

~~PH 45-27~~ PC 25-60

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

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

WELL ABANDONMENT REPORT MUST BE
RETURNED WITHIN 30 DAYS OF
ABANDONMENT.

WELL or SOIL BORING
ABANDONMENT REPORT

- OFFICIAL USE ONLY -

PAGE _____ OF _____ PAGES
PERMIT #: _____

ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PLEASE TYPE OR PRINT - USE BLUE OR BLACK INK ONLY

Permit # of Abandoned Well: 224016
Replacement Well Permit #: Auth: 6253924
Local ID: _____ Tax Map/Parcel #: 3-31-005-000

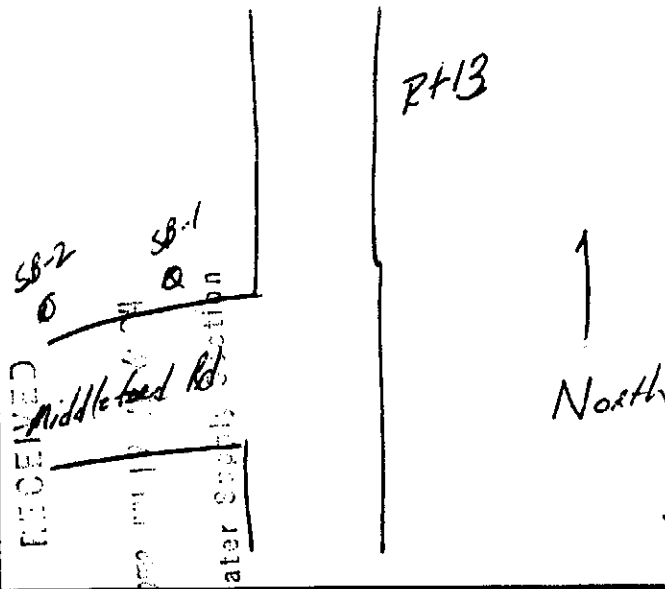
Property Owner: Del. Dept. of TRANS
Well Contractor: Hillis-Carnes Lic. #: _____
Well Driller in Charge: Jersey Johnson Lic #: 4314
Construction Date of Abandoned Well/Soil Boring: 5/15/08
Abandonment Date: 5/15/08

WELL CONSTRUCTION METHOD (if known):

- Augered
- Bored
- Cable Tool
- Driven
- Jetted
- Air Rotary
- Mud Rotary
- Reverse
- Washed
- Other (Specify): _____

PROVIDE A LOCATION SKETCH OF ABANDONED WELL(S)

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



WELL ABANDONMENT:

Casing Material: _____
Casing Diameter (inches): _____
Well Depth: _____
Was any Casing Removed? NO YES
If YES, Amount of Casing Removed (feet): _____
Was Casing Ripped or Perforated? NO YES
Type of Sealing Material Used: _____
Sealed From: _____ ft. To: _____ ft.

NOTE: If this form is submitted in place of a completion report for wells or soil borings installed and abandoned on the same date, a formation log must be attached. Formation logs must be submitted on forms provided by DNREC.

The abandonment of this well(s) or soil boring(s) is in compliance with all permit conditions and with all applicable well construction regulations.

- YES
- NO

COMMENTS: _____

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

Signature: _____ Licensed Driller in Charge of Abandonment

4314
Well Driller License # _____
6/17/08
Date _____

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

Received By: _____	Modified Grid: _____	DRBC: <input type="checkbox"/> YES <input type="checkbox"/> NO	X-Coord: _____
Amount: _____	Drainage Basin: _____	H ₂ O Utility: _____	Y-Coord: _____
Date: _____	Quad: _____	Flood Zone/Coastal: _____	DOT #: _____

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION

Project Name Middleford Road Water Loop Boring No. SB-3
 Location Seaford, Delaware Job # S08095

SAMPLER

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 6 Foreman K, Hastings
 Surf. Elev. EG Ft. Hammer Drop 30 in. Rock Core Diameter --- Classified By D. Salazar
 Date Started 5/7/2008 Pipe Size 2 in. Boring Method HSA Date Completed 5/7/2008

Elevation/ Depth	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM %	SPT Blows	SPT Blows/Foot Curve	
							N	Curve
0	D	Brown, moist, loose, fine to medium SAND, some silt, trace clay, trace roots (SM)	The boring was offset 26 feet north. Topsoil: 12 inches	16		3-4-3	7	
3.5	D	Light brown, moist, loose to medium dense, fine to coarse, SAND, trace silt, trace clay, trace fine gravel (SP)		14		3-4-4	4	
7	D	Orange-light brown, wet, medium dense, fine to medium SAND, trace silt, trace clay (SP-SM)	Water encountered on rods at 6.0 feet below existing grade.	16		4-7-8	15	
10	D	Light brown-light gray, wet to saturated, medium dense to loose, fine to coarse SAND, trace silt, trace clay, trace gravel (SP)		16		7-10-13	23	
14	D			18		3-4-6	10	
17.5	D			18		10-14-21	35	
21	I	Orange-light brown, wet, very stiff, silty CLAY, trace fine sand (CL)		18		4-7-10	17	

SAMPLER TYPE
 DRIVEN SPLIT SPOON UNLESS OTHERWISE
 PT - PRESSED SHELBY TUBE
 CA - CONTINUOUS FLIGHT AUGER
 RC - ROCK CORE

SAMPLE CONDITIONS
 D - DISINTEGRATED
 I - INTACT
 U - UNDISTURBED
 L - LOST

GROUND WATER
 AT COMPLETION 8.0 ft.
 AFTER 24 HRS. --- ft.
 AFTER --- HRS. --- ft.

CAVE IN DEPTH
9.5 ft.
--- ft.
--- ft.

BORING METHOD
 HSA - HOLLOW STEM AUGERS
 CFA - CONTINUOUS FLIGHT AUGERS
 DC - DRIVING CASING

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION

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 Location Seaford, Delaware Job # S08095

SAMPLER

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 Surf. Elev. EG Ft. Hammer Drop 30 in. Rock Core Diameter --- Classified By D. Salazar
 Date Started 5/7/2008 Pipe Size 2 in. Boring Method HSA Date Completed 5/7/2008

Elevation/ Depth	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM %	SPT Blows	SPT Blows/Foot			
							N	10	30	50
24.5	I	Gray, wet, stiff to very stiff, silty CLAY, some fine sand (CL)		18		3-3-5	8			
28										
31										
35	D	Orange, wet, medium dense to very dense, fine to coarse SAND, trace silt, trace clay (SP-SM)		16		3-3-3	6			
38										
42										
45				18		12-24-35	59			
				18		12-30-35	65			

SAMPLER TYPE
 DRIVEN SPLIT SPOON UNLESS OTHERWISE
 PT - PRESSED SHELBY TUBE
 CA - CONTINUOUS FLIGHT AUGER
 RC - ROCK CORE

SAMPLE CONDITIONS
 O - DISINTEGRATED
 I - INTACT
 U - UNDISTURBED
 L - LOST

AT COMPLETION
 AFTER 24 HRS.
 AFTER --- HRS.

GROUND WATER
8.0 ft.
 --- ft.
 --- ft.

CAVE IN DEPTH
9.5 ft.
 --- ft.
 --- ft.

BORING METHOD
 HSA - HOLLOW STEM AUGERS
 CFA - CONTINUOUS FLIGHT AUGERS
 DC - DRIVING CASING

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.

STANDARD PENETRATION TEST, DRIVING 2" O.D. SAMPLER USING 140 LB HAMMER FALLING 30" COURT MADE AT SEAFORD, DE

**HILLIS - CARNES
ENGINEERING ASSOCIATES, INC.
RECORD OF SOIL EXPLORATION**

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 Location Seaford, Delaware Job # S08095

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 Date Started 5/7/2008 Pipe Size 2 in. Boring Method HSA Date Completed 5/7/2008

Elevation/ Depth	SOIL SYMBOLS/ SAMPLE CONDITIONS	Description	Boring and Sampling Notes	Rec.	NM %	SPT Blows	SPT Blows/Foot Curve								
							N	10	30	50					
49	D	Boring was terminated at 50.0 feet.		14		18-50/6"	100								
52.5															
56															
59.5															
63															
66.5															

SAMPLER TYPE
 DRIVEN SPLIT SPOON UNLESS OTHERWISE
 PT - PRESSED SHELBY TUBE
 CA - CONTINUOUS FLIGHT AUGER
 RC - ROCK CORE

SAMPLE CONDITIONS
 D - DISINTEGRATED
 I - INTACT
 U - UNDISTURBED
 L - LOST

GROUND WATER
 AT COMPLETION 8.0 ft.
 AFTER 24 HRS. --- ft.
 AFTER --- HRS. --- ft.

CAVE IN DEPTH
9.5 ft.
--- ft.
--- ft.

BORING METHOD
 HSA - HOLLOW STEM AUGERS
 CFA - CONTINUOUS FLIGHT AUGERS
 DC - DRIVING CASING

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.

STANDARD PENETRATION TEST-DRIVING 2" O.D. SAMPLER 1" WITH 140# HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS.