

C1 0345

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

COUNTY NUMBER 13 A515042

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY 6 15 06

Depth of Well 22 200 26 (TO NEAREST FOOT)

9/29/06 OK (signature)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-0310

OWNER Toll Brothers STREET OR RFD Fox River Drive TOWN Ellicott City SUBDIVISION Benedict Farm SECTION LOT 191

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes handwritten entries: Brown Shale (0-60), Gray Limestone (60-200).

GROUTING RECORD: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM, BC), NO. OF BAGS (28), NO. OF POUNDS (2632), GALLONS OF WATER (1168), DEPTH OF GROUT SEAL (0-59 ft).

CASING RECORD: casing types insert appropriate code below (PL, ST, CO, OT), MAIN CASING TYPE (PL), Nominal diameter (06), Total depth (63).

OTHER CASING (if used) diameter inch, depth (feet) from to

SCREEN RECORD: screen type or open hole (HO), insert appropriate code below (ST, BR, HO, PL, OT).

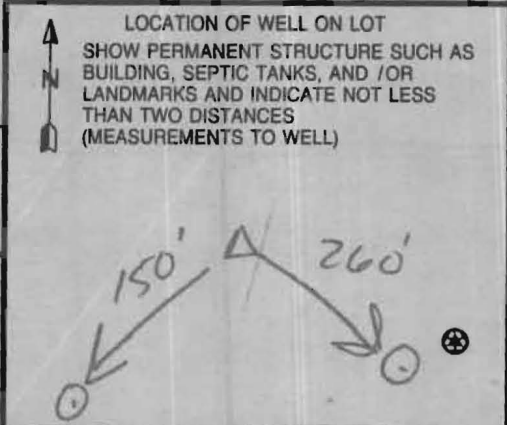
DEPTH (nearest ft.) table with columns 1-21, handwritten values: HO 63, 200.

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q 70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST: HOURS PUMPED (03), PUMPING RATE (8.5), METHOD USED TO MEASURE PUMPING RATE (1900), WATER LEVEL (32 ft. before, 73 ft. when pumping), TYPE OF PUMP USED (S submersible).

PUMP INSTALLED: DRILLER INSTALLED PUMP (NO), TYPE OF PUMP INSTALLED (S), CAPACITY: GALLONS PER MINUTE (31-35), PUMP HORSE POWER (37-41), PUMP COLUMN LENGTH (43-47), CASING HEIGHT (02 foot).



NUMBER OF UNSUCCESSFUL WELLS: 0, WELL HYDROFRACTURED (Y), CIRCLE APPROPRIATE LETTER (A, E, P).

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...

DRILLERS LIC. NO. M S D 009, DRILLERS SIGNATURE, LIC. NO. D, SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

B 1 1010
1 2 3 6

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
524353 please type

STATE PERMIT NUMBER

40-95-0310
fill in this form completely 79

Date Received (APA)

03 15 06
8 MM DD YY 13

OWNER INFORMATION

Toll Brothers
14324 Triadelphia Rd
Glenelg md 21737

B 3

LOCATION OF WELL

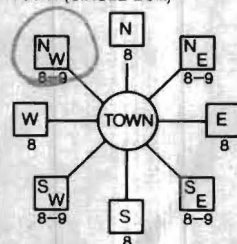
Howard
Benedict Farm
Columbia
3 M I

DRILLER INFORMATION

Allen Compton M S D 009
Fogels Well Drilling
580 obrecht Rd
3-14-06

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Fox River Drive
NEAR WHAT ROAD
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
934 37
DISTANCE FROM ROAD
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

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

Howard (13) A515042
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S
DATE ISSUED 3/17/2006 Brian Baker 3/17/2007
43 MM DD YY 48 CO SIGNATURE EXP. DATE
NORTH GRID 511 000 EAST GRID 825 000
50 55 57 63

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
CABLE REVerse-ROTary DRive-POINT

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 H02003G006
PERMIT No H0-95-0310

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

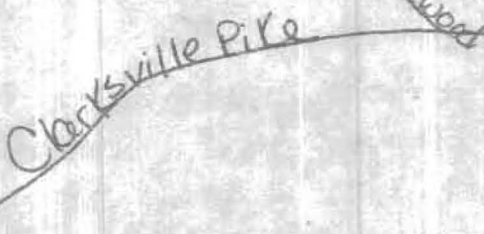
SOURCES OF DRILLING WATER

WRITE THE BOX NUMBER FROM THE MAP HERE

E 8265
N 5101

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

N



SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 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 Telephone #: 410-795-5670
Address: 588 Obrecht Rd
Salesville Md 21784

(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# MSP009

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

Name of Property Owner: Toil Brothers Telephone #: 410-489-6292
Subdivision: Paluxent Chase Lot #: 19 Well Tag #: HO-95-0310
Site Address: 11535 Fox River Dr

Submersible Pump Data **Pitless Adapter** **Well Cap and Electric Conduit**
Make: Grundfos Make: Cambell Two piece watertight cap: yes
Model #: 1550201-180 Model#: N/A Screened, vented well cap: yes
Pump Capacity 15 GPM Depth: 36 (36" min) Cap secured to casing: yes
Well Yield: 8.5 GPM NSF approved: yes Conduit min 18" B.G.: yes
Depth of well encountered at time of pump installation: 200 (feet) Conduit secured to well cap: yes
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Torque arrestors or Cable guards are required - Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt: N/A

Piping to house **House Connection**
Type: 1" Black Plastic PVC sleeved to undisturbed soil at wall penetration: yes
PSI: 160 (160 psi min) Approximate length of sleeve: 5
Depth of supply line: 42 (36" min) Sieeve caulked and sealed properly: yes

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.

Allen Compton 12/24/06
Signature of company representative responsible for installation date

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

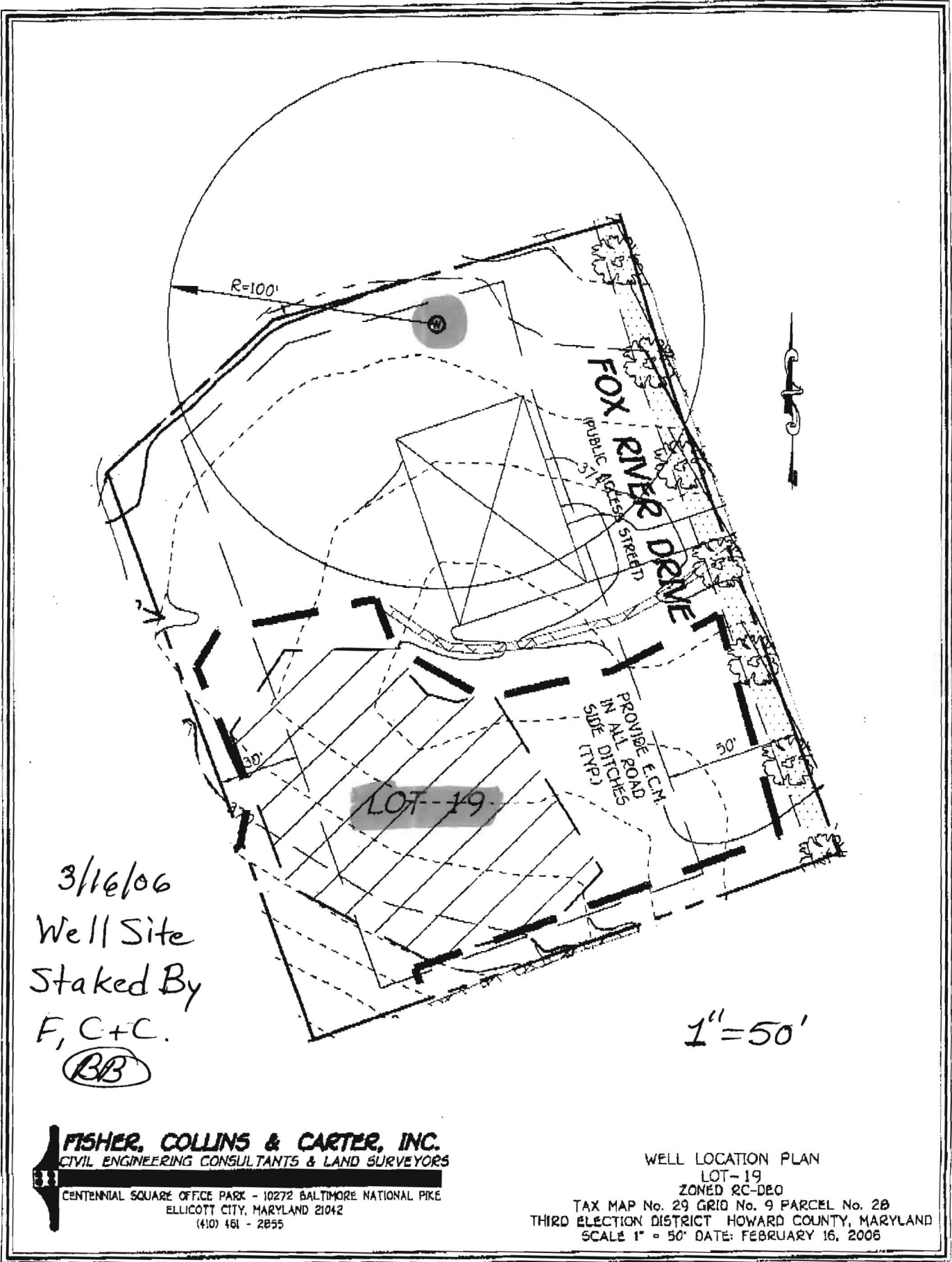
Date Insp. Requested: _____ Date Insp. Approved: 12/18/06 KW
Inspection Data: Pitless adapter and water supply line at least 36" below grade _____
Two piece cap installed and attached to casing securely _____
Elec. conduit extends at least 18" below grade/attached to cap properly _____
Safety rope installed inside of well casing _____
Correct well tag attached properly and casing 8" above finished grade _____
Water supply line sleeved adequately at house connection _____
Adequate grout observed below pitless adapter _____

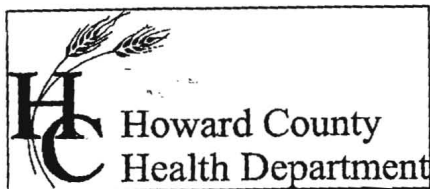
K:\SDSKPROJ\30754 Benedict Farm\dwg\PHASE 1 - FINAL\30754 WELL LOCATION.dwg, 2/17/2006 11:14:27 AM, 1:1

3/16/06
Well Site
Staked By
F, C+C.
BB

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

WELL LOCATION PLAN
LOT-19
ZONED RC-DEO
TAX MAP No. 29 GRID No. 9 PARCEL No. 2B
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE 1" = 50' DATE: FEBRUARY 16, 2006





Bureau of Environmental Health
7178 Columbia Gateway Drive Columbia, Maryland 21046-2132
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

July 9, 2007

Toll MD II LP
7164 Columbia Gateway Drive, #230
Columbia, MD 21046

RE: Homewood Crossing, Lot 19
Benedict Farm
11535 Fox River Drive
Ellicott City, MD 21042
BP #: B00160146
Well Permit # HO-95-0310

Dear Sir:

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 01/16/2007. Final approval of the well line connection to the dwelling was approved on 12/18/2006.**

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.

Also, pre and post treatment Radium 226/228 samples were collected on 06/20/2006. Both findings were below the combined 226/228 MCL of 5pCi/l. At the time of the 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 and Occupancy.

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-95-0310. 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.

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 #: 62781 Account #: 1930
 Reference: Toll Brothers Lot 19 Company: Fogle's Well Drilling
 Location: 11535 Fox River Drive Requested By: Dave Fogle
 Clarksville, MD 21029 Source: Well Water
 Date/ Time Collected: 4/17/2007 1315 Site: Laundry Room Sink Tap
 Date/Time Rec'd: 4/17/2007 1427 Treatment: None
 Chlorine ppm: Free: ND Total: ND pH: 5.6
 Collected By: D. Fogle 8194DF Well #: HO-95-0310

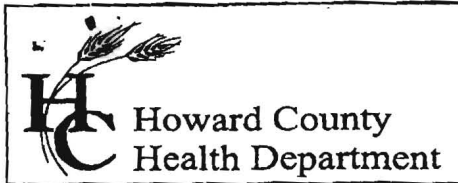
PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	4/18/2007 / 0900 / AD/BD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	4/18/2007 / 0900 / AD/BD
Nitrate	4.12	mg/L	10	601	4/17/2007 / 1550 / BCD
Turbidity	0.94	NTU	<10	SM18 2130B	4/17/2007 / 1521 / BCD
Sand	NS	mg/L	5	Visual/Gravimetr	4/17/2007 / 1521 / BCD

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 and Chlorine level tested in lab

Reason for Test : Use & Occupancy
 Building Permit # : B00160146

Date Reported: 4/18/2007



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website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

June 26, 2006

Toll Brothers – Maryland Division
7164 Columbia Gateway Drive
Columbia, Maryland 21046

RE: Benedict Farm Subdivision
Well Tag: HO-95-0310

To Whom It May Concern:

A sample was collected during a yield test on June 20, 2006 and submitted to GPL 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 1.8 ± 1.0 picocuries/liter (pCi/L); while the **Gross Beta** level was 4.7 ± 1.4 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 **MCL** of 50 pCi/L. 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 (potability) 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 concerns.

Sincerely,

Bert Nixon, Deputy Director
Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater
Well & Septic property file

Analytical Summary Report

Client Name:	Howard County	Client Sample ID:	HOGCBF196/20
Receipt Date/Time:	6/21/2006	Lab Sample ID:	606155-001
Prepared Date/Time:	6/23/2006	Sample Matrix:	Water
Analysis Date/Time:	6/23/2006 11:01:00 AM	Analytica Method:	EPA 900.0

Isotope	Result	Uncertainty 2σ	MDA	Q
Gross Alpha	1.805 pCi/L	+/- 1.007 pCi/L	1.230 pCi/L	
Gross Beta	4.744 pCi/L	+/- 1.435 pCi/L	1.764 pCi/L	