A+ RELIABLE HOME INSPECTIONS LLC.

WATER ANALYSIS

RESULTS SUMMARY

ANONYMIZED SAMPLE REPORT

Sample Property - East Tennessee

Inspector: Nicholas Cudd

Lab report: SC092424-1

Collected: Sep 20, 2024 | Reported: Sep 26, 2024

Follow-Up Recommended

Bacterial contamination detected in the submitted sample.

LAB RESULTS AT A GLANCE

PARAMETER	RESULT	INTERPRETATION
Coliform	**Present**	Bacteria detected
E. coli	**Present**	Bacteria detected
pH	**7.63**	Within lab range: 6.5-8.5
Nitrate	**BDL**	Below detectable limit
Nitrite	**BDL**	Below detectable limit
Lead	**BDL**	Below detectable limit

BDL = Below Detectable Limit; it does not mean a concentration of zero.

WHAT THESE RESULTS MEAN

Positive coliform and E. coli results indicate bacterial contamination. Nitrate, nitrite and lead were below detectable limits. The pH of 7.63 was within the laboratory's listed 6.5-8.5 range. These findings do not establish overall water safety.

RECOMMENDED NEXT STEPS

Have a qualified well/water-treatment professional evaluate the well or water system and recommend corrective treatment, including disinfection as appropriate. Complete follow-up testing before relying on the water for normal household use.

Interpretation only. The attached laboratory report remains the official result. This anonymized sample copy changes property and inspector identification only; original laboratory dates and analytical results are retained. It is not a laboratory reissue or a newly certified report.

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 10:12 am, Sep 26, 2024

assuredbio™

BASIC WATER PANEL

Inspector:	Nicholas Cudd	Date Collected:	09/20/2024
Project Name:	Sample Property - East Tennessee	Date Received:	09/24/2024
Project Number:		Date Reported:	09/26/2024
Assured Bio ID:	SC092424-1	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
Coliform ***E. coli*** ≥1 cfu/100ml	0 cfu/ml	†The presence of coliform bacteria, including *E. coli*, indicates your well water may be contaminated by livestock or human waste runoff, fertilizer, a leak in your septic system, and more. *E. coli* bacteria can result in recurring gastro-intestinal illness, with symptoms such as stomach cramping and diarrhea.
Lead 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.
Nitrate 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.
Nitrite 0.015 – 0.06 ppm	1 ppm	
pH 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	SC092424-1		
Sample ID			
Sample Description	Water Test		
Sample Condition	Intact		
Sample Type	Water		
Analyte	**Results**	**Unit**	
Bacteria			
Coliform	Present	P/A	
E. coli	Present	P/A	
Property			
pH	7.63		
Inorganic			
Nitrate	BDL	ppm	
Nitrite	BDL	ppm	
Metal			
Lead	BDL	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 potablitiy 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 guidence.

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

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Assured Bio Labs, LLC
228 Midway Lane, Suite B
Oak Ridge, TN 37830
www.assuredbio.com
info@assuredbio.com
(865) 813-1700

General Chain of Custody

AB Identifier: (for internal use only) SC092424-1

Project Name: Sample Property - East Tennessee

Project Number:

PO Number:

Inspector/Customer: Nicholas Cudd

Company Name (If Applicable): A+ Reliable Home Inspections LLC.

Collection Date: 9.20.24

Rush (Specify TAT and Samples):**

Company Address: 648 Abbey Way, Friendsville TN 37737

Phone: 1-865-306-2332

Email: aplusinspectorinfo@gmail.com

Outside Conditions (circle all that apply) Clear Rain Wind 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:***
	water test	W													✔				

*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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select one: Drop Off ○ USPS ◉ Fed Ex ○ UPS ○

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