

C1 3871 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 AS17937

ST/CO USE ONLY DATE RECEIVED MM DD YY 8 13

DATE WELL COMPLETED MM DD YY 03 07 05 Depth of Well 22 180 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-94-4077

OWNER Thompson Builders last name Patterson Farm Ct. first name TOWN Glenelg SUBDIVISION Hopkins Choice SECTION LOT 8

WELL LOG Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Top Soil, Sandy, Sand Stone, MICKA, and Sand Stone MICKA.

GROUTING RECORD yes no Y N 44 44 WELL HAS BEEN GROUTED (Circle Appropriate Box) TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS 18 NO. OF POUNDS 1800 GALLONS OF WATER 108 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 30 ft.

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)! Total depth of main casing (nearest foot)

OTHER CASING (if used) diameter inch depth (feet) from to PL 6 60

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

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes no 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. MSDL19 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. D

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

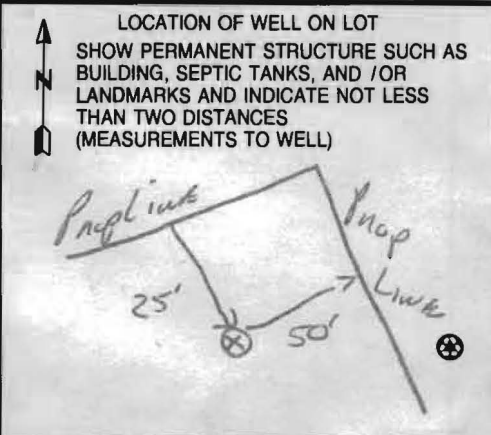
DEPTH (nearest ft.) HO 58 180 A 8 9 11 15 17 21 C 23 24 26 30 32 36 S 38 39 41 45 47 51 E SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60 from to

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

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 1 2 HOURS PUMPED (nearest hour) 3 8 9 PUMPING RATE (gal. per min.) 10 11 15 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 25 17 20 ft. WHEN PUMPING 55 22 25 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 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 - below LAND SURFACE (nearest foot) 2 50 51



B 1 5778
1 2 3 6

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
PERMIT TO DRILL WELL
please print or type

STATE PERMIT NUMBER

HO-94-4077
70 fill in this form completely 79

W521503

Date Received (APA)
11/04/09
8 MM DD YY 13

OWNER INFORMATION

Thompson Builders Inc
6300 Woodside Ct Suite A
Columbia MD 21046

B 3

LOCATION OF WELL

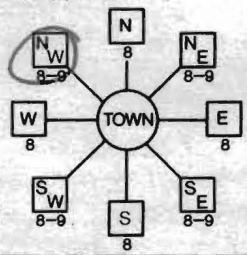
Howard
8 COUNTY 21
HOPKINS CHOICE
23 SUBDIVISION 42
SECTION 44 46 LOT 8 48 50
GLENELG
52 NEAREST TOWN 71
MILES FROM TOWN (enter 0 if in town) I M I
73 76 77 78

DRILLER INFORMATION

Ralph E. Maywe M S D 112
Ralph E. Maywe Inc
17024 Handy Rd Mt Airy MD 21771
10-10-04

B 4

1 2
DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Patterson Farm Ct.
11 NEAR WHAT ROAD 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH
WEST EAST
SOUTH
34 350 37
DISTANCE FROM ROAD 41
ENTER FT OR MI 38 39
TAX MAP: 21 BLK: 12 PARCEL 111

B 2 WELL INFORMATION
APPROX. PUMPING RATE 5 (GAL. PER MIN.)
AVERAGE DAILY QUANTITY NEEDED 500 (GAL. PER DAY)

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) A517937
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S
DATE ISSUED 1/13/2006 Brian Baber 1/13/2006
NORTH GRID 522 000 EAST GRID 799 000

APPROXIMATE DEPTH OF WELL 150 FEET
APPROXIMATE DIAMETER OF WELL 6" NEAREST INCH

METHOD OF DRILLING (circle one)

AIR-ROTary JETTED Jetted & DRIVEN
CABLE REVerse-ROTary Drive-POINT

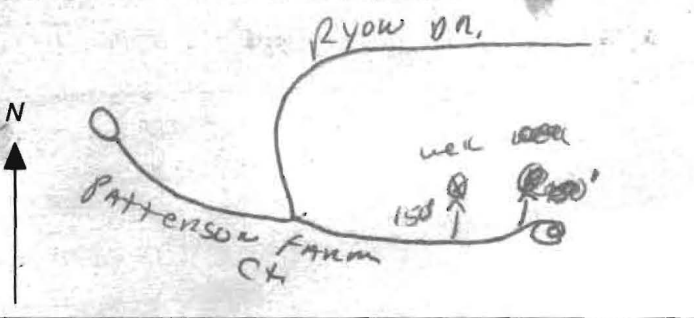
REPLACEMENT OR DEEPEINED WELLS (CIRCLE APPROPRIATE BOX)

- 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 DEEPEIN AN EXISTING WELL

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
SOURCES OF DRILLING WATER
1. well
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE
E 800799
N 522

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



Not to be filled in by driller (MDE OR COUNTY USE ONLY)
APPROX. PERMIT NUMBER HO2004 GAP 011(01)
PERMIT No. HO-94-4077

SPECIAL CONDITIONS

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

6/18/05
 KR

Well Permit No. HO - 94-4075 4077
 Location of property (road) Ryon Drive
 Subdivision Hopkins Choice Lot 08 Block _____ Plat _____ Sec. _____
 Well Driller Ralph Mayne Owner Thompson Builders

Depth of well 180
 Distance of measuring point (M.P.) above ground 2 ft
 Static water level (S.W.L.) below M.P. 15 ft

I. High rate pumping -- reservoir drawdown

Time pump started 8:30 Pumping rate 25 Gpm
 Total time 15 min to reach pumping water level 55 ft. below M.P.

II. Recovery pump test data - observations to be recorded every 15 minutes

TIME (in 15 minute intervals)	WATER LEVEL below M.P.	PUMPING RATE time to fill 5 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
8:30	15 ft	4 Sec		15 GPM
			Test Started	
8:45	55 ft	6 Sec	X	10 GPM
9:00	55 ft	6 Sec		10 GPM
9:15	55 ft	6 Sec		10 GPM
9:30	55 "	6 "		10 "
9:45	55 "	6 "		10 "
10:00	55 "	6 "		10 "
10:15	55 ft	6 Sec		10 GPM
10:30	55 ft	6 Sec		10 GPM
10:45	55 ft	6 Sec		10 GPM
11:00	55 "	6 "		10 "
11:15	55 "	6 "		10 "
11:30	55 ft	6 Sec		10 GPM
11:45	55 ft	6 Sec		10 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: Eagles Well Drilling Telephone #: 443-609-4195
Address: P.O. Box 202
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# MSD0009

***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 #: 410-992-5978
Subdivision: Hookins Chase Lot #: 8 Well Tag #: HO-94-4077
Site Address: 14088 Patterson Farm Ct

<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>1550807-180</u>	Model#: <u>N/A</u>	Screened, vented well cap: <u>yes</u>
Pump Capacity <u>15</u> GPM	Depth: <u>36"</u> (36" min)	Cap secured to casing: <u>yes</u>
Well Yield: <u>10</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>180</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 <u>inside of well casing</u> <u>N/A</u>		

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>1" Black Plastic Pipe</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 Compt date: 12/5/12

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

Date Insp. Requested: _____ Date Insp. Approved: _____ Inspector: _____

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 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 _____

**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: _____ 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 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: _____ Telephone #: _____
Subdivision: _____ Lot #: 8 Well Tag #: HO 94-4077
Site Address: 14088 Patterson Farm Ct.

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

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

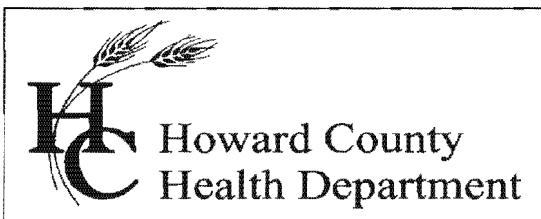
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

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: 12/13/2012 Inspector: BB

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
Main: 410-313-6300 | Fax: 410-313-6303
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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – September 15, 2013

March 15, 2013

Homeowner
14088 Patterson Farm Court
Glenelg, MD 21737

**RE: Hopkins Choice, Lot 8
14088 Patterson Farm Court
Building Permit: B12001386
Well Permit: HO-94-4077**

Dear Homeowner:

This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **3/12/2013**. Final approval of the well line connection to the dwelling was granted on **12/13/2012**. The well construction was completed on **3/7/2005**. Water samples were collected on **3/8/2013 and 3/13/2013**.

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. 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-94-4077. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will be issued. **Failure to submit an additional sample and obtain a Final Certificate of Potability will result in a Notice of Violation and is punishable as a misdemeanor under the Annotated Code of Maryland, Environment Article, 9-1311, subject to a fine of up to \$500 or imprisonment not to exceed three months.**

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

Approving Authority,



Robert Bricker, REHS/R.S.
Environmental Sanitarian
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
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 #: 88425 Account #: 1930
Reference: Toll Brothers Lot 8 Company: Fogle's Well Drilling
Location: 14088 Patterson Farm Court Requested By: Dave Fogle
Glenelg, MD 21737 Source: Well Water
Date/ Time Collected: 3/13/2013 1151 Site: Kitchen Sink Tap
Date/Time Rec'd: 3/13/2013 1520 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 5.7
Collected By: J. Fogle 1974JF Well #: HO-94-4077

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Turbidity	1.80	NTU	<10	SM18 2130B	3/13/2013 / 1530 / LLO

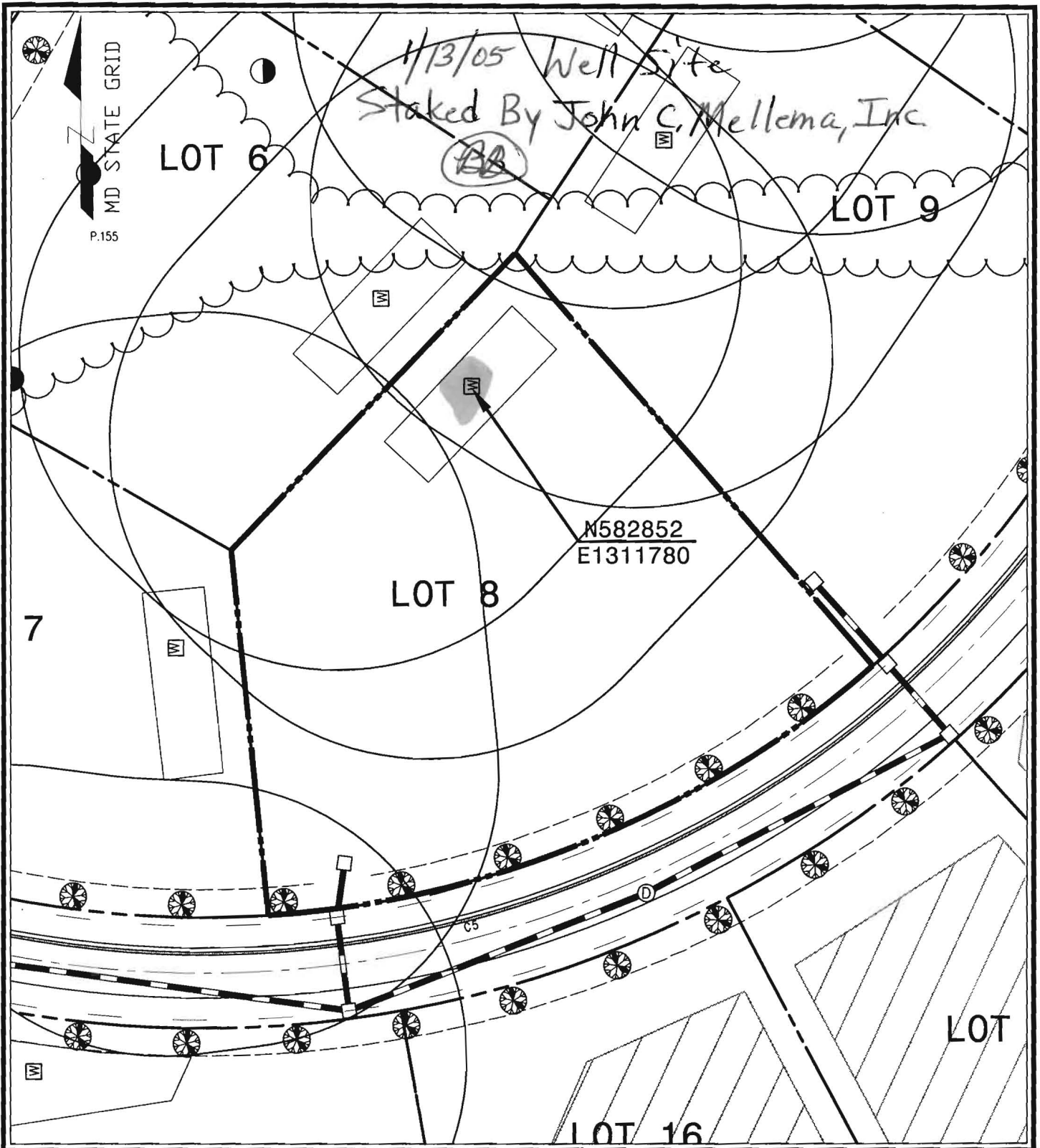
*OK! ref 3/14/13
no treatment described*

NOTES

- 1 NTU = Nephelometric Turbidity Units
- 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 and Chlorine level tested in lab

Reason for Test : Use & Occupancy
Building Permit # : 12001386

Date Reported: 3/13/2013



WELL LOCATION PLAN

LOT 8

HOPKINS CHOICE SUBDIVISION

4th ELECTION DISTRICT, TAX MAP # 21, GRID 12, ZONE : RR-DEO PARCEL 111
HOWARD COUNTY, MARYLAND

PREPARED BY :

American Land Development
and Engineering, Inc.

10749 BIRMINGHAM WAY
WOODSTOCK, MD. 21163
TEL. (410) 465-7903
FAX. (410) 465-3845

CONTRACT No.

FILE No.

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 #: 88378 Account #: 1930
Reference: Toll Brothers Lot 8 Company: Fogle's Well Drilling
Location: 14088 Patterson Farm Court Requested By: Dave Fogle
Glenelg, MD 21737 Source: Well Water
Date/ Time Collected: 3/8/2013 1256 Site: Pressure Tank
Date/Time Rec'd: 3/8/2013 1424 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.2
Collected By: J. Fogle 1974JF Well #: HO-94-4077

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	3/9/2013 / 1000 / BCD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	3/9/2013 / 1000 / BCD
Nitrate	7.01	mg/L	10	601	3/8/2013 / 1545 / CCH
Turbidity	12.7	NTU	<10	SM18 2130B	3/8/2013 / 1500 / CCH
Sand	NS	mg/L	5	Visual/Gravimetric	3/8/2013 / 1530 / CCH

*Turbidity fails
others 'OK' reB 3/14/2013*

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 on site

Reason for Test : Use & Occupancy

Building Permit # : 12001386

Date Reported: 3/11/2013