Field ID: G1NE0829 04112017

F ENVIRONMENTAL PROTECTION RING PROGRAM FIELD SHEET

January 2017

PAGE 1 OF 1

Data Qualified? Yes / No

Wacassassa R @ SR 24

STORET 21030006 21020006

Date: 4 - 11 - 2017 (mm/dd/yyyy)

WBID: 3699 Latitude: 29.3544 (Decimal Degrees)

County: Levy RQ - 2017-04-03-17 ORG ID: 21 FLA Longitude: 82.7347 (Decimal Degrees)

Receiving Body of Water: Gulf of Mexico Field ID:

Filled out wrong field sheet

AK→

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Parrish		X			
A. Kalmbacher	X		X	X	X

Sampling Equipment

- [X] Sample Container
- [ ] Carboy
- [ ] Dipper
- [ ] Van Dorn
- [ ] Syringe
- [ ] Other
- [X] Pole

Equipment ID Ortho Kit #

Collection Method

- [ ] Wading
- [X] From Shore
- [ ] Other (note below)

Via Boat
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [ ] Gasoline Motor

Water Level: Dry / Pooled / Low / Normal / High → Flooded

Matrix: (Fresh) / Marine / DI

Meter ID# YSI 3 Photos: Yes / No

Tide Falling: Yes / No / (NA)

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
~~EST~~ DST	~~0930~~	~~0.3~~	~~.74~~	~~6.18~~	~~67~~	~~7.20~~	~~0.06~~	~~0.6~~	~~120~~	~~18.9~~
CEN	1155	0.3	1.4	8.65	92	7.82	0.12	1.49	256	18.1

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other

SBIO ID Numbers: SBIO-ID: RPS-ID: Macrophyte-ID: LIMS#:

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	[X] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	[X] Ice [X] H_2SO_4			[X] <2
Metals	[ ] W-ICPMS [ ] W-ICP	[ ] Ice [ ] HNO_3			[ ] <2
Filtered Nutrients	[X] W-PO4-F [X] Field Filtered 0.45 µm Filter	[X] Ice			
Chlorophyll	[X] CHLSUITE-W	[ ] Ice			
Physical/Aggregate (Fresh)	[X] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	[X] 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 [ ] Entero [ ] PCR-FILTER	[ ] Ice			
Tracers	[ ] W-LCMS-DIJ [ ] W-UHERB-AA	[ ] Ice			
Pesticides	[ ] W-PSNP-TQ [ ] W-AHERB-AA [ ] W-PYR-AA-R [ ] W-PCL-SQ-R [ ] W-UHERB-AA [ ] W-GLYPH	[ ] Ice [ ] Other			

Contains 1:1 Sulfuric Acid SA-6302030 EXP: 10/28/17 Warning! See SDS

...tive Sticker(s) Here (If Available)

Notes:

Place Label Here (If Available)

Signature: A. Kalmbacher Date: 4 - 11 - 2017

Field Parameters Entered into LIMS: AK 4/13/17 (Initials/Date) Field Parameters QC in LIMS: (Initials/Date)

Date Migrated to STORET: (Initials/Date) Field Sheets Scanned/Saved: (Initials/Date)

SWIO 77528

DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID _____ ORG ID 23020006 LATITUDE 29.3544

COUNTY Levy STORET # ~~21030006~~ LONGITUDE 82.7347

DATE 4-11-2017 TIME 1155 SAMPLING AGENCY _____

SITE NAME Waccasassa R @ SR 24

FIELD ID/NAME GINE0829 RECEIVING BODY OF WATER Gulf of Mexico

RIPARIAN ZONE / STREAM FEATURES

Meter ID:

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) :

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
90%	5%			5%			

Landscape Development Intensity Index (LDI): _____

Local Watershed Erosion (select one) : ☐ None ☒ Slight ☐ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side

Left Bank : >18m Right Bank : >18m

Hydrologic Modification Score (per FT 3101) 1-2

High Water Mark: 0.8 (m) + 1.0 (above present water level) = 1.8 (present depth) (above bed)

Artificially Impounded ☐ Yes ☒ No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect

5 m wide

m/s	.25 m/s	m/s
m deep	1.0 m deep	m deep

Artificially Channelized : ☒ No ☐ Mostly recovered, more sinuous ☐ Some recovery ☐ Recent, severe

Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%) ☒ Heavily Shaded ☐ Moderate Shaded (46-80%)

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse

Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify) :

Smothering of Substrates

	None	Slight	Moderate	Severe
Sand Smothering:	☐	☐	☒	☐
Silt Smothering:	☐	☒	☐	☐
Algae Smothering:	☒	☐	☐	☐

SUBSTRATE TYPE

Assessment Tool: ☒ SCI ☐ RPS ☐ LVS ☐ LCI ☐ BioRecon

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	3.5	5	
Undercut Banks / Roots	2.5	5	
Leaf Packs or Mat	0.75	5	
Aquatic Vegetation			
Rock or Shell Rubble..			
Sand.....	90	5	
Mud / Muck / Silt	3		
Other			
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top :								1.45
Mid:	0.5	18.1	7.82	8.65	92	256	0.12	TOTAL DEPTH
Bottom								1.4

System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐ _____

Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐

Water Surface Oils Normal ☐ Sheen ☐ Globs ☐ Slick ☐ Other ☐

Water Sample Taken? ☒ Yes ☐ No

Sample Preserved? ☐ Yes ☐ No

Lot Number:_____ Exp:_____

Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ _____

Algae Sample Taken? ☐ Yes ☐ No

Sample Preserved? ☐ Yes ☐ No

Lot Number:_____ Exp:_____

Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐

ABUNDANCE

	Not Obs.	Rare	Common	Abundant
Periphyton:	☒	☒	☐	☐
Fish:	☐	☐	☒	☐
Aquatic Plants:	☒	☐	☐	☐
Iron/Sulfur Bacteria:	☐	☒	☐	☐

AMBIENT FIELD CONDITIONS / NOTES:

Hydrologic Disturbance Scoring ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9-10

☐ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM J. Parrish / A. Kalmbacher SIGNATURE: _____

62-160.800, F.A.C.

Revision Date: March 1, 2014

MP4 8654

4/11/17 JP 73529

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Wacassassa 24 | County: Levy | Date: 4/11/17 | Investigators: JP / AK

STORET Station Number: ~~2[illegible]~~ 23020006

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N	N	
	2	N	N	
	3	N	Y	
	4	N		
	5			96
	6			
	7			
	8		N	
	9		N	
10	1	N	N	
	2	N	N	
	3	N	Y	
	4	N		
	5	N		92
	6	N	N	
	7	N	N	
	8	N	N	
	9	N	N	
20	1	N	N	
	2	N	N	
	3	N	Y	
	4			
	5			96
	6			
	7			
	8		N	
	9		N	
30	1	N	N	
	2	N	N	
	3	N	Y	
	4	N		
	5	N		96
	6	N		
	7	N		
	8	N	N	
	9	N	N	
40	1	N	N	
	2	N	N	
	3	N		
	4	X		
	5			96
	6			
	7			
	8			
	9			
50	1	X		
	2			
	3			
	4			94
	5			
	6			
	7			
	8			
	9			

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	N	N	
	2	N	N	
	3	X		
	4			
	5			96
	6			
	7	2		
	8	N	N	
	9	N	N	
70	1	N	N	
	2	N	N	
	3	X		
	4			
	5			96
	6			
	7			
	8	N	N	
	9	N	N	
80	1	N	N	
	2	N		
	3	X		
	4	X		
	5	X		96
	6	X		
	7	X		
	8	X		
	9	X		
90	1	X	N	
	2	X	N	
	3	X		
	4	X		
	5	X		96
	6	X		
	7	X		
	8	X	N	
	9	X	N	
100	1	X	N	
	2	N		
	3	N		
	4	N		
	5			96
	6			
	7			
	8			
	9			

Secchi depth	
Estimated?	

# points ranked 4-6	
total points assessed	
% points ranked 4-6	

Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	
Habitat Assessment	
SCI/Biorecon	
Water sample	
RQ-	

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%.

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

7P523

SAMPLING AGENCY:		STORET STATION NUMBER: 210 2006	DATE (MM/DD/YY): 4/11/17	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: Levy	LOCATION: Wacassassa @ 24		FIELD ID/NAME:

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 13	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) 12 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 7	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 15	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 50	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 **Artificial Channelization** 20	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. (20) 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 6 Left Bank 6	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful 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 10 Left Bank 10	Width of vegetation greater than 18 m (10) 9	Width of vegetation >12 to 18m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system 5 4	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank 10 Left Bank 10 Secondary Score 72	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

~~122~~ **TOTAL SCORE**

Date: 4/11/17	Analyst: JBM	Signature: JBM

1.5 R
2 L
2 S

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

Location: Wacassala @ 24

Date: 4/11/17

Sampler: JP/AK

100 m:	Latitude	
	Longitude	
0 m:	Latitude	
	Longitude	

Substrates: Code key, draw proportionate habitat abundance. %

Code	Substrate	%
[snag symbol]	Snags	3.5%
[roots symbol]	Roots/undercut banks	2.5%
[leaf symbol]	Leaf Packs (or mats)	0.75%
	Aquatic Macrophytes	6-7 +2 m %
	Pools	total # observed = ___ # range expected = ___

Average width 15 m

Average depth 1.1 m

Velocity measured at 100 meter mark.

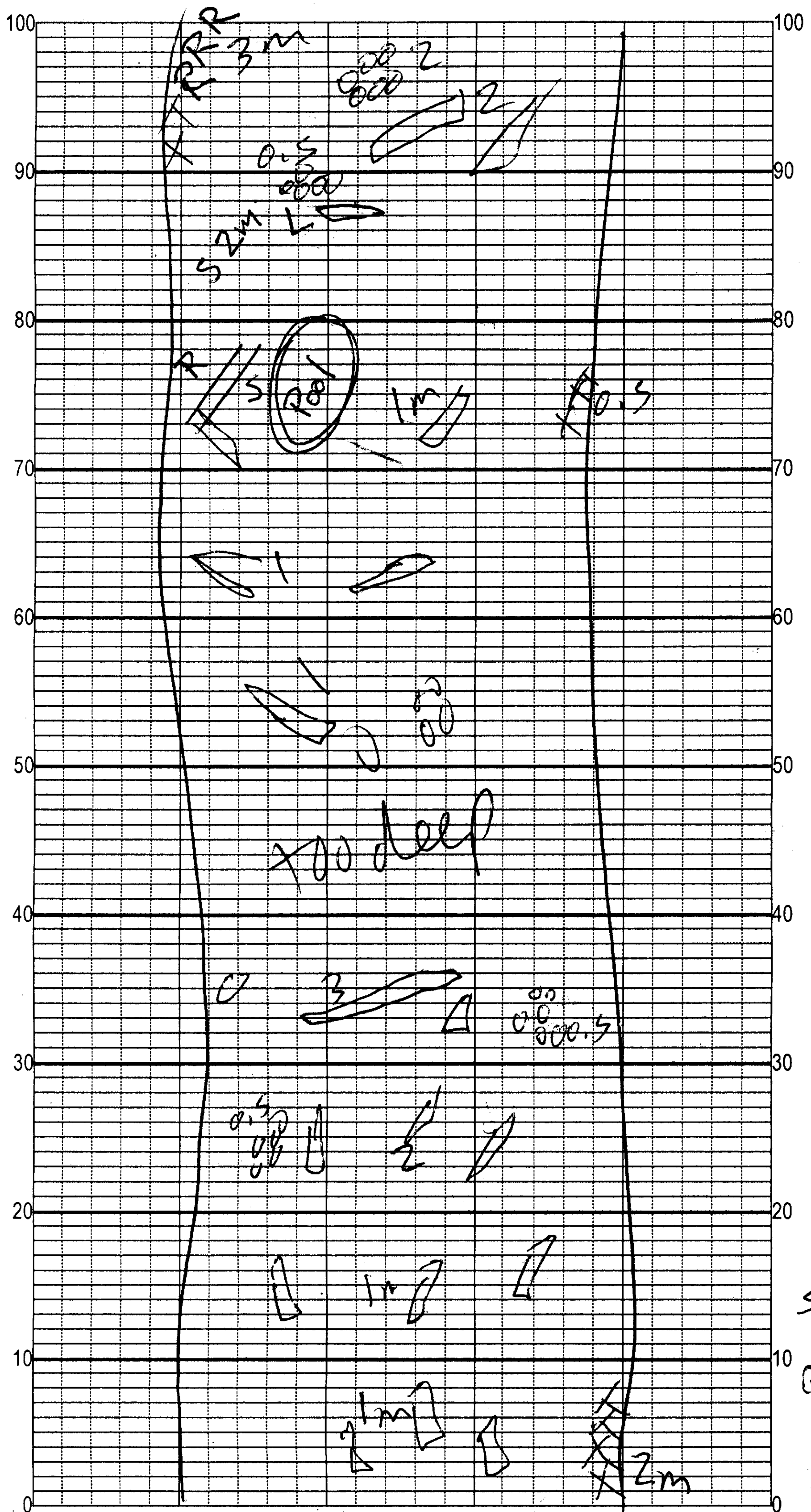
WQ & chemistry taken at 0 meter mark.

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.

Left Bank



Downstream

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

S ~~1m wide~~
5m wide

Plants observed / other notes:

Snag 3 + 3 + 2 + 3 + 3 + 1
17 m

Root 3 + 2 + 1 + 6 12 m

leaf 3.5 m

S = 1%

10
15 = 34

62-160.800, F.A.C

Revision Date: March 1, 2014

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 YSI #3 RQ- 2017-04-10-06 Project Suwannee Sors

Notes: (1) Numbers ≤4, are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
(2) Always wait for meter to stabilize before recording any readings.
(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.	JParish	4/11/17	706	23.8	8.58	8.58	100	53.3		P	
ICV	"	"	715	23.1	8.56	8.48	99.2	52.3	—	P	
CCV	AKalmbacher	4-11-17	1655	24.1	8.40	8.42	100.3	51.2	—	P	L
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals.
DO Acceptance criteria from Table ±0.3 mg/L. **Rapid-Pulse Sensors:** DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.
Optical: DO gain range 0.85 to 1.15; DO charge N/A. **Steady-state & Galvanic Sensors:** DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	JParish	4/11/17	719	161014	11/17	1002	1002	P	
ICV	"	"	720	2147201	12/17	147	144	P	
CCV	AKalmbacher	4-11-17	1657	1.000	11/17	1,000	1,002	P	L
CCV									

Report specific conductance as a whole number with no decimal figure. Conductivity Acceptance criteria ± 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.	JParish	4/11/17	721	2702C47	2/19	7.0	7.00	-16.7	P	
Calibr.	"	"	724	2608626	8/18	4.0	4.0			
Calibr.	"	"	725	2608E35	2/18	10.0	10.0	-159.5	P	
ICV	"	"	730	2608626	8/18	4.0	4.05		P	
CCV			1700	2702C47	2/19	7.0	6.96	-13.0	P	L
CCV										

Report pH with one decimal place; pH Acceptance criteria ±0.2 SU; mV pH7 Range 0±50; mV pH 4 Range +180±50;
mV pH 10 Range -180±50; Slope from 7 to 10 and 4 to 7 must be between 165 and 180 mV

Depth (Quarterly) Date of Last Depth Verification _____

Depth Sensor (Daily)	Name	Date	Time CT-ET	Zero the Sensor	ICV Value	Pass / Fail	Lab / Field
Pressure mode in air	JParish	4/11/17	731	0.000	0.0	P	

ICV acceptance criteria ±5 % or ±0.05m, whichever is greater

Scanned

Advanced Environmental Laboratories, Inc.

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☐ Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954.889.2288 • Fax 954.889.2281
☐ Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL 32301 • 850.219.6274 • Fax 850.219.6275
☐ Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327

Client Name: FDEP
Address: 8800 Baymeadows Way W
Jacksonville FL 32256
Phone: 904-256-1700
FAX:
Contact: Jeremy Parrish
Sampled By: Jeremy Parrish
Turn Around Time: ☐ STANDARD ☐ RUSH
Page ____ of ____

Project Name: RA2017-04-03-17
P.O. Number/Project Number:
Project Location:
FDEP Facility No:
Project Name and Address:

Special Instructions:
☐ ADaPT ☐ EQuIS ☐ Other

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED	LABORATORY I.D. NUMBER
							Preservation	E. Coli	
							Field-Filtered?		
GW2829		X	4-11-17	1155	SW	1			

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☑ Where required, pH checked Temperature when received 3.1 (in degrees celcius)

DCN: AD-051 Form last revised 10/15/2015 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

	Relinquished by:	Date	Time	Received by:	Date	Time
1	[signature]	4-11-17	1415	[signature]	4/11/17	1415
2						
3						
4						

FOR DRINKING WATER USE:
(When PWS Information not otherwise supplied) PWS ID: _____
Contact Person: _____ Phone: _____
Supplier of Water: _____
Site-Address: _____