2017 Owners: Jonathon / Christy Strange

KW Emailed permit to client 4/21

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office - Central Permitting (704) 878-5305 Mooresville Office (704) 660-3625

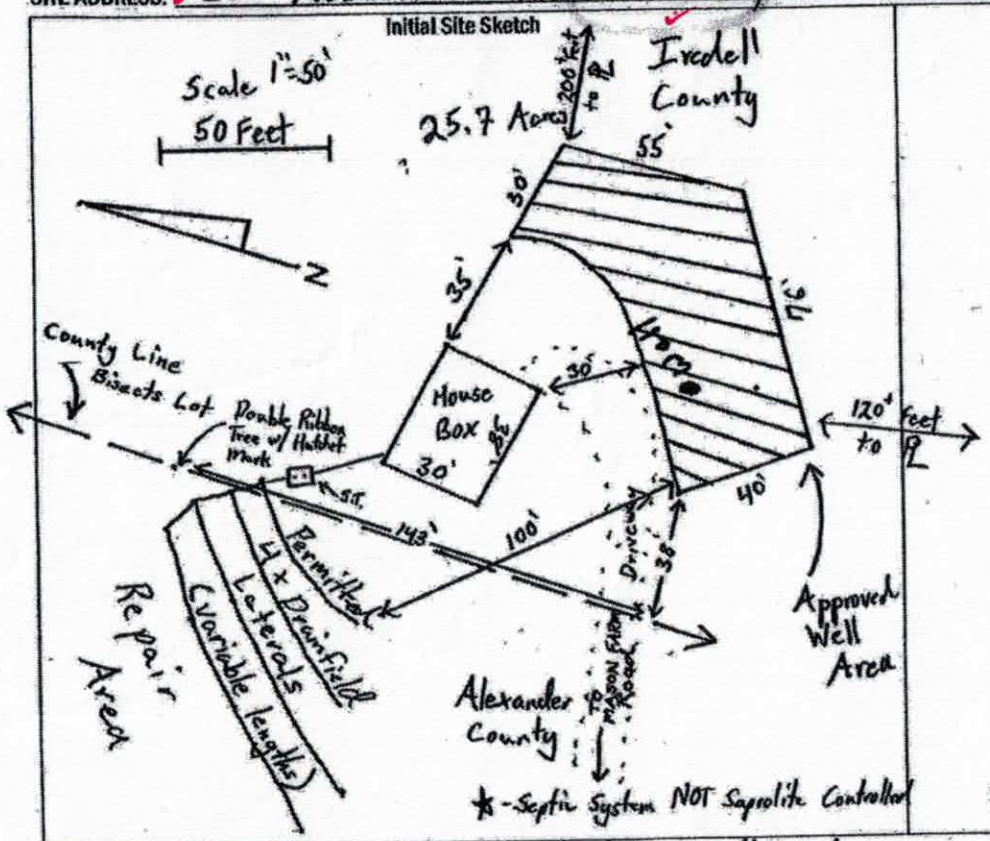
PRIVATE DRINKING WATER WELL PERMIT # 214930 PIN # 4802-72-5527 ✓ Type of Permit (circle one): (New) Repair Abandonment

APPLICANT NAME: Americas Home Place Inc. ADDRESS: 1206 Greenland Dr. Statesville, NC 28677 PHONE: 704-881-1023

DIRECTIONS TO SITE: Rt 115 N → L on Mountain View Rd → R on Bacon Rd → L on Mason Farm Rd → Lot on Right (partially in Alexander County)

SITE ADDRESS: ✓ 300 Mason Farm Rd. Statesville, NC SUBDIVISION: _____ SECTION/LOT: _____

Initial Site Sketch



"As Built" Sketch

20½" grout hole
88' Casing

Well GPS Latitude: _____ Longitude: _____

PERMIT CONDITIONS/COMMENTS: Follow all N.C. well rules.

WELL PERMIT ISSUED BY: Tom Rhuck DATE: 4/21/2017 (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: Chris Russell CONTRACTOR CERT #: 3254 ★ GROUT INSPECTION BY: [signature] DATE: 07/10/17

OR CERTIFICATION OF GROUT NOT WITNESSED BY DEPT: _____ DATE: _____ WELL HEAD INSPECTION BY: [signature] DATE: 8/16/17

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: Maria Tolson DATE: 8/16/17 WATER SAMPLES BY: Kayla Wilson DATE: 11-27-17

Attachments: Form GW-1a (required except for abandonment) ☑ Form GW-30 ☐ Water Sample Results ☑ Plat ☐

Health Dept. Copy - White Applicant Certificate of Completion - Yellow Applicant Well Construction Permit - Pink

IREDELL COUNTY HEALTH DEPARTMENT

Environmental Health Division

Statesville Office 704-878-5305 Mooresville Office 704-660-3625 option #3

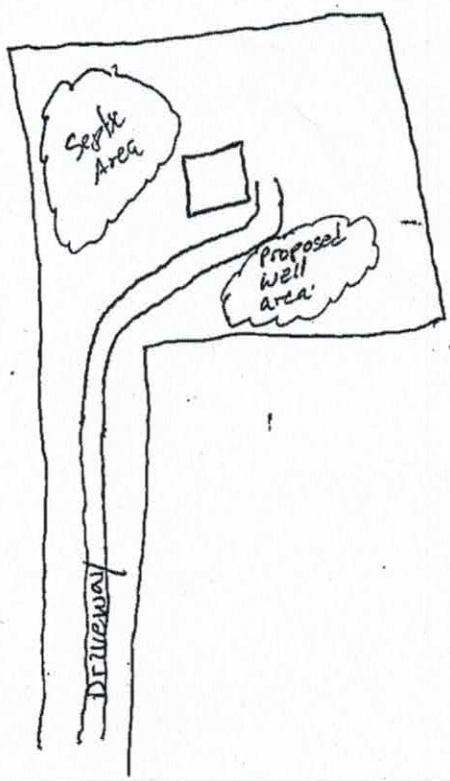
APPLICATION FOR PRIVATE DRINKING WATER WELL PERMIT

Americas Home Place Inc.	1206 Greenland Dr. Statesville NC 28677		704-881-1023
Applicant Name	Street, City, State, Zip		Phone Number
Jonathan Strunge	2546 Old Mountain Rd. Statesville NC 28625		704-500-7441
Name of Owner / Authorized Agent	Street, City, State, Zip		Phone Number
300 Mason Farm Rd.			
Well Site Location Street Address	Single family residential const.	Subdivision	Lot Number
4802725527		New	
Parcel Identification Number (PIN)	Intended Use of Property	Type of Well Permit (New, Repair, Abandonment)	

Directions from here to your site: From 115, Left onto Mtn. view rd., Rt. onto Bacon Rd., Left onto Mason Farm Rd., jobsite on the right.

All site characteristics such as existing or permitted sewage disposal systems, easements or rights of way, existing wells or springs, surface water or designated wetlands, chemical or petroleum storage tanks, landfills, waste storage, known underground contamination and any other characteristics or activities on the property or adjacent properties that could impact groundwater quality or suitability of the site for well construction must be identified on the site plan sketch below.

SITE PLAN SKETCH



CHECK AS APPLICABLE:

____ There are current or pending restrictions regarding groundwater use as specified in GS 87-88(a)

____ There is a variance regarding well construction or location issued under 15A NCAC 02C .0118.

____ There is an easement, right-of-way or other encroachment agreement applicable to this parcel.

By signing below I acknowledge that the information provided herein is true, complete and correct. Furthermore, I grant authorized county and state officials right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand 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 investigation can be performed.

SIGNATURE OF OWNER OR AUTHORIZED AGENT — DATE 3/31/17

White Copy – Environmental Health Yellow Copy - Applicant Copy

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625

IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PERMIT # 214930

PIN # 4802-72-5527

APPLICANT: Americas Home Place

APPLICANT ADDRESS: 1206 Greenland Drive

SITE ADDRESS: 300 Mason Farm Rd Statesville, NC 28625

PHONE: 704-881-1023 ALT. PHONE:

SITE DIRECTIONS: Rt 115 N → L on Mountain View Rd → R on Bacon Rd → L on Mason Farm Rd → Lot on Right (partially in Alexander County)

SUBDIVISION: — SECTION: — LOT # — LOT AREA: 25.7 acres DESIGN FLOW: 360 GPD L.T.A.R.: 0.30

Septic Tank	1000	(gal)	STB		Date				
Pump Tank	—	(gal)	PT	—	Date	—			
Pump Make	—	Model		—	Serial #	—			
# Nitrification Fields	1	# Lines	4		Linear Ft:	300			
Trench Width	36"	Trench Bottom Depth	28" [low side]		Gravel Depth	—			

☒ New System ☐ Repair ☐ Expansion System Type: I II (III) IV V VI

System Description: 25% Reduction

Repair System Description: 25% Reduction

Maintenance Agreement Required: ☐ YES ☒ NO

☒ GRAVITY ☐ PRESSURE

☒ Residence ☐ Business ☐ Other ☐ Slab ☐ Basement w/plumbing

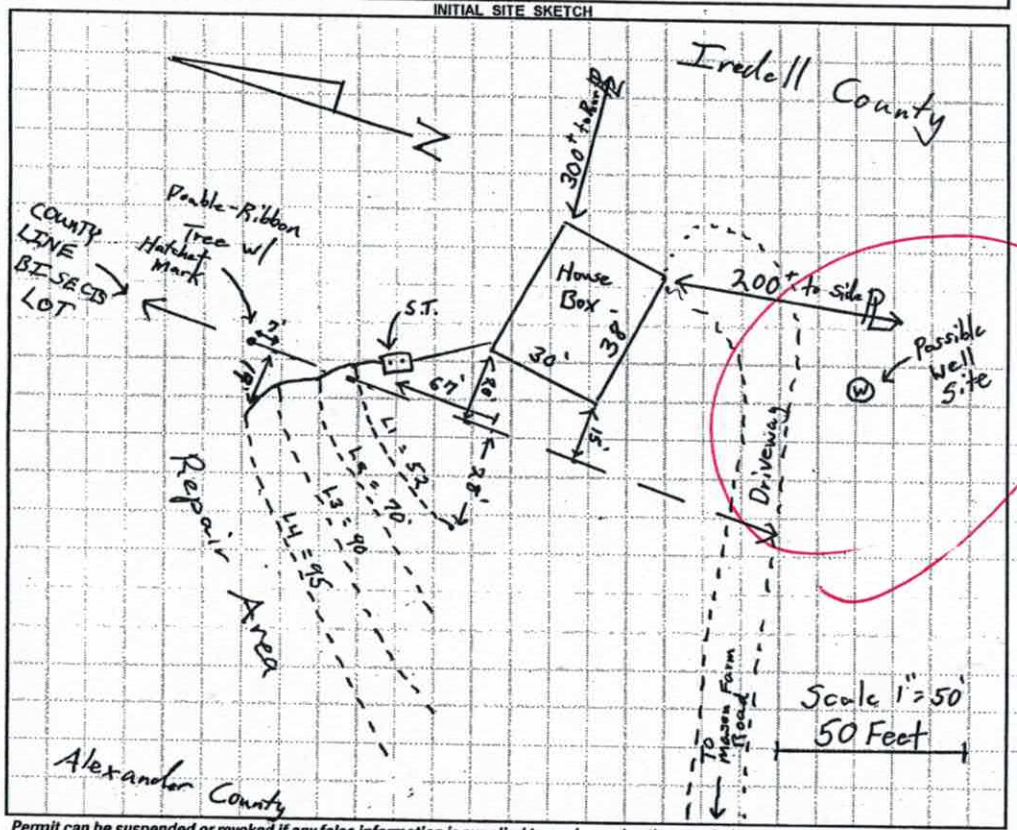
No. Bedrooms 3 No. Persons 6 No. Employees — ☒ Crawl Space

Water Supply: ☐ Private ☐ Public ☐ Community

☐ Basement w/o plumbing

Comments / Conditions: Recommend pumping septic tank every 3-5 years

INITIAL SITE SKETCH



AS BUILT SKETCH

Authorization to Construct

Client gets pink copy

Have property owner fill out

Administrative Appeal Rights form

Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☒ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☒ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: _____ Date: _____ Installed by: _____

IMPROVEMENT PERMIT by: Tom Shuck Date: 3/23/17 OPERATION PERMIT by: _____ Date: _____

AUTHORIZATION TO CONSTRUCT by: Tom Shuck Date: 3/27/17 Existing System Inspected by: _____ Date: _____

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK

faxed 7-13-17

Print Form

WELL CONSTRUCTION RECORD (GW-1)

1. Well Contractor Information:

Chris C. Russell
Well Contractor Name

3254-A
NC Well Contractor Certification Number

Russell Well Drilling, Inc.
Company Name

2. Well Construction Permit #: 214930
List all applicable well construction permits (i.e. UIC, County, State, Variance, etc.)

3. Well Use (check well use):

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

Non-Water Supply Well:
- [ ] Monitoring
- [ ] Recovery

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

4. Date Well(s) Completed: 7-10-17 **Well ID#**

5a. Well Location:

Strange — Facility/Owner Name
AHP — Facility ID# (if applicable)
300 Mason Farm Rd, Statesville, NC 28677 — Physical Address, City, and Zip
Iredell — 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' 59.571' N 081' 00.210' W

6. Is(are) the well(s): [ ] Permanent or [ ] Temporary

7. Is this a repair to an existing well: [ ] Yes or [x] 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: 385 (ft.)
For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 120 (ft.)
If water level is above casing, use "+"

11. Borehole diameter: 6.25 (in.)

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

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm): 40 **Method of test:** Air

13b. Disinfection type: HTH **Amount:** 3/4 cup

For Internal Use Only:

14. WATER ZONES

FROM	TO	DESCRIPTION
120 ft.	385 ft.	
ft.	ft.	

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

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0 ft.	88 ft.	6.25 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.	Grout	Poured
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.	83 ft.	Dirt
83 ft.	385 ft.	Rock
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

22. Certification:

Chris Russell — Signature of Certified Well Contractor
7-13-17 — Date

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.

North Carolina State Laboratory Public Health
Environmental Sciences
Microbiology
Certificate of Analysis

P.O. Box 28047
4312 District Drive
Raleigh, NC 27611-8047
http://slph.ncpublichealth.com
Phone: 919-733-7308
Fax: 919-715-8611

Report To:
IREDELL CO. ENVIRONMENTAL HEALTH DEPT - MOOR
610 EAST CENTER AVENUE

MOORESVILLE, NC 28115
EIN:566000309E

COURIER #: 09-08-02

Name of System:
JONATHAN STRANGE

300 MASON FARM RD.
STATESVILLE, NC 28687

StarLiMS Sample ID: **ES112817-0092001**

Collected: 11/27/2017 10:57
Received: 11/28/2017 08:36

Kayla Wilson
Susan Beasley

ES Microbiology ID:
GPS Number:

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

Well Permit Number:
214930

Sample Description:
Comment:

Environmental Microbiology - Colilert Profile

Method: SM 9223B

Test Name: Colilert

Analyte	Test Result	Date
Total Coliform, Colilert	Absent	11/29/2017
E. coli, Colilert	Absent	11/29/2017

Report Date: 11/29/2017

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

P.O. Box 28047
4312 District Drive
Raleigh, NC 27611-8047
http://slph.ncpublichealth.com
Phone: 919-733-7308
Fax: 919-715-8611

Report To: **KAYLA WILSON**

IREDELL CO. ENVIRONMENTAL HEALTH DEPT - MO
610 EAST CENTER AVENUE

MOORESVILLE, NC 28115
EIN: 566000309E

Courier # 09-08-02

Name of System:

JONATHAN STRANGE

300 MASON FARM RD
STATESVILLE, NC 28687

StarLiMS ID: **ES112817-0030001**

Date Collected: 11/27/17
Date Received: 11/28/17

Time Collected: 10:57 AM
Collected By: Kayla Wilson

Sample Type: Raw
Sample Source: New Well

Sampling Point: Well head
Temp. at Receipt: 2.5

Well Permit #: 214930
GPS #:

Sample Description:
Comment:

New Well I (Profile)

Analyte	Result	Allowable Limit	Unit	Qualifier(s)
Arsenic	< 0.005	0.010	mg/L	
Barium	< 0.1	2.00	mg/L	
Cadmium	< 0.001	0.005	mg/L	
Calcium	22		mg/L	
Chloride	< 5.00	250	mg/L	
Chromium	< 0.01	0.10	mg/L	
Copper	< 0.05	1.3	mg/L	
Fluoride	1.10	4.00	mg/L	
Iron	< 0.10	0.30	mg/L	
Lead	< 0.005	0.015	mg/L	
Magnesium	2		mg/L	
Manganese	0.060	0.05	mg/L	
Mercury	< 0.0005	0.002	mg/L	
Nitrate	< 1.00	10.00	mg/L	
Nitrite	< 0.1	1.00	mg/L	
pH	8.2		N/A	
Selenium	< 0.005	0.05	mg/L	
Silver	< 0.05	0.10	mg/L	
Sodium	22.00		mg/L	
Sulfate	6.30	250	mg/L	
Total Alkalinity	98		mg/L	
Total Hardness	65		mg/L	
Zinc	< 0.05	5.00	mg/L	

Report Date: 12/11/2017

Reported By: *Debbie Moncol*

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

nc department of health and human services

Private Well Information and Use Recommendations

For Inorganic Chemical Contaminants

County: Iredell

Name: Jonathan Strange

Sample ID #: 0030001

Reviewer: Kayla Wilson

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 circled 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	Lead	Iron	
Manganese	Mercury	Nitrate/Nitrite	Selenium	Silver	Magnesium	Zinc	pH	

3. ☐ 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. Levels over 30 mg/l may pose aesthetic problems such as bad taste, odor, staining of porcelain, etc.

4. ☐ Re-sampling is recommended in _____ months.

5. ☐ 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.

6. ☐ The following substance(s) exceeded federal 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.

Barium	Cadmium	Chromium	Fluoride	Iron	Magnesium
Manganese	Selenium	Silver	pH	Zinc	

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

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: Jonathan Strange Sample ID Number: 0092001
Location: 300 Mason Farm Rd Statesville, NC Reviewer Kayla Wilson

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.