

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: YSI Pro DSS Stitzh RA: RA-2019-08-65-44 Project: Waze Complaint

- 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.	<u>A Kalmbacher</u>	<u>9-30-19</u>	<u>1125</u>	<u>23.6</u>	<u>760</u>	<u>8.5</u>	<u>8.47</u>	<u>100.1</u>			P / F	L / F
ICV			<u>1130</u>	<u>23.7</u>	<u>760</u>	<u>8.5</u>	<u>8.48</u>	<u>100.1</u>			(P) F	(L) F
CCV	<u>A Kalmbacher</u>	<u>9-30-19</u>	<u>1455</u>	<u>21.9</u>	<u>758</u>	<u>8.3</u>	<u>8.28</u>	<u>99.7</u>			(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.	<u>A Kalmbacher</u>	<u>9-30-19</u>	<u>1133</u>	<u>190711B</u>	<u>07/2020</u>	<u>1,000</u>	<u>1,001</u>	P / F	L / F
ICV			<u>1135</u>	<u>190711A</u>	<u>07/2020</u>	<u>100</u>	<u>104</u>	(P) F	(L) F
CCV	<u>A Kalmbacher</u>	<u>9-30-19</u>	<u>1500</u>	<u>190711B</u>	<u>07/2020</u>	<u>1,000</u>	<u>997</u>	(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.	<u>A Kalmbacher</u>	<u>9-30-19</u>	<u>1140</u>	<u>2902778</u>	<u>2/2021</u>	<u>7.</u>	<u>23.6</u>	<u>7.01</u>	<u>-1.7</u>	P / F	L / F
Calibr.			<u>1144</u>	<u>2904300</u>	<u>3/2021</u>	<u>4.</u>	<u>23.6</u>	<u>4.00</u>	<u>178.9</u>	P / F	L / F
Calibr.			<u>1147</u>	<u>2810F55</u>	<u>4/2020</u>	<u>10.</u>	<u>23.7</u>	<u>10.02</u>	<u>-174.7</u>	P / F	L / F
ICV			<u>1150</u>	<u>2902778</u>	<u>1/2021</u>	<u>7.0</u>	<u>23.5</u>	<u>7.03</u>	<u>-0.8</u>	(P) F	(L) F
CCV	<u>A Kalmbacher</u>	<u>9-30-19</u>	<u>1555</u>	<u>2904300</u>	<u>3/2021</u>	<u>4.0</u>	<u>23.7</u>	<u>4.03</u>	<u>175.9</u>	(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	<u>A Kalmbacher</u>	<u>9-30-19</u>	<u>1153</u>	<u>0.00</u>	<u>0.00</u>	(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:

Cyanobacteria Bloom Response Field Data Sheet

RQ-2019-08-05-44		Collected By: Jeremy Parrish									
Customer: Mark Hopper		Field Report Prepared By: K. H. M. Bacher									
Project ID: Bloom Response		Sampling Agency: FDEP									
WIN ID/Field ID:  HABNE0001		Comments: Looked fairly normal, scant film + foam, very slightly turbid									
North Fork Black Creek Blanding		Collection Equipment: Pole & Bottle									
Matrix: ☒ Grab		Coordinates: 30° 4' 31.5" / -81° 51' 48.6"									
Tide: ☒ Rising ☐ Falling ☐ Slack ☐ N/A		High Tide Time: Low Tide Time:									
Water Quality											
Date	Time ☒ EST ☐ CEN	Sample Depth (m)	Total Depth (m)	Secchi (m)	Temp °C	pH (SU)	D.O. (mg/L)	D.O. (%)	Cond. (umho/cm)	Salinity (ppt)	
9-30-19	1325	0.3	0.34 1m	0.6	26.9	6.73	3.55	44.4	117	0.05	
Bloom Observations											
Algal Bloom Observed? ☐ Yes ☒ No											
Water Odors		☒ Normal	☐ Sewage	☐ Petroleum	☐ Chemical	☐ Other:					
Water Clarity		☐ Clear	☒ Slightly Turbid	☐ Turbid	☐ Opaque	☐ Other: Not observed					
Bloom Color		☐ Green	☐ Red	☐ Brown	☐ Other:						
Water Surface		☒ Clear	☐ Scum	☐ Globbs	☐ Slick						
Parameter Suite		Parameter Methods			Preservation		pH Check	#Bottles Sent to Lab	Bottle Group		
Bloom ID (PT-500mL)		☒ BLOOM-ID			☒ Ice						
Chlorophyll (BP-1L)		☒ CHLSUITE-W			☒ Ice						
Toxins		☒ W-MCYST-AA			☒ Ice						
Preserved Nutrients (500mL HDPE)		W-NH3 / W-NO2NO3 / W-TKN / W-S-A-TP			☒ Ice ☐ H2SO4		☒ 2				
		Lot			Exp:		☐ <2				
Filtered Nutrients (P125mL)		☒ W-PO4-F		☒ Field Filtered 0.45um Filter		☒ Ice					
Quantitative Algae		☐ DTY-QN-C / PKD-QN-C			☐ Ice ☐ Lugols		not collected				
Relinquished By:		Date/Time		Number of Coolers Shipped		Received By:		Date/Time			
K. H. M. Bacher		9-30-2019		1							

Contains: 1:1 H2SO4
Lot #: SA9129100
Expires: 05/09/20
See Safety Data Sheet (SDS)

[illegible]

Algae Bloom Response-as needed

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: WQAP

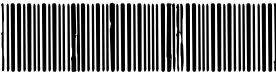
Requester: Jeremy M. Parrish

Field Report Prepared By:

Project ID: BLOOM-RESP

Collected By:

Sampling Agency:

Location	WIN ID/Field ID:		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 9/30/19 Time 1325	Eastern Central	Composite end Date	Time	Bottle Group(s) (See pg 2)	
Field ID	HABNE0001		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen 3.55	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	A, B	
WIN/ST	North Fork Black Creek Blanding		Temp (C) 26.9	pH 6.73	Sample Depth .03	☐ ft ☒ m	Sp. Conductance (umho/cm) 117		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) 0.05	Comments				
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Eastern Central	Composite end Date	Time	Bottle Group(s)	
Field ID			Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #			Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments				
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Eastern Central	Composite end Date	Time	Bottle Group(s)	
Field ID			Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #			Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments				
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Eastern Central	Composite end Date	Time	Bottle Group(s)	
Field ID			Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #			Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments				

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
	9-30-2019	Fed Ex	1		

1530

Group: A	Bottle Type:	PT-50ML	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
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BLOOM-ID

Group: B	Bottle Type:	BP-1L	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
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CHLSUITE-W

Group: B	Bottle Type:	BG-250ML-WDMT H	# of Bottles: 8	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
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W-MCYST-AA

Group: B	Bottle Type:	P-500ML	# of Bottles: 8	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
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W-NH3
W-NO2NO3
W-S-A-TP
W-TKN

Group: B	Bottle Type:	P-125ML	# of Bottles: 8	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
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W-PO4-F