PJD

ICHD Environmental Health Division

INSPECTIONS 704-664-3703 Statesville Office: (704) 878-5305 x3456 - Mooresville Office: (704) 660-3625

PRIVATE DRINKING WATER WELL PERMIT # 319663 **PIN #** 4629 - 63 - 1674 **Type of Permit (circle one):** New Repair Abandonment

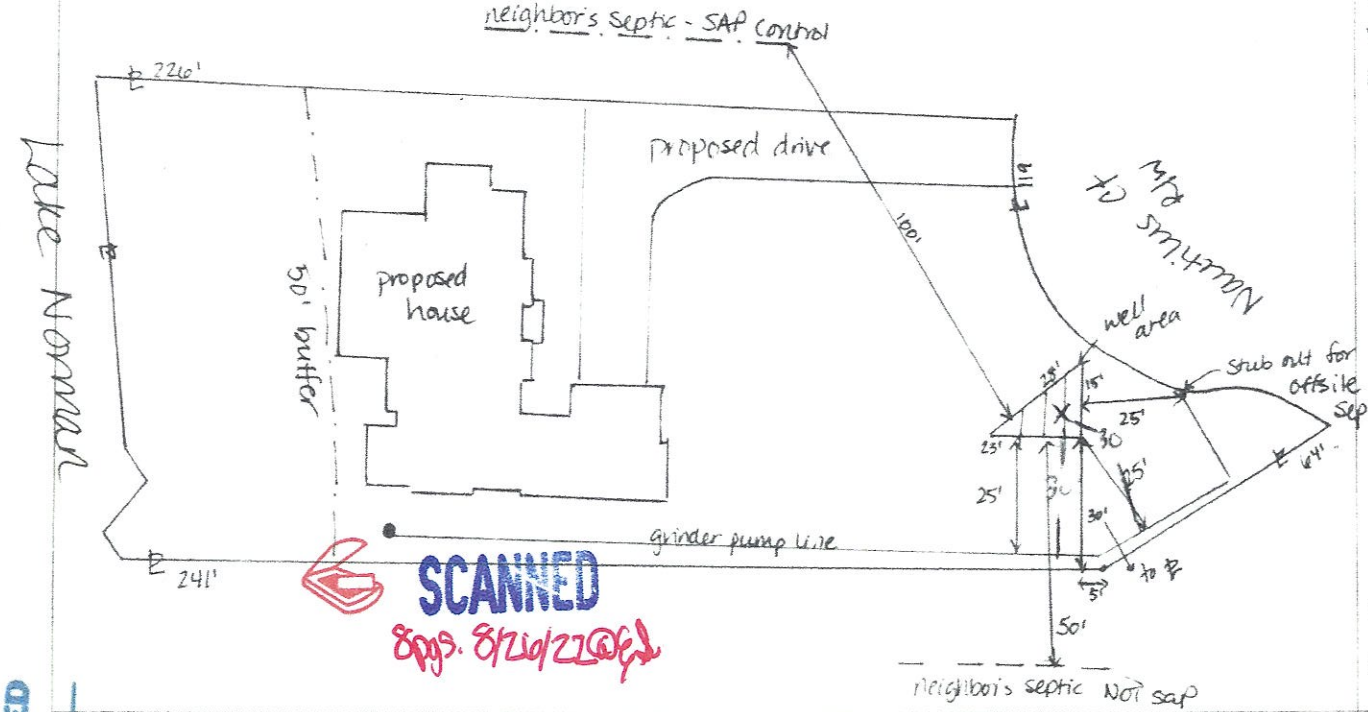
APPLICANT/OWNER NAME: Oscar Koenier ADDRESS: 167 Maple View Dr. Troutman NC 28166 PHONE: 704-309-0227

DIRECTIONS TO SITE: (N) Perth → (L) State Park → (L) Morrison Farm → (R) April → (L) Nautilus Ct. → lot in back of cul-de-sac

SITE ADDRESS: 111 Nautilus court, Troutman NC 28166 SUBDIVISION: Hawkes Bay SECTION/LOT: 30

Initial Site Sketch

1"=40'



SCANNED 8pgs. 8/26/22@cl

GROUTING RESULTS

Total Depth Still

Depth of Casing 46'

Yield Drilling

Notes:

Pre Construction Meeting Required

Well GPS Latitude: _____

Longitude: _____

PERMIT CONDITIONS/COMMENTS: MUST maintain 25' off line from grinder pump to stub out, 25' off stub out also. Keep 100' from lot Septic, 50' from lot Septic. Follow all NCAC 2C well rules - grout min 20', set min 20' casing. Drill in well area

WELL PERMIT ISSUED BY: D. Inkberg DATE: 8/25/21 (Permit is valid for 5 years from date issued. This permit may be revoked if it is determined there has been a material change in any fact or circumstance upon which the permit is issued. Actions of the employees of the Iredell County Health Department shall in no way be taken as a guarantee that this well will produce water of any particular quantity or quality or for any amount of time. Employees of the Iredell County Health Department assume no liability for any damages, either direct or consequential which may be caused by this well.)

Well Contractor: B&K CONTRACTOR CERT #: 3371 A GROUT INSPECTION BY: Cory DATE: 10/8/21

OR CERTIFICATION OF GROUT NOT WITNESSED BY DEPT: _____ DATE: _____ WELL HEAD INSPECTION BY: _____ DATE: 8/1/22

WELL HEAD INSPECTION (check when completed): GROUT TO GROUND SURFACE ☑ WELL CONTRACTOR ID PLATE ☑ PUMP INSTALLER ID PLATE ☑ SAMPLE PORT ☑

ACCESS PORT / VENT ☑ WELL SEAL ☑ WELL HEAD 12 INCHES / PITLESS ADAPTOR 8 INCHES ABOVE GRADE ☑

CERTIFICATE OF COMPLETION BY: D Inkberg DATE: 8/1/22 WATER SAMPLES BY: Seanne Kobeck DATE: 8/8/22

Attachments Form GW-1a (required except for abandonment) ☑ Form GW-30 ☐ Water Sample Results ☐ Plat ☐ CALL 704 664 3703 to schedule grout or well head inspections between 8-9am

E-MAILED 10/8/21

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: Oscar Koehler Sample ID Number: ES 220809-0074
Location: 111 Nautilus Ct Troutman Reviewer Teanna Kobuck

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 your water sample. Total Coliform are a group of related bacteria that are (with few exceptions) not harmful to humans. A variety of bacteria, parasites, and viruses, known as pathogens, can potentially cause health problems if humans ingest them. EPA considers total coliforms a useful indicator of other pathogens for drinking water. Total coliforms are used to determine the adequacy of water treatment and the integrity of the distribution system

_____ It is recommended that your well water 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.

4312 District Drive
MSC 1918
Raleigh, NC 27699-1918

http://slph.ncpublichealth.com
Phone: 919-733-7308
Fax: 919-715-8611

North Carolina State Laboratory of Public Health

Environmental Sciences

Microbiology

Certificate of Analysis

FINAL REPORT

Report to: **Teanna Kobuck**

IREDELL CO. ENVIRONMENTAL HEALTH DEPT - MOORESVILLE
610 EAST CENTER AVENUE
Mooresville, NC 28115

Name of System:

Oscar Koehler
111 Nautilus Ct
Troutman, NC 28166

EIN: 566000309E **Delivery: NC Courier** **Iredell County**

StarLiMS ID: **ES220809-0074**

Date Collected: 08/08/2022 Time Collected: 15:10 By: Teanna Kobuck
Date Received: 08/09/2022 Time Received: 08:36 By: Angela Heybroek

Sample Source: New Well
Sample Type: Raw
Treatment:

Sampling Point: Well head
GPS No.
Well Permit No. 319663

Comment:

Colilert Profile **Method: SM 9223B**

Analyte	Test Result	Unit	Conclusion	Date Tested
Total Coliform	Absent			08/09/2022
E. coli	Absent			08/09/2022

Report Date: 08/11/2022 **Reported By:** **KPLEMMONS**

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.

N O R T H C A R O L I N A

NC DEPARTMENT OF
HEALTH AND HUMAN SERVICES
Division of Public Health

Private Well Information and Use Recommendations

For Inorganic Chemical Contaminants

County: Iredell | Sample Name: 111 Nautilus Ct Troutman, NC

Sample ID #: ES220809-0009 | Reviewer: Teanna Kobuck

TEST RESULTS AND USE RECOMMENDATIONS

1. ☑ Your well water meets federal drinking water standards ***for inorganic chemicals***. Your water can be used for drinking, cooking, washing, cleaning, bathing, and showering based on the ***inorganic chemical results only***. You may have other water sampling results that are not taken into account in this report.

2. ☐ The following substance(s) exceeded federal drinking water standards or the North Carolina 2L calculated health levels. The North Carolina Division of Public Health recommends that your well water not be used for drinking and cooking unless you install a water treatment system to remove the checked substance(s). However, it may be used for washing, cleaning, bathing, and showering based on the ***inorganic chemical results only***.

☐Arsenic ☐Barium ☐Cadmium ☐Chromium ☐Copper ☐Fluoride ☐Iron
☐Lead ☐Manganese ☐Mercury ☐Nickel ☐Nitrate/Nitrite ☐Selenium ☐Silver
☐Zinc

3. ☐ While your lead levels do not exceed federal or state standards, the North Carolina Division of Public Health has concerns with any detection of lead. Should you have any questions please contact the NC Private Well and Health Program at (919) 707 - 5900.

4. ☐ Re-sample for lead and /or copper. Take a first draw and 30-second flush sample inside the house (preferably the kitchen sink) and a first draw and 4 minutes flush sample at the wellhead to determine the source of the lead and/ or copper.

5. ■ The following substance(s) exceeded aesthetic drinking water standards. Your water can be used for drinking, cooking, washing, cleaning, bathing, and showering based on the ***inorganic chemical results only***, 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.

☐Chloride ☐Copper ☐Flouride ☐Iron ☑Manganese
☐pH ☐Silver ☐Sulfate ☐Zinc

6. ■ a. Sodium levels exceed the U.S. Environmental Protection Agency's (USEPA) Health Advisory level for sodium of 20 mg/l. The North Carolina Division of Public Health recommends that only individuals on no or low sodium-restricted diets not use this water for drinking or cooking. It may be used for washing, cleaning, bathing, and showering based on the ***inorganic chemical results only***.

☐b. Your sodium level exceeds 30 mg/L and may pose aesthetic issues such as bad taste, odor, staining of porcelain, etc.

7. ☐ Re-sampling is recommended in _____months, to reinvestigate_____.

For more information regarding your well water results, please call the North Carolina Division of Public Health at 919-707-5900.

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Environmental Sciences
Inorganic Chemistry

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610 EAST CENTER AVENUE
MOORESVILLE, NC 28115

Name of System:

Oscar Koehler
111 Nautilus Ct
Troutman, NC 28166

EIN: 566000309E

Delivery: NC Courier

StarLiMS ID: ES220809-0009

Date Collected: 08/08/2022
Time Collected: 15:10
By: Teanna Kobuck
Date Received: 08/09/2022
Time Received: 07:34

Sample Type: Raw
Sample Source: New Well
Sampling Point: Well head
Receipt Temp. : 0.5 °C
Well Permit No. 319663
GPS Number:

Profile: New Well I

Analyte	Test Result	Allowable Limit	Unit	Qualifier(s)
Arsenic	<0.001	0.010	mg/L	
Barium	0.106	2.0	mg/L	
Cadmium	<0.0001	0.005	mg/L	
Calcium	53		mg/L	
Chloride	29.1	250	mg/L	
Chromium	<0.02	0.10	mg/L	
Copper	<0.01	1.3	mg/L	
Fluoride	0.279	4.00	mg/L	
Iron	<0.06	0.30	mg/L	
Lead	<0.003	0.015	mg/L	
Magnesium	7		mg/L	
Manganese	0.222	0.05	mg/L	
Mercury	<0.0004	0.002	mg/L	
Nickel	<0.01	0.1	mg/L	
Nitrate	6.57	10.0	mg/L	
Nitrite	<0.1	1.00	mg/L	
pH	7.0		N/A	
Selenium	<0.005	0.05	mg/L	
Silver	<0.01	0.10	mg/L	
Sodium	31.3		mg/L	
Sulfate	14.0	250	mg/L	
Total Alkalinity	101		mg/L	
Total Hardness	159		mg/L	
Zinc	<0.05	5.0	mg/L	