

August 23, 2019

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



RE: Lake Water Dunlap Lake

WorkOrder: 19081226

Dear Carolyn Green:

TEKLAB, INC received 3 samples on 8/19/2019 11:45:00 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



Report Contents

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

Client: Dunlap Lake Property Owners Association

Work Order: 19081226

Client Project: Lake Water Dunlap Lake

Report Date: 23-Aug-2019

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Client: Dunlap Lake Property Owners Association

Work Order: 19081226

Client Project: Lake Water Dunlap Lake

Report Date: 23-Aug-2019

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
- 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)

Qualifiers

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



Case Narrative

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

Client: Dunlap Lake Property Owners Association

Work Order: 19081226

Client Project: Lake Water Dunlap Lake

Report Date: 23-Aug-2019

Cooler Receipt Temp: 13.8 °C

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: 19081226

Client Project: Lake Water Dunlap Lake

Report Date: 23-Aug-2019

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2020	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2020	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2020	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2020	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2019	Collinsville
Arkansas	ADEQ	88-0966		3/14/2020	Collinsville
Illinois	IDPH	17584		5/31/2019	Collinsville
Indiana	ISDH	C-IL-06		1/31/2020	Collinsville
Kentucky	KDEP	98006		12/31/2019	Collinsville
Kentucky	UST	0073		1/31/2020	Collinsville
Louisiana	LDPH	LA016		12/31/2019	Collinsville
Missouri	MDNR	930		1/31/2022	Collinsville
Missouri	MDNR	00930		5/31/2019	Collinsville
Tennessee	TDEC	04905		1/31/2020	Collinsville

Client: Dunlap Lake Property Owners Association

Work Order: 19081226

Client Project: Lake Water Dunlap Lake

Report Date: 23-Aug-2019

Lab ID: 19081226-001

Client Sample ID: Sample 1

Matrix: AQUEOUS

Collection Date: 08/19/2019 10:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 21ST ED. 9222D, 9221F EC-MUG								
E Coli	*	0		Absent	P/A	1	08/19/2019 14:51	R265876
<i>No growth; E. coli is presumed absent.</i>								
STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER								
Fecal Coliform	*	10		< 10	CFU/100ml	10	08/19/2019 14:51	R265876
EPA 600 351.2								
Total Kjeldahl Nitrogen (as N)	NELAP	1	J	0.8	mg/L	1	08/20/2019 11:24	156532
EPA 600 365.4 (TOTAL)								
Phosphorus, Total (as P)	NELAP	0.100		0.205	mg/L	1	08/20/2019 11:22	156531



Laboratory Results

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

Client: Dunlap Lake Property Owners Association
Client Project: Lake Water Dunlap Lake
Lab ID: 19081226-002
Matrix: AQUEOUS

Work Order: 19081226
Report Date: 23-Aug-2019
Client Sample ID: Sample 2
Collection Date: 08/19/2019 10:40

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 21ST ED. 9222D, 9221F EC-MUG								
E Coli	*	0		Absent	P/A	1	08/19/2019 14:51	R265876
<i>No growth; E. coli is presumed absent.</i>								
STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER								
Fecal Coliform	*	10		< 10	CFU/100ml	10	08/19/2019 14:51	R265876
EPA 600 351.2								
Total Kjeldahl Nitrogen (as N)	NELAP	1	J	0.7	mg/L	1	08/20/2019 11:26	156532
EPA 600 365.4 (TOTAL)								
Phosphorus, Total (as P)	NELAP	0.100		0.211	mg/L	1	08/20/2019 11:25	156531



Laboratory Results

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

Client: Dunlap Lake Property Owners Association
Client Project: Lake Water Dunlap Lake
Lab ID: 19081226-003
Matrix: AQUEOUS

Work Order: 19081226
Report Date: 23-Aug-2019
Client Sample ID: Sample 3
Collection Date: 08/19/2019 10:55

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 21ST ED. 9222D, 9221F EC-MUG								
E Coli	*	0		Present	P/A	1	08/19/2019 14:51	R265876
STANDARD METHODS 22ND ED. 9222 D MEMBRANE FILTER								
Fecal Coliform	*	10		30	CFU/100ml	10	08/19/2019 14:51	R265876
EPA 600 351.2								
Total Kjeldahl Nitrogen (as N)	NELAP	1	J	0.8	mg/L	1	08/20/2019 11:29	156532
EPA 600 365.4 (TOTAL)								
Phosphorus, Total (as P)	NELAP	0.100		0.209	mg/L	1	08/20/2019 11:27	156531



Receiving Check List

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

Client: Dunlap Lake Property Owners Association

Work Order: 19081226

Client Project: Lake Water Dunlap Lake

Report Date: 23-Aug-2019

Carrier: Doug Carney

Received By: AMD

Completed by:

Amber Dilallo

Reviewed by:

Elizabeth A. Hurley

On:

On:

19-Aug-2019

19-Aug-2019

Amber M. Dilallo

Elizabeth A. Hurley

Pages to follow:

Chain of custody

Extra pages included

- | | | | | | |
|---|---|---|--------------------------------------|---------|-------------------------------------|
| Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> | Temp °C | 13.8 |
| Type of thermal preservation? | None <input type="checkbox"/> | Ice <input checked="" type="checkbox"/> | Blue Ice <input type="checkbox"/> | Dry Ice | <input type="checkbox"/> |
| Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | | |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | | |
| Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | | |
| Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | | |
| Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | | |
| Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | | |
| All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | | |
| Reported field parameters measured: | Field <input type="checkbox"/> | Lab <input type="checkbox"/> | NA | | <input checked="" type="checkbox"/> |
| Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | | | |

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 <input type="checkbox"/> | No <input type="checkbox"/> | No VOA vials | <input checked="" type="checkbox"/> |
| Water - TOX containers have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | No TOX containers | <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA | <input type="checkbox"/> |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA | <input checked="" type="checkbox"/> |

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

Additional Sulfuric Acid (69854) was needed in Sample 2 upon arrival at the laboratory. - mdarling - 8/19/2019 12:37:15 PM

