

NORTH INDIAN BASIN UNIT NO. 14
Unit B. 660' FNL & 2,310' FEL
Section 2, T-21-S, R-23-E
Eddy County, New Mexico

AFE:

Date: September 14, 1996

MOC: WI - 90.6825% NRI - 77.7180%

Purpose: Drill 1200' short-radius lateral

Elevation: GL - 3,696' KB - 3,712' PBTD - 7,773' (CIBP)

Surface Casing: 9 5/8" O.D., 36#, J-55 set at 1,213'. Cement w/ 684 sxs., Circ.

Production Casing: 7" O.D., 23# & 26#, K-55 set at 7,989', DV tool at 6,028'.
Cement 1st stage w/ 475 sxs., circ. 100 sxs. Cement 2nd stage w/
775 sxs., circ.

Tubing: BP MA, perf sub, 10 jts. 2 7/8" O.D., 6.5#, L-80 tubing, 2 7/8" X 7" TAC,
236 jts. 2 7/8" O.D., 6.5#, L-80 tubing, 2 - 2 7/8" O.D., L-80, 6.5# tubing
subs.

Rods/Pump: 2 1/2" X 1 3/4" X 26' Pump w/ 1 1/4" X 8' gas anchor, 1 - 1" N97 rod,
33K shear tool, 154 - 1" N97 rods, 102 - 1.25" FG rods, 1 - 1.25" X 3'
pony rod, 1 1/2" X 24' PR w/ 1 3/4" X 16' PRL.

Perforations: Canyon: 7588' - 7602', 7620' - 7644', 7654' - 7684', 7690' - 7706', and
7716' - 7754'
2nd Canyon (Below CIBP): 7783' - 7800'

Estimated SBHP: 1,900 psi

Safety: - Hold daily safety meetings explaining the proposed procedure.
- H2S concentration - 5,000 PPM
- Keep TIW on rig floor for all pipe connections at all times.
- Use 10# Brine to kill well if necessary.

1. Unhang well and lockout/tagout energy source. RDMO pumping unit. Prepare location as necessary for rig. Build 50' X 50' reserve pit. Test safety anchors to 22,500# if necessary.
2. MIRU pulling unit. Blow well down or kill well as necessary. Install rod stripper. Unseat pump and TOO H w/ rods laying down. Install 7 1/16" 3M dual ram hydraulic BOP. Release TAC and TOO H w/ tubing.
3. TIH w/ 2 7/8" O.D. tubing w/ 7" packer and RBP to 500'. Set plug, PU and set packer. Test pipe rams to 1500 psi. Release packer and TOO H. Test blind rams to 1500 psi. TIH w/ retrieving head on 2 7/8" tubing. Release RBP and TOO H.
4. TIH w/ 2 7/8" O.D. tubing openended to RBP at 7773'. Spot 100 sacks Class C + 1.0% FL-62 + 0.3% CD-32 + 0.2% SM mixxed at 14.8 PPG w/ 1.33 yield. PU to 7200' and squeeze perforations to 500 psi. Reverse out tubing. TOO H.
5. PU 6 1/8" bit, 6 - 4 1/2" DC's, and TIH. Drill out cement squeeze to 7765'. Test squeeze to 500 psi. Drill out CIBP at 7773'. TIH to 7900'. Establish injection into 2nd Canyon perforations. TOO H.
6. RU wireline unit. NU lubricator. Set 7" cement retainer at 7770'. RD wireline unit.
7. TIH w/ retainer stinger on 2 7/8" O.D. tubing. Sting into retainer and load backside. Establish rate into perforations. Squeeze perforations w/ 100 sacks Class C + 1.0%