



CAPE ENVIRONMENTAL LABORATORY, L.L.C.

102 North Main • Cape May Court House, NJ 08210

D.E.P. Cert. #05679

Phone: 609-463-0077

Fax: 609-463-8977

These laboratory analyses were completed for the purpose of complying with the Private Well Testing Act.

Analytical results meet primary and secondary contaminant standards for drinking water.

-OR-

One or more of the analytical results do not meet primary + contaminant standards for drinking water.

-AND/OR-

☒ One or more of the analytical results do not meet secondary ++ contaminant standards for drinking water.

CLIENT INFORMATION:

CLIENT INFORMATION: **CHC Contracting** DATE TEST REQUESTED: _____

MAILING ADDRESS: **1521 Delaware Avenue, Cape May, NJ 08204**

PROPERTY INFORMATION:

PROPERTY: **1754 Pennsylvania Avenue, Unit D, Cape May** MUNICIPALITY: **Cape May City**

MUNI CODE: _____ COUNTY: **CAPE MAY** LOT: _____
BLOCK: _____

GPS LOCATION-STATE PLANE COORDINATE: (X) _____ (Y) _____ feet

GPS COORDINATE ORIGIN: _____ WELL PERMIT OR RECORD NUMBER: _____

SAMPLE INFORMATION:

SAMPLE COLLECTOR NAME: **Tim Delp** CAPE ENVIRONMENTAL LAB EMPLOYEE

SAMPLE TYPE: **RAW** NOTE: N.J.A.C. 7:9E requires RAW (untreated) water sampling

a.) ☒ RAW: Indicate Specific Location of Sample Collected **Kitchen Tap**

b.) TREATED: Reason why treated sample was collected, explain

NOTE: Treated water samples are not the same as well water samples. The results are generally lower than untreated.

Type of treatment device installed: (if known)

+ In accordance with N.J.A.C. 7:10, Primary Drinking Water contaminants are those contaminants that have Maximum Contaminant Levels or Action Levels, such as volatile organic compounds, coliform bacteria, nitrates, arsenic, mercury, lead and gross alpha. The standards for primary contaminants are the maximum permissible levels allowed in drinking water based on ingesting the drinking water over the course of a lifetime.

++ Secondary Drinking Water contaminants are those contaminants that have Recommended Upper Limits or Optimum Ranges such as pH. The limits or range of limits for secondary contaminants protects against those properties that adversely effects the taste, odor, or appearance of drinking water.

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SUMMARY OF WELL WATER TEST RESULTS

Required Parameters	Results	Units	Applicable Standards	Exceeded (Y,N)	Lab Cert. ID #	Analytical Method
Total Coliform	Absent	Pres/Abs	Absent	N	05679	SM 9223 B
*E. Coli	Absent	Pres/Abs	Absent	N	05679	SM 9223 B
Iron	0.187	mg/L	0.30 mg/L	N	05679	SM 18 3111 B
Manganese	***0.103	mg/L	0.05 mg/L	Y	05679	SM 18 3111 B
PH	N/A	s.u.	6.5 – 8.5	N	05679	SM 18 4500 -H + -B
Nitrate (total)	N/A	Ug/L	10,000 ug/L	N	05679	SM 4500 NO3-D
Lead	N/A	Ug/L	5 ug/L	N	05679	SM 18 3113B
Mercury	N/A	Ug/L	2 ug/L	N	05679	SM 18 3112 B
Arsenic	N/A	Ug/L	5 ug/L	N	05679	SM 18 3113B
Benzene	N/A	Ug/L	1 ug/L	N	05679	524.2
Carbon Tetrachloride	N/A	Ug/L	2 ug/L	N	05679	524.2
1,2-Dichlorobenzene	N/A	Ug/L	600 ug/L	N	05679	524.2
1,3-Dichlorobenzene	N/A	Ug/L	600 ug/L	N	05679	524.2
1,4-Dichlorobenzene	N/A	Ug/L	75 ug/L	N	05679	524.2
1,1-Dichloroethane	N/A	Ug/L	50 ug/L	N	05679	524.2
1,2-Dichloroethane	N/A	Ug/L	2 ug/L	N	05679	524.2
1,1-Dichloroethylene	N/A	Ug/L	2 ug/L	N	05679	524.2
Cis-1,2-Dichloroethylene	N/A	Ug/L	70 ug/L	N	05679	524.2
Trans-1,2-Dichloroethylene	N/A	Ug/L	100 ug/L	N	05679	524.2
1,2-Dichloropropane	N/A	Ug/L	5 ug/L	N	05679	524.2
Ethylbenzene	N/A	Ug/L	700 ug/L	N	05679	524.2
MTBE	N/A	Ug/L	70 ug/L	N	05679	524.2
Methylene Chloride	N/A	Ug/L	3 ug/L	N	05679	524.2
Monochlorobenzene	N/A	Ug/L	50 ug/L	N	05679	524.2
Napthalene	N/A	Ug/L	300 ug/L	N	05679	524.2
Styrene	N/A	Ug/L	100 ug/L	N	05679	524.2
1,1,2,2-Tetrachloroethane	N/A	Ug/L	1 ug/L	N	05679	524.2
Tetrachloroethylene	N/A	Ug/L	1 ug/L	N	05679	524.2
Toluene	N/A	Ug/L	1,000 ug/L	N	05679	524.2
1,2,4-Trichlorobenzene	N/A	Ug/L	9 ug/L	N	05679	524.2
1,1,1-Trichloroethane	N/A	Ug/L	30 ug/L	N	05679	524.2
1,1,2-Trichloroethane	N/A	Ug/L	3 ug/L	N	05679	524.2
Trichloroethylene	N/A	Ug/L	1 ug/L	N	05679	524.2
Vinyl Chloride	N/A	Ug/L	2 ug/L	N	05679	524.2
Xylenes (total)	N/A	Ug/L	1,000 ug/L	N	05679	524.2
Gross Alpha (final)	N/A	Pci/L	15 pCi/L	N	FL008	ECLS-R-GA

UNITS: Pres/Abs= presence or absence; ug/L=micrograms per liter (parts per billion); mg/L=milligrams per liter (parts per million); su=standard units; pCi=picocuries

* If total coliform bacteria are detected then additional analyses are required to determine the specific type (fecal or E. coli) present. Fecal coliform or E. coli analysis are not required if total coliform sample results indicate the absence of total coliform bacteria.

** The results of a "flushed" raw (untreated) water sample, which is required by the Private Well Testing Act regulations, should be compared to the Ground Water Quality Standard of 10 ug/L found at N.J.A.C. 7: 9-6 et seq. The Lead Action Level of 15 ppb applies to a 1 liter first-draw tap sample collected from a cold water kitchen or bathroom sink in which the water has remained motionless in the plumbing system for at least six hours [40 CFR 141.86(b)(2)]. This type of standing sample

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ADDITIONAL SAMPLE INFORMATION**COLIFORM ANALYSIS**Date/Time Sample Collected 9/1/2022 9:57:00 AM Date/Time Sample Analyzed: 9/1/2022 11:50:00 AM Sample ID Number: 67000**VOLATILE ORGANICS**Date/Time Sample Collected Not applicable Date/Time Sample Analyzed: Not applicable Sample ID Number: N/A**INORGANICS**Date/Time Sample Collected 9/1/2022 9:57:00 AM Date/Time Sample Analyzed: 9/12/2022 9:47:00 AM Sample ID Number: 67000**PH ANALYSIS**Date/Time Sample Collected Not applicable Date/Time Sample Analyzed: Not applicable Sample ID Number: N/A**GROSS ALPHA**Date/Time Sample Collected Not applicable Date/Time Sample Analyzed: Not applicable Sample ID Number: N/A

Date All Analyses Received by Reporting Lab from Subcontracted Lab (if applicable):

CERTIFICATION OF RESULTS

I certify in writing that all sampling, analyses, and reporting performed herein, comply with all requirements set forth in N.J.A.C. 7:9E and N.J.A.C. 7:18, and hereby certify that laboratory is in compliance with all laboratory certification and quality control procedures and requirements as set forth in N.J.A.C. 7:18.

Laboratory Manager or Designee9/22/22_____
Date**ADDITIONAL INFORMATION:**

Additional information concerning remediation alternatives and health effects of the parameters listed maybe obtained by logging on to the New Jersey Department of Environmental Protection's website at www.state.nj.us/dep/ppwta or by calling the Bureau of Safe Drinking Water's – Private Well Testing Act Hotline

I. Remediation/Treatment Funding Sources:

A.) The Spill Fund Program administered by Environmental Claims Administration within the Department of Environmental Protection offers help to innocent parties suffering from direct or indirect damages resulting from the discharge of a hazardous substance in the well water. A claimant has 1 year from the date he/she learns that the well is contaminated above standards to file a claim. There are specific requirements and guidelines for filing claims with the Spill Fund. For more information, please contact the NJDEP Environmental Claims Administration at 609-633-0719 or visit their website at: www.state.nj.us/dep/srp or you may write to the ECA: NJDEP-ECA/Spill Fund, P.O. Box 028, 401 E., State St., Trenton, NJ 08625-0028.

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Standard Acronyms/Flags

MDL	Method Detection Limit
RDL	Reporting Detection Limit
ND	Not Detected – indicates that the analyte was Not Detected at the RDL
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
J	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not calculated
+	Result outside of QC limits
MCL	Maximum Contamination Level
E	Reported value estimated, result over calibration range
FRB	Field Reagent Blank
B	Compound present in Blank
IP	Informational Purposes Only/Not Certified
H	Out of holding time

Notes

-Samples collected by CEL personnel are done so in accordance with the procedures set forth in the CEL Sampling SOP.

-Samples brought to CEL by Outside Sampling Agent must be accompanied by a signed and dated Chain of Custody. If no Chain of Custody is delivered, Samples are considered not for regulatory purposes.

-All numeric values following < are equal to Laboratory Reporting Limit.

New Jersey Private Well Water Test Reporting Form

The New Jersey Private Well Test Reporting Form is a standardized form to be used exclusively by laboratories reporting well test results to their client in accordance with the Private Well Testing Act Regulations at N.J.A.C. 7:9E.

ADDITIONAL INFORMATION:

I. Treatment Options

Listed below are the common treatment options available to homeowners having well contamination above a Maximum Contaminant Level, Action Level or Recommended Limit. The goal of water treatment is the removal of contaminants to levels below the Maximum Contaminant Level, Action Level or Recommended Limit. For additional information on home treatment devices contact your local/county health department or visit the Private Well Testing Act webpage at: https://www.nj.gov/dep/watersupply/pw_pwta.html. You may also call the USEPA Drinking Water Hotline at (800) 426-4791 to obtain a copy of USEPA's pamphlet entitled "Home Water Treatment Units." All treatment devices must be properly maintained in accordance with manufacturer recommendations to ensure operating efficiency in removing contaminants. As noted below, not all treatment devices remove every contaminant; there may be more than one device installed if multiple contaminants exist in the drinking water. NJDEP recommends hiring a water treatment professional to design and install needed water treatment.

SUMMARY OF TREATMENT OPTIONS FOR HOMEOWNERS

Arsenic*	Arsenic Two-Tank Adsorption System (Whole House)*
	Arsenic Adsorption Under-Sink Cartridges (Single Tap)*
	Anion Exchange (Arsenic-5 Only) (Whole House)*
	Reverse Osmosis (Arsenic-5 Only) (Single Tap)*
Gross Alpha*	Radium Source - Cation Exchange (Whole House)*
	Uranium Source - Anion Exchange (Whole House)*
	Radium & Uranium Source-Reverse Osmosis (Single Tap)
Iron	Water Softener (Ion exchange)
	Oxidation and Filtration
Lead	pH adjustment to reduce water corrosiveness (Whole House)
	Reverse Osmosis (Single Tap)
	Pitcher Filter- must be certified to remove lead (Point-of-use)
Manganese	Water Softener (Ion exchange)
	Oxidation and Filtration
Mercury	KDF-55 with pH adjustment
Nitrate	Anion Exchange (Whole House)
	Reverse Osmosis (Single Tap)
Perfluorinated Compounds	Granular Activated Carbon Filtration
pH	Acid Neutralizer
Synthetic Organic Compounds	Granular Activated Carbon Filtration
Total Coliform and E. coli (Bacteria)	Ultraviolet Light
	Chlorination
Uranium	Anion Exchange (Whole House)
	Reverse Osmosis (Single Tap)
Volatile Organic Compounds	Granular Activated Carbon Filtration
	Air Stripping

*See additional resources below

Additional Resources for Specific Contaminants	
Arsenic	Radionuclides
Arsenic Water Treatment for Residential Wells in New Jersey: https://www.nj.gov/dep/pwta/Arsenic_Treatment.pdf	A North Jersey Homeowner's Guide to Radioactivity in Drinking Water: Uranium https://www.state.nj.us/dep/rpp/rms/agreedown/urwater.pdf
New Jersey Arsenic Awareness Initiative: http://www.tinyurl.com/arsenichelp	A South Jersey Homeowner's Guide to Radioactivity in Drinking Water: Radium https://www.state.nj.us/dep/rpp/rms/agreedown/radwater.pdf
Arsenic Homeowner's Guide: https://www.state.nj.us/dep/dsr/arsenic/guide.htm	

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II. Health Effects

Drinking water standards are established to protect consumers of drinking water from both adverse health effects (primary drinking water standards) and from qualities that make the water unpalatable (secondary drinking water standards). Both NJDEP and USEPA set drinking water standards; those in effect in New Jersey can be found at https://www.nj.gov/dep/watersupply/pwta/pdf/mcl_table_6_21_06.pdf. Both NJDEP and USEPA periodically review this list and add or subtract contaminants based on new scientific information. Standard setting is summarized in a brochure entitled "Standards for Safe Drinking Water in New Jersey" available at <https://www.nj.gov/dep/watersupply/pdf/stdsdwfaq.pdf>. There are several resources available to assist in interpreting your test results. Information can be found on our website at https://www.nj.gov/dep/watersupply/pw_pwta.html. Health effects information developed by the USEPA is summarized at <https://www.epa.gov/dwstandardsregulations/drinking-water-contaminant-human-health-effects-information>. Additional information regarding private wells and health effects can be found at: <https://www.state.nj.us/health/ceohs/sanitation-safety/drinking-water-public-health/>.

III. Recommendations for Additional Testing

The gross alpha test may identify the presence of radionuclides at levels suggesting additional testing and/or treatment. With any gross alpha value (Initial, Second, or Adjusted) exceeding 5 pCi/L, additional testing may be recommended for naturally occurring isotopes of radium, uranium and radon. There are a number of factors to consider and we recommend reviewing the Homeowner's Guide to Radioactivity in Drinking Water for more detailed information.

In Southern New Jersey, radium is the main cause of high gross alpha. In Northern New Jersey, uranium is the main cause of high gross alpha. A water softener can be used to remove radium from water and offers additional benefits to water quality.

Therefore, homeowners whose gross alpha exceeds 5 pCi/L, especially in southern New Jersey, may decide it is more cost-effective to install a water softener than conduct additional water testing for radium. Additional resources on this topic are listed on page 5.

The Private Well Testing Act regulations require well water samples to be collected from untreated or "raw" water. Raw water quality represents the well water quality. Additional water testing may be conducted to determine the effectiveness of a water treatment system or to determine if the distribution system (pipes) may be contributing additional contamination. In those cases, sampling of treated or finished water at the kitchen tap is recommended. This additional testing of treated water is not required under the Private Well Testing Act regulations. However, testing of treated water to determine the effectiveness of a treatment system to remove contaminants for a known, pre-existing, water quality problem is strongly recommended. Below are recommendations for additional testing in three different scenarios.

Scenario One: There is an existing treatment system or device installed at the house or building due to a known pre-existing water quality problem and raw water testing indicates that one or more parameters are above a Maximum Contaminant Level, Action Level, or Recommended Limit. NJDEP recommends that a second water sample be collected for the parameter(s) of concern at a location after the treatment system or device, at the kitchen tap, to ensure that the system or device is working properly and removing or reducing the contaminants to below the applicable Maximum Contaminant Level, Action Level, or Recommended Limit.

Scenario Two: After testing, total coliform and *E. coli* bacteria are found to be above the Maximum Contaminant Level. The well is subsequently treated via chlorine disinfection. Re-testing is recommended after a chlorine residual can no longer be detected to insure the effectiveness of the treatment.

Scenario Three - FOR LEAD ANALYSIS ONLY: The Private Well Testing Act regulations require that a "flushed" sample be collected for lead analysis meaning the well water must be run to remove any water that may have been in contact with the plumbing for an extended period of time. In scenario three, the flushed, untreated sample, collected at the tap, indicates there is lead contamination greater than 5 µg/L. The state's ground water quality standard of 5 µg/L is the most appropriate standard to apply to a "flushed" water sample rather than the drinking water Action Level of 15 µg/L, which is based on sampling drinking water that has been allowed to remain in the plumbing for at least six hours.

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If the well owner wants to better evaluate the level of potential lead contamination from the plumbing system, a “first draw” (non-flushed) sample should also be analyzed for lead. This “first draw” water sample may likely contain the highest level of lead to which the water users are likely to be exposed. The results of this sample should be compared to the lead Action Level of 15 µg/L. Results above 15 µg/L mean that there is a source of lead in the home plumbing system. The interested party may install treatment to make the water less corrosive and less likely to dissolve lead from the plumbing; may attempt to locate the source of the lead and remove it from the home plumbing system, or may choose to run the water through the plumbing (or selected faucets) each morning to ensure that the standing water is flushed through the pipes and is not consumed.

IV. Remediation/Treatment Funding Sources

- A.) The **Spill Fund Program** administered by the Bureau of Contract and Fund Management (BCFM) within the New Jersey Department of Environmental Protection (NJDEP) offers help to innocent parties suffering from direct or indirect damages resulting from the discharge of a *hazardous substance*. There are specific eligibility requirements and guidelines for filing claims with the Spill Fund. Please note that as of March 2, 2009, someone who purchases a property with human-caused contamination in the water supply, whether there is an existing Spill Fund claim or not, will not be eligible for a Spill fund claim. For more information about the Spill Fund, please contact the NJDEP-Fund Management Section at: 609-777-0101 or visit their website at: <https://www.state.nj.us/dep/srp/finance/eca.htm> or you may write to the ECA/Spill Fund, 401-06J PO Box 420, Trenton, NJ 08625-0420.
- B.) The **New Jersey Housing and Mortgage Finance Agency (NJHMFA)** has a Potable Water Loan Program that is available to owners of single-family residences whose source of potable water exceeds the State of New Jersey's Primary Drinking Water Standards, including lead and mercury. In addition, the loan program covers iron and manganese although these contaminants do not have Primary Drinking Water Standards. For further information, please contact the NJHMFA Hotline at 1-800-NJHOUSE (1-800-654-6873) or they may be reached at: P.O. Box 18550, 637 South Clinton Avenue, Trenton, N.J. 08650-2085 or on the web at: <https://www.nj.gov/dca/hmfa/homeownership/owners/potable/>.