

C1 0122

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY
PLEASE TYPE

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

8 13

DATE WELL COMPLETED

MM DD YY
11 16 05

Depth of Well

22 200 26
(TO NEAREST FOOT)

PERMIT NO.

FROM "PERMIT TO DRILL WELL"

H0-95-0141
26 29 30 31 32 33 34 35 36 37

OWNER

STREET OR RFD

SUBDIVISION

Toll Brothers Homes
Rivercrossing Court
Benedict Farm

first name

TOWN

Ellicott City

SECTION

LOT

72

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARINGDESCRIPTION (Use
additional sheets if needed)

FEET

FROM

TO

check
if water
bearing

MEDIUM GRAY 0 44
HARD GRAY 44 65
MEDIUM HAZEL TAN 65 75
HARD GRAY 75 135
MEDIUM GRAY 135 138
HARD GRAY 138 200

GROUTING RECORD

yes no

WELL HAS BEEN GROUTED
(Circle Appropriate Box)

Y N

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM

BENTONITE CLAY BC

NO. OF BAGS 21

NO. OF POUNDS 1451

GALLONS OF WATER 125

DEPTH OF GROUT SEAL (to nearest foot)

from 48 TOP 52 ft. to 54 BOTTOM 58 ft.
(enter 0 if from surface)casing
types
insert
appropriate
code
below

CASING RECORD

ST

STEEL

CO

CONCRETE

PL

PLASTIC

OT

OTHER

MAIN
CASING
TYPENominal diameter
top (main) casing
(nearest inch)Total depth
of main casing
(nearest foot)

60 61

63 64

66

70

E
A
C
H
C
A
S
I
N
G

OTHER CASING (if used)

diameter

depth (feet)

inch

from

to

screen type
or open hole(insert
appropriate
code
below)

SCREEN RECORD

ST

STEEL

BR

BRASS

BRONZE

PL

PLASTIC

HO

OPEN

HOLE

OT

OTHER

C 2

DEPTH (nearest ft.)

1 2

E 1

A 8

C 9

H 11

S 23

C 24

3 26

R 30

E 32

36

C 38

39

41

45

47

51

SLOT SIZE 1 2 3

DIAMETER

OF SCREEN

56

60

from

to

GRAVEL PACK

IF WELL DRILLED

WAS FLOWING WELL

INSERT F IN BOX 68

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

C 3

PUMPING TEST

HOURS PUMPED (nearest hour)

3

PUMPING RATE (gal. per min.)

12

METHOD USED TO

MEASURE PUMPING RATE

Timer/bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING

37 ft.

WHEN PUMPING

92 ft.

TYPE OF PUMP USED (for test)

A air

P piston

T turbine

27

27

27

C centrifugal

R rotary

O other

27

27

27

J jet

S submersible

27

PUMP INSTALLED

DRILLER INSTALLED PUMP

YES

NO

(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)

31

35

PUMP HORSE POWER

37

41

PUMP COLUMN LENGTH

(nearest ft.)

43

47

CASING HEIGHT

(circle appropriate box

and enter casing height)

A above

49

B below

49

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)

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED

yes

Y

no

N

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED
WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION
WELLI 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, AND THAT THE INFORMATION PRESENTED
HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY
KNOWLEDGE.

DRILLERS LIC. NO.

M D 385

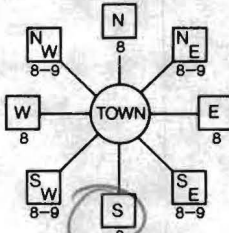
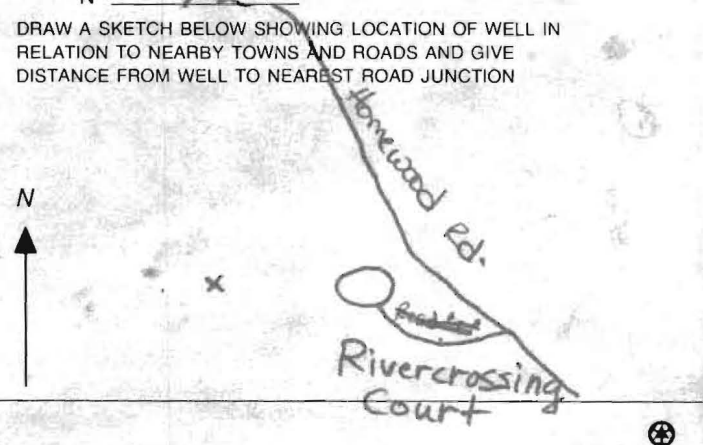
DRILLERS SIGNATURE

(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.

D

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

B 1 6514 2 3 6	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 523472	STATE PERMIT NUMBER HO-95-0141 70 fill in this form completely 79
Date Received (APA) 10/11/2005 8 MM DD YY 13 Toll Brothers, Inc. 15 Last Name Owner First Name 34 71104 Columbia Gateway Dr. Suite 230 36 Street or RFD 55 Columbia, MD 21046 57 Town 70 State 72 Zip 76		B 3 Howard LOCATION OF WELL 8 COUNTY 21 Homewood Crossing 23 SUBDIVISION 42 SECTION 44 46 LOT 72 48 50 Clarksville 52 NEAREST TOWN 71 MILES FROM TOWN (enter 0 if in town) <u> </u> M <u> </u> 73 76 77 78	
DRILLER INFORMATION Michael Barlow MD D355 Driller's Name 76 License No. 81 Michael Barlow Well Drilling Inc. Firm Name 522 Underwood Ln Bel Air MD 21014 Address [Signature] 9/20/05 Signature Date		B 4 1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)  Rivercrossing Court 11 NEAR WHAT ROAD 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH N WEST W EAST E SOUTH S 34 30 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39 TAX MAP: 29 BLK: 9 PARCEL: 28	
B 2 1 2 WELL INFORMATION APPROX. PUMPING RATE 5 (GAL. PER MIN.) 8 12 AVERAGE DAILY QUANTITY NEEDED 500 (GAL. PER DAY) 14 20		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL Howard (13) A515042 COUNTY NAME COUNTY NO. STATE SIGNATURE INSERT S → 41 DATE ISSUED 10/13/2005 Brian Baber 10/13/2006 43 MM DD YY 48 CO SIGNATURE EXP. DATE NORTH GRID 512 0 0 0 EAST GRID 827 0 0 0 50 55 57 63	
USE FOR WATER (CIRCLE APPROPRIATE BOX) <input checked="" type="checkbox"/> D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) 22 <input type="checkbox"/> I INDUSTRIAL, COMMERCIAL, DEWATERING <input type="checkbox"/> P PUBLIC WATER SUPPLY WELL <input type="checkbox"/> T TEST, OBSERVATION, MONITORING <input type="checkbox"/> G GEO-THERMAL		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 83027 N 5102 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 	
APPROXIMATE DEPTH OF WELL <u>250</u> FEET 24 28 APPROXIMATE DIAMETER OF WELL <u>6</u> INCH NEAREST INCH		METHOD OF DRILLING (circle one) BORED (or Augered) JETTED Jetted & DRIVEN 30 AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary) 37 CABLE REVERSE-ROTARY Drive-POINT other _____	
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) <input checked="" type="checkbox"/> N THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED 39 <input type="checkbox"/> S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="checkbox"/> D THIS WELL WILL DEEPEMED 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) APPROP. PERMIT NUMBER H02003G006 PERMIT No. HO-95-0141 70 71 72 73 74 75 76 77 78 79	
SPECIAL CONDITIONS NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED			

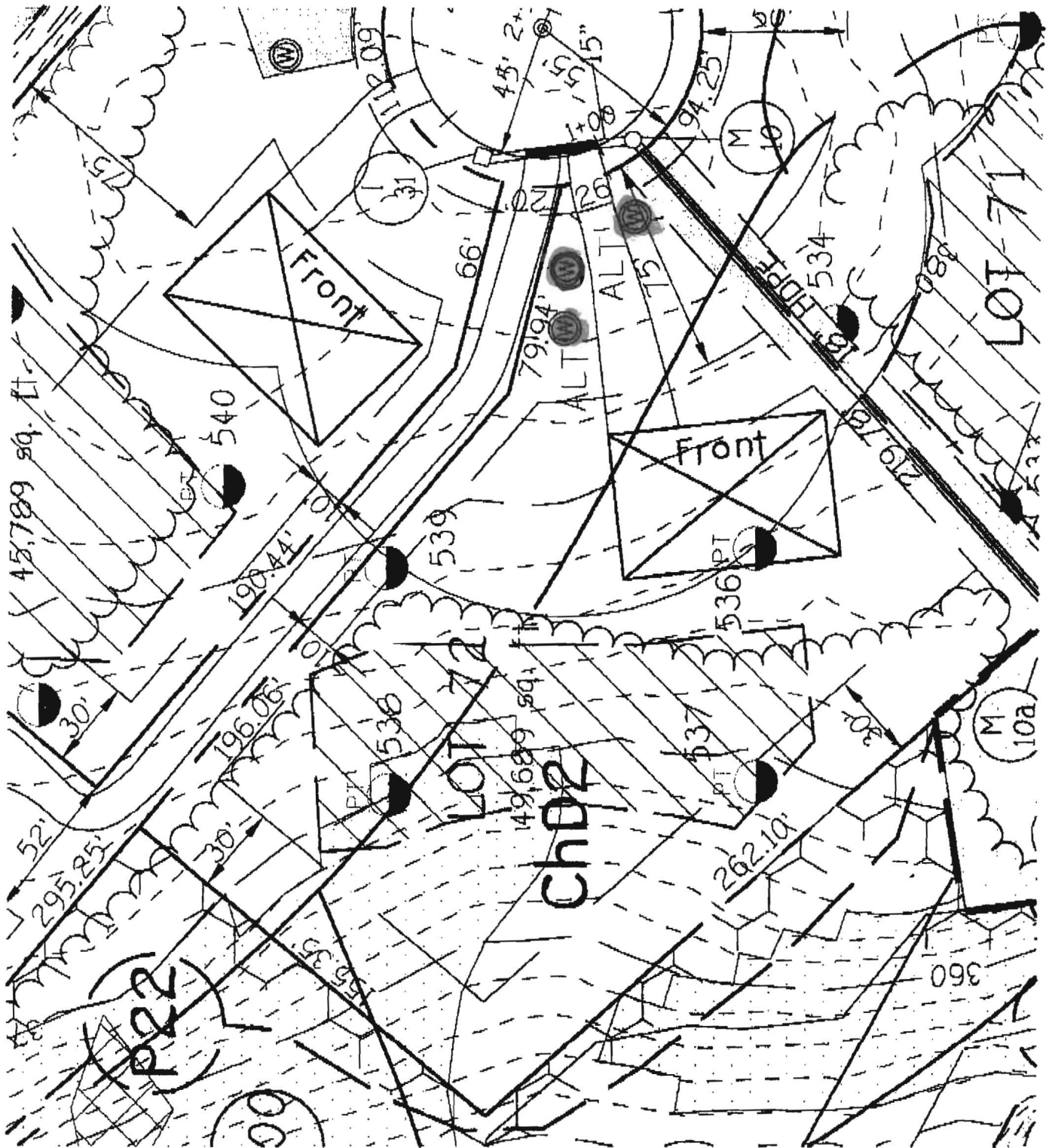
MICHAEL BARLOW WELL DRILLING & SERVICE, INC.
522 Underwood lane **Bel Air, Maryland 21014**
(410) 838-6910 **Fax (410) 838-3582**

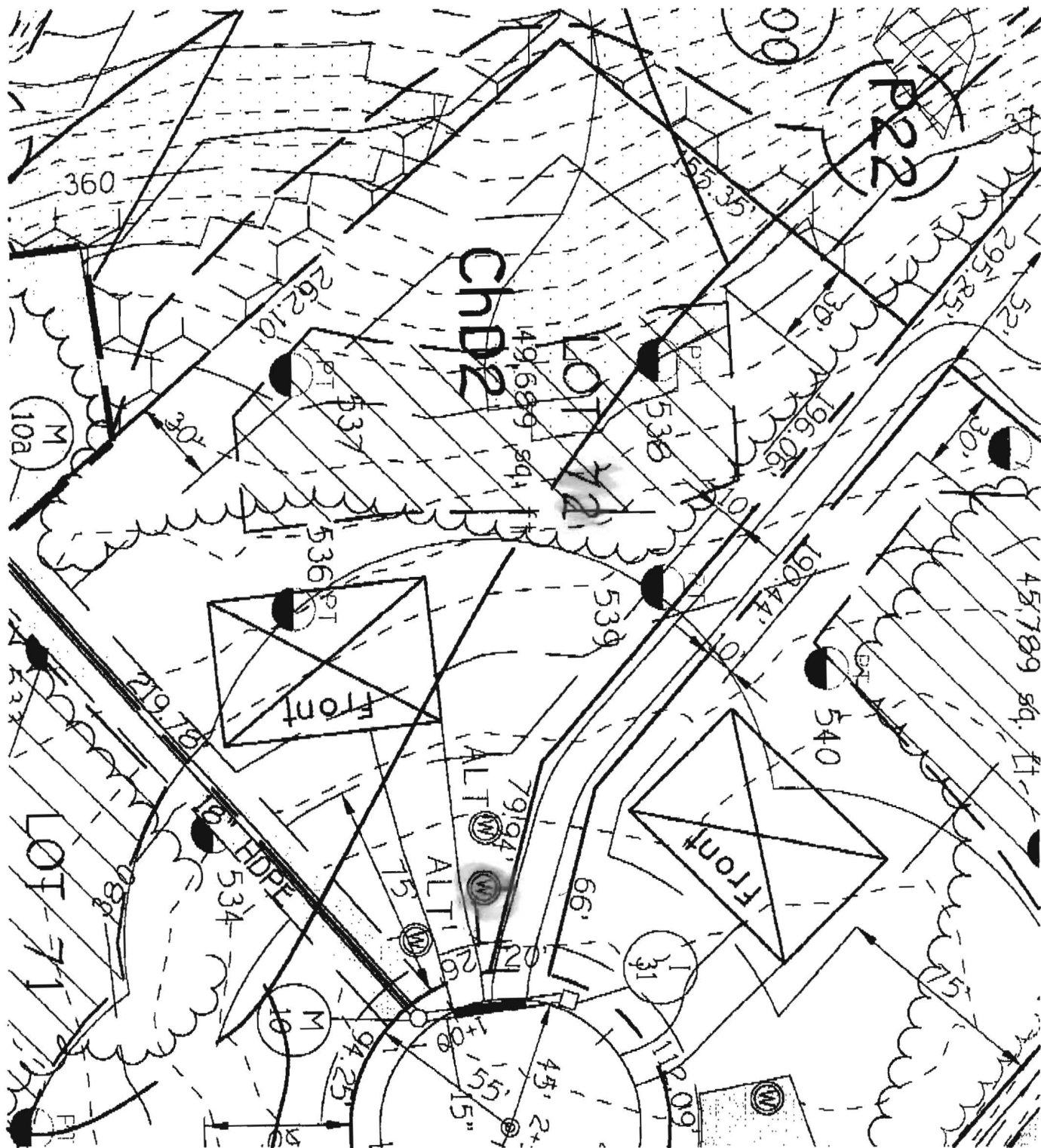
WELL YIELD REPORT

Date Test Completed:		November 23, 2005	
Well Depth:		200	feet
Customer	TOLL BROTHERS, INC.	Permit #	HO-95-0141
Road	RIVER CROSSING COURT	Subdivision	BENEDICT FARM
City	ELLICOTT CITY	Section	
State	MARYLAND	Lot #	72

[illegible]

BB





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: _____ Telephone #: _____
Address: _____

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

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

Name (Print): _____ License# _____

*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: _____ Telephone #: _____
Subdivision: _____ Lot #: 72 Well Tag # HO-95-0141
Site Address: 4811 Rivercrossing Ct.

Submersible Pump Data

Make: _____
Model #: _____
Pump Capacity _____ GPM
Well Yield: _____ GPM

Pitless Adapter

Make: _____
Model#: _____
Depth: _____ (36" min)
NSF approved: _____

Well Cap and Electric Conduit

Two piece watertight cap: _____
Screened, vented well cap: _____
Cap secured to casing: _____
Conduit min 18" B.G.: _____
Conduit secured to well cap: _____

Depth of well encountered at time of pump installation: _____ (feet)

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 _____

Piping to house

Type: _____
PSI: _____ (160 psi min)

House Connection

PVC sleeved to undisturbed soil at wall penetration: _____
Approximate length of sleeve (5 foot minimum): _____

Depth of supply line: _____ (36" min)

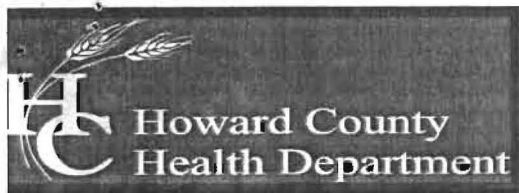
Sleeve caulked and sealed properly: _____

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 _____ date _____

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

Date Insp. Requested: _____ Date Insp. Approved: 9/12/2014 **BP**
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 ☒



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Maura Rossman, M.D., Health Officer

October 10, 2013

Toll Brothers Inc.
Toll MD III Limited Partnership
7164 Columbia Gateway Drive
Columbia, Maryland 21046

RE: Homewood Crossing Lot 72
4804 River Crossing Court
Well Tag: HO - 95 - 2504

To Whom it May Concern:

A sample was collected during a yield test on March 28, 2013 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 2.6 ± 1.3 picocuries/liter (pCi/L), while the **Gross Beta** level was 5.7 ± 1.9 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 meets EPA regulatory standards. Additional testing **for these parameters** will not be required to secure the future Use & Occupancy. **Please note** that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be required to help secure Use & Occupancy.

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.

Sincerely,

Bert Nixon, Director

Bureau of Environmental Health

Enclosure

cc: Well & Septic property file

Send Report To:

Bert Nixon

Howard County Health Department
Bureau of Environmental Health
7178 Columbia Gateway Drive
Columbia, Maryland 21046

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

E002145 E282

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: HC2504 No. B: _____ Field Blank Bottle No. 1: HC0000 No B: _____

Plant/Site Name: "Homewood Crossing" Lot 72 County: Howard

Sample Source: Well @ 4811 River Crossing G Location: HO-95-2504
Ellicott City (well no, lab sink, sample tap, etc.)

County: ☒ 1 ☒ 3 Plant No. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

CHECK (one per box)

Drinking Water ☒
Landfill ☐
Stream ☐
Other ☐

Community ☐
Non-community ☐
Private ☒
Other ☐

Source (raw water) ☒
Distribution (treated) ☐
MCL ☐

Emergency ☐
Routine ☒
Recheck ☐
Special ☐

Collector: R. Rappaport

Telephone No.: 410-313-1781

Date Collected: 3/28/13 cont

Time Collected: _____ a.m. 12:00 p.m.

Nitric Acid Preserved: Yes ☒ No ☐

Iced: Yes ☒ No ☐

Submitters Code: ☐ ☐

Federal Project: ☒

Field Data: 6.8
pH Chlorine

Remarks: Sample taken @ yield test

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Analyzed	Date Reported
✓	Gross Alpha	4000	<u>2145</u>	<u>2.6 ± 1.3</u>	<u>03/31/13</u>	<u>04/01/13</u>
✓	Gross Beta	4100	<u>2145</u>	<u>5.7 ± 1.9</u>	<u>"</u>	<u>"</u>
	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: 03/28/13

Supervisor: [Signature]

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

FORM REVISED 10/07
DHMH 4540 10/07

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH

APR 08 2013

CUSTOMER COPY II

Send Report To:

Bert Nixon

Howard County Health Department
Bureau of Environmental Health
7178 Columbia Gateway Drive
Columbia, Maryland 21046

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

E002144 E202

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: _____ No. B: _____ Field Blank Bottle No. 1: HG0000 No B: _____

Plant/Site Name: Field Blank HCHD County: Howard

Sample Source: Distilled H2O Location: Lab
(well no, lab sink, sample tap, etc.)

County: ☒ 1 ☒ 3 Plant No. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

CHECK (one per box)

Drinking Water ☒
Landfill ☐
Stream ☐
Other ☐

Community ☐
Non-community ☐
Private ☒
Other ☐

Source (raw water) ☒
Distribution (treated) ☐
MCL ☐

Emergency ☐
Routine ☒
Recheck ☐
Special ☐

Collector: R. Rappaport

Telephone No.: 410-313-1781

Date Collected: 3/28/13 ^{cont}

Time Collected: _____ a.m. ~~11:00~~ p.m. 1:00

Nitric Acid Preserved: Yes ☒ No ☐

Iced: Yes ☒ No ☐

Submitters Code: ☐ ☐

Federal Project: ☒

Field Data: _____ pH _____ Chlorine _____

Remarks: distilled H2O in lab use for sample

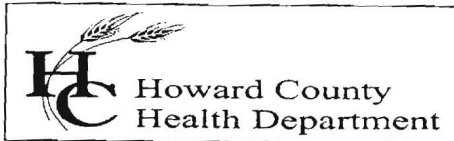
✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Analyzed	Date Reported
✓	Gross Alpha	4000	2144	<2.0	03/31/13	04/01/13
✓	Gross Beta	4100	2144	<4.0	4	1
	Radon-222 Bottle A	4004				
	Radon-222 Bottle B	4004				
	Field Blank #A	4004				
	Field Blank #B	4004				
	Tritium					
	Ra - 226	4020				
	Ra - 228	4030				
	Total Uranium	4006				

Date Received: 03/28/13

Supervisor: [Signature]

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

Invoice



Bureau of Environmental Health
Attn: Bert Nixon, Director

DATE: APRIL 25, 2013
DATES OF SERVICE: MARCH 27 & 28, 2010
INVOICE #: 2013-008

7178 Columbia Gateway Drive, Columbia , MD 21046-2147
Phone 410-313-2640 Fax 410-313-2648
www.hchealth.org

BILL TO Toll MD III Limited Partnership
7164 Columbia Gateway Drive
Columbia, Maryland 21046

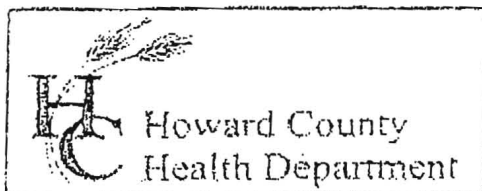
COMMENTS Payment due upon receipt. Letter
and results will be released upon
receipt of payment.

DATE	DESCRIPTION	BALANCE	AMOUNT
03/27/2013	Gross alpha/beta testing performed for Homewood Crossing Lot # 73 HO - 95 - 2465		\$45.00
03/28/2013	Gross alpha/beta testing performed for Homewood Crossing Lot # 72 HO - 95 - 2504		\$45.00
			AMOUNT DUE
			\$90.00

Please detach and return with payment.

REMITTANCE	
Invoice #	2013-008
Site Information	Homewood Crossing Lots 72 and 73
Amount Due	\$90.00
Amount Enclosed	

Make all checks payable to: **The Director of Finance**



3525 H Ellicott Mills Drive, Ellicott City, MD 21043
(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

TO ALL INTERESTED PARTIES

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

- ☒ The well site has been staked by ESE Consultants
(professional land surveyor or company employing professional land surveyors)
on 12-10-12 (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 6/10/03



SCALE 1" = 50'



ESE Consultants Inc.
7164 Columbia Gateway Dr.
Suite 203
Columbia, MD 21046
TEL: 410-872-9105
FAX: 410-872-4870

Send Report To:

Bert Nixon
Howard County Health Department
Bureau of Environmental Health
7178 Columbia Gateway Drive
Columbia, Maryland 21046

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Chemistry
ENVIRONMENTAL METALS SECTION
201 W. Preston Street, Baltimore, Maryland 21201

Lab No. Date Received



E13004865001

Received: 03/28/2013

Metals

HC 2504

LABORATORY ANALYSIS REQUEST

Please Print

Sample ID No: HC 2504 Site Name: Homewood Crossing Lot 72 County: Howard

Sample Source: 4811 Rivercrossing Ct., Ellicott City, MD Collector: R. Rappaport
Street Town or City Name

Date Collected: 3 / 28 / 2013 Time Collected: 12 a.m. 12 p.m. Phone #: 410-313-1781

Sample Preserved By: ☒ Field ☐ ESRL ☐ Central Lab

Preservative Used: ☒ HNO₃ HNO₃ SAH

Sample Type: ☒ Drinking Water ☐ Landfill ☒ Source (Raw Water) ☐ Liquid
☐ Community ☐ Stream ☐ Distribution (Treated) ☐ Solid
☐ Non-Community ☐ Sediment ☐ Other _____
☒ Private

Specify Program: ☒ SDWA ☐ NPDES ☐ CWA ☐ RCRA ☐ Consumer Products ☐ Other _____

Type of Sample Preparation: ☐ Total Metals ☐ Total Metals TCLP ☐ Dissolved Metals
(field preparation required)

Remarks: Sample taken at yield test

✓	Element	Results (ppm)	✓	Element	Results (ppm)
	Antimony (Sb)			Copper (Cu)	
	Arsenic (As)			Lead (Pb)	
	Barium (Ba)			Silver (Ag)	
	Beryllium (Be)			Zinc (Zn)	
	Cadmium (Cd)			Aluminum (Al)	
	Chromium (Cr)			Iron (Fe)	
	Mercury (Hg)			Manganese (Mn)	
	Nickel (Ni)			Calcium (Ca)	
	Selenium (Se)			Magnesium (Mg)	
✓	Sodium (Na)	<u>7.3</u>		Potassium (K)	
	Thallium (Tl)			Uranium (U)	

APR 23 2013

Lab Supervisor: _____

HOWARD COUNTY
Date Reported: 3 / 28 / 2013
BUREAU OF ENVIRONMENTAL HEALTH

DHMH 4432 (7/10)

• Phone: (410) 767 - 6186

• Fax: (410) 333 - 5122

SUBMITTER'S COPY



State of Maryland
DHMH-Laboratories Administration
Division of Environmental Chemistry
TRACE METALS LABORATORY
201 W. Preston Street, Baltimore, Maryland 21201
Robert Myers, Ph.D., Director

Certificate of Analysis

HOWARD CO ENVIRONMENTAL HLTH
7178 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD 21046

Lab Project No: E13004865 Date Coll.: 03/28/2013 Date Received: 03/28/2013 Submitted By: RAPPAPORT

Field ID: HC 2504
Lab No.: E13004865001

<u>Method</u>	<u>Element</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
EPA 200.7	Sodium	7.34	ppm	04/17/2013

Comments:

Approved by: _____

Taijin wei

RECEIVED

APR 23 2013

HOWARD COUNTY HEALTH DEPT

BUREAU OF ENVIRONMENTAL HEALTH

Approval date: 04/19/2013

This document contains confidential health information that is privileged, confidential and exempt from disclosure under law. If you have received this information in error, please call (410) 767-6944 and arrange for return or destruction.

Howard County Health Department
Bureau of Environmental Health
7178 Columbia Gateway Drive
Columbia, Maryland 21046

WATER ANALYSIS

HC 2504

FIELD	Plant No.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Sampling Station	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Preservation: Iced <input checked="" type="checkbox"/>	Acid <input type="checkbox"/>	Type of Acid <input type="text"/>
	pH	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Chlorine: Free	<input type="text"/>	<input type="text"/>	Total	<input type="text"/>	<input type="text"/>	Specific Conductance	<input type="text"/>
	Notes to Lab/Remarks: <input type="text"/>												
	<input type="text"/>												

[illegible]

Date Reported _____



State of Maryland
DHMH-Laboratories Administration
Division of Environmental Chemistry
INORGANICS ANALYTICAL LABORATORY
201 W. Preston Street, Baltimore, Maryland 21201
Robert Myers, Ph.D., Director

Certificate of Analysis

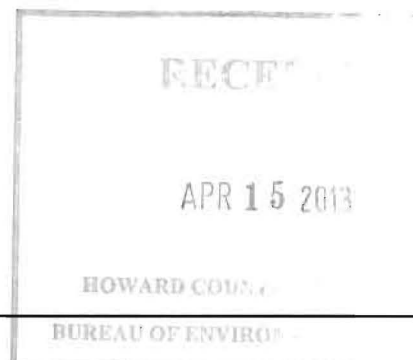
HOWARD CO ENVIRONMENTAL HLTH
7178 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD 21046

Lab Project No E13004822 Date Coll. 03/28/2013 Date Received: 03/28/2013 Submitted By: R. Rappaport

Field ID: HC 2504
Lab No.: E13004822002

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Chloride	SM 4500-Cl E	<10	mg/L	03/29/2013
Total Dissolved Solids	SM 2540C	160	mg/L	04/02/2013

Comments:



Approved by:

Approval date: 04/09/2013

This document contains confidential health information that is privileged, confidential and exempt from disclosure under law. If you have received this information in error, please call (410) 767-6190 and arrange for return or destruction.



Bureau of Environmental Health

7178 Columbia Gateway Drive, Columbia, MD 21046-2147

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

March 20, 2013

MEMO WITH PHOTOS FOR FILE

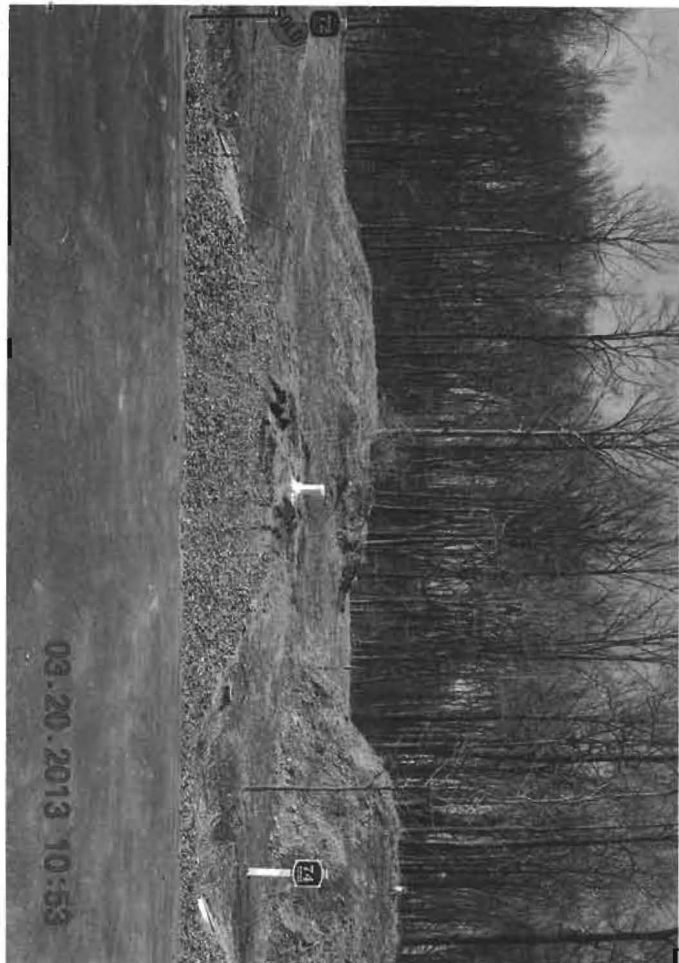
RE: Well Drilling at River Crossing Court, Lots 72, 73 and 74

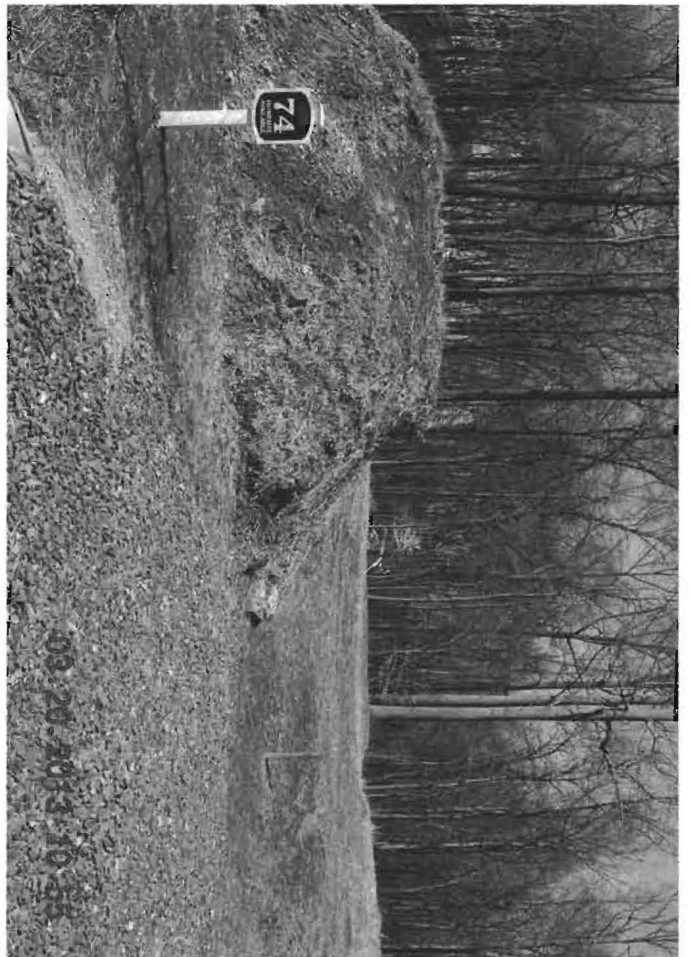
These photos which are attached were taken in an effort to document the separate Lots 72, 73 and 74 which are located at the cul-de-sac of River Crossing Ct. in Ellicott City. The photos provide a record that a secondary well was recently drilled on Lot 72, which has not yet been permitted. Also noted is the Lot 73 well stake where a well was permitted to be drilled but at this time has not yet been drilled.

A handwritten signature in black ink, appearing to read 'R. Rappaport', is located below the text block.

Ryan Rappaport
Howard County Health Dept
Bureau of Environmental Health

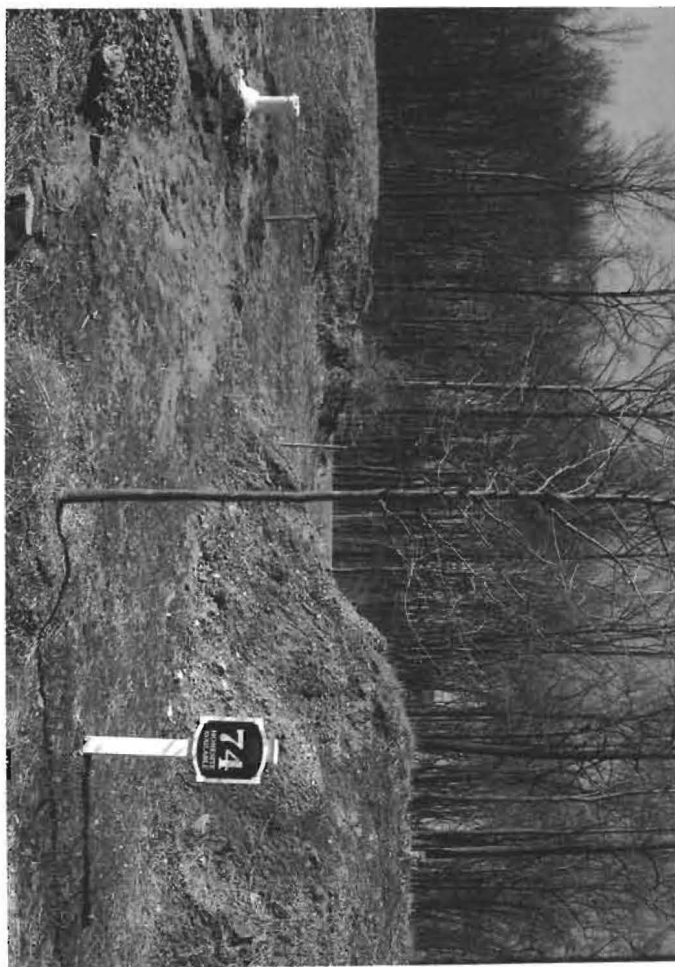
- Lot 89





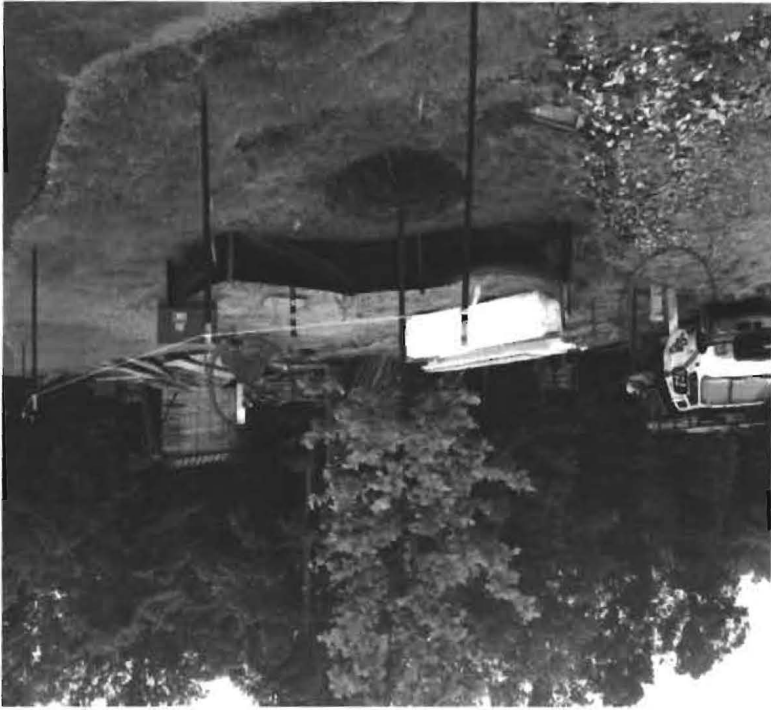


Driveway 12





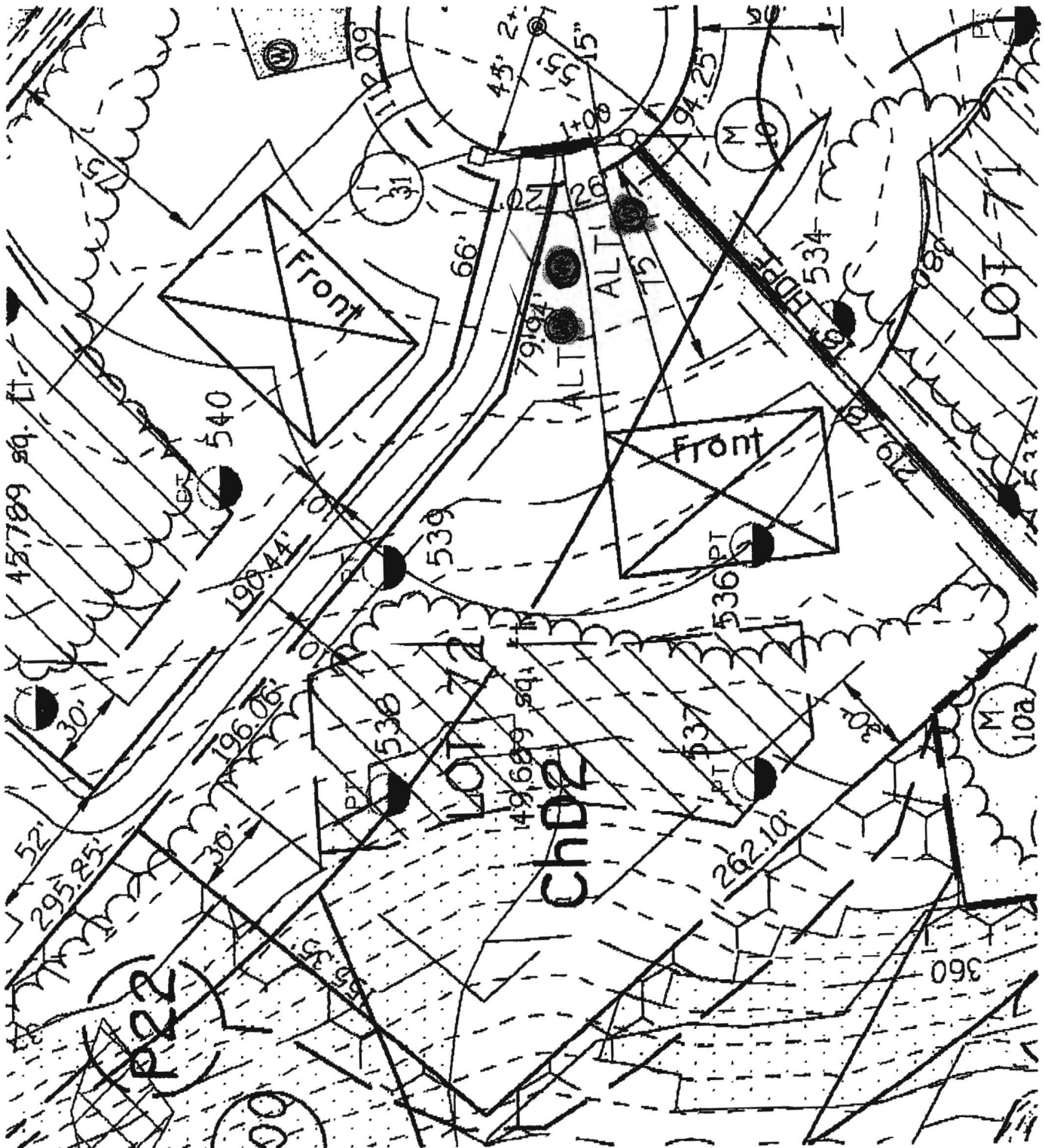


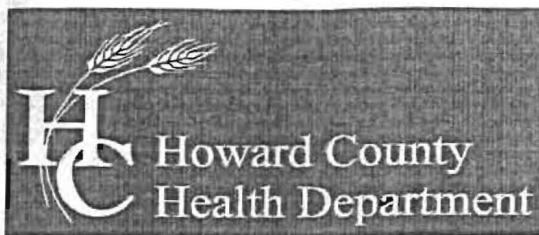


4811 River Crossing Ct - Lot 72 (6/12/2014)

10/13/05
Well Site Staked By Fisher, Collins + Carter

(RB)





Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

MEMORANDUM

TO: Fogle's Well Drilling
ATTN: Theresa
Allen Compton MWD

FROM: Kevin M. Wolf, R.S., R.E.H.S. *Kmw*
Well and Septic Program
Groundwater Management Section

RE: *Homewood Crossing Lots 70, 71, 73, 75, 76, 78, 79 Well Permit # 72*
Applications: Special Conditions

DATE: January 17th, 2013

The following comments apply to the above referenced Well Permit Applications. Please read through and complete as needed.

In order to preserve the quality of ground drinking water, a special condition has been set for the above referenced lots. This condition requires the driller to seal off the upper strata by placing a certain amount of casing to the approximate depth below the very first water-bearing fracture OR a minimum of 75 feet (which ever comes first). For example, if you hit a water-bearing fracture at 53 feet, then there should be at least 55 feet of casing or enough casing to get below that fracture. Any deviations to this condition are to be prior approved by the Health Department. This will also require sampling at the time of yield test for each well. Sampling will include but not limited to, total dissolved solids, chlorides and sodium.

Homewood Crossing Lots 70, 71, 73, 75, 76, 78, and 79 are located in the Radium area and require testing. This testing will be done during the yield test of each well on each indicated lot. When calling in yields and grouts on such pre-scheduled days, please make a note that a sanitarian will need to be present during the time of the yield test to take the recommended samples.

If you have any questions on this matter, please feel free to call me at any time at 410-313-2645.

KMW

C.C. Files Lots 70, 71, 73, 75, 76, 78, and 79





3/15/13 · Site visit to confirm well site location and placement of stakes. Found one well which has been drilled and not grouted located in the center of the proposed driveway of Lot 72, also found well HO-95-0141 drilled and sealed on Lot 72 also. This well was permitted on 10/13/05 and now sits on top of a very graded hill. See photos. (R)

DATE _____

RESULTS OF REVIEW FOR FILE	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50
51	52
53	54
55	56
57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

FILE NOTES

- 3 -

- 3 -