## NAHAMA AND WEAGANT ENERGY COMPANY Condor LF 43-32-65 DRILLING PROGRAM - REVISED

Location: 1150' FEL and 2400' FSL of Section 32, T6N, R5W, W.B.&M.

<u>Elevation</u>: 830' +/- K.B.

Estimated Drilling Depth:

Total projected depth 1940'

<u>Directional Control</u>: Hole to be vertically drilled.

## Program:

- 1. Cement 30' of 16" conductor.
- 2. Drill 14-3/4" hole to 500'+/- (drill to fit casing).
- 3. Run 10-3/4", 40.5#, K-55, casing equipped with open guide shoe, insert fillup valve in first collar and 3 centralizers on the 1st, 3rd and 5th collars. Tack weld and Bakerlock bottom 4 collars and weld shoe solid.
- 4. Cement with 175 sx. class "G" cement premixed with 3#/sx Calseal, 8% gel and 3% CaCl<sub>2</sub> followed with a tail slurry of 100 sx. class "G" cement premixed with 3% CaCl<sub>2</sub>. Pump 50 cf. fresh water ahead of cement and displace top plug with fresh water. Bleed pressure off casing and observe backflow (50% excess, WOC. 4 hrs.).
- 5. Install and weld 13-3/8" x 3M x 10-3/4" SOW casing head and test to 1500#. Install Class III-B BOPE. Test Hydrill to 1000# and all rams, lines, valves and chokes to 1500#. DOGAMI to witness tests and log on tour sheet.
- 6. Drill 9-7/8" hole to 1940' +/- (total depth to be called by on-site geologist. Estimated T.D. will be 60' below top of C&W). Install mud loggers when drilling out shoe of surface pipe. Wipe new hole drilled every 5-6 hrs. or sooner it tight hole becomes evident.
- 7. Run electric, sonic logs, FMS, and SWS in seperate runs to total depth.
- 8. Run 7", 23#, J-55 casing from top of C&W (est. 1880') to surface. Equip casing with guide shoe and differential fillup collar. Place centralizers as directed.
- Cement casing as follows:
  - a. Precede cement slurry with 20 bbls. mud flush.
  - b. Cement volume to be based on caliper plus 25% with cement top to be brought to surface.
  - c. Displace cement in turbulent flow with fresh water.
- 10. Land casing as cemented, install tubing head and test to 3000#.
- 11. Install B.O.P.E. and test. DOGAMI to witness test.
- 12. R.I.H. with 6-1/4" bit on 3-1/2" drill pipe.
- 13. Drill out shoe of 7" casing and run bit to T.D. Change hole over to KCL-Polymer drilling fluid. P.O.O.H.
- 14. R.I.H. with hole opener. Open hole below shoe of 7" to 13". P.O.O.H. and lay down hole opener tools.
- 15. R.I.H. with 5-1/2", 17#, VFJ slotted liner (50R x 6" centers x .120) Land liner at T.D. with minimum 20' lap.
- 16. Gravel pack liner with 20-40 sand. P.O.O.H. and lay down gravel packing tools.
- 17. Run 2 7/8", 6.5#, J-55 tubing to 1750' +/-. Land tubing in donut and install Xmas tree.
- 18. Swab tubing to initiate flow, flow well to test.
- 19. Release drilling rig.