

C 1 9875
 SEQUENCE NO. (WRA USE ONLY)
 (THIS NUMBER IS TO BE PUNCHED IN COLUMNS 3-6 ON ALL CARDS)

STATE OF MARYLAND
 WATER RESOURCES ADMINISTRATION
 TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401
 WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 30 DAYS AFTER WELL COMPLETE
 FILL IN THIS FORM COMPLETELY
 COUNTY NUMBER

DATE RECEIVED (WRA USE ONLY) _____ DATE WELL COMPLETED June 11 78 DEPTH OF WELL 185 PERMIT NO. FROM "PERMIT TO DRILL WELL" 40-73-2730
 22 (TO NEAREST FOOT) 26
 28 29 30 31 32 33 34 35 36 37
 DRILLERS IDENTIFICATION NO. 238

OWNER LAST NAME _____ FIRST NAME _____
 STREET OR RFD _____ POST OFFICE _____

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

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY)	FEET		CHECK IF WATER BEARING
	FROM	TO	
gray sand	0	30	
rock	30	185	

WELL DESCRIPTION
GROUTING RECORD
 WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX) YES Y NO N
 TYPE OF GROUTING MATERIAL (CIRCLE BOX)*
 CEMENT C M BENTONITE CLAY B C
 45 46 45 46
 NO. OF BAGS 5 NO. OF POUNDS 470
 GALLONS OF WATER 30
 DEPTH OF GROUT SEAL (TO NEAREST FOOT)
 FROM 0 FT. TO 21 FT.
 (ENTER 0 IF FROM SURFACE)
CASING RECORD
 CASING TYPES (INSERT APPROPRIATE CODE BELOW)
 S T C O
 STEEL CONCRETE
 P L O T
 PLASTIC OTHER
 MAIN CASING TYPE S T NOMINAL DIAMETER TOP (MAIN) CASING (NEAREST INCH) 6 TOTAL DEPTH OF MAIN CASING (NEAREST FOOT) 23
 60 61 63 64 66 70

C 3
 1 2 3 (SEQ. NO.) 6
PUMPING TEST
 HOURS PUMPED (TO NEAREST HOUR) 2
 8 9
 PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON) 10
 11 15
 METHOD USED TO MEASURE PUMPING RATE _____
 WATER LEVEL: (DISTANCE FROM LAND SURFACE)
 BEFORE PUMPING _____ (NEAREST FOOT)
 17 20
 WHEN PUMPING _____ (NEAREST FOOT)
 22 25
 TYPE OF PUMPED USED (CIRCLE APPROPRIATE BOX) (FOR PUMPING TEST)
 A AIR P PISTON T TURBINE
 27 27 27
 C CENTRIFUGAL R ROTARY O OTHER (DESCRIBE BELOW)
 27 27 27
 J JET S SUBMERSIBLE
 27 27

OTHER CASING (IF USED)
 DIAMETER (INCH) _____ DEPTH (FEET) FROM _____ TO _____
 EACH CASING

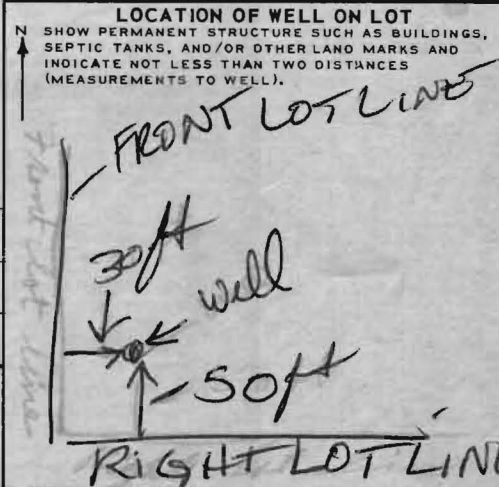
PUMP INSTALLED
 TYPE OF PUMP (WRITE APPROPRIATE LETTER IN BOX - SEE ABOVE: A, C, J, P, R, S, T, O) _____ 29
 DRILLER WILL INSTALL PUMP (CIRCLE APPROPRIATE BOX) YES Y NO N
 CAPACITY:
 GALLONS PER MINUTE (TO NEAREST GALLON) _____ 31 35
 PUMP HORSE POWER _____ 37 41
 PUMP COLUMN LENGTH (NEAREST FOOT) _____ 43 47

SCREEN RECORD
 SCREEN TYPE OR OPEN HOLE (INSERT APPROPRIATE CODE BELOW)
 S T B R H O
 STEEL BRASS OR BRONZE OPEN HOLE
 P L O T
 PLASTIC OTHER

CASING HEIGHT (CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT)
 + ABOVE } LAND SURFACE (NEAREST FOOT)
 - BELOW } _____ 49 50 51

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

C 2
 1 2 3 (SEQ. NO.) 6
DEPTH (NEAREST WHOLE FOOT)
 FROM _____ TO _____
 EACH SCREEN
 1 _____ 8 9 11 15 17 21
 2 _____ 23 24 26 30 32 36
 3 _____ 38 39 41 45 47 51
 SLOTS SIZE 1, _____ 2, _____ 3, _____



I HEREBY CERTIFY THAT I HAVE COMPLIED WITH ALL CONDITIONS STATED ON THE ABOVE-CAPTIONED "PERMIT TO DRILL WELL", AND THAT INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.
 DRILLERS NAME _____
 (PLEASE PRINT) _____
 SIGNATURE _____

DIAMETER OF SCREEN 56 (NEAREST INCH)
 FROM _____ TO _____
 GRAVEL PACK _____
 IF WELL DRILLED WAS A FLOWING WELL CIRCLE BOX 68 F
 WRA USE ONLY (NOT TO BE FILLED IN BY DRILLER)
 T (E.R.D.S.) W Q
 70 72 74 75 76
 TELESCOPE LOG OTHER DATA
 CASING INDICATOR AVAILABLE

B 1 1926
 SEQUENCE NO. (WRA USE ONLY)
 1 2 3 (SEQ. NO.) 6
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BLDG., ANNAPOLIS, MARYLAND 21401
APPLICATION FOR PERMIT TO DRILL WELL

WRA PERMIT NUMBER
 40 73 2720
 FILL IN THIS FORM COMPLETELY

DATE RECEIVED (WRA USE ONLY)
 6/19/78
 10:08 A.M.

OWNER Brandon M. ...
 COL 15 LAST NAME FIRST NAME COL. 34
STREET OR RFD 215 ...
 COL 36 COL. 55
POST OFFICE Columbia Md.
 COL 57 COL. 76

B 1 CONTINUED DRILLER INFORMATION
 1 2 3 (SEQ. NO.) 6
DATE April 1978 **LICENSE NUMBER** 238
 COL. 77 COL. 80
FIRST NAME Joseph L. Maynard **DRILLER** **LAST NAME**
SIGNATURE Joseph L. Maynard

B 3 LOCATION OF WELL
 1 2 3 (SEQ. NO.) 6
COUNTY St. Mary's (DO NOT ABBREVIATE COUNTY NAME) 21
SUBDIVISION ... 42
SECTION E **LOT** ... 50
NEAREST TOWN ... 71
MILES FROM TOWN (ENTER 0 IF IN TOWN) ... 73 76 77 78

B 2 WELL INFORMATION
 1 2 3 (SEQ. NO.) 6
MAXIMUM PUMPING RATE (GALLONS PER MINUTE) ... 8 12
AVERAGE DAILY QUANTITY NEEDED (GALLONS PER DAY) 750 14 20
USE FOR WATER (CIRCLE APPROPRIATE BOX)
 HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
 FARMING, AGRICULTURE, IRRIGATION
 INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOVERNMENT.
 MUNICIPAL WATER SUPPLY } MUST HAVE STATE HEALTH DEPT. APPROVAL
 PRIVATE WATER COMPANY
 TEST

B 4 DIRECTION FROM TOWN
 (CIRCLE APPROPRIATE BOX)
 NORTH EAST N E NORTHEAST S E SOUTHEAST
 SOUTH WEST N W NORTHWEST S W SOUTHWEST
NEAR WHAT ROAD ... 11 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) N S E W 32 32 32 32
DISTANCE FROM ROAD (ENTER DISTANCE AND CIRCLE APPROPRIATE BOX) 34 37 38 39

APPROXIMATE DEPTH OF WELL 200 FEET
 24 28

APPROXIMATE DIAMETER OF WELL 6 (NEAREST INCH)

METHOD OF DRILLING USED (CIRCLE APPROPRIATE METHOD)
 BORED (OR AUGERED) JETTED DRIVEN
 30-37 AIR-ROTARY AIR-PERCUSSION ROTARY (HYDRAULIC ROTARY)
 CABLE REVERSE-ROTARY DRIVE-POINT
OTHER (DESCRIBE)

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)
 THIS WELL WILL NOT REPLACE AN EXISTING WELL
 THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
 THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY
 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 (WRA USE ONLY)
APPROPRIATION PERMIT NUMBER 54 **ENGINEER REVIEW DISTRICT NO.** 65
FORCE 67 **WRITE INITIALS IN BOX** **CONDITIONS** ... 70 71 72 73 74 75 76 77 78 79

B 4 CONTINUED HEALTH DEPARTMENT APPROVAL
 1 2 3 (SEQ. NO.) 6
 STATE HEALTH (CIRCLE BOX) Howard **COUNTY NAME** 127787 **COUNTY NO.**
DATE 04/12/78 **APPROVED BY** Donald W. Monaghan, Sanitarian
 43 48

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS, ROADS AND STREAMS WITH NORTH IN THE DIRECTION OF THE ARROW, AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION OR STREAM CROSSING SHOWN ON THE SKETCH. ALSO SHOW, BY MEANS OF AN "X", THE WELL LOCATION IN THE BOX BELOW AND THE BOX NUMBER FROM THE WELL LOCATION MAP.

*23' casing
 22' open hole
 5 bags cement
 6/19/78
 TSO*

John ... Rd

Trulston

BOX NUMBER 520
 E N
480

NORTH COORDINATE ... 50 51 52 53 54 55
EAST COORDINATE ... 57 58 59 60 61 62 63
ELEVATION AT WELL HEAD (FEET) ... 65 66 67 68

0/5 5/5
 0/0 5/0

B 5 SPECIAL CONDITIONS 8-63 (WRA USE ONLY)
 1 2 3 (SEQ. NO.) 6

CFE 11/8/10 9:32 AM

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 26.14.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: R & G WATER SYSTEMS, INC. Telephone #: 410-239-0700
Address: 4322 OPALS CHURCH DR
WATFOLITE STORZ, MD 21022

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

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

Name (Print): Rickey L. Koons License # PI 0141

*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: R. S. CONSTRUCTION Telephone #: 410-623-0511
Subdivision: N/A Lot #: N/A Well Tag #: HO-72-2720
Site Address: 7343 HALLOWICK CRT
CLARESVILLE, MD 21029

Submersible Pump Data

Make: Extron
Model #: ?
Pump Capacity: 17 GPM
Well Yield: ? GPM

Pitless Adapter

Make: Pipe
Model #: HT2070
Depth: 36 (36" min)
NSF approved: YES

Well Cap and Electric Conduit

Two piece watertight cap:
Screened, vented well cap:
Cap secured to casing:
Conduit min 1/2" 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 gears are required - Must circle one

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

* PLEASE NOTE: OWNER REQUESTED TO LEAVE AND USE THE EXISTING PUMP THAT IS IN THE WELL

Piping to house

Type: Poly
PSI: 200 (160 psi min)
Depth of supply line: 36 (36" min)

House Connection

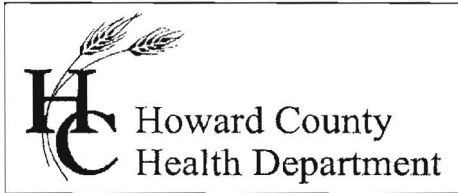
PVC sleeved to undisturbed soil at wall penetration: YES
Approximate length of sleeve: 30'
Sleeve caulked and sealed properly: YES

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: [Signature] date: 11/8/10

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

Date Insp. Requested: _____ Date Insp. Approved: (10) 11/18/10
Inspection Data: Pitless adapter and water supply line at least 36" below grade 100%
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 gout observed below pitless adapter



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

January 27, 2011

Homeowner
7343 Hallmark Road
Clarksville, MD 21029

RE:

7343 Hallmark Road
Clarksville, MD 21029
BP #B10000886
Well Permit #HO-73-2720

Dear Sir/Madam,

This is to advise you that the septic system for the above referenced property has been installed and inspected. **Final approval of the septic system was granted on 07/23/2010. Final approval of the well line connection to the dwelling was approved on 11/18/2011.**

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.

The raw nitrate sample results were previously documented to be 15.1 ppm. **A nitrate removal device (Reverse Osmosis) has been installed to treat the excessive nitrate contamination. The nitrate treatment device appears to be operating properly as evidenced by the water sample results taken on 01/07/2011 which indicates a nitrate level of 2.8 ppm.**

Permanent Deviation for Nitrates

COMAR 26.04.04.09 prohibits approval of any water supply with a nitrate-nitrogen contaminant level in excess of 10 parts per million. **This department will grant a permanent deviation to that section of the regulation on condition that the nitrate removal system effectively maintains the nitrate-nitrogen contaminant level of 10 ppm or less.**

Furthermore, it will be necessary for you to comply with the following conditions:

1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the **residence**.
2. It is recommended that a laboratory certified for water testing perform a yearly nitrate analysis. (Certified to test for nitrates)
3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of the above condition.

INTERIM CERTIFICATE OF POTABILITY
(Permanent Deviation for Nitrates)

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-73-2720 **Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.** Based upon satisfactory investigation and evaluation, the Howard County Health Department as authorized by the Maryland Department of the Environment accepts this well system as required by COMAR 26.04.04.

Further more under COMAR 26.04.04.09 E. *Disclosure*, any and all special conditions to this interim certificate of potability shall be disclosed to any purchaser of the property served by the well HO-95-1568 before entering into a contract of sale or lease. A person who fails to make this disclosure is subject to the penalties set out in Regulation .12F *Enforcement* and Environment Article 9-1311, Annotated Code of Maryland.

This certificate may become final upon completion of the second bacteriological and nitrate tests, which may be taken by the health department within six months of the date of this letter. Please contact (410) 313-1773 to schedule a final water sample appointment. Currently, there is no charge for this final sampling.

Date of Water Sample(s): 01/03/2011 & 01/07/2011
Dated of Well Completion: 06/11/1978

Respectfully,

Brian Baker, R.S.
Environmental Sanitarian
Well and Septic Program

cc: Building Inspector's office
 Community Health Services
 File



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:

B-Square Construction
 2420 Alees Drive
 New Windsor, Maryland 21776

S/O Number: 80034

Report Date: January 10, 2011

Nitrate Retest

Property Sampled: 7343 Hallmark Road, 21029
Sample Location: Bathroom Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B10000886
Sampler ID #: 9813AM
Samples Iced: Yes

County: Howard
Map: 41

Subdivision: Hallmark
Parcel: 422

Lot #: 34

Date/Time Collected in Field: January 7, 2011 @ 12:35 pm

Date/Time Received in Lab: January 7, 2011 @ 2:45 pm

Well Tag #: HO-73-2720
Well Condition: 2-Piece Cap, Satisfactory Condition

Water Treatment/Conditioning: Softener with Nitrate Removal Beads

PARAMETER	METHOD	MCL	RESULT	PASS/FAIL
Nitrate	SM 4500D	10 mg/L as N	2.8 mg/L as N	Pass

Katherine C. Higgs
 Katherine C. Higgs
 Administrative Assistant



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:

B-Square Construction
 2420 Alees Drive
 New Windsor, Maryland 21776

S/O Number: 79983

Report Date: January 4, 2011

Property Sampled: 7343 Hallmark Road, 21029
Sample Location: Bathroom Sink
Residual Chlorine: <0.1 mg/L

Building Permit #: B10000886
Sampler ID #: 9813AM
Samples Iced: Yes

County: Howard
Map: 41

Subdivision: Hallmark
Parcel: 422

Lot #: 34

Date/Time Collected in Field: January 3, 2011 @ 1:30 pm

Date/Time Received in Lab: January 3, 2011 @ 3:40 pm

Well Tag #: HO-73-2720
Well Condition: 2-Piece Cap, Satisfactory Condition

Water Treatment/Conditioning: None

PARAMETER	METHOD	MCL/*SMCL	RESULT	PASS/FAIL
Total Coliform	SM 9223B	Absent	Absent	Pass
E. coli	SM 9223B	Absent	Absent	Pass
Nitrate	SM 4500D	10 mg/L as N	15.1 mg/L as N	FAIL
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass
pH	EPA 150.1	*6.5-8.5 Units	6.4 Units	***
Sand		Negative	Negative	

Katherine C. Higgs
 Katherine C. Higgs
 Administrative Assistant

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.