



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

October 2017

Qualified Data

Yes

Location/STORET Station Name: Willacoochee Creek

Date: 1/11/18
(mm/dd/yyyy)

STORET # G1TLHR0087

WBID: 410

Latitude:

(Decimal Degrees)

County: Gadsden

RQ - 2018-01-01-24

ORG ID: 21FLTLHR

Longitude:

(Decimal Degrees)

Receiving Body of Water: Attapulgus Swamp Creek

Field ID: G1TLHR0087

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment		
Jon Woods Jessie Tolbert				X	X	X	X	X	☒ Sample Container	☐ Van Dorn	☐ Pole
									☐ Carboy	☒ Syringe	☐ Other
									☐ Dipper		
									Equipment ID		
									Collection Method		
									☒ Wading	☐ Canoe/Kayak	
									☐ From Shore	☐ Electric Motor	
									☐ Other	☐ Gasoline Motor	

Water Level:		Dry / Low / <u>Normal</u> / Above Normal / Flooded				Meter ID#		118157		Matrix:		Fresh / Marine / DI			
Photos:		Yes / No		Flow:		No Flow / Intestinal / <u>Flowing</u> / 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 (µmhos/cm)	Temp. (C°)					
<u>EST</u>	1040	0.25	0.5	9.54	93.1	7.02	0.03	0.5	67	14.51					
CEN								S							

Biological Samples Collected:		None		<u>HA</u>	<u>SCI</u>	<u>RPS</u>	Algae ID	<u>LVS</u>	LVI	Other
SBIO ID Numbers:		SBIO-ID: 78178		HA-ID: 1475		RPS-ID: 8888		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	7875010	10/2/18	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP						☐ Ice ☐ HNO3			☐ <2
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-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 ☐ Other			

Notes: Secchi visible on bottom
SCI @ 1050

Field/WIN ID
Location



G1TLHR0087



WILLACOOCHEE CREEK

Signature: [Signature]

Date: 1/11/18

Field Parameters Entered into LIMS: 4/23/18
(Initials/Date)

Field Parameters QC in LIMS: 4/23/18
(Initials/Date)

Date Migrated to STORET: 4/23/18
(Initials/Date)

Field Sheets Scanned/Saved: 4/23/18
(Initials/Date)

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

SAMPLE ID G1TLR00067 ORG ID 21FC9LHR LATITUDE _____
 COUNTY Gadsden STORET # G1TLR00067 LONGITUDE _____
 DATE 1/11/18 TIME 1040 SAMPLING AGENCY 8034
 SITE NAME Willacoochee Creek
 FIELD ID/NAME G1TLR00067 RECEIVING BODY OF WATER Atapulga Swamp Creek

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>30</u> Silviculture <u>40</u> Field/Pasture <u> </u> Agricultural <u> </u> Residential <u>30</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>12</u> m wide <u>0.25</u> m/s <u>0.25</u> m/s <u>0.25</u> m/s <u>0.2</u> m deep <u>0.5</u> m deep <u>0.3</u> m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>6-12</u> Right Bank: <u>218</u>		Hydrologic Modification Score (per FT 3101) <u> </u>					
High Water Mark: <u> </u> + <u> </u> = <u> </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																																															
<table border="1"> <thead> <tr> <th></th> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top:</td> <td><u>0.25</u></td> <td><u>14.51</u></td> <td><u>7.02</u></td> <td><u>9.54</u></td> <td><u>93.1</u></td> <td><u>67</u></td> <td><u>0.03</u></td> <td><u>0.5</u></td> </tr> <tr> <td>Mid:</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td>☒ VOB</td> </tr> <tr> <td>Bottom:</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> </tr> <tr> <td colspan="8"> Meter ID: <u>1146157</u> </td> <td> TOTAL DEPTH <u>0.5</u> </td> </tr> </tbody> </table>				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>14.51</u>	<u>7.02</u>	<u>9.54</u>	<u>93.1</u>	<u>67</u>	<u>0.03</u>	<u>0.5</u>	Mid:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	☒ VOB	Bottom:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Meter ID: <u>1146157</u>								TOTAL DEPTH <u>0.5</u>			
	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>14.51</u>	<u>7.02</u>	<u>9.54</u>	<u>93.1</u>	<u>67</u>	<u>0.03</u>	<u>0.5</u>																																										
Mid:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	☒ VOB																																										
Bottom:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>																																										
Meter ID: <u>1146157</u>								TOTAL DEPTH <u>0.5</u>																																										
<table border="1"> <thead> <tr> <th></th> <th>% Coverage</th> <th>INVERT # Times Sampled</th> <th>PERI # Times Sampled</th> </tr> </thead> <tbody> <tr> <td>Woody Debris (Snags)</td> <td><u>0.75</u></td> <td><u>4</u></td> <td><u> </u></td> </tr> <tr> <td>Undercut Banks / Roots</td> <td><u>1.0</u></td> <td><u>4</u></td> <td><u> </u></td> </tr> <tr> <td>Leaf Packs or Mat</td> <td><u>0.5</u></td> <td><u>4</u></td> <td><u> </u></td> </tr> <tr> <td>Aquatic Vegetation</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> </tr> <tr> <td>Rock or Shell Rubble...</td> <td><u>0.25</u></td> <td><u>4</u></td> <td><u> </u></td> </tr> <tr> <td>Sand.....</td> <td><u>97.5</u></td> <td><u>4</u></td> <td><u> </u></td> </tr> <tr> <td>Mud / Muck / Silt</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> </tr> <tr> <td>Other</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> </tr> <tr> <td>Other</td> <td><u> </u></td> <td><u> </u></td> <td><u> </u></td> </tr> </tbody> </table>				% Coverage	INVERT # Times Sampled	PERI # Times Sampled	Woody Debris (Snags)	<u>0.75</u>	<u>4</u>	<u> </u>	Undercut Banks / Roots	<u>1.0</u>	<u>4</u>	<u> </u>	Leaf Packs or Mat	<u>0.5</u>	<u>4</u>	<u> </u>	Aquatic Vegetation	<u> </u>	<u> </u>	<u> </u>	Rock or Shell Rubble...	<u>0.25</u>	<u>4</u>	<u> </u>	Sand.....	<u>97.5</u>	<u>4</u>	<u> </u>	Mud / Muck / Silt	<u> </u>	<u> </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 ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐ Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐							
	% Coverage	INVERT # Times Sampled	PERI # Times Sampled																																															
Woody Debris (Snags)	<u>0.75</u>	<u>4</u>	<u> </u>																																															
Undercut Banks / Roots	<u>1.0</u>	<u>4</u>	<u> </u>																																															
Leaf Packs or Mat	<u>0.5</u>	<u>4</u>	<u> </u>																																															
Aquatic Vegetation	<u> </u>	<u> </u>	<u> </u>																																															
Rock or Shell Rubble...	<u>0.25</u>	<u>4</u>	<u> </u>																																															
Sand.....	<u>97.5</u>	<u>4</u>	<u> </u>																																															
Mud / Muck / Silt	<u> </u>	<u> </u>	<u> </u>																																															
Other	<u> </u>	<u> </u>	<u> </u>																																															
Other	<u> </u>	<u> </u>	<u> </u>																																															
ABUNDANCE			System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐																																															
<table border="1"> <thead> <tr> <th></th> <th>Not Obs.</th> <th>Rare</th> <th>Common</th> <th>Abundant</th> </tr> </thead> <tbody> <tr> <td>Periphyton:</td> <td>☐</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Fish:</td> <td>☐</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Aquatic Plants:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Iron/Sulfur Bacteria:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>				Not Obs.	Rare	Common	Abundant	Periphyton:	☐	☒	☐	☐	Fish:	☐	☒	☐	☐	Aquatic Plants:	☒	☐	☐	☐	Iron/Sulfur Bacteria:	☒	☐	☐	☐	AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.																						
	Not Obs.	Rare	Common	Abundant																																														
Periphyton:	☐	☒	☐	☐																																														
Fish:	☐	☒	☐	☐																																														
Aquatic Plants:	☒	☐	☐	☐																																														
Iron/Sulfur Bacteria:	☒	☐	☐	☐																																														

SAMPLING TEAM Woods Tolbert SIGNATURE: [Signature] DATE: 1/11/18

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

SAMPLING AGENCY: <u>8034</u>		STORET STATION NUMBER: <u>GTHR0087</u>	DATE (MM/DD/YY): <u>1/11/2018</u>	RECEIVING BODY OF WATER: <u>Attapulgus Swamp Creek</u>
REMARKS:	COUNTY: <u>Gadsden</u>	LOCATION: <u>Willacoochee Creek</u>	FIELD ID/NAME: <u>GTHR0087</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>16</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>2</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>15</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 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>12</u> ----- Primary Score <u>45</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 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 <u>17</u>	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.	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.
Right Bank <u>6</u> Left Bank <u>6</u>	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 <u>10</u> Left Bank <u>9</u>	10 9	8 7 6	5 4	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.	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 <u>10</u> Left Bank <u>9</u> ----- Secondary Score <u>71</u>	10 9	8 7 6	5 4	3 2 1

116

TOTAL SCORE

Date: <u>1/11/18</u>	Analyst: <u>Woods / Tolbert</u>	Signature: <u>[Signature]</u>
----------------------	---------------------------------	-------------------------------

Entered SBIO: GT 1-22-18

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>G1TLHRO067</u>					County: <u>Gadsden</u>		Date: <u>1/11/16</u>		Investigators: <u>Woods/Tolbert</u>	
					STORET Station Number: <u>G1TLHRO067</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	N		60	1	N	N		
	2					2				
	3					3				
	4					4				
	5			70		5			40	
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N	N		70	1	N	N		
	2					2				
	3					3				
	4					4				
	5			44		5			72	
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N	N		80	1	N	N		
	2					2				
	3					3				
	4					4				
	5			40		5			66	
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N	N		90	1	N	N		
	2					2				
	3					3				
	4					4				
	5			34		5			56	
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N	N		100	1	N	N		
	2					2				
	3					3				
	4					4				
	5			70		5			74	
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N	N			1	N	N		
	2					2				
	3					3				
	4					4				
	5			96		5				
	6					6				
	7					7				
	8					8				
	9					9				

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%.

Secchi depth 0.5
Estimated? N

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

Check accompanying data collected at same site/date.

Algal mat sample	
Linear Veg Survey	X
Habitat Assessment	X
SCI/Biorecon	X
Water sample	X

RQ-2016-01-01-24

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

Entered SBO2: JTB 1-22-18

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: G17LR0087	Date: 1/11/18	County: Gadsden	Storet Number: G17LR0087
----------------------	---------------	-----------------	--------------------------

Analyst: Woods / Tolbert Signature: Woods

Comments: *LA m2*

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.

[illegible]

Entered SB102: JT 1-22-18

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: 116157

RQ:

Project: G-1 SMP 1601

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 11/17

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.	Son Woods	1/10/18	809	18.64	9.352	9.34	100	—	1.02	P/F	L/F
ICV	"	"	820	21.6	8.880	8.92	101	—	—	P/F	L/F
CCV	"	"	1106	19.4	9.202	9.25	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.	Son Woods	1/10/18	810	171121D	12/16	1000	1000	P/F	L/F
ICV	"	"	419	2710761	9/19	100	101	P/F	L/F
CCV	"	"	1107	171031B	11/16	1000	1010	P/F	L/F
CCV	"	"	1106	2710761	9/19	100	102	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.	Son Woods	1/10/18	812	171121A	6/19	7.0	7.0	-49	P/F	L/F
Calibr.	"	"	814	171121C	12/16	4.0	4.0	120.6	P/F	L/F
Calibr.	"	"	816	171121B	6/2019	10.0	10.00	-217.5	P/F	L/F
ICV	"	"	818	"	"	10.0	10.0	-219.6	P/F	L/F
CCV	"	"	1109	170925B	10/16	4.0	4.1	115	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 10 168.5, slope from 4 to 7 169.6 (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:

Central Laboratory Submittal Form

Customer: TLH-ROC

Requester: Chris Green

Field Report Prepared By: Woods

Project ID: SMP

Collected By: Woods Tolbert

Sampling Agency: 8034

Location	Field/WIN ID		Collection (comp begin or grab)		Eastern	Composite end	Bottle
Field ID	Location		Comp	Date	Central	Date	Group(s)
STORET #	Matrix (type, e.g., Salt, Fresh, etc)		Grab	Time	Diss. Oxygen		(See pg 2)
Latitude	Temp (C)		pH		mg/L		Chlorine
Longitude	Salinity (ppt)		Sample Depth		% sat		
Comments	Salinity (ppt)		pH		ft		67
Field ID	Collection (comp begin or grab)		Date		mg/L		A/B
STORET #	Matrix (type, e.g., Salt, Fresh, etc)		Time		Total Res. Chlorine		
Latitude	Temp (C)		pH		ft		
Longitude	Salinity (ppt)		Sample Depth		m		
Comments	Salinity (ppt)		pH		ft		
Field ID	Collection (comp begin or grab)		Date		mg/L		
STORET #	Matrix (type, e.g., Salt, Fresh, etc)		Time		Total Res. Chlorine		
Latitude	Temp (C)		pH		ft		
Longitude	Salinity (ppt)		Sample Depth		m		
Comments	Salinity (ppt)		pH		ft		
Field ID	Collection (comp begin or grab)		Date		mg/L		
STORET #	Matrix (type, e.g., Salt, Fresh, etc)		Time		Total Res. Chlorine		
Latitude	Temp (C)		pH		ft		
Longitude	Salinity (ppt)		Sample Depth		m		
Comments	Salinity (ppt)		pH		ft		
Field ID	Collection (comp begin or grab)		Date		mg/L		
STORET #	Matrix (type, e.g., Salt, Fresh, etc)		Time		Total Res. Chlorine		
Latitude	Temp (C)		pH		ft		
Longitude	Salinity (ppt)		Sample Depth		m		
Comments	Salinity (ppt)		pH		ft		

Relinquished By: Woods	Date/Time: 1/11/18 12:55	Shipping Method: HD	Number of Coolers Shipped: 1	Received By: [Signature]	Date/Time: 1-11-18 12:55
------------------------	--------------------------	---------------------	------------------------------	--------------------------	--------------------------