



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

A-KIT

Data Qualified?
Yes / No

WIN Station Name: G1SW0103 (Horsehole Creek @ 19) Date: 5/8/2018
(mm/dd/yyyy)
WIN/ Field ID: G1SW0103SM G1SW0106 WBID: 3703 Latitude: 29° 8' 2.05" 29° 8' 1.83"
(Decimal Degrees)
County: Levy ORG ID: 21FLTPA Longitude: -82° 38' 10.63" -82° 38' 16.55"
(Decimal Degrees)
Receiving Body of Water: Gulf of Mexico RQ-2018: 04-30-23

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
H. SPANIERE								
M. Bearden								
Ben Paswater								

Sampling Equipment		
☐ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Depth Measured with <u>Secchi</u>		
Equipment ID <u>Secchi #1</u>		
Collection Method		
☒ Wading	☐ Canoe/Kayak	
☐ From Shore	☐ Electric Motor	
☐ Other	☐ Gasoline Motor	

Water Level: Dry / Pooled / <u>Low</u> / Normal / High / Flooded				Meter ID# <u>Leica</u>				Matrix: <u>Fresh</u> Marine / DI			
Photos: <u>Yes</u> / No		Flow: No Flow / <u>Intestinal</u> / <u>Flowing</u> / NA		Tide: Rising / Falling / Slack / <u>NA</u>		Tide Times: High / Low					
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (µmhos/cm)	Temp. (C°)	
EST	0940	0.4	0.2	0.4 ^{ms}	1.39	15.2	6.9	0.16	327	19.9	
CEN											

Biological Samples Collected: None <u>HA</u> SCI <u>RPS</u> Algae ID <u>LVS</u> LVI Other:					
SBIO ID Numbers: SBIO-ID: <u>78672</u> HA-ID: <u>15308</u> RPS-ID: <u>9068</u> Macrophyte-ID: <u>11004</u> LIMS#: <u>1991080</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 ☒ H ₂ SO ₄	<u>SA7341020</u>	<u>12/07/18</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice	<u>9792034</u>		
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	☐ M-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ <u>E. coli</u> ☐ F Cell ☐ 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 ☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Notes: SMP05072018-FB

Ref: Date: 20Apr18 SHIPPING: 0.00
Dep: Wgt: 8.00 LBS SPECIAL: 0.00
DV: 0.00 HANDLING: 0.00
TOTAL: 0.00

Sves: PRIORITY OVERNIGHT
TRACK: 4385 5028 5590

Field ID/WIN: G1SW0103SM
G1SW0106
Site Name: Horsehole Creek @ 19

Signature: H. SPANIERE M. Bearden Date: 5/8/18

Enter Field Parameters/Verify Station ID in LIMS DMT: 6/18/2018 SM QC Station ID, Field Parameters in LIMS DMT: SM 08/01/2018 SM 12/27/18
Scan/Save Field Sheets (Initials/Date) Migrate Data to WIN: 9/01/SM 12/27/2018 Verify Data in WIN: SM 1/15/2019
(Initials/Date) (Initials/Date) (Initials/Date)

Bio Authorized 12/11/18 (MB)

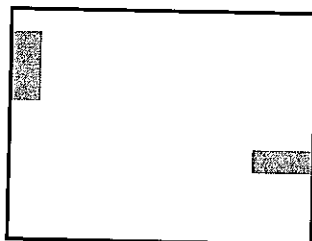
E15W0103

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m² of taxa present). Note in the boxes below if no dominant are selected, and note total macrophyte abundance rank for each section. Only the most common taxa are listed, so use blank spaces for additional taxa names.

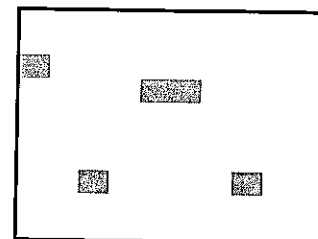
FDEP FORM FD 9000-32 LINEAR VEGETATION SURVEY FIELD SHEET

Percent Cover Categories for macrophytes in a 10 m segment of a stream 5 m wide

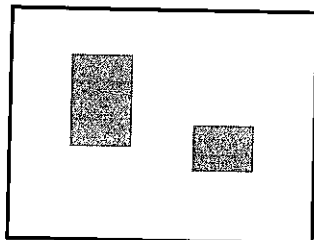
5% Macrophyte Coverage



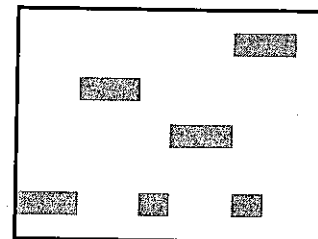
5% Macrophyte Coverage



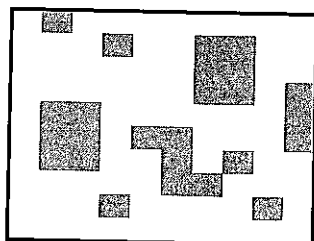
10% Macrophyte Coverage



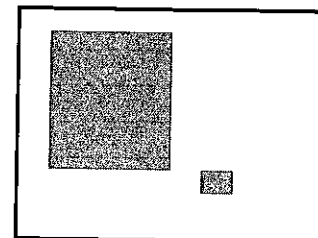
10% Macrophyte Coverage



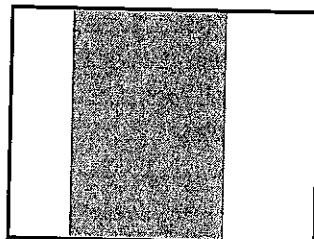
25% Macrophyte Coverage



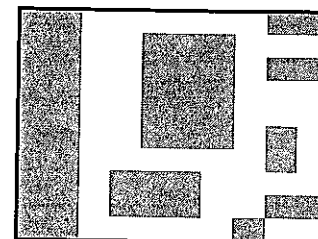
25% Macrophyte Coverage



50% Macrophyte Coverage



50% Macrophyte Coverage



DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

County: Levy Investigators: BP Horsehole Creek

Transect (m) Point 1=right 9=left Algal Thickness Rank (N-6, X) Estimated Canopy Cover

Transect (m)	Point	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1			
	2	N		
	3			
	4			
	5			0
	6			
	7			
	8			
	9			
10	1			
	2			
	3			
	4			
	5			0
	6			
	7			
	8			
	9			
20	1			
	2			
	3			
	4			
	5			0
	6			
	7			
	8			
	9			
30	1			
	2			
	3			
	4			
	5			0
	6			
	7			
	8			
	9			
40	1			
	2			
	3			
	4			
	5			0
	6			
	7			
	8			
	9			
50	1			
	2			
	3			
	4			
	5			0
	6			
	7			
	8			
	9			

STORET Station Number: GISW0103

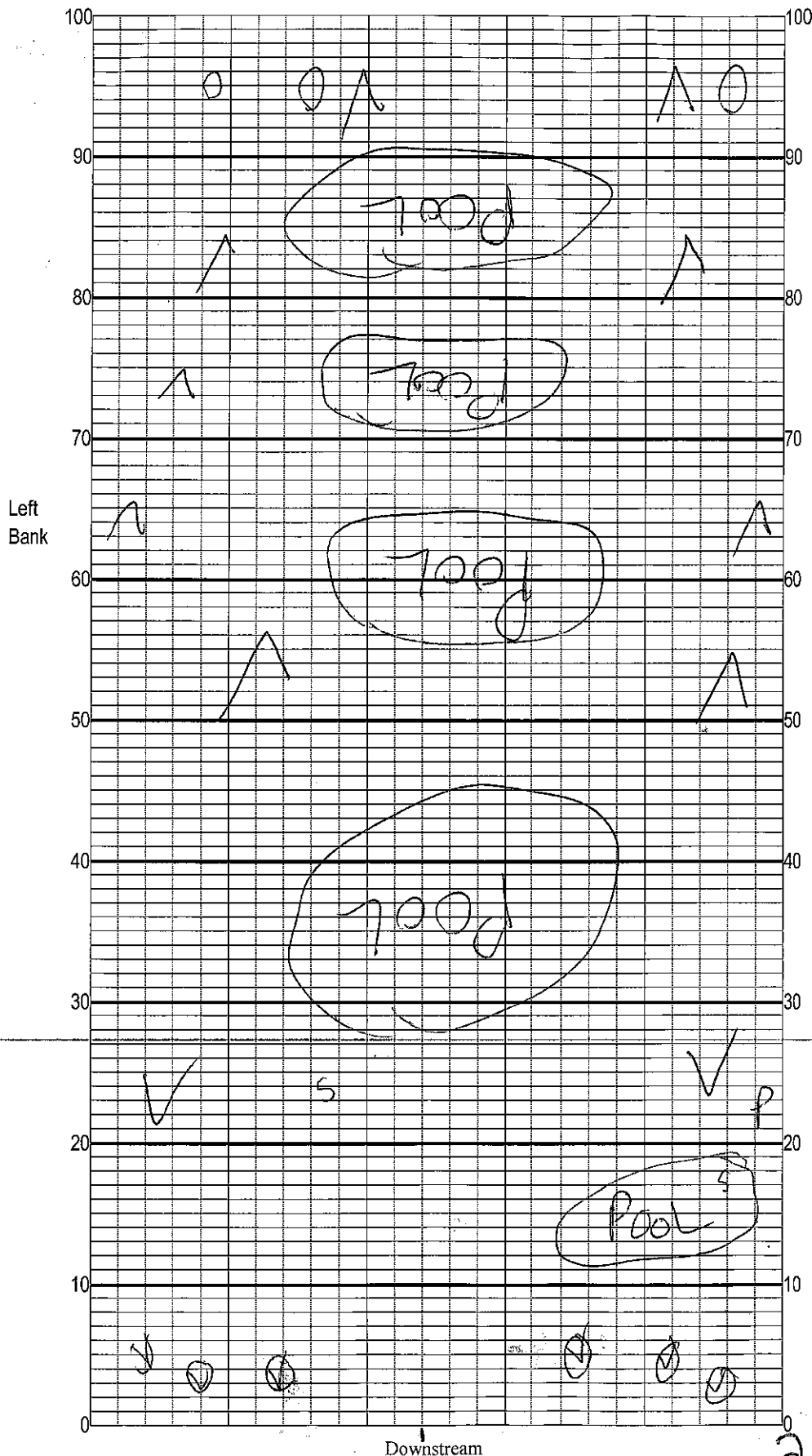
Secchi depth 0.4
Estimated? N
points ranked 4-6 0
total points assessed 90
% points ranked 4-6 0

Check accompanying data collected at same site/date.
Algal mat sample ☐
Linear Veg Survey ☒
Habitat Assessment ☒
SCI/Biorecon ☐
Water sample ☒
RQ- 2018-04-30-27

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

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



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

Location: Horseshole
Date: 5/8/18
Sampler: Ben Paswater

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

☐ Snags few

☐ Roots/undercut banks _____

☐ Leaf Packs (or mats) _____

☒ Aquatic Macrophytes 3.4

☐ Rock few

☐ _____

☐ Pools total # observed = 5
range expected = _____

Average width 2 m

Average depth .5 m

Velocity measured at 0 meter mark.

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.

Plants observed / other notes:

$$V = 85 = 3.4\%$$

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

PUT STICKER UP ^ HERE		STORET STATION NUMBER: see sticker	DATE (MM/DD/YY):	SAMPLING AGENCY: FDEP SW ROC
FIELD ID/NAME: see sticker ^ GISW0103	COUNTY: Lexy	LOCATION: Horsehole West of US 19	RECEIVING BODY OF WATER: Gulf of Mexico	

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered
Substrate Diversity 5	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability 4	Greater than 30% major productive habitat present at site 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 11	6% to 15% major productive habitat 10 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity 6	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 17 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 15 ----- Primary Score 30	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 19 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	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered.	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area.	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks.
Artificial Channelization 11	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability	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.	Only meets 2 of the 3 requirements for optimal bank stability. LR	Only meets 1 of the 3 requirements for optimal bank stability.	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas.
	10 9	8 7 6	5 4	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation >12 to 18m	Width of vegetation 6 to 12 m. human activities close to system	Less than 6 m of buffer zone due to intensive human activities
Right Bank 4 Left Bank 4	10 9	8 7 6	5 4 LR	3 2 1
Riparian Zone Vegetation Quality	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.	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. LR	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).
Right Bank 6 Left Bank 6 ----- Secondary Score 45	10 9	8 7 6	5 4	3 2 1

75 TOTAL SCORE

Date: 5/8/18	Analyst: Ben Pasuate	Signature: Ben Pasuate
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☐	<u>Gainesville:</u> 4965 SW 41st Blvd. • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639
☐	<u>Jacksonville:</u> 6681 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354
☐	<u>Tallahassee:</u> 2639 North Monroe Street, Suite D • Tallahassee, FL 32303 • 850.219.6274 • Fax 850.219.6275
☒	<u>Tampa:</u> 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327

[illegible]

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Customer: SW-DIST

Project ID: SMP

Requester: Matthew Bearden

Collected By:

H. Sprinkle

Field Report Prepared By:

H. Sprinkle

Sampling Agency:

FDEP

Location		☐ Comp ☒ Grab		Collection (comp begin or grab) Date 5/8/18 Time 940		☒ Eastern ☐ Central		Composite end Date Time		Bottle Group(s) (See pg 2)			
Field ID/WIN G1SW0103		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen 4		☒ mg/L ☐ % sat		Total Res. Chlorine (mg/L)		A			
Site Name: Horsehole Creek @ 19		Temp (C) 19.9		pH 6.9		Sample Depth 0.3		☐ ft ☒ m				Sp. Conductance (umho/cm) 327	
☐ dd ☐ dms		Salinity (ppt)		Comments Dropped off E. coli @ AEL									
Location		☐ Comp ☐ Grab		Collection (comp begin or grab) Date Time		☐ Eastern ☐ Central		Composite end Date Time		Bottle Group(s)			
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)					
WIN/STORET #		Temp (C)		pH		Sample Depth		☐ ft ☐ m				Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms		Longitude ☐ dd ☐ dms		Salinity (ppt)		Comments							
Location		☐ Comp ☐ Grab		Collection (comp begin or grab) Date Time		☐ Eastern ☐ Central		Composite end Date Time		Bottle Group(s)			
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)					
WIN/STORET #		Temp (C)		pH		Sample Depth		☐ ft ☐ m				Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms		Longitude ☐ dd ☐ dms		Salinity (ppt)		Comments							
Location		☐ Comp ☐ Grab		Collection (comp begin or grab) Date Time		☐ Eastern ☐ Central		Composite end Date Time		Bottle Group(s)			
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)					
WIN/STORET #		Temp (C)		pH		Sample Depth		☐ ft ☐ m				Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms		Longitude ☐ dd ☐ dms		Salinity (ppt)		Comments							
Location		☐ Comp ☐ Grab		Collection (comp begin or grab) Date Time		☐ Eastern ☐ Central		Composite end Date Time		Bottle Group(s)			
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)					
WIN/STORET #		Temp (C)		pH		Sample Depth		☐ ft ☐ m				Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms		Longitude ☐ dd ☐ dms		Salinity (ppt)		Comments							

Relinquished By: H. Sprinkle	Date/Time 5/8/18 4pm	Shipping Method Fedex	Number of Coolers Shipped: 1	Received By:	Date/Time
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