

MAIL TO:

WATER SUPPLY SECTION  
DIVISION OF WATER RESOURCES  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

PHONE: 302-739-9944  
FAX: 302-739-7764

STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL

APPLICATION FOR A PERMIT  
TO CONSTRUCT A WELL

http://www.dnrec.state.de.us/

APPLICATION MUST BE SUBMITTED  
AND PERMIT RECEIVED BEFORE  
DRILLING IS STARTED.

- OFFICIAL USE ONLY -

PAGE # \_\_\_\_\_ OF \_\_\_\_\_ PAGES  
PERMIT NO: 224607

ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PLEASE TYPE OR PRINT - USE BLUE OR BLACK INK ONLY

Property Owner: Shipbuilders LLC (Wanna Station)  
Address: 2044 Sunset Lake Rd  
City: Newark State: DE Zip: 19702  
Telephone Number: 302-737-3401  
Licensed Preparer/WC: Tidewater Utilities  
Lic. #: 110 Date of Application: 6-25-08  
Estimated Construction Date: 7-21-08

PURPOSE:  Test  Permanent  Temporary for Well Construction

USE:  Domestic  Irrigation  
 Industrial  Agricultural  
 Public  Heat Pump Supply  
 Miscellaneous Public  Heat Pump Recharge  
 Other (Specify): \_\_\_\_\_  Closed Loop Heat Pump

Is this a replacement well?  NO  YES (Reason): \_\_\_\_\_

Is public water available?  NO  YES (Utility): \_\_\_\_\_

On public sewage?  YES  OR Septic system permit #: \_\_\_\_\_

PROPOSED WELL CONSTRUCTION:

	Inner Casing	Outer Casing
Approximate total depth:	250 ft	ft
Casing top (above grade):	24 in	in
Casing bottom (below grade):	135 ft	ft
Casing diameter:	4	
Casing material:	SS	

Proposed screen setting: 135 ft. TO: 250 ft. Material: SS  
top bottom

Type of Grout: Cement From: 0 top To: 130 bottom

Gravel pack:  NO  YES From: 130 top To: 250 bottom

Maximum capacity: \_\_\_\_\_ (GPM) Max. Daily Withdrawal: \_\_\_\_\_ (GPD)

Will the operation of this well by itself or in combination with any other well(s), owned or operated by the permittee, withdraw greater than 50,000 gallons in any 24 hr. period?  NO  YES

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

[Signature] 6/25/08  
Signature - Licensed Preparer/Water Well Contractor Date

[Signature] 6/25/08  
Signature - Property Owner Date

Please release the contractor's copy of the permit and the well tag to the water well contractor noted on this application:

YES  NO

LOCATION MAP - ROAD MAP

County:  New Castle  Kent  Sussex

Subdivision: Skyview Estates

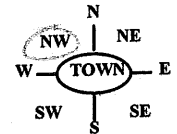
Lot #: \_\_\_\_\_ ADC Map Grid: 31 H 3

Tax Map/Parcel #: 133-10.00-30.01

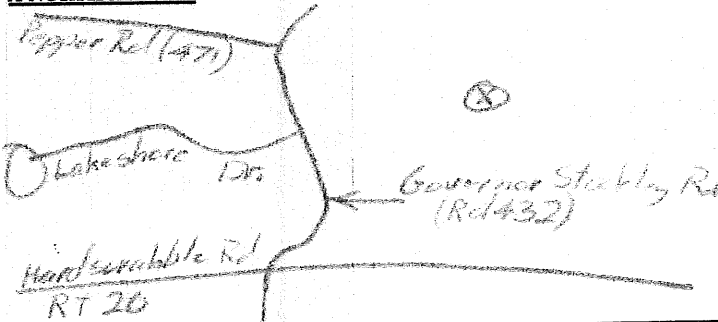
Name of Nearest Town: Millsboro DE

Distance to Nearest Town: 3.5 miles

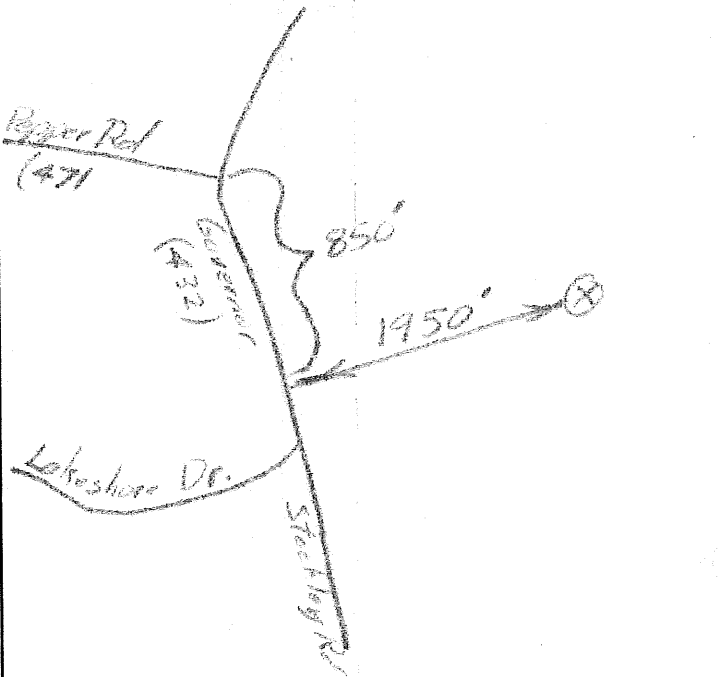
DIRECTION OF WELL FROM TOWN (CIRCLE DIRECTION)



Draw a sketch below showing location of well in relation to at least two county or state roads, give distance from well site to nearest road junction and **SHOW A NORTH ARROW.**



Site Plan - Include lot size and dimensions, distances from well to house, property lines, nearest road, and all nearby septic systems (include suitable plot plan if available).



PERMIT #: 224607

- FOR OFFICIAL USE ONLY - DO NOT WRITE BELOW THIS LINE -

Received By: \_\_\_\_\_ Modified Grid: 12 DRBC:  YES  NO X - Coord: 200 43  
Amount: \_\_\_\_\_ Drainage Basin: \_\_\_\_\_ H<sub>2</sub>O Utility: \_\_\_\_\_ Y - Coord: \_\_\_\_\_  
Date: \_\_\_\_\_ Quad: \_\_\_\_\_ Flood Zone/Coastal: \_\_\_\_\_ DOT #: \_\_\_\_\_

MAIL TO:

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DIVISION OF WATER RESOURCES  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL

http://www.dnrec.state.de.us/

WELL COMPLETION REPORT  
MUST BE RETURNED WITHIN 30  
DAYS OF CONSTRUCTION. A  
WELL FORMATION LOG MUST BE  
INCLUDED WITH THIS REPORT.

PHONE: 302-739-9944  
FAX: 302-739-7764

WELL COMPLETION REPORT

-Authorization Number-

# 3425155

ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PLEASE PRINT OR TYPE - USE BLUE OR BLACK INK ONLY

Permit #: 224607 Local ID: TW-1  
Tax Map/Parcel #: 1-33-10.00-0030.01  
Property Owner: SHIPBUILDERS LLC  
Water Well Contractor: DES LLC WC Lic #: 5374  
Well Driller in Charge during Construction: STEVEN DIAPUK

WELL CONSTRUCTION METHOD

Augered  Bored  Cable Tool  
 Driven  Jetted  Air Rotary  
 Mud Rotary  Reverse  Washed  
 Other (Specify): \_\_\_\_\_  
Total Depth of Excavation: 250'  
Construction Date: 7-28-08

CASING INSTALLATION:

INNER CASING

SCREEN INSTALLATION

CASING TOP: \_\_\_\_\_  
CASING BOTTOM: \_\_\_\_\_  
CASING DIAMETER: \_\_\_\_\_  
CASING MATERIAL: \_\_\_\_\_  
  
OUTER CASING  
(1) (2) (3)  
CASING TOP: +24" \_\_\_\_\_  
CASING BOTTOM: 175' \_\_\_\_\_  
CASING DIAMETER: 4" \_\_\_\_\_  
CASING MATERIAL: PVC \_\_\_\_\_

SCREEN TOP: 175'  
SCREEN BOTTOM: 225'  
SCREEN DIAMETER: 4"  
SCREEN MATERIAL: PVC  
  
SCREEN SLOT SIZE: 1.020 /THOUSANDS  
GRAVEL PACK SIZE: #2

Gravel Pack From: 165 ft. To: 250 ft.  
Grout Type: \_\_\_\_\_  Cement 0-165  Bentonite Clay  
 Other: \_\_\_\_\_ From: \_\_\_\_\_ ft. To: \_\_\_\_\_ ft.  
Type of Non-Grout backfill of Well Annulus: \_\_\_\_\_  
From: \_\_\_\_\_ To: \_\_\_\_\_  
Static Water Level: 8.5 ft.  Below OR  Above Ground Surface  
On (date): 7-28-08  
Pumping Water Level: 41.75 ft. On (date): 7-28-08  
After: 8 hrs. Pumping at: 123 GPM  
Was a Geophysical Log Taken?  YES  NO

Site Plan - Include lot size and dimensions, distances from well to house, property lines, nearest road, and all nearby septic systems (include suitable plot plan if available). (If different from original application)

WELL HEAD COMPLETION:

Type:  Pitless Adapter  Standard "T"  
 Well Pit  Pad Mount  
 Other - Specify: TEST WELL 24" AGS  
Well Head Completed: 24 inches  Above (OR)  Below Ground Surface  
Was the Well Tag attached in accordance with current regulations?  
 YES  NO If "NO", Please Explain: \_\_\_\_\_

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steven E. Diapuk  
Signature - Well Driller in Charge of Well Construction  
903 8-9-08  
License # Date

# DRAPER ENVIRONMENTAL SERVICES LLC



**CUSTOMER: Tidewater Utilities Inc.**

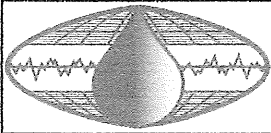
**PROJECT NAME: Skyview Estates**

**PERMIT #: 224607**

**LOCAL ID #: TW-1**

**PROPERTY OWNER: SHIPBUILDERS LLC**

SOIL DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Top Soil	0	1
Tan Clay	1	7.5
Fine Orange Sand	7.5	15
Fine - Medium Orange Sand	15	30
Medium - Coarse Orange Sand	30	75
Medium - Coarse Orange Sand & Gravel	75	95
Fine Gray Sandy Silt with Gray Clay Lenses	95	115
Fine - Medium Gray Sand	115	135
Fine Gray Sandy Silt	135	170
Medium - Coarse Gray Sand	170	230
Fine- Medium Gray Sand & Silt	230	250



**Earth Data Incorporated**  
131 Comet Drive, Centerville, MD 21617  
Phone: (410) 758-8160 / Facsimile (410) 758-8168  
www.earthdatainc.com

**WELL I.D.**

Pilot Hole

Logging Date: 7/22/08  
Logging Speed: 27'/min Up x Down  
BOC: N/A TD: 248.3'

**Project:** Draper Well Drilling/Millsboro Geo Log

**Bit Size:** 8"

**EDI Job No.:** 3976

**Client:** Draper Well Drilling

**Fluid Type:** Mud Based Water

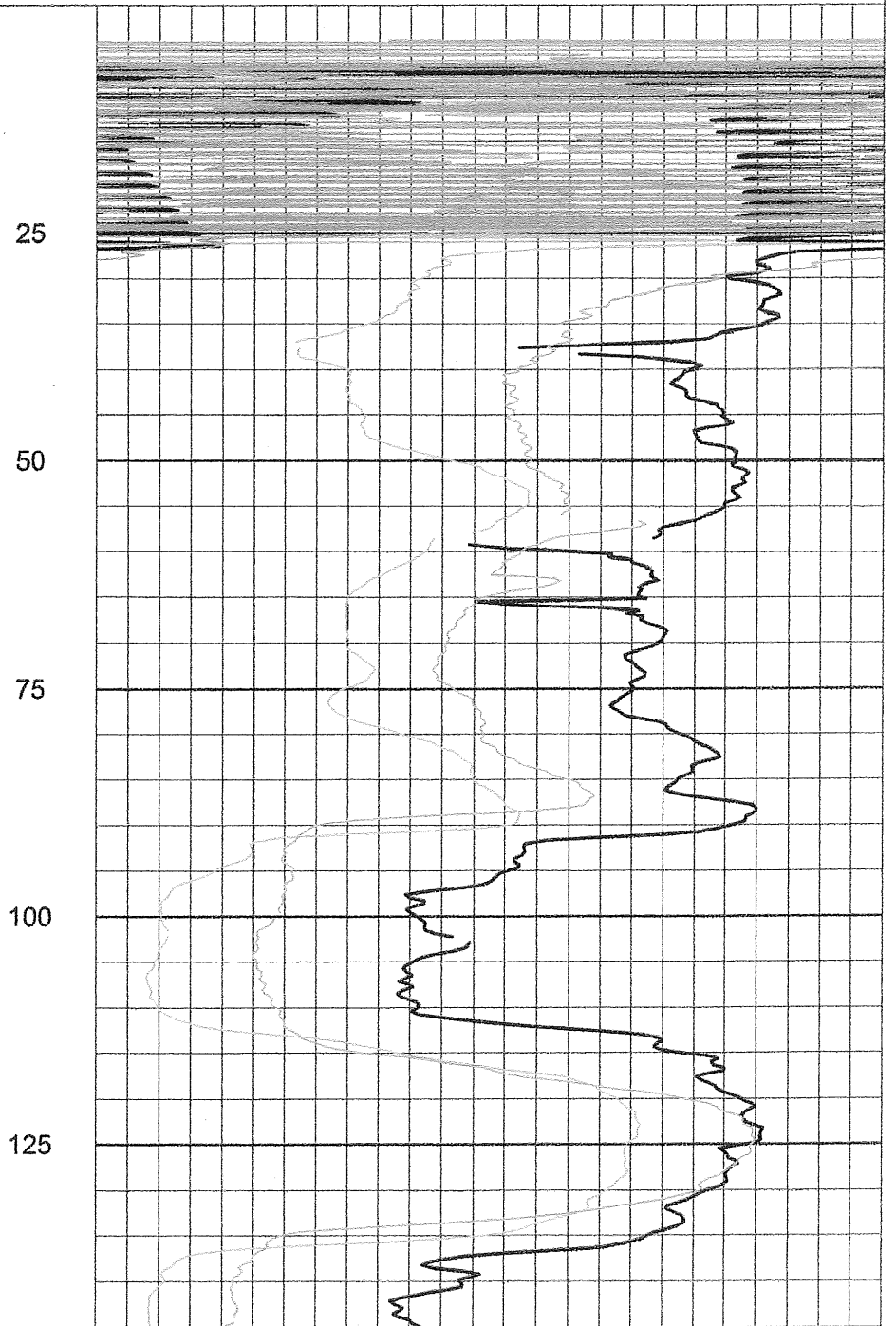
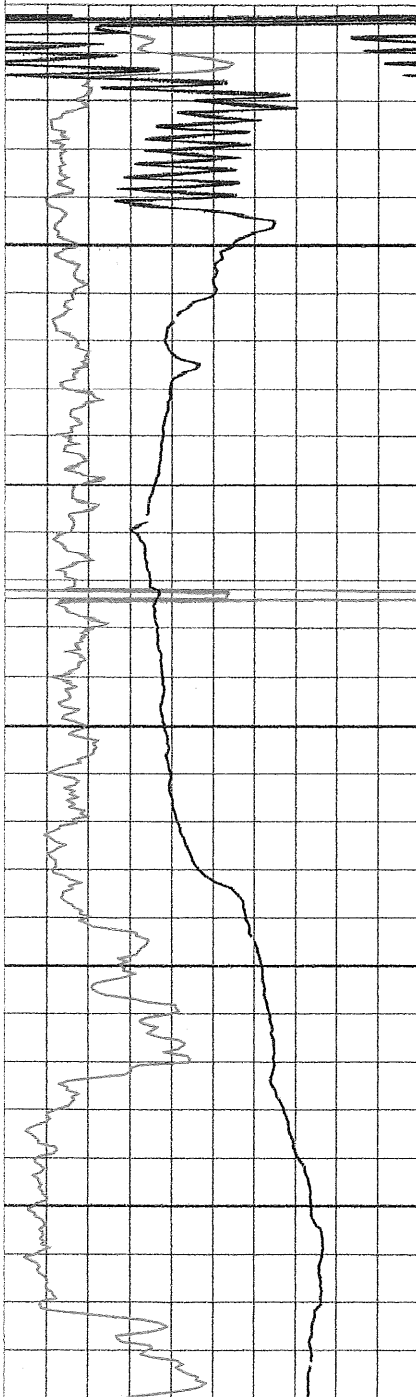
**Technician:** JKrewson

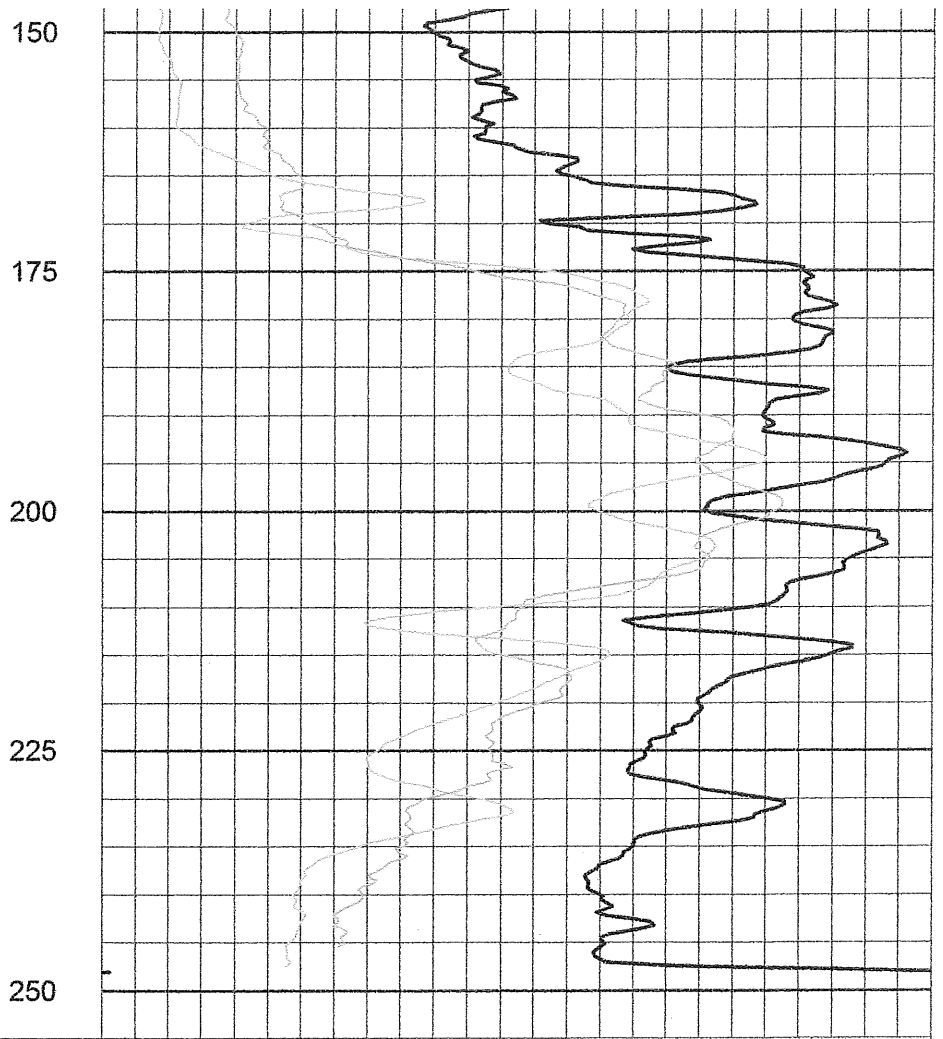
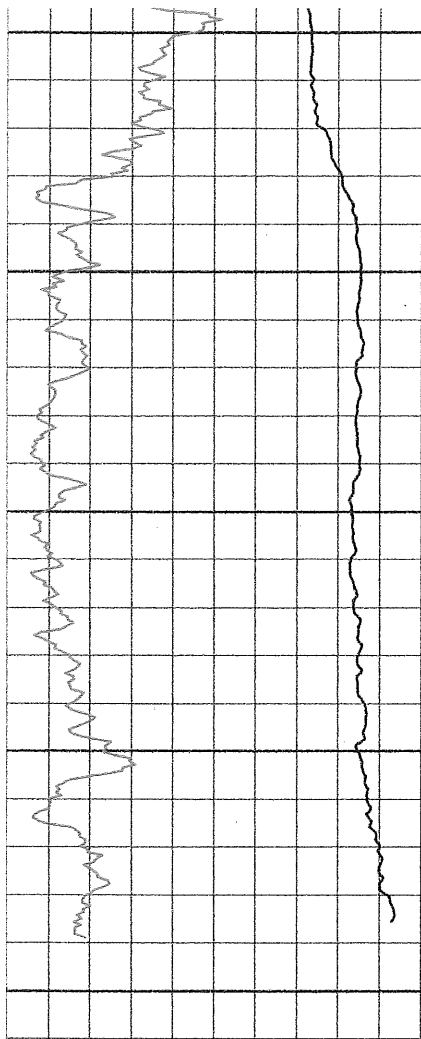
**Location:** Millsboro, DE

**Casing Material:** N/A

**Witness:** Steve Draper

Gamma		Depth	SPR	
0	cps	1in:20ft	0	Ohm
	SP			R16
100	mV		0	Ohm-m
				R64
			0	Ohm-m
				R64





SP		R64	
100	375	0	750
mV		Ohm-m	
Gamma		R16	
0	200	0	750
cps		Ohm-m	
Depth		SPR	
1in:20ft		Ohm	
0	625	0	625