

Klug, Kyle

From: Davis, Brian G.
Sent: Wednesday, March 24, 2021 2:57 PM
To: Lab.Receiving
Cc: McDonald, Kelly
Subject: COC for RQ-2021-03-22-34
Attachments: RQ-2021-03-22-34_03212021.pdf

COC attached for RQ-2021-03-22-34.

For any lab purposes please ignore the last two pages of the field sheets. Those pages are specifically for continuous monitoring collected and a separate meter was used for collecting samples. The water quality samples for this RQ **did not** J-Code.

How did Viking Ships communicate with each other?

Norse Code!

Brian Davis
Environmental Specialist II
Department of Environmental Assessment and Restoration
FDEP - North East District
904-256-1568

RQ- 2021-03-22-34

Login Checklist

Login Station ID: #5

Shipping Method: FedEx | UPS | HD | GreyhoundDate/Time of Receipt: 3/ 25 /21 @ 10:10

*Cooler Temperature	Samples Frozen?	* All Samples in Cooler Preserved with		Number of Sample Containers in Cooler	Evidence Tape				Waybill Tracking #
					Present?		*Intact?		
	YES	HNO ₃	Formalin		Yes	No	Yes	No	
0.5				5		✓			9293 8010 9580

COOLER CHECK

*All samples received on ice unless otherwise noted. HNO₃ and Formalin preserved samples do NOT have a temperature requirement.

- If the temperature of a cooler exceeds 6.0 oC (above 10.0 oC for W-1-4-DIOX and microbiology) or received without ice, identify affected samples in an NCR. NCR# _____
- DOH coolers can exceed 2.0 °C above the standard temperature (6.0 or 10.0 °C for W-1-4-DIOX) without login confirmation from customer for samples requiring ice preservation; identify affected samples in an NCR. NCR# _____
- If cooler or samples are received with a damaged Evidence Seal; identify the affected samples in an NCR. NCR# _____
- If coolers or samples are received late; identify the affected samples in an NCR. NCR# _____

Chain of Custody/ Field Sheet(s) Included?

Yes ✓ No _____

Micro-Biology Overflow Chain of Custody/ Field Sheet(s) Included?

Yes ✓ No _____

CONTAINER CHECK

Evidence Tape on Bottles?

Yes _____ No _____ NA ✓

Evidence Tape intact? Yes _____ No _____

If Criminal, photographs taken?

Yes _____ No _____

Containers intact? Yes ✓ No _____

Caps on tight?

Yes ✓ No _____

Sufficient Sample Volume:

Yes ✓ No _____If NO is checked above, generate an NCR listing affected sample IDs in its appropriate category. NCR# _____

CHLORINE CHECK REQUIRED? (Blue dot on container)

Yes _____ No ✓ Init: HK

Chlorine detected? (One container checked per Field ID)

Yes _____ No _____ Init: _____

If chlorine is detected, generate an NCR listing affected sample IDs . NCR# _____

PRESERVATION CHECK (EXCLUDING SAMPLES SENT TO OVERFLOW LABS, "OV-")

**Acid Preserved Samples: pH < 2.0?

Yes ✓ No _____ NA _____ Init: HK

**W-1-4-DIOX (Green dot on container) preserved to pH < 4.0?

Yes _____ No _____ NA ✓ Init: HK

If samples were not preserved correctly, generate an NCR listing affected sample IDs . NCR# _____

Coolers Unpacked/Checked by: HKDate: 3/ 25 /21Event contains NCRs (Y/N)? N

Event ID: Tolomato CM

NE-DIST-2021-03-25-01 (SMP)

-Date Received: 25-MAR-2021 10:10

Login Checklist

Login Preservation Equipment

Lot # & Exp: Date

Infrared Thermometer ID:	IR TEMP GUN #5 EXP:10-28-21
pH Test Strips 0 – 6	
pH Paper 0 – 3	
pH Paper 0 – 13	Lot#210620 EXP:4-15-23
Chlorine Test Strips	Lot#0261 EXP:5-23

Additional Comments:

ENCORE SAMPLES

S-VOC-MS samples in Encores must be frozen within 48 hours of collection.

Were Encore samples received? Yes _____ Init: _____

Date and time placed in freezer _____

Were all samples placed in freezer within 48 hours of collection? Yes _____ No _____

If no, were samples shipped on dry ice? Yes _____ No _____

If S-VOC-MS samples were not preserved correctly, generate an NCR listing affected sample IDs . NCR# _____

FOR CLEAN LAB USE ONLY – Total Mercury Preservation Check(W-HG-AF;W-HG-AF-F):

Samples preserved within 48 hours? Yes _____ No _____

Date and time samples preserved: _____

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 3/24/2021 **Collected By:** Kelly McDonald, Brian Davis
Customer: NE-DIST **Sampling Agency:** FDEP
RQ: RQ-2021-03-22-34 **Project ID:** SMP

PLEASE RETURN THE ORIGINAL OF THIS FORM WITH SAMPLE SUBMITTAL
FORMS AND THE COOLER PACKING WORKSHEET TO THE LAB

Number of Coolers Shipped: 1

FIELD ID (Labels) submitted under this RQ for this collection date.

Site Location	Field ID/WIN ID
Tolomato River 800 m N of Bridge	 G5NE0601

RELINQUISHED BY(SIGNATURE):

[Signature]

DATE/TIME: 03/24/21 1600

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By: *KA*

Rec'd/Inspected Date: *3.25.21/1010*

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly "X" this box if there are qualified data on this page.

Meter ID: ProDSS Desi

RQ: 2021-03-22-34

Project: Tolomato CM

- 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.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 2/15/2021

DO DEP SOP FT 1500	Name	Date	Time CT/ET	Temp °C	Baro-meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	K McDonald	3-24	0923	21.4	761.9	8.9	-	100.3	-	1.057	P/F	L/F
ICV	↓	↓	0929	21.7	761.9	8.8	8.81	100.4	-	1.057	P/F	L/F
CCV	↓	↓	1403	22.9	760.6	8.6	8.55	99.7	-	1.057	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 (Pro DSS 0.75 to 1.50); 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.	K McDonald	3-24	0933	201222B	01/22	1000	1000	P/F	L/F
ICV	↓	↓	0937	200902C	09/21	1413	1398	P/F	L/F
CCV	↓	↓	1405	200407A	04/21	50,000	50,105	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	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	K McDonald	3-24	0942	2010F27	10/22	7.01	22.8	7.01	-42.3	P/F	L/F
Calibr.	↓	↓	0946	2010C31	09/22	4.00	22.7	4.00	141.9	P/F	L/F
Calibr.	↓	↓	0948	2012797	05/22	10.02	22.8	10.03	-206.8	P/F	L/F
ICV	↓	↓	0949	2010C31	09/22	4.00	22.7	3.95	143.3	P/F	L/F
CCV	↓	↓	1409	2002911	08/21	10.00	23.0	10.01	-209.0	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 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: 2/15/21

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last 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	K. McDonald	3-24	0952	0.00	0.00	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:



RQ-2021-03-22-34

Customer: WQAP

Project ID: SMP

Collected By: Kelly McDonald, Brian Davis

Field Report Prepared By: Kelly McDonald

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G5NE0601

Location: Tolomato River 800 m N of Bridge

Comments: Microbiology sample(s) submitted to contract laboratory

Matrix: Marine

(Check one)

☒ GRAB☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPTH)
3/24/2021	1120 EST	7.41	88.4	18.8	7.38	0.3	1.2 ☒ VOB (S)	1.2	29943	18.63
							Central Lab please use top row for login purposes			
	EST									

Parameter Suite	Parameter Methods	Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP Lot # Sa0293040 Exp: 10.19.21	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD Lot # Na0344060 Exp: 01.04.20	☒ Ice ☒ HNO3*	☒ <2	1	A
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # R0nb35407 Syringe Lot #	☒ Ice		1	A
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4-IC / W-TDS	☐ Ice			
Physical/Aggregate (Marine) (P-1L)	☒ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☒ Ice		1	A
Macroinvertebrates (PJ-2L)	☐ MI-FW-QLDC	☐ Formalin			
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☐ E Coli ☐ F Coli ☒ Enterococci ☒ Contract Lab	☒ Ice		1	A
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD	☐ Ice			
Tracers (BG-500ML)	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides (BG-500ML) (BG-1L)	W-E8321-DI WE8321-MS W-PSNP-TQ W-CT-CL-R W-PCL-SQ-R W-CAR8-AA (5 ml of MCAA** Buffer Solution) W-DIELDRIN	☐ Ice			
Phytoplankton/Periphyton	DTM-QL-C PEN-QL-C DTY-QN-C PKD-QN-C DTM-QN-C PRN-QN-C PKD-QN-BV	☐ Ice			
Name: Kelly McDonald Brian Davis		Signature:		Date: 03/24/21	

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Tolomato River 800 m N of Bridge

Date: 3/24/2021

WIN/Field ID: G5NE0601

WBID: 236311

ENR: ENRT1

Latitude: 30.1372

County: ST. JOHNS

Org ID: 21FLA

Longitude: -81.3887

Receiving Body of Water: Upper East Coast

RQ- 2021-03-22-34

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Kelly McDonald	☒		☒		
☒	Brian Davis		☒		☒	☒
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☐ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: 2	
Collection Method	
☐ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other	☒ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded		Meter ID# DESI	
Photos: No	Flow: FLOW	Tide: FALLING	Tide Times: High: 0750 Low:
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:			
SBIO ID Numbers:			
Notes:			

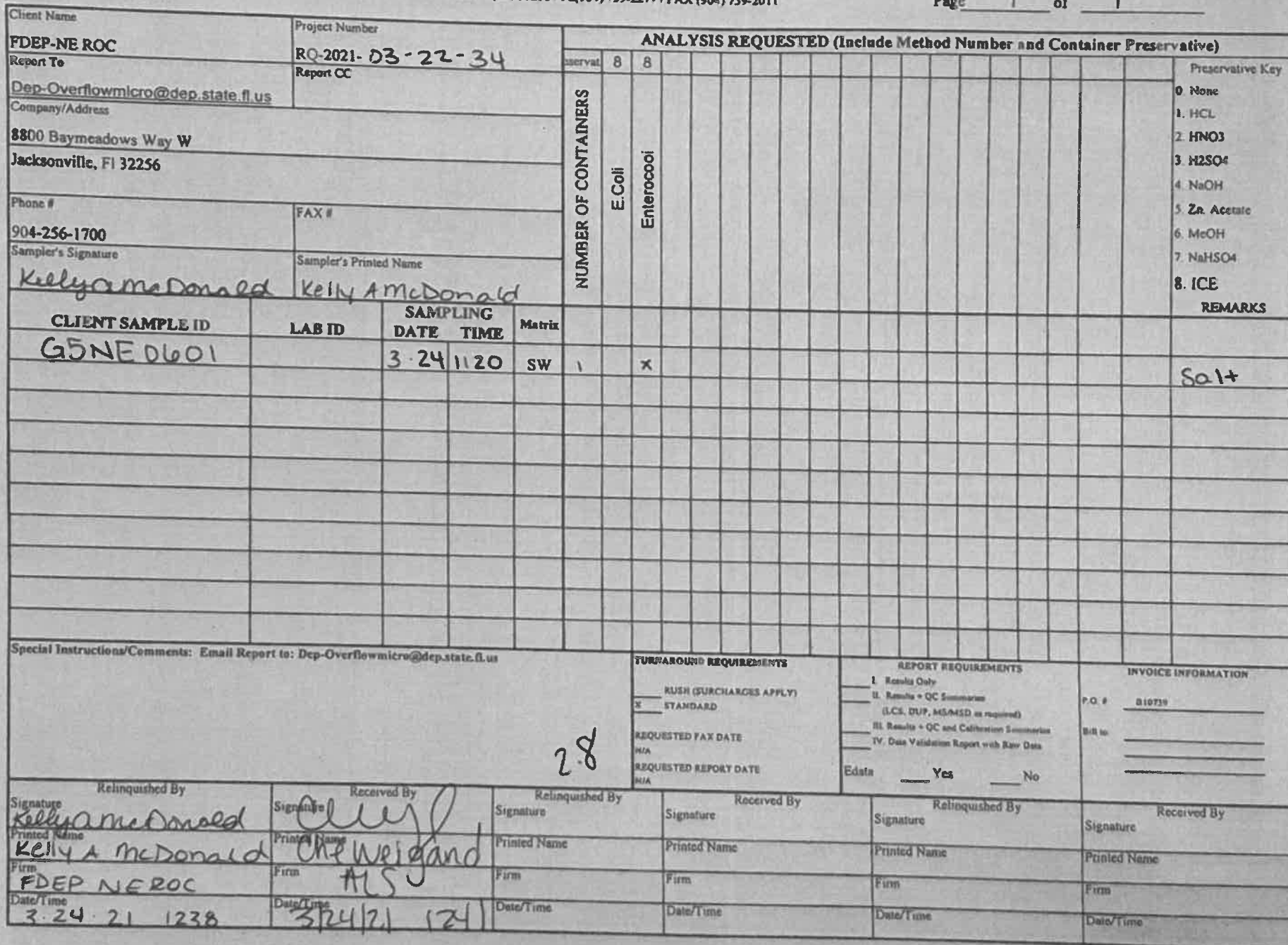
Duplicate Sample

Time Zone: EST	Time:	Field ID: N/A	(WIN ID_DUP)
WIN DMT Activity ID:			

Blank

Time Zone:	Time:	Field ID:	(Blank Type_DDMMYYYY)
DI Source:	Location:		
DI Type:	Equipment ID:		
DI Container (Name/ID):	DI Container Type:		

LIMS EVENT ID:	WIN Import ID:
Enter Field Parameters, Verify Station ID in LIMS DMT:	QC Station ID, Field Parameters in LIMS DMT:
(Initials/Date)	(Initials/Date)
Scan/Save Field Sheets BD 03/24/21	Migrate Data to WIN:
(Initials/Date)	(Initials/Date)
	Verify Data in WIN:
	(Initials/Date)





FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
SMP CONTINUOUS MONITORING SHEET

August 2017

PAGE ____ OF ____

Data Qualified?
☒ Yes ☐ No

STORET Station Name: Tolomato River 800 m N of Bridge

WBID: 2863 I1

STORET Station ID: 65NE0601

ORG ID: 21FLA

Field ID: _____

County: St. Johns

RQ: 2021-01-22-84

Meter ID#: MOE

Pre-Deployment Setup

Date: 3/17/21

Performed by: B Davis

Parameters Recorded: Temp (C) pH DO (mg/L) Depth

Sampling Interval (min): 15'00 Free Memory (days): 98% Free Expected Battery Life: 2.69v Programmed Duration: N/A

Sonde Filename: TR03172021 Reset Clock? (Y or N) Yes

Programmed Start Date/Time: 3/17/21 (mm/dd/yyyy) 14:00:00 (hh:mm:ss) (Cent. 1) East Wipers Park Correctly? Yes

Programmed End Date/Time: 3/24/21 (mm/dd/yyyy) 14:00:00 (hh:mm:ss) (Cent. 1) East Calibration Date 3/17/21

Deployment

Date: 3/17/21 Time Into Water: 1100 Time Zone: Cent. 1 East

Deployed Sonde Latitude: 30 13 71.70 Deployed By: (print all staff present) BD, JP

Deployed Sonde Longitude: -81 38 87.00

Notes: (how to get to, landmarks, site considerations & concerns, etc.)

Photos: ☒ Yes ☐ No

Retrieval

Date: 3/24/21 Time Out Of Water: 1125 Time Zone: Cent. 1 East

Mounting left or removed? Removed Retrieved By: BD, KM

Notes: (significant fouling, signs of human disturbance, site considerations and concerns, etc.)

After data analysis the sonde appeared to come out of water, likely the reason for the J-code on pH CCV.

Post-Deployment

Date: 3/24/21 Performed by: B Davis

Data File Downloaded? ☒ Yes ☐ No Archived Filename: Dctraw-05242021

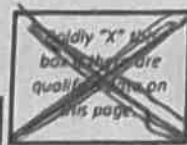
Meter Verification Date: 3/24/21

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Meter ID: MOE

RQ: 2021-03-24-34

Project: Tolomato CM



- 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.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification _____

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro- meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Brian Davis	3/17/21	850	23.2	760.9	8.5	—	100.1	—	1.08	P/F	L/F
ICV			851	23.3	761.0	8.5	856	100.4	—	1.08	P/F	L/F
CCV		3/24/21	1345	24.0	759.1	8.4	852	101.2	—	1.08	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 (Pro DSS 0.75 to 1.50), 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.	Brian Davis	3/17/21	918	201222R	1/22	1000	1000	P/F	L/F
ICV			924	201222C	1/22	50,000	49435	P/F	L/F
CCV		3/24/21	1401	200904C	9/21	1413	1402	P/F	L/F
CCV		3/24/21	1401	200904C	9/21	1413	1402	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	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Brian Davis	3/17/21	857	2006F52	6/22	7.01	23.8	7.01	-32.4	P/F	L/F
Calibr.			901	2912871	12/21	4.00	23.8	4.00	133.9	P/F	L/F
Calibr.			906	2012797	5/12	10.02	23.8	10.01	-194.8	P/F	L/F
ICV			915	2006F52	6/22	7.00	23.8	7.11	-36.6	P/F	L/F
CCV		3/24/21	1401	2012797	5/12	10.02	23.7	1028	201	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 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: _____

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last 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	B-D	3/17/21	927	0.00	0.00	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:

Printed: 3/25/2021 10:42:12 AM

Page 1 of 2

Date of Request: 02-MAR-2021
 Created By: PARRISH_J On: 02-MAR-2021
 Modified By: JASROTIA_P On: 03-MAR-2021
 Customer: NE-DIST
 Project: SMP
 Division: Division of Environmental Assessment and Restoration
 District: Northeast District
 Event Description: Tolomato CM

Send Coolers To:

Phone: 904-256-1693
 8800 Baymeadows Way West
 Suite 100
 Jacksonville, FL 32256
 Attn: Jeremy Parrish
 Cooler Ship EMail: Jeremy.M.Parrish@dep.state.fl.us

Priority: 3
 Event Status: A
 Criminal Investigation: NO
 Chemistry Request Reviewed By: WATTS_J On: 03-MAR-2021
 Biology Request Reviewed By: JASROTIA_P On: 03-MAR-2021
 Sampling Kit Required: NO Ship on:
 Sampling Kit Shipped:
 Sampling Kit Packed By:
 Preservatives Needed: NO
 Date to Receive Samples: 22-MAR-2021
 Logged In By:

Send Final Report To:

8800 Baymeadows Way West
 Suite 100
 Jacksonville, FL 32256
 Attn: Jeremy Parrish
 Report Notification EMail: Jeremy.M.Parrish@floridadep.gov

Comments: Group A:(Surf.Salt) Nutrients, Metals,Bacteria

NE-ALS-ENQ

Packing Notes:**Bottle Group A (Water) With 1 Samples:**

Bottle Type: P-1L	Number of Bottles: 1	Preserved With: ICE
ALKALINITY	Template: DEFAULT	(SM 2320 B-2011) Alkalinity in aqueous matrices as mg CaCO ₃ /L
TURBIDITY	Template: DEFAULT	(EPA 180.1 Rev. 2.0) Turbidity in aqueous matrices
W-BR-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Bromide in aqueous matrices
W-F	Template: DEFAULT	(SM 4500 F-C-2011) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-TSS	Template: DEFAULT	(SM 2540 D-2011) Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample
Bottle Type: BP-1L	Number of Bottles: 1	Preserved With: ICE
CHLSUITE-W	Template: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry
Bottle Type: P-250ML-WI-THI	Number of Bottles: 1	Preserved With: ICE
NE-ALS-ENQ	Template: DEFAULT	(ASTM D650399) Enterococci by Enterolert/QT by ALS in Jacksonville
Bottle Type: P-500ML	Number of Bottles: 1	Preserved With: HNO ₃
W-ICP	Template:	(EPA 200.7 Rev. 4.4) Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects
Calcium		
Iron		
Magnesium		
Manganese		
Zinc		
W-ICPMS	Template:	(EPA 200.8 Rev. 5.4) Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects

Bottle Group A (Water) With 1 Samples:

Bottle Type: P-500ML Number of Bottles: 1 Preserved With: HNO3
W-ICPMS Template: (EPA 200.8 Rev. 5.4) Total Recoverable Metals analysis using ICP-MS for aqueous samples
supporting Clean Water Act Projects

Aluminum
Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Nickel
Selenium
Silver
Thallium

Bottle Type: P-500ML Number of Bottles: 1 Preserved With: ICE And H2SO4
W-NH3 Template: DEFAULT (EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
W-NO2NO3 Template: DEFAULT (EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
W-S-A-TP Template: DEFAULT (EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
W-TKN Template: DEFAULT (EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices
W-TOC Template: DEFAULT (SM 5310 B-2011) Nonpurgeable Organic Carbon in aqueous matrices