

C1- 3787

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 13 A516004

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY 11/18/04

Depth of Well 500 (TO NEAREST FOOT)

1/24/05 O.K. (BB)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-94-4009

OWNER Winchester Homes STREET OR RFD Hunters View Road TOWN Ellicott City SUBDIVISION Riverwood SECTION 1 LOT 8

WELL LOG Not required for driven wells

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries like Topsoil, brown/orange rocky clay, Tan rocky clay, Sandstone, etc.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y/N) TYPE OF GROUTING MATERIAL (CM, BC) NO. OF BAGS 34 NO. OF POUNDS 3400

CASING RECORD

MAIN CASING TYPE (ST) Nominal diameter top (main) casing (nearest inch) 6 Total depth of main casing (nearest foot) 60

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

SCREEN RECORD

screen type or open hole (ST, BR, HO, PL, OT) insert appropriate code below

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" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...

DRILLERS LIC. NO. 1 MWD 040 DRILLERS SIGNATURE

LIC. NO. 1 JW D 727

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

DEPTH (nearest ft.)

Table with columns: 1-11, 15-17, 21-24, 26-32, 36-39, 41-47, 51-54. Includes handwritten values like 58, 500.

SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60

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

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) (E.R.O.S.) W Q

70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST

HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 12 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 25 ft. WHEN PUMPING 137 ft. TYPE OF PUMP USED (for test) S submersible

PUMP INSTALLED

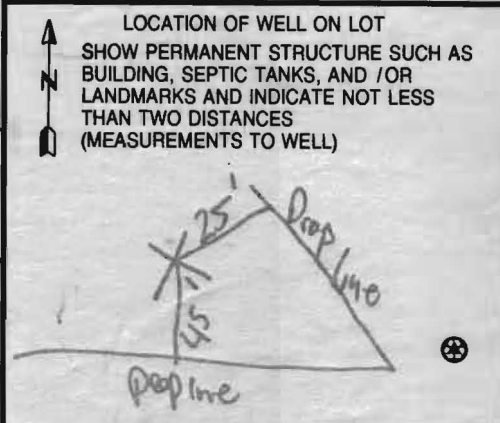
DRILLER INSTALLED PUMP (CIRCLE) (YES OR NO) YES NO IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

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 () below LAND SURFACE 2 (nearest foot)

LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



B 1 9711

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type

STATE PERMIT NUMBER

HO-94-4009 fill in this form completely

520762

Date Received (APA)

OWNER INFORMATION

9760

B 3

Howard

LOCATION OF WELL

CC#

8 MM DD YY 13

Winchester Homes, inc

15 Last Name Owner First Name 34

6905 Rockledge Drive, Suite 800

36 Street or RFD 55

Bethesda, Md 20817

57 Town 70 State 72 Zip 76

8 COUNTY 21

Riverwood

23 SUBDIVISION 42

SECTION 1 LOT 8

Clarksville

52 NEAREST TOWN 71

MILES FROM TOWN (enter 0 if in town) 3 M I I 73 76 77 78

DRILLER INFORMATION

George F. Easterday M W 040

Driller's Name 76 License No. 81

L. Franklin Easterday, inc.

Firm Name

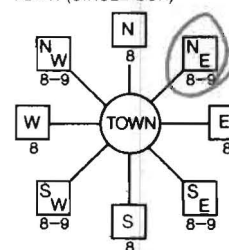
9265 Brown Church Rd., MT. Airy, Md. 21771

Address

Signature Date 6/28/04

B 4

1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Hunters View Road

11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)



34 200 37 DISTANCE FROM ROAD Ft.

ENTER FT OR MI 38 39

TAX MAP: 29 BLK: 4 PARCEL 20

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 8 5 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 500 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- 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 (13) A516084

COUNTY NAME COUNTY NO.

STATE SIGNATURE INSERT S

DATE ISSUED 8/20/2004 Brian Baker 8/20/2005

43 MM DD YY 48 CO SIGNATURE EXP DATE

NORTH GRID 514 0 0 0 EAST GRID 828 0 0 0

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

- BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTary AIR-Percussion ROTARY (Hydraulic Rotary)
CABLE REVerse-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 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)

APPROP. PERMIT NUMBER HO 2004G007

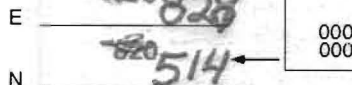
PERMIT No. HO-94-4009

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

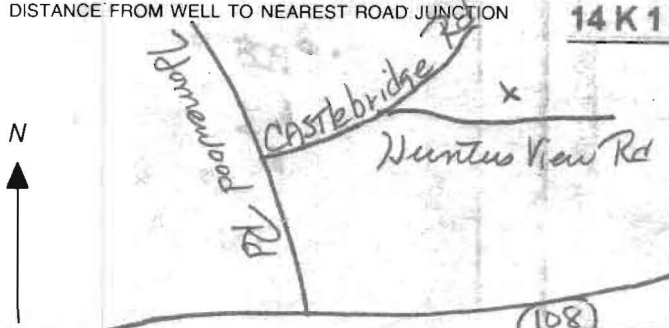
SOURCES OF DRILLING WATER

- 1. wells
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE



DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



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: NATIONAL WATER SVC Telephone #: 301-854-1333
Address: PO BOX 188
Ashton, MI 48861

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): DAVID RYCKE License#: PL 0145

*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: WINCHESTER HOMES Telephone #: 301-823-4174
Subdivision: RIVERWOOD Lot #: 8 Well Tag #: HO-44-4009
Site Address: 11028 HUNTERS VIEW RD
Ellicott City, MD

Submersible Pump Data Pitless Adapter Well Cap and Electric Conduit
Make: GRUNDfos Make: Campbell Two piece watertight cap: [checked]
Model #: 15 SQE10-250 Model #: PA 300 Screened, vented well cap: [checked]
Pump Capacity 15 GPM Depth: 48" (36" min) Cap secured to casing: [checked]
Well Yield: 12 GPM NSF/WSC approved: YES Conduit min 18" B.G.: [checked]
Depth of well encountered at time of pump installation: 500 (feet) Conduit secured to well cap: [checked]

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. CPS
Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing YES

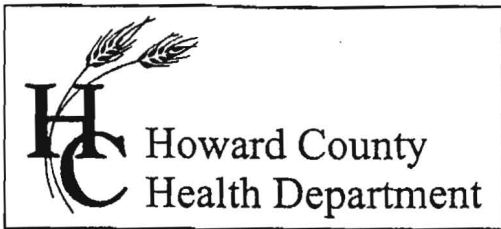
Piping to house House Connection
Type: Poly PVC sleeve to undisturbed soil at wall penetration: YES
PSI: 160 (160 psi min) Approximate length of sleeve: 5'
Depth of supply line: 4' (36" min) Sleeve caulked and sealed properly: YES

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 date 11/12/10

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

Date Insp. Requested: Date Insp. Approved: 11/12/10 Inspector: KW
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade [checked]
Two piece cap installed and attached to casing securely [checked]
Elec. conduit extends at least 18" below grade/attached to cap properly [checked]
Safety rope not seen outside of well cap/casing [checked]
Correct well tag attached properly and casing 8" above finished grade [checked]
Water supply line sleeved adequately at house connection [checked]
Adequate grout observed below pitless adapter [checked]



3525 H Ellicott Mills Drive • Ellicott City, MD 21043
(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

ATTENTION WELL DRILLERS!!!

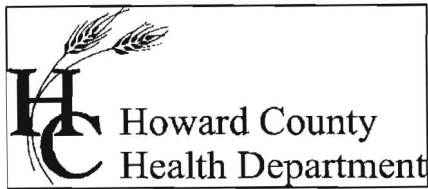
When submitting a well application for a new or replacement well, please indicate ~~one~~ of the following:

- The well site has been staked by Benchmark Engineering on June '04 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 Winchester Homes
LOTS 1-10 Phase I
12-23 Riverwood
34-41

All are staked



Bureau of Environmental Health
7178 Columbia Gateway Drive Columbia, Maryland 21046-2132
(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

November 23, 2010

Winchester Homes
6905 Rockledge Drive, Suite 800
Bethesda, MD 20817

RE: Riverwood, Lot 8
11028 Hunters View Road
Ellicott City, MD 21042
BP# B10002106
Well Tag #: HO-94-4009

Dear Sir:

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 11/12/2010 Final approval of the well line connection to the dwelling was approved on 11/12/2010.**

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 water sample results were found to be in compliance with COMAR water quality standards.

Gross Alpha and Beta samples were also collected on 11/15/2010. Both findings were below the maximum limit suggested by the EPA. At the time of the testing and with respect to these parameters, the future well water supply appears safe for all uses. No addition testing **for these parameters** will be required to secure the future Use and Occupancy.

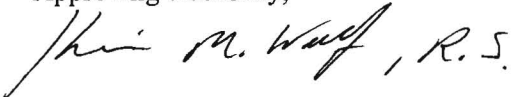
INTERIM CERTIFICATE OF POTABILITY

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-94-4008. 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.

This certificate may become final upon completion of the second bacteriological test, which is to be taken by the county health department within six months of receipt 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 Samples: 11/05/2010, 11/12/2010 & 11/18/2010
Date of Samples for Gross Alpha & Gross Beta: 11/15/2010 & 11/18/2010
Date of Well Completion: 11/18/2004

Approving Authority,



Kevin M. Wolf R.S./R.E.H.S
Environmental Sanitarian
Well & Septic Program

cc: Building Inspector's Office
Community Health Services
File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #:	77605	Account #:	3123
Reference:	Riverwood Lot 8	Company:	National Water Servicing
Location:	11028 Hunters View Road Ellicott City, MD 21042	Requested By:	Dave Rycke
Date/ Time Collected:	11/18/2010 1130	Source:	Well Water
Date/Time Rec'd:	11/18/2010 1331	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	Prior to Sediment Filter & Softener
Collected By:	J. Yeager 6176JY	pH:	6.5
		Well #:	HO-94-4009

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	11/19/2010 / 0815 / KME
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	11/19/2010 / 0815 / KME

NOTES

- 1 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 ND:None Detected
- 4 Visual well check: Sealed, vented cap
- 5 pH and Chlorine level tested on site

Reason for Test : Use & Occupancy
 Building Permit # : B10002106

Date Reported: 11/19/2010

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.
 1413 Old Taneytown Rd., Westminster, MD 21157-1014 TEL: 410-876-4524 FAX: 410-876-0298

REPORT OF ANALYSIS

Laboratory ID #:	77551	Account #:	3123
Reference:	Riverwood Lot 8	Company:	National Water Servicing
Location:	11028 Hunters View Road Ellicott City, MD 21042	Requested By:	Dave Rycke
Date/ Time Collected:	11/15/2010 1028	Source:	Well Water
Date/Time Rec'd:	11/15/2010 1201	Site:	Test Port after Treatment
Chlorine ppm:	Free: ND Total: ND	Treatment:	Sediment Filter & Softener
Collected By:	J.Yeager 6176JY	pH:	7.2
		Well #:	HO-94-4009

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha	3.9	pCi/L	15	900.0	11/17/2010 / 0719 / MJN
Gross Beta	5.1	pCi/L	50	900.0	11/17/2010 / 0719 / MJN

NOTES

- 1 Gross Alpha Detection Limit: 1.7 pCi/L
- 2 Gross Beta Detection Limit: 2.4 pCi/L
- 3 pCi/L = picocuries per liter
- 4 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 5 Subcontracted to Reference Lab #278
- 6 ND:None Detected
- 7 Visual well check: Scaled, vented cap
- 8 pH and Chlorine level tested on site

Reason for Test : Use & Occupancy
 Building Permit # : B10002106

Date Reported: 11/19/2010



REPORT OF ANALYSIS

Laboratory ID #:	77551	Account #:	3123
Reference:	Riverwood Lot 8	Company:	National Water Servicing
Location:	11028 Hunters View Road	Requested By:	Dave Rycke
	Ellicott City, MD 21042	Source:	Well Water
Date/ Time Collected:	11/15/2010 1028	Site:	Test Port after Treatment
Date/Time Rec'd:	11/15/2010 1201	Treatment:	Sediment Filter & Softener
Chlorine ppm:	Free: ND Total: ND	pH:	7.2
Collected By:	J.Yeager 6176TY	Well #:	HO-94-4009

Gross Alpha	3.9	pCi/L	15	900.0	11/17/2010 / 0719 / MJN
Gross Beta	5.1	pCi/L	50	900.0	11/17/2010 / 0719 / MJN

NOTES

- 1 Gross Alpha Detection Limit: 1.7 pCi/L
 - 2 Gross Beta Detection Limit: 2.4 pCi/L
 - 3 pCi/L = picocuries per liter
 - 4 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
 - 5 Subcontracted to Reference Lab #278
 - 6 ND:None Detected
 - 7 Visual well check: Sealed, vented cap
 - 8 pH and Chlorine level tested on site
- Reason for Test : Use & Occupancy
 Building Permit # : B10002106

Date Reported: 11/19/2010

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #:	77545	Account #:	3123
Reference:	Riverwood Lot 8	Company:	National Water Servicing
Location:	11028 Hunters View Road Ellicott City, MD 21042	Requested By:	Dave Rycke
Date/ Time Collected:	11/12/2010 1145	Source:	Well Water
Date/Time Rec'd:	11/12/2010 1415	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	Prior to Sediment Filter & Softener
Collected By:	J.Yeager 6176JY	pH:	6.4
		Well #:	HO-94-4009

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	42.9	MPN/ 100 ml	<1.0	SM18 9223	11/13/2010 / 1000 / KME
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	11/13/2010 / 1000 / KME

NOTES

- 1 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 ND:None Detected
- 4 Visual well check: Sealed, vented cap
- 5 pH and Chlorine level tested on site

Reason for Test : Use & Occupancy
 Building Permit # : B10002106

Date Reported: 11/15/2010

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1913 Old Taneytown Rd. Westminster, MD (410)348-1014 (410)376-8550 FAX (410)348-1898

REPORT OF ANALYSIS

Laboratory ID #: 77441	Account #: 3123
Reference: Riverwood Lot 8	Company: National Water Servicing
Location: 11028 Hunters View Road Ellicott City, MD 21042	Requested By: Dave Ryoce
Date/ Time Collected: 11/5/2010 1120	Source: Well Water
Date/Time Rec'd: 11/5/2010 1221	Site: Pressure Tank
Chlorine ppm: Free: ND Total: ND	Treatment: Prior to Sediment Filter
Collected By: J.Yeager 6176JY	pH: 6.3
	Well #: HO-94-4009

PARAMETER	RESULTS	UNITS	REFERENCE	METHOD	
Bacteria, Coliform, Total, MPN	23.8	MPN/ 100 ml	<1.0	SM18 9223	11/6/2010 / 1000 / BCD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	11/6/2010 / 1000 / BCD
Nitrate	1.29	mg/L	10	601	11/5/2010 / 1315 / CCH
Turbidity	3.87	NTU	<10	SM18 2130B	11/5/2010 / 1440 / KME
Sand	NS	mg/L	5	Visual/Gravimetric	11/5/2010 / 1440 / KME

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND:None Detected
- 7 Visual well check: Sealed, vented cap
- 8 pH and Chlorine level tested on site

Reason for Test : Use & Occupancy
 Building Permit # : B10002106

Date Reported: 11/8/2010