

# Assured Bio Labs, LLC

Environmental Microbiology Lab

Tennessee Division of Water Resources Lab ID: 03147

228 Midway Ln, Ste B

Oak Ridge, TN 37830

**REVIEWED**

By James G. Elkins, Ph.D. at 5:44 pm, Jul 26, 2024



## BASIC WATER PANEL

Inspector:	Advantage Inspection Raleigh
Project Name:	
Project Number:	Garabaya
Assured Bio ID:	DP072524-12

Date Collected:	07/24/2024
Date Received:	07/25/2024
Date Reported:	07/26/2024
Analyst(s):	D. Christopher, J. Wilder

**Reference Table:** a reference to the maximum containment levels set forth by the EPA. It is not a representation of your samples, but a guide to assist in the interpretation of your results. Consult your local and state regulations for more details.

Water Analyte Range of Detection	MCL*	Description
<b>Coliform</b> <b><i>E. coli</i></b> ≥1 cfu/100ml	0 cfu/ml	*The presence of coliform bacteria, including <i>E. coli</i> , indicates your well water may be contaminated by livestock or human waste runoff, fertilizer, a leak in your septic system, and more. <i>E. coli</i> bacteria can result in recurring gastro-intestinal illness, with symptoms such as stomach cramping and diarrhea.
<b>Lead</b> 0.003 – 0.300 ppm	0 ppm 0.015 ppm	Household plumbing and service lines made from lead or lead solder can leach lead into drinking water. Lead is toxic, a carcinogen, in fetuses and children can cause developmental and cognitive problems and accumulates in the body over time.
<b>Nitrate</b> 0.23 – 13.5 ppm	10 ppm	Associated with livestock/human waste and agricultural runoff. Increased nitrates and/or nitrites are particularly harmful for children under three. Blue baby syndrome is associated with drinking water high in nitrites.
<b>Nitrite</b> 0.015 – 0.06 ppm	1 ppm	
<b>pH</b> 1.0 – 14.0	6.5 – 8.5	Associated with and may affect the presence of other contaminants; monitoring pH levels over time is a good way to determine if conditions impacting drinking water have changed.

### Abbreviations

BDL	Below Detectable Limit
cfu	colony forming unit
MCL	Maximum Contaminant Level
ml	milliliter
n/a	not applicable
P/A	Present/Absent
ppm	parts per million (milligrams/liter)

**\*Maximum Contaminant Levels** are the maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur set by the Environmental Protection Agency (EPA).

**\*For positive bacteria results we recommend referring to the Tennessee Healthy Well Manual for well shocking instructions.**

**\*\*An action level** is the concentration of a contaminant, set by the EPA, which, if exceeded, triggers treatment or other requirements that a water system must follow.

# Sample Results

Assured Bio Identifier	DP072524-12-1	
Sample ID		
Sample Description	Grab Water Sample Location: Sink	
Sample Condition	Intact	
Sample Type	Water	
Analyte	Results	Unit
Bacteria		
Coliform	Present	P/A
<i>E. coli</i>	Present	P/A
Property		
pH	6.70	
Inorganic		
Nitrate	0.738	ppm
Nitrite	Negative	ppm
Metal		
Lead	Negative	ppm

### **Selected References**

- EPA Manual of the Certification of Laboratories Analyzing Drinking Water, 5th Edition. EPA 815-R-05-004, January 2005.
- IDEXX SimPlate® for HPC Unit Dose Instructions. 06-03208-10, 2016..
- Environmental Protection Agency. 2005. EPA Manual for the Certification of Laboratories Analyzing Drinking Water. Criteria and Procedures Quality Assurance. Fifth Edition. Cincinnati, Ohio

### **Methods of Analysis**

Assured Bio Labs, LLC uses the following Standard Operating Procedures for the analysis of samples:

CD 205: Coliform Presence Absence Test According to the EPA Manual for the Certification of Laboratories Analyzing Drinking Water, CD 219: Hach Water Testing (DR 3900) Using TNT, Powder Pillow, or Other Photospectroscopic Methods.

Assured Bio Labs, LLC uses the following Standard Operating Procedures for the analysis of samples:

CD 224 Heterotrophic Plate Count Using the SimPlate® Method

### **Reporting Limits**

**Method Detection Limit:** The American Industrial Hygiene Association defines this term in AIHA LAP, LLC Policy Document – Module 9 as "The minimum concentration of an analyte that, in a given matrix and with a specific method, has a 99 percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero."

**Reporting Limit:** The American Industrial Hygiene Association defines this term in AIHA LAP, LLC

Policy Document – Module 9 as "The lowest concentration of analyte in a sample that can be reported with a defined, reproducible level of certainty."

**Range of Detection:** The reporting limit to the maximum reporting limit giving the currently used testing methodology at Assured Bio labs LLC. Any amount reported outside of this range should be considered an estimate. Values outside of this range may be reported as greater than (">") or less than ("<").

### **Additional Comments**

The analytical data included in this report reflect only the conditions of the material sampled and submitted to the laboratory for analysis at the time of collection. We can make no claims to the safety or potability of water. The results included in this report may not be used for past or future environmental conditions. The results apply to the sample(s) as received. Potential interferences may exist for certain tests. When such interferences are detected, they will be report when potentially affecting the result and the Maximum Contaminant Level. A list of methods used can be provided upon request. If you require a certain method please contact us for further guidance.

The results are reported as the Most Probable Number per milliliter (MPN/ml) with the upper and lower 95% confidence limits provided per sample. These values are derived from the IDEXX SimPlate® Most Probable Number Table. Samples with less than one positive well are reported as below detectable limits with a 95% confidence interval of <0.03-<1.4 MPN/ml.

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## General Chain of Custody

AB Identifier: (for internal use only)

DP072524-12

Project Name:

Project Number:

Gambaya

PO Number:

Collection Date:

7/24/24

Rush (Specify TAT and Samples):\*\*

Inspector/Customer:

Dave Park

Company Name (If Applicable):

Advantage Inspection Raleigh

Company Address:

4020 Wake Forest Rd. Suite 300 Raleigh NC 27609

Phone:

919-850-2526

Email:

dave@advantagenc.com

Outside Conditions

Clear

Rain

Wind

(circle all that apply)

Thunderstorm

Snow

Other

Sample Codes (SC) MT - M-Trap® SP - Spore Trap SW - Swab

W - Water

B - Bulk

TL - Tape Lift

D - Dust

O - Other

Sample ID	Description	SC	Volume/Area (If Applicable)	Comments	MoldScan (Direct Exam)	Big 2 (Pen/Asp & Stachybotrys)	ERMI	SIM - Survey of Indoor Molds	SIAM - Species Id of Airborne Molds	Legionella (ISO or CDC ELITE)	ViaScan Fungal Genus ID	ViaScan Fungal Species ID*	ViaScan Bacterial Colony Count	ViaScan Bacterial Species ID*	Basic Home Loan Panel	Coliform/E. coli Test (+/-)	Lead Water Test	Other***	Other***
	grab water sample	W	260ml <sup>1.5m</sup>	FHA											X				
	location: sink																		

\*Culture and PCR done at Assured Bio Labs, sequencing subcontracted. \*\*Consult pricing catalogue or call lab for rush availability and pricing. \*\*\*Please specify other analysis. Some analyses may be subcontracted, contact Assured Bio for more information.

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7/24/24

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Shipped Date

7/24/24

Tracking #

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