

ILLEGIBLE

Nipple Up: The BOP's should be run in the 11 3/4" head should be cut off and removed. A Gray CWC-F 7" nominal 10" 5,000 WP casing head will be welded on the 8 5/8" pipe 5' above the 11 3/4" cut off should be as short as possible. Cement should stand to the 11 3/4" cut off; a few sacks should be left on the ground to grout between the 8 5/8" and 11 3/4" if it is not full. Nipple up a 2 ram plus annular hydraulic operated BOP stand 10" 5,000 WP DEPCO. IV (attached). Pressure test rams and choke manifold to 5,000 psi. Drill out the shoe and 50' of new hole and pressure up to 1100 psi; 12 ppg equivalent at the shoe. Test in 500 psi increments if pump in is accomplished discontinue pressure test.

Production Hole: A 7 7/8" hole will be drilled from 5,800' to TD. The drilling fluid will be fresh-water lime 8 + pH to 11,000'; 10# brine + 3% KCl + lime 9 + pH to 13,000'; 10# - 10.2# brine + 3% KCl + drispac 32-34 vis, 9 + pH, < 10 cc WL to TD. A mud-gas separator and rotating head should be installed before reaching 11,000'.

Evaluation: Samples should be sacked each 10' from 5,800' to 11,000' and each 10' from 11,000' to TD. ~~The hole will be logged through the Delaware from the top of the Bone Springs at 8,650' with Sonic log, BIL 118 Sp, and 5 small cones.~~ A down hole mud log unit will be put on the well from 11,000' to TD. Lateral ST's are 1 in the Atoka at 13,000' and 2 in the Morrow below 13,000'. The hole will be logged at TD with FIC-40-GR and 21' with MFL.

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Production Casing: 5 1/2" casing will be run in 7 7/8" hole

5 1/2" casing design for 14,500'

0-1,730'	1730'	17 1/2 ft	N-60	Buttress
1,730-10,770'	9040'	17 1/2 ft	N-60	LT&C
10,770-14,500'	3730'	17 1/2 ft	S-95	LT&C

the casing will be run with a float shoe and a float collar. The casing will be centralized and ruff-coated across potential pay zones. The cement volume should be calculated from the caliper log to return cement to 1,000' above the 1/2 mile camp, or to about 10,600'. The cement will be about 1,000 sx 50-50 class H-pozmix A - 2% gel + 0.5% CFR-2 + 0.8% Malad 22 + 6 lbs/sk KCl 14.5 ppg 1.3 ft³/sk.

Nipple Up: The tubing head will be a Gray CWC-F 7" nominal 10" 5,000 WP x 6" 5,000 WP. The rig will be moved off after the tubing head is installed.

Time: This well is estimated to require 15-20 days from spud to move out.

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