

Tidewater Associated Oil Company
Delaware City, Delaware

Dc 53-7

Driller: Schultes

Elevation: Feet

Test Hole #12
Hydraulic rotary (cores)

<u>Depth</u>	<u>Description</u>
6	buff, clean, coarse, some medium and fine sand.
11	light buff and white, clean, well-sorted fine sand.
16	layers of: black and buff fine sand orange silty fine sand buff clayey medium sand orange clay
21	buff, mostly coarse sand with some silt; some pebbles and grit.
26	reddish and gray clayey sand; considerable amount of clay.
31	buff, clean, fairly well sorted, coarse sand; few black minerals.
36	buff, clean, well-sorted, fine to medium sand.
41	light buff, clean, well-sorted fine sand.
46	same
51	same
56	buff, clean, well sorted, fine to medium sand; considerable number of black minerals.
61	reddish-white (red color might be due to drilling mud) very coarse sand with grit and pebbles.
66	orange-buff, fine and medium sand with considerable number of pebbles; some silt.
67	rust-brown and gray sandy clay; sand is fine; some grit and small pebbles.
71	dark gray to black clay with many pebbles and grit.
76	black sandy clay with green glauconite; sand is fine.
81	same
86	black sandy clay and some white, clean fine sand in patches
91	red and white clay.
96	red and white clay with some sand and grit.
101	gray and red silty very fine sand.

- 106 gray sandy clay (sand is fine) and red clay with many small pebbles and grit.
- 111 light gray silt and clay.
- 116 white silty very fine sand.
- 121 silty very fine sand and white clean, well sorted fine sand.
- 126 white silt and clay.
- 131 light gray to white and rust-brown) fine, well sorted sand with some silt.
- 136 light buff to white, clean, well sorted fine sand.
- 141 light brown medium sand with clay.
- 146 white and red silt to very fine sand.
- 151 red and gray clay.
- 156 red and light gray silt and clay.
- 161 light gray and some red clay.
- 166 red and gray soft clay.
- 171 red and gray clay.
- 176 light gray very fine sand with some clay.
- 181 red and gray soft clay.
- 186 red and gray clay with some silt.
- 191 gray and red clay.
- 196 light gray and brown clay.
- 201 same
- 206 red and gray clay.
- 211 red and gray clay.

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Test Hole #12 (continued)

<u>Depth</u>	<u>Description</u>
216	red and gray clay with some silt.
221	(2 layers) 1. white, well sorted, fine sand 2. red and gray clay.
226	gray fine sand with considerable amount of clay
231	light buff, fine sand with some clay.
236	layers of red soft clay and white fine sand; some reddish fine sand.
241	red clay with small streaks of white silt.
246	gray silt.

12 Continued

h11	Core	Variegated, mostly red, clay (4" recovery)
h16	Core	Do (full recovery)
h21	Core	Do
h26	Core	pink and light grey variegated clay.
h31	Core	Brick-red and white variegated slightly sandy clay.
h36	Core and w	Red and white variegated tough clay.
h41	Core	Do
h46	Core	White and red variegated tough clay.
h51	Core	Brick red and white variegated tough clay.
h56	Core	Red and white variegated clay with a little fine sand, some mica.
h61	Core	Grey, very fine, sandy clay.
h66	Core	Do
h71	Core	Light grey, very fine, angular, clayey quartz sand, some black minerals.
h76	Core	Grey and red variegated clay.
h81	Core	Grey, very fine, angular, micaceous, clayey sand.

Test hole #12 (continued)

<u>Depth Feet</u>	<u>Description</u>
621	gray and some rust-brown clayey fine sand (white crystals).
626	same
631	(a) light gray fine sand with some clay. (b) bluish-gray clay with grit.
636	red-brown clay with an abundance of grit and small pebbles.
638	gray and red clay with some sand.
641	red brown clay with grit.
646	red and some gray clay with some sand.
651	light gray very compact clayey fine sand and rust-brown clay, with some sand with mica.
656	light gray and red-brown clayey primarily coarse, some medium sand, some grit and small pebbles.
661	light gray clayey fine sand with mica.
666	brown red and some yellow clay with some sand and many small mica flakes.
671	red-brown clayey fine sand with many small mica flakes.
676	light gray fine sand with some clay.
681	blue gray and rust-brown clay.
686	blue gray clay.
691	(a) dark gray clayey very fine sand, with an abundance of lignite. (b) light gray and rust-brown clay with some fine sand.
696	dark gray very fine sand with some clay and an abundance of lignite; in other places more clay.
701	dark gray clayey very fine sand to silt with lignite.
706	same.
711	same.
716	dark gray clayey very fine sand with an abundance of large and small pieces of lignite.
721	(a) gray soft clay (b) clayey coarse sand } cores, but different boxes.

Depth	Description
726	gray clayey fine sand with an abundance of lignite.
731	dark gray to black clay with some fine sand; abundance of small micaflakes.
736	same.
741	black and dark gray clay with an abundance of large and small pieces of lignite.
751	dark gray clay with some fine sand. (cores in box) (a) gray clayey fine sand (b) angular rock pieces, grit and small pebble size.
756	greenish-gray sand with some clay.
761	black clayey fine sand with abundance of lignite.
766	black lignite and blue green clay with some fine sand.
771	green clay with some fine sand and larger angular quartz pieces.
776	hard rock
781	hard rock

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