

## DRILLING PROGNOSIS

### BASS POKER LAKE UNIT #51

Location: 1980' FNL, 1980' FWL, Sec. 9, T25S, R30E, Eddy County, New Mexico

Field or Prospect: Poker Lake Delaware Wildcat

Conductor Casing: 40' ± of 14" conductor casing should be set with a rathole machine and cemented to the surface with ready mix.

Surface Casing: A 12-1/4" O.D. should be drilled to the top of the Rustler Anhydrite @ 975' ±. The drilling fluid should be a fresh water mud with a funnel viscosity of 50 Sec./1000 cc and a weight of 8.5 - 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 975' 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 400 sx Western Pacesetter Lite plus 1/4#/sx Cello-ceal (1.8 ft<sup>3</sup>/sx, 12.4 ppg) tailed with 100 sx Class "C" plus 2% CaCl<sub>2</sub>. A top wooden plug 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 a 8-5/8" SWX 8" 2000# WP RJT Casinghead welded in place.

A set of Hydraulic Dual BOP's (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" O.D. will be drilled to TD (3825' 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 @ 3647'. At 3647' 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 (3825') 5-1/2" 14#/ft K-55 ST&C casing should be run. The float equipment should consist of a guide shoe, float collar, and 4 centralizers.

#### 5-1/2" Casing Design

<u>Seq.</u>	<u>Wt.</u>	<u>Grade</u>	<u>Thread</u>	<u>Length</u>	<u>Top</u>	<u>Bottom</u>
1 *	14	K-55	ST&C	3825'	0	3825'

\*Ruff-cote bottom four joints.

The "long string" cement will be 350 sx 50-50 Pozmix "A" plus 8#/sx salt (1.3 ft<sup>3</sup>/sx, 14.5 ppg). Top rubber plugs should be used.

Nippling Up 5-1/2" Casing: Immediately after "bumping" the plug, the 5-1/2" casing slips can be set with 30,000# and the casing cut off. A 8" x 6" 2000# tubing spool can then be installed.

Evaluation Procedures: A one man mud logging unit will be on location from the 3600' to TD.

Ten foot samples will be caught from 3600' to TD.

The CNL-FDC-GR log will be run from TD to the base of the surface casing (975 ±). The DLL-Rxo log will be run from TD to

Drill Stem Tests will be run on any significant shows.

Time: This well is estimated to take 12 days from spud to moving off