

Cotton Draw Unit 90

Bone Springs Completion Procedure

660' FNL & 660' FWL
Section 36, T24S, R31E
Eddy County, New Mexico

Date: June 7, 2002
WBS No:
Cost Center: BCPI11200

Elevation: 3498' GL 3525.5' KB
MD/TVD: 15,200'
PBTD: 14,915'

Surface: 13 3/8", 48#, H-40 casing at 704' w/1060 sx, circ.

Intermediate: 9 5/8", 36#, K-55 at 4,283' w/ 1940 sx, circ.

Intermediate: 7", 26# & 29#, P-110 at 12,790', DV @ at 7504'
w/ 1360 sx 1st stage & 1800 sx 2nd stage. TOC 4300'.

Production: 5", 18# & 23#, P110 Liner 12,267' – 15,200', LC @ 15,149'
w/ 580 sx. CIBP at 14,950' capped w/ 35' cement.

Open Perforations: Upper Morrow 14,782'-14,794'

Abandoned Perfs: Lower Morrow (Below CIBP at 14,950') 14,995'-15,097'

Tubing: 2-3/8", 4.7#, L-80 EUE AB Mod. (474 joints) w/ Baker Reliant Model M packer & on/off tool w/ 1.875" F nipple at 14,719', 10' x 2-3/8" sub. 1.81" R nipple at 14,736', 10' x 2-3/8" sub, Debris sub at 14,759', 10' x 2-3/8" sub, Firing head at 14,770', Safety spacer, 12' TCP Gun, bull-plug at 14,796'.

1. RU slickline. Set 1.81" R plug in nipple below packer. RD slickline.
2. MIRUPU. ND Tree. NU 7-1/16" 5M BOP's.
3. TOOH w/ 2-3/8" tubing, packer and BHA. St and back 9000' and lay down remainder.
4. RU Baker. RIH w/ CIBP for 5", 23# casing and set at 14,750'. NOTE: Correlate to the Schlumberger Array Sonic/P and S/Neutron/Gamma Ray log dated 1/12/02.
5. RIH w/ dump bailer. Dump 35' cement plug on top of CIBP at 14,750'.
6. Load casing w/ 2% KCL. Test CIBP w/ 1000 psi surface pressure.