

DRILLING PROGNOSIS

BASS POKER LAKE UNIT #57

LOCATION:

330' FSL & 1980' FWL, Section 28, T25S, R31E, Eddy County, New Mexico.

FIELD OR PROSPECT:

Poker Lake Delaware Wildcat.

CONDUCTOR CASING:

40' + of 13 3/8" conductor casing should be set with a rathole machine and cemented to the surface with ready-mix. Because of the unusual length of 11" surface hole, a good cement job on this conductor is mandatory.

SURFACE CASING:

An 11" OH should be drilled to the top of the Rustler Anhydrite @ 1020'+. The drilling fluid should be a fresh water mud with a funnel viscosity of 50 sec/1000 cc weight of 8.6-8.8 ppg. The viscosity may have to be varied upwards according to hole conditions. Hulls may be used for lost circulation.

Surface casing will be 1020', 8 5/8" 24# K-55 ST&C run with a guide shoe, insert float valve, five centralizers and a "petal" type cement basket. The float valve should be installed in the top of the first joint with the centralizers spaced beginning 10' above the guide shoe and on every other collar until all five are installed. The cement basket should be placed approximately 60' below ground level.

The surface casing will be cemented with 600 sx Class "C" + 2% CaCl₂ 1/4 lb/sx flocele (1.32 ft³/sx, 14.8 ppg, 200% excess). Top and bottom wooden plugs should be used.

Minimum waiting on cement time is 4 hours.

NIPPLING UP 8 5/8" CASING:

After "waiting on cement" 4 hours, the 8 5/8" casing can be cut off and an 8 5/8" SW 10" x 3000# WP RJT casinghead welded in place.

A set of Hydraulic Dual BOPs (blind rams on bottom) should then be installed. (See BEPCO II attached). Test the blind rams to 1000 psi before drilling the cement. Test the pipe rams and 8 5/8" casing to 1000 psi with the mud pump before drilling the guide shoe.

PRODUCTION CASING:

A 7 7/8" OH will be drilled to TD (8500' approx.). The drilling fluid should be 10.0 ppg brine water from the base of the surface casing to the top of the Delaware Mt. Group @ 4180'. At 4180' the system should be mudded up to a viscosity of 32-34 sec., and 15 cc water loss. This system should be maintained to TD.

At TD (8500') 5 1/2" 14#, 15.5# & 17# K-55 ST&C casing should be run. The float equipment should consist of a guide shoe, float collar, and four centralizers.

5 1/2" Casing Design

<u>Segment</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>Length</u>	<u>Top</u>	<u>Bottom</u>
1	17#	K-55	ST&C	1000'	7500'	8500'
2	15.5#	K-55	ST&C	1500	6000	7500
3	14#	K-55	ST&C	6000	0	6000

The "long string" cement will be 200 sx* 50-50 pozmix "A" with 2% gel, 1/4# flocele, 5/10 % CFR-2, and 3# salt (13.7 ppg, 1.36 ft³/sx). Top and bottom rubber plugs should be used.

*If the MMS requires the cement to be circulated then run a caliper survey and precede this cement with the necessary amount of Halco Lite with no additives.