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

P.O. Box 28047
306 N. Wilmington St.
Raleigh, NC 27611-8047
http://slph.ncpublichealth.com
Phone: 919-733-7834
Fax: 919-733-8695

Report To: LORNE COOK

IREDELL CO ENV HEALTH/STATESVILLE

318 TURNERSBURG HIGHWAY
STATESVILLE, NC 28625
EIN: 566000309-

Courier # 09-36-07

Name of System:

CENTRAL VOLUNTEER FIRE DEPT
117 BAKERS GROVE
UNION GROVE, NC 28689

StarLiMS ID: **ES050411-0025001**

Date Collected: 05/03/11
Date Received: 05/04/11

Time Collected: 10:30 AM
Collected By: Lorne Cook

Sample Type:
Sample Source: New Well

Sampling Point: Well head
Temp. at Receipt: 5.5

Well Permit #: 159150
GPS #: 4803731103

Sample Description:
Comment:

New Well I (Profile)

Analyte	Result	Allowable Limit	Unit	Qualifier(s)
Arsenic	0.006	0.010	mg/L	
Barium	< 0.1	2.00	mg/L	
Cadmium	< 0.001	0.005	mg/L	
Calcium	20		mg/L	
Chloride	< 5.00	250	mg/L	
Chromium	< 0.01	0.10	mg/L	
Copper	< 0.05	1.3	mg/L	
Fluoride	0.32	2.00	mg/L	
Iron	< 0.10	0.30	mg/L	
Lead	< 0.005	0.015	mg/L	
Magnesium	2		mg/L	
Manganese	0.04	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	7.6		N/A	
Selenium	< 0.005	0.05	mg/L	
Silver	< 0.05	0.10	mg/L	
Sodium	13.00		mg/L	
Sulfate	14.00	250	mg/L	
Total Alkalinity	63		mg/L	
Total Hardness	59		mg/L	
Zinc	< 0.05	5.00	mg/L	

Report Date: 05/11/2011

Reported By: *Debbie Moncol*

North Carolina State Laboratory Public Health

Environmental Sciences

Microbiology

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318 TURNERSBURG HIGHWAY
STATESVILLE, NC 28625
EIN:566000309-

Name of System:

CENTRAL VOLUNTEER FIRE DEPT
117 BARKERS GROVE
UNION GROVE, NC 28689

StarLiMS Sample ID: **ES050411-0061001**

Collected: 05/03/2011 10:30 **Lorne Cook**
Received: 05/04/2011 09:13 **Angela Heybroek**

ES Microbiology ID: **26794**
GPS Number: 4803731103

Sample Source: **New Well**
Sampling Point: **Well head**

Well Permit Number: **159150**

Sample Description:
Comment:

Environmental Microbiology - Colilert Profile **Method:** SM 9223B

Test Name: Colilert

Analyte	Test Result	Analyst	Date
Total Coliform, Colilert	Present	Joy Hayes	05/05/2011
E. coli, Colilert	Absent	Joy Hayes	05/05/2011

Report Date: 05/05/2011

Reported By: **Susan Beasley**

Susan Beasley

Explanations of Coliform Analysis:

If coliform bacteria are **Absent**, the water is considered safe for drinking purpose. If coliform bacteria are **Present**, the water is considered unsafe for drinking purpose. Presence of *E. coli* (bacteria) generally indicates that the water has been contaminated with fecal material. It must be remembered that a water analysis refers only to the sample received and should not be regarded as a complete report on the water supply.

North Carolina Division of Public Health
Occupational and Environmental Epidemiology Branch, Epidemiology Section
BIOLOGICAL ANALYSIS REPORT

Private well water information and recommendations

County: Iredell Name: Central Vol. Fire Dept. Sample ID Number: 26794
Location: _____ Reviewer KMP

Initial Sample ✓ Confirmation Sample _____

BIOLOGICAL ANALYSIS RESULTS AND RECOMMENDATIONS FOR USES OF YOUR PRIVATE WELL WATER (These recommendations are based on biological analysis only.)

_____ No coliform bacteria were found in your well water. Your water can be used for all purposes including drinking, cooking, washing dishes, bathing and showering.

✓ Total coliform bacteria were detected in the sample which indicates that harmful bacteria from human or animal waste could enter the well. Do not use the water for drinking or cooking unless it has been boiled for 3 minutes. You may use your water for all other purposes including washing dishes, bathing or showering.

✓ Your well water needs to be re-tested to verify that the result is accurate.

_____ Fecal coliform bacteria were detected in the sample. Do not use the water for drinking, cooking, washing dishes, bathing or showering.

If the re-test shows contamination by bacteria contact your local health department for assistance. There may be a problem with the construction of the well, the groundwater source, or operation of the well. The well needs to be inspected by the local health department or a local well contractor to determine the problem with the well and to give guidance on how to correct the problem.

Your well water was tested for biological contaminants (total coliform and fecal coliform bacteria). The results were evaluated using the federal drinking water standards.

Drinking water may contain substances that can occur naturally in water or can be introduced into water from man-made sources. Total coliform bacteria are found in soil and fecal coliform bacteria are found in animal and human waste. Total coliform or fecal coliform bacteria in well water indicate that the well may have structural problems or that the well was not properly disinfected.

If you have been drinking the well water and are pregnant, nursing, have a child in the household under 5 years of age, or immunocompromised (such as an individual with AIDS, cancer, hepatitis, dialysis or surgical procedures) inform your physician of these results at your next visit.

If the contamination continues, you should investigate the possibility of drilling a new well or installing a point-of-entry disinfection unit which can use chlorine, ultraviolet light, or ozone.

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