Ri 15-01

INTERVAL (METERS)	PORMATION-AGE	DESCRIPTION	COMMENTS	SAMPLES SIEVED	RATIO COARSE/FINES	FINES
0-42.7			No samples			
42.7-67.1		Fine sand				
67.1-73.2		Pine-medium well rounded sand.Some very coarse sand and gravel	Shells			
73.2-137.2		Very fine-fine sand	Minor shells			
137.2-140.2		Fine-medium sand with organic mud	Shells			
140.2-143.3		Pine-medium sand	Shells			
143.3-158.5		Fine-medium aand with organic mud	Shells			
158.5-164.6		Medium-coarse sand	Shells			
164.6-183.0		Cored	Recovery from 178.9-182.0			
183.0-189.0	-	Clay				
189.0-192.0		Muddy fine-medium sand				
192.0-213.4		Clay	Shells			
213.4-268.2		Silty clay with some sand and gravel	Shells			
268.2-2 89 .6		Clay and silt	Shells			
289.6-295.7		Sandy clay	Shells			
295.7-301.1		Cored	Recovery from 299.3-301.1			

C--67

٢,

Ri 15-1

Ri15-1

Assawoman Wildlife Area Geothermal drilling project hole

9/1-9/2/78

DESCRIPTIVE LOG

(Depths measured from K.B. elevation of 8 feet above ground) KDW:

Depths	Description	Collected by				
140-150	Sand, gray, fine well sorted	driller				
150-160	Sand, gray, fine well sorted	driller				
160-170	Sand, gray, med., well sorted	driller				
170-180	Sand, med. to fine, gray	driller				
180-190	Sand, med. to fine, gray	driller				
190-200	Sand, gray, fine, well sorted	driller				
200-210	Sand, gray, fine, well sorted	driller				
210-220	Sand, gray, fine, well sorted	driller				
220-230	Sand, gray, med. to some coarse clean	e, driller				
230-240	Sand, gray, mostly coarse, clea	an driller				
469	Clayey, glauconitit, probably becoming silty. Samples coming very fast (unreliable?); Sand may be from offside of hole, eroded due to high mud velocity.					
500-511	No sand in returns, probably silt (St. Mary's?), drilling slower, lignite rare.					
~ 525	Drills like sand for a few feet; little or no sand in returns.					
≁ 530	Drilling slower, no sand in returns, probably silty.					
542	Same as above					

DESCRIPTIVE LOG

Ri-15-1 Page 2 Assawoman Wildlife Area Geothermal drilling project hole 9/1-9/2/78 Description Depth 542-555 Silt, no sand in returns, drilling slow. ~ 572 Silt, gray (?) Cored interval 574-599, recovered approximately 13'. DGS sample from core catcher at 599': top is gray silt, bottom is gray sand. RNB: Core catcher sample, 599': Forams common, typical Chesapeake Group benthic assemblage (Calvert (?), Choptank (?)), middle to outer neritic paleoenvironment -; a few pyritized diatoms; rare ostracodes; shell fragments (bivalves mostly); fine to med. grained glauconite (?) or phosphate (?) pellets, some coarse. 600-630 Shell fragments, coarse sand. 660 Same plus gray silt, lignite in returns. Same, increase in sand and lignite; 670-690 shell fragments mostly of bivalves and barnacles. 690-720 Same, increase in shell fragments. . 750 Same. 780 Gravelly sand, with shell, silt. JHT: Sand, med. to very coarse with small gravel, 890-924 shell, lignite. Easy drilling. Silica-cemented sandstone containing shell 924-954 shell fragments (20 minutes to drill 30'; 934-944' - drill string chattering; 946-952 string bouncing). 952-984 Sand, med. to very coarse, lignite, shell fragments. (Drilled 20' in 9-10 minutes). Cored interval: 982-988': Cored only 6' because of hardness of rock; recovered ~ 10 " of hard ss.

Ri 15-1

DESCRIPTIVE LOG

Ri15-1 Assawoman Wildlife Area Geothermal drilling project hole Page 3

9/1-9/2/78

Depth Description

RNB:

- 988' (core catcher) sandstone, hard, silica cemented, medium to coarse; (mostly breaks around grains; shelly (bivalves, barnacles); vuggy; black grains, med. to coarse, of phosphate (?), bone (?), chert (?).
- 982'(?) Sand at top of core, fine to med. grained, silty, with some large shell fragments; large bone fragment.
- 987-988(?)Sand above hard ss at 988': medium grained, fairly well sorted; w/ black phosphate (?) grains, some bone phosphate, barnacle and bivalve fragments.
 - Cored interval 988-1007': only recovery was approximately 1' of hard ss as above, in core catcher.

Ri15-1