

## Workover Procedure

### W. H. Laughlin No. 6

1980' FNL, 2250' FWL

Section 9, 20S-37E, U/L "F"

Monument (Eumont) Field, Lea County, New Mexico

**AFE NO:** 301501

**Date:** September 4, 2001

**Purpose:** Plug-back higher in Eumont

**Elevation:** **KB:** 3550' **PBTD:** 3660'  
**GL:** 3544' **TD:** 3760'

**Estimated Cost:** \$300,000

**Estimated Rig Days:** 14

**WI:** 100% **NRI:** 87.5%

**Surface Casing:** 7", 20#, K-55. 8rd ST&C, casing set to 1203'. Burst = 3740 psi.  
Cemented w/ 325 sx. Circulated cement to surface (112 sx).  
Burst (80%) = 2992 psi

**Production Casing:** 4-1/2", 11.6#, K-55. 8rd LT&C, seamless casing to 3755'. Cemented w/ 565sc. Circulated cement to surface (25 sx).

**Production Tubing:** 2-3/8", 4.7#, J-55, EUE 3467'.

**Perforations:** Existing Perfs (Lower Eumont) – 3337'-3490'

**Recent Rate:** August 23 (30 day average) 10 MCFPD.

**Estimated Bottom Hole Pressure:** Lower Eumont ~ 100 psi

**Safety:** The new interval can be over-pressured and is sour (3000 ppm).

#### Performance/Capacities

Size	ID (in.)	Drift (in.)	Burst (80%) (psi)	Capacity (bbl/ft)
2-3/8" 4.7#	1.995	1.901	6160	.00387
4-1/2" 11.6#	4.000	3.875	4280	.0155
Tbg/Csg Annulus	-----	-----	-----	.0101

#### Procedure:

1. Notify Hobbs personnel of workover. Test rig anchors. Rig line from production casing valve to production facilities to allow well testing immediately after perforating. The first casing valve and nipples need to be 5000 psi WP. Downstream of the first valve, equipment may be 2000 or higher WP. If on site separator and meters are not available, rental 2-phase separator equipment should be considered.
2. MIRU PU. Kill well by pumping +/- 30 bbls of produced or brine water down tubing/casing annulus.
3. ND wellhead. Install 5000 psi WP 4-inch or larger full-opening, manual frac valve on top of tubing head. NU 3000 psi WP BOP stack on top of full-opening valve w/ 2-3/8" pipe rams. Test BOPE.
4. POOH with 3467' (112 joints) of 2-3/8" tubing.