

C1 9732

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER, STREET OR RFD, TOWN, SUBDIVISION, SECTION, LOT

WELL LOG Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Brown mica and Gray Limestone.

GROUTING RECORD

WELL HAS BEEN GROUTED, TYPE OF GROUTING MATERIAL, NO. OF BAGS, NO. OF POUNDS, GALLONS OF WATER, DEPTH OF GROUT SEAL

CASING RECORD

MAIN CASING TYPE, Nominal diameter top (main) casing, Total depth of main casing

OTHER CASING (if used) diameter, depth (feet)

SCREEN RECORD

screen type or open hole, insert appropriate code below

C3

PUMPING TEST

HOURS PUMPED, PUMPING RATE, METHOD USED TO MEASURE PUMPING RATE, WATER LEVEL, TYPE OF PUMP USED

NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACTURED

CIRCLE APPROPRIATE LETTER A, E, P

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 28.04.04

DRILLERS LIC. NO. 1, DRILLERS SIGNATURE

LIC. NO. 1

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

DEPTH (nearest ft.)

Table with columns: A, C, H, S, R, E, E, N and depth values.

DIAMETER OF SCREEN (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

TELESCOPE CASING, LOG INDICATOR, OTHER DATA

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon)

PUMP HORSE POWER

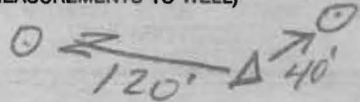
PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

LAND SURFACE (nearest foot)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



B 1 5500
1 2 3 6

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-95-1710
70 fill in this form completely 79

530232 please type

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13
15 Last Name Owner First Name 34
36 Street or RFD 55
57 Town 70 State 72 Zip 76
Toll Brothers
11423 Hunt Crossing Ct
Ellicott City Md. 21042

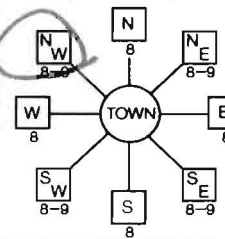
B 3 LOCATION OF WELL

8 COUNTY 21
23 SUBDIVISION 42
SECTION 44 46 LOT 80 48 50
52 NEAREST TOWN 71
Columbia
MILES FROM TOWN (enter 0 if in town) 3 M I I
73 76 77 78

DRILLER INFORMATION

Driller's Name 76 License No. 81
Firm Name
Address
Signature Date
Allen Compton M S D009
Fogles Well Drilling
6003 Woodbine Rd.
Allen Compton 11-12-08

B 4 1 2
DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



11 NEAR WHAT ROAD 30
Hunt Crossing Ct

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH
WEST EAST
SOUTH
34 200 37
DISTANCE FROM ROAD FT
ENTER FT OR MI 38 39
TAX MAP: 29 BLK: 9 PARCEL 28

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 5
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500
14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
- FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
- INDUSTRIAL, COMMERCIAL, DEWATERING
- PUBLIC WATER SUPPLY WELL
- TEST, OBSERVATION, MONITORING
- GEO-THERMAL

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

COUNTY NAME Howard COUNTY NO. 1527849
STATE SIGNATURE INSERT S
DATE ISSUED 11/14/08 CO SIGNATURE EXP DATE 11/14/09
43 MM DD YY 48 NORTH GRID 510 000 EAST GRID 824 000
50 55 57 63

APPROXIMATE DEPTH OF WELL 300 FEET
24 28

APPROXIMATE DIAMETER OF WELL 6 NEAREST INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTary AIR-PERcussion ROTARY (Hydraulic Rotary)
CABLE REVERSE-ROTary DRIVE-POINT
other

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- THIS WELL WILL NOT REPLACE AN EXISTING WELL
 - THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
 - THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
 - THIS WELL WILL DEEPEM AN EXISTING WELL
- PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROX. PERMIT NUMBER HO 2003 G006
PERMIT No. HO-95-1710
70 71 72 73 74 75 76 77 78 79

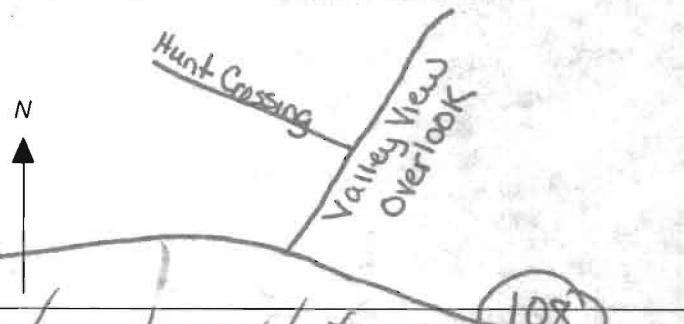
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

- SOURCES OF DRILLING WATER
- 1.
- 2.
- 3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 824
N 510
000
000

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



SPECIAL CONDITIONS

NOTE: APPROVING AUTHORITIES SHOULD USE SEPTIC SYSTEMS WHEN NEEDED

Need radium sample at yield test

MD Well Permt. #. H0-95-1710

Date of Test: 12-3-08

Subdivision Name: Patuxent chase

Section _____ Lot # 80

Street Address: HUNT CROSSING CT

Measuring Point (MP) Description: Top of casing
(for ex. "Top of casing")

Distance from MP to ground surface 1 ft.

Well Depth: 200 ft.

Well Driller: Fogle's Well Drilling

Must be submitted with the State of Maryland Well Completion Report

Submit to:

NOTES:

Pump Start Time	Static Water level	Pumping Rate	Calculated Flow
	<u>12</u> ft.	() Time to fill bucket <u>7</u> gal. () Flow meter reading (if used)	(gallons per minute) <u>20</u>
TIME	WATER LEVEL BELOW M.P.		
Water level and pumping rate must be recorded every 15 minutes			
1	8:00	12 ft.	3 20 GPM
2	8:15	70 ft.	8 7.5 GPM
3	8:30	70 ft.	8 7.5 GPM
4	8:45	70 ft.	8 7.5 GPM
5	9:00	70 ft.	8 7.5 GPM
6	9:15	70 ft.	8 7.5 GPM
7	9:30	70 ft.	8 7.5 GPM
8	9:45	70 ft.	8 7.5 GPM
9	10:00	70 ft.	8 7.5 GPM
10	10:15	70 ft.	8 7.5 GPM
11	10:30	70 ft.	8 7.5 GPM
12	10:45	70 ft.	8 7.5 GPM
13	11:00	70 ft.	8 7.5 GPM
14	11:15	70 ft.	8 7.5 GPM
15		ft.	GPM
16		ft.	GPM
17		ft.	GPM
18		ft.	GPM
19		ft.	GPM
20		ft.	GPM
21		ft.	GPM
22		ft.	GPM
23		ft.	GPM
24		ft.	GPM
25		ft.	GPM
26		ft.	GPM
27		ft.	GPM
28		ft.	GPM
29		ft.	GPM
30		ft.	GPM

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WELL & SEPTIC PROGRAM
TEL: (410)313-1771 FAX: (410)313-2648**

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: Fogles Well Drilling, LLC Telephone #: 443-609-4195
Address: P.O. Box 203
Woodbine, Md 21797

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer

License # and name of individual responsible for the field installation:

Name (Print): Allen Compton License# MSB009

*A licensed individual must perform the actual installation. Apprentices must be under the supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification. Unlicensed individuals may be reported to the appropriate licensing agency.

Name of Property Owner: Toil Brothers Telephone #: 410-320-0323
Subdivision: Benedict Farm Lot #: 80 Well Tag #: HO-95-1910 ✓
Site Address: 11449 Hunt Crossing Ct
Ellicott City, Md. 21042

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Grundfos</u>	Make: <u>Campbell</u>	Two piece watertight cap: <u>yes</u>
Model #: <u>15SGE09-182</u>	Model#: <u>-</u>	Screened, vented well cap: <u>yes</u>
Pump Capacity <u>15</u> GPM	Depth: <u>42"</u> (36" min)	Cap secured to casing: <u>yes</u>
Well Yield: <u>7.5</u> GPM	NSF/WSC approved: <u>yes</u>	Conduit min 18" B.G.: <u>yes</u>
Depth of well encountered at time of pump installation: <u>320</u> (feet)	Conduit secured to well cap: <u>yes</u>	

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Torque arrestors, Cable guards, or other acceptable method used- Must circle one
Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing ✓

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>1" PVC</u>	PVC sleeve to undisturbed soil at wall penetration: <u>yes</u>
PSI: <u>160</u> (160 psi min)	Length of sleeve (5' minimum from foundation): <u>5'</u>
Depth of supply line: <u>42"</u> (36" min)	Sleeve sealed properly: <u>yes</u>

The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation: Allen Compton date: 4/11/11

For Health Department Use Only -- Not to be completed by Installer

Date Insp. Requested: _____ Date Insp. Approved: 4/11/11 Inspector: (KW)

Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade	<input checked="" type="checkbox"/>
Two piece cap installed and attached to casing securely	<input checked="" type="checkbox"/>
Elec. conduit extends at least 18" below grade/attached to cap properly	<input checked="" type="checkbox"/>
Safety rope not outside of well cap/casing	<input checked="" type="checkbox"/>
Correct well tag attached properly and casing 8" above finished grade	<input checked="" type="checkbox"/>
Water supply line sleeved adequately at house connection	<input checked="" type="checkbox"/>
Adequate grout observed below pitless adapter	<input checked="" type="checkbox"/>



Bureau of Environmental Health
 7178 Columbia Gateway Drive, Columbia, MD 21046-2147
 (410) 313-2640 Fax (410) 313-2648
 TDD (410) 313-2323 Toll Free 1-866-313-6300
 website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

TO ALL INTERESTED PARTIES

When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

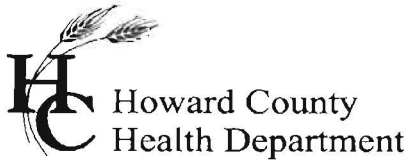
Well Site Location:
Patuxent Chase 80 Hunt Crossing Ct
 Subdivision/Property Name Lot# Road Name

The well site has been staked by Benchmark
 (professional land surveyor or company employing professional land surveyors)
 on Nov 6, 2008 (date) and does not require a site inspection.

The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

Revised 3/11/05



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Website: www.hchealth.org

Peter Beilenson, M.D., M.P.H., Health Officer

July 29th, 2011

Homeowner
11449 Hunt Crossing Court
Ellicott City, MD 21042

RE: Homewood Crossing, Lot 80
BP #: B10003385
Well Tag: HO-95-1710

Dear Homeowner:

This is to advise you that the septic system for the above referenced property has been installed and inspected. **Final approval of the septic system was granted on 05/12/2011. Final approval of the well line connection to the dwelling was approved on 04/11/2011.**

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. The water sample results were found to be in compliance with COMAR water quality standards.

Gross Alpha and Beta samples were also collected on 01/17/2007. Results showed a Gross Alpha level of **9.0+- 2.0 pCi/L** and **Gross Beta** level of **11.0+- 2.0 pCi/L**. Future well water supply appears safe for all uses. No additional testing is required.

Enclosed with this certificate, is a copy of the septic permit and the as-built along with important information regarding the use and maintenance of your septic system. Please read through carefully and thoroughly. Any questions regarding your well and/or septic, please call this office for guidance 410-313-1771.

INTERIM CERTIFICATE OF POTABILITY

This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-95-1710. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies. Based upon satisfactory investigation and evaluation, the Howard County Health Department as authorized by the Maryland Department of the Environment accepts this well system as required by COMAR 26.04.04.

This certificate may become final upon completion of the second bacteriological test, which is to be taken by the county health department within six months of receipt of this letter. **Please contact (410) 313-1773 to schedule a final water sample appointment. Currently, there is no charge for this final sampling.**

Date of Water Samples: 07/21/2011 & 07/25/2011
Date of Radium Samples: 12/09/2008
Date of Well Completion: 12/03/2008

Approving Authority,

Kevin Wolf, R.E.H.S., R.S.
Environmental Sanitarian
Well & Septic Program

cc: Building Inspector's Office
Community Hygiene Program
File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #: 80571 Account #: 1930
Reference: Toll Brothers Lot 80 Company: Fogle's Well Drilling
Location: 11449 Hunt Crossing Ct. Requested By: Dave Fogle
Ellicott City, MD 21042 Source: Well Water
Date/ Time Collected: 7/25/2011 1320 Site: Laundry Tub
Date/Time Rec'd: 7/25/2011 1605 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.2
Collected By: J. Fogle 1974JF Well #: HO-95-1710

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Sand	NS	mg/L	5	Visual/Gravimetric	7/25/2011 / 1615 / KME

NOTES

- 1 NS = None Seen (NS indicates less than 5 mg/L)
- 2 ND:None Detected
- 3 Sample collected by client, analyzed as received
- 4 pH & Chlorine level tested in lab

Reason for Test : Use & Occupancy
Building Permit # : B1-0003385

Date Reported: 7/26/2011

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.
 115 Old Line Road, Suite 200, Ellicott City, MD 21042

REPORT OF ANALYSIS

Laboratory ID #:	80521	Account #:	1930
Reference:	Toll Brothers Lot 80	Company:	Fogle's Well Drilling
Location:	11449 Hunt Crossing Ct. Ellicott City, MD 21042	Requested By:	Dave Fogle
Date/ Time Collected:	7/21/2011 1250	Source:	Well Water
Date/Time Rec'd:	7/21/2011 1415	Site:	Laundry Tub
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	J. Fogle 1974JF	pH:	6.5
		Well #:	HO-95-1710

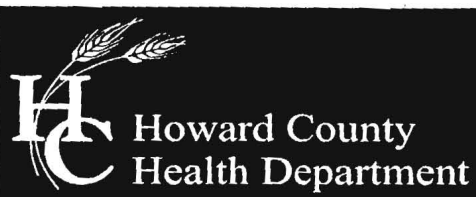
PARAMETERS	RESULTS	UNITS	REFERENCE	DATE
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 7/22/2011 / 0820 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 7/22/2011 / 0820 / CCH
Nitrate	3.01	mg/L	10	601 7/22/2011 / 1200 / CCH
Turbidity	1.13	NTU	<10	SM18 2130B 7/22/2011 / 0840 / KME
Sand	Present	mg/L	5	Visual/Gravimetric 7/22/2011 / 0840 / KME

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND:None Detected
- 7 Sample collected by client, analyzed as received
- 8 pH & Chlorine level tested in lab

Reason for Test : Use & Occupancy
 Building Permit # : B1-0003385

Date Reported: 7/22/2011



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website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

January 7, 2008

Toll Brothers, Inc.
11423 Hunt Crossing Ct.
Ellicott City, Maryland 21042

RE: Patuxent Chase, Lot # 80
Well Tag: HO-95-1710

To Whom It May Concern:

A sample was collected during a yield test on December 9, 2008 and submitted to the Department of Health & Mental Hygiene Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in a water supply. These naturally occurring radioactive nuclides have been demonstrated to be present in a certain type of geologic formation known as the Baltimore Gneiss which exists in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of 9.0 ± 2.0 picocuries/liter (pCi/L); while the **Gross Beta** level was 11.0 ± 2.0 pCi/L. The **Gross Alpha** result was below its **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below its targeted value of 50 pCi/L (roughly equivalent to the **annual dose rate** of 4 millirems/year).

At the time of testing and with respect to these parameters, the future well water supply appears safe for all uses. No additional testing for these parameters will be required to secure the future Use & Occupancy. However, other standard testing will still be necessary.

A copy of the test results is enclosed for your information. Please call this office at 410-313-1773 if you have any further questions or to discuss additional testing requirements.

Sincerely,

Bert Nixon, Director
Bureau of Environmental Health

cc: Barry Glotfelty, MDE Water Mgmt.
✓ Well & Septic property file

Send Report To:

Bert Alton

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Chemistry
RADIATION LABORATORY
201 W. Preston Street, Baltimore, Maryland 21201
John M. DeBoy, Dr. P. H., Director

E001108 511 8

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: 140-95-1710 No. B: _____ Field Blank Bottle No. 1: _____ No B: _____

Plant/Site Name: Patuxent Chase Lot 80 County: Howard

Sample Source: _____ Location: 40-95-1710
(well no, lab sink, sample tap, etc.)

County: 1 3 Plant No.

CHECK (one per box)

Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Community	<input type="checkbox"/>
Non-community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Source (raw water)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Collector: K. Wolf

Telephone No.: 410-313-2645

Date Collected: 12/9/08

Time Collected: 11:00 a.m. _____ p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

Submitters Code:

Federal Project:

Field Data: _____
pH _____ Chlorine _____

Remarks: Sample collected @ end of yield test

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Analyzed	Date Reported
✓	Gross Alpha	4000	1108	9 ± 2	12/12/08	12/16/08
✓	Gross Beta	4100	1108	11 ± 2	" "	" "
	Radon-222 Bottle A	4004				
	Radon-222 Bottle B	4004				
	Field Blank #A	4004				
	Field Blank #B	4004				
	Tritium					
	Ra - 226	4020				
	Ra - 228	4030				
	Total Uranium	4006				

Date Received: 12/11/08

Supervisor: [Signature]

•Tel. No.: (410) 767 - 5537 •Fax No.: (410) 333- 5373