

C1 15996 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE

45 DAYS AFTER WELL IS COMPLETED. COUNTY NUMBER 534423

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

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY

Depth of Well 22 260 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" 110-55-2036

OWNER SCHWARTZ last name first name TOWN Columbia MD. STREET OR RFD 7501 CLOCKTOWER BL SUBDIVISION HUDSON PROP. SECTION LOT 2

WELL LOG Not required for driven wells

Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Rows include Top Soil, Sandy, Sandstone, MICKA, Sandstone, MICKA, Flint Rock, MICKA.

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) YES Y NO N. TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC. NO. OF BAGS 18 NO. OF POUNDS 1800. GALLONS OF WATER 108. DEPTH OF GROUT SEAL (to nearest foot) 42.

CASING RECORD casing types insert appropriate code below. MAIN CASING TYPE PL. Nominal diameter top (main) casing (nearest inch) 6. Total depth of main casing (nearest foot) 46.

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

SCREEN RECORD screen type or open hole insert appropriate code below. STEEL ST BRASS BR BRONZE BR PLASTIC PL OPEN HOLE HO OTHER OT.

DEPTH (nearest ft.) 44 260

NUMBER OF UNSUCCESSFUL WELLS: 0. WELL HYDROFRACTURED YES Y DO N.

CIRCLE APPROPRIATE LETTER. A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED. E ELECTRIC LOG OBTAINED. P TEST WELL CONVERTED TO PRODUCTION WELL.

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. M SD 119. DRILLERS SIGNATURE. LIC. NO. D.

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

DEPTH (nearest ft.) 44 260. SLOT SIZE 1 2 3. DIAMETER OF SCREEN (NEAREST INCH) 56 60. 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.

70 72 74 75 76. TELESCOPE CASING LOG INDICATOR OTHER DATA.

C 3 PUMPING TEST

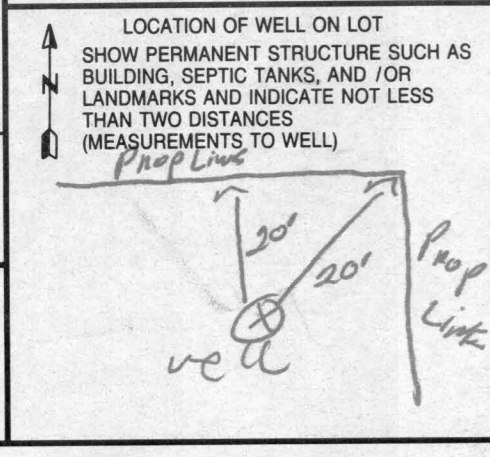
HOURS PUMPED (nearest hour) 3. PUMPING RATE (gal. per min.) 15. METHOD USED TO MEASURE PUMPING RATE Bucket. WATER LEVEL (distance from land surface) BEFORE PUMPING 53 ft. WHEN PUMPING 75 ft. TYPE OF PUMP USED (for test) S submersible.

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) 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).



B 1 8492

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 534423

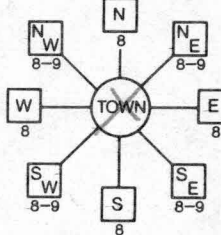
STATE PERMIT NUMBER 70 110-95-2036 79 fill in this form completely

Date Received (APA) 12 16 10 OWNER INFORMATION SCHWARTZ KEVIN 9521 Clock Tower Ln Columbia MD, 21046-1870

B 3 LOCATION OF WELL HOWARD Hudson Properties West Friendship MILES FROM TOWN 0

DRILLER INFORMATION RALPH E. MAYNE MSD 117 17024 Handy Rd. Mt. Airy MD 21071

B 4 MD Rt. 144 ON WHICH SIDE OF ROAD 34 700 37 DISTANCE FROM ROAD ENTER FT OR MI TAX MAP: 15 BLK: 18 PARCEL 75



B 2 WELL INFORMATION APPROX. PUMPING RATE 5 AVERAGE DAILY QUANTITY NEEDED 500

- 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

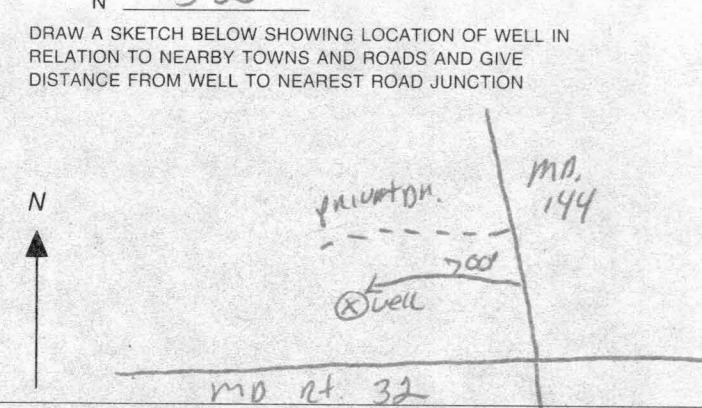
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL HOWARD COUNTY NAME 13 COUNTY NO. DATE ISSUED 12/21/10 CO SIGNATURE EXP. DATE 12/22/10 NORTH GRID 533 000 EAST GRID 0812 000

APPROXIMATE DEPTH OF WELL 150 FEET APPROXIMATE DIAMETER OF WELL 64 INCH NEAREST

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER 1. well WRITE THE BOX NUMBER FROM THE MAP HERE E 8102 N 533

METHOD OF DRILLING (circle one) BORED (or Augered) AIR-ROTary JETTED AIR-PERCussion Jetted & DRIVEN ROTARY (Hydraulic Rotary) DRIVE-POINT

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 DEEPEAN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED



Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER G PERMIT No. 110-95-2036

SPECIAL CONDITIONS NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 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: AR Crowell Plumbing Telephone #: 301-725-0902
Address: 906 Mountgomery St
Laurel, MD 20707

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): Robert Crowell License# 8980

*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: Hamilton Road Block's Telephone #: 410-977-1328
Subdivision: _____ Lot #: _____ Well Tag #: HO-95-2036
Site Address: 12787 Frederick Rd
West Friendship, MD 21794

Submersible Pump Data Pitless Adapter Well Cap and Electric Conduit
Make: Mesa Sumner Make: American Two piece watertight cap: _____
Model #: 5AT 10221 Model#: Lug PT 6" Screened, vented well cap:
Pump Capacity 5 GPM Depth: 40" (36" min) Cap secured to casing:
Well Yield: 2 GPM NSF/WSC approved: _____ Conduit min 1 1/2" B.G.:
Depth of well encountered at time of pump installation: _____ (feet) Conduit secured to well cap:

If pump capacity exceeds well yield, a low water/cut off switch is required by NSPC 1990 Section 17.8.4
Torque arrestors, Cable guards, or other acceptable method used- Must circle one
Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing

Piping to house House Connection
Type: POLY PVC sleeve to undisturbed soil at wall penetration:
PSI: 160 (160 psi min) Approximate length of sleeve: 2ft
Depth of supply line: 40" (36" min) Sleeve caulked and sealed properly:

The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation _____ date 12-9-11

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

Date Insp. Requested: _____ Date Insp. Approved: _____ Inspector: _____
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade _____
Two piece cap installed and attached to casing securely _____
Elec. conduit extends at least 18" below grade/attached to cap properly _____
Safety rope not seen outside of well cap/casing _____
Correct well tag attached properly and casing 8" above finished grade _____
Water supply line sleeved adequately at house connection _____
Adequate grout observed below pitless adapter _____

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648**

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

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Company Name: _____ Telephone #: _____
Address: _____

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer

License # and name of individual responsible for the field installation:

Name (Print): _____ License# _____

***A licensed individual must perform the actual installation. Apprentices must be under the direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification.**

Name of Property Owner: _____ Telephone #: _____
Subdivision: Hudson Property Lot #: 1 Well Tag #: HO-95-2036
Site Address: 12787 Frederick Road

Submersible Pump Data

Make: _____
Model #: _____
Pump Capacity _____ GPM
Well Yield: _____ GPM

Pitless Adapter

Make: _____
Model#: _____
Depth: _____ (36" min)
NSF approved: _____

Well Cap and Electric Conduit

Two piece watertight cap: _____
Screened, vented well cap: _____
Cap secured to casing: _____
Conduit min 18" B.G.: _____
Conduit secured to well cap: _____

Depth of well encountered at time of pump installation: _____ (feet)
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

Torque arrestors or Cable guards are required - Must circle one

Safety rope, if used, attached to inside of well casing with eye bolt _____

Piping to house

Type: _____
PSI: _____ (160 psi min)
Depth of supply line: _____ (36" min)

House Connection

PVC sleeved to undisturbed soil at wall penetration: _____
Approximate length of sleeve: _____
Sleeve caulked and sealed properly: _____

The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation _____ date _____

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

Date Insp. Requested: _____ Date Insp. Approved: _____

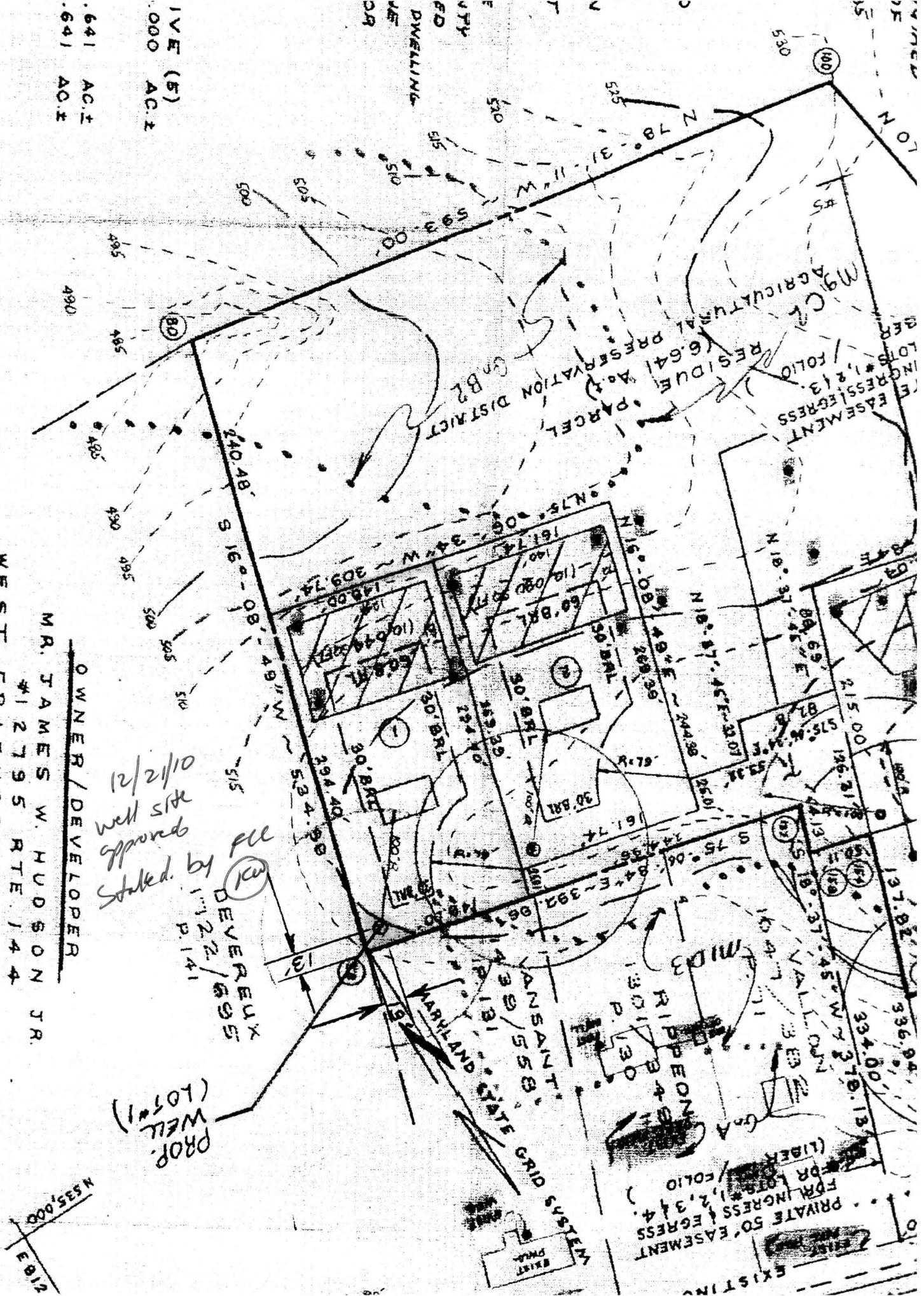
Inspection Data: Pitless adapter and water supply line at least 36" below grade
Two piece cap installed and attached to casing securely
Elec. conduit extends at least 18" below grade/attached to cap properly
Safety rope installed inside of well casing
Correct well tag attached properly and casing 8" above finished grade
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter

✓
~~Not Glued~~
~~Not Glued~~
✓
✓
✓
✓

10/27/2011
BB

● = PROPOSED PERC TEST
 ○ = SOILS DIVISION LINE

LIVE (F)
 .000 AC.±
 .641 AC.±
 .641 AC.±



12/21/10
 well site
 approved
 Staked by PCC
 DEVEREUX
 1122 P. 141

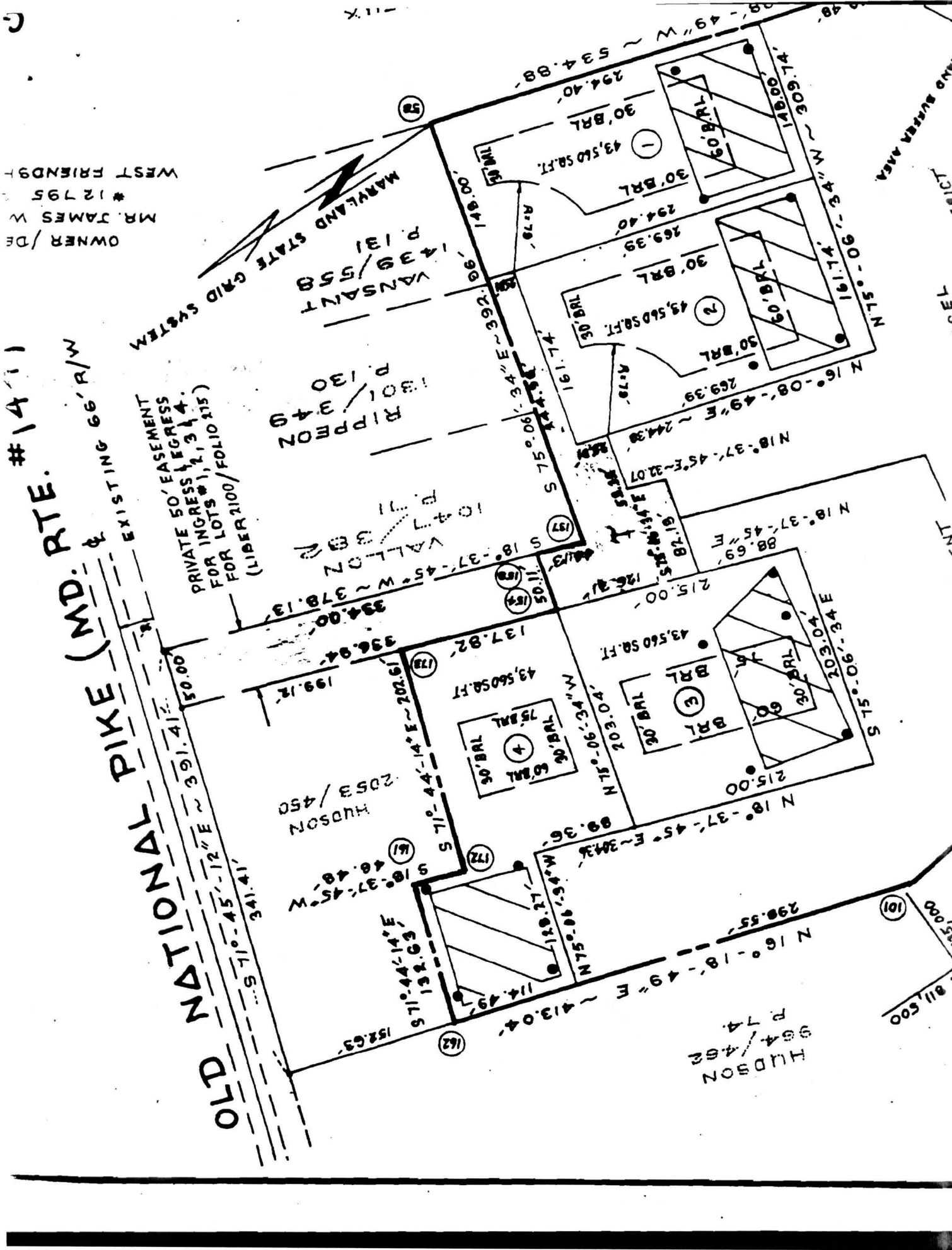
OWNER/DEVELOPER
 MR. JAMES W. HUDSON JR.
 #12795 RTE 144
 WEST FRIENDSHIP, MD. 21794

N 535,000
 E 812

#1411
 OLD NATIONAL PIKE (MD. RTE.)
 & EXISTING 66' R/W
 PRIVATE 50' EASEMENT
 FOR INGRESS & EGRESS
 FOR LOTS #1, 2, 3 & 4
 (LIBER 2100 / FOLIO 215)

OWNER / DE
 MR. JAMES W
 #12795
 WEST FRIENDS

MARYLAND STATE GRID SYSTEM
 VANSAANT
 P 131 / 558
 RIPPEON
 P 130 / 349



VALLON
 P 111 / 382
 1047

HUDSON
 P 253 / 450

HUDSON
 P 74 / 462

AND SURVEY AREA

CEL

INT

50' 55'

811 500

(5)

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

ATTENTION WELL DRILLERS!!!

When submitting a well application for a new or replacement well, please indicate one of the following:

- The well site has been staked by Fisher - Collins - Carter on Dec 16 2010 and is ready for site inspection.
- _____ will call the Health Department for a time to meet in the field to verify a well location.
- Site plan for new well is attached to well permit application.

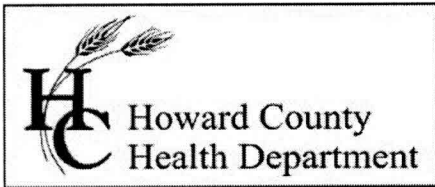
Please attach this sheet when submitting your green application. This should help improve communication allowing a more timely service for our citizens.

KN Must BE Sent with well APPLICATION

Owner Kevin Schwartz

Lot # I

Sub Hudson Property



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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – June 19, 2012

December 19, 2011

Homeowner
12787 Frederick Road
West Friendship, MD 21794

**RE: 12787 Frederick Road
Building Permit: B10004038
Well Permit: HO-95-2036**

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 **10/21/2011**. Final approval of the well line connection to the dwelling was granted on **12/19/2011**. The well construction was completed on **1/6/2011**. Water samples were collected on **12/15/2011**.

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-95-2036. 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,

Jeff Williams
Program Supervisor
Well & Septic Program

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



TRACE LABORATORIES, INC
 5 North Park Drive
 Hunt Valley, MD 21030 USA
 Telephone: 410/584-9099 / Fax: 410/584-9117
 Website: www.traceclabs.com / Email: info@traceclabs.com

Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

Steve Forney
 Hamilton Reed
 3368 Brantley Court
 Glenwood, Maryland 21738

S/O Number: 83670

Report Date: December 16, 2011

Property Sampled: 12787 Frederick Road, 21794
Sample Location: Upstairs Bath tub Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B10004038
Sampler ID #: 0765AR
Samples Iced: Yes

County: Howard
Map: N/A

Subdivision: N/A
Parcel: N/A

Lot #: N/A

Date/Time Collected in Field: December 15, 2011 @ 3:15 pm
Date/Time Received in Lab: December 15, 2011 @ 4:40 pm

Well Tag #: HO-95-2036
Well Condition: 2-Piece Cap, Satisfactory

*OK JW
 12/16/11*

Water Treatment/Conditioning: None

PARAMETER	METHOD	MCL/*SMCL	RESULT	PASS/FAIL
Total Coliform	SM 9223B	Absent	Absent	Pass
<i>E. coli</i>	SM 9223B	Absent	Absent	Pass
Nitrate	SM 4500D	10 mg/L as N	<1.0 mg/L as N	Pass
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass
pH	EPA 150.1	*6.5-8.5 Units	6.3 Units	***
Sand		Absent	Absent	Pass

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

MCL: Maximum Contamination Level, an enforceable level established by the EPA
 *SMCL: Secondary Maximum Contamination Level, a level recommended by the EPA
 ***A non-enforceable parameter that may cause cosmetic effects or aesthetic effects (such as taste, color or odor) in drinking water.