

MUD PROGRAM30" Casing at 430' RKB (36" hole)

Drill the 36" hole with sea water with returns to the sea floor. Pump slugs of thick mud through the hole frequently to clean and seal off surface sands. After the 36" hole has been drilled fill the 36" hole (300 bbls) with thick mud to run the conductor pipe. Mix the thick mud as follows:

<u>Material</u>	<u>Properties</u>
Sea Water	Weight 8.8 to 9.5 ppg
Attapulgate 10 to 15 ppb	Viscosity thick
Flosal 2 to 3 ppb	Fluid Loss No control

Run shearing device on suction pit (500 to 600 psi) to shear flosal.

20" Casing at 1500'RKB 26" hole

Drill the 26" hole with sea water with returns to the sea floor. Pump slugs of thick mud through the hole as needed to clean. After the 26" hole has been drilled pump 300bbls of 11.0 ppg mud into the hole to make a short trip. Pump the entire surface volume (800 bbls) into the hole to run the 20" casing. Mix the thick mud as above and increase the density to 11.0 ppg with barite.

13 3/8" Casing at 4600'RKB 17 1/2" Hole

Drill the cement, float and shoe with Gyp-Sea water mud with the following properties:

Weight	9.5-9.8
Viscosity	45 to 50 sec/qt
Fluid Loss	± 15 cc 30/min.
Ph	9.5 to 10.0
Calcium	800 to 1000 ppm
Oil	5 to 6 %

Drilling 12 1/4" hole

Drill below the 13 3/8" casing with lignosulfonate sea-water mud. Condition the mud to a lignosulfonate mud while nipping up and waiting on cement, condition to the following properties:

Weight	11.0
Viscosity	45 to 50 sec/qt.
Fluid Loss	8 - 10 cc/30 min
Ph	10.0 to 10.5
Solids	15 %
Oil	4 to 5 %

As drilling proceeds, regulate the mud properties as required. It is anticipated that mud weight requirements will not exceed 12.0 ppg.

Run the centrifuge as needed for barite recovery.

Packer Fluid

Condition the mud as follows for testing and packer fluids:
Dilute with water and centrifuge as needed and add:

<u>Material</u>		<u>Properties</u>	
Barite	As needed	Weight	12.0 ppg
Caustic Soda	1 to 1½ ppb	Viscosity	55 to 65 sec/qt.
Desco	1 to 1½ ppb	Ph	11.0 to 12
Flosal	2 ppb	YP	14 to 18
Bentonite	As needed	Bentonite	15 to 20 ppb

Check bentonite by Methyl-blue test. Add no starch or lignosulfonate to packer fluid for conditioning.

DETAILS OF OPERATIONS

MUD PROGRAM

<u>Depth</u>	<u>Weight</u>	<u>Viscosity</u>	<u>PV</u>	<u>YP</u>	<u>Water Loss</u>
0 - 1505 ft.	(Sea water with periodic spotting of high viscosity mud)				
1505 - 3007 ft.	9.9	45	12	10	17
3007 - 4596 ft.	10.	52	16	10	11.
4596 - 6003 ft.	11.	43	16	9	6.
6003 - 7295 ft.	11.	45	17	9	5.8
7295 - 7466 ft.	11.1	49	17	12	8.
7466 - 7799 ft.	11.1	49	18	11	9.6

TESTING

The following intervals were perforated and tested.

7420' - 7384' No shows

7355' - 7320' No shows

Detailed test results are filed separately.