

C1 26537 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 520 385

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

ST/CO USE ONLY DATE RECEIVED MM DD YY 10 15 15

DATE WELL COMPLETED MM DD YY 10 15 15 Depth of Well 22 265 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" OK 10/21/15 sc HO-15-0121

OWNER Bassler Ventures LLC WELL SITE ADDRESS last name GOATE MYRTLE CT first name TOWN CLANKSVILLE SUBDIVISION WALNUT CREEK PHASE 4 SECTION 4 LOT 155

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 include Top Soil, CLAY, Sandy, Sand Stone, MICKA, SAND Stone, MICKA, SAND Stone, MICKA.

GROUTING RECORD yes no

WELL HAS BEEN GROUTED (Circle Appropriate Box) TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS 20 NO. OF POUNDS 2000 GALLONS OF WATER 120 DEPTH OF GROUT SEAL (to nearest foot) from 0 to 50 ft.

CASING RECORD

casings types insert appropriate code below MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch)! 6 Total depth of main casing (nearest foot) 60

OTHER CASING (if used) diameter inch depth (feet) PL 4 265 185 PL 4 165 145

SCREEN RECORD

screen type or open hole insert appropriate code below SCREEN RECORD ST BR HO PL OT

NUMBER OF UNSUCCESSFUL WELLS: I

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. 1 M SD 117 DRILLERS SIGNATURE M.E. Myer LIC. NO. 5000

C 2 DEPTH (nearest ft.)

Table with columns: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60. Rows include HO 58, PL 185, PL 145, SLOT SIZE 1 1/16 2 1/16 3, DIAMETER OF SCREEN 4" (NEAREST INCH)

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

C 3 PUMPING TEST

HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 5 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 21 ft. WHEN PUMPING 65 ft. TYPE OF PUMP USED (for test) A air P piston T turbine C centrifugal R rotary O other (describe below) J jet S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35 PUMP HORSE POWER 37 41 PUMP COLUMN LENGTH (nearest ft.) 43 47 CASING HEIGHT (circle appropriate box and enter casing height) (+) above LAND SURFACE (-) below 2 (nearest foot)

LATITUDE 39.23670 LONGITUDE 76.94722 (DEFAULT COORD. WGS 84) NOTES:

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee) TELESCOPE CASING LOG INDICATOR OTHER DATA

B 126897

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-15-0121 fill in this form completely

550505L please type

Date Received (APA) 080315

OWNER INFORMATION

8 MM DD YY 13 Bassler Venture LLC PO Box 412 Lisbon MN 21065

B 3 LOCATION OF WELL

Howard 8 COUNTY 21 Walnut Creek Phase III 23 SUBDIVISION 42 SECTION 44 46 LOT 155 48 50 Clarksville MD 52 NEAREST TOWN 71

DRILLER INFORMATION

RAUL MAYNE M S D 110 Driller's Name 76 License No. 81 RAUL MAYNE WELL DRILLING Firm Name 17024 Handy rd Mt Airy MD 21771 Address 7/18/15 Signature Date

B 4 SOURCES OF DRILLING WATER

1 well 2. 3. GRATE MYRTLE CH 11 STREET ADDRESS 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH SOUTH DISTANCE FROM ROAD 34 200 37 ENTER FT OR MI 38 39 TAX MAP: 28 BLK: PARCEL 49

B 2 WELL INFORMATION

1 2 APPROX. PUMPING RATE (GAL. PER MIN.) 5 8 12 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- (D) DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION (F) FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) (I) INDUSTRIAL, COMMERCIAL, DEWATERING (P) PUBLIC WATER SUPPLY WELL (T) TEST, OBSERVATION, MONITORING (O) OPEN LOOP GEOTHERMAL (C) CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13) AS20385 COUNTY NAME COUNTY NO. STATE SIGNATURE INSERT S 41 DATE ISSUED 8/11/15 CO SIGNATURE EXP. DATE 8/11/16

APPROXIMATE DEPTH OF WELL 150 FEET

APPROXIMATE DIAMETER OF WELL 64 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 52

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

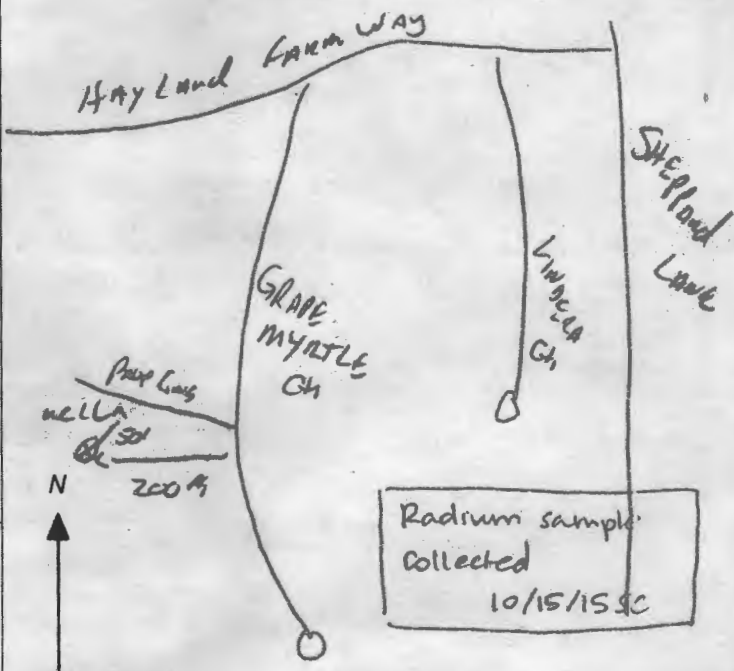
APPROX. PERMIT NUMBER H02006G020 PERMIT No. H0-15-0121

SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

Wells must be 100' apart. Radium sample required at yield.

PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL



FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 15-0121
 Location of property (road) GRACE MYRTLE Ct.
 Subdivision Walnut Creek Phase 4 Lot 155 Block 6 Plat Sec.
 Well Driller Ralph Mayne Owner Bassler Ventures

Depth of well 265'
 Distance of measuring point (M.P.) above ground 2'
 Static water level (S.W.L.) below M.P. 21'

I. High rate pumping -- reservoir drawdown

Time pump started 8:00 Pumping rate 12 GPM
 Total time 15 min to reach pumping water level 65 ft. below M.P.

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

TIME (in 15 minute intervals)	WATER LEVEL below M.P.	PUMPING RATE time to fill 5 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
8:00	21 ft.	5 Sec		12 GPM
			TEST Started	
8:15	65 ft	12 Sec		5 GPM
8:30	65 ft	12 Sec		5 GPM
8:45	65 ft	12 Sec		5 GPM
9:00	65 "	12 "		5 "
9:15	65 "	12 "		5 "
9:30	65 "	12 "		5 "
9:45	65 ft	12 Sec		5 GPM
10:00	65 ft	12 Sec		5 GPM
10:15	65 ft	12 Sec		5 GPM
10:30	65 "	12 "		5 "
10:45	65 "	12 "		5 "
11:00	65 ft	12 Sec		5 GPM
11:15	65 ft	12 Sec		5 GPM

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WELL & SEPTIC PROGRAM
TEL: (410)313-1771 FAX: (410)313-2648

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: Tri-County Pump Service, Inc Telephone #: 301.432.0330
Address: 6711 Old National Pk
Baltimore, Md 21113

(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# 2035
*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: Craftmark Homes Telephone #: 703-932-0593
Subdivision: Walnut Creek Lot #: 155 Well Tag #: HO-15-0121
Site Address: 5026 Crane Myrtle Ct
Ellicott City, Md 21047

Submersible Pump Data Pitless Adapter Well Cap and Electric Conduit
Make: Sta-Lite Make: American Gravity Two piece watertight cap: y
Model #: 5901-80522-1 Model #: PT-100 Screened, vented well cap: y
Pump Capacity 5 GPM Depth: 36 (36" min) Cap secured to casing: y
Well Yield: 5 GPM NSF/WSC approved: y Conduit min 18" B.G.: y
Depth of well encountered at time of pump installation: 265 (feet) Conduit secured to well cap: y
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: Poly PVC sleeve to undisturbed soil at wall penetration: y
PSI: 200 (160 psi/min) Length of sleeve(5' minimum from foundation): 202
Depth of supply line: 36" (36" min) Sleeve sealed properly: y

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: William Griffith date: 5-2-2011

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

Date Insp. Requested: 5/4/11 Date Insp. Approved: 5/4/11 Inspector: RB
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 13" 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

Maura J. Rossman, M.D., Health Officer

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – NOVEMBER 13, 2019

May 13, 2019

Homeowner
5026 Crape Myrtle Court
Ellicott City, MD 21042

RE: Walnut Creek, Lot 155
5026 Crape Myrtle Court
Building Permit: B17004406
Well Permit: HO-15-0121

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 **11/13/2018**. Final approval of the well line connection to the dwelling was granted on **5/4/2018**. The well construction was completed on **10/15/2015**. Water samples were collected on **4/8/2019**.

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 **10/15/2018**. Results showed a Gross Alpha level of **2.0 ± 0.0 pCi/L** and **Gross Beta** level of **4.0 ± 0.0 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-15-0121. 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.**



Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

Maura J. Rossman, M.D., Health Officer

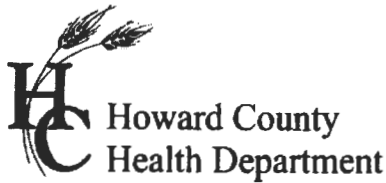
Please contact (410) 313-1773 to schedule a final water sample appointment or contact a certified water quality laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website: <http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

In closing, please refer to our "Homeowner Fact Sheet" for understanding your onsite sewage disposal system. You will also find a link to Maryland Department of the Environment website which elaborates in further detail operation and maintenance of your Septic System.

Approving Authority,

Kevin M Wolf, L.E.H.S., REHS/R.S., Supervisor
Groundwater Management Section
Well & Septic Program

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



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

Peter L. Bielensohn, M.D., M.P.H., Health Officer

TO ALL INTERESTED PARTIES

When submitting a well application for a proposed well for new construction, please indicate one of the following:

Well Site Location:

<u>Walnut Creek Phase 4</u>	<u>155</u>	<u>Crape Myrtle Ct.</u>
Subdivision/Property Name	Lot #	Road Name

- The well site has been staked by Fisher, Collins and Carter, Inc.,
(professional land surveyor or company employing professional land surveyors)
on 07/27/15 (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.

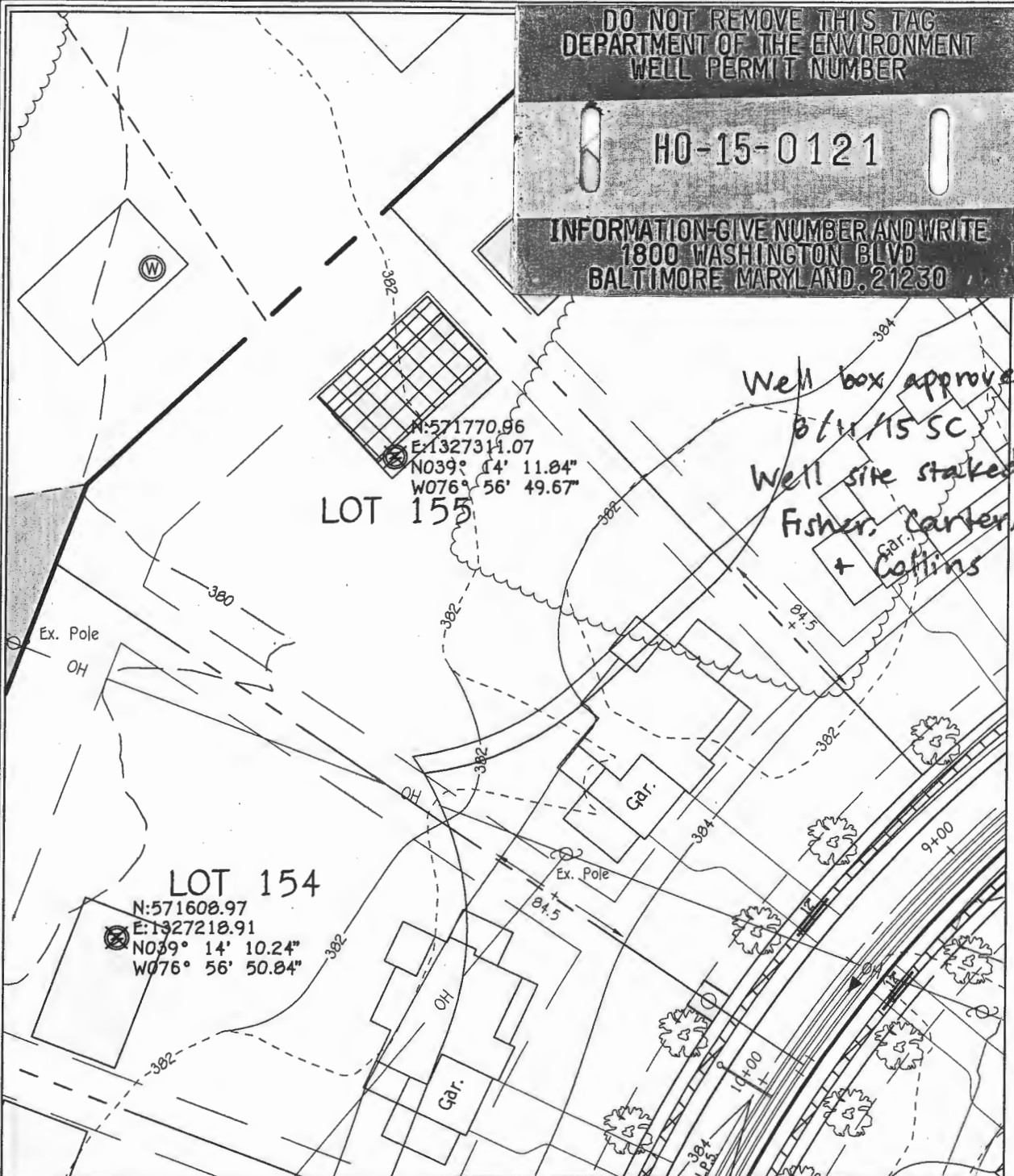
Revised 3/11/07

I:\2004\04001\dwg\PHASE FOUR FINALS\04001 Phase Four FINAL WELL MAPS.dwg, 7/22/2015 9:37:58 AM, 1:1

DO NOT REMOVE THIS TAG
DEPARTMENT OF THE ENVIRONMENT
WELL PERMIT NUMBER

HO-15-0121

INFORMATION-GIVE NUMBER AND WRITE
1800 WASHINGTON BLVD
BALTIMORE MARYLAND, 21230



WELL LOCATION INFORMATION:
 NORTHING = 571770.96 EASTING = 1327311.07
 LATITUDE = N 39° 14' 12" LONGITUDE = W 76° 56' 50"

LOT 155 WELL MAP
WALNUT CREEK
 PHASE FOUR

Lots 23 - 68, Non-Buildable Preservation Parcels
 'C', 'G', 'T', 'K', 'L' And 'M', Buildable Bulk Parcels 'E' And 'H'
 & Non-Buildable Parcel 'J'
 ZONED: RC-DEO & RR-DEO

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461 - 2855

TAX MAP No. 28 GRID Nos. 4, 5, 10-12, 17, AND 18 PARCEL No. 49
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: July 22, 2015 SCALE: 1"=50'



Fredericktowne Labs Inc.

ENVIRONMENTAL TESTING

1029 Ventrie Court • P.O. BOX 245 • Myersville, MD 21773 • 800-533-3340 • FAX 301-263-2386
 www.fredericktownelabs.com • info@fredericktownelabs.com

Certificate of Analysis

Acct. No. 3948 - 2272-1

Field Record

Site visit performed on: Monday, April 08, 2019 10:57 AM
 by: Steve Wolfe State ID No. 8587SW
 Affiliation: Tri-County Pump Services
 Property Owner: Craftmark Homes
 Project: Lot 155
 Property Address: 5026 Crape Myrtle Court
 Ellicott City, MD 21042
 Sample Source: 1st Floor 1/2 Bath Vanity
 Treatment Devices Noted: No Treatment Devices
 Well No.: HO-15-0121
 Field pH: 7.5
 Free Res. Cl.: <0.1 mg/l

Laboratory Report

Sample Received at laboratory: 4/8/2019 12:08 PM

Bacteriological results:

Total Colif. (/100ml)	E.coli.(/100ml)	Start		End		Method	Analyst
		Date	Time	Date	Time		
<1	<1	04/08/19	14:15	04/09/19	08:15	9223B	JD

Bacteriological analysis of this sample indicates the water is safe for human consumption and meets federal, state and local requirements. Analysis was performed according to the 20th edition of Standard Methods

Inorganic Chemical results:

Parameter	Result	Units	MCL	Date of Analysis	Method	Analyst
Nitrate-Nitrogen	1.2	mg/l	10	4/8/2019	300.0	PH
Sand	<2	mg/l	5	4/9/2019	0.065mmFilter	JD
Turbidity	0.8	NTU	<10	4/8/2019	180.1	KB

Reported by: Courtney Phelps 4/10/19
 Name Date

Fredericktowne Labs, Inc. is a State Certified Water Quality Laboratory
 Maryland Cert. No. 118 Virginia Cert. No. 00444
 MDOT WBE Cert. No.: 91-168

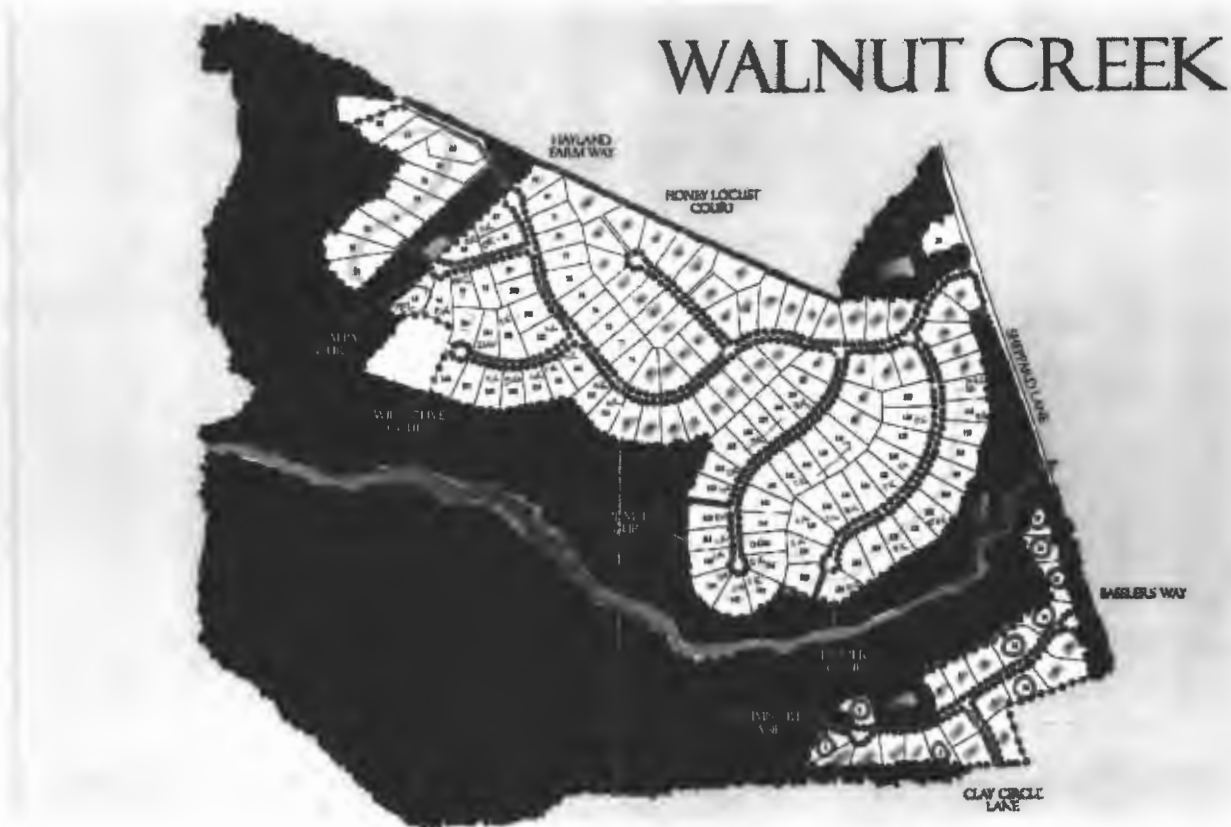
Williams, Jeffrey

From: Williams, Jeffrey
Sent: Friday, May 16, 2014 12:16 PM
To: Tim Feaga
Subject: Walnut Creek Radium testing
Attachments: Walnut Creek radium.pdf; Walnut Creek radium_2.pdf

Hi Tim. I met with Bert regarding possible easement of radium testing at all lots in Walnut Creek. I've attached a map showing the additional lots that we would like to still be tested to ensure that there is not an area of concern in the remaining lots. The lots in the green cloud have been tested and passed. The lots in the red cloud are lots that we would like to be tested. The lots at the top corner (82-86, 90-94) fall within the radium testing boundary. We want the lots near the river tested to prove whether the stream is in fact acting as a natural buffer from the positive tests on the other side and the passing lots above them. Furthermore, we'd like some representative lots tested in the other section near the upper testing boundary to prove that there are no hot spots. If these are also passing, then we would likely be comfortable waiving the remaining.

We'd be happy to meet with you to discuss if you prefer. Thanks.

Jeff Williams
Program Supervisor, Well & Septic Program
Bureau of Environmental Health
Howard County Health Dept.
410-313-4261
jewilliams@howardcountymd.gov



30 November 2015

Mr. Jeff Williams

Bureau of Environmental Health
Howard County Health Department
8930 Stanford Blvd.
Columbia, MD 21045



**Re: Waiver for Simultaneous Testing
Water Appropriation Permit HO2006G020(02)
Residential Wells – Lots 51, 155, and 156
Walnut Creek, Howard County, Maryland**

Dear Mr. Williams:

In response to the emails regarding the above-referenced lot wells, Hydro-Terra Group (HTG) is providing this letter addressing concerns for the potential of well interference.

Work Completed

HTG completed the following, forming the basis for the waiver. This included:

- Installing and calibrating water level loggers in unused wells on Lots 155 and 156, and providing a logger for barometric pressure corrections.
- Water level monitoring every minute to the nearest 1/100th of a foot for approximately six days.
- Coordinating with the Lot 51 homeowner, who ran a garden hose at a 5 gallon per minute (gpm) rate for approximately 4.5 hours starting at 8 AM on 11/22/15 (the family had been home all week).
- Test pumping the Lot 156 well for 4 hours at a 4.88 gpm rate on 11/24/15.
- Demobilizing the equipment, downloading the loggers, and graphing the water level data.

Results and Discussion

The results of the monitoring are presented in the attached graph. As shown, water levels in either well fluctuated very little during the monitoring period. A very slight decline in water level in the Lot 155 well is evident when the Lot 51 well was pumped, although the magnitude was a fraction of a foot (0.06 feet). The Lot 156 well water level dropped approximately 5 feet when pumped; the Lot 155 well showed no response during this time.

Based on review of well logs in the area, casing depths are generally between 40 and 60 feet, wells are drilled to depths of 100 to 300 feet deep, and the drillers testing reported relatively high yields of 10 gpm or more. Given that the water table is less than 30 feet deep, the underlying aquifer is relatively productive and is recharged through a significant saprolite zone. As a result, there is a relative lack of significant water level drawdown in individual wells when

pumped, and well interferences are buffered by the productivity of the aquifer. Given that seasonal water fluctuations in this area and topographic setting are likely to be less than 10 feet, there should be no changes in potential well interferences during drought cycles.

Conclusions

Based on these results, there is no need for additional testing or concern for potential well interferences now or in the future.

Please feel free to call with any questions or comments.

Respectfully submitted,
HYDRO-TERRA GROUP



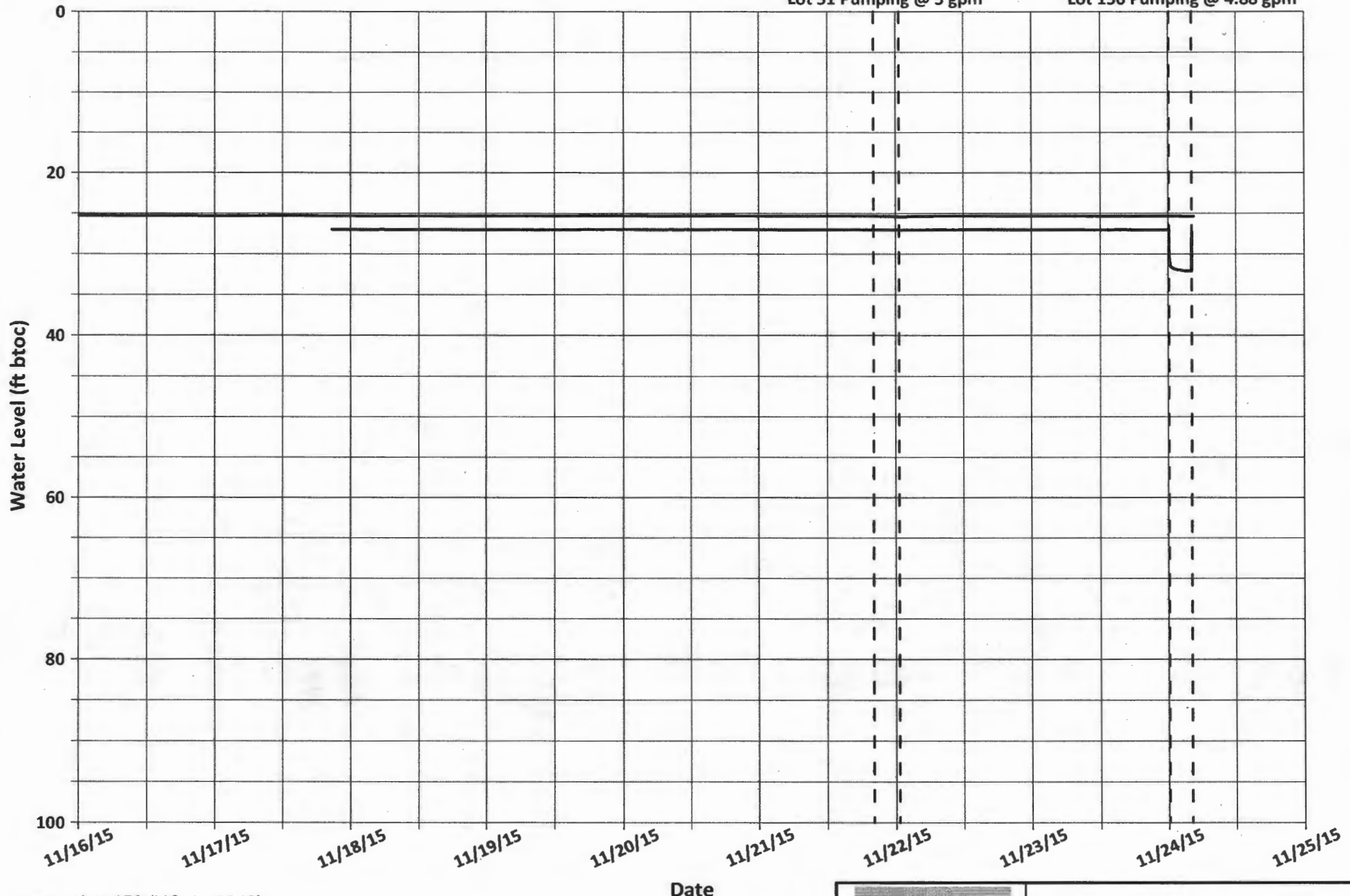
Michael D. Haufler, PG



Attachment

Copy: Tim Feaga, Jeremy Rutter, Jeff Lindaw,file

Lot 51 Pumping @ 5 gpm

Lot 156 Pumping @ 4.88 gpm



 Lot 156 (HO-15-0040)
 Lot 155 (HO-15-0121)

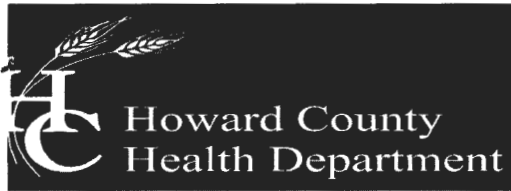
Date



Walnut Creek - Phase 4
Clarksville, Maryland

Lot 156 (HO-15-0040)
Water Level Monitoring Record

drawn	JJL	checked	JJL	approved	MDH	Graph
date	11/27/15	date	11/27/15	date	11/27/15	1
project no.				file		



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

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

Maura Rossman, M.D., Health Officer

November 20, 2015

Bassler Venture
Attn. Tim Feaga
15950 North Avenue, P.O. Box 482
Lisbon, Maryland 21765

RE: Walnut Creek Lot 155
Crape Myrtle Court
Well Tag: HO - 15 - 0121

Dear Mr. Feaga:

A sample was collected during a yield test on October 15, 2015 and submitted to the Department of Health & 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 $< 2.0 \pm 0.0$ picocuries/liter (pCi/L), while the **Gross Beta** level was $< 4.0 \pm 0.0$ 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 targeted 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 **meets** EPA regulatory standards. Additional testing **for these parameters** will not be required to secure the future Use & Occupancy. **Please note** that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be required to help secure Use & Occupancy.

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,

A handwritten signature in black ink that reads 'Bert Nixon'.

Bert Nixon, Director
Bureau of Environmental Health

✓ Enclosure
cc: Property file

SEND REPORT TO: Bert Nixon
Howard Co. Health Dept.
Bureau of Environmental Health
8930 Stratford Blvd.
Columbia, MD 21045

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston St., Baltimore, MD 21201
Robert A. Myers, Ph.D., Director

Lab No.

E000655 #16#

1770 Ashland Ave. Baltimore, MD 21205
RADIATION ANALYSIS REQUEST FORM

Plant/Site Name: Walnut Creek - Lot 155 County: Howard

Sample Source: Crape Myrtle Ct. Location: H0-15-0121

(Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A _____ Radon-222 Field Blank Bottle A _____
Bottle B _____ Bottle B _____

County 13 Plant No. _____

CHECK (one per Box)

Type	
Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other _____	<input type="checkbox"/>

Service	
Community	<input type="checkbox"/>
Non-Community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other _____	<input type="checkbox"/>

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Testing	
Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code: _____ Federal Project: 5

Collector: S. Collins Telephone No.: 410-313-6287

Date Collected: 10/15/15 Time Collected: 11 a.m. _____ p.m.

Field pH: _____ Field Chlorine: _____

Nitric Acid Preserved: Yes No Iced: Yes No

Remarks: Sample taken during yield

<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	0655	EPA 900.0	<2.0	10/20/15	JJ	10/21/15
<input checked="" type="checkbox"/>	Gross Beta	4100	0655	EPA 900.0	<4.0	10/20/15	JJ	10/21/15
<input type="checkbox"/>	Radium-226	4020						
<input type="checkbox"/>	Radium-228	4030						
<input type="checkbox"/>	Total Uranium	4006						
<input type="checkbox"/>	Radon-222 (Bottle A)	4004						
<input type="checkbox"/>	Radon-222 (Bottle B)	4004						
<input type="checkbox"/>	Radon Field Blank A	4004						
<input type="checkbox"/>	Radon Field Blank B	4004						
<input type="checkbox"/>	Tritium							
<input type="checkbox"/>								

Date Received: 10/16/15 Received By: In Ji

Data Release Signature: Deborah Miller-Jurk Date: 10/21/15

Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?			
Sample pH <2.0?	<input checked="" type="checkbox"/>		
Received within holding time?	<input checked="" type="checkbox"/>		

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

SEND REPORT TO: Bert Nixon
 Howard Co Health Dept.
 Bureau of Environmental Health
 4932 Stanford Blvd
 Columbia, MD 21045

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
 Laboratories Administration
 201 W. Preston St., Baltimore, MD 21201
 Robert A. Myers, Ph.D., Director

Lab No.
 E000654 2162

1700 Ashland Ave. Baltimore, MD 21205

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name: Field Blank County: Howard

Sample Source: dtl₀ Location: HCHD Lab

(Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A _____ Radon-222 Field Blank Bottle A _____
 Bottle B _____ Bottle B _____

County 13 Plant No. _____

CHECK (one per Box)

Type	
Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Service	
Community	<input type="checkbox"/>
Non-Community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Testing	
Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code: _____ Federal Project: 5

Collector: S. Collins Telephone No.: 410-313-6237

Date Collected: 10/15/15 Time Collected: _____ a.m. 3 p.m.

Field pH: _____ Field Chlorine: _____

Nitric Acid Preserved: Yes No Iced: Yes No

Remarks: _____

TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/> Gross Alpha	4000	0654	EPA 900.0	<2.0	10/20/15	JJ	10/21/15
<input checked="" type="checkbox"/> Gross Beta	4100	0654	EPA 900.0	<4.0	10/20/15	JJ	10/21/15
<input type="checkbox"/> Radium-226	4020						
<input type="checkbox"/> Radium-228	4030						
<input type="checkbox"/> Total Uranium	4006						
<input type="checkbox"/> Radon-222 (Bottle A)	4004						
<input type="checkbox"/> Radon-222 (Bottle B)	4004						
<input type="checkbox"/> Radon Field Blank A	4004						
<input type="checkbox"/> Radon Field Blank B	4004						
<input type="checkbox"/> Tritium							
<input type="checkbox"/>							

Date Received: 10/16/15 Received By: In Ji
 Data Release Signature: Delvinah Miller-Judd Date: 10/21/15

Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?	<input checked="" type="checkbox"/>		
Sample pH <2.0?	<input checked="" type="checkbox"/>		
Received within holding time?	<input checked="" type="checkbox"/>		

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

FORM REVISED 6/73
 DHMH 4540 01/13

PROGRAM COPY

0212 MAR 20 10/27/15

Invoice



Bureau of Environmental Health
Attn: Bert Nixon, Director

DATE: OCTOBER 27, 2015
DATES OF SERVICE: OCT. 1, 6, 8, 15, 2015
INVOICE #: 2015-009

8930 Stanford Boulevard, Columbia, MD 21045
Phone 410-313-2640 Fax 410-313-2648
www.hchealth.org

BILL TO Basslers Venture
Attn: Tim Feaga
15950 North Ave P.O. Box 482
Lisbon, MD 21765

COMMENTS Payment due upon receipt. Letter and results will be released upon receipt of payment.

DATE	DESCRIPTION	BALANCE	AMOUNT
10/01/15	Gross alpha/beta testing performed for Walnut Creek, Lots 134, 148 & 149 HO - 15 - 0031 HO - 15 - 0118 HO - 15 - 0019		\$135.00
10/06/15	Gross alpha/beta testing performed for Walnut Creek, Lot 147 HO - 15 - 0117		\$45.00
10/08/15	Gross alpha/beta testing performed for Walnut Creek, Lot 130 HO - 15 - 0155		\$45.00
10/15/15	Gross alpha/beta testing performed for Walnut Creek, Lots 116 & 155 HO - 15 - 0141 HO - 15 - 0121		\$90.00
			AMOUNT DUE
			\$315.00

Please detach and return with payment.

REMITTANCE	
Invoice #	2015-009
Site Information	Walnut Creek Lots 116,130,134,147-149,155
Amount Due	\$315.00

Receipt # 57460
11/17/2015

Make Checks Payable to: **Director of Finance** Mail Payments to: **Bureau of Env. Health**

Williams, Jeffrey

From: Williams, Jeffrey
Sent: Thursday, November 12, 2015 2:55 PM
To: chuckzepp@mris.com; jeremy@rutterpm.com
Cc: Wolf, Kevin; Collins, Sarah
Subject: Walnut Creek Lot 155

Hello Chuck and Jeremy. I spoke with John Grace at MDE about the well situation on lot 155. He sent me a partial waiver to the GAP requirement based on some requirements as listed. Please coordinate with us on when you will be performing the required items. Let me know if you have any questions. Here is his partial waiver:

Hi Jeff,

This follows up our phone call this morning. This email is to document my partial waiver of the simultaneous yield testing requirement (as found in the permit HO2006G020(02)) for the newly drilled replacement well for lot 155.

The basis for the waiver is to have the developer place a water level transducer in the new well for a five day period for continuous readings (not less than a minute apart). The water level data should then be analyzed for any spikes indicative of use from the existing well on lot 51. (Someone needs to make sure that the existing home is occupied during the week that the measurements are being taken).

In addition I would also ask permission of the existing homeowner to run their garden hose for about four hours on one of the middle days of monitoring at 3-5 gpm. The water from the garden hose should be directed away from the newly drilled well.

While not required by our permit I recommend that the well on lot 156 be pumped for a four hour period at 3-5 gpm the day after pumping lot 51.

If the well on lot 155 is sharing the same fracture with either of the other two wells, then water level fluctuations, including the larger fluctuation

for the period when pumping for four hours, would be seen in the well transducer record from lot 155.

If the well on lot 155 does not show any of the fluctuations, then no need for a simultaneous yield test.

If the well on lot 155 only shows connection with the pumping from lot 156, it is your judgement on whether or not to require simultaneous testing. I would look at how many feet the water level dropped to make that call and how many feet the current static water level is above bedrock. If you have at least 15 feet of water in the well above the bottom of casing (i.e. at least 10 ft of water in the saprolite) I would worry very little about the well on lot 155 being significantly interfered with.

fyi - water levels are higher now than would be in a drought. See link below for Baltimore County well at Oregon Ridge Park.

http://waterdata.usgs.gov/md/nwis/dv?cb_72019=on&format=gif_default&site_no=392931076410301&referred_module=sw&period=&begin_date=2000-11-01&end_date=2015-11-11

Jeff Williams
Program Supervisor, Well & Septic Program
Bureau of Environmental Health
Howard County Health Dept.
410-313-4261
jewilliams@howardcountymd.gov

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Williams, Jeffrey

From: John Grace -MDE- <john.grace@maryland.gov>
Sent: Thursday, November 12, 2015 11:00 AM
To: Williams, Jeffrey
Cc: John Boris -MDE-
Subject: Re: Simultaneous yield tests at Walnut Creek

Hi Jeff,

This follows up our phone call this morning. This email is to document my partial waiver of the simultaneous yield testing requirement (as found in the permit HO2006G020(02)) for the newly drilled replacement well for lot 155.

The basis for the waiver is to have the developer place a water level transducer in the new well for a five day period for continuous readings (not less than a minute apart). The water level data should then be analyzed for any spikes indicative of use from the existing well on lot 51. (Someone needs to make sure that the existing home is occupied during the week that the measurements are being taken).

In addition I would also ask permission of the existing homeowner to run their garden hose for about four hours on one of the middle days of monitoring at 3-5 gpm. The water from the garden hose should be directed away from the newly drilled well.

While not required by our permit I recommend that the well on lot 156 be pumped for a four hour period at 3-5 gpm the day after pumping lot 51.

If the well on lot 155 is sharing the same fracture with either of the other two wells, then water level fluctuations, including the larger fluctuation for the period when pumping for four hours, would be seen in the well transducer record from lot 155.

If the well on lot 155 does not show any of the fluctuations, then no need for a simultaneous yield test.

If the well on lot 155 only shows connection with the pumping from lot 156, it is your judgement on whether or not to require simultaneous testing. I would look at how many feet the water level dropped to make that call and how many feet the current static water level is above bedrock. If you have at least 15 feet of water in the well above the bottom of casing (i.e. at least 10 ft of water in the saprolite) I would worry very little about the well on lot 155 being significantly interfered with.

fyi - water levels are higher now than would be in a drought. See link below for Baltimore County well at Oregon Ridge Park.

http://waterdata.usgs.gov/md/nwis/dv?cb_72019=on&format=gif_default&site_no=392931076410301&referred_module=sw&period=&begin_date=2000-11-01&end_date=2015-11-11

John Grace
Water Supply Program
410 537 3714

On Thu, Nov 12, 2015 at 8:24 AM, John Boris -MDE- <john.boris@maryland.gov> wrote:
John,

Just wanted to follow up. The last time we discussed this matter you were considering some option. I don't normally like to pass this stuff along but the County wants to make sure they get it right. Please advise.

John A. Boris, Jr., LEHS
Geologist Program Consultant
Maryland Dept. of the Environment
Onsite Systems Division
Office: (410) 537-3678
Cell: (443) 992-6195
Fax: (410) 537-3163

----- Forwarded message -----

From: **Williams, Jeffrey** <jewilliams@howardcountymd.gov>
Date: Tue, Nov 10, 2015 at 3:57 PM
Subject: RE: Simultaneous yield tests at Walnut Creek

To: John Boris -MDE- <john.boris@maryland.gov>

Hi John. Any word from John Grace about this? He can contact me directly if he likes. This is one of the last things they need to do before submitting a record plat for phase IV. Thanks

Jeff

From: John Boris -MDE- [<mailto:john.boris@maryland.gov>]
Sent: Monday, November 02, 2015 2:00 PM
To: Williams, Jeffrey
Subject: Re: Simultaneous yield tests at Walnut Creek

Jeff,

Thanks. I did have a chance to speak to John G. He wanted to check and see if the GAP was still applicable. As I suspected, he has some idea's as to how we can be less invasive on determining if one well is drawing off the other. I expect we'll be hearing from him soon.

John A. Boris, Jr., LEHS

Geologist Program Consultant
Maryland Dept. of the Environment
Onsite Systems Division
Office: [\(410\) 537-3678](tel:4105373678)

Cell: [\(443\) 992-6195](tel:4439926195)
Fax: [\(410\) 537-3163](tel:4105373163)

On Mon, Nov 2, 2015 at 1:51 PM, Williams, Jeffrey <jewilliams@howardcountymd.gov> wrote:

See the relevant section of the GAP attached.

From: John Boris -MDE- [<mailto:john.boris@maryland.gov>]
Sent: Monday, November 02, 2015 11:31 AM
To: Williams, Jeffrey
Cc: Davis, Michael J; Steven Krieg -MDE-; Jay Prager -MDE-; Naomi Howell -MDE-
Subject: Re: Simultaneous yield tests at Walnut Creek

Jeff,

Based on the content of your email it appears that the Appropriation Permit specifically mentions the need for the simultaneous yield. Can you please provide me with copy of the Appropriation Permit? I'm going to forward this to John Grace for further clarification before I respond.

John A. Boris, Jr., LEHS

Geologist Program Consultant
Maryland Dept. of the Environment
Onsite Systems Division
Office: [\(410\) 537-3678](tel:4105373678)

Cell: [\(443\) 992-6195](tel:4439926195)
Fax: [\(410\) 537-3163](tel:4105373163)

On Mon, Nov 2, 2015 at 10:55 AM, Williams, Jeffrey <jewilliams@howardcountymd.gov> wrote:

Hi John. I wanted to get your opinion on an issue we have out at Walnut Creek. I'm asking via email to give you a chance to look at the relevant completion reports (attached) and it's a bit of a long story.

To set up the story, Walnut Creek has a GAP with a well spacing requirement in order to minimize the potential for interference. The wells shall be 100' separated "where feasible" and any that are less than that shall be simultaneously yield tested. We have been having the surveyor stake a specific well location within the approved well box so we can confirm that they are 100' separated. For the first time out there, Ralph hit a dry hole on lot 155 and called the surveyor to stake a new location. They did and it was within the approved well box, but it was less than 100' from a neighboring well on lot 51. Of course, the neighboring well is a lot from an earlier phase and already has someone living in the house. The developer reached out to us in a panic to see what we could do to avoid making this homeowner go without water for 2 days while we simultaneously yield test their well.

Our preliminary take was to find out what the yields were and if they were both extremely high, we would waive the simultaneous yield test given that there would be no way that either one would drop very low and the intent of the requirement would be met. Well, the developer wasn't that lucky. As you can see from the completion reports, the well in question on lot 155 had a yield of 5. The neighboring well less than 100' away on lot 51 had a great yield at 15. The other close well is on lot 156 at just over 100' from 155 and its yield was 8.5. Lot 154 on the other side a bit further away and had a yield of 15. As you can see from the well exhibit, 155 and 156 are near a high spot and the topo flows down towards 51. Looking at the completion reports, it looks like 155 is sharing a water bearing fracture around 80' with 156 and one around 200' with 51.

To the question: Do you think there's a way to be satisfied with the results and the GAP requirement without having to yield test 51? We could yield test 155 and 156 together and see whether there's an influence in the 80' fracture. Our other option is to say it has to be simultaneously yield tested and if the developer doesn't like it they can appeal to John Grace. We wanted to feel out your opinion first. Thanks

Jeff Williams

Program Supervisor, Well & Septic Program

Bureau of Environmental Health

Howard County Health Dept.

410-313-4261


jewilliams@howardcountymd.gov

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15. WELL SPACING - IN ORDER TO MINIMIZE THE POTENTIAL FOR INTERFERENCE BETWEEN WELLS, ALL WELLS SHALL BE LOCATED WITHIN LOCALLY APPROVED WELL BOXES AND, WHERE FEASIBLE, BE CONSTRUCTED SO AS TO ACHIEVE A SEPARATION OF AT LEAST 100 FEET FROM EACH OTHER AND/OR FROM EXISTING WELLS ON OTHER PROPERTIES. WELLS DRILLED PRIOR TO JUNE 1, 2008 ARE NOT REQUIRED TO SATISFY THIS 100 FOOT SEPARATION REQUIREMENT. THE PERMITTEE SHALL CONDUCT SIMULTANEOUS YIELD TESTS FOR ANY WELLS THAT ARE SEPARATED BY LESS THAN 100 FOOT. IN THE EVENT THAT A WELL TESTED SIMULTANEOUSLY WITH OTHER WELLS DOES NOT MEET MINIMUM YIELD STANDARDS, THE PERMITTEE SHALL RELOCATE OR DEEPEN THE WELL OR SEEK LOCAL APPROVAL TO RELOCATE THE WELL BOXES SO AS TO ACHIEVE THE 100-FOOT SEPARATION DISTANCE. ALL WELLS SHALL COMPLY WITH WELL CONSTRUCTION REQUIREMENTS.

BY AUTHORITY OF THE DIRECTOR
WATER MANAGEMENT ADMINISTRATION

 2/4/09
John W. Grace, Chief
SOURCE PROTECTION AND APPROPRIATION DIV



C1 08154 (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

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

COUNTY NUMBER A520 498 A520 385

ST/CO USE ONLY DATE RECEIVED MM 09 DO 28 YR 12

DATE WELL COMPLETED MM 9 DO 14 YR 2012

Depth of Well 220 6 11/2 2 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-2351

OWNER Land Marketing Consultants WELL SITE ADDRESS Ashleigh D. TOWN Clarksville SUBDIVISION Walnut Hill SECTION LOT 31

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 TO check if water bearing

Table with 3 columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Rows include Clay (0-10), Sand (10-56), Mica Rock (56-280), and Water (265).

GROUTING RECORD

WELL HAS BEEN GROUTED (Y/N) TYPE OF GROUTING MATERIAL (Cement CM, Bentonite Clay BC) NO. OF BAGS 14 NO. OF POUNDS 1316

CASING RECORD

MAIN CASING TYPE ST Nominal diameter 6 Total depth of main casing 60

OTHER CASING (if used)

Empty table for other casing details.

SCREEN RECORD

screen type or open hole (ST, BR, HO, PL, OT)

DEPTH (nearest ft.)

Table with 2 columns: Depth (ft.), Diameter of Screen (inches). Shows depth from 8 to 21 ft and screen diameters from 56 to 60 inches.

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 3 PUMPING RATE 15 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL BEFORE PUMPING 24 ft WHEN PUMPING 97 ft TYPE OF PUMP USED S submersible

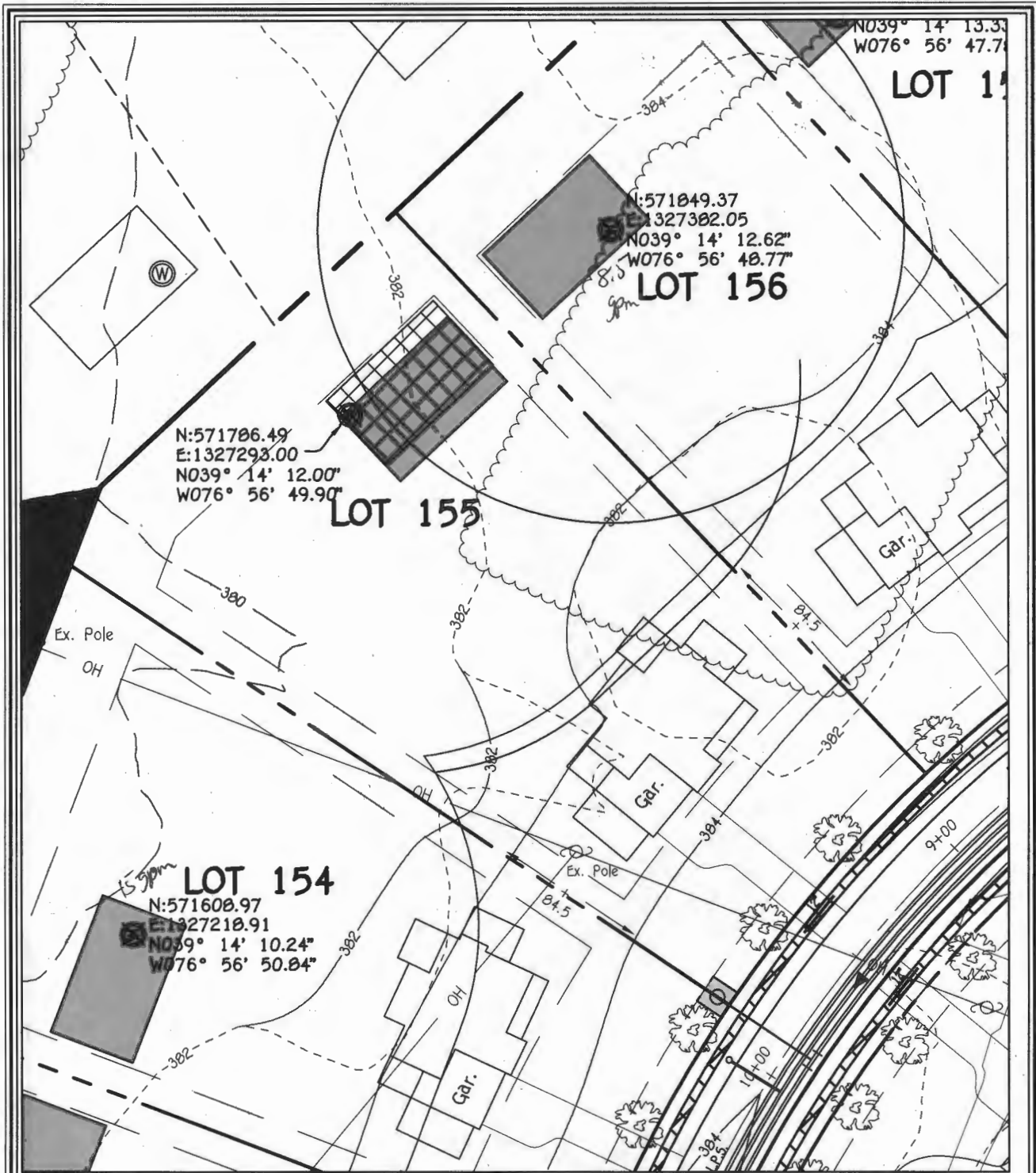
PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) YES NO IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE IN BOX 29 CAPACITY: GALLONS PER MINUTE 31 PUMP HORSE POWER 37 PUMP COLUMN LENGTH 41 CASING HEIGHT above LAND SURFACE below 2 (nearest foot)

LATITUDE 39.14209 LONGITUDE 76.56846 (DEFAULT COORD. WGS 84)

NOTES:

I:\2004\04001\dwg\PHASE FOUR FINALS\04001 Phase Four FINAL WELL MAPS.dwg, 10/22/2015 8:30:07 PM, 1:1



WELL LOCATION INFORMATION:
 NORTHING = 571770.96 EASTING = 1327311.07
 LATITUDE = N 39°14'12" LONGITUDE = W 76°56'50"

**LOT 155 WELL MAP
 WALNUT CREEK
 PHASE FOUR**

Lots 23 - 60, Non-Buildable Preservation Parcels
 'C', 'G', 'T', 'K', 'L' And 'M', Buildable Bulk Parcels 'E' And 'H'
 & Non-Buildable Parcel 'J'
 ZONED: RC-DEO & RR-DEO

TAX MAP No. 28 GRID Nos. 4, 5, 10-12, 17, AND 18 PARCEL No. 49
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: July 22, 2015 SCALE: 1"=50'

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461 - 2999