

DEP Form F-0000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID _____ ORG ID 21FLWQSP LATITUDE 30.73008
 COUNTY JACKSON STORET # JAC15BR11 LONGITUDE -85.18423
 DATE 8/19/15 TIME 1010 EST SAMPLING AGENCY FDEP/AEQA
 SITE NAME BRIDGE CK ABOVE 71
 FIELD ID/NAME BRDGCKAB71 RECEIVING BODY OF WATER CHITOLA RIVER

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☐ Commercial ☐ Industry ☐ Other (Specify) ☐							Landscape Development Intensity Index (LDI) <u>~ 1.45</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>~ 2m</u> m wide _____ m/s _____ m/s _____ m/s _____ m deep _____ m deep _____ m deep <i>VERY SHALLOW w/ SCATTERED POOLS</i>
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u><18m</u> Right Bank: <u><6m</u>				Hydrologic Modification Score (per FT 3101) _____			
High Water Mark: <u>1.8</u> + <u>0.15</u> = <u>1.95</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): _____		Smothering of Substrates Sand Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐ Silt Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐ Algae Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐																																					
SUBSTRATE TYPE <i>No sampling</i> Assessment Tool: ☐ SCI ☒ RPS ☒ LVS <i>AO</i> ☐ 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>0.1</u></td> <td><u>24.59</u></td> <td><u>7.08</u></td> <td><u>5.64</u></td> <td><u>67.6</u></td> <td><u>216</u></td> <td></td> <td><u>0.3</u></td> </tr> <tr> <td>Mid:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>☒ VOB</td> </tr> <tr> <td>Bottom:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> Meter ID: <u>YSI #7</u> TOTAL DEPTH: <u>0.3</u>					Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:	<u>0.1</u>	<u>24.59</u>	<u>7.08</u>	<u>5.64</u>	<u>67.6</u>	<u>216</u>		<u>0.3</u>	Mid:								☒ VOB	Bottom:								
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Mid:								☒ VOB																																	
Bottom:																																									
Woody Debris (Snags) _____ Undercut Banks / Roots _____ Leaf Packs or Mat _____ Aquatic Vegetation _____ Rock or Shell Rubble _____ Sand _____ Mud / Muck / Silt _____ Other _____ Other _____		Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐		Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐																																					
		Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>5113230</u> Exp: <u>4/23/16</u>		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: <i>GART OTHERS</i> ☐ ☒ ☒ ☐ Aquatic Plants: ☐ ☐ ☐ ☐ Iron/Sulfur Bacteria: ☐ ☐ ☐ ☐		System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐																																							
AMBIENT FIELD CONDITIONS / NOTES: WATER LEVEL TOO LOW FOR SCI - FLOW ONLY AT LOW- STRICTIONS. CARM, MOSTLY SUNNY, SO'S. NEW STATION ESTABLISHED TO AVOID PARKING LOTS + ROAD ☐ The antecedent hydrologic conditions have been met to my best knowledge. DO AND COND J Qualified.																																									
SAMPLING TEAM <u>JACKSON, AONEAL, LOWNEY</u>			SIGNATURE: <u>J. Jackson</u>		DATE: <u>8/19/15</u>																																				

DEP Form 3000-5 Stream/River Habitat Assessment Field Sheet

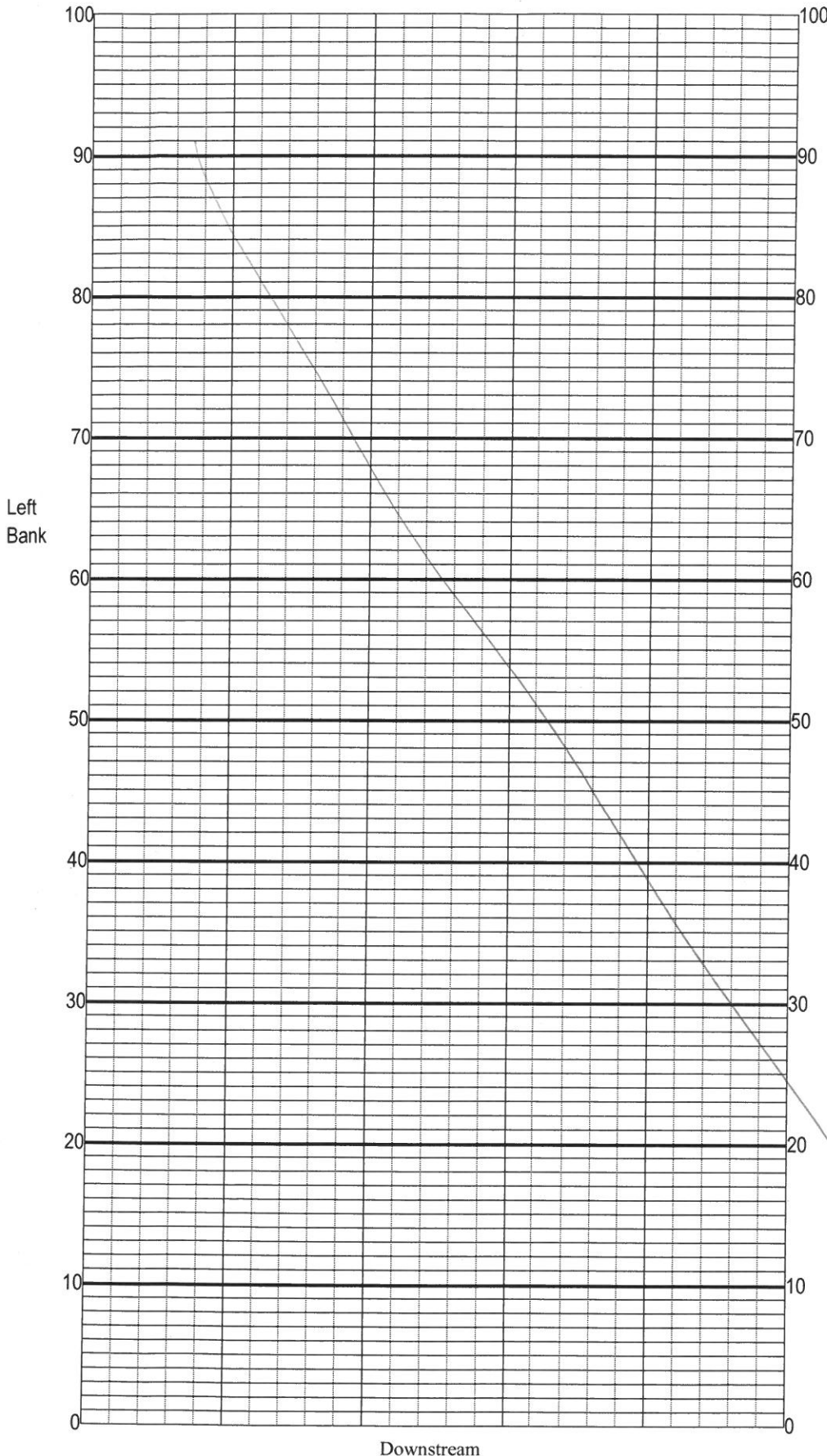
SAMPLING AGENCY: <u>FDEP/AEQA</u>		STORET STATION NUMBER: <u>JAC15BR1</u>	DATE (MM/DD/YY): <u>8/19/15</u>	RECEIVING BODY OF WATER: <u>CHIPOLA RIVER</u>
REMARKS: <u>VERY LOW WATER</u>	COUNTY: <u>JACKSON</u>	LOCATION: <u>BRIDGE CREEK AB 71</u>	FIELD ID/NAME: <u>BRD6CKAB71</u>	

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 _____	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability _____	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>NO HA</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 _____ ----- Primary Score _____	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 _____	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 _____ Left Bank _____	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 _____ Left Bank _____	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 _____ Left Bank _____ ----- Secondary Score _____	10 9	8 7 6	5 4	3 2 1

TOTAL SCORE

Date: <u>8/19/15</u>	Analyst: <u>JACKSON</u>	Signature: <u>JAJad</u>
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DEP Form FD 9000-4 Stream/Pond Habitat Assessment Sketch Sheet



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

Location: BRIDGE CREEK AB 71

Date: 8/19/15

Sampler: J JACOBSON

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

☐ Snags _____

☐ Roots/undercut banks _____

☐ Leaf Packs (or mats) _____

☐ Aquatic Macrophytes _____

☐ _____

☐ _____

☐ Pools total # observed = _____
range expected = _____

Average width _____ m

Average depth _____ m

Velocity measured at _____ meter mark.

WQ & chemistry taken at _____ 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:

no sampling
or HA
needs

no flow
not appropriate
as a reference site
but needs HA/SCI
when water levels
appropriate

LDI?
disturbance
close to
road &
interstate

Revision Date: March 1, 2014

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: _____ County: JACKSON Date: 8/19/15 Investigators: _____

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				60	1			
	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				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%.				
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								

STORET Station Number: _____

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

NO RPS
some periphyton observed

ELD SHEET

NO
plants
in
water

SITE NAME: Bridge Creek DATE: 8/19/15 TIME 1010 EST CST DEPTH: 10 ft (m) FIELD ID: BRDGCK AB71

SAMPLING TEAM MEMBERS	WQ MEASUREMENTS	DOCUMENTATION	SAMPLE COLLECTION	PRESERVATION	PRESERVATION CHECK
A O Neal			X	X	X
L Olney	X				
J Jackson		X			

SAMPLING EQUIPMENT	
☒ Sample Container	☐ Tubing type: _____
☐ Pole	☐ Other _____
☐ Pump ID#: _____	☐ Other _____
WATER QUALITY MEASUREMENTS	
Instrument ID: <u>YS1 #7</u>	
COLLECTION MODE	
☒ Wading	☐ Via Boat
☐ Diving	☐ Canoe
☐ From Shore	☐ Electric Motor
☐ Other _____	☐ Gasoline Motor

Parameter Suite	Parameter(s)/Method	Matrix Code	Preservation**	Preservative Lot #	pH Check	# Bottles ...
Preserved Nutrients	☒ TKN ☒ TP ☒ NOx ☒ NH3 ☐ *OC ☐ Total N ☐ Other: _____	S W	☒ Ice ☒ H ₂ SO ₄	5113230	☒ <2	1
Filtered Nutrients	☐ oP ☐ Other: _____	W	☐ Ice ☐ .45 um Filter			
Unpreserved Nutrients	☐ NO ₂ ☐ NO ₃ ☐ SO ₄ ☐ Other: _____	W	☐ Ice			
Physical/Aggregate Properties	☒ TDS ☒ TSS ☐ TS ☒ Turbidity ☒ Alk ☐ Color ☐ Other: _____	S W	☒ Ice			1
Chlorophyll	☒ CHL-PPTN-W	S W	☒ Ice			↓
BOD	☐ BOD-INHB ☐ BOD-UNIN	W	☐ Ice			
Microbiology	MF: ☒ E coli ☐ T Coli ☒ F Coli ☐ Enteroc ☐ F Strep ☒ MI-FW-QLDC ☐ MI-FW-QLBR ☐ MI-FW-QNNC ☐ MI-MN-QNNC	S W	☒ Ice			2
Macroinvertebrates	☐ PKD-QN-C ☐ DTY-QN-C	W	☐ Formalin			
Phytoplankton	☐ PRN-QL-C ☐ DTM-QL-C ☐ PRN-QN-C ☐ DTM-QN-C	W	☐ Formalin			
Periphyton	☐ AA-AGP ☐ AA-LIM-NUT	W	☐ Ice			
Metals	☐ W-ICP ☐ W-FIAS ☐ W-ICPMS ☐ W-ICP-Tr	W	☐ HNO ₃		☐ <2	
Filtered Metals	☐ W-ICP-F ☐ W-FIAS-F ☐ W-ICPMS-F ☐ W-ICP-Tr-F	W	☐ HNO ₃ ☐ .45 um Filter		☐ <2	
Mercury	☐ W-HG-AF	W				
Base/Neutral / Acid Extractable	☐ W-BNA ☐ W-AE ☐ W-BN ☐ W-PAH ☐ W-FL-PRO ☐ W ☐ Other: _____	W	☐ Ice ☐ H ₂ SO ₄		☐ <2	
Pesticides	☐ W-PEST-CL ☐ W-PCB ☐ W-PEST-NP ☐ W-PSCL-PCB ☐ W-NP-AA-SF ☐ W-PC-AA-SF ☐ W-PSHRB-NP ☐ W-SLFN-UREA ☐ W-SULFN-LC ☐ Other: _____ ☐ W-ACIDHERB ☐ W-CARB	W	☐ Ice			
Purgeables	☐ W-VOC-MS ☐ W-VOC-MS-A	W	☐ Ice ☐ HCl			
Bioassay	Specify Test: _____	W	☐ Ice			
OTHER	<u>SUCRALOSE W-SUC-AA-R</u>	S W	☒ Other: <u>Ice</u>			1

Notes:

H₂SO₄ EXPIR 4/23/16
→ cloud cover, 80s high humidity

Use one line for each set of sample (as supplied by the laboratory) containers. Use separate sheet for field or laboratory duplicate or blank or different water depth

^Enter "S" for surface if collected at a depth less than or equal to 1 foot

*Matrix Codes (Insert prefix): **SW** = Surface Water **GW** = Groundwater **DW** = Drinking Water **WW** = Wastewater **O** = Other: _____

**PRESERVATIVES: 1 ml added unless otherwise noted

***Enter number of containers supplied by the laboratory for the test (e.g., 3 for volatile organics, etc.)

DEP Bureau of Laboratories Water Sample Collection Record

(Use with FDEP SOP-001/01 Form FD 9000-3 Physical/Chemical Characterization Field Sheet)

Temp:

4.1

Florida Department of Environmental Protection
Central Laboratory Sample Submittal Form

Request Number: RQ-2015-07-13-59
SCI Reference sites

Event ID *

Requester: Larry Olney

Customer: BSSP

Field Report Prepared By: A O'Neal

Collected By:

L. Olney, J. Jackson, A. O'Neal

Project ID: SCIREF

Send Final Report To: Joy Jackson

Sampling Agency:

FDEP

Lab ID *	Location	Bridge Creek	Field ID	BRDGCKAB71	Matrix (include type e.g. Salt, Fresh, etc)	SW (Fresh)	Latitude	30.73008	Temp (C)	24.59	pH	7.08	Longtitude	-85.18423	dd	dd	Sample Depth	0.1	m	ft	Collection (comp begin or grab)	Date	8/19/15	Time	10:10	Composite end Date	Storet Station Number	JAC15BRI1	NPDES Number	Eastern Central	Bottle Group(s)**	B

Lab ID *	Location	Chipola River	Field ID	CHIPOREF	Matrix (include type e.g. Salt, Fresh, etc)	SW (Fresh)	Latitude	30° 33' 4.21"	Temp (C)	24.71	pH	7.79	Longtitude	-85° 16' 17.06"	dd	dd	Sample Depth	0.1	m	ft	Collection (comp begin or grab)	Date	8/19/15	Time	12:20	Composite end Date	Storet Station Number	31020012	NPDES Number	Eastern Central	Bottle Group(s)**	A, B

Lab ID *	Location		Field ID		Matrix (include type e.g. Salt, Fresh, etc)		Latitude		Temp (C)		pH		Longtitude		dd	dd	Sample Depth		m	ft	Collection (comp begin or grab)	Date		Time		Composite end Date	Storet Station Number		NPDES Number	Eastern Central	Bottle Group(s)**	

Lab ID *	Location		Field ID		Matrix (include type e.g. Salt, Fresh, etc)		Latitude		Temp (C)		pH		Longtitude		dd	dd	Sample Depth		m	ft	Collection (comp begin or grab)	Date		Time		Composite end Date	Storet Station Number		NPDES Number	Eastern Central	Bottle Group(s)**	

Relinquished By	Date/Time	Shipping Method	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
Ashley Doolittle	8/19/15	hand delivered	WJB	8/19/15 4:45 pm				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Group: A	Bottle Type: MI-FW-QLDC	PJ-2L	# of Bottles: 4	Preservative:	Formalin	Enter Number of Bottles Sent to Lab	2
Group: B	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
Group: B	Bottle Type: ECOLI-18QT	P-250ML-WO-THI	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
Group: B	Bottle Type: FCOLI-MF	P-120ML-OC	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
Group: B	Bottle Type: TURBIDITY W-ALK W-COLOR W-TDS W-TSS	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
Group: B	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	2
Group: B	Bottle Type: W-SUC-AA-R	BG-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2

Algal-ID bag algae 1