HALLWOOD DRILLING PROGNOSIS

DATE: 2/3/98 1/1/10
PREPARED BY: KEO
(660' FSL x 1980' FWL) proposed location
STATEANM

DRILLING PROGRAM

2080 FWL

CASING/ TUBING	FROM	TO	SIZE	WEIGHT	GRADE	CPLG	HOLE
Surface	0	1200'	13 3/8"	54.5#	K-55	STXC	17 1/2"
Inter.	0	3100'	8 5/8"	24 x 32#	K-55	LTXC	12 11 11
Production	0	8300'	5 1/2"	15.5 x 17#	N-80	LTXC	7 7/8"
					1-55		

MUD PROGRAM

TYPE	DEPTH	RHEOLOGY	WT	VIS	WL
Native	0-1200'		8.4 - 8.6	34-36	NC
Brine Water	1200-3100'		10.0 - 10.1	28-29	NC NC
Cut Brine Wtr	3100-8300'		9.0 - 9.2	28-40	20-30
			After 6000'		Below 10

CEMENT PROGRAM

INTERVAL STAGE	EST. SLURRY VOLUME	SLURRY CHARACTERISTICS	EQUIPMENT: DV, SCRATCHER, CENTRALIZERS, SHOE, ETC.
Surface	1600 cu ft	5 00 sxs lead & 100 sxs neat tail (600 \$ x 5)	6 centralizers
Intermediate	1920 cu ft	50 sxs lead & 150 sxs neat tail (1000 5x5)	10-12 centralizers
Production	1346 cu ft cmt to 2900'	1 st : 50 sxs neat 2 st : 440 sxs lead, 100 sxs neat tail	Turbulators & centralizers

BIT PROGRAM

DRILLING HAZARDS/PRODUCTION PROBLEMS

None anticipated

DEVIATION SURVEYS/PRODUCTION PROBLEMS

Possible deviation problems 2000-4000'.

WELLHEAD

3000 psi equipment required.

SPECIAL EQUIPMENT

None

SPECIAL PERSONNEL REQUIREMENTS

None

Cementing Notes:

- А. В. С. On surface hole use 100% excess cement (or run fluid caliper).
 - On intermediate hole use 50% excess cement.

On production hole, as when d DV tool at 6000'. First Stage - Cement use 35% excess and all neat cement. Second Stage - Use 50% excess, tail in with 100 sxs of neat, top of cement designed for 2900'.

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Detailed program to follow.