

C1 16307

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

DATE RECEIVED

DATE WELL COMPLETED

DEPTH OF WELL

PERMIT NO. FROM "PERMIT TO DRILL WELL"

DATE RECEIVED MM DD YY

DATE WELL COMPLETED MM DD YY

DEPTH OF WELL TO NEAREST FOOT

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER, WELL SITE ADDRESS, TOWN, SUBDIVISION, SECTION, LOT

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, FEET (FROM, TO), check if water bearing. Includes handwritten entries: Overburden 0-3', Soft Brown 3-83', Gray Rock 83-500', Hit water 430'.

GROUTING RECORD WELL HAS BEEN GROUTED (Y/N)

TYPE OF GROUTING MATERIAL (Cement, Bentonite Clay), NO. OF BAGS, NO. OF POUNDS, GALLONS OF WATER, DEPTH OF GROUT SEAL

CASING RECORD casing types insert appropriate code below (Steel, Concrete, Plastic, Other)

MAIN CASING TYPE, Nominal diameter top (main) casing, Total depth of main casing

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

SCREEN RECORD screen type or open hole (Steel, Brass, Plastic, Open Hole, Other)

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (Y/N)

CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION"

DRILLERS LIC. NO. 1 M 5D 157, DRILLERS SIGNATURE

LIC. NO. 1 AWD 919, SITE SUPERVISOR

Table with columns: DEPTH (nearest ft.), E A C H C A S I N G, S L O T S I Z E, DIAMETER OF SCREEN

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

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) TELESCOPE CASING, LOG INDICATOR, OTHER DATA

PUMPING TEST

HOURS PUMPED (nearest hour) 3, PUMPING RATE (gal. per min.) 16.6, WATER LEVEL (distance from land surface) BEFORE PUMPING 25 ft., WHEN PUMPING 75 ft., TYPE OF PUMP USED (for test) S submersible

PUMP INSTALLED DRILLER INSTALLED PUMP (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) 16.66

PUMP HORSE POWER 1 HP, PUMP COLUMN LENGTH (nearest ft.) 480', CASING HEIGHT (circle appropriate box and enter casing height) + above 1 (nearest foot)

LATITUDE 39.27627, LONGITUDE 76.42593 (DEFAULT COORD. WGS 84)

NOTES: Hall Shop Rd., House -55'-x

B 1 16102

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type

STATE PERMIT NUMBER

40-95-2293 fill in this form completely

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13

Gossage William 3121 Eastern Ave. Baltimore MD 21224

B 3

LOCATION OF WELL

Howard 8 COUNTY 21 23 SUBDIVISION 42 SECTION 44 46 LOT 48 50 Clarksville 52 NEAREST TOWN 71

DRILLER INFORMATION

Michael B. Cochran M S D 157 76 License No. 81 Hair Well Drilling 12047 Falls Rd. Cockeysville MD B. Cochran 5-4-12

B 4

SOURCES OF DRILLING WATER

1 Shop 2. 3.

11877 Hall Shop Road 11 STREET ADDRESS 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH 34 130 37 DISTANCE FROM ROAD FT ENTER FT OR MI 38 39 TAX MAP: BLK: PARCEL

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 O OPEN LOOP GEOTHERMAL C CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard 13 A535283 COUNTY NAME COUNTY NO. STATE SIGNATURE INSERT S DATE ISSUED 5/15/12 CO SIGNATURE H. M. Wolf EXP. DATE 5/15/12

APPROXIMATE DEPTH OF WELL 300 FEET 24 28

APPROXIMATE DIAMETER OF WELL 6 INCH 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 DEEPEN 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 G PERMIT No. 40-95-2293

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



SPECIAL CONDITIONS Ex. Pit well to be sealed per COMAR 26.04.04.07

Need Radium Sample during yield.

HARR WELL DRILLING

12047 FALLS ROAD

COCKEYSVILLE, MD 21030
410-252-4588

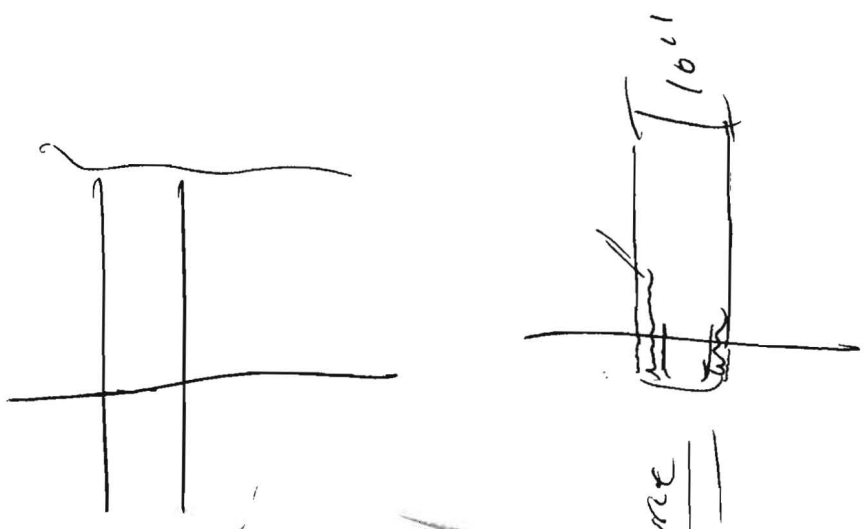
HOWARD COUNTY WELL YIELD TEST REPORT

Date Test Performed: 06-08-12
Address: 11887 Hall Shop Road
Owner: William Gossage
Well Depth: 500 FT

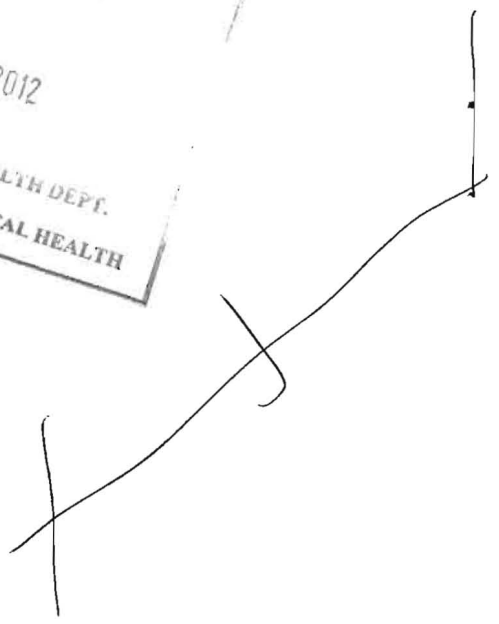
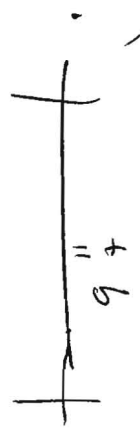
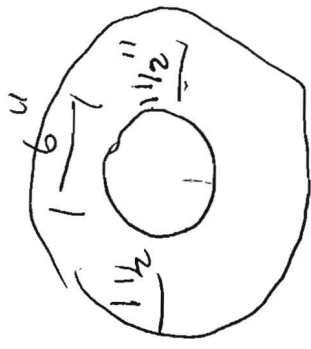
Permit Number: HO- 95-2293
Subdivision:
Election District:
Static Water Level: 25 Ft

Time	Water Level	PSI Existing Pump	Pumping Rate Seconds to fill 5 Gallon bucket	Calculated Flow-Gallons Per Minute
0900	25 ft	58 psi	18 sec	16.66
0915	50	58	17	17.64
0930	56	58	17	17.64
0945	62	58	17	17.64
1000	65	58	17	17.64
1015	68	58	17	17.64
1030	72	58	17	17.64
1045	75	62	18	16.66
1100	75	62	18	16.66
1115	75	62	18	16.66
1130	75	62	18	16.66
1145	75	62	18	16.66
1200	75	62	18	16.66

Annular Space = casing OD + 1 1/2" circumference.



REC'D
JUL 11 2012
HOWARD COUNTY HEALTH DEPT.
BUREAU OF ENVIRONMENTAL HEALTH





Howard County
Health Department

Bureau of Environmental Health
7178 Gateway Drive Columbia, MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

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

July 6, 2012

William Gossage
3121 Eastern Avenue
Baltimore, Maryland 21224

RE: 11877 Hall Shop Road
Replacement Well
Well Tag: HO - 95 - 2293

Dear Mr. Gossage:

A sample was collected during a yield test on June 8, 2012 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 24.1 ± 3.6 picocuries/liter (pCi/L), while the **Gross Beta** level was 9.0 ± 2.1 pCi/L. The **Gross Alpha** result was above 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 replacement well water supply **does not** meet EPA regulatory standards. Additional testing for **these parameters, plus Radium 226 and Radium 228** will be required to secure the future Use & Occupancy. Given the elevated finding for **Gross Alpha** the installation of a water softener system and / or a reverse osmosis system may be necessary. **Post short and long term Gross Alpha and Beta, plus a post Radium 226 / 228** will be needed to properly evaluate the effectiveness of the installed treatment. Given that it typically takes up to one month to perform and receive back the **Radium** analyses, plan accordingly. However, 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 report is enclosed for your information. Please call this office at **410-313-1773** if you have any further questions or to schedule additional testing.

Sincerely,

Bert Nixon, Director
Bureau of Environmental Health

Enclosure

cc: Barry Glotfelty, MDE Water Mgmt.

✓ Well & Septic property file

Send Report To:

Bert Nixon

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

E002957 3112

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: 1095 2293 No. B: Field Blank Bottle No. 1: F3KW6112 No B:

Plant/Site Name: 11887 Hall Shop Rd. County: Howard

Sample Source: Well Head Location: 10-95-2293
(well no, lab sink, sample tap, etc.)

County: 1 3 Plant No.

CHECK (one per box)

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

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

Source (raw water)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

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

Collector: K. Wolf

Telephone No.: 410-313-2645

Date Collected: 6/8/12

Time Collected: 11:00 a.m. p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

Submitters Code: Federal Project:

Field Data: pH Chlorine

Remarks: Sample preserved pH 2.0
CONFIRMATION 06/13/12 218.2 ± 6.4 B 6.4 ± 2.1

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Analyzed	Date Reported
✓	Gross Alpha	4000	2957	24.1 ± 3.6	06/12/12	06/13/12
✓	Gross Beta	4100	2957	9.0 ± 2.1	"	"
	Radon-222 Bottle A	4004				
	Radon-222 Bottle B	4004				
	Field Blank #A	4004				
	Field Blank #B	4004				
	Tritium					
	Ra - 226	4020				
	Ra - 228	4030				
	Total Uranium	4006				

Date Received: 06/11/12

Supervisor: [Signature]

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

Send Report To:

Bob Nixon

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Chemistry
RADIATION LABORATORY

201 W. Preston Street, Baltimore, Maryland 21201
John M. DeBoy, Dr. P. H., Director

E002956 3114

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: No. B: Field Blank Bottle No. 1: FBKW6112 No B:

Plant/Site Name: Howard County Health Dept. County: Howard

Sample Source: Distilled H2O Location: lab
(well no, lab sink, sample tap, etc.)

County: 1 3 Plant No.

CHECK (one per box)

Drinking Water
Landfill
Stream
Other

Community
Non-community
Private
Other

Source (raw water)
Distribution (treated)
MCL

Emergency
Routine
Recheck
Special

Collector: K. Wolf

Telephone No.: 410-313-2415

Date Collected: 6/11/12 Cent

Time Collected: 9:15 a.m. p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

Submitters Code: Federal Project:

Field Data: pH Chlorine

Remarks: Sample pH preserved = < 2.0

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Analyzed	Date Reported
	Gross Alpha	4000	2956	< 2.0	06/12/12	06/13/12
	Gross Beta	4100	2956	< 4.0	"	"
	Radon-222 Bottle A	4004				
	Radon-222 Bottle B	4004				
✓	Field Blank #A	4004				
	Field Blank #B	4004				
	Tritium					
	Ra - 226	4020				
	Ra - 228	4030				
	Total Uranium	4006				

Date Received: 06/11/12

Supervisor: Smyly

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

Send Report To:

Bert Alden

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Chemistry
RADIATION LABORATORY

201 W. Preston Street, Baltimore, Maryland 21201
John M. DeBoy, Dr. P. H., Director

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: No. B: Field Blank Bottle No. 1: FBKW61112 No B:

Plant/Site Name: Howard County Health Dept. County: Howard

Sample Source: Distilled H2O Location: lab
(well no, lab sink, sample tap, etc.)

County: 1 3 Plant No.

CHECK (one per box)

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

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

Source (raw water)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

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

Collector: K. Wolf

Telephone No.: 410-513-2645

Date Collected: 6/11/12

Time Collected: 9:15 a.m. p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

Submitters Code: Federal Project:

Field Data: pH Chlorine

Remarks: Sample pH preserved < 2.0

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Analyzed	Date Reported
	Gross Alpha	4000				
	Gross Beta	4100				
	Radon-222 Bottle A	4004				
	Radon-222 Bottle B	4004				
✓	Field Blank #A	4004				
	Field Blank #B	4004				
	Tritium					
	Ra - 226	4020				
	Ra - 228	4030				
	Total Uranium	4006				

Date Received: / /

Supervisor:

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

Send Report To:

Bert Nixon

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

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: H095 2293 No. B: Field Blank Bottle No. 1: F3KW6112 No B:

Plant/Site Name: 11887 Hall Shop Rel. County: Howard

Sample Source: Well Head Location: H0-9.5-2293
(well no, lab sink, sample tap, etc.)

County: 1 3 Plant No.

CHECK (one per box)

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

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

Source (raw water)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

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

Collector: K. Wolf

Telephone No.: 410-813-2645

Date Collected: 6/8/12

Time Collected: 11:00 a.m. p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

Submitters Code:

Federal Project:

Field Data: pH Chlorine

Remarks: Sample preserved pH < 2.0

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Analyzed	Date Reported
✓	Gross Alpha	4000				
✓	Gross Beta	4100				
	Radon-222 Bottle A	4004				
	Radon-222 Bottle B	4004				
	Field Blank #A	4004				
	Field Blank #B	4004				
	Tritium					
	Ra - 226	4020				
	Ra - 228	4030				
	Total Uranium	4006				

Date Received: / /

Supervisor:

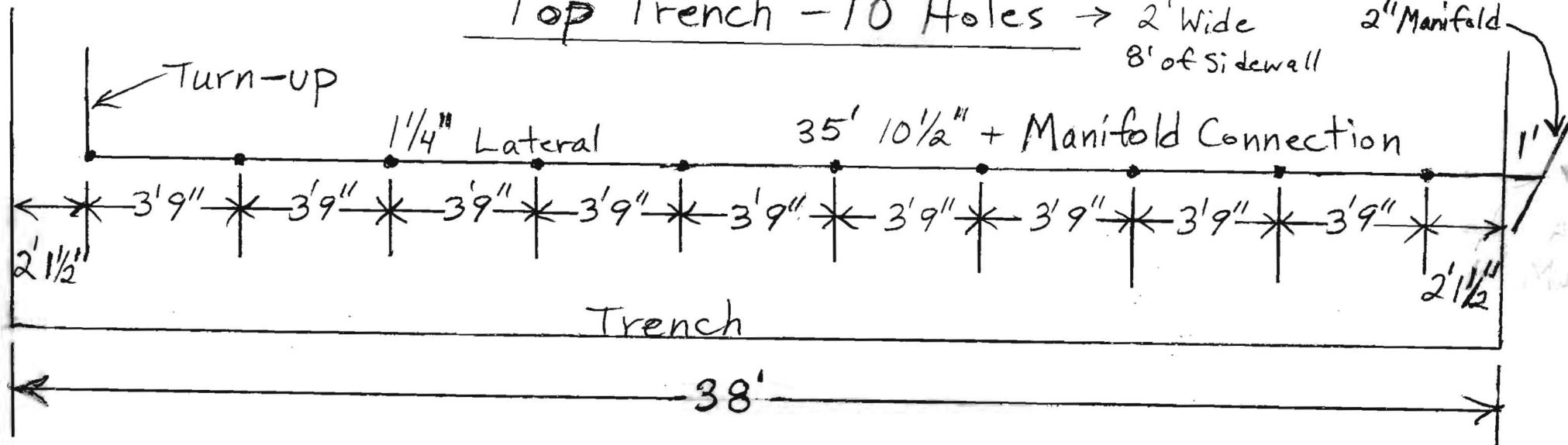
•Tel. No.: (410) 767 - 5537 •Fax No: (410) 333- 5373

5/16" Diameter Holes

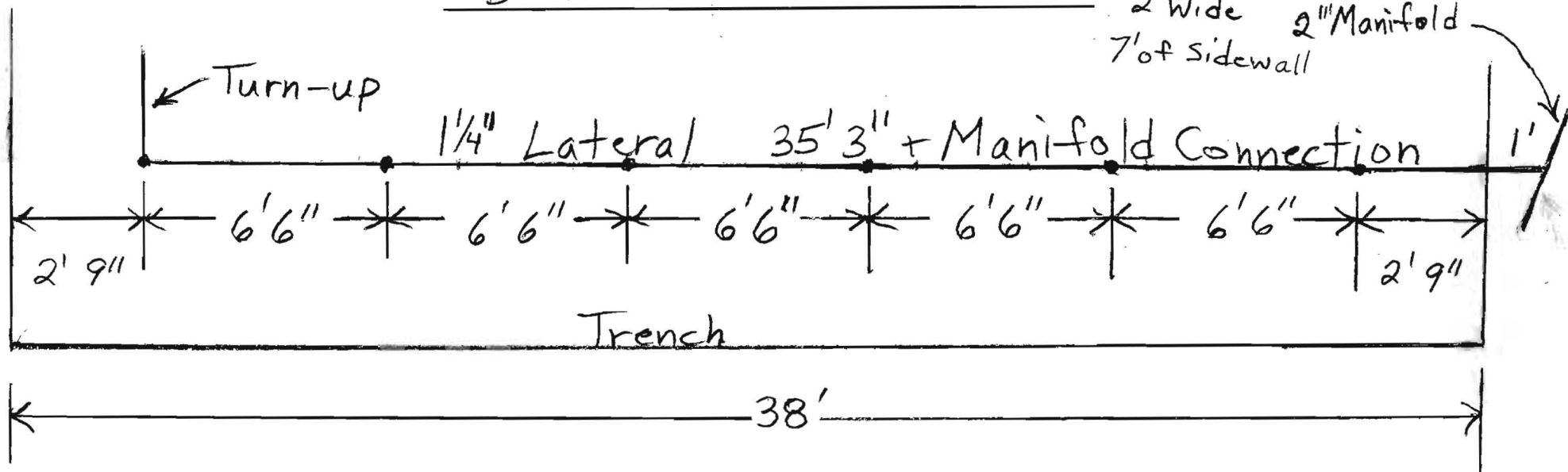
1/2 HP Pump

3.5' Elevation Difference
Between Trenches

Top Trench - 10 Holes → 2' Wide 2" Manifold
8' of Sidewall



Bottom Trench - 6 Holes → 2' Wide 2" Manifold
7' of Sidewall



SITE INSPECTION SHEET

OWNER: _____ PHONE #: _____

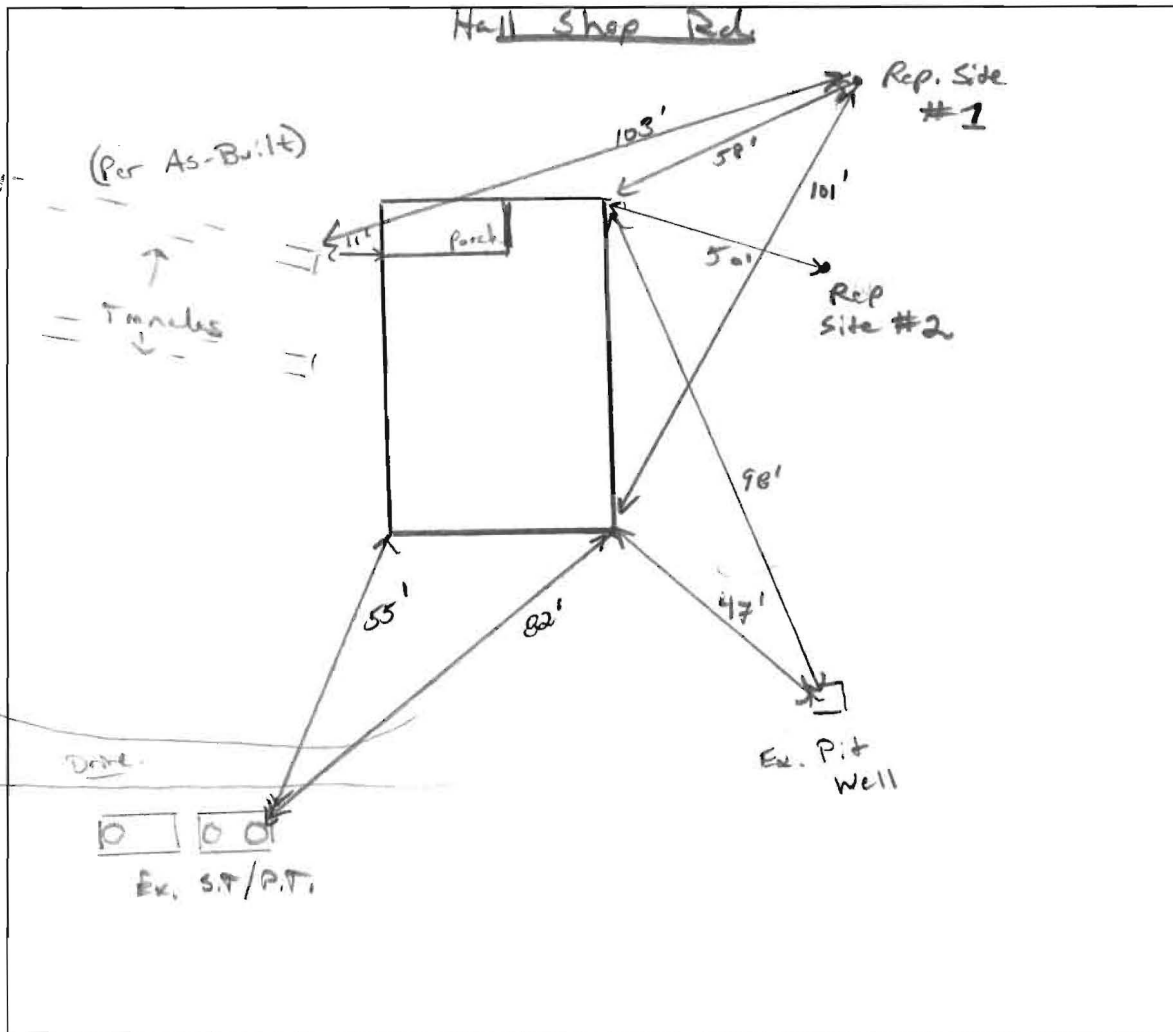
ADDRESS: 11887 Hall Shop Rd CONTRACTOR: Harr

WELL TAG #: _____

SUBDIVISION: _____ LOT: _____ COUNTY #: (13)

PROPOSAL: Pit well to be upgraded, out of H₂O?

LOCATION DIAGRAM



COMMENTS: 5/10/12 located 2 possible Rep. well sites w/ driller.
Ex. pit well < 1gpm. (to be tested).

DATE: 5/10/12 INSPECTOR: R. Wolf



HOWARD COUNTY HEALTH DEPARTMENT

37302

W5

DATE
5 / 11 / 12

Received From

G. Edgar Harr Sons' Corp

PHONE # 410-252-4588

12047 Falls Rd Cockeysville, MD

For (2) Well Permits - 12010 Hall Shop Rd
- 11877 Hall Shop Rd -

CASH
 CHECK

NO.

12844

three hundred and twenty dollars ~~xx~~ Dollars

\$

320 | 00

Received By

Curtis Hy