C 1 | 0222 | SEQUENCE NO. (MDE USE ONLY)

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

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) A517422

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED: 08 19 06

Depth of Well: 200 (TO NEAREST FOOT)

11/22/06 O.K. BB

PERMIT NO. FROM "PERMIT TO DRILL WELL": 40-95-0416

OWNER: DeFrancis (last name) (first name)

STREET OR RFD: Holly Creek Lane TOWN: Ellicott City

SUBDIVISION: Walnut Grove SECTION: LOT: 66

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 FROM	FEET TO	check if water bearing
Top Soil	0	1	
Clay	1	6	
Sandy	6	18	
Sand Stone	18	35	✓
MICKA	35	140	
Sand Stone	140	145	✓
MICKA	145	200	

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 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.: M S D 112

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: D

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

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes (Y) no (N)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT (CM) BENTONITE CLAY (BC)

NO. OF BAGS 9 NO. OF POUNDS 500

GALLONS OF WATER 54

DEPTH OF GROUT SEAL (to nearest foot)

from 0 (TOP) ft. to 26 (BOTTOM) 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)!	Total depth of main casing (nearest foot)
PL	6	28

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below

(ST) STEEL (BR) BRASS BRONZE (HO) OPEN HOLE (PL) PLASTIC (OT) OTHER

C 2		DEPTH (nearest ft.)	
EACH SCREEN	1 HO	26	200
	2		
	3		

SLOT SIZE 1 ____ 2 ____ 3 ____

DIAMETER OF SCREEN ____ (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68: from ____ to ____

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

T ____ (E.R.O.S.) ____ W Q ____

TELESCOPE CASING ____ LOG INDICATOR ____ OTHER DATA ____

C 3 PUMPING TEST

HOURS PUMPED (nearest hour): 3

PUMPING RATE (gal. per min.): 10

METHOD USED TO MEASURE PUMPING RATE: Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING: 20 ft.

WHEN PUMPING: 32 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)

PUMP HORSE POWER

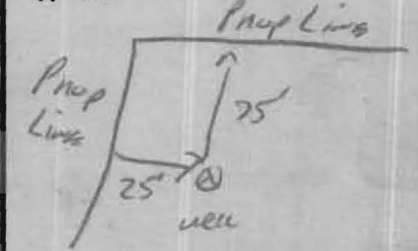
PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

(+) above (–) below LAND SURFACE: 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)



DENV-CR00

COUNTY

EMERGENCY/TEMP NO. IF ANY

B 1 | 0940 (1 2 3 6) | SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

please type

W523734

STATE PERMIT NUMBER (70–79): HO-95-0416

fill in this form completely

Date Received (APA) (8 MM DD YY 13): 11/30/05

OWNER INFORMATION

Land MKTG Consultants INC (15 Last Name Owner First Name 34)

3060 Washington Rd (36 Street or RFD 55)

Glenwood MD 21738 (57 Town 70 State 72 Zip 76)

DRILLER INFORMATION

Ralph E. MAYNE MSD 117 (Driller's Name 76 License No. 81)

Ralph E. MAYNE INC (Firm Name)

17024 Hardy Rd MT. Airy MD 21771 (Address)

Signature 11-20-05 (Date)

B 2 WELL INFORMATION

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

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

USE FOR WATER (CIRCLE APPROPRIATE BOX)

22

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

APPROXIMATE DEPTH OF WELL (24 28): 150' FEET

APPROXIMATE DIAMETER OF WELL: 6" NEAREST INCH

METHOD OF DRILLING (circle one)

30 / 37

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

other

REPLACEMENT OR DEEPENED 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
- 39 [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 DEEPENED (IF AVAILABLE) (41 52): ____-____-____

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

APPROP. PERMIT NUMBER: H02005G006

PERMIT No. (70 71 72 73 74 75 76 77 78 79): HO-95-0416

B 3 LOCATION OF WELL

8 COUNTY: Howard (21)

23 SUBDIVISION: Walnut GROVE (42)

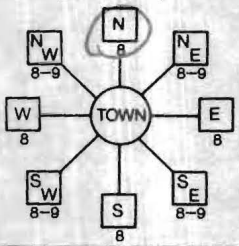
SECTION (44 46): ____ LOT (48 50): 66

52 NEAREST TOWN: Clarksville (71)

MILES FROM TOWN (enter 0 if in town) (73 76 77 78): 2 M

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



11 NEAR WHAT ROAD 30: WATKINS Bridge Rd.

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

34 DISTANCE FROM ROAD 37: 200 FT

ENTER FT OR MI (38 39)

TAX MAP: 28 BLK: 18 PARCEL 74

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

Howard (13) A517422

COUNTY NAME COUNTY NO.

STATE SIGNATURE _____ INSERT S → (41)

DATE ISSUED (43 MM DD YY 48): 6/26/2006 Brian Baker 6/26/2007

CO SIGNATURE EXP. DATE

NORTH GRID (50 55): 508 000

EAST GRID (57 63): 815 000

APPROXIMATE DEPTH OF WELL: 150' FEET

APPROXIMATE DIAMETER OF WELL: 6" NEAREST INCH

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X →

Yield Test on 8/17/06
Sample taken on 8/29/06

(X)

SOURCES OF DRILLING WATER
1. Well
2.
3.

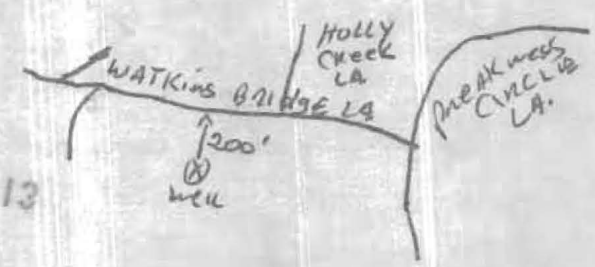
WRITE THE BOX NUMBER FROM THE MAP HERE

E 815

N 508

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 SEPARATE SHEET IF NEEDED

DENV-Permit 97

② COUNTY

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648

FAXED 4-11-12

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: NATIONAL WATER SVC Telephone #: 301-854-1333
Address: P.O. BOX 138
ASHTON, MD 20861

(Must circle one) Licensed Plumber Licensed Well Driller **Licensed Well Pump Installer**
License # and name of individual responsible for the field installation:
Name (Print): DAVID RYCKE License# PI 0145
*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: SELFRIDGE BUILDERS Telephone #:
Subdivision: WALNUT GROVE Lot #: 66 Well Tag # : HO - 95 - 0416
Site Address: 12431 WATKINS Bridge LA
CLARKSVILLE MD 21029

Submersible Pump Data
Make: GRUNDFOS
Model #: 15SQE07-180
Pump Capacity 15 GPM
Well Yield: 10 GPM

Pitless Adapter
Make: CAMPBELL
Model#: PA 800
Depth: 48" (36" min)
NSF approved: YES

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: 180 (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 CPS
Safety rope, if used, attached to inside of well casing with eye bolt N/A

Piping to house
Type: POLY
PSI: 160 (160 psi min)
Depth of supply line: 4' (36" min)

House Connection
PVC sleeved to undisturbed soil at wall penetration: YES
Approximate length of sleeve: 5'
Sleeve 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.

Signature of company representative responsible for installation — date 4/11/12

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

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

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 _____

HD-215(Rev. 8/00)

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 #: _____ Well Tag # : HO - 95 - 0416
Site Address: 12431 Watkins Bridge LN.
_____

Submersible Pump Data	Pitless Adapter	Well Cap and Electric Conduit
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 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 or Cable guards are required – Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt ____

Piping to house	House Connection
Type: _____	PVC sleeved to undisturbed soil at wall penetration:_____
PSI: _____(160 psi min)	Approximate length of sleeve:_____
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.

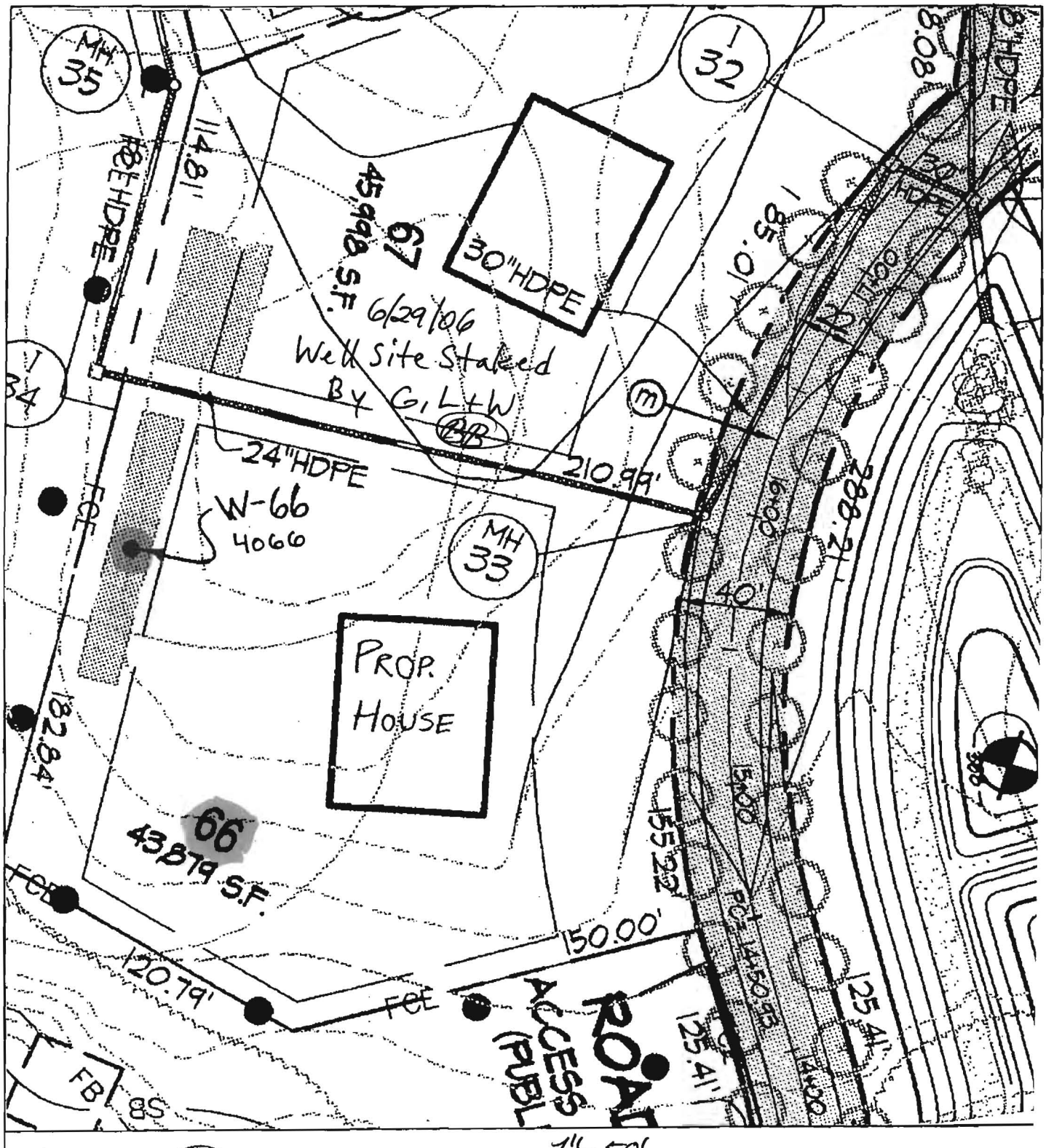
_____ _____
Signature of company representative responsible for installation date

---

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

Date Insp. Requested: _____ Date Insp. Approved: 3/30/2012 BG

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 Under Footer
- Adequate grout observed below pitless adapter ✓



1"=50'

HERITAGE
Land Development

LAND PLANNING ◆ DEVELOPMENT ◆ MARKETING ◆ ZONING ◆ VALUATION

3300 WASHINGTON (RT. 97), SUITE 330, GLENWOOD, MD 21738 PHONE: 410-489-7900

WELL LOCATION EXHIBIT – LOT 66

WALNUT GROVE

TAX MAP 52B ZONED: RC-DEO PARCEL: 74
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE 1"=50' DATED OCTOBER 25, 2005

Howard County
Health Department

7178 Columbia Gateway Dr. • Columbia, MD 21046
(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

ATTENTION WELL DRILLERS!!!

When submitting a well application for a new or replacement well, please indicate one of the following:

☑ The well site has been staked by Gutschick, Little & Weber on 11/10/2005

☐ _____ will call the Health Department for a time to meet in the field to verify a well location.

☑ Site plan for new well is attached to well permit application.

Please attach this sheet when submitting your green application. This should help improve communication allowing a more timely service for our citizens.

KN

Howard County
Health Department

Bureau of Environmental Health
7178 Gateway Drive Columbia, MD 21046
(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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – December 19th, 2012

June 19th, 2012

Homeowner
12431 Watkins Bridge Lane
Clarksville, MD 21029

RE: Walnut Grove, Lot 66
12431 Watkins Bridge Ln.
Building Permit: B11002141
Well Permit: HO-95-0416

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 **6/19/2012.** Final approval of the well line connection to the dwelling was granted on **3/30/2012.** The well construction was completed on **8/17/2006.** Water samples were collected on **5/10/2012, 5/9/2012 & 4/30/2012.**

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.

Gross Alpha and Beta samples were also collected on **5/10/2012**. Results showed a Gross Alpha level of **2.1** ± 0.9 **pCi/L** and **Gross Beta** level of **2.5 ± 0.9 pCi/L**. The Gross Alpha was below the maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta was below the target level of 50pCi/L (roughly equivalent to the annual dose rate of 4 millirems per year). At the time of testing and with respect to these parameters, the well water is safe for all uses.

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-95-0416. 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 certified water quality 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,

Heidi Scott, R.S.
Environmental Sanitarian
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
Community Hygiene Program
File

TRACE LABORATORIES, INC
5 North Park Drive
Hunt Valley, MD 21030 USA
Telephone: 410/584-9099 / Fax: 410/584-9117
Website: www.tracelabs.com / Email: info@tracelabs.com

Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

James H. Selfridge Builders Inc.
4781 Ten Oaks Road
Dayton, Maryland 21036

S/O Number: 85178

Report Date: May 10, 2012

Retest #1

Property Sampled: 12431 Watkins Bridge Lane, 21029
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B11002141
Sampler ID #: 0765AR
Samples Iced: Yes

County: Howard **Subdivision:** Walnut Grove
Map: 28 **Parcel:** 74 **Lot#:** 66

Date/Time Collected in Field: May 9, 2012 @ 1:20 pm
Date/Time Received in Lab: May 9, 2012 @ 3:40 pm

Well Tag #: HO-95-0416
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: None

PARAMETER	METHOD	MCL	RESULT	PASS/FAIL
Total Coliform	SM 9223B	Absent	Absent	Pass
E. coli	SM 9223B	Absent	Absent	Pass

The results in this report relate only to those items tested. If any additional information or clarification of this report is required, please contact us. This test report shall not be reproduced except in full without the written approval of Trace Laboratories Inc.

OK-
HS 5-11-12

Katherine C. Higgs
Katherine C. Higgs
Manager – Drinking Water Testing

MCL: Maximum Contamination Level, an enforceable level established by the EPA

TRACE LABORATORIES, INC
5 North Park Drive
Hunt Valley, MD 21030 USA
Telephone: 410/584-9099 / Fax: 410/584-9117
Website: www.tracelabs.com / Email: info@tracelabs.com

Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

James H. Selfridge Builders Inc.
4781 Ten Oaks Road
Dayton, Maryland 21036

S/O Number: 85094

Report Date: May 1, 2012

Potability Testing

Property Sampled:	12431 Watkins Bridge Lane, 21029	**Building Permit #:**	B11002141
Sample Location:	Pressure Tank Tap	**Sampler ID #:**	0765AR
Residual Chlorine:	<0.1 mg/L	**Samples Iced:**	Yes

County:	Howard	**Subdivision:**	Walnut Grove		
Map:	28	**Parcel:**	74	**Lot#:**	66

Date/Time Collected in Field: April 30, 2012 @ 10:55 am
Date/Time Received in Lab: April 30, 2012 @ 3:05 pm

Well Tag #: HO-95-0416
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: None

PARAMETER	METHOD	MCL/*SMCL	RESULT	PASS/FAIL
Total Coliform	SM 9223B	Absent	PRESENT	FAIL
E. coli	SM 9223B	Absent	Absent	Pass
Nitrate	SM 4500D	10 mg/L as N	5.4 mg/L as N	Pass
Turbidity	EPA 180.1	10 NTU	2.7 NTU	Pass
pH	EPA 150.1	*6.5-8.5 Units	7.8 Units	***
Sand		Absent	Absent	Pass

The results in this report relate only to those items tested. If any additional information or clarification of this report is required, please contact us. This test report shall not be reproduced except in full without the written approval of Trace Laboratories Inc.

Fails Bacteriology
others 'OK' MB 5/2/2012

Katherine C. Higgs
Katherine C. Higgs
Manager – Drinking Water Testing

MCL: Maximum Contamination Level, an enforceable level established by the EPA
*SMCL: Secondary Maximum Contamination Level, a level recommended by the EPA
***A non-enforceable parameter that may cause cosmetic effects or aesthetic effects (such as taste, color or odor) in drinking water.

TRACE LABORATORIES, INC
5 North Park Drive
Hunt Valley, MD 21030 USA
Telephone: 410/584-9099 / Fax: 410/584-9117
Website: www.tracelabs.com / Email: info@tracelabs.com

Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

James H. Selfridge Builders Inc.
4781 Ten Oaks Road
Dayton, Maryland 21036

S/O Number: 85094

Report Date: May 15, 2012

Radium Test

Property Sampled: 12431 Watkins Bridge Lane, 21029
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B11002141
Sampler ID #: 0765AR
Samples Iced: Yes

County: Howard **Subdivision:** Walnut Grove
Map: 28 **Parcel:** 74 **Lot#:** 66

Date/Time Collected in Field: May 10, 2012 @ 12:10 pm
Date/Time Received in Lab: May 10, 2012 @ 1:35 pm

Well Tag #: HO-95-0416
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: None

PARAMETER	METHOD	MDL (pCi/L)	MCL* (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Gross Alpha	EPA 900.0	1.1	15	2.1 ± 0.9	Acceptable
Gross Beta	EPA 900.0	1.4	50	2.5 ± 0.9	Acceptable

*Note: There are no established limits set forth by the EPA for radionuclide particles in private well water. The limits for public water are instead provided as MCLs in this report and the acceptability of this sample is based on these requirements. Gross Alpha levels under 5 pCi/L are acceptable. Levels between 5 and 15 pCi/L are considered moderate, and levels greater than 15 pCi/L are considered high. When levels are moderate or high, treatment or further testing is recommended and in certain cases may be required by the health department.

Katherine C. Higgs
Manager – Drinking Water Testing

MDL: Method Detection Limit
MCL: Maximum Contamination Level, an enforceable level established by the EPA
Analysis completed by Laboratory #278

Howard County
Health Department

Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046
(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

October 5, 2006

Walnut Grove, LLC
10705 Charter Dr.
Suite 320
Columbia, Maryland 21044

RE: Walnut Grove
Well Tag: HO-95-0416

To Whom It May Concern:

A sample was collected during a yield test on August 24, 2006 and submitted to Department of Health and 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 **7.0 ± 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 target 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 (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

Send Report To:
Howard County
Env. Health

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

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: WnG6 KW 0416 **No. B:** _____ **Field Blank Bottle No. A:** _____ **No. B:** _____

Plant/Site Name: Walnut Grove **County:** Howard

Sample Source: ~~[illegible]~~ Holly Creek Lane **Location:** Well # HO-95-0416
(well no., lab sink, sample tap, etc.)

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

CHECK (one per box)

Drinking Water ☒	Community ☐	Source (raw water) ☒	Emergency ☐
Landfill ☐	Non-community ☐	Distribution (treated) ☐	Routine ☐
Stream ☐	Private ☒	MCL ☐	Recheck ☒
Other ☐	Other ☐		Special ☐

Collector: Kevin Wolf **Telephone No:** 410-713-2645

Date Collected: 8/24/06 **Time Collected:** 10:30 **a.m.** _____ **p.m.**

Nitric Acid Preserved: Yes ☒ No ☐ **Iced:** Yes ☐ No ☒

Submitters Code: ☐☐ **Federal Project:** ☐ **Field Data:** _____ _____
pH Chlorine

Remarks: Sample taken few days after yield test

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000			
✓	Gross Beta	4100			
	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: _____/_____/_____

Supervisor: _____

FORM REVISED 02/06
DHMH 4540 02/06

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

ORIGINAL - LABORATORY