

Bend Genetics, LLC 107 Scripps Drive, Ste. 210 Sacramento, CA 95825 Tel: (916) 550-1048

Date: 9/2/2022

Subject: Cyanobacterial testing results – Agreement# 19-001-270

From: Tim Otten, Laboratory Director

To: Marisa Van Dyke, Freshwater HABS Program Manager

State Water Resources Control Board - Information Management & Quality Assurance

Testing results are enclosed for ELISA analyses conducted on three samples collected near Stockton (RB5; c/o Janis Cooke) on 8/24/2022. Note that in order to expedite analyses for the holiday assessment microscopy was not included in this report. The microscopy results will be appended to these toxin testing results at a later date. All data have been reviewed and are considered final. An EDD report summarizing these data will be submitted to the State Water Board within 40 days of receipt of the data template.

Analyses included in this report:

 Quantification of total cyanobacterial toxins (anatoxin-a, cylindrospermopsin, microcystin/nodularin and saxitoxin) by enzyme linked immunosorbent assay (ELISA).



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Project: RWB5_HolAssm_2022

Analysis for Toxic Cyanobacteria

Agreement #: 19-001-270 **Reported:** 9/2/2022 10:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Location	Date Collected	Date Received	Matrix	Preserved	BG_ID
SWPJC220824 20	Buckley Cove	8/24/2022 12:50	8/25/2022 9:16	Water	N	WB3570
SWPJC220824 21	SJR @ Stockton GC	8/24/2022 12:25	8/25/2022 9:16	Water	N	WB3571
SWPJC220824 22	McLeod Lake	8/24/2022 10:50	8/25/2022 9:16	Water	N	WB3572



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SAMPLE RESULTS

				Quantitation			
Sample ID	Method	Target	Result	Limit	Units	Notes	
SWPJC220824 20	ELISA	Anatoxin-a	ND	0.15	μg/L	U	
SWPJC220824 20	ELISA	Cylindrospermopsin	ND	0.05	μg/L	U	
SWPJC220824 20	ELISA	Microcystin/Nod.	ND	0.15	μg/L	U	Batch 1
SWPJC220824 20	ELISA	Saxitoxin	ND	0.02	μg/L	U	
SWPJC220824 21	ELISA	Anatoxin-a	ND	0.15	μg/L	U	
SWPJC220824 21	ELISA	Cylindrospermopsin	ND	0.05	μg/L	U	
SWPJC220824 21	ELISA	Microcystin/Nod.	0.40	0.15	μg/L		Batch 1
SWPJC220824 21	ELISA	Saxitoxin	ND	0.02	μg/L	U	
SWPJC220824 22	ELISA	Anatoxin-a	ND	0.15	μg/L	U	
SWPJC220824 22	ELISA	Cylindrospermopsin	ND	0.05	μg/L	U	
SWPJC220824 22	ELISA	Microcystin/Nod.	8.63	3.00	μg/L		Batch 2
SWPJC220824 22	ELISA	Saxitoxin	ND	0.02	μg/L	U	



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QUALITY CONTROL

	_	_	Qualifiers /			•	%REC
Method	Analyte	Result	Comments	Units	Spike Level	%REC	Limits
ELISA	ATX - Blank	ND	U	μg/L	0		
ELISA	ATX - Positive	0.70		μg/L	0.75	92.8	70-130
ELISA	ATX - Matrix Sp	1.25		μg/L	1.25	99.9	70-130
ELISA	CYN - Blank	ND	U	μg/L	0		
ELISA	CYN - Positive	0.72		μg/L	0.75	95.5	70-130
ELISA	CYN - Matrix Sp	1.07		μg/L	1.00	107.3	70-130
ELISA	MC - Blank	ND	U, Batch 1	μg/L	0		
ELISA	MC - Positive	0.79	Batch 1	μg/L	0.75	105.7	70-130
ELISA	MC - Matrix Sp	1.10	Batch 1	μg/L	1.10	100.5	70-130
ELISA	MC - Blank	ND	U, Batch 2	μg/L	0		
ELISA	MC - Positive	0.81	Batch 2	μg/L	0.75	107.8	70-130
ELISA	MC - Matrix Sp	0.99	Batch 2	μg/L	1.00	98.8	70-130
ELISA	STX - Blank	ND	U	μg/L	0		
ELISA	STX - Positive	0.070		μg/L	0.075	93.0	70-130
ELISA	STX - Matrix Sp	0.190		μg/L	0.200	94.9	70-130

QUALIFIERS/COMMENTS/NOTES

- C1 The reported concentration for this analyte is below the quantification limit.
- C2 The reported concentration for this analyte is above the calibration range of the instrument.
- J The reported result for this analyte should be considered an estimated value.
- U Undetected