

Analysis Report

Report# 250613_CDSD

Client and sample receipt information

Submitted to: Manjot K. Masson
Project: NA
PO/Contract #: NA
Organization: Central Davis Sewer District
Address: 2200 So. Sunset Dr, Kaysville, UT 84037
Email: mkaur@cdsewer.org, jillj@cdsewer.org
Sample Receipt Date: 13 June 2025
Temp Upon Receipt (°C): 22.0
Lab Order ID: CDSO-2025-784
Date Report Generated: 19 June 2025
Generated by: Christopher Schaller

Laboratory identification (Lab ID), sample identification, description/site, collection date, and notes

Lab ID	Sample ID	Site	Date	Notes
GWL25-1412	FB1	Great Salt Lake	12 June 2025	Salt
GWL25-1413	FB4	Great Salt Lake	12 June 2025	Salt

Test, method, standard operating procedure (SOP), analyte, and acronym

Test	Method	SOP#	Analyte	Acronym
NOD-R	LC-MS/MS	62	nodularin	NOD-R

Sample Preparation/Extraction

Sample preparation SOP#, name, and summary

SOP#	Name	Summary
30	Cellular Lysis and Preparation of Water Samples	Three freeze/thaw cycles are used for raw water (and all Method 546) samples. A bead ruptor or tissue grinder are used for benthic algae.

Method Modifications

None

Abbreviations and Qualifier Flags (QF)

Abbreviations			
MRL	Method Reporting Limit	FS	Field Sample
MDL	Method Detection Limit	LFSM	Lab Fortified Sample Matrix
Blank	Water/buffer free from interferences	LFSMD	Lab Fortified Sample Matrix Duplicate
LFB	Lab Fortified Blank	LD	Lab Duplicate
MB	Method Blank	IS	Internal Standard
CCC	Continued Calibration Check	—	Not Analyzed
ND	Not Detected above the MDL/MRL	NA	Not Applicable

Qualifier Flag

CL	Analytical result is estimated due to ineffective quenching.
J	Analyte was positively identified; the associated numerical value is estimated.
PT	The reported result is estimated because the sample was not analyzed within required holding time.
B	Analytical result is estimated. Analyte was detected in associated reagent blank as well as the samples.
E	Analytical result is estimated. Values achieved were outside calibration range.
N	Spiked sample (LFSM) control was outside limits (water \pm 30%; complicated matrix and within 2x MDL \pm 50%)
T	The reported result is estimated because the sample exceeded temperature threshold when received

Reporting Unit Conversions

Sample Type	Units
Water	$\mu\text{g/L} = \text{ng/mL} = \text{ppb}$
Biological Specimens	$\text{ng/g} = \mu\text{g/kg} = \text{ppb}$
Supplements/Food	$\mu\text{g/g} = \text{mg/kg} = \text{ppm}$
Swabs/Filters/Etc.	ng/unit

LC-MS/MS Results

LC-MS/MS Data including the laboratory identification, analyte, average interpolated result, method reporting limit (MRL), units, LFSM (where applicable), percent recovery (%Rec), Qualifier Flag (QF), analyst initials (IN), and analysis date.

Lab ID	Analyte	Result	MRL	Units	LFSM Level	%Rec	QF	IN	Date
GWL25-1412	NOD-R	<0.10	0.10	µg/L	0.10	116%	T	LK	06/18/2025
GWL25-1413	NOD-R	<0.10	0.10	µg/L			T	LK	06/18/2025

Control Limits: Water LFSM ± 30%; Complicated matrix LFSM and when LFSM within 2X MDL ± 50

Guidance Values

Recreational Guidance values for cyanotoxins detected in drinking and surface waters by agency (EPA – United States Environmental Protection Agency; WHO – World Health Organization) (ppb; ng/mL).

Toxin	Recreational		Drinking Water			
	EPA Value	WHO Value	EPA (10 day - infants)	EPA (10 day - children/adults)	WHO (14 day - adults)	WHO (lifetime - adults)
Microcystins	8 ppb	20 ppb	0.3 ppb	1.6 ppb	12 ppb	1 ppb
Cylindrospermopsin	15 ppb	6 ppb	0.7 ppb	3.0 ppb	3 ppb	0.7 ppb
Anatoxin-a	None	60 ppb	None	None	30 ppb	None
Saxitoxins	None	30 ppb	None	None	3 ppb	None

Summary of Results

Summary of LC-MS/MS test results ($\mu\text{g/L}$)

Customer Sample ID	Lab ID	NOD-R
FB1	GWL25-1412	ND
FB4	GWL25-1413	ND
<i>MRL:</i>		0.10

Submitted by:



Amanda Foss
Lab Director

Date: June 19, 2025

*The results in this report relate only to the samples listed above.
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