



North Carolina State Laboratory of Public Health  
Environmental Sciences  
Inorganic Chemistry  
Certificate of Analysis

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Report To: **JAMES MANHART III**  
**HARNETT CO ENVIRONMENTAL HEALTH**  
**307 CORNELIUS HARNETT BLVD**

Name of System:  
**BARRY CAULDER**

**LILLINGTON, NC 27546**  
**EIN: 566000306EH**

**Courier # 14-73-01**

**641 DUKE RD**  
**DUNN, NC 28334**

StarLiMS ID: **ES091713-0028001**

Date Collected: 09/16/13

Time Collected: 11:00 AM

Date Received: 09/17/13

Collected By: James E Manhart

Sample Type:  
Sample Source: New Well

Sampling Point: Outside spigot  
Temp. at Receipt: 2.5

Well Permit #: 12-5-79662  
GPS #: <sup>29662</sup>

Sample Description:  
Comment:

**New Well I (Profile)**

Analyte	Result	Allowable Limit	Unit	Qualifier(s)
Arsenic	< 0.005	0.010	mg/L	
Barium	0.2	2.00	mg/L	
Cadmium	< 0.001	0.005	mg/L	
Calcium	7		mg/L	
Chloride	< 5.00	250	mg/L	
Chromium	< 0.01	0.10	mg/L	
Copper	< 0.05	1.3	mg/L	
Fluoride	0.29	4.00	mg/L	
Iron	2.20	0.30	mg/L	
Lead	< 0.005	0.015	mg/L	
Magnesium	8		mg/L	
Manganese	0.18	0.05	mg/L	
Mercury	< 0.0005	0.002	mg/L	
Nitrate	< 1.00	10.00	mg/L	
Nitrite	< 0.10	1.00	mg/L	
pH	7.5		N/A	
Selenium	< 0.005	0.05	mg/L	
Silver	< 0.05	0.10	mg/L	
Sodium	7.90		mg/L	
Sulfate	5.90	250	mg/L	
Total Alkalinity	61		mg/L	
Total Hardness	53		mg/L	
Zinc	< 0.05	5.00	mg/L	

Report Date: 09/24/2013

Reported By: Arnold Hall

North Carolina Division of Public Health  
Occupational and Environmental Epidemiology Branch, Epidemiology Section  
**INORGANIC CHEMICAL ANALYSIS REPORT**  
Private well water information and recommendations

County: Harnett Name: Calden Sample Id Number: 28001  
Location: \_\_\_\_\_ Reviewer: KMR 10/16/13

**ANALYSIS REPORT**

Your well water was tested for 15 metals, plus nitrates, nitrites, and pH. The results were evaluated using the federal drinking water standards. The pH is a measure of the acidity of the water. Drinking water may contain substances that can occur naturally in water or can be introduced into the water from manmade sources.

**TEST RESULTS AND USE RECOMMENDATIONS**

\_\_\_\_ Your well water meets federal drinking water standards. Your water can be used for drinking, cooking, washing, cleaning, bathing, and showering.

✓ The following substance(s) exceeded federal drinking water standards. Your water can be used for drinking, cooking, washing, cleaning, bathing, and showering, but aesthetic problems such as bad taste, odor, staining of porcelain, etc. may occur. You may want to install a household water treatment system to address aesthetic problems.

Barium	Cadmium	Chromium	Fluoride	<u>Iron</u>	Magnesium
<u>Manganese</u>	Selenium	Silver	Sodium	Zinc	pH

\_\_\_\_ The following substance(s) exceeded federal drinking water standards. We recommend that your well water not be used for drinking and cooking, unless you install a water treatment system to remove the circled substance(s). However, it may be used for washing, cleaning, bathing and showering.

Arsenic	Barium	Cadmium	Chromium	Copper	Fluoride	Lead	Iron	Magnesium
Manganese	Mercury	Nitrate/Nitrite	Selenium	Silver	Sodium	Zinc	pH	

\_\_\_\_ Re-sampling is recommended in \_\_\_\_\_ months.

\_\_\_\_ Re-sample for lead and /or copper. Take a first draw, 5 minute, and 15 minute sample inside the house (preferably the kitchen) and if possible a first draw, 5 minute and a 15 minute sample at the well head to determine the source of the lead and/or copper.

**OTHER CONSIDERATIONS**

Routine well water sampling for the above substances is recommended every two to three years. Sample your well water when there is a known problem or contamination in your area, after repairs or replacement of your well, or after a flooding event. Contact your local health department for sampling instructions.

**For further information please contact your county health department or the Occupational and Environmental Epidemiology Branch at 919-707-5900.**