

DRILLING PROCEDURE
BIG EDDY UNIT #91
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PRODUCTION HOLE & CASING: Drill an 8 3/4" hole from 4000' to TD (13,450') using a FW lime system circulating reserve pit, down to 10,582' (T/Wolfcamp). From 10,582' to 11,882' (T/Strawn) use 10# BW & continue circulating reserve pit. In addition, a mud-gas separator and rotating head should be installed by 10,100'. At the T/Strawn (11,882') lower fluid loss to 20 cc or less with Drispac and XC-polymer. From T/Atoka (12,132') to TD, an 11.0 ppg, 34-36 vis, BW Drispac, XC-polymer, 3-4% KCl with a fluid Loss of 10 cc or less should be used.

The production casing will consist of the following segments:

0- 2100' (2100')	7" 23#/ft, N-80 Buttruss
2100- 4960' (2860')	7" 23#/ft, N-80 LT&C
4960- 8570' (3610')	7" 23#/ft, S-95 LT&C
8570-13450' (4880')	7" 26#/ft, S-95 LT&C

Run casing with a combination float and guide shoe, float collar and a 7" LT&C 20-23# Halliburton FO Multiple Stage Cementer. Placed FO tool @ + 6000'. Cement casing with 500 sx HALCO Lite + 5#/sx KCl + .3% CFR-2 (1.54 ft³/sx, 13.6 ppg) followed with 150 sx Class "H" + .3% CFR-2 + .5% HALAD 22 + 5#/sx KCl (1.20 ft³/sx, 15.8 ppg). The cement should be tested with rig water for a minimum pump time of 3 hours on an API 13,000' schedule (assume BHT of 210° F). The cementing thru the FO tool will be done prior to completion using tubing and completion rig. Cement thru "FO" tool with 400 sx Lite (1.84 ft³/sx, 12.7 ppg). Estimated TOC @ 1500'±.

BLOWOUT PREVENTION PROCEDURE: The pipe rams should be operated once each tour from 10,100' to TD. Blind rams should be closed after each bit trip, A reduced circulating pressure at 30 SPM should be taken each day and this recorded on the daily drilling log. The attached BOP prevention worksheet should also be kept current.

EVALUATION: A one man logging unit on location from 3000' to 4000'. Two men from 4000' to TD. Catch 10' samples from 3000' to 12,542' (T/U. Morrow) then 5' samples from 12,460' TD. At TD the following logs should be run: GR-CNL-LDT Caliper, GR-DLL-MSFL. Dipmeter with GR from TD to 200' above Strawn and from 300' below 49'er to Base of 13-3/8" casing. Possible core in M. Morrow and DST all significant shows in Delaware, Wolfcamp and Strawn.

TIME: This well is estimated to take 57 days.


Stephen D. Smith 7-9-84
Date