

AMERICAN QUASAR PETROLEUM CO. OF NEW MEXICO

FEDERAL NO. 1-24

American Quasar
10,000' Morrow Prospect
Sec. 24, Twp. 20 S., Rng. 25 E.
Hddy County, New Mexico

Recommended Mud and Casing Program

0' - 350': Spud mud consisting of AQUAGEL flocculated with Lime. Treat with Cottonseed Hulls and FIBRETEX for loss of circulation. Possible river bed boulders at 200' - 250'. If complete loss occurs, blind drill to casing point. If necessary to blind drill to casing point, prior to coming to run casing, spot in the hole, 200 barrels Viscous AQUAGEL mud treated with Cottonseed Hulls and FIBRETEX. This should improve possibilities of circulating of the cement.

Surface casing - 13-3/8" at 350' - 17-1/2" hole.

350' - 2,400': Drill out with fresh water and circulate a controlled section of the reserve pit. Use HYSEAL for seepage loss of fluid. Control pH 10.5 with Lime to minimize corrosion and to help keep water clear of solids. Treat with BENEX to prevent solids buildup. Mud is usually not needed to set this string of casing, however, if hole conditions warrant, mud up with AQUAGEL and CALLEX for a viscosity of 32-33 Sec/1000 cc and filter loss of 15 cc or less.

Intermediate casing - 9-5/8" at 2,400' - 12-1/4" hole.

2,400' - 6,500': Drill out with existing water and circulate a controlled section of the reserve pit. Treat with Lime and BENEX to reduce solids buildup. Use HYSEAL for seepage loss of fluid.

6,500': Or top of Wolfcamp shale, add brine water to increase the fluid weight to 8.9-9.0 #/gallon. Mud up with an osmotic/polymer mud using FLOSAL for the viscosity 32-33 Sec/1000 cc and DEXTRID/DRISPAC for fluid loss control of 10-15 cc. Reduce the hardness below 400 PPM with Soda Ash. Maintain these properties unless hole conditions warrant a change. Maintain chloride content with additions of brine water. If need to increase mud weight above 9.0 #/gallon add brine or sack salt.

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MAY 10 1973

U. S. GEOLOGICAL SURVEY
ARTESIAL AND GEOTHERMAL DIVISION