



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

Qualified Data

October 2017

Location/STORET Station Name:

Bailey mill creek @ Wilson rd

Date:

01/04/2018

STORET #

G1TLHR0081

WBID:

3436

Latitude:

30.627.444

(mm/dd/yyyy)

County:

Jefferson RQ -

2018-01-01-24

ORG ID:

21FLTLHR

Longitude:

83.5800.711

(Decimal Degrees)

(Decimal Degrees)

Receiving Body of Water:

Wacissa

Field ID:

G1TLHR0081

Sampling Team Members

J. Burdett
J. Tolbert
C. GreenWQ Measurements
Sample Collection
Documentation
Preservation
Preservation Check

Sampling Equipment

☒ Sample Container ☐ Van Dorn ☐ Pole
☐ Carboy ☒ Syringe
☐ Dipper ☐ Other

Equipment ID

Collection Method

☒ Wading ☐ Canoe/Kayak
☐ From Shore ☐ Electric Motor
☐ Other ☐ Gasoline Motor

Water Level: Dry / Low / Normal / Above Normal / Flooded

Meter ID#

Exo 3

Matrix:

Fres / Marine / DI

Photos: Yes / No

Flow:

No Flow / Intertidal / Flowing / NA

Tide:

Rising / Falling / Slack / NA

Tide Times:

High Low

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Secchi Disk (m)	Sp COND (umhos/cm)	Temp. (C°)
EST	1130	0.125	0.25	10.40	77.1	7.18	0.07	0.125	147.2	3.204
CEN								S		

Biological Samples Collected:

None

HA

SCI

RPS

Algae ID

LVS

LVI

Other

SBIO ID Numbers:

SBIO-ID: 32071

HA-ID:

RPS-ID: 8893

Macrophyte-ID:

LIMS#:

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

SA7341020

12/7/18

☒ <2

Metals

☐ W-ICPMS ☐ W-ICP☐ Ice☐ HNO3☐ <2

Filtered Nutrients

☒ W-PO4-F ☒ Field Filtered 0.45 um Filter☒ Ice

Chlorophyll

☒ CHL-SUITE-W☒ Ice

Physical/Aggregate (Fresh)

☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-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-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R☐ Ice☐ OtherPlace Preservative Sticker(s) Here
(If Available)

Notes:

30.2749000
#83.96666667Place Label Here
(If Available)

Signature:

Jade

Date:

1/4/18

Field Parameters Entered into LIMS:

CH 1-30-18

(Initials/Date)

Field Parameters QC in LIMS:

JB 1/31/18

(Initials/Date)

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved:

(Initials/Date)

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

SAMPLING AGENCY: <u>8034</u>		STORET STATION NUMBER: <u>GTLHR0081</u>	DATE (MM/DD/YY): <u>01/04/18</u>	RECEIVING BODY OF WATER: <u>Waccissa</u>
REMARKS:	COUNTY: <u>Jefferson</u>	LOCATION: <u>Barley mill csk @ Wilson</u>		FIELD ID/NAME: <u>GTLHR0081</u>

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 <u>8</u>	20 19 18 17 16	15 14 13 12 11	10 9 <u>8</u> 7 6	5 4 3 2 1
Substrate Availability <u>16</u>	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 <u>14</u>	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 <u>14</u> 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>17</u> ----- Primary Score <u>39</u> <u>55</u>	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 19 18 <u>17</u> 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 <u>20</u>	<u>20</u> 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. Right Bank <u>10</u> Left Bank <u>10</u>	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	Width of vegetation greater than 18 m Right Bank <u>10</u> Left Bank <u>10</u>	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	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. Right Bank <u>10</u> Left Bank <u>10</u> ----- Secondary Score <u>80</u>	>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

135 119 16

TOTAL SCORE

Date: <u>01/04/18</u>	Analyst: <u>S. Burchett, C. Green, J. Folbert</u>	Signature: <u>[Signature]</u>
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DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID 21FTLHR ORG ID Bailey Mill Crk @ Wilson LATITUDE _____
 COUNTY Jefferson STORET # 61TLH0081 LONGITUDE _____
 DATE 1/4/14 TIME 1130 SAMPLING AGENCY 8034
 SITE NAME Bailey Mill Crk @ Wilson rd.
 FIELD ID/NAME 61TLH0081 RECEIVING BODY OF WATER Waccissa

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>20</u> Silviculture <u> </u> Field/Pasture <u> </u> Agricultural <u> </u> Residential <u> </u> Commercial <u> </u> Industry <u> </u> Other (Specify) <u> </u>								Landscape Development Intensity Index (LDI) <u> </u>	
Local Watershed Erosion (select one): ☒ None ☐ Slight ☐ Moderate ☐ Heavy Local Watershed NPS Pollution: ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy						Typical Width (m) Depth (m) Velocity (m/sec) Transect <u>2</u> m wide <u>0.2</u> m/s <u>0.2</u> m/s <u>0.2</u> m/s <u>0.3</u> m deep <u>0.4</u> m deep <u>0.3</u> m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>>18</u> Right Bank: <u>>18</u>				Hydrologic Modification Score (per FT 3101) <u> </u>					
High Water Mark: <u>0.5</u> + <u>0.4</u> = <u>0.9</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☒ Yes ☐ No					
Artificially ☒ No ☐ Mostly recovered, more sinuous Channelized: ☐ 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): <u> </u>			Smothering of Substrates Sand Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐ Silt Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐ Algae Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐		
SUBSTRATE TYPE Assessment Tool: ☒ SCI ☐ RPS ☒ LVS ☐ LCI ☐ BioRecon			WATER QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u>0.25</u> <u>32.0</u> <u>7.14</u> <u>10.4</u> <u>77.1</u> <u>147.2</u> <u>0.07</u> <u>0.25</u> Mid: <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> Bottom: <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> Meter ID: <u>Exo 3</u> <u>0.25</u>					
Woody Debris (Snags) <u>6</u> <u>5</u> <u> </u> Undercut Banks / Roots <u>0</u> <u> </u> <u> </u> Leaf Packs or Mat <u>34</u> <u>9</u> <u> </u> Aquatic Vegetation <u>0</u> <u> </u> <u> </u> Rock or Shell Rubble.. <u>0</u> <u> </u> <u> </u> Sand..... <u>50</u> <u>15</u> <u> </u> Mud / Muck / Silt <u>10</u> <u>1</u> <u> </u> Other <u> </u> <u> </u> <u> </u> Other <u> </u> <u> </u> <u> </u>			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐			Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐		
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: ☐ ☒ ☐ ☐ Aquatic Plants: ☒ ☐ ☐ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			Water Sample Taken? ☐ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____ Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____			Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐		
System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐			AMBIENT FIELD CONDITIONS / NOTES: ☐ The antecedent hydrologic conditions have been met to my best knowledge.					

SAMPLING TEAM C. Green, J. Burtchett, J. Tolbert **SIGNATURE:** John R **DATE:** 01/04/14

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>Barley mill @ W. 1300 rd</u>	County: <u>Jefferson</u>	Date: <u>1/4/18</u>	Investigators: <u>GG, JB, JT</u>
STORET Station Number: <u>GITLH2006</u>			

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			60	1	N			
	2					2				
	3					3				
	4					4				
	5			93		5			94	
	6					6				
	7					7				
	8					8				
	9					9				
10	1				70	1				
	2					2				
	3					3				
	4					4				
	5			95		5			98 9/10	
	6					6				
	7					7				
	8					8				
	9					9				
20	1				80	1				
	2					2				
	3					3				
	4					4				
	5			95		5			93	
	6					6				
	7					7				
	8					8				
	9					9				
30	1				90	1				
	2					2				
	3					3				
	4					4				
	5			92		5			96	
	6					6				
	7					7				
	8					8				
	9					9				
40	1				100	1				
	2					2				
	3					3				
	4					4				
	5			95		5			95	
	6					6				
	7					7				
	8					8				
	9					9				
50	1					1				
	2					2				
	3					3				
	4					4				
	5			90		5				
	6					6				
	7					7				
	8					8				
	9					9				

Secchi depth	<u>0.25</u>
Estimated?	

# points ranked 4-6	<u>0</u>
total points assessed	<u>99</u>
% points ranked 4-6	<u>0</u>

Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	☒
Habitat Assessment	☒
SCI/Biorecon	☒
Water sample	☒
RC <u>2018-01-01-24</u>	

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.

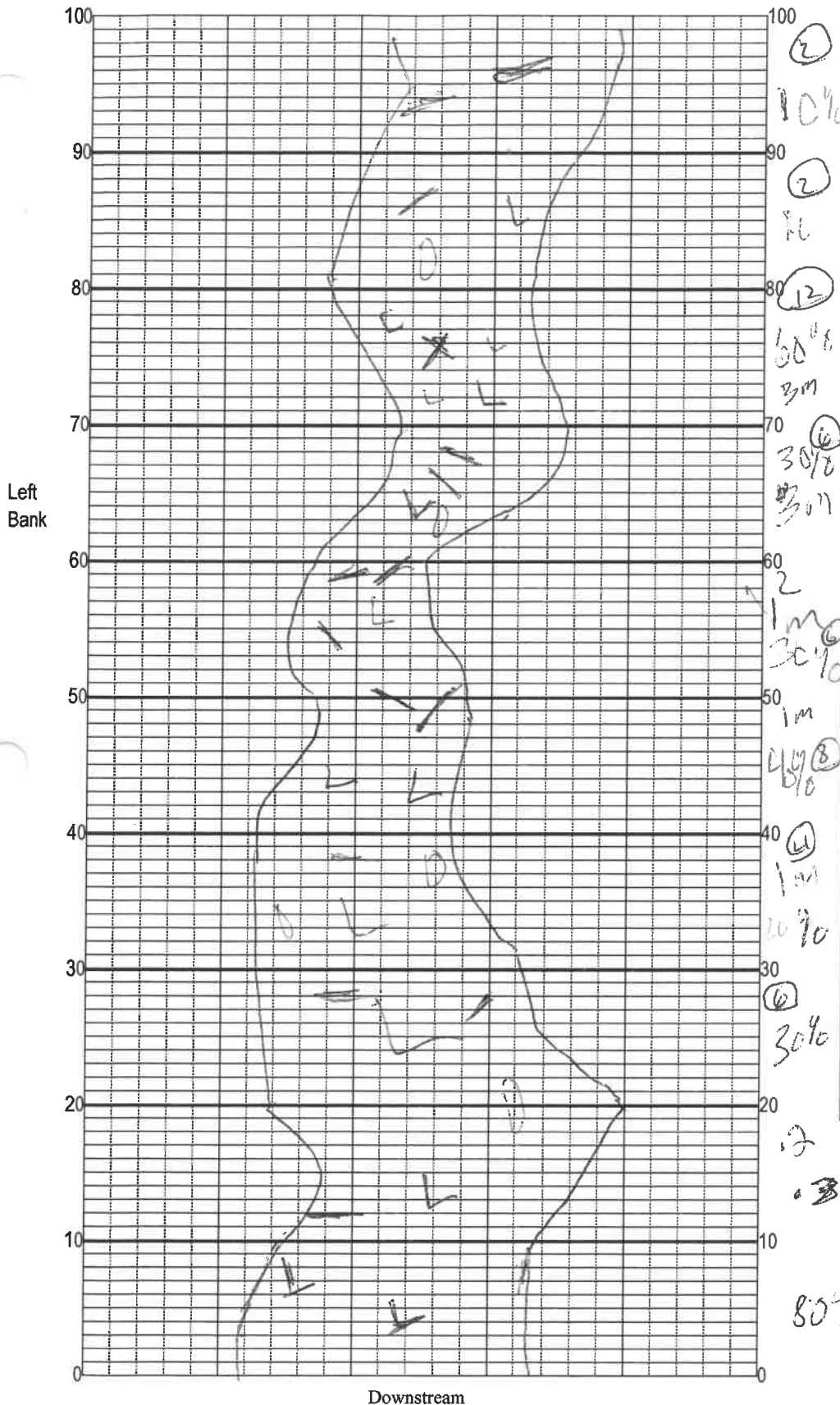
Record canopy cover as the number of small densimeter quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6.

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%.

Waterbody: <u>Berley Mill GTH</u>	Date: <u>1/4/16</u>	County: <u>Jefferson</u>	Storet Number: <u>GTH120051</u>
Analyst: <u>Burton H. C. Green</u>	Signature: <u>[Signature]</u>		
Comments: <u>2nd of veg</u>			

[illegible]

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).

61TLH20081

Location: Bailey Mill Creek

Date: 1-4-18

Sampler:

100 m: Latitude

Longitude

0 m: Latitude

Longitude

Substrates: Code key, draw proportionate habitat abundance. %

Snags 6

Roots/undercut banks

Leaf Packs (or mats) 34

Aquatic Macrophytes

Pools total # observed = # range expected =

Average width 2 m

Average depth 40 m

Velocity measured at 10 meter mark.

WQ & chemistry taken at 100 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:

20 m L/S

40% 8

80% 16

68m L

12m snag

Central Laboratory Submittal Form

Customer: TLH-ROC

Requester: Chris Green

Field Report Prepared By: J. Burtchett

Project ID: SMP

Collected By: JB, JT, CG

Sampling Agency: 80234

Location Bailey mill sk @ Wilson rd	Collection (comp begin or grab) Date 11/4/18 Time 1130		Composite end Date		Bottle Group(s) (See pg 2)
Field ID GTLHRO081	Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 12.40	mg/L Total Res. Chlorine %		
STORET #	Temp (C) 7.18	pH	Sp. Conductance (umho/cm) 147.2		A
Latitude 301627.4614	Salinity (ppt) 0.07	Comments			
Location Bailey mill sk @ Wilson rd	Collection (comp begin or grab) Date		Composite end Date		Bottle Group(s)
Field ID GTLHRO081	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	mg/L Total Res. Chlorine %		B
STORET #	Temp (C)	pH	Sp. Conductance (umho/cm) ft m		
Latitude	Salinity (ppt)	Comments	SL performed		
Location	Collection (comp begin or grab) Date		Composite end Date		Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	mg/L Total Res. Chlorine %		
STORET #	Temp (C)	pH	Sp. Conductance (umho/cm) ft m		
Latitude	Salinity (ppt)	Comments			
Location	Collection (comp begin or grab) Date		Composite end Date		Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	mg/L Total Res. Chlorine %		
STORET #	Temp (C)	pH	Sp. Conductance (umho/cm) ft m		
Latitude	Salinity (ppt)	Comments			
Location	Collection (comp begin or grab) Date		Composite end Date		Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	mg/L Total Res. Chlorine %		
STORET #	Temp (C)	pH	Sp. Conductance (umho/cm) ft m		
Latitude	Salinity (ppt)	Comments			

Relinquished By: JB, JT, CG	Date/Time: 11/4/18	Shipping Method: HD	Number of Coolers Shipped: 1	Received By: SR	Date/Time: 11-4-18 / 1:59
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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 name.

Meter ID: E103

RQ: 2018-01-01-29

Project: SMP 2014

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 11/14

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.	J. Butcher	1/4/18	758	14.04	12.77	10.30	100	-	-	P/F	L/F
ICV	↓	↓	813	14.4	10.23	10.22	100	-	-	P/F	L/F
CCV	↓	↓	1254	5.0	12.77	12.9	101	-	-	P/F	L/F
CCV										P/F	L/F

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 μ hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	J. Butcher	1/4/18	802	171121B	12/18	1000	1000	P/F	L/F
ICV	↓	↓	815	2710781	09/19	100	100	P/F	L/F
CCV	↓	↓	1256	170630A	07/18	500	505	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.	J. Butcher	1/4/18	804	171121A	06/19	7.0	7.0	-17.8	P/F	L/F
Calibr.	↓	↓	806	171121C	12/18	4.0	4.0	156.2	P/F	L/F
Calibr.	↓	↓	808	171121B	06/19	10.0	10.0	-188.6	P/F	L/F
ICV	↓	↓	817	171121B	06/19	10.0	10.0	-190.9	P/F	L/F
CCV	↓	↓	1258	171121C	12/18	4.0	4.0	156.8	P/F	L/F
CCV									P/F	L/F

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

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

mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 170.8, slope from 4 to 7 174 (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						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: