

# QN Completion Procedure

API No. 30-025-37556

Walter Lynch # 12

1830' FNL & 1980' FWL

Section 1, T22S-R37E, UL "F"

Lea County, New Mexico

**Date:** August 8, 2006

**Purpose:** Recomplete and Frac Queen

**Elevation:**   **KB:** 3363'                      **PBTD:** 3951'  
                  **GL:** 3353'                      **TD:** 4626'

**Current Perforations:** 3829-32, 3840-47, 3871-73, 3899-3901, w/ 1 SPF Grayburg  
3676-77, 3680-82 w/ 1 SPF Queen

## Procedure:

1. RU WSU. POOH with rods and pump. Install BOPE. POOH with tubing and anchor. Use 2% KCL as workover fluid.
2. RIH w/ 5-1/2" Cement Retainer and Tbg. Set Retainer @ 3750' (about 2 Jt above to Grayburg perms 3829'-3901'). Pressure test Tbg to 1000 psi.
3. RU Cement Services. Pump fresh water to establish rate switch to cement. Pump 75 sx Class C Neat Cement. Mix cement w/ 6.3 gals water/sx to weight of 14.8 lbs/gal. Thickening time is 2:10 with a yield of 1.32 Cu Ft/sx. Displace cement with fresh water to retainer. Sting out of retainer and reverse circ tbg clean w/ 1 tbg volume (22 bbls) of 2% KCL, POOH and stand back tbg.
4. **Perforate:**  
RU Baker-Atlas electric line with lubricator and pack off. Use Baker-Atlas GR/CCL log dated 1/16/06 for depth control. Note short joint at 3169-90.5. RIH with 3-1/8" perf guns loaded with 311T charges and perforate 6' w/ 4 SPF, 24 holes as follows:  
3676 - 3682 (24-holes)  
RD Baker-Atlas.
5. Prepare well for frac.
6. Install Stinger Tree Saver. RU Halliburton Frac. Test line to 6000 PSI
7. Frac per Halliburton design.
8. RD Halliburton equipment and tree saver.
9. RIH with notched collar and clean-out frac sand to top of cement at +/- 3750'. PWOP w/ pump set below perforation.