

C1 1168

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

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

COUNTY NUMBER A516063

ST/CO USE ONLY DATE Received

DATE WELL COMPLETED

Depth of Well 380'

PERMIT NO. FROM "PERMIT TO DRILL WELL" H6-95-0244

OWNER: Horton R. D. STREET OR RFD: Heather Glen Way TOWN: Clarksville Md SUBDIVISION: Turnbury Grove SECTION: LOT: 32

WELL LOG

Not required for driven wells

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

Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Rows: Sand (0-62), Gray Mica Rock (62-380).

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) (N) TYPE OF GROUTING MATERIAL (C) (B) CEMENT BENTONITE CLAY NO. OF BAGS 15 NO. OF POUNDS 140 GALLONS OF WATER 90 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 60 ft.

CASING RECORD

MAIN CASING TYPE (S) (T) (C) (O) (P) (L) (O) (T) Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot) 6 66

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

SCREEN RECORD

screen type or open hole (S) (T) (B) (R) (H) (O) (P) (L) (O) (T) STEEL BRASS BRONZE PLASTIC OPEN HOLE OTHER

Table with columns: DEPTH (nearest ft.), SLOT SIZE 1, 2, 3, DIAMETER OF SCREEN (NEAREST INCH) 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 TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3

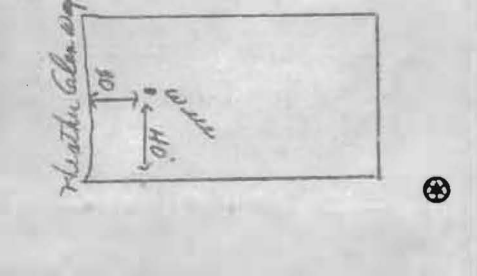
PUMPING TEST

HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 4 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 32 ft. WHEN PUMPING 264 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 (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

LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



NUMBER OF UNSUCCESSFUL WELLS: 2 WELL HYDROFRACTURED (Y) (N) CIRCLE APPROPRIATE LETTER A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 28.04.04 "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. 1 M SD 024 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. 1 D SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

B 1 1474

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 523944 please type

STATE PERMIT NUMBER

10-95-0244 fill in this form completely

Date Received (APA)

01 20 06

OWNER INFORMATION

8 MM DD YY 13
15 Last Name Owner First Name 34
1370 Piccard Drive
55 Street or RFD
Rockville Md 20850
57 Town 70 State 72 Zip 76

B 3

LOCATION OF WELL

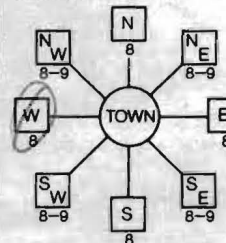
8 COUNTY Howard 21
23 SUBDIVISION Sunnyday Grove 42
SECTION 44 46 LOT 30 48 50
52 NEAREST TOWN Clarksville 71
MILES FROM TOWN (enter 0 if in town) 1/2 MI 73 76 77 78

DRILLER INFORMATION

Driller's Name Joseph P. Mayne M S D 024 76 License No. 81
Firm Name Joseph P. Mayne Well Drilling
Address 5512 Ridge Rd Mt. Airy Md 21771
Signature Joseph Mayne 1-6-06 Date

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



11 NEAR WHAT ROAD Heather Glen Way 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH N
WEST W 32 E
SOUTH S
34 25 37 DISTANCE FROM ROAD FT
ENTER FT OR MI 38 39
TAX MAP: 34 BLK: 11 PARCEL 77

B 2

WELL INFORMATION

APPROX. PUMPING RATE 5 GAL. PER MIN. 8 12
AVERAGE DAILY QUANTITY NEEDED 500 GAL. PER DAY 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

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

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard AS16063
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S
DATE ISSUED 2/6/06
CO SIGNATURE EXP. DATE 2/6/07
NORTH GRID 50 000 55 EAST GRID 57 814 000 63

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 NEAREST INCH

METHOD OF DRILLING (circle one)

- BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
CABLE REVERSE-ROTary DRIVE-POINT
other

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

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

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41

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

APPROX. PERMIT NUMBER 10 2006 G 003
PERMIT No. 10-95-0244

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

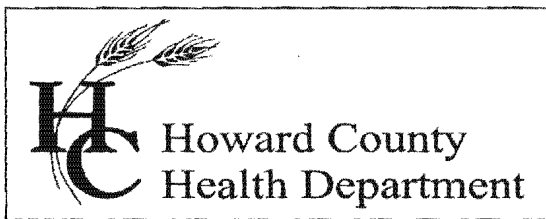
E 814 4
N 494 9

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. At field test, need Radon & VOC samples



Bureau of Environmental Health

8930 Stanford Blvd., Columbia, MD 21045
Main: 410-313-1771 | 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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date –January 8, 2015

July 8, 2014

Homeowner
6211 Heather Glen Way
Clarksville, Maryland 21029

**RE: Turnbury Grove, Lot # 32
6211 Heather Glen Way
Building Permit: B13001799
Well Permit: HO-95-0244**

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 7/7/2014. Final approval of the well line connection to the dwelling was granted on 3/26/2014. The well construction was completed on 2/28/2006. Water samples were collected on 6/13/2014.

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-95-0244. **Further testing must occur before the FCOP can be issued. The testing will be required to confirm the accuracy of the Gross Alfa and Gross Beta, short term and long term.** 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,

A handwritten signature in cursive script that reads "Dana Bernard".

Dana Bernard, REHS/L.E.H.S.
Environmental Sanitarian
Well & Septic Program

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

**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: EASTERDAY WELL & PUMP Telephone #: _____
 Address: 9265 BROWN CHURCH RD
MT. AIRY MD 21771
301-831-5170

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer **X**
 License # and name of individual responsible for the field installation:
 Name (Print): Jerry A. Miller, III License# WLP0074

*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: Compass Homes Telephone #: _____
 Subdivision: _____ Lot #: 3/2 Well Tag #: HO-95-0244
 Site Address: 6211 Heather Glen Way
Clarksville, MD 21039

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Coats</u>	Make: <u>Martred</u>	Two piece watertight cap: _____
Model #: <u>76607402</u>	Model #: <u>B-DX</u>	Screened, vented well cap: <input checked="" type="checkbox"/>
Pump Capacity <u>10</u> GPM	Depth: <u>3 1/2"</u> (36" min)	Cap secured to casing: <u>4</u>
Well Yield: <u>10</u> GPM	NSF/WSC approved: _____	Conduit min 18" B.G.: <u>4</u>
Depth of well encountered at time of pump installation: <u>380</u> (feet)	Conduit secured to well cap: <input checked="" type="checkbox"/>	

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

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>PE</u>	PVC sleeve to undisturbed soil at wall penetration: <u>YES</u>
PSI: <u>500</u> (160 psi min)	Length of sleeve (5' minimum from foundation): <u>5ft</u>
Depth of supply line: <u>3 1/2</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: Jerry A. Miller, III date: 3-10-14

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

Date Insp. Requested: 3/26/14 Date Insp. Approved: 3/26/14 Inspector: AG
 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

Filed: 3/10/14

Approved

Send Report To:

Howard County Health Department
Bureau of Environmental Health
778 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

961201 FEB 28 2006

Do not write above this line

LABORATORY ANALYSIS REQUEST

Bottle No: H06CTG30228(A)&(B) Plant/Site Name: Turnberry Grove Lot 32 County: Howard
Sample Source: Hesther Glen Way Street Town or City: Clarksville Location: H0-95-0244
(well no., lab sink, sample tap, etc.)

Sampler ID: 2774GC PWSID: Plant ID:

Collector: G. Creighton 410 313 2775
(include telephone number)

Date Collected: 2/28/2006 Time Collected: 10 a.m. p.m.

Field Preserved: Yes No Preservative Used: 1:1 HCl+Ascorbic acid Na₂SO₄ 6 mg NH₄Cl

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: 6.8 0.0 0.0
pH Free Cl Total Cl

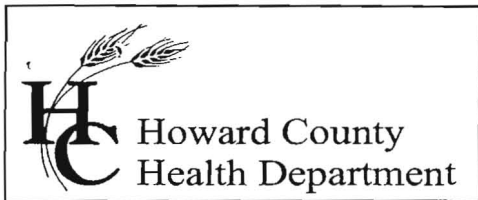
Field Blank Bottle No.: H06CTG30228 FB(A)&(B)
Trip Blank Bottle No.: H06CTG30228 TB(A)&(B)

Remarks: Full Drinking Water scan incl. MTBE

Section Chief: Chadman J. Thurman Date Reported: 3/13/06

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

Form Revised 12/00
DHMH 4362



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

July 12, 2006

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

RE: Water Sample Results
37 Lot 31 Turnbury Grove
HO - 95 - 0244

To Whom this May Concern:

During the recent "yield test" of the well serving the future Lot 30 (located on Heather Glen Way), a sample was collected for volatile organic compounds (VOC's) on February 28, 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. Similar findings were noted for the corresponding Field and Trip Blank samples. With respect to these parameters, the future well water supply is **currently** safe for all uses.

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

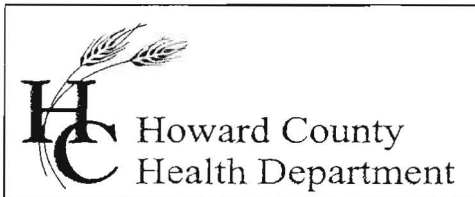
If questions should arise, you may contact Stuart Oster of the Well & Septic Program at (410) 313 - 1771 or me at (410) 313 - 1773.

Sincerely,


Bert Nixon, Assistant Director
Bureau of Environmental Health

Enclosure

cc: Lot 30 Turnbury Grove Property File



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 14, 2006

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

RE: Turnbury Grove Subdivision, Lot 3~~8~~2

Well Tag: HO-95-0244

To Whom It May Concern:

A sample was collected from a yield test on February 28, 2006 and submitted to Florida Radiochemistry Services 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. 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 3.1 ± 1.2 picocuries/liter (pCi/L); while the **Gross Beta level** was 4.7 ± 1.3 pCi/L. Both the **Gross Alpha** and **Gross Beta results** were both below their respective **maximum contaminant levels (MCL's)** of 15 pCi/L and 50 pCi/L respectively.

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

Sincerely,

Bert Nixon, Deputy Director
Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater
✓Well & Septic 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
RADIATION LABORATORY

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

LABORATORY ANALYSIS REQUEST

Ho ~~6~~CTG 30228R

Sample Bottle No. A: _____ No. B: _____ Field Blank Bottle No. 1: _____ No. 2: _____

Plant/Site Name: Turnberry Grove Heather Glen Way County: HOWARD

Sample Source: Turnberry Grove Lot 3B Location: H095 0244
(well no., lab sink, sample tap, etc.)

County: 1 3 Plant No.

Collector: G. Craighton Telephone No.: Rosa 410 313 1773

Date Collected: 2128106 Time Collected: 10 a.m. _____ p.m.

Nitric Acid Preserved: Yes No Iced: Yes No

Submitters Code: Federal Project: S Field Data: 6.8 N/A
pH Chlorine

Remarks: _____

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	0603015-03	3.1 ± 1.2	3/6/2006
✓	Gross Beta	4100		4.7 ± 1.3	
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank #1	4004			
	Field Blank #2	4004			
	Tritium				
	Ra - 226	4020			
	Ra - 228	4030			
	Total Uranium	4006			

Date Received: _____ / _____ / _____

Section Chief: _____



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:

Compass Homes
 Attn: Elizabeth Jackson
 P.O. Box 299
 Severna Park, Maryland 21146

S/O Number: 93564

Report Date: July 7, 2014

Retest #1

Property Sampled: 6211 Heather Glen Way, 21029
Sample Location: R/O Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B13001799
Sampler ID #: 7483AM
Samples Iced: Yes

County: Howard **Subdivision:** Preserve at Clarksville **Lot#:** 32

Date/Time Collected in Field: June 24, 2014 3:20 pm
Date/Time Received in Lab: June 24, 2014 5:43 pm

Well Tag #: HO-95-0244
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Reverse Osmosis (R/O)

PARAMETER	METHOD	MCL (pCi/L)	RESULT (pCi/L)	COMMENT
Gross Beta (Short-Term)	EPA 900.0	50	19.2 ± 1.3	Pass
Gross Beta (Long-Term)	EPA 900.0	50	7.4 ± 1.3	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.

Not

Further testing must occur before FCOP

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

To confirm accuracy of Gross Alpha + Beta Short and Long Term.

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:

Compass Homes
 Attn: Elizabeth Jackson
 P.O. Box 299
 Severna Park, Maryland 21146

S/O Number: 93328-1

Report Date: June 20, 2014

Raw Sample

Property Sampled: 6211 Heather Glen Way, 21029
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B13001799
Sampler ID #: 7483AM
Samples Iced: Yes

County: Howard

Subdivision: Preserve at Clarksville

Lot#: 32

Date/Time Collected in Field: June 4, 2014 11:57 am
Date/Time Received in Lab: June 4, 2014 3:04 pm

Well Tag #: HO-95-0244
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: N/A – Raw Sample

PARAMETER	METHOD	MCL (pCi/L)	RESULT (pCi/L)	COMMENT
Gross Alpha (Short-Term)	EPA 900.0	15	2.5 ± 1.4	Pass [+]
Gross Beta (Short-Term)	EPA 900.0	50	4.2 ± 1.5	Pass
Gross Alpha (Long-Term)	EPA 900.0	15	1.7 ± 1.1	Pass [+]
Gross Beta (Long-Term)	EPA 900.0	50	5.0 ± 1.3	Pass

[+] Gross alpha 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.

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

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: 961201 TB Method: EPA 524.2
 Date Analyzed: 03/09/06

<u>Contaminants</u>	<u>DL*</u>	<u>MCL*</u>	<u>Result*</u>	<u>Contaminants</u>	<u>DL*</u>	<u>MCL*</u>	<u>Result*</u>
TRIHALOMETHANES				UNREGULATED			
Bromodichloromethane	0.5	na	ND	Dichlorodifluoromethane	0.5	na	ND
Bromoform	0.5	na	ND	Chloromethane	0.5	na	ND
Chloroform	0.5	na	ND	Bromomethane	0.5	na	ND
Dibromochloromethane	0.5	na	ND	Chloroethane	0.5	na	ND
TOTAL THMs	-	80	-	Trichlorofluoromethane	0.5	na	ND
REGULATED				1,1-Dichloroethane	0.5	na	ND
Benzene	0.5	5	ND	1,3-Dichlorobenzene	0.5	na	ND
Carbon Tetrachloride	0.5	5	ND	Dibromomethane	0.5	na	ND
Chlorobenzene	0.5	100	ND	1,1-Dichloropropene	0.5	na	ND
1,4-Dichlorobenzene	0.5	75	ND	trans-1,3-Dichloropropene	0.5	na	ND
1,1-Dichloroethene	0.5	7	ND	1,1,2,2-Tetrachloroethane	0.5	na	ND
1,2-Dichloroethane	0.5	5	ND	1,3-Dichloropropane	0.5	na	ND
1,2-Dichlorobenzene	0.5	600	ND	2,2-Dichloropropane	0.5	na	ND
1,2-Dichloropropane	0.5	5	ND	cis-1,3-Dichloropropene	0.5	na	ND
cis-1,2-Dichloroethene	0.5	70	ND	2-Chlorotoluene	0.5	na	ND
trans-1,2-Dichloroethene	0.5	100	ND	4-Chlorotoluene	0.5	na	ND
Ethylbenzene	0.5	700	ND	Bromobenzene	0.5	na	ND
Styrene	0.5	100	ND	1,3,5-Trimethylbenzene	0.5	na	ND
Tetrachloroethene	0.5	5	ND	1,2,4-Trimethylbenzene	0.5	na	ND
Trichloroethene	0.5	5	ND	1,2,3-Trichlorobenzene	0.5	na	ND
1,1,1-Trichloroethane	0.5	200	ND	n-Propylbenzene	0.5	na	ND
Toluene	0.5	1000	ND	n-Butylbenzene	0.5	na	ND
Vinyl Chloride	0.5	2	ND	Naphthalene	0.5	na	ND
o-Xylene	0.5	na	ND	Hexachlorobutadiene	0.5	na	ND
m+p-Xylene	1.0	na	ND	Isopropylbenzene	0.5	na	ND
Total Xylenes	1.5	10000	ND	1,2,3-Trichloropropane	0.5	na	ND
Methylene Chloride	0.5	5	ND	1,2-Dibromo-3-Chloropropane	0.5	na	ND
1,1,2-Trichloroethane	0.5	5	ND	p-Isopropyltoluene	0.5	na	ND
1,2,4-Trichlorobenzene	0.5	70	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:

Christina J. Morrison

Date Approved:

3/13/06

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: 961201 HDGCT302285A Method: EPA 524.2
 Date Analyzed: 03/09/06

Contaminants	DL*	MCL*	Result*	Contaminants	DL*	MCL*	Result*
TRIALOMETHANES				UNREGULATED			
Bromodichloromethane	0.5	na	ND	Dichlorodifluoromethane	0.5	na	ND
Bromoform	0.5	na	ND	Chloromethane	0.5	na	ND
Chloroform	0.5	na	ND	Bromomethane	0.5	na	ND
Dibromochloromethane	0.5	na	ND	Chloroethane	0.5	na	ND
TOTAL THMs	-	80	-	Trichlorofluoromethane	0.5	na	ND
REGULATED				1,1-Dichloroethane	0.5	na	ND
Benzene	0.5	5	ND	1,3-Dichlorobenzene	0.5	na	ND
Carbon Tetrachloride	0.5	5	ND	Dibromomethane	0.5	na	ND
Chlorobenzene	0.5	100	ND	1,1-Dichloropropene	0.5	na	ND
1,4-Dichlorobenzene	0.5	75	ND	trans-1,3-Dichloropropene	0.5	na	ND
1,1-Dichloroethane	0.5	7	ND	1,1,2,2-Tetrachloroethane	0.5	na	ND
1,2-Dichloroethane	0.5	5	ND	1,3-Dichloropropane	0.5	na	ND
1,2-Dichlorobenzene	0.5	600	ND	2,2-Dichloropropane	0.5	na	ND
1,2-Dichloropropane	0.5	5	ND	cis-1,3-Dichloropropene	0.5	na	ND
cis-1,2-Dichloroethene	0.5	70	ND	2-Chlorotoluene	0.5	na	ND
trans-1,2-Dichloroethene	0.5	100	ND	4-Chlorotoluene	0.5	na	ND
Ethylbenzene	0.5	700	ND	Bromobenzene	0.5	na	ND
Styrene	0.5	100	ND	1,3,5-Trimethylbenzene	0.5	na	ND
Tetrachloroethene	0.5	5	ND	1,2,4-Trimethylbenzene	0.5	na	ND
Trichloroethene	0.5	5	ND	1,2,3-Trichlorobenzene	0.5	na	ND
1,1,1-Trichloroethane	0.5	200	ND	n-Propylbenzene	0.5	na	ND
Toluene	0.5	1000	ND	n-Butylbenzene	0.5	na	ND
Vinyl Chloride	0.5	2	ND	Naphthalene	0.5	na	ND
o-Xylene	0.5	na	ND	Hexachlorobutadiene	0.5	na	ND
m+p-Xylene	1.0	na	ND	Isopropylbenzene	0.5	na	ND
Total Xylenes	1.5	10000	ND	1,2,3-Trichloropropane	0.5	na	ND
Methylene Chloride	0.5	5	ND	1,2-Dibromo-3-Chloropropane	0.5	na	ND
1,1,2-Trichloroethane	0.5	5	ND	p-Isopropyltoluene	0.5	na	ND
1,2,4-Trichlorobenzene	0.5	70	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: Christopher J. Pinnam

Date Approved: 3/13/06

Phone: (410) 767-5896

Fax: (410) 225-9318



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:

Compass Homes
 Attn: Elizabeth Jackson
 P.O. Box 299
 Severna Park, Maryland 21146

S/O Number: 93328-2

Report Date: June 20, 2014

Treated Sample

Property Sampled: 6211 Heather Glen Way, 21029
 Sample Location: R/O Tap
 Residual Chlorine: <0.1 mg/L

Building Permit #: B13001799
 Sampler ID #: 7483AM
 Samples Iced: Yes

County: Howard Subdivision: Preserve at Clarksville Lot#: 32

Date/Time Collected in Field: June 4, 2014 11:47 am
 Date/Time Received in Lab: June 4, 2014 3:04 pm

Well Tag #: HO-95-0244
 Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Reverse Osmosis (R/O)

*NOT OK
 7-8-14
 installed
 in the
 week.*

PARAMETER	METHOD	MCL (pCi/L)	RESULT (pCi/L)	COMMENT
Gross Alpha (Short-Term)	EPA 900.0	15	<0.7 ± 0.5	Pass [+]
Gross Beta (Short-Term)	EPA 900.0	50	57.7 ± 2.9	FAIL
Gross Alpha (Long-Term)	EPA 900.0	15	1.2 ± 0.9	Pass [+]
Gross Beta (Long-Term)	EPA 900.0	50	51.3 ± 2.5	FAIL

[+] Gross alpha 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.

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



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Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

Compass Homes
 6206 Heather Glen Way
 Clarksville, Maryland 21029

S/O Number: 93452

Report Date: June 16, 2014

Retest #1

Property Sampled: 6211 Heather Glen Way, 21029
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B13001799
Sampler ID #: 2256CL
Samples Iced: Yes

County: Howard

Subdivision: Preserve at Clarksville

Lot #: 32

Date/Time Collected in Field: June 13, 2014 11:42 am

Date/Time Received in Lab: June 13, 2014 12:36 pm

Well Tag #: HO-95-0244

Well Condition: 2-Piece Cap, Satisfactory

7-8-14
OK

Water Treatment/Conditioning: N/A – Raw Sample

PARAMETER	METHOD	MCL	RESULT	COMMENT
Total Coliform	SM 9223B	Absent	Absent	Pass
<i>E. coli</i>	SM 9223B	Absent	Absent	Pass

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



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Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

Compass Homes
 Attn: Elizabeth Jackson
 P.O. Box 299
 Severna Park, Maryland 21146

S/O Number: 93328-1

Report Date: June 20, 2014

Raw Sample

Property Sampled: 6211 Heather Glen Way, 21029
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B13001799
Sampler ID #: 7483AM
Samples Iced: Yes

County: Howard **Subdivision:** Preserve at Clarksville **Lot#:** 32

Date/Time Collected in Field: June 4, 2014 11:57 am
Date/Time Received in Lab: June 4, 2014 3:04 pm

Well Tag #: HO-95-0244
Well Condition: 2-Piece Cap, Satisfactory

*NOT OK
 7-8-14
 [Signature]*

Water Treatment/Conditioning: N/A – Raw Sample

PARAMETER	METHOD	MCL/*SMCL	RESULT	COMMENT
Total Coliform	SM 9223B	Absent	PRESENT	FAIL
<i>E. coli</i>	SM 9223B	Absent	Absent	Pass ✓
Nitrate	SM 4500-NO3D	10 mg/L as N	2.8 mg/L as N	Pass ✓
Turbidity	EPA 180.1	10 NTU	9.4 NTU	Pass ✓
pH (Field)	SM 4500-H ⁺ B	*6.5-8.5 Units	6.5 Units	*** ✓
Sand		Absent	Absent	Pass ✓

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 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.



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CERTIFICATE OF ANALYSIS

Requester:

Compass Homes
 Attn: Elizabeth Jackson
 P.O. Box 299
 Severna Park, Maryland 21146

S/O Number: 93328-2

Report Date: June 20, 2014

Treated Sample

Property Sampled: 6211 Heather Glen Way, 21029
Sample Location: R/O Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B13001799
Sampler ID #: 7483AM
Samples Iced: Yes

County: Howard **Subdivision:** Preserve at Clarksville **Lot#:** 32

Date/Time Collected in Field: June 4, 2014 11:47 am
Date/Time Received in Lab: June 4, 2014 3:04 pm

Well Tag #: HO-95-0244
Well Condition: 2-Piece Cap, Satisfactory

*OK 7-8-14
 PB*

Water Treatment/Conditioning: Reverse Osmosis (R/O)

PARAMETER	METHOD	MCL (pCi/L)	RESULT (pCi/L)	COMMENT
Radium 226	EPA 903.1	5 pCi/L Combined	<0.2 ± 0.1	Pass
Radium 228	EPA Ra-05		<0.9 ± 0.6	Pass

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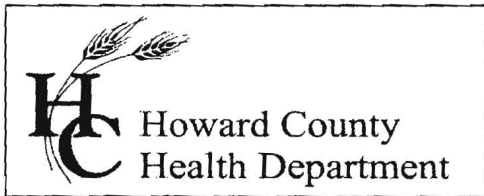
Katherine C. Higgs
 Katherine C. Higgs
 Manager – Drinking Water Testing

3/26/14

6211 Heather Glen Way

Well Line Inspection Checklist

- Date of the Requested Inspection
 - Date of the Actual Inspection
 - Date of Final Approval
 - Did the Contractor complete the top portion of the sheet **PRIOR** to inspection?
1. Is the **Pitless Adaptor** watertight?
 - Does the curve in the adaptor match the curve of the casing at the point of contact (seal/gasket)
 - Is the adaptor Lead-free Brass or Stainless Steel
 - Does the adaptor have a seal/gasket
 - Is the water line securely fastened to the adaptor
 - Is there an undercut beneath the adaptor
 - Was it filled with back fill or gravel?
 - Is the adaptor at least 36 inches below grade
 2. Is the **Well Cap** on?
 - Is it tight and secure
 - Are the bolts snug
 - Does the cap have a vent/screen
 - Does the cap have a place for electrical conduit
 - Is the cap a two piece design (top and bottom)
 3. Is the **Electrical Conduit** installed?
 - Does the conduit extend at least 18 inches below grade
 - Is the conduit glued into the coupling
 - Is the conduit secure in the cap
 4. Is the **Safety Rope** NOT outside of the well cap/casing?
 5. Is the **Well Tag** attached to the casing?
 - Is the tag attached correctly (1/2 inch stainless steel band, or equivalent)
 - Is the tag number correct
 - Is the tag at least 8 inches above final grade
 6. Is the **Water Supply Line** connected?
 - Is it at least 36 inches below grade
 - Is the trench bedded with gravel in necessary
 - Is the water line sleeved adequately into the house
 - Is the sleeve extended to at least 5 feet from any foundation
 - Is the water line into the foundation sidewall or under the foundation floor
 - *If under foundation floor, line is not required to be sleeved at connection point**
 - Is the connection point waterproofed (ex. Tar)
 7. Is the **Casing Properly/Adequately Grouted**?
 - Is there a visible open annular spacing
 - Is there grout at the site of water line service, or up to grounds surface
 - Is there at least 2 inches around the nominal casing size
 - Is the grout continuous and uniform



7178 Columbia Gateway Drive, Columbia MD 21046

(410) 313-2640 Fax (410) 313-2648

TDD (410) 313-2323 Toll Free 1-866-313-6300

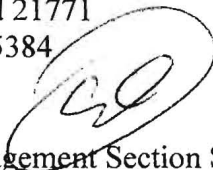
website: www.hchealth.org

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

February 8, 2006

MEMORANDUM

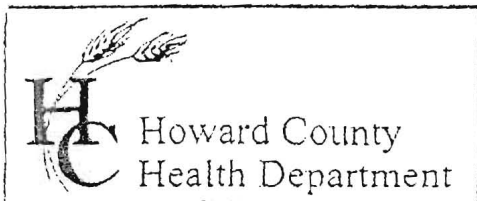
TO: Joseph L. Mayne Well Drilling
5512 Ridge Road
Mt. Airy, Maryland 21771
Faxed to 301-829-5384

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



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
Lurnbury Grove*

e3 Environmental LLC

302-725-0788 www.e3onsite.com

ECOPOD-N Completion Statement

Installation Information

Owners Name		# of Bedrooms / GPD	600
Street	6211 Heather Glenn Way	Repair	<input type="checkbox"/>
City	Clarksville	New Construction	<input checked="" type="checkbox"/>
State	MD		
Zip	21029		

Installation Company

Company	Compass Builder	Installed Date	6/17/14
Certified Installer	Paul Thompson	Startup Date	6/26/14
Street	PO Box 299		
City	SEVERN PARK		
State	MD		
Zip			

ECOPOD-N

Model #	Serial #
E50 <input type="checkbox"/>	
E60 <input checked="" type="checkbox"/>	E-LON 021CA
E75 <input type="checkbox"/>	
E100 <input type="checkbox"/>	
E150 <input type="checkbox"/>	

Blower Voltage	Good
Blower Running Amps	Good
Inches of water over media with blower turned off	2 inch
Vent Installed	YES
Tanks and Risers Water tight	YES
Alarm Functional	YES

I hereby certify that the ECOPOD-N wastewater treatment system has been installed and started up in accordance with the construction permit and is in compliance with the manufacturers recommendations

Company Behylen Vault Co Date 6/26/14
 Signature Steven R Koontz
 Printed Name STEVEN KOONTZ



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Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

Compass Homes
 Attn: Elizabeth Jackson
 P.O. Box 299
 Severna Park, Maryland 21146

S/O Number: 93564

Report Date: July 7, 2014

Retest #1

Property Sampled: 6211 Heather Glen Way, 21029
Sample Location: R/O Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B13001799
Sampler ID #: 7483AM
Samples Iced: Yes

County: Howard **Subdivision:** Preserve at Clarksville **Lot#:** 32

Date/Time Collected in Field: June 24, 2014 3:20 pm
Date/Time Received in Lab: June 24, 2014 5:43 pm

Well Tag #: HO-95-0244
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Reverse Osmosis (R/O)

PARAMETER	METHOD	MCL (pCi/L)	RESULT (pCi/L)	COMMENT
Gross Beta (Short-Term)	EPA 900.0	50	19.2 ± 1.3	Pass
Gross Beta (Long-Term)	EPA 900.0	50	7.4 ± 1.3	Pass

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Katherine C. Higgs

 Katherine C. Higgs
 Manager – Drinking Water Testing