C	1	1172

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

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 A 516063

ST/CO USE ONLY
DATE Received MM DD YY (8–13)

DATE WELL COMPLETED MM DD YY: 2 15 06 (15–20)

Depth of Well (22–26): 300' (TO NEAREST FOOT)

OK (50) 4/11/06

PERMIT NO. FROM "PERMIT TO DRILL WELL": Ho - 95 - 0226 (28–37)

OWNER: Horton (last name) R. D. (first name)
STREET OR RFD: Heather Glen Way TOWN: Clarksville Md
SUBDIVISION: Turnbury Grove SECTION: ______ LOT: #4

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
Sand	0	45	
Gray Granite Rock	45	300	✓

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes [Y] no [N] (circled: 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 SD 024
Joseph L Mayne
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] (circled) no [N] (44)

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT [CM] (circled) (45 46) BENTONITE CLAY [BC] (45 46)

NO. OF BAGS 9 NO. OF POUNDS 846
GALLONS OF WATER 54
DEPTH OF GROUT SEAL (to nearest foot)
from 0 ft. (TOP, 48–52) to 40 ft. (BOTTOM, 54–58)
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
[ST] STEEL [CO] CONCRETE [PL] PLASTIC [OT] OTHER

MAIN CASING TYPE (60 61)	Nominal diameter top (main) casing (nearest inch)! (63 64)	Total depth of main casing (nearest foot) (66–70)
St	6	49

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

C2 EACH SCREEN		DEPTH (nearest ft.)	
1	HO (8 9)	47 (11–15)	300 (17–21)
2	(23 24)	(26–30)	(32–36)
3	(38 39)	(41–45)	(47–51)

SLOT SIZE 1 ____ 2 ____ 3 ____
DIAMETER OF SCREEN ____ (56–60) (NEAREST INCH)

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

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

C 3
PUMPING TEST
HOURS PUMPED (nearest hour) 3 (8 9)
PUMPING RATE (gal. per min.) 12 (11–15)
METHOD USED TO MEASURE PUMPING RATE Bucket
WATER LEVEL (distance from land surface)
BEFORE PUMPING 28 ft. (17–20)
WHEN PUMPING 70 ft. (22–25)

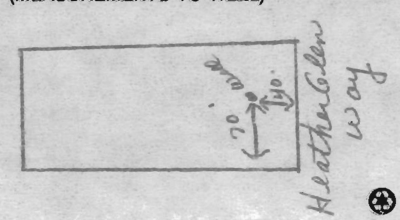
TYPE OF PUMP USED (for test)
[A] air [P] piston [T] turbine [C] centrifugal [R] rotary [O] other (describe below) [J] jet [S] submersible (circled)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): YES NO (circled)

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 (circled) / [−] below LAND SURFACE: 2 (nearest) foot (50 51)

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 | 1456 | SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

please type

523944

STATE PERMIT NUMBER: HO-95-0226

fill in this form completely

OWNER INFORMATION

Date Received (APA): 01 20 06

Horton | R. | D.
Last Name | Owner | First Name

1370 Piccard Drive
Street or RFD

Rockville Md. 20850
Town | State | Zip

DRILLER INFORMATION

Joseph L. Mayne | MD 024
Driller's Name | License No.

Joseph L. Mayne Well Drilling
Firm Name

5512 Ridge Rd Mt. Airy Md 21771
Address

Joseph L Mayne | 1-6-06
Signature | Date

B 2 WELL INFORMATION

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

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

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- (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

B 3 LOCATION OF WELL

Howard
COUNTY

Turnbury Grove
SUBDIVISION

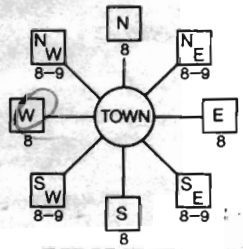
SECTION | LOT X4

Clarksville
NEAREST TOWN

MILES FROM TOWN (enter 0 if in town): 1/2 M I

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Heather Glen Way
NEAR WHAT ROAD

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

DISTANCE FROM ROAD: 25 | FT (ENTER FT OR MI)

TAX MAP: 34 BLK: 11 PARCEL 77

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard | 9516063
COUNTY NAME | COUNTY NO.

STATE SIGNATURE _____ INSERT S →

DATE ISSUED: 2/7/06 | CO SIGNATURE | EXP. DATE: 2/7/07

NORTH GRID: 499000 | EAST GRID: 814 000

APPROXIMATE DEPTH OF WELL: 300 FEET

APPROXIMATE DIAMETER OF WELL: 6 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 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

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER
1. well
2.
3.

2/15/06
Radioactive and VOC test samples taken
*Yield O.K.
BB

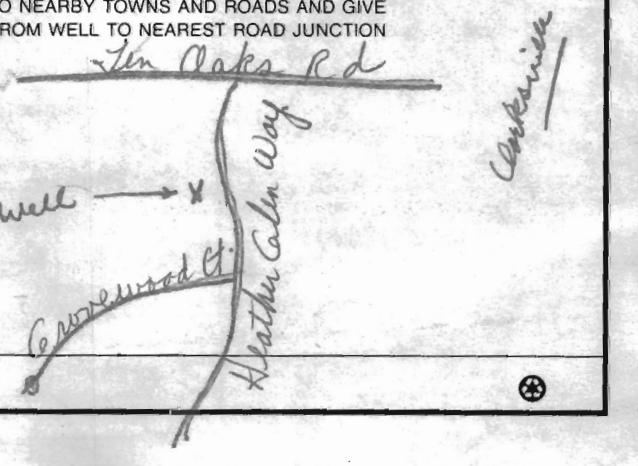
WRITE THE BOX NUMBER FROM THE MAP HERE

E 814

N 499

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



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

APPROP. PERMIT NUMBER: HO2006G003

PERMIT No. HO-95-0226

SPECIAL CONDITIONS
NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

DENV-Permit 97

© COUNTY

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: Tri-County Pump Service Inc Telephone #: 301-432-0330
Address: 6711 Old National Pike
Boonsboro, MD, 21713

(**Must circle one**) (Licensed Plumber) Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): William Griffith License# 20135

***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: Bryant Group Inc. Telephone #: 301-252-1373
Subdivision: Preserve at Clarksville Lot #: 44 Well Tag #: HO - 95- 02226
Site Address: 6218 Heather Glen Way
Clarksville, Md 21029

Submersible Pump Data
Make: AY McDonald
Model #: 23100V2SH
Pump Capacity 7 GPM
Well Yield: 10 GPM

Pitless Adapter
Make: American Granby
Model#: P1800
Depth: 36' (36" min)
NSF/WSC approved: YES

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: 490 (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: Poly
PSI: 200 (160 psi min)
Depth of supply line: 4' (36" min)

House Connection
PVC sleeve to undisturbed soil at wall penetration: YES
Length of sleeve(5' minimum from foundation): 20ft
Sleeve 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.

William E Griffith 2/7/2013
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: _____ 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: Preserve @ Clarksville Lot #: 4 Well Tag #: **HO** - 95 - 0226
Site Address: 6218 Heather Eaton Way
_____

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/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 inside of well casing ____

Piping to house	**House Connection**
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: 2/8/13 Date Insp. Approved: 2/8/13 Inspector: KW

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

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:

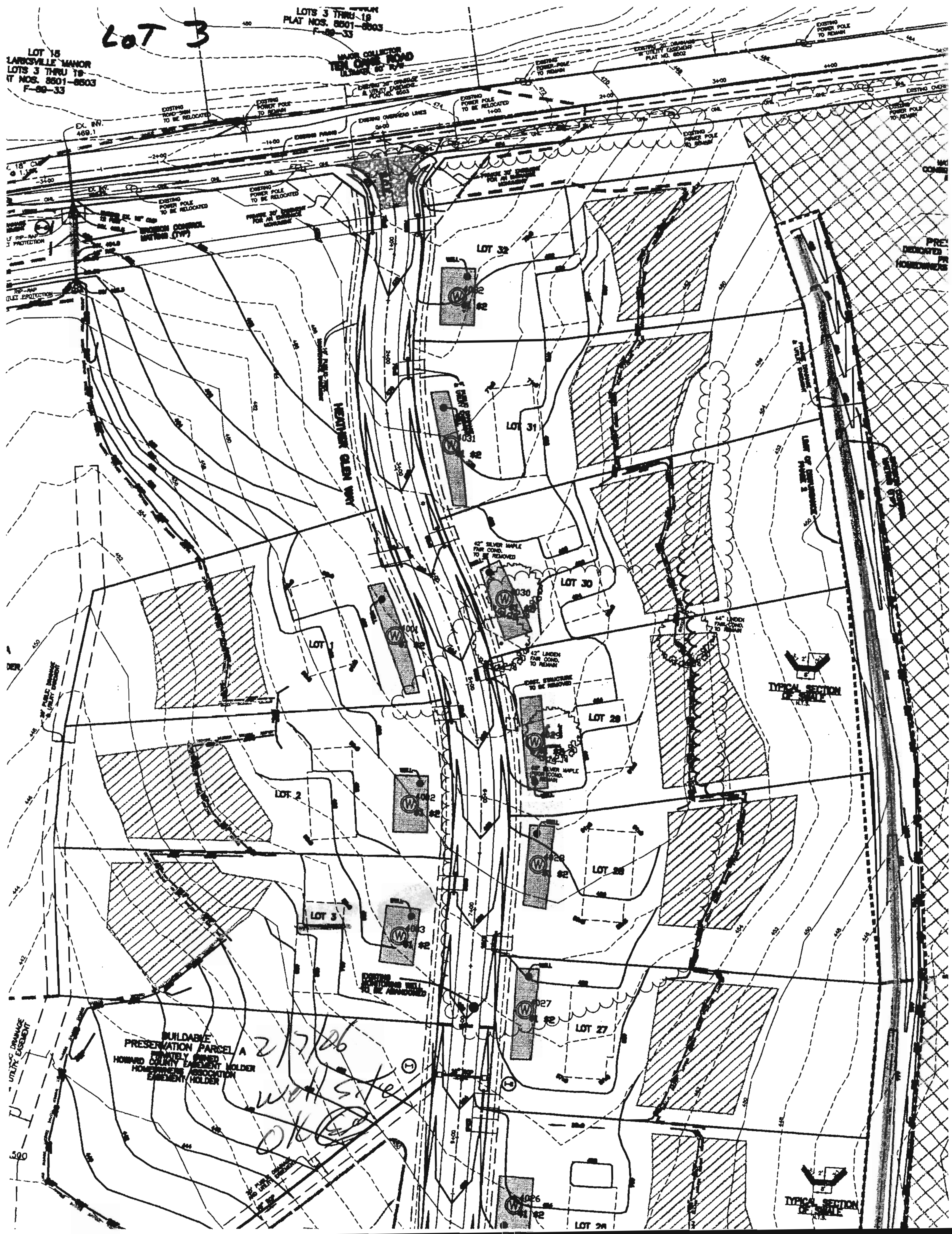
☑ The well site has been staked by Benchmark Engineering
(professional land surveyor or company employing professional land surveyors)
on 12-14-05 (date) and does not require a site inspection.

☐ 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

33 Lots for D.R. Horton
Turnbury Grove


LOT 3
LOTS 3 THRU 19
PLAT NOS. 8601-8603
F-89-33
LOT 18
MAJOR COLLECTOR
TEN OAKS ROAD
EXISTING POWER POLE TO BE RELOCATED
EXISTING POWER POLE TO REMAIN
EXISTING OVERHEAD LINES
EROSION CONTROL MATTING (TYP)
HEATHER GLEN WAY
LOT 32
LOT 31
LOT 30
LOT 1
LOT 29
LOT 2
LOT 28
LOT 3
LOT 27
LOT 26
42" SILVER MAPLE FAIR COND. TO BE REMOVED
EXIST. STRUCTURE TO BE REMOVED
EXISTING DWELLING WELL TO BE ABANDONED
TYPICAL SECTION OF SWALE
BUILDABLE PRESERVATION PARCEL A
PRIVATELY OWNED
HOWARD COUNTY EASEMENT HOLDER
HOMEOWNERS ASSOCIATION EASEMENT HOLDER
2/7/06
well site OK

Howard County
Health Department

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
PERMANENT DEVIATION FOR NITRATES
Expiration Date – December 12, 2013

June 12, 2013

Homeowner
6218 Heather Glen Way
Clarksville, MD 21029

RE: The Preserve at Clarksville, Lot 4
6218 Heather Glen Way
Building Permit: B12002404
Well Permit: HO-95-0226

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 **1/10/2013.** Final approval of the well line connection to the dwelling was granted on **2/8/2013.** The well construction was completed on **2/15/2006.** Water samples were collected on **5/22/2013 & 5/28/2013.**

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.

Gross Alpha and Beta samples were also collected on **5/22/2013**. Results showed a Gross Alpha level of 2.3 ± 1.1 **pCi/L** and **Gross Beta** level of 3.8 **± 1.4 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.

The untreated water sample collected on **5/22/2013** indicated a nitrate level of **17.4 mg/L**. **This exceeds the maximum contaminant limit of 10 mg/L set forth in COMAR 26.04.04.09.** After installation of a nitrate removal device (kitchen tap reverse osmosis system), a post-treatment water sample was collected on **5/22/2013** and indicated a nitrate level of **<1.0 mg/L**.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the nitrate removal system effectively maintains a nitrate-nitrogen contaminant level of **10 mg/L or less.**

Furthermore, it will be necessary for you to comply with the following conditions:

1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence.

2. It is recommended that a Maryland certified water laboratory certified for nitrates analysis perform a yearly nitrate analysis.

3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this permanent deviation. **A person who fails to make this disclosure is subject to the penalties set out in COMAR 26.04.04.12F *Enforcement* and Environment Article 9-1311, Annotated Code of Maryland.**

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-95-0226. 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 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:

Amy Ferrer
Compass Homes
6206 Heather Glen Way
Clarksville, Maryland 21029

S/O Number: 89194-2

Report Date: June 10, 2013

Treated Sample

Property Sampled: 6218 Heather Glen Way, 21029
Sample Location: Kitchen R/O Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B12002404
Sampler ID #: 5745KC
Samples Iced: Yes

County: Howard
Subdivision: Preserve at Clarksville
Map: 34
Parcel: 77
Lot#: 4

Date/Time Collected in Field: May 22, 2013 @ 12:04 pm
Date/Time Received in Lab: May 22, 2013 @ 1:35 pm

Well Tag #: HO-95-0226
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Sediment Filter, Reverse Osmosis (R/O)

Radium OK
6/12/13 HS

PARAMETER	METHOD	MDL (pCi/L)	MCL* (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Gross Alpha (Short-Term)	EPA 900.0	1.3	15	2.3 ± 1.1	Acceptable
Gross Beta (Short-Term)	EPA 900.0	2.1	50	3.8 ± 1.4	Acceptable
Gross Alpha (Long-Term)	EPA 900.0	1.4	15	2.4 ± 1.3	Acceptable
Gross Beta (Long-Term)	EPA 900.0	1.8	50	3.6 ± 1.6	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
Katherine C. Higgs
Manager – Drinking Water Testing

MDL: Method Detection Limit
MCL: Maximum Contamination Level, an enforceable level established by the EPA
Analyzed by Lab # 278

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:

Amy Ferrer
Compass Homes
6206 Heather Glen Way
Clarksville, Maryland 21029

S/O Number: 89194-2

Report Date: June 10, 2013

Treated Sample

Property Sampled: 6218 Heather Glen Way, 21029
Sample Location: Kitchen R/O Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B12002404
Sampler ID #: 5745KC
Samples Iced: Yes

County: Howard
Subdivision: Preserve at Clarksville
Map: 34
Parcel: 77
Lot#: 4

Date/Time Collected in Field: May 22, 2013 @ 12:04 pm
Date/Time Received in Lab: May 22, 2013 @ 1:35 pm

Well Tag #: HO-95-0226
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Sediment Filter, Reverse Osmosis (R/O)

PARAMETER	METHOD	MDL (pCi/L)	MCL* (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Radium 226	EPA 903.1	0.1	5 pCi/L Combined	0.3 ± 0.1	Acceptable
Radium 228	EPA Ra-05	0.8		<0.8 ± 0.5	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
Katherine C. Higgs
Manager – Drinking Water Testing

MDL: Method Detection Limit
MCL: Maximum Contamination Level, an enforceable level established by the EPA
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5 North Park Drive
Hunt Valley, MD 21030 USA
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Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

Amy Ferrer
Compass Homes
6206 Heather Glen Way
Clarksville, Maryland 21029

S/O Number: 89194-1

Report Date: June 10, 2013

Raw Sample

Property Sampled: 6218 Heather Glen Way, 21029
Sample Location: Pressure Tank Tap
Residual Chlorine: ~~<0.1 mg/L~~

Building Permit #: B12002404
Sampler ID #: 5745KC
Samples Iced: Yes

County: Howard
Map: 34
Subdivision: Preserve at Clarksville
Parcel: 77
Lot#: 4

Date/Time Collected in Field: May 22, 2013 @ 12:13 pm
Date/Time Received in Lab: May 22, 2013 @ 1:35 pm

Well Tag #: HO-95-0226
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Sediment Filter, Reverse Osmosis (R/O)

Bacteria FAIL
Nitrates FAIL
Rest, OK
6/12/13 HS

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	**17.4 mg/L as N**	**FAIL**
Turbidity	EPA 180.1	10 NTU	7.5 NTU	Pass ✓
pH	EPA 150.1	*6.5-8.5 Units	5.9 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.

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:

Amy Ferrer
Compass Homes
6206 Heather Glen Way
Clarksville, Maryland 21029

S/O Number: 89194-1

Report Date: June 10, 2013

Raw Sample

Property Sampled: 6218 Heather Glen Way, 21029
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B12002404
Sampler ID #: 5745KC
Samples Iced: Yes

County: Howard
Subdivision: Preserve at Clarksville
Map: 34
Parcel: 77
Lot#: 4

Date/Time Collected in Field: May 22, 2013 @ 12:13 pm
Date/Time Received in Lab: May 22, 2013 @ 1:35 pm

Well Tag #: HO-95-0226
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Sediment Filter, Reverse Osmosis (R/O)

PARAMETER	METHOD	MDL (pCi/L)	MCL* (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Gross Alpha (Short-Term)	EPA 900.0	1.7	15	6.3 ± 1.7	**MODERATE**
Gross Beta (Short-Term)	EPA 900.0	2.1	50	8.7 ± 1.6	Acceptable
Gross Alpha (Long-Term)	EPA 900.0	0.9	15	1.8 ± 0.9	Acceptable
Gross Beta (Long-Term)	EPA 900.0	1.7	50	3.9 ± 1.2	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
Katherine C. Higgs
Manager – Drinking Water Testing

MDL: Method Detection Limit
MCL: Maximum Contamination Level, an enforceable level established by the EPA
Analyzed by Lab # 278

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Hunt Valley, MD 21030 USA
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Website: www.tracelabs.com / Email: info@tracelabs.com

Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

Compass Homes
Attn: Amy Ferrer
6206 Heather Glen Way
Clarksville, Maryland 21029

S/O Number: 89280

Report Date: May 29, 2013

Bacteria Retest #1

Property Sampled: 6218 ~~Heather~~ Glen Way, 21029
Sample Location: Pressure Tank
Residual Chlorine: ~~<0.1 mg/L~~

Building Permit #: 12002404
Sampler ID #: 7483AM
Samples Iced: Yes

County: Howard
Map: 34
Subdivision: Preserve at Clarksville
Parcel: 77
Lot #: 4

Date/Time Collected in Field: May 28, 2013 @ 10:45 am
Date/Time Received in Lab: May 28, 2013 @ 12:14 pm

Well Tag #: HO-95-0226
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Sediment Filter, Reverse Osmosis (R/O)

Bacteria OK
6/12/13 HS

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.

Katherine C. Higgs

Katherine C. Higgs
Manager – Drinking Water Testing

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

Howard County Health Department

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

REQUEST FOR PERMANENT DEVIATION TO NITRATE STANDARDS FOR CERTIFICATE OF POTABILITY

DATE: 6/11/13 WELL PERMIT #: HO - 95 - 0226

PROPERTY OWNER: Neel + Sharada Vibhakar

SUBDIVISION & LOT #: Preserve at Clarksville Lot #4

PROPERTY ADDRESS: 6218 Heather Glen Way
Clarksville, MD 21029

CONDITIONS:

1) The well installed under permit # HO - 95 - 0226 has been documented to have a nitrate level of 17.4 ppm, which exceeds the MCL of 10 ppm.
2) After installation and operation of a nitrate filtration system, water samples collected on 5/22/13 indicated that the nitrate contamination has been reduced to <1.0 ppm at the primary drinking tap.

I hereby request that a Permanent Deviation to COMAR 26.04.04.09 be granted for the well installed under permit HO -95 - 0226 I am fully aware of the conditions under which this deviation will be granted, and of my responsibilities as the well owner, which include advising any future buyer/ tenant of the installation, condition and maintenance responsibilities of the nitrate removal device.

Prospective Owner's Original Signature(s) [Person(s) that intend to live in the dwelling]

Sharada Vibhakar

Prospective Owner's Day Time Phone Number(s)

410-916-4255, 410-987-4245, 443-517-3335

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Hunt Valley, MD 21030 USA
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Website: www.tracelabs.com / Email: info@tracelabs.com

Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

Amy Ferrer
Compass Homes
6206 Heather Glen Way
Clarksville, Maryland 21029

S/O Number: 89194-2

Report Date: June 10, 2013

Treated Sample

Property Sampled: 6218 Heather Glen Way, 21029
Sample Location: Kitchen R/O Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B12002404
Sampler ID #: 5745KC
Samples Iced: Yes

County: Howard
Subdivision: Preserve at Clarksville
Map: 34
Parcel: 77
Lot#: 4

Date/Time Collected in Field: May 22, 2013 @ 12:04 pm
Date/Time Received in Lab: May 22, 2013 @ 1:35 pm

Well Tag #: HO-95-0226
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Sediment Filter, Reverse Osmosis (R/O)

Nitrate OK
6/12/13
1:48

PARAMETER	METHOD	MCL	RESULT	PASS/FAIL
Nitrate	SM 4500D	10 mg/L as N	<1.0 mg/L as N	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.

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

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

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

March 7, 2006

D.R. Horton
1370 Piccard Drive
Rockville, MD 20850

RE: Turnbury Grove Subdivision, Lot ~~3~~ 4 7/18/12 rcB

Well Tag: HO-95-0226

To Whom It May Concern:

A sample was taken from a yield test on February 15, 2006 and samples submitted to GPL Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. Gross Alpha and Gross Beta measure the total alpha and beta activity in a water supply. In turn, this can provide information regarding naturally occurring radiation (i.e. Radionuclides) that may exist in your water supply.

Results from this screening revealed a **Gross Alpha** of **5.0 ± 0.8 picocuries/liter (pCi/L)**; while the **Gross Beta level** was **4.5 ± 0.7 pCi/L**. The **Gross Alpha** result was below the **maximum contaminant level (MCL)** of **15 pCi/L,** while the **Gross Beta** was below the **MCL** of **50 pCi/L**.

A copy of the test results is enclosed for your information. Please call this office at **410-313-1773** number if you have any further questions or concerns.

Sincerely,

Bert Nixon

Bert Nixon, Assistant Director
Bureau of Environmental Health

Eric Dougherty, MDE, Water Mgmt., Groundwater
Well & Septic Property File

Analytical Summary Report

Client Name:	Howard County Health Department	Client Sample ID:	(HO-GC)HO-95-0226
Sample Date/Time:	2/15/2006	Lab Sample ID:	602058-011-011-1/1
Receipt Date/Time:	2/15/2006	Sample Matrix:	WATER
Prepared Date/Time:		Analytical Method:	ALPHA/BETA BY METHOD 900.0

Isotope	Result	Uncertainty 1σ	MDA	Q
Gross Alpha	5.0469 pCi/L	± 0.7739 pCi/L	1.4405 pCi/L	
Gross Beta	4.4528 pCi/L	± 0.6815 pCi/L	2.1589 pCi/L	

Howard County
Health Department

Bureau of Environmental Health
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TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

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

March 9, 2006

D. R. Horton, Inc.
1370 Picardi Drive
Rockville, Maryland 20850

RE: Water Sample Results
(4) Lot~~s~~ Turnbury Grove
HO – 95 – 0226

To Whom it May Concern:

During the recent "yield test" of the well serving the future Lot 3 (located on Heather Glen Way), a sample was collected for volatile organic compounds (VOC's) on February 15, 2006. This testing was performed to establish a baseline evaluation of the well water supply due to known VOC ground water contamination concerns previously documented (during the 1990's and earlier) in properties nearby this development.

Results from this sampling were free of all tested VOC's to the limit of detection for the test method employed. With respect to these parameters, the well water supply is currently safe for all uses.

A copy of the test report is enclosed for your records.

If questions should arise, you may contact Stuart Oster of the Well & Septic Program at (410) 313 – 1771 or me at (410) 313 – 1773.

Sincerely,

Bert Nixon, Assistant Director
Bureau of Environmental Health

BN/bn
Enclosure
cc: Lot 3 Trunbury Grove Property File

Send Report To:

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
TRACE ORGANICS SECTION
201 W. Preston Street, Baltimore, Maryland 21201
J. Mehsen Joseph, Ph.D., Director

Lab No. Date Received

961138 FEB 15

Do not write above this line

LABORATORY ANALYSIS REQUEST

Bottle No: HCHGWL3-1 HCHGWL3-2 **Plant/Site Name:** Heather Glen Way Lot 84 **County:** Howard

Sample Source: Heather Glen Way (Street) Clarksville (Town or City) **Location:** yield test - hose (well no., lab sink, sample tap, etc.)

Sampler ID: 1 1 9 2 KC **PWSID:** ☐☐☐☐☐☐☐ **Plant ID:** ☐☐

Collector: Kathleen Cook 410 313 2774 (include telephone number)

Date Collected: 2 / 15 /2006 **Time Collected:** 9:00 a.m. _____ p.m.

Field Preserved: ☒ Yes ☐ No **Preservative Used:** ☒ 1:1 HCl ~~+ Ascorbic acid~~ ☐ Na_2SO_4 ☐ 6 mg NH_4Cl

Sample Type:

☐ Drinking Water	☐ Landfill	☒ Source (Raw Water)	☒ Liquid
☐ Community	☐ Stream	☐ Distribution (Treated)	☐ Solid
☐ Non-Community	☐ Sediment	☐ Water Treatment Plant POE	☐ Other _____
☒ Private			

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

Test Requested: ☒ Trihalomethanes ☒ Volatiles ☒ Semi-volatiles ☐ Haloacetic Acids

FIELD DATA : pH _____ Free Cl _____ Total Cl _____

Field Blank Bottle No.: HCHGWL3FB

Trip Blank Bottle No.: HCHGWL3TB *

Remarks: _____

Section Chief: [illegible] **Date Reported:** 3 / 2 / 06

•Phone: (410) 767 - 5643 •Fax: (410) 333 - 5237

Form Revised 12/00
DHMH 4362

SUBMITTER'S COPY

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Chemistry
TRACE ORGANICS SECTION
201 W. Preston Street, Baltimore, MD 21201
John M. DeBoy, Dr. P.H., Director

Certificate of Analysis - Volatiles

Sample Name: 961138 TB
Date Analyzed: 02/28/06
Method: EPA 524.2

Contaminants	DL*	MCL*	Result*
TRIHALOMETHANES			
Bromodichloromethane	0.5	na	ND
Bromoform	0.5	na	ND
Chloroform	0.5	na	ND
Dibromochloromethane	0.5	na	ND
TOTAL THMs	-	80	-
REGULATED			
Benzene	0.5	5	ND
Carbon Tetrachloride	0.5	5	ND
Chlorobenzene	0.5	100	ND
1,4-Dichlorobenzene	0.5	75	ND
1,1-Dichloroethene	0.5	7	ND
1,2-Dichloroethane	0.5	5	ND
1,2-Dichlorobenzene	0.5	600	ND
1,2-Dichloropropane	0.5	5	ND
cis-1,2-Dichloroethene	0.5	70	ND
trans-1,2-Dichloroethene	0.5	100	ND
Ethylbenzene	0.5	700	ND
Styrene	0.5	100	ND
Tetrachloroethene	0.5	5	ND
Trichloroethene	0.5	5	ND
1,1,1-Trichloroethane	0.5	200	ND
Toluene	0.5	1000	ND
Vinyl Chloride	0.5	2	ND
o-Xylene	0.5	na	ND
m+p-Xylene	1.0	na	ND
Total Xylenes	1.5	10000	ND
Methylene Chloride	0.5	5	ND
1,1,2-Trichloroethane	0.5	5	ND
1,2,4-Trichlorobenzene	0.5	70	ND

Contaminants	DL*	MCL*	Result*
UNREGULATED			
Dichlorodifluoromethane	0.5	na	ND
Chloromethane	0.5	na	ND
Bromomethane	0.5	na	ND
Chloroethane	0.5	na	ND
Trichlorofluoromethane	0.5	na	ND
1,1-Dichloroethane	0.5	na	ND
1,3-Dichlorobenzene	0.5	na	ND
Dibromomethane	0.5	na	ND
1,1-Dichloropropene	0.5	na	ND
trans-1,3-Dichloropropene	0.5	na	ND
1,1,2,2-Tetrachloroethane	0.5	na	ND
1,3-Dichloropropane	0.5	na	ND
2,2-Dichloropropane	0.5	na	ND
cis-1,3-Dichloropropene	0.5	na	ND
2-Chlorotoluene	0.5	na	ND
4-Chlorotoluene	0.5	na	ND
Bromobenzene	0.5	na	ND
1,3,5-Trimethylbenzene	0.5	na	ND
1,2,4-Trimethylbenzene	0.5	na	ND
1,2,3-Trichlorobenzene	0.5	na	ND
n-Propylbenzene	0.5	na	ND
n-Butylbenzene	0.5	na	ND
Naphthalene	0.5	na	ND
Hexachlorobutadiene	0.5	na	ND
Isopropylbenzene	0.5	na	ND
1,2,3-Trichloropropane	0.5	na	ND
1,2-Dibromo-3-Chloropropane	0.5	na	ND
p-Isopropyltoluene	0.5	na	ND
tert-Butylbenzene	0.5	na	ND
sec-Butylbenzene	0.5	na	ND
Bromochloromethane	0.5	na	ND
1,1,1,2-Tetrachloroethane	0.5	na	ND
1,2-Dibromoethane	0.5	na	ND
Methyl-tert-Butyl Ether (MTBE)	0.5	na	ND
Ethyl-tert-Butyl Ether (ETBE)	0.5	na	ND
tert-Amyl Methyl Ether (TAME)	0.5	na	ND

*All results are in parts per billion (ppb)
ND = Less than the detection limit
na = not applicable
e = estimated value

Section Chief: Deborah Miller Date Approved: 3/2/06

Phone: (410) 767-5896 ***Fax: (410) 225-9318***

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Chemistry
TRACE ORGANICS SECTION
201 W. Preston Street, Baltimore, MD 21201
John M. DeBoy, Dr. P.H., Director

Certificate of Analysis - Volatiles

Sample Name: 961138 HCHGWL3-1 **Method:** EPA 524.2
Date Analyzed: 02/28/06

Contaminants	DL*	MCL*	Result*
TRIHALOMETHANES			
Bromodichloromethane	0.5	na	ND
Bromoform	0.5	na	ND
Chloroform	0.5	na	ND
Dibromochloromethane	0.5	na	ND
TOTAL THMs	-	80	-
REGULATED			
Benzene	0.5	5	ND
Carbon Tetrachloride	0.5	5	ND
Chlorobenzene	0.5	100	ND
1,4-Dichlorobenzene	0.5	75	ND
1,1-Dichloroethene	0.5	7	ND
1,2-Dichloroethane	0.5	5	ND
1,2-Dichlorobenzene	0.5	600	ND
1,2-Dichloropropane	0.5	5	ND
cis-1,2-Dichloroethene	0.5	70	ND
trans-1,2-Dichloroethene	0.5	100	ND
Ethylbenzene	0.5	700	ND
Styrene	0.5	100	ND
Tetrachloroethene	0.5	5	ND
Trichloroethene	0.5	5	ND
1,1,1-Trichloroethane	0.5	200	ND
Toluene	0.5	1000	ND
Vinyl Chloride	0.5	2	ND
o-Xylene	0.5	na	ND
m+p-Xylene	1.0	na	ND
Total Xylenes	1.5	10000	ND
Methylene Chloride	0.5	5	ND
1,1,2-Trichloroethane	0.5	5	ND
1,2,4-Trichlorobenzene	0.5	70	ND

Contaminants	DL*	MCL*	Result*
UNREGULATED			
Dichlorodifluoromethane	0.5	na	ND
Chloromethane	0.5	na	ND
Bromomethane	0.5	na	ND
Chloroethane	0.5	na	ND
Trichlorofluoromethane	0.5	na	ND
1,1-Dichloroethane	0.5	na	ND
1,3-Dichlorobenzene	0.5	na	ND
Dibromomethane	0.5	na	ND
1,1-Dichloropropene	0.5	na	ND
trans-1,3-Dichloropropene	0.5	na	ND
1,1,2,2-Tetrachloroethane	0.5	na	ND
1,3-Dichloropropane	0.5	na	ND
2,2-Dichloropropane	0.5	na	ND
cis-1,3-Dichloropropene	0.5	na	ND
2-Chlorotoluene	0.5	na	ND
4-Chlorotoluene	0.5	na	ND
Bromobenzene	0.5	na	ND
1,3,5-Trimethylbenzene	0.5	na	ND
1,2,4-Trimethylbenzene	0.5	na	ND
1,2,3-Trichlorobenzene	0.5	na	ND
n-Propylbenzene	0.5	na	ND
n-Butylbenzene	0.5	na	ND
Naphthalene	0.5	na	ND
Hexachlorobutadiene	0.5	na	ND
Isopropylbenzene	0.5	na	ND
1,2,3-Trichloropropane	0.5	na	ND
1,2-Dibromo-3-Chloropropane	0.5	na	ND
p-Isopropyltoluene	0.5	na	ND
tert-Butylbenzene	0.5	na	ND
sec-Butylbenzene	0.5	na	ND
Bromochloromethane	0.5	na	ND
1,1,1,2-Tetrachloroethane	0.5	na	ND
1,2-Dibromoethane	0.5	na	ND
Methyl-tert-Butyl Ether (MTBE)	0.5	na	ND
Ethyl-tert-Butyl Ether (ETBE)	0.5	na	ND
tert-Amyl Methyl Ether (TAME)	0.5	na	ND

*All results are in parts per billion (ppb)
ND = Less than the detection limit
na = not applicable
e = estimated value

Section Chief: Deborah Miller-Duck Date Approved: 3/2/06

Phone: (410) 767-5896 Fax: (410) 225-9318

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Chemistry
TRACE ORGANICS SECTION
201 W. Preston Street, Baltimore, MD 21201
John M. DeBoy, Dr. P.H., Director

Certificate of Analysis - Volatiles

Sample Name: 961138 FB
Date Analyzed: 02/28/06
Method: EPA 524.2

Contaminants	DL*	MCL*	Result*
TRIHALOMETHANES			
Bromodichloromethane	0.5	na	ND
Bromoform	0.5	na	ND
Chloroform	0.5	na	ND
Dibromochloromethane	0.5	na	ND
TOTAL THMs	-	80	-
REGULATED			
Benzene	0.5	5	ND
Carbon Tetrachloride	0.5	5	ND
Chlorobenzene	0.5	100	ND
1,4-Dichlorobenzene	0.5	75	ND
1,1-Dichloroethene	0.5	7	ND
1,2-Dichloroethane	0.5	5	ND
1,2-Dichlorobenzene	0.5	600	ND
1,2-Dichloropropane	0.5	5	ND
cis-1,2-Dichloroethene	0.5	70	ND
trans-1,2-Dichloroethene	0.5	100	ND
Ethylbenzene	0.5	700	ND
Styrene	0.5	100	ND
Tetrachloroethene	0.5	5	ND
Trichloroethene	0.5	5	ND
1,1,1-Trichloroethane	0.5	200	ND
Toluene	0.5	1000	ND
Vinyl Chloride	0.5	2	ND
o-Xylene	0.5	na	ND
m+p-Xylene	1.0	na	ND
Total Xylenes	1.5	10000	ND
Methylene Chloride	0.5	5	ND
1,1,2-Trichloroethane	0.5	5	ND
1,2,4-Trichlorobenzene	0.5	70	ND

Contaminants	DL*	MCL*	Result*
UNREGULATED			
Dichlorodifluoromethane	0.5	na	ND
Chloromethane	0.5	na	ND
Bromomethane	0.5	na	ND
Chloroethane	0.5	na	ND
Trichlorofluoromethane	0.5	na	ND
1,1-Dichloroethane	0.5	na	ND
1,3-Dichlorobenzene	0.5	na	ND
Dibromomethane	0.5	na	ND
1,1-Dichloropropene	0.5	na	ND
trans-1,3-Dichloropropene	0.5	na	ND
1,1,2,2-Tetrachloroethane	0.5	na	ND
1,3-Dichloropropane	0.5	na	ND
2,2-Dichloropropane	0.5	na	ND
cis-1,3-Dichloropropene	0.5	na	ND
2-Chlorotoluene	0.5	na	ND
4-Chlorotoluene	0.5	na	ND
Bromobenzene	0.5	na	ND
1,3,5-Trimethylbenzene	0.5	na	ND
1,2,4-Trimethylbenzene	0.5	na	ND
1,2,3-Trichlorobenzene	0.5	na	ND
n-Propylbenzene	0.5	na	ND
n-Butylbenzene	0.5	na	ND
Naphthalene	0.5	na	ND
Hexachlorobutadiene	0.5	na	ND
Isopropylbenzene	0.5	na	ND
1,2,3-Trichloropropane	0.5	na	ND
1,2-Dibromo-3-Chloropropane	0.5	na	ND
p-Isopropyltoluene	0.5	na	ND
tert-Butylbenzene	0.5	na	ND
sec-Butylbenzene	0.5	na	ND
Bromochloromethane	0.5	na	ND
1,1,1,2-Tetrachloroethane	0.5	na	ND
1,2-Dibromoethane	0.5	na	ND
Methyl-tert-Butyl Ether (MTBE)	0.5	na	ND
Ethyl-tert-Butyl Ether (ETBE)	0.5	na	ND
tert-Amyl Methyl Ether (TAME)	0.5	na	ND

*All results are in parts per billion (ppb)
ND = Less than the detection limit
na = not applicable
e = estimated value

Section Chief: Deborah Miller Dunk Date Approved: 3/2/06

Phone: (410) 767-5896 ***Fax: (410) 225-9318***

Howard County
Health Department

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

February 8, 2006

MEMORANDUM

TO: Joseph L. Mayne Well Drilling
5512 Ridge Road
Mt. Airy, Maryland 21771
Faxed to 301-829-5384

FROM: Stuart Oster, R.S.
Groundwater Management Section Supervisor
Well and Septic Program

RE: File Number: P-05-013
Title: Turnbery Grove

The Health Department requires that all the wells in this subdivision be tested for radium and V.O.C.'s (Volatile Organic Contaminants). The optimum time to sample would be when the yield test is being completed. When contacting this office about the yield test, please mention that these water test need to be collected. Also, attached is a letter dated November 21, 2005 from Bert Nixon further explaining the radium testing.

Cc: D. R. Horton, Inc.
File

HOWARD COUNTY HEALTH DEPARTMENT

WS 23944

DATE 1/20/2006

Received From D.R HORTON, INC PHONE # 301 670 6144

301 Commerce St, 5th Floor, Fort Worth TX 76102

For Well Permits

~~33 lots Turnberry Grove~~

☐ CASH

☒ CHECK

NO. 102414

Five Thousand two hundred eighty and 00/100 Dollars

$ 5280 00

Received By Mary A Bujja