

August 31, 2023

Carolyn Green  
Dunlap Lake Property Owners Association  
P.O. Box 5  
Edwardsville, IL 62025  
TEL: (618) 791-1398  
FAX:



Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

**RE:** Lake Water Dunlap Lake

**WorkOrder:** 23081661

Dear Carolyn Green:

TEKLAB, INC received 3 samples on 8/22/2023 10:05:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Marvin L. Darling  
Project Manager  
(618)344-1004 ex 41  
[mdarling@teklabinc.com](mailto:mdarling@teklabinc.com)



## Report Contents

<http://www.teklabinc.com/>

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**Client:** Dunlap Lake Property Owners Association

**Work Order:** 23081661

**Client Project:** Lake Water Dunlap Lake

**Report Date:** 31-Aug-23

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**Client:** Dunlap Lake Property Owners Association

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### Abbr Definition

\* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count (> 200 CFU)

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### Qualifiers

- # - Unknown hydrocarbon
- C - RL shown is a Client Requested Quantitation Limit
- H - Holding times exceeded
- J - Analyte detected below quantitation limits
- ND - Not Detected at the Reporting Limit
- S - Spike Recovery outside recovery limits
- X - Value exceeds Maximum Contaminant Level
- B - Analyte detected in associated Method Blank
- E - Value above quantitation range
- I - Associated internal standard was outside method criteria
- M - Manual Integration used to determine area response
- R - RPD outside accepted recovery limits
- T - TIC(Tentatively identified compound)



## Case Narrative

<http://www.teklabinc.com/>

**Client:** Dunlap Lake Property Owners Association

**Work Order:** 23081661

**Client Project:** Lake Water Dunlap Lake

**Report Date:** 31-Aug-23

**Cooler Receipt Temp:** 24.2 °C

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### Locations

#### Collinsville

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425  
**Phone** (618) 344-1004  
**Fax** (618) 344-1005  
**Email** jhriley@teklabinc.com

#### Collinsville Air

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425  
**Phone** (618) 344-1004  
**Fax** (618) 344-1005  
**Email** EHurley@teklabinc.com

#### Springfield

**Address** 3920 Pintail Dr  
Springfield, IL 62711-9415  
**Phone** (217) 698-1004  
**Fax** (217) 698-1005  
**Email** KKlostermann@teklabinc.com

#### Chicago

**Address** 1319 Butterfield Rd.  
Downers Grove, IL 60515  
**Phone** (630) 324-6855  
**Fax**  
**Email** arenner@teklabinc.com

#### Kansas City

**Address** 8421 Nieman Road  
Lenexa, KS 66214  
**Phone** (913) 541-1998  
**Fax** (913) 541-1998  
**Email** jhriley@teklabinc.com



## Accreditations

<http://www.teklabinc.com/>

**Client:** Dunlap Lake Property Owners Association

**Work Order:** 23081661

**Client Project:** Lake Water Dunlap Lake

**Report Date:** 31-Aug-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2023	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2024	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



## Laboratory Results

<http://www.teklabinc.com/>

Client: Dunlap Lake Property Owners Association  
 Client Project: Lake Water Dunlap Lake  
 Lab ID: 23081661-001  
 Matrix: AQUEOUS

Work Order: 23081661  
 Report Date: 31-Aug-23  
 Client Sample ID: Sample 1  
 Collection Date: 08/22/2023 9:05

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 9223B 22ND ED., COLILERT-18 QUANTITRAY</b>								
E Coli	IDPH	1.0		<b>2.0</b>	MPN/100ml	1	08/22/2023 12:14	R335383
<b>EPA 600 351.2</b>								
Total Kjeldahl Nitrogen (as N)	NELAP	1	J	<b>0.9</b>	mg/L	1	08/24/2023 15:58	211228
<b>EPA 600 365.4 (TOTAL)</b>								
Phosphorus, Total (as P)	NELAP	0.100		<b>0.330</b>	mg/L	1	08/24/2023 15:57	211227
<b>EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)</b>								
Lead	NELAP	0.0150		<b>&lt; 0.0150</b>	mg/L	1	08/28/2023 10:09	211197
<b>SW-846 3510C, 8151A, CHLORINATED HERBICIDES BY GC/ECD</b>								
2,4-D	NELAP	0.60		<b>2.42</b>	µg/L	2	08/28/2023 11:07	211211
Surr: 2,4-Dichlorophenylacetic acid	*	18.4-136		<b>93.7</b>	%REC	1	08/25/2023 16:18	211211
<i>Elevated reporting limit due to sample extract composition.</i>								



## Laboratory Results

<http://www.teklabinc.com/>

**Client:** Dunlap Lake Property Owners Association

**Work Order:** 23081661

**Client Project:** Lake Water Dunlap Lake

**Report Date:** 31-Aug-23

**Lab ID:** 23081661-002

**Client Sample ID:** Sample 2

**Matrix:** AQUEOUS

**Collection Date:** 08/22/2023 9:15

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 9223B 22ND ED., COLILERT-18 QUANTITRAY</b>								
E Coli	IDPH	1.0		<b>0</b>	MPN/100ml	1	08/22/2023 12:14	R335383
<b>EPA 600 351.2</b>								
Total Kjeldahl Nitrogen (as N)	NELAP	1.0		<b>1.1</b>	mg/L	1	08/24/2023 16:00	211228
<b>EPA 600 365.4 (TOTAL)</b>								
Phosphorus, Total (as P)	NELAP	0.100		<b>0.357</b>	mg/L	1	08/24/2023 16:00	211227
<b>EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)</b>								
Lead	NELAP	0.0150		<b>&lt; 0.0150</b>	mg/L	1	08/28/2023 10:09	211197
<b>SW-846 3510C, 8151A, CHLORINATED HERBICIDES BY GC/ECD</b>								
2,4-D	NELAP	0.30	J	<b>0.29</b>	µg/L	1	08/25/2023 16:44	211211
Surr: 2,4-Dichlorophenylacetic acid	*	18.4-136		<b>91.8</b>	%REC	1	08/25/2023 16:44	211211





## Laboratory Results

<http://www.teklabinc.com/>

**Client:** Dunlap Lake Property Owners Association  
**Client Project:** Lake Water Dunlap Lake  
**Lab ID:** 23081661-003  
**Matrix:** AQUEOUS

**Work Order:** 23081661  
**Report Date:** 31-Aug-23  
**Client Sample ID:** Sample 3  
**Collection Date:** 08/22/2023 9:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
<b>STANDARD METHODS 9223B 22ND ED., COLILERT-18 QUANTITRAY</b>								
E Coli	IDPH	1.0		<b>2.0</b>	MPN/100ml	1	08/22/2023 12:14	R335383
<b>EPA 600 351.2</b>								
Total Kjeldahl Nitrogen (as N)	NELAP	1.0		<b>1.0</b>	mg/L	1	08/24/2023 16:03	211228
<b>EPA 600 365.4 (TOTAL)</b>								
Phosphorus, Total (as P)	NELAP	0.100		<b>0.379</b>	mg/L	1	08/24/2023 16:02	211227
<b>EPA 600 4.1.4, 200.7R4.4, METALS BY ICP (TOTAL)</b>								
Lead	NELAP	0.0150		<b>&lt; 0.0150</b>	mg/L	1	08/28/2023 10:10	211197
<b>SW-846 3510C, 8151A, CHLORINATED HERBICIDES BY GC/ECD</b>								
2,4-D	NELAP	0.30		<b>ND</b>	µg/L	1	08/25/2023 17:10	211211
Surr: 2,4-Dichlorophenylacetic acid	*	18.4-136		<b>69.4</b>	%REC	1	08/25/2023 17:10	211211



Receiving Check List

http://www.teklabinc.com/

Client: Dunlap Lake Property Owners Association

Work Order: 23081661

Client Project: Lake Water Dunlap Lake

Report Date: 31-Aug-23

Carrier: Doug Carney

Received By: LM

Completed by:

[Signature]

Reviewed by:

[Signature]

On:

22-Aug-23

Timothy W. Mathis

On:

22-Aug-23

Ellie Hopkins

Pages to follow: Chain of custody 1

Extra pages included 0

- Shipping container/cooler in good condition? Yes [checked] No [ ]
Type of thermal preservation? None [ ] Ice [checked]
Chain of custody present? Yes [checked] No [ ]
Chain of custody signed when relinquished and received? Yes [checked] No [ ]
Chain of custody agrees with sample labels? Yes [checked] No [ ]
Samples in proper container/bottle? Yes [checked] No [ ]
Sample containers intact? Yes [checked] No [ ]
Sufficient sample volume for indicated test? Yes [checked] No [ ]
All samples received within holding time? Yes [checked] No [ ]
Reported field parameters measured: Field [ ] Lab [ ] NA [checked]
Container/Temp Blank temperature in compliance? Yes [checked] No [ ]

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

- Water - at least one vial per sample has zero headspace? Yes [ ] No [ ] No VOA vials [checked]
Water - TOX containers have zero headspace? Yes [ ] No [ ] No TOX containers [checked]
Water - pH acceptable upon receipt? Yes [checked] No [ ] NA [ ]
NPDES/CWA TCN interferences checked/treated in the field? Yes [ ] No [ ] NA [checked]

Any No responses must be detailed below or on the COC.

pH strip #90719 TM. - TMathis - 8/22/2023 10:30:11 AM

E. Coli per project history. - MLDII/ERH 8/22/23

# CHAIN OF CUSTODY

pg. \_\_\_\_ of \_\_\_\_ Work order # 23081661

**TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005**

<b>Client:</b> <u>Dunlap Lake Property Owners Association</u> <b>Address:</b> <u>P.O. Box 5</u> <b>City / State / Zip:</b> <u>Edwardsville, IL 62025</u> <b>Contact:</b> <u>Carolyn Green</u> <b>Phone:</b> <u>(618) 791-1398</u> <b>E-Mail:</b> <u>carolyn@dunlaplake.org</u> <b>Fax:</b> _____	<b>Samples on:</b> <input checked="" type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE <u>24.2°C</u> <b>LTG#</b> <u>3</u> <b>Preserved in:</b> <input type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD <b>FOR LAB USE ONLY</b> <b>Lab Notes:</b> <u>PM 90719</u> <u>E-Coli per project history, MUDIE 8/22/23</u>
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Are these samples known to be involved in litigation? If yes, a surcharge will apply  Yes  No  
 Are these samples known to be hazardous?  Yes  No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.  Yes  No

**Client Comments**  
Please email results to doug.carney@gmail.com as well as Carolyn.  
Water temp at Site 1 - 85°F

Project Name/Number		Sample Collector's Name				MATRIX		INDICATE ANALYSIS REQUESTED													
<u>Lake Water Dunlap Lake</u>		<u>Doug Carney</u>				Aqueous		2,4-D	Fecal Coliform E. Coli	Lead PM 8/22/23	Phosphorus	TKN									
Results Requested	Billing Instructions	# and Type of Containers																			
<input type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other _____ <input type="checkbox"/> 3 Day (50% Surcharge)		UNP	HNO3	H2SO4																	
Lab Use Only	Sample Identification	Date/Time Sampled																			
<u>23081661</u> <u>-C01</u>	Sample 1	<u>8/22/23 0905</u>		2	1	1															
<u>W02</u>	Sample 2	<u>8/22/23 0915</u>		2	1	1															
<u>W03</u>	Sample 3	<u>8/22/23 0925</u>		2	1	1															

Relinquished By	Date/Time	Received By	Date/Time
<u>Doug Carney</u>	<u>8/22/23 1005</u>	<u>[Signature]</u>	<u>8/22/23 1005</u>