C 1 32104 SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.	
1 2 3 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)	FILL IN THIS FORM COMPLETELY PLEASE TYPE	COUNTY NUMBER	
ST/CO USE ONLY DATE Received MM DD YY 8 13 15	Depth of Well 22 5 352 26 (TO NEAREST FOOT)	PERMIT NO. FROM "PERMIT TO DRILL WELL" 10 - 15 - 03 / 3 28 29 30 31 32 33 34 35 36 37	
OWNER_ MUMUNEY	SERTE		
WELL SITE ADDRESS leat harmy 3 (6) 5	READELPHIA WITH ROWN	CLARKSVILLE	
SUBDIVISION Vunfretten WELL LOG	SECTION	Clal	
Not required for driven wells	WELL HAS BEEN GROUTED (Circle Appropriate Box)	C 3	
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING	TYPE OF GROUTING MATERIAL (Circle one)	PUMPING TEST HOURS PUMPED (nearest hour)	
DESCRIPTION (Use additional sheets if needed) FROM TO bearing		6 9	
dint 01	NO. OF BAGS 45 46 NO. OF POUNDS 45 48 OF GALLONS OF WATER 44 OF WATER	PUMPING PATE (gal. per min.)	
soft brewn 1 59	DEPTH OF GROUT SEAL (to nearest foot)	METHOD USED TO MEASURE PUMPING RATE	
hard gray rock 59 60	from 48 TOP 52 ft. to 54 BOTTOM 58 ft.	WATER LEVEL (distance from land surface)	
Soft brown rock 60 64 V	(enter 0 if from surface)	BEFORE PUMPING ft.	
2017	types insert ST CØ	20	
hard gray rock 64 89 91 whard brown rock 89 91 47 hard gray rock 91 97 hard limestone 97 210	appropriate STEEL CONGRETE	WHEN PUMPING 22 25 ft.	
hard order rock 91 97	below PLASTIC OTHER	TYPE OF PUMP USED (for test)	
hard gray rock 97 210	MAIN Nominal diameter Total depth CASING top (main) casing of main casing	A air P piston turbine	
	TYPE (nearest inch)! (nearest foot)	centrifugal R rotary Other (describe below)	
hurd gray rock 210 352	60 61 63 64 66 70	J jet S submersible	
	E OTHER CASING (if used)	27 27 27	
Hole #1 - 200	C diamete depth (feet) inch from to	PUMP INSTALLED	
41 352	S S	DRILLER INSTALLED PUMP YES NO (CIRCLE) (YES or NO)	
43 310'S Install	N	IF DRILLER INSTALLS PUMP, THIS SECTION	
# 4 42' (11/4"	screen type SCREEN RECORD	MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED	
#5 352	or open hole STT BR HO	PLACE (A,C,J,P,R,S,T,O) 29 IN BOX 29.	
#6 352 J	/ appropriate \ BRONZE HOLE	CAPACITY: GALLONS PER MINUTE	
	code below PL OT	(to nearest gallon) 31 35	
	PLASTIC OTHER	PUMP HORSE POWER 37 41	
NUMBER OF UNSUCCESSFUL WELLS:	DEPTH (nearest ft.)	PUMP COLUMN LENGTH (nearest ft.)	
yes no	E 8 9 11 15 17 21	CASING HEIGHT (circle appropriate box	
WELL HYDROFRACTURED Y	A 6 3 11 15 17 21	+ above and enter casing height)	
CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED	H 23 24 26 30 32 36	49 LAND SURFACE (nearest)	
E ELECTRIC LOG OBTAINED	C 3 R 38 39 41 45 47 51	below) (10dlest)	
P TEST WELL CONVERTED TO PRODUCTION WELL	E E SLOT SIZE 1 2 3	LATITUDE 39.216106	
I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 25,04,04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE	DIAMETER (NEAREST	LONGITUDE 76.985686	
CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY	OF SCHEEN (NCH)	(DEFAULT COORD. WGS 84)	
KNOWLEDGE.	from to	NOTES: Tridelphia My Ror	
DRILLERS LIC. NO. 1 M W D 3 9 4 1	GRAVEL PACK	The second second	
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)	MSERT F IN BOX 68 68	200	
LIC. NO. 1 4 5 1 1 2 1	MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q	5 6 W #13615	
De 10 11 0		102' - EVIL W	
SITE SUPERVISOR (sign. of driller or journeyman	70 72 74 75 76	4321	
responsible for sitework if different from permittee)	TELESCOPE LOG CASING INDICATOR OTHER DATA		
MDE/WMA/PER.071	COUNTY		

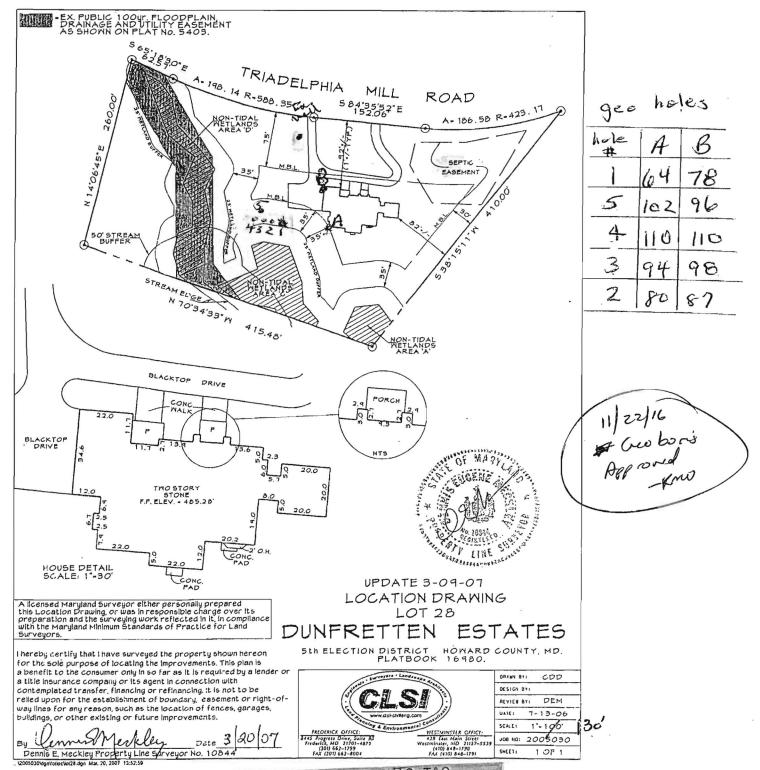
4	110	COUL
P	-	FE
10		
-	Will the	1119

HOWARD COUNTY HEALTH DEPARTMENT

59840

UID Lelly (CC PHONE #	
(dell/0rnet/13615)	1
7/46dolphild	40
IND WINDOW Sey19-	Do
Received By	
	Wild Celly (C PHONE # (Wall Cornet / 13615 The Colphy A NO White Colphy A

SEQUENCE NO.	STATE OF MA	DVI AND	STATE PERMIT NUMBER
B 1 (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL		11
1 2 3			140 - 15 - 0363
	please ty	/pe	fill in this form completely
Date Received (APA)	В	3	LOCATION OF WELL
8 MM DD YY 13	RMATION	Mouserd	
11	C	8 COUNTY	21
15 Last Name Owner First Name 34		Dunfrett	en Estates.
13 Last Name Owner	First Name 34	23 SUBDIVISION	42
36 Street of RFD	55	SECTION	107128
Che kuralle M.		44 46	48 50
57 Town 70 State	72 Zip 76	Clarksvi	lle
DRILLER INFORMATION	72 Zip 70	52 NEAREST TOWN	20 V (20 V) 21 2 1 2 1 2 1 2 1 2 1 2 1 7 1 2 1 2 1
Direct March	11Jn 304		
	M D D B	3 4	
Jones Well Dallace	so	DURCES OF DRILLING WATER	13615 Triadulphia MINIS
Firm Name	14	outable well	11 STREET ADDRESS 30
3700 luch Pol Jarrels	elle md 21084. 2		NORTH
Address	3.		ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
Java Belly	11/7/16		WEST-STEAST
Signature	Date		34 /6 4 37 SOUTH
B 2 WELL INFORMATION	0	公司,但是	DISTANCE FROM ROAD
1 2 APPROX. PUMPING RATE — (GAL. PER MIN.)	8 12		ENTER FT OR MI 38 39
AVERAGE DAILY QUANTITY NEEDED	0		TAX MAP BLK: PARCEL
(GAL. PER DAY) 14	20		
USE FOR WATER (CIRCLE AF	THE RESIDENCE OF THE PARTY OF T		BE FILLED IN BY DRILLER DEPARTMENT APPROVAL
D DOMESTIC POTABLE SUPPLY & RESIDE IRRIGATION	NTIAL	HEALI	I DEFARTMENT AFTHOVAL
F FARMING (LIVESTOCK WATERING & AG	RICULTURAL	Howard	(13) A 516065
IRRIGATION)		COUNTY NAME	COUNTY NO.
22 I INDUSTRIAL, COMMERCIAL, DEWATER	ING	STATE SIGNATURE	INSERT S
P PUBLIC WATER SUPPLY WELL		DATE ISSUED	11 day 21
T TEST, OBSERVATION, MONITORING		11/22/16	h 1. West 11/22/17
O OPEN LOOP GEOTHERMAL		43 MM DD YY 48	CO SIGNATURE EXP. DATE
CLOSED LOOP GEOTHERMAL	holes		
100000WATE DEDTH OF WELL 352			ED LOCATION OF WELL ON LOT CTURES SUCH AS BUILDINGS, SEPTIC SYSTEM,
APPROXIMATE DEPTH OF WELL 24	FEET 28	ROADS AND/OR LAND	MARKS AND INDICATE NOT LESS THAN TWO
APPROXIMATE DIAMETER OF WELL	NEAREST INCH	ses hales DISTANO	CE MEASUREMENTS TO WELL
ATTROMINATE DIAMETERS OF WEEK	INCH	MAG	4135
METHOD OF DRILLING	(circle one)	170	
BORED (or Augered) JETTED	Jetted & DRIVEN	164 178	
30 AIR-ROTary AIR-PERcussion	ROTARY (Hydraulic Rotary)	102 96	1/ 80.
37 CABLE REVerse-ROTary	DRive-POINT	110 110	Triadelphia M.11 Rd.
other		194 98	7
REPLACEMENT OR DEEPL	ENED WELLS	3 109	(SRA)
(CIRCLE APPROPRIATI		\$ 80 10 Well 1	1
THIS WELL WILL NOT REPLACE AN EXIST	ING WELL	12582	The second secon
THIS WELL WILL REPLACE A WELL THAT	WILL BE	Ho-9472	
ABANDONED AND SEALED	WILL BE LICED		3 \
39 S THIS WELL WILL REPLACE A WELL THAT AS A STANDBY-CONTACT LOCAL APPROV		5/	12
FOR POLICY ON STANDBY WELLS		5 / hell	
D THIS WELL WILL DEEPEN AN EXISTING WELL		0 / 5 1	L#13615 47
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE) 41 - 52		NA	
		3 2	2
Not to be filled in by driller (MDE OR C	COUNTY USE ONLY)		
APPROP. PERMIT NUMBER	G	图 建物层面	
		1/2 - 1 - 1	No. of the last of
PERMIT No. HO	-15-0363	10/16	
A STATE OF THE PROPERTY OF THE PARTY OF THE	72 73 74 75 76 77 78 79	400	
SPECIAL CONDITIONS NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED=	75 17 17	17 1	₩



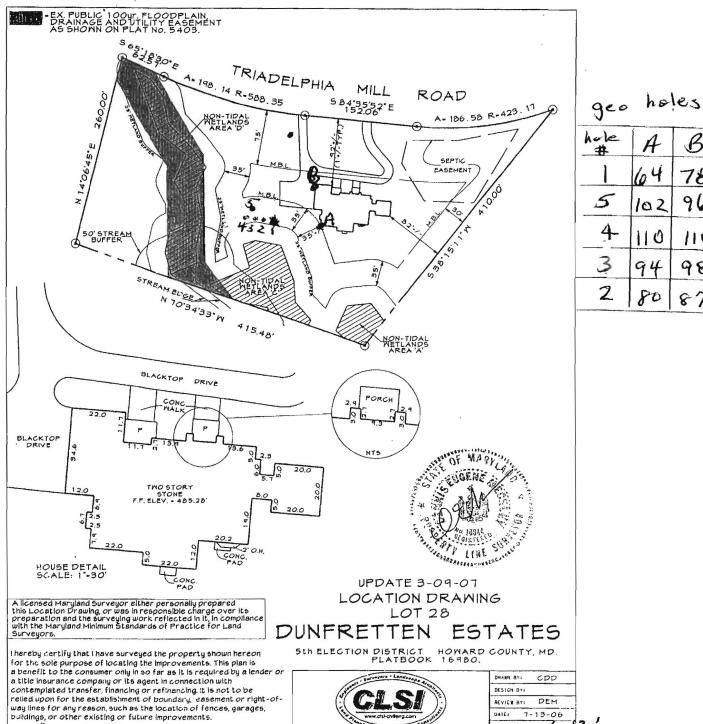
Serif M. DO NOT REMOVE THIS TAG
DEPARTMENT OF THE ENVIRONMENT
WELL PERMIT NUMBER

HO-15-0363

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

outractor. I loop HighAn Cond G. Inc. 0-836-1706

of o Scott allum



SCALE: 1-196 JOB NO. 2005030 1 OF 1 HVAC contractor

Serif Mumuney 13615 Triadelphia PD. Clarksville Md 21029

By Lennes Merkley Date 3 20 07
Dennis E. Meckley Property Line Serveyor No. 10844
1700603070danNoticclouze.dan Mar. 70, 2007 13,5759

Grand loop Ht STAN Coul Co. Inc. 410-836-1706 Contact & Scott allum

64

102

110

94

80

5

78

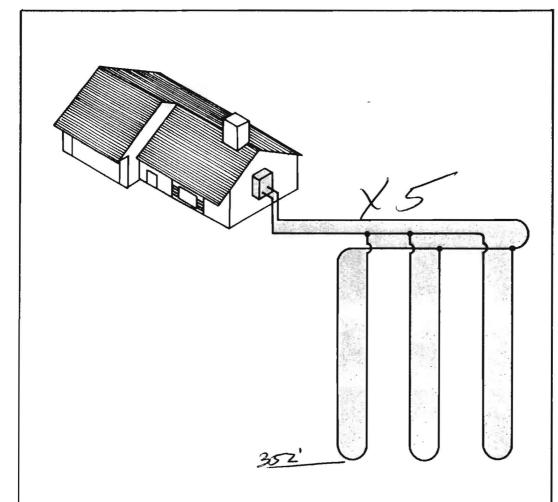
110

98

87

FILE INQUIRY NOTES

DATE	Bore closest to house dimed, loop installed + growted. Drilling			
12/9/16				
	next lone at 270'. Silt fence containing water and			
	cuttings. (SC)			
12/12/16	Two loops installed, both grouted. Topping off both boves. Drillers			
	drilling 3rd bore. Grout is EZ Grout. (SC)			
12/13/16	On site during drilling. Jones drilling hate #5. Holes 1-3 drilled +			
	growted, #4 drilled with loop but not growted. Just set 11' PVC casing			
	and addring more ble of collapse (Se)			
12/14/16	On site white Jones is drilling #5. Topping of grout of other four			
	bores. (C)			
•				



Earth Coil Type: Vertical - Single U-Bend

Water Flow: Parallel 114

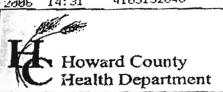
Pipe Sizes: Strange inch loops, Strange

∞ 2-inch headers

Bore Lengths: 3521 105020225 feet/ton

Pipe Lengths: 764 3500 to 450 feet/ton

FIGURE 4.5: Parallel Vertical Ground Heat Exchanger



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

TO ALL INTERESTED PARTIES

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

Well Site Location:

Denfection Estates 28 /3615 Transcliphic m. 11 felt

Subdivision/Property Name Lot# Road Name

The well site has been staked by (professional land surveyor or company employing professional land surveyors) on (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 3/11/05