

## DRILLING PROCEDURE

### Big Eddy Unit #78

#### Location:

2310 1980' <sup>FSL</sup>FEL & 1980' <sup>FEL</sup>FNL, Sec. 35, T20S, R30E

#### Conductor Casing:

40' + of 16" conductor casing will be set with a rathole machine and cemented to the surface with ready mix.

#### Surface Hole:

A 15" O.H. will be drilled to 380' + (T/Rustler) and 11-3/4" 42#/ft H-40 casing run to total depth. The surface casing will be cemented with 290 sx Class "C" plus 2% CaCl<sub>2</sub>. Cement must be circulated to the surface.

Total WOC time is 24 hours.

#### Nippling Up 11-3/4" Casing:

After waiting 4 hours "nippling up" procedures may begin. An 11-3/4" SW 3000# WP x 12" 3000# WP casinghead will be welded in place. A set of hydraulic operated pipe and blind rams will then be installed. (See BEPCO II attached) and tested to 1000 psi with the rig pump.

The results of this test must be reported in the daily driller's log.

#### Intermediate Hole:

An 11" O.H. will then be drilled to 3990' (T/Delaware Mtn. Group) 8-5/8" casing will be run to total depth and cemented with approximately 1000 sks Halliburton Lite plus 18# NaCl/sx plus 1/4#/sx floccel, plus 1% CaCl<sub>2</sub> "tailed-in" with 350 sx Class "C" with 2% CaCl<sub>2</sub> plus 1/4#/sx floccel. Cement will be circulated to the surface.

A DV tool will be installed at approximately 2144' (100' into Capitan Reef) and the cement two staged.

Total WOC time for this casing string will be 24 hours.

#### Nippling Up 8-5/8" casing:

After waiting 4 hours "nippling up" procedures may begin. The 11-3/4" casinghead will be removed and a 8-5/8" SW 5000# WP x 10" 5000# WP casinghead installed.

A BOP stack consisting of hydril, pipe rams and blind rams will be installed as per BEPCO Drawing IV (attached). This BOP stack will be hydrostatically tested to 5000 psi (hydril 1500#) by Yellow Jacket. The USGS will be notified in sufficient time to witness the testing of the 8-5/8" BOP stack. A copy of the test results will also be furnished to the USGS.

The results of this test will be recorded in the daily driller's log.

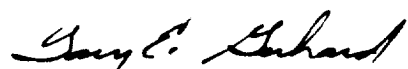
#### Production Hole:

A 7-7/8" O.H. will then be drilled to T.D. (990' +). A PVT recorder, flow-show sensor and rotating head will be installed before drilling the Wolfcamp.

5 1/2" casing will be run to T.D. This casing string will be cemented with approx. 900 sx Class "H" plus 5# KCl/sx plus 0.3% CFR-2, plus 0.6% Halad 22. The cement volume should be sufficient to bring the cement top 1000' above the Wolfcamp.

#### Time:

This well is estimated to take 48 days from spud to T.D.

  
Gary Gerhard