P-250ML

Qty: 2 Preservation: ICE

Lot # 00069545

Description: 250ml Sterile Nalgene (2)

Analysis

PCR-FILTER

PCR-HF183

Description

Preparation of Samples by Filtration and held for qPCR Analysis

Detection and quantification of human-specific HF183 Bacteroides genetic marker with quantitative polymerase chain reaction

Bottle Group: F

of Sites: 1

Container ID: QPCR-P-250ML

Qty: 2 Preservation: ICE

Lot # 00067460

Description: 250ml Sterile Nalgene (2)

Analysis

PCR-BACR

PCR-HF183

Description

Detection and quantification of Ruminant specific Bacteroidetes BacR genetic marker with quantitative polymerase chain reaction

Detection and quantification of human-specific HF183 Bacteroides genetic marker with quantitative polymerase chain reaction

Bottle Group: G

of Sites: 4

Container ID: QPCR-P-250ML

Qty: 8 Preservation: ICE

Lot # 00069545

Description: 250ml Sterile Nalgene (2)

Analysis

PCR-FILTER

Description

Preparation of Samples by Filtration and held for qPCR Analysis