



G1NE0096 12122016

IRONMENTAL PROTECTION
PROGRAM FIELD SHEET

PAGE 1 OF 1

Data Qualified?

Yes / No

016

Hatchett Creek
at SR26

20020122

STC

STORET Station ID:

WBID:

2688

Latitude:

Date: 12-13-2016

(mm/dd/yyyy)

29.6878

County: Alachua RQ - 2016-12-12-14

ORG ID: 21FLA

Longitude:

82.2065

(Decimal Degrees)

(Decimal Degrees)

Receiving Body of Water: Newnan's Lk Field ID:

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
J. Parrish A. Rimbacher				☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole	
									☐ Carboy	☐ Syringe	☐ Other	
									☐ Dipper	Equipment ID Ortho Kit #3		
Collection Method												
☒ Wading									☐ Via Boat			
☐ From Shore									☐ Canoe/Kayak			
☐ Other (note below)									☐ Electric Motor			
									☐ Gasoline Motor			
Water Level: Dry / <u>Low</u> / Normal / High / Flooded									Matrix: <u>Fresh</u> / Marine / DI			
Meter ID# <u>YSI #3</u>				Photos: <u>Yes</u> / No				Tide Falling: Yes / No / <u>NA</u>				
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>	<u>1110</u>	<u>0.3</u>	<u>0.5</u>	<u>7.2</u>	<u>75</u>	<u>6.72</u>	<u>0.08</u>	<u>0.55</u>	<u>159</u>	<u>16.5</u>		
CEN												
Biological Samples Collected: None HA <u>SCI</u> LVS RPS LVI Other												
Parameter Suite	Parameter Methods					Preservation	Acid Lot#	Expiration	pH Check			
Preserved Nutrients	☒ W-NH3 / ☒ W-NO2NO3 / ☒ W-TKN / ☒ W-TOC / ☒ W-S-A-TP					☒ Ice ☒ H2SO4			☒ <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-Cl-IC / W-COLOR / W-SO4-IC / W-TDS					☒ Ice						
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY					☐ Ice						
Macroinvertebrates	☐ MI-FW-QLDC					☐ Formalin						
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococcus ☐ QPCR					☐ Ice						
Periphyton	☐ ALGAE-ID					☐ Ice						
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R					☐ Ice						
	☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH					☐ Other						

Notes:

Water level low



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Hatchett Creek
at SR26

20020122

Signature:

Date:

12-13-2016

Field Parameters Entered into LIMS:

JP 12/20/16

(Initials/Date)

Field Parameters QC in LIMS:

(Initials/Date)

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved:

(Initials/Date)

77186

SAMPLE ID 200 ORG ID _____ LATITUDE _____
COUNTY Alachua STORET # 20020122 LONGITUDE _____
DATE 12-13-2016 TIME _____ SAMPLING AGENCY FDEP/NE REC
SITE NAME Hatchet Creek @ SR 26
FIELD ID/NAME _____ RECEIVING BODY OF WATER Newnan's Lake

RIPARIAN ZONE / STREAM FEATURES

Meter ID: _____

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category):								Landscape Development Intensity Index (LDI)	
Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)		
<u>90</u>				<u>10</u>					
Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy								Typical Width (m) Depth (m)/Velocity (m/sec) Transect	
Local Watershed NPS Pollution: ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy								<u>3</u> m wide	
Width of Riparian Vegetation (m) on Each Buffer Side				Hydrologic Modification Score (per FT 3101)					
Left Bank: <u>>18m</u> Right Bank: <u>>18m</u>				<u>2</u>					
High Water Mark: <u>1</u> + <u>0.2</u> = <u>1.2</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No					
Artificially ☒ No ☐ Mostly recovered, more sinuous				Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%)					
Channelized: ☐ Some recovery ☐ Recent, severe				☒ 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 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>0.55</u>	
			Mid:	<u>0.3</u>	<u>16.5</u>	<u>6.72</u>	<u>7.25</u>	<u>159</u>	<u>0.08</u>	TOTAL DEPTH	
			Bottom:							<u>0.5</u>	
			System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐								
			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐			Water Surface Oils Normal ☐ Sheen ☐ Globs ☐ Slick ☐ Other ☒ Iron fixings					
			Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>6242080</u> Exp: <u>8/29/17</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: ☒ ☐ ☐ ☐ 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 <u>J. Parrish / A. Kalmbacher</u>			SIGNATURE <u>[Signature]</u>				<u>12-13-2016</u>				

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Harzler @ 26 County: Alachua Date: 12/13/16 Investigators: J. Parnish

Transect (m)	Point 1=right	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	
0	1	N	N		60	1	N	N		
	2					2				
	3					3				
	4					4				
	5					5				96
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N			70	1	N	N		
	2					2				
	3					3				
	4					4				96
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N			80	1	N	N		
	2					2				
	3					3				
	4					4				96
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N			90	1	N	N		
	2					2				
	3					3				
	4					4				92
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N			100	1	N	N		
	2					2				
	3					3				
	4					4				94
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N			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.					
	2									
	3									
	4				Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank.					
	5									
	6				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.					
	7									
	8				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%.					
	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

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

77186

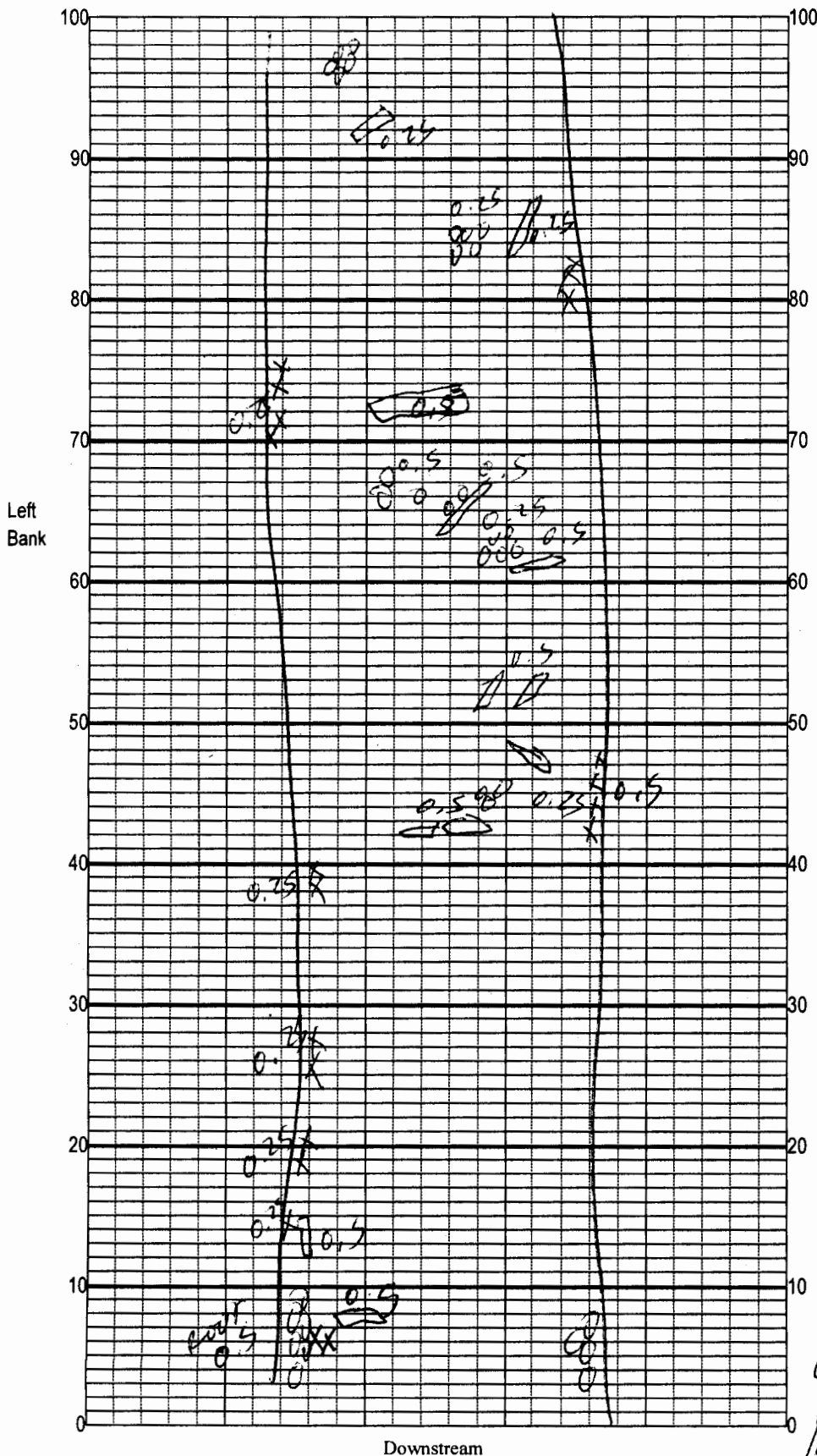
SAMPLING AGENCY: NE ROC		STORET STATION NUMBER:	DATE (MM/DD/YY): 12/13/16	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: Alachua	LOCATION: Hatchee 24		FIELD ID/NAME:

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>11</u>	20 19 18 17 16	15 14 13 12 <u>11</u>	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>6</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 <u>6</u>	Less than 5% major productive habitat <u>5</u> 4 3 2 1
Water Velocity <u>10</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 <u>10</u> 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>15</u> Primary Score <u>47</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. <u>15</u> 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 Right Bank <u>4</u> Left Bank <u>4</u>	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. 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 <u>4</u>	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 <u>10</u> Left Bank <u>10</u>	Width of vegetation greater than 18 m <u>10</u> 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 <u>10</u> Left Bank <u>9</u> Secondary Score <u>67</u>	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 <u>9</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

114 TOTAL SCORE

Date:	Analyst:	Signature:
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: _____

Date: _____

Sampler: _____

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

☐ Snags 2.5%

☐ Roots/undercut banks 1.5%

☐ Leaf Packs (or mats) 2%

☐ 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:

<2 M of Macrophytes was observed while doing the LVS? YES or NO

$$X = \frac{0.5 + 1 + 0.5 + 0.5 + 0.5}{3-4} = 1.0\%$$

$$00 = 3-4 = 1.5\%$$

$$1 = 5-6m \quad 2.0\%$$

$$200m \quad 2\% = 4.5$$

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- 2016-12-12-14 Project Hatchett Cr SCI

- 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 03/04/2016

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.	A Kalmbacher	12-13-16	0805	22.5	8.46	8.67	100	62.5	0.8517		
ICV			0825	22.3	8.69	8.77	101.0	59.4	0.8517	P	L
CCV	A Kalmbacher	12-13-16	1530	24.1	8.46	8.96	104.8	60.4	0.8517	X	L
CCV											

CODE

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 μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	A Kalmbacher	12-13-16	0808	160616A	8/2017	1.000	1.000		
ICV			0812	160616B	12/2016	100	102	P	L
CCV	A Kalmbacher	12-13-16	1535	160616B	12/2016	10A	102	P	L
CCV									

Report specific conductance as a whole number with no decimal figure.

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.	A Kalmbacher	12-13-16	0815	2060E04	6/2018	7.0	7.0	-18.7		
Calibr.			0817	2605918	4/2018	4.0	4.0	160.5		
Calibr.			0819	2607973	6/2018	10.0	9.98	-192.3		
ICV			0822	2060E04	6/2018	7.0	7.03	-18.4	P	L
CCV	A Kalmbacher	12-13-16	1538	2060E04	6/2018	7.0	7.03	-18.4	P	L
CCV										

Report pH with one decimal place; pH Acceptance criteria ± 0.2 SU; mV pH7 Range 0 $\pm$ 50;

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

mV pH 10 Range -180 $\pm$ 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	A Kalmbacher	12-13-16	0830	0.000	0.000	P	L

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