

Bend Genetics, LLC
87 Scripps Drive, Ste. 301
Sacramento, CA 95825
Tel: (916) 550-1048

Date: 8/31/2020
Subject: Cyanobacterial toxin analysis
From: Tim Otten, Laboratory Director
To: Thomas Moorhouse
Clean Lakes, Inc.

Microscopy and cyanotoxin testing results are attached for one sample collected from site LSin on 8/24/2020. These data have been reviewed and are considered final.

Analyses included in this report:

- Quantification of total cyanobacterial toxins (anatoxin-a, cylindrospermopsin, microcystin/nodularin and saxitoxin) by enzyme linked immunosorbent assay (ELISA).
- Microscope photos and identification of potentially toxigenic (PTOX) cyanobacteria.



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Analysis for Toxic Cyanobacteria
PO #:
Reported: 8/31/2020 11:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Location	Date Collected	Date Received	Matrix	Preservative	BG ID
LSin1	LSin	8/24/2020 14:00	8/26/2020 10:30	Water	N	CN01



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SAMPLE RESULTS

Sample ID	Method	Target Analyte	Result	Reporting Limit	Units	Dilution Factor	Notes
LSin1	ELISA	Anatoxin-a	ND	0.15	µg/L	1	U
LSin1	ELISA	Cylindrospermopsin	ND	0.05	µg/L	1	U
LSin1	ELISA	Microcystin/Nod.	ND	0.15	µg/L	1	U
LSin1	ELISA	Saxitoxin	ND	0.02	µg/L	1	U



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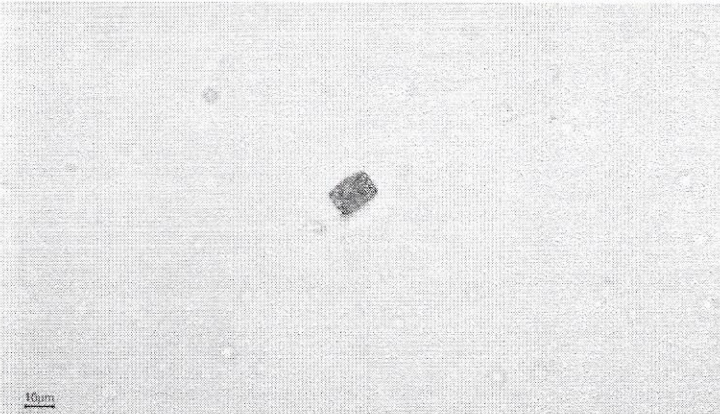
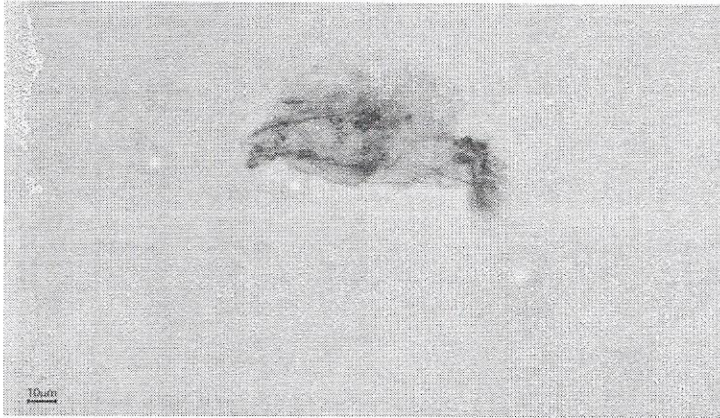
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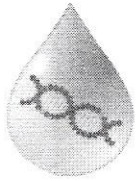
MICROSCOPY RESULTS - Identification of CyanoHABs

Sample ID	Dominant	Sub-dominant	Also present	Notes
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LSin1 NA



This sample contained a low amount of sediment and indistinguishable detritus; however, no cyanobacteria were observed. The photomicrographs were taken under 400X magnification.



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QUALITY CONTROL

Method	Analyte	Result	Qualifiers / Comments	Units	Spike Level	%REC	%REC Limits
ELISA	ATX - Blank	ND	U	µg/L	0		
ELISA	ATX - Positive	0.81		µg/L	0.75	107.8	70-130
ELISA	ATX - Matrix Sp	1.25		µg/L	1.25	100.1	70-130
ELISA	CYN - Blank	ND	U	µg/L	0		
ELISA	CYN - Positive	0.75		µg/L	0.75	99.5	70-130
ELISA	CYN - Matrix Sp	0.94		µg/L	1.00	94.4	70-130
ELISA	MC - Blank	ND	U	µg/L	0		
ELISA	MC - Positive	0.81		µg/L	0.75	107.8	70-130
ELISA	MC - Matrix Sp	1.04		µg/L	1.00	103.7	70-130
ELISA	STX - Blank	ND	U	µg/L	0		
ELISA	STX - Positive	0.081		µg/L	0.075	107.5	70-130
ELISA	STX - Matrix Sp	0.205		µg/L	0.20	102.4	70-130

Notes/Qualifiers

- 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