Last Edit Date: 04/11/2025

NERRS SWMP Water Quality Calibration Log

Reserve: GTM | Station Name: PI | CDMO Raw File Name: gtmpiwq032625

Datasonde and Probe Identification Numbers

	Sonde Code	Serial Number
Datasonde:	EXO210122020	20H100464
Vented:	No	Model Number
Nickname:	Matthew	EXO2

	Serial Number	Model Number
pH:	24G104085	577602
RP DO:		
ODO:	24H100705	599100-01
Turbidity:	13K102042	599101-01
Conductivity:	24H100562	599827
Chl/TotAlg:	20C000096	599103-01
EXO Wiper:	12L101282	599090-01

Datasonde Maintenance

Date of Calibration: 03/25/2025 mm/dd/yyyy | Technician(s): Megan Howkins

	Central/TURB	ODO	CHL		Central/TURB	ODO	CHL
Wiper(s) Replaced:	Yes			Wiper parks 180° from optics:	Yes		
Batteries Replaced:	Yes			DO/ODO membrane replaced:	No		
Format Flash Disk:				Membrane integrity test:			

Comments: fDOM SN: 20C201718

Pre/Post Deployment Calibration

Pre-Deployment						Post-Deployment			Sensor Diagnostics	
Standards		**Before Cal**		**Calibrated**	**Error**				**Pre-Deployment**	
Temp	21.48 °C	21.494	°C		No	Check Date	04/10/202			
RP % DO @ 100% sat		%		%		%		%	RP DO chrg (range 25-75)	
BP @ cal (Rapid Pulse)		mm Hg							RP DO gain (0.7-1.4)	
Optical %DO @ 100% sat	90.1 %	100.7	%		No	102.7 %		102.8 %	Optical DO gain (6600: 0.7-1.4, EXO: 0.87-1.25)	1.12
BP @ Cal (Optical)		765.2	mm Hg			767.2	mm Hg		RP DO warm up test (hi/lo)	
Baro. Pres. (Depth Calib)		764.3	mm Hg	(760.0 for vented sonde)		767.2	mm Hg	(760.0 for vented)	Cell const (6600: 4.6-5.45, EXO CT2: 4.59-5.61, WPD EXO: 0.419-0.519)	0.47
Depth	0.058 offset	0.076	m	0.058 m	No	0.144	m	0.098 offset	pH 7 (0 +/- 50 mV)	-17.1
Station Offset									pH 10 (-180 +/- 50 mV)	-195.6
Level	0.0 offset							0.0 offset	pH 4 (+180 +/- 50 mV)	163.7
SpCond	50.0 mS/cm	50.095	mS/cm	50.0 mS/cm	No	50.117	mS/cm		Calculated pH slope	178.5
ph 7	7.02	7.06		7.02	No	7.13			(<155 is suspect)	
ph 10	10.06	10.09		10.06	No	10.13			(4/7 will result in negative slope)	
ph 4	4.0	3.99		3.99	No	4.07				
Turb	0.0 NTU/FNU	-0.01	NTU/FNU	0.0 NTU/FNU	No	-0.02	NTU/FNU		**Post-Deployment**	
Turb	124.0 NTU/FNU	125.39	NTU/FNU	123.99 NTU/FNU	No		NTU/FNU		RP DO chrg (range 25-75)	
Rhodamine WT Temp		22.051	°C			21.893	°C		RP DO warm up test (hi/lo)	
Chl (0)	0.0 ug/L	-0.04	ug/L	0.0 ug/L	No	0.13	ug/L		pH 7 (0 +/- 50 mV)	-22.5
Chl (118)	6600:113.7 ug/L	68.12	ug/L	68.38 ug/L	No		ug/L	6600:114.0	pH 10 (-180 +/- 50 mV)	-200.8
	EXO: 65.9 ug/L							EXO: 66.1	pH 4 (+180 +/- 50 mV)	159.2
Battery voltage		5.39	V	(remove ext. power -650,6038)		5.51	V	(remove ext. power)	Calculated pH Slope (<155 is suspect)	178.3

Programming

Interval:	15 min	Start date:	03/26/2025 mm/dd/yyyy	Start time (STD):	05:00:00 24 hh:mm:ss
Duration:	365 days	sonde file name:	PI032625	Battery life:	134.75 days
Free memory:	24221.35 days	Set clock (status):	Yes Y or N	Free memory (status):	98.69 bytes (k) or %

Parameters recorded:

Temp:	Yes	Sp Cond:	Yes	Salinity:	Yes
DO % sat:	Yes	DO Conc.:	Yes	Depth/Level:	Yes
pH:	Yes	Turbidity:	Yes	Chlorophyll:	Yes
		pH mV:	Yes	Battery Voltage:	Yes

Comments-Pre: fDOM Calibrated: 0.04, 0.00 RFU; 99.35, 100.00 QSU; -0.01, 0.00 QSU; 296.59, 300.00 QSU; TAL CHLa RFU DI: -0.01, 0.00; 22C Rhod (std 16.4): 16.55, 16.39; New ODO sensor added

Comments-Post: temp: 21.307C, 21.29C; fDOM: 0.50QSU, 0.25RFU; TAL RFU: 0.06

Last Edit Date: 04/11/2025

NERRS SWMP Water Quality Field Log

Deployment Information

First Sample Time: 10:45

Date Deployed: 03/26/2025 mm/dd/yyyy * **Time:** 10:42 hh:mm (24hr) **White Towel:** Yes

Technician(s): Megan Howkins

Field Data:

Water Temp	20.458 °C	DO Percent	89.0 %	Instrument Type:	EXO2
Sp Cond	36.747 mS/cm	DO Conc.	7.0 mg/L		
Salinity	23.29 psu	Other	7.65		

Comments: windy, no clouds, warm, outgoing tide

Infield Maintenance: Note changes to site during deployment, sonde tube maintenance, biofouling removal, etc.

Date: 04/09/2025 mm/dd/yyyy **Duration:** 4 min **Maintenance:** ram rod

Comments: light soft fouling cleared

Retrieval Information

Last Sample Time: 10:30

Date Retrieved: 04/09/2025 mm/dd/yyyy **Time:** 10:33 hh:mm (24hr) **White Towel:** Yes

Technician(s): Megan Howkins

Field Data:

Water Temp	°C	DO Percent	%	Instrument Type:	
Sp Cond	mS/cm	DO Conc.	mg/L		
Salinity	psu	Other			

Fouling Presence:

Type: A=algae, B=barnacles, C=crabs, E=eggs, F=fish, H=hydroids, MD=mud, S=sponges, SI=silt, SL=shell SP=shrimp, T=tunicates, W=worm, O=other, N=none

Amount: H=heavy, M=moderate, L=light *(e.g. A/H, B/L)*

Sonde/Guard	N	External Screen	N	Chlorophyll	N
Temp/Cond	N	Dissolved Oxygen	N		
pH	N	Turbidity	N		

Comments: no fouling

File Retrieval

Sonde Filename: PI032625 **Probe Malfunction:** No

Comments: