

C 1 - 6455

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

1514193

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  
4 21 05

Depth of Well

22 145 26  
(TO NEAREST FOOT)

6/9/05  
DK (S)

PERMIT NO. FROM "PERMIT TO DRILL WELL"  
HD-94-4147  
28 29 30 31 32 33 34 35 36 37

OWNER Toll Bros last name first name

STREET OR RFD Meadow Lake Dr TOWN Colony

SUBDIVISION Trail Crossing SECTION 2122/197 LOT 16

### WELL LOG

Not required for driven wells

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

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Dirt	0	80	
Hard Gray	80	84	
Hard Tan	84	86	
Hard Gray	86	103	
Med Gray	103	105	✓
Hard Gray	105	113	
Med Brown	113	115	✓
Hard Gray	115	145	

### GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box)  Y  N

TYPE OF GROUTING MATERIAL (Circle one) CEMENT  BENTONITE CLAY

NO. OF BAGS 20 NO. OF POUNDS 1800

GALLONS OF WATER 120

DEPTH OF GROUT SEAL (to nearest foot)  
from 0 ft. to 80 ft.  
(enter 0 if from surface)

### CASING RECORD

casing types insert appropriate code below  
 ST STEEL  CO CONCRETE  
 PL PLASTIC  OT OTHER

MAIN CASING TYPE  
Nominal diameter top (main) casing (nearest inch)! 6  
Total depth of main casing (nearest foot) 80

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

### SCREEN RECORD

screen type or open hole insert appropriate code below  
 ST STEEL  BR BRASS  HO OPEN HOLE  
 PL PLASTIC  OT OTHER

DEPTH (nearest ft.)

1	2	3	4	5	6
11	15	17	21		
23	24	26	30	32	36
38	39	41	45	47	51

SLOT SIZE 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_  
DIAMETER OF SCREEN (NEAREST INCH)  
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.) 20

METHOD USED TO MEASURE PUMPING RATE Timer/Becke

WATER LEVEL (distance from land surface)

BEFORE PUMPING 33 ft.

WHEN PUMPING 38 ft.

TYPE OF PUMP USED (for test)

A air  P piston  T turbine  
 C centrifugal  R rotary  O other (describe below)  
 J jet  S submersible

### PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES OR NO) YES  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 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

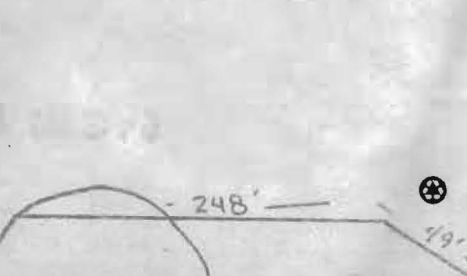
PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)  
 above } LAND SURFACE  
 below } 2 (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  Y  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 WELL

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, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. MWD 355

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. MWD 553

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

B 1 **5347**

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

**HO-94-4147**  
fill in this form completely

**522003**

please type

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13

**Toll Brothers Inc**  
15 Last Name Owner First Name 34

**7164 Columbia Gateway Dr**  
36 Street or RFD 55

**Columbia MD 21116**  
57 Town 70 State 72 Zip 76

B 3

LOCATION OF WELL

8 COUNTY **Howard** 21

**Tenadelpia Crossing**  
23 SUBDIVISION 42

SECTION **1** LOT **16**  
44 46 48 50

**Colevly**  
52 NEAREST TOWN 71

MILES FROM TOWN (enter 0 if in town) **1/2** M I  
73 76 77 78

DRILLER INFORMATION

**Michael Barlow** M D **355**  
76 Driller's Name License No. 81

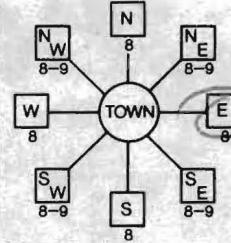
**Michael Barlow Well Drilling Inc.**  
Firm Name

**522 Underwood Lane Belair MD**  
Address

**Michael Barlow** **2/17/14**  
Signature Date

B 4

1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



**Meadow Lake Dr**  
11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

34 **10'** 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39

TAX MAP: **21** BLK: **23** PARCEL **97**

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) **5**  
8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) **500**  
14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

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

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

**Howard** COUNTY NAME **A514193** COUNTY NO.

STATE SIGNATURE \_\_\_\_\_ INSERT S →

DATE ISSUED **4/1/05** DATE **4/1/06**  
43 MM DD YY 48 CO SIGNATURE EXP. DATE

NORTH GRID **519 0 0 0** EAST GRID **795 0 0 0**  
50 55 57 63

APPROXIMATE DEPTH OF WELL **300** FEET  
24 28

APPROXIMATE DIAMETER OF WELL **6** 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)

- N THIS WELL WILL NOT REPLACE AN EXISTING WELL
- Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
- D THIS WELL WILL DEEPEN 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 2004-G 005**

PERMIT No. **HO-94-4147**  
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

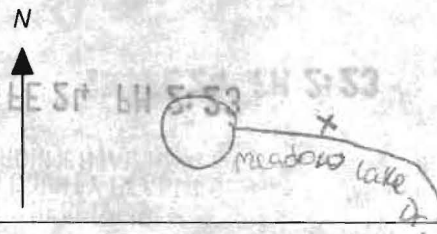
SOURCES OF DRILLING WATER

- 1.
- 2.
- 3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E **7945**  
N **5189**

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







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: Michael Barlow Well Drilling <sup>Sic. Inc</sup> Telephone #: 410-838-6910  
 Address: 522 W. Denwood

(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 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: Toll Brothers Telephone #: 410-489-2275  
 Subdivision: Tridelpna Crossing Lot #: 16 Well Tag #: HO-HO-94-4147  
 Site Address: \_\_\_\_\_

Submersible Pump Data

Make: Sta-Lite  
 Model #: TSP4E0252  
 Pump Capacity 7 GPM  
 Well Yield: 30 GPM

Pitless Adapter

Make: Campbell  
 Model #: PA 800  
 Depth: 42" (36" min)  
 NSF/WSC approved: \_\_\_\_\_

Well Cap and Electric Conduit

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

Depth of well encountered at time of pump installation: 145 (feet)  
 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

Piping to house

Type: Polyethylene  
 PSI: 160 (160 psi min)  
 Depth of supply line: \_\_\_\_\_ (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: \_\_\_\_\_  
 Approximate length of sleeve: \_\_\_\_\_  
 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: 4/17/06

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

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: 3/28/06 Inspector: BB

- Inspection Data: Pitless adapter watertight & 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 not seen outside of well cap/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

ZONED: RC-DEC

CLARKS WOK  
DORSET HILL  
LOT 4  
6377/85  
PLAN NO. 1  
ZONED: RC-

EXISTING  
CORN FIELD

LOT 16  
46,498 S.F.

LOT 17  
74,154 S.F.

LOT 18  
48,971 S.F.

TRP/O NON-BUILDABLE  
FOR COMMUNITY PROJECT  
WELL

MIC

157  
546  
551.5  
220  
159  
555.8  
219  
118  
552.8  
SDA S.E.

30' BRL

50' BRL  
160  
554.5

EX. BGE RP  
TO BE REMOVED

162  
558.9  
10' BRL

164

10' BRL  
166

EX. DIRT DRIVE  
30' BRL  
358

WELL

WELL

WELL

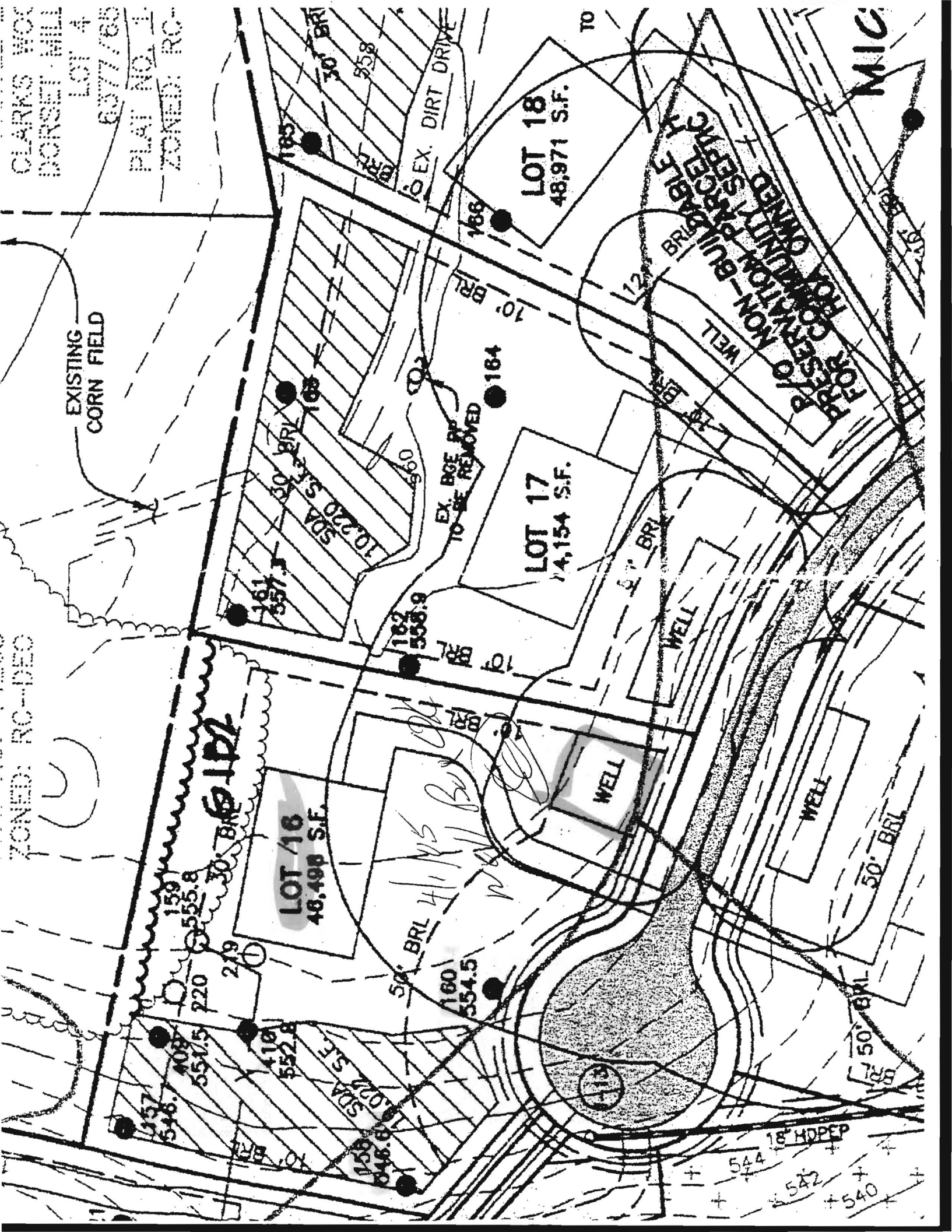
50' BRL

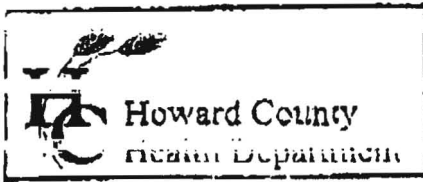
18" HDPEP

544

542

540





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:

*Eastern States Eng*

- The well site has been staked by ESE (professional land surveyor or company employing professional land surveyors) on Feb 22, 2005 (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

Post-It® Fax Note	7671	Date	7 mar 05	# of pages	1
To	Stuart	From	David Comar		
Co./Dept.		Co.			
Phone #		Phone #	410 872 9105		
Fax #	410 313 2648	Fax #			

*(for) Tridelfhia Crossing*

*Toll Bros*

**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 #:	59229	Account #:	1930
Reference:	Toll Brothers Lot 16	Company:	Fogle's Well Drilling
Location:	14234 Meadow Lake Drive Highland, MD 20777	Requested By:	Dave Fogle
Date/ Time Collected:	5/24/2006 0900	Source:	Well Water
Date/Time Rec'd:	5/24/2006 1130	Site:	R/O Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	Reverse Osmosis
Collected By:	V.M. Fadoul 6804VF-FS	pH:	6.1
		Well #:	HO-94-4147

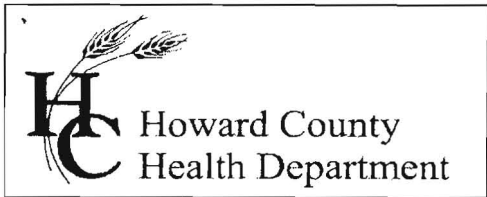
PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Nitrate	<1.0	mg/l.	10	601	5/25/2006 / 0930 / GN

**NOTES:**

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 ND:None Detected
- 4 Sample collected by client, analyzed as received
- 5 pH tested on-site

Reason for Test : Use & Occupancy retest 59155  
 Building Permit # : B155464

Date Reported: 5/25/2006



7178 Columbia Gateway Drive, Columbia Maryland 21046  
(410) 313-1771 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**

JUNE ?  
May 9, 2006

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

**SENT VIA FACSIMILE 410-489-2278**

RE: Triadelphia Crossing, Lot 16  
14234 Meadow Lake Drive  
Glenelg, MD 21737  
BP #: B00155464  
Well Permit # HO-94-4147

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 house connection to the septic system was granted on 5/25/2006 by HCHD. Final approval of the well line connection to the dwelling was approved on 3/28/2006.**

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.

**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-94-4147. 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: 5/16/2006 & 5/24/2006  
Date of Well Completion: 4/21/2005

Approving Authority,  
*Brian Baker*  
Brian Baker, R. S.  
Well & Septic Program

cc: Building Inspector's Office  
Community Health Services  
File

**FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.**

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

**REPORT OF ANALYSIS**

Laboratory ID #:	59155	Account #:	1930
Reference:	Toll Brothers Lot 16	Company:	Fogle's Well Drilling
Location:	14234 Meadow Lake Drive Highland, MD 20777	Requested By:	Dave Fogle
Date/ Time Collected:	5/16/2006 1100	Source:	Well Water
Date/Time Rec'd:	5/16/2006 1142	Site:	Kitchen Sink Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	M. Dodd 6244MD	pH:	6.4
		Well #:	HO-94-4147

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYS
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	5/17/2006 / 0820 / BCD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	5/17/2006 / 0820 / BCD
Nitrate	10.3	mg/L	10	601	5/17/2006 / 0945 / BCD
Turbidity	0.58	NTU	<10	SM18 2130B	5/17/2006 / 1000 / BCD
Sand	NS	mg/L	5	Visual/Gravimetric	5/17/2006 / 1000 / BCD
Iron	0.01	mg/L	0.3	FR. 45 (126)	5/17/2006 / 1205 / AMD/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 tested on-site

Reason for Test : Use & Occupancy  
 Building Permit # : B155464

Date Reported: 5/17/2006