Groundwater & Wastewater Services
Well Project File & Data Review Worksheet

GWS File #: 6402B WASPS App #: 12665

Primary ES assigned to project: Ken Comett

Secondary ES assigned to project: _____

Project Type: New Well ☒ Well Abandonment ☐ Major Repair ☐

Septic System Status: Permit in progress ☐ System installation completed ☒ N/A-Sewer ☐

I. File Review:

Completed application	Yes ☑	No ☐					
ARGU review report	Yes ☑	No ☐	N/A ☐				
Signed permit	Yes ☑	No ☐					
Notification of disinfection	Yes ☑	No ☐	N/A ☑				
Sample Results	TC ☑	Nitrate/Nitrite ☑	Other ☑	N/A ☐			
GW-1 Form / GW-30 Form	Yes ☑	No ☐					
Other related documentation	Yes ☑	No ☐	N/A ☐				

Items requiring correction/modification: _____

Comments:

II. WASPS Review:

Completed application w/ valid address	Yes ☑	No ☐	
ARGU review completed	Yes ☑	No ☐	N/A ☐
Permit issued	Yes ☑	No ☐	
Activity checklist completed	Yes ☑	No ☐	
Appropriate comments included	Yes ☑	No ☐	
Site information record completed	Yes ☑	No ☐	
Well detail record completed	Yes ☐	No ☐	

Items requiring correction/modification: _____

Comments: Well file Complete

Application received date: _____ ES assigned date: _____ Permit issued date: _____

Well approval date: _____ Number of days to complete project: _____

Review performed by: [signature] Date performed: 1/3/24

640213

MECKLENBURG COUNTY
HEALTH DEPARTMENT

X 30400 18 NOV '21 AM 11:38 #12665

APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

1. **SEPTIC / TYPE APPLICATION:** ○ N/A ● NEW SYSTEM ○ ALTERATION ○ REPAIR ○ MODIFIED PLOT PLAN

2. **WELL / TYPE APPLICATION:** ○ N/A ● NEW WELL ○ MAJOR REPAIR ○ ABANDONMENT

3. **JOB LOCATION INFORMATION:**

TAX PARCEL NUMBER: 011-261-20
STREET ADDRESS: 15005 Ramah Church Rd.
CITY: Huntersville
STATE: NC ZIP: 28078
SUBDIVISION NAME: Meadowbrook Farms
LOT #: 5 LOT SIZE (acres): 5.4
TOWNSHIP:

○ MECKLENBURG ○ CORNELIUS ● HUNTERSVILLE
○ DAVIDSON ○ CHARLOTTE ○ PINEVILLE
○ MATTHEWS ○ MINT HILL

4. **BUILDING INFORMATION:**

BUILDING TYPE:

○ SINGLE MOBILE HOME ○ MODULAR HOME
○ DOUBLE WIDE ○ MULTIPLE FAMILY
● HOUSE ○ OTHER _____

HEATED SQUARE FOOTAGE: 4,618
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS: 2
FOUNDATION TYPE:

● CONCRETE SLAB ○ BASEMENT WITH PLUMBING
○ CRAWL SPACE ○ BASEMENT WITH NO PLUMBING

5. **IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION:** ☒ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. **WATER SUPPLY:** ○ MUNICIPAL ○ PRIVATE WELL ○ PUBLIC WELL ○ SHARED WELL ○ OTHER _____

7. **PROPOSED USE OF WELL:** ○ N/A ● IRRIGATION ○ POTABLE (DRINKING WATER) ○ OTHER _____

8. **PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE** *(1-MOST DESIRED 5-LEAST DESIRED)*:

☒ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

8A. **RANK:** ____ ____ ____ ____ ____

9. **DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.**

BURIED CABLES, LANDFILLS, STUMPHOLES	○ YES ● NO	GRADING/SOIL REMOVAL PERFORMED	○ YES ○ NO
EXISTING WASTEWATER (SEPTIC) SYSTEMS	● YES ○ NO	JURISDICTIONAL WETLANDS	○ YES ● NO
WELLS, SPRINGS, OR WATER LINES	● YES ○ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	○ YES ● NO
EASEMENTS OR RIGHT-OF-WAYS	○ YES ● NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	○ YES ● NO
CHEMICAL/PETROLEUM STORAGE TANKS	○ YES ● NO	KNOWN UNDERGROUND CONTAMINATION	○ YES ● NO
WASTE STORAGE	○ YES ● NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	○ YES ● NO

10. **WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?** _____ ☒ UNKNOWN

11. **WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?** _____ ☒ N/A

12. **PROPERTY OWNER:**

NAME: Dan + Mayra Caylor
ADDRESS: 1315 Samuel Spencer Parkway
CITY: Davidson
STATE: NC ZIP: 28036
WORK PHONE: _____
MOBILE PHONE: 704-201-2990
FAX: _____
E-MAIL: DCaylor@bescoelectrical.com

13. **OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:**

**Owner's Authorization form is required if legal representative is submitting application*

NAME: Augusta Homes
ADDRESS: 19830 N. Statesville Rd. #225
CITY: Cornelius
STATE: NC ZIP: 28031
WORK PHONE: 704-892-7795
MOBILE PHONE: _____
FAX: _____
E-MAIL: megancranford@augustahomesnc.com

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
3205 Freedom Drive, Suite 8000, Charlotte, NC 28208
OFFICE: 980-314-1680 FAX: 704-336-6894 Email: Wellcon@MecklenburgCountyNC.gov

Revised on: 4/20/17

14. SEPTIC SYSTEM PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for either sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

_____ (Initial here for septic system applications)

15. WELL PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for a period of twelve (12) months from the date of issuance.

MC (Initial here for well applications)

16. APPLICATION SIGNATURE SECTION:

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below. A PROPOSED PLOT PLAN is required to be submitted with each application.

Megan Cabel
Property Owner's or Owner's Legal Representative Signature

10-29-21
Date

OFFICE USE ONLY

O SURVEY PLAT TO SCALE SUBMITTED O SCALED SITE PLAN SUBMITTED O UN-SCALED SITE PLAN SUBMITTED

SEPTIC APPLICATION FEE RECEIVED: $_____ DATE FEE RECEIVED: _____

WELL APPLICATION FEE RECEIVED: $_____ DATE FEE RECEIVED: _____

APPLICATION PROCESSED BY: _____

GWS FILE NUMBER ASSIGNED: _____

APPLICATION ID NUMBER ASSIGNED: _____

COMMENTS:

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
3205 Freedom Drive, Suite 8000, Charlotte, NC 28208
OFFICE: 980.314.1680 FAX: 704.336.6894 Email: Wellreq@MecklenburgCountyNC.gov

E. Winters Mabry, MD
Director

MECKLENBURG COUNTY
Health Department

(704) 432-3199

Addendum to Application for
New Well or Septic System Installation
Abandonment or Repair of Existing Well or Septic System

Your signature below confirms the following:

1. The information on the application is true, complete and accurate.
2. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliances with applicable laws and rules.
3. I acknowledge that Augusta Homes is acting as my legal representative (agent) in the submittal of the application for a water supply well or septic permit located at 15005 Ramah Church Rd. Huntersville, NC 28078.
   Number Street Town
   (Or Parcel Number)

DANIEL P. CAYLOR III
Property Owner (print name)

Property Owner (signature)

8/17/2021
Date

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 11/18/21
Receipt #: 131535
Check / Auth #: CHARGE
Received By: ELLISLW

Amount: 550.00
Tendered: 550.00
Returned: 0.00

Account Information

Account #: X30400
Contractor: AUGUSTA HOMES INC
Attn:
Address: 9606 BAILEY RD.
Address: SUITE 255
City/State/Zip: CORNELIUS, NC 28031

Item	Description	Permit#	Quantity	Unit Price	Total Price
0753	Private Well, New 15005 RAMAH CHURCH ROAD		1	550.00	550.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
950.94					

Mecklenburg County Health Department
Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000
Charlotte, NC 28202
Phone: (980) 314-1680
Fax: (704) 336-6894

PERMIT TO CONSTRUCT A WATER SUPPLY WELL

Permit #: 10012665 **File #:** 6402B **Tax Parcel #:** 011-261-21
Property Owner: DAN & MAYRA CAYLOR
Job Location Address: 15005 RAMAH CHURCH RD
City/ETJ: HUNTERSVILLE **State:** NC **Zip Code:** 28078
Permit Issuance Date: 11/19/2021
Use of Well: Irrigation
Type of Facility Served by Well: House

Area of Regulated Groundwater Usage Review: NO

General Conditions of This Permit:

- Water Supply Well construction must meet all requirements set forth in the *Mecklenburg County Groundwater Well Regulations* and any other applicable rules and laws.
- A North Carolina Certified Well Contractor must perform the well construction activities.
- The permitted Water Supply Well shall be located in accordance with the attached SITE PLAN.
- Any alteration of the site (including location of structures and appurtenances) or modification in use of the well, may subject this Permit to revocation.
- The Department will collect an initial sample of water from the Water Supply Well and analyze the sample for total coliform bacteria, nitrate, and nitrite. A review of the analysis by the Department must find the sample to meet the groundwater quality standards specified in Chapter 5 of the Mecklenburg County Groundwater Well Regulations before the Water Supply Well can be placed in service.
- The Department will collect an initial sample of water from the Water Supply Well and analyze the sample for Arsenic, Barium, Cadmium, Chromium, Copper, Fluoride, Lead, Iron, Magnesium, Manganese, Mercury, Silver, Sodium, Zinc, and pH.
- This Permit shall be VALID for a period not to exceed 12 months from the date of issuance.

Specific Conditions of This Permit (Check all that apply):

☐ Grout must be placed the full extent of the casing. ☐ Casing to bedrock

☐ Initial water sample to be taken and analyzed for (check all that apply):

☐ Volatile Organic Compounds (VOC's) ☐ Semi-volatile Compounds ☐ Metals (Specify in Other Conditions)

☐ Pesticides ☐ Herbicides ☐ Other (See Below)

The analysis must be approved prior to the Water Supply well being placed in service.

Other Conditions of This Permit:

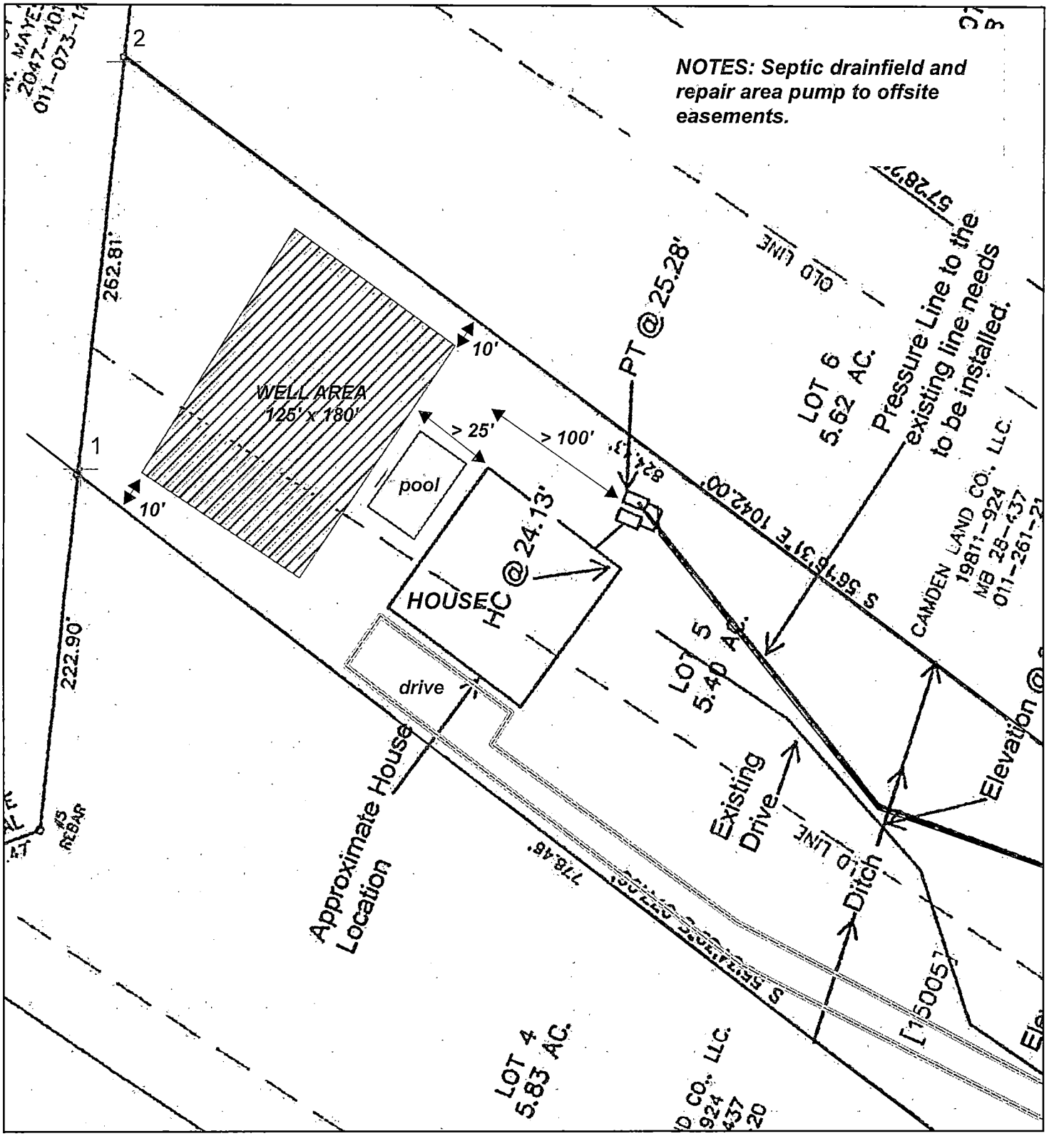
Kim Garrett, REHS
Authorized Agent: Print Name

Kim Garrett, REHS
Signature:

Owner/Legal Agent: Print Name

Signature:

WELL PERMIT DIAGRAM



Mecklenburg County Health Department
Environmental Health Program
Well Permit # 10012665
Don & Mayra Caylor
PID# 011-261-20
Date permitted 11/19/2021

Authorized Agent: Kim Garrett

Date: 11/19/21

Owner/Legal Agent: _____

Date: _____

1 inch = 90 feet

Mecklenburg County Health Department
Groundwater & Wastewater Services
3205 Freedom Dr Suite 8000
Charlotte, NC 28202
Phone: (980) 314-1680
Fax: (704) 336-6894

PERMIT TO CONSTRUCT A WATER SUPPLY WELL

Permit #: 10012665 **File #:** 6402B **Tax Parcel #:** 011-261-21
Property Owner: DAN & MAYRA CAYLOR
Job Location Address: 15005 RAMAH CHURCH RD
City/ETJ: HUNTERSVILLE **State:** NC **Zip Code:** 28078
Permit Issuance Date: 11/19/2021
Use of Well: Irrigation
Type of Facility Served by Well: House

Area of Regulated Groundwater Usage Review: NO

General Conditions of This Permit:

- Water Supply Well construction must meet all requirements set forth in the *Mecklenburg County Groundwater Well Regulations* and any other applicable rules and laws
- A North Carolina Certified Well Contractor must perform the well construction activities.
- The permitted Water Supply Well shall be located in accordance with the attached SITE PLAN
- Any alteration of the site (including location of structures and appurtenances) or modification in use of the well, may subject this Permit to revocation.
- The Department will collect an initial sample of water from the Water Supply Well and analyze the sample for total coliform bacteria, nitrate, and nitrite A review of the analysis by the Department must find the sample to meet the groundwater quality standards specified in Chapter 5 of the Mecklenburg County Groundwater Well Regulations before the Water Supply Well can be placed in service.
- The Department will collect an initial sample of water from the Water Supply Well and analyze the sample for Arsenic, Barium, Cadmium, Chromium, Copper, Fluoride, Lead, Iron, Magnesium, Manganese, Mercury, Silver, Sodium, Zinc, and pH.
- This Permit shall be VALID for a period not to exceed 12 months from the date of issuance.

Specific Conditions of This Permit (Check all that apply):

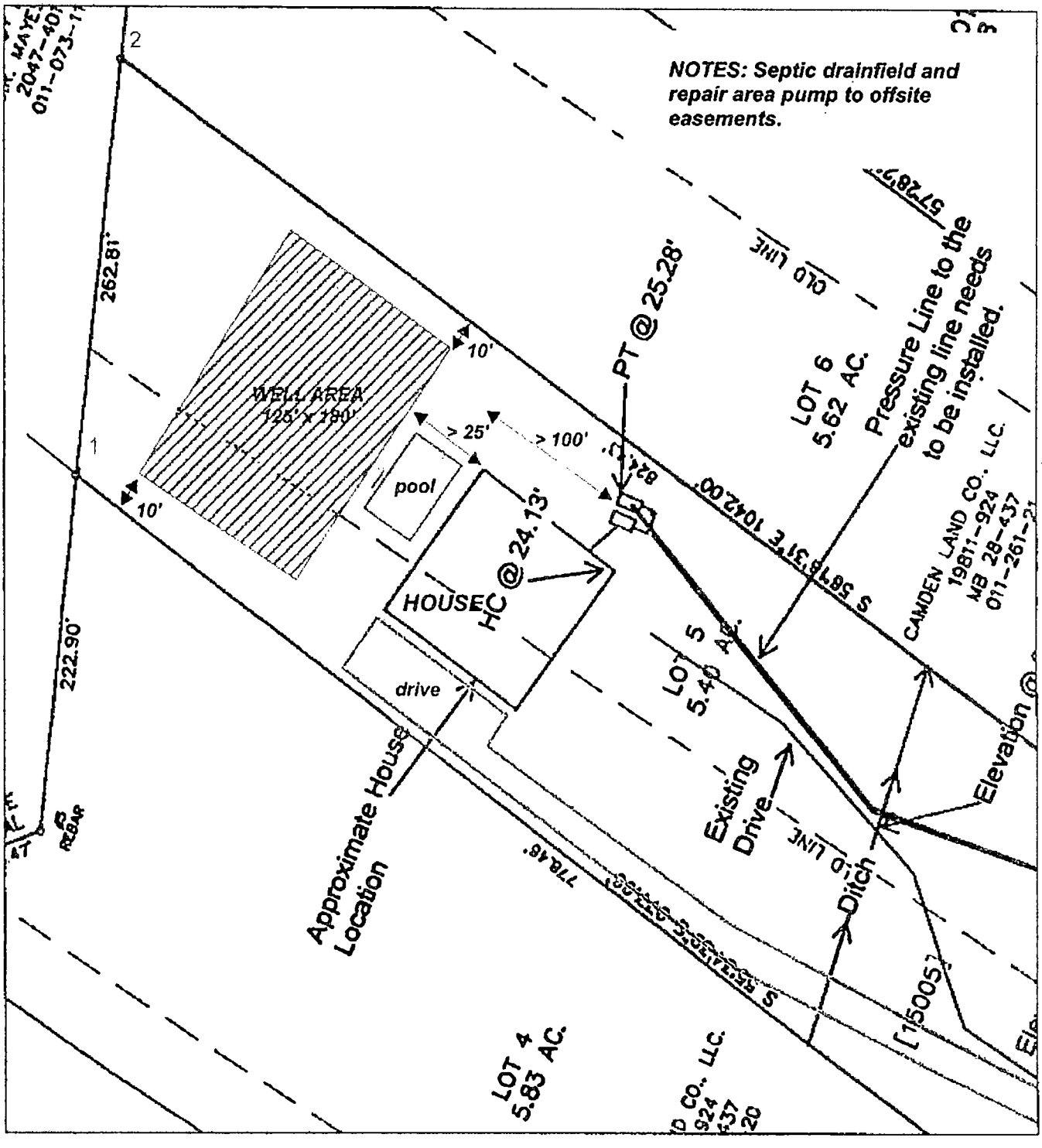
☐ Grout must be placed the full extent of the casing ☐ Casing to bedrock
☐ Initial water sample to be taken and analyzed for (check all that apply):
☐ Volatile Organic Compounds (VOC's) ☐ Semi-volatile Compounds ☐ Metals (Specify in Other Conditions)
☐ Pesticides ☐ Herbicides ☐ Other (See Below)
The analysis must be approved prior to the Water Supply well be ng placed in service

Other Conditions of This Permit:

Kim Garrett, REHS
Authorized Agent Print Name
Kim Garrett, REHS
Signature:

Megan Cranford
Owner/Legal Agent Print Name
Megan Cranford
Signature

WELL PERMIT DIAGRAM



Mecklenburg County Health Department
Environmental Health Program
Well Permit # 10012665
Don & Mayra Caylor
PID# 011-261-20
Date permitted 11/19/2021

Authorized Agent: [signature]

Date: 11/19/21

Owner/Legal Agent: Megan [signature]

Date: 11-22-21

1 inch = 90 feet

Print Form

WELL CONSTRUCTION RECORD (GW-1)

For Internal Use Only:

1. Well Contractor Information:

Spencer Adams
Well Contractor Name

4449-A
NC Well Contractor Certification Number

Rowan Well Drilling
Company Name

2. Well Construction Permit #: 10012665
List all applicable well construction permits (i.e. UIC, County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:
- ☐ Agricultural
- ☐ Geothermal (Heating/Cooling Supply)
- ☐ Industrial/Commercial
- ☐ Irrigation
- ☐ Municipal/Public
- ☒ Residential Water Supply (single)
- ☐ Residential Water Supply (shared)

Non-Water Supply Well:
- ☐ Monitoring
- ☐ Recovery

Injection Well:
- ☐ Aquifer Recharge
- ☐ Aquifer Storage and Recovery
- ☐ Aquifer Test
- ☐ Experimental Technology
- ☐ Geothermal (Closed Loop)
- ☐ Geothermal (Heating/Cooling Return)
- ☐ Groundwater Remediation
- ☐ Salinity Barrier
- ☐ Stormwater Drainage
- ☐ Subsidence Control
- ☐ Tracer
- ☐ Other (explain under #21 Remarks)

4. Date Well(s) Completed: 3/4/22 **Well ID#** 10012665

5a. Well Location:

Dan & Mayra Caylor
Facility/Owner Name — Facility ID# (if applicable)

15005 Ramah Ch Rd, Huntersville 28078
Physical Address, City, and Zip

Mecklenburg — 011-261-21
County — Parcel Identification No. (PIN)

5b. Latitude and longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35 26 47.671 N 80 47 52.850 W

6. Is(are) the well(s): ☒ Permanent or ☐ Temporary

7. Is this a repair to an existing well: ☐ Yes or ☒ No
If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. For Geoprobe/DPT or Closed-Loop Geothermal Wells having the same construction, only 1 GW-1 is needed. Indicate TOTAL NUMBER of wells drilled: _____

9. Total well depth below land surface: 685 (ft.)
For multiple wells list all depths if different (example: 1@200' and 2@100')

10. Static water level below top of casing: _____ (ft.)
If water level is above casing, use "+"

11. Borehole diameter: 6 (in.)

12. Well construction method: Rotary
(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm): 24 **Method of test:** weir

13b. Disinfection type: chlorine **Amount:** 24 oz

14. WATER ZONES

FROM	TO	DESCRIPTION
565 ft.	585 ft.	Water
625 ft.	685 ft.	Water

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0 ft.	123 ft.	6 3/4 in.	SDR21	PVC

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
ft.	ft.	in.			
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0 ft.	20 ft.	Hydrating	Gravity 10 bags
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
ft.	ft.		
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0 ft.	20 ft.	Clay
20 ft.	75 ft.	Sandy overburden
75 ft.	112 ft.	Weathered rock
112 ft.	123 ft.	Hard rock
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

22. Certification:

Signature of Certified Well Contractor — Date: 3/4/22

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:
You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTRUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Resources, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit one copy of this form within 30 days of completion of well construction to the following:

Division of Water Resources, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

CHARLOTTE WATER

Environmental Laboratory Services

Laboratory Analysis Report
Report Date: 09/07/2022 13:43

LOCATION: GWO-97785
LOC ID: G-NEW
SAMPLE DATE-TIME: 09/02/2022 10:15
SAMPLE DESCRIPTION: Grab

CHAIN OF CUSTODY #: 220902021

	Parameter	Result	Units	RL	Method	Start Date / Time		Analyst
Sample ID:	**AI38332**							
AI38332	E. Coli-PA (Colilert)	Absent	P/A		SM 9223B	09/02/2022	13:59	SLT
AI38332	Total Coliform- P/A (Colilert)	Absent	P/A		SM 9223B	09/02/2022	13:59	SLT

Comment:

Eric W. Newell, Laboratory Supervisor: _____

The results contained in this report are specific to the samples listed above.

CHARLOTTE WATER-Environmental Laboratory Services
4222 Westmont Drive, Charlotte, North Carolina 28217
N.C. Certification 192, N.C.DHHS Certification 37417, EPA Cert 01215

CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT

ENVIRONMENTAL LABORATORY SERVICES

4222 Westmont Drive, Charlotte, NC 28217 (704) 336 - 2854 or (704) 622 - 7280

NC DENR Certification No. 192; NC DHHS Certification No. 37417; US EPA Certification No. 01215

CHARLOTTE
CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT
CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT

CHAIN OF CUSTODY RECORD

COC #: 220902021 PAGE 1 OF 1

CLIENT:	Mecklenburg County, LUESA - Groundwater & Wastewater Services
FACILITY:	Groundwater (POTABLE WATER)
ADDRESS:	15005 Ramah Church Road
LAB CODE: (circle one)	REAL PRIV (NEW) TNC MPL PME AMB LM OTHER

Send REPORT To:	Send INVOICE To:
Kim Garrett	Jeremy Michael
3205 Freedom Drive, Suite 8000	3205 Freedom Drive, Suite 8000
Charlotte, NC 28208	Charlotte, NC 28208

Sampled By (Print Name): Kim Garrett

Witnessed By (Print & Sign Name - If Applicable):

Sample ID	Sampler Collector's Initials	Sample Collection: Begin Date / Time	Sample Collection: End Date / Time	Chlorinated System: (Y/N)	Sample Temperature: Collection Temp, °C	Sample Temperature: Receipt Temp, °C	Sample Type: Depth Composite	Sample Type: Auto Composite	Sample Type: Hand Composite	Sample Type: Grab	Sample Containers: Plastic	Sample Containers: Glass	Sample Containers: # of Containers	Chemical Preservative: None	HNO3	H2SO4	NaOH	HCl	Na2S2O3	Indicate pH of Preserved Sample	Analyses: Total Coliform - P/A	Analyses: E. coli - P/A	LAB USE ONLY LABORATORY SAMPLE ID
GWO- 97785	ksg	9/2/2022 10:15	N/A N/A	N	17.1	3.6				x	100 ml		1						x		x	x	AT 38332 A

Instructions: Complete all yellow shaded areas. Blue areas are for LAB USE ONLY.

For each parameter requested, circle the "x" to verify your request.

Nutrients include: Nitrate/Nitrite, TKN, Total Phosphours, Ammonia

Itemize Metals Here:

For Composite samples, record the autosampler BEGIN and END date/time.

For Grab samples, record the collection time as the BEGIN date/time only.

Comments: ***3-DAY TAT REQUESTED*** @ Wellhead

Relinquished by: (Signature)	Received by: (Signature)	Date:	Military Time:
Kim Garrett	Sandra Gibson	09-02-22	1153
Relinquished by: (Signature)	Received by: (Signature)	Date:	Military Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Military Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Military Time:

Lab Codes: REAL = Real Estate; PRIV = Private Well; NEW = New Permitted Well; TNC = Transient Non-Community; AMB = Ambient; LM = Landfill

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

Private well water information and recommendations

County: Mecklenburg Name: GWO-97785 Sample ID Number: A138332
Location: 15005 Rabah Church Rd Reviewer Kimbarrett

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.

CHARLOTTE WATER

Environmental Laboratory Services

Laboratory Analysis Report
Report Date: 05/27/2022 13:31

LOCATION: GWO-97412
LOC ID: G-NEW
SAMPLE DATE-TIME: 05/24/2022 11:30
SAMPLE DESCRIPTION: Grab

CHAIN OF CUSTODY #: 220524014

	Parameter	Result	Units	RL	Method	Start Date / Time		Analyst
Sample ID:	AI28086							
AI28086	Nitrate	<0.05	mg/L	0.05	EPA353.2-93	05/24/2022	14:19	SRP
AI28086	Nitrate/Nitrite	<0.05	mg/L	0.05	EPA353.2-93	05/24/2022	13:47	SRP
AI28086	Nitrite	<0.05	mg/L	0.05	EPA353.2-93	05/24/2022	14:19	SRP
AI28086	E. Coli-PA (Colilert)	Absent	P/A		SM 9223B	05/24/2022	16:02	KNB
AI28086	Total Coliform- P/A (Colilert)	Present	P/A		SM 9223B	05/24/2022	16:02	KNB

Comment:

Gina H. Kimble, Laboratory Supervisor:

The results contained in this report are specific to the samples listed above.

CHARLOTTE WATER-Environmental Laboratory Services
4222 Westmont Drive, Charlotte, North Carolina 28217
N.C. Certification 192, N.C.DHHS Certification 37417, EPA Cert 01215

CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT

ENVIRONMENTAL LABORATORY SERVICES

4222 Westmont Drive, Charlotte, NC 28217 (704) 336 - 2854 or (704) 622 - 7280

NC DENR Certification No. 192; NC DHHS Certification No. 37417; US EPA Certification No. 01215

CHARLOTTE. CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT

CHAIN OF CUSTODY RECORD

COC #: 220524014 PAGE 1 OF 1

CLIENT: Mecklenburg County, LUESA - Groundwater & Wastewater Services	Send REPORT To: Kim Garrett, 3205 Freedom Drive, Suite 8000, Charlotte, NC 28208	Send INVOICE To: Jeremy Michael, 3205 Freedom Drive, Suite 8000, Charlotte, NC 28208	Sampled By (Print Name): Kim Garrett
FACILITY: Groundwater (POTABLE WATER)			Witnessed By (Print & Sign Name - If Applicable):
ADDRESS: 15005 Ramah Church Road			
LAB CODE: (circle one) REAL PRIV (NEW) TNC MPL PME AMB LM OTHER			

Sample ID	Sample Collector's Initials	Sample Collection: Begin Date / Time	Sample Collection: End Date / Time	Chlorinated System: (Y/N)	Sample Temperature: Collection Temp, °C	Sample Temperature: Receipt Temp, °C	Sample Type: Depth Composite	Sample Type: Auto Composite	Sample Type: Hand Composite	Sample Type: Grab	Sample Containers: Plastic	Sample Containers: Glass	Sample Containers: # of Containers	Chemical Preservative: None	HNO3	H2SO4	NaOH	HCl	Na2S2O3	Indicate pH of Preserved Sample	Analyses: Total Coliform - P/A	E. coli P/A	Nitrate	Nitrite	LAB USE ONLY LABORATORY SAMPLE ID
GWO-97412	ksg	5/24/2022 11:30am	N/A	N	17.1	4.1				x	100 ml		1						x		X	X			AL 28086 A
			N/A	N		4.5				x	250 ml		1			x				<2			X		B
			N/A	N						x	250 ml		1	x									X		C
			N/A																						
			N/A																						
			N/A																						
			N/A																						
			N/A																						
			N/A																						
			N/A																						

Instructions: Complete all yellow shaded areas. Blue areas are for LAB USE ONLY.

For each parameter requested, circle the "x" to verify your request.

Nutrients include: Nitrate/Nitrite, TKN, Total Phosphours, Ammonia

Itemize Metals Here:

For Composite samples, record the autosampler BEGIN and END date/time.

For Grab samples, record the collection time as the BEGIN date/time only.

Comments: ***3-DAY TAT REQUESTED*** Cwellhead

Relinquished by: (Signature)	Received by: (Signature)	Date:	Military Time:
Kim Garrett	Sandra Cuba	05-24-22	1238
Relinquished by: (Signature)	Received by: (Signature)	Date:	Military Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Military Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Military Time:

Form Revision 08; Effective April 1, 2012

Lab Codes: REAL = Real Estate; PRIV = Private Well; NEW = New Permitted Well; TNC = Transient Non-Community; AMB = Ambient; LM = Landfill

North Carolina State Laboratory of Public Health

Environmental Sciences

Inorganic Chemistry

4312 District Drive
MSC 1918
Raleigh, NC 27699-1918

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

15005 Ramah Church Rd

Certificate of Analysis

FINAL REPORT

Report to: KIM GARRETT

MECKLENBURG CO ENVIRONMENTAL HEALTH
3205 Freedom Drive
CHARLOTTE, NC 28208

Name of System:

GWO - 97412

EIN: 566000319EH **Delivery:** NC Courier

StarLiMS ID: **ES220527-0014**
Date Collected: 05/24/2022 Time Collected: 11:30 By: Kim Garrett
Date Received: 05/27/2022 Time Received: 07:36
Sample Type: Raw Sampling Point: Well head Well Permit No. GWO-97412
Sample Source: New Well Receipt Temp. : GPS Number:

Profile: New Well - No Nitrate I

Analyte	Test Result	Allowable Limit	Unit	Qualifier(s)
Arsenic	<0.001	0.010	mg/L	
Barium	<0.1	2.0	mg/L	
Cadmium	<0.0001	0.005	mg/L	
Calcium	65		mg/L	
Chloride	9.0	250	mg/L	
Chromium	<0.02	0.10	mg/L	
Copper	<0.01	1.3	mg/L	
Fluoride	0.506	4.00	mg/L	
Iron	<0.06	0.30	mg/L	
Lead	<0.003	0.015	mg/L	
Magnesium	8		mg/L	
Manganese	0.017	0.05	mg/L	
Mercury	<0.0004	0.002	mg/L	
Nickel	<0.01	0.1	mg/L	
pH	7.9		N/A	
Selenium	<0.005	0.05	mg/L	
Silver	<0.01	0.10	mg/L	
Sodium	29.2		mg/L	
Sulfate	140.7	250	mg/L	
Total Alkalinity	103		mg/L	
Total Hardness	198		mg/L	
Zinc	0.05	5.0	mg/L	

Report Date: 06/16/2022

Reported By: Marc Komlos

NORTH CAROLINA

NC DEPARTMENT OF
HEALTH AND HUMAN SERVICES
Division of Public Health

Private Well Information and Use Recommendations

For Inorganic Chemical Contaminants

County: mecklenburg Sample Name: GWO-97412

Sample ID #: ES220537-0014 Reviewer: Kim Garrett

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.

MECKLENBURG COUNTY
Public Health

Raynard Washington, PhD, MPH
Health Director

(704) 336-4700

September 26, 2022

Dan & Mayra Caylor
15005 Ramah Church Road
Huntersville, NC 28078

RE: Well Water Sampling Results

Staff with the Mecklenburg County Public Health Department sampled water from the water supply well referenced at the above location. Laboratory results for the analysis are attached and indicate the following:

DATE	PARAMETERS	RESULTS	EPA Primary Drinking Water Standards	EPA Secondary Drinking Water Standards	US EPA Drinking Water Advisory
05/24/22	*Total coliform bacteria*	*present*	*absent*		
	E. coli bacteria	*absent*	*absent*		
	Nitrate	*< 0.05 mg/L*	*10 mg/L*		
	Nitrite	*< 0.05 mg/L*	*1 mg/L*		
	Inorganic chemicals	*All inorganic chemicals were within EPA Primary & Secondary Drinking Water Standards*	*See "Private Well Information and Use Recommendations" handout*	*See "Private Well Information and Use Recommendations" handout*	*Sodium exceeded the 20 mg/L at 29.2 mg/L*
09/02/22	*Total coliform bacteria*	*present*	*absent*		
	E. coli bacteria	*absent*	*absent*		

Notes:

1. *Primary Drinking Water Standards are designed to protect public health by limiting the levels of contaminants in drinking water. Secondary Drinking Water Standards are guidelines regulating contaminants that may cause cosmetic or aesthetic effects. (www.epa.gov/safewater/mcl.html).*

If you have any additional questions concerning these results, please contact me at 980-721-2054.

Sincerely,

Kim Garrett, REHS
Sr. Environmental Specialist
Mecklenburg County Health Department
Environmental Health Program
980-721-2054 cell
kimberly.garrett@mecklenburgcountync.gov

Enclosures: Laboratory Analysis

Mecklenburg County
Groundwater & Wastewater Services
3205 Freedom Dr., Suite 8000
Charlotte, NC 28208
Phone: (980) 314-1680 FAX: (704) 336-6894

CERTIFICATE of COMPLETION
for a
WATER SUPPLY WELL

Permit #: 10012665 File #: 6402B Tax Parcel #: 01126121

Well Location Address: 15005 RAMAH CHURCH RD

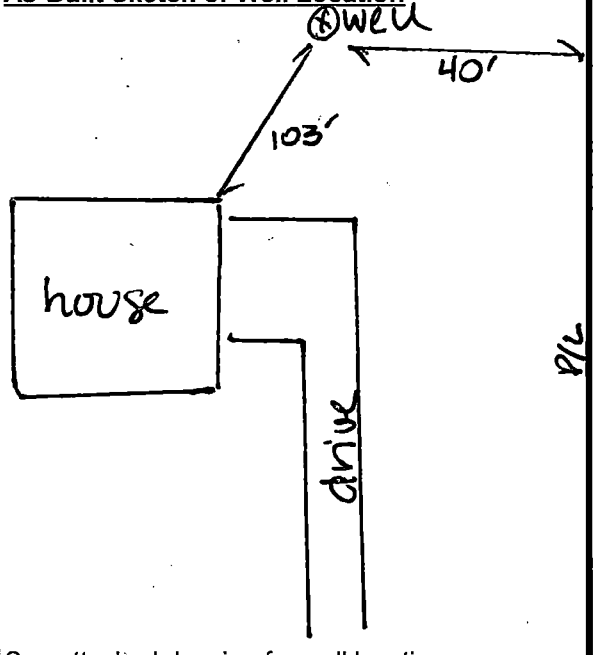
City: HUNTERSVILLE State: NC Zip Code: 28078

Well Information
Well Type: Irrigation
Well Status: Active
Install Date: 3/4/2022
Well Depth: 685 feet
Casing Depth: 123 feet
Diameter: 6 inches
Yield – GPM: 24
Static Water Level: 0 feet (below land surface)
Level Date: 3/4/2022
X-Coordinate: 1464267.00(NC Grid)
Y-Coordinate: 622250.00(NC Grid)

Well Contractor Information
Well Contractor: Rowan Well/Spencer Adams
Certification #: 4449-A
Registration #:

Well Inspection Dates
Permit Issued: 11/19/2021
Grout Inspection: 3/3/2022
☐ Contractor certification for grouting not witnessed by GWS
Well Head Inspection: 5/24/2022

As-Built Sketch of Well Location



☐ See attached drawing for well location

The undersigned has inspected the well described above and certifies that construction has been completed, a well construction form (GW-1a) has been received, and inspections have been completed in accordance with 15A NCAC 02C. This document is issued subject to those restrictions and conditions shown on the original permit and the provisions of 15A NCAC 02C .0300. This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would modify the required setbacks for the well.

☑ Required water samples have been collected. The lab results are included for your review.

☐ Required water samples have been collected however GWS has not received all lab results at this time. The lab results available are included for your review.

Registered Environmental Health Specialist: Kimberly, REHS (Print)

Kimberly, REHS (Sign)

Certificate of Completion Issuance Date: 9/30/2022