

Algal Bloom Response - As needed

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: WQAP

Requester: Michael Linger

Field Report Prepared By:

Mike Drennan

Project ID: BLOOM-RESP

Collected By:

Mike Drennan

Sampling Agency:

FDEP-CEROC

Location		☐ Comp ☒ Grab		Collection (comp begin or grab) Date 7/12/18 Time 1110		Eastern Central		Composite end Date Time		Bottle Group(s) (See pg 2)	
Fie		Algae Bloom Sampling Kit RQ-2018-04-30-40		Matrix (type, e.g., Salt, Fresh, etc) Fresh		Diss. Oxygen 8.13		☒ mg/L ☐ % sat		Total Res. Chlorine (mg/L)	
Wl		Location: Lake Weir, East Shore 7/12/2018 Mike Drennan, Terry Riordan		Temp (C) 31.92		pH 8.40		Sample Depth 0.3		Sp. Conductance (umho/cm) 245	
Lat		☐ dd ☐ dms		Salinity (ppt)		Comments					
Location		☐ Comp ☐ Grab		Collection (comp begin or grab) Date Time		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		Sp. Conductance (umho/cm)	
Latitude		☐ dd ☐ dms		Longitude		☐ dd ☐ dms		Salinity (ppt)		Comments	
Location		☐ Comp ☐ Grab		Collection (comp begin or grab) Date Time		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		Sp. Conductance (umho/cm)	
Latitude		☐ dd ☐ dms		Longitude		☐ dd ☐ dms		Salinity (ppt)		Comments	
Location		☐ Comp ☐ Grab		Collection (comp begin or grab) Date Time		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		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

Group: A	Bottle Type:	PT-50ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
BLOOM-ID							
Group: B	Bottle Type:	BG-500ML-WDMT H	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
W-MCYST-AA							
Group: C	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
CHLSUITE-W							
Group: C	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
W-NH3							
W-NO2NO3							
W-S-A-TP							
W-TKN							
							H2SO4 LOT# SA8085170 EXP: 03/26/19
Group: C	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
W-PO4-F							
Group: D	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	Lugols	Enter Number of Bottles Sent to Lab	1
DTY-QN-C							
PKD-QN-C							

Appendix A

CYANOBACTERIA BLOOM RESPONSE FIELD DATA SHEET (7-6-06 V2)

WATERBODY Lake Weir, East Shore		DATE (M/D/YY): 7/12/18	TIME: (AM) 1110	Case ID# RQ-2018-04-30-40
COUNTY: Marion		LOCATION:		NEAREST TOWN/CITY: Weirsdale
Visit Type: ☐ Initial ☐ Recon ☒ Sampling ☐ Follow-	Samples collected: ☒ yes ☐ no	Samples submitted to: Central DEP Lab		Photos Taken: ☒ yes ☐ no
Sample collection method: Single Grab: ☒ Grab Composite: ☐ Depth integrated composite: ☐				
Sample & Analysis types: Aqueous: ☒ Surface Scum: ☐ Benthic mat: ☐ Tissue: ☐				
Algal ID & enumeration: ☒ Nutrients: ☐ Chl-a: ☒ AGP: ☒ Turbidity: ☒ Toxin: ☐ Specify				
Estimated size of bloom:		Impounded: ☐ yes ☒ no		
Lake/Estuary Typical depth 2.0 m deep		Inflows: ☐ yes ☐ no Outflows: ☐ yes ☐ no		
Stream/River/Canal		Typical Transect		
		Water velocity		
		Left bank Middle Right bank		

Canopy Cover: Open: ☒ Lightly Shaded (11-45%): ☐ Moderately Shaded (46-80%): ☐ Heavily Shaded: ☐
Description of Bloom/ Latitude Degrees Minutes Seconds Longitude Degrees Minutes Seconds
Present Weather conditions mid 80's, light wind, partly cldy
Print a map from GIS tool or Internet mapping service (e.g., Mapquest, Google Map)
Sketch bloom area on the attached map. Indicate wind direction.
Last rain event 7/9/18
Rainfall amount .22"

WATER QUALITY	Depth (m):	Temp. (°C):	pH (SU):	D.O. (mg/l):	Cond. (µmho/cm) or Salinity (ppt):	Secchi (m)
Top	0.3	31.92	8.40	8.13	245	0.8
Mid-depth	1.0	31.37	8.30	8.06	244	
Bottom	1.5	31.22	8.22	8.03	244	
System Type: Stream: ☐ (1st - 2nd order 3rd - 4th order 5th - 6th order 7th order or greater) Lake: ☒ Wetland: ☐ Estuary: ☐ Other: ☐						
Water Odors (check box): Normal: ☒ Sewage: ☐ Petroleum: ☐ Chemical: ☐ Other: ☐						
Water Surface (check box): Clear: ☐ Scum: ☐ Globbs: ☐ Slick: ☐						
Water Clarity (check box): Clear: ☐ Slightly turbid: ☒ Turbid: ☐ Opaque: ☐						
Bloom Color (check box): Green: ☐ Red: ☐ Brown: ☐ Other: ☐						
Notes: * Minimal bloom left. Some brown/orange + globular (1. lit green) blooms @ East shore						
Abundance: Absent Rare Common Abundant						
Periphyton ☐ ☒ ☐ ☒						
Fish ☐ ☐ ☐ ☒						
Aquatic Macrophytes ☐ ☐ ☐ ☒						
Iron/sulfur Bacteria ☒ ☐ ☐ ☐						

VISIT TEAM: **T. Riordan** **M. Brennan** **21 FL CEM - DEP**

Cooler Packing Worksheet for Request: RQ-2018-04-30-40

Algal Bloom Response - As needed

Ship Cooler On: 4/20/2018

Customer/Project: WQAP/BLOOM-RESP

Assigned To: REYNOLDS_T

Requester: Michael Linger

Priority: 3

407-897-4180
3319 Maguire Blvd
Suite 232
Orlando, FL 32803

Attn: Mike Linger

Comments:

No preservatives needed.

Analyze toxin upon receipt after consultation with Biology's Taxonomy Manager.

Bottle Groups A/B - separate event, priority 1

Bottle Groups C/D - separate event, C - priority 3, D - priority 12

Bottle Group A - Priority 1

For algal dominant taxon.

Bottle Group B - Priority 1

For toxin testing.

Bottle Group C - Priority 3

Water quality testing

Bottle Group D - Priority 12

For algal full ID.

There are multiple bottles per Group in case multiple sample targets or sample locations are needed. Samplers use best professional judgement to decide which samples are appropriate to collect for a particular response. All sets of bottles do not have to be filled at one time.

Requested Analyses:

Bottle Group: A

of Sites: 1

Container ID: PT-50ML

Qty: 1 Preservation: ICE

Lot # 03775003

Description: Plastic Tube 50 mL

Analysis

BLOOM-ID

Description

Assessment of dominant algal taxa in bloom or mat sample

Bottle Group: B

of Sites: 1

Container ID: BG-500ML-WDMTH Qty: 1 Preservation: ICE

Lot # 08067647

Description: Wide Mouth Amber Glass Bottle 500 ml

Analysis
W-MCYST-AA

Description
Microcystins in water matrices by HPLC/MS/MS

Bottle Group: C

of Sites: 1

Container ID: BP-1L Qty: 1 Preservation: ICE

Lot # 1223623

Description: Brown Plastic Bottle 1L

Analysis
CHLSUITE-W

Description
Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Container ID: P-500ML Qty: 1 Preservation: ICE And H2SO4

Lot # 08070631

Description: Plastic Bottle 500 mL Affix YELLOW sulfuric acid dot to container.

Analysis
W-NH3
W-NO2NO3
W-S-A-TP
W-TKN

Description
Ammonia in aqueous matrices as mg N/L
Nitrite/Nitrate in aqueous matrices as mg N/L
Total Phosphorus in aqueous matrices as mg P/L
Total Kjeldahl Nitrogen in aqueous matrices

Container ID: P-125ML Qty: 1 Preservation: FILTER-ICE

Lot # 08069732

Description: Plastic Bottle 125 mL

Analysis
W-PO4-F

Description
Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Bottle Group: D

of Sites: 1

Container ID: BP-1L Qty: 1 Preservation: Lugols

Lot # 1223623

Description: Brown Plastic Bottle 1L

Analysis
DTY-QN-C
PKD-QN-C

Description
No. of diatom taxa of quantitative phytoplankton sample.
No. of wet taxa of quantitative phytoplankton sample.

Cooler Packed By: Tyler Number of Coolers: 1 Date: 04/16/18

Kit must also include:

- ☒ Field Sheets
- ☒ Temperature Control Bottle
- ☒ FedEx Bills, if applicable
- ☒ Plastic Bags
- ☒ Zip Ties

If Preservation Included:

ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____

PLEASE RETURN ALL COOLERS FOR RQ-2018-04-30-40