

MUD PROGRAM

SURFACE

0'-350'

Fresh water gel slurry

INTERMEDIATE

2000' of 9-5/8"

Water to which gel and lime are added may be used to spud and drill surface. If no hole trouble is encountered, surface may be drilled with native mud and casing set.

For coring, testing, logging or unanticipated hole trouble, mud up with a low solids, salt gel type drilling fluid with the following characteristics:

Weight:	10.2 to 10.4 lb/gals
Viscosity:	36 to 38 sec/1000 cc
Water Loss:	10 cc or less

COMMENTS

1. The red-bed section in this area is troublesome. Run a constant 32 to 34 sec/1000 cc native mud viscosity.
2. It may be necessary to circulate a portion of the reserve pit and add water at flow line.

PRODUCTION

8500'

Drill from below surface casing to 6250' with saturated salt system with 10 ppg density. At 5400' (or 200' prior to top of ABO section), mud up with a low solids, salt gel and oil type drilling fluid with the following characteristics:

Weight:	10.0 lbs/gal
Viscosity:	40 to 45 sec/1000 cc
Water Loss:	10 cc
Oil Content:	8% to 10%
Preservative Content:	14 lbs/bbl

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This type drilling fluid should be sufficient to drill to 8500' with the exception of viscosity and weight, which may need altering as hole conditions dictate.

COMMENTS

1. Circulate a portion of reserve from bottom of surface to 5400'.
Return to steel pits prior to mudding up at 5400'.
2. A desander will be helpful from 5400' to total depth in helping to control hole solids, reducing the amount of oil needed and reducing the overall mud cost.