Unocal Energy Resourc ivision Unocal Corporation 1004 North Big Spring, Suite 300 P.O. Box 3100 Midland, Texas 79702 Telephone (915) 685-7600



**UNOCAL**®

December 21, 1993

Mr. Jerry Sexton Supervisor & Oil and Gas Inspector Permian Basin Makes Maxico Oil & Gas Conservation Commission 1000 West Broadway Hobbs, New Mexico 88240

> Subject: UNOCAL FED COM 28-1 Red Hills Field Lea County, NM 2310' FNL & 2310' FEL Section 28, T-25-S R-33-E

Dear Mr. Sexton:

As we discussed on the phone last week, I have attached the flow test results for the UNOCAL Red Hills Fed Com #28-1, Red Hills Field, Lea County, New Mexico.

UNOCAL is currently testing the subject well down the sales line after a successful polymer squeeze operation. Pre-polymer flow rates were approximately 1,000 MCFPD with 450 BWPD. Post-polymer flow tests are 1,379 MCFPD with 160 BWPD. However, we experienced a significant water production increase and a large tubing pressure drop when the choke was increased to a 13/64" setting. We are concerned that opening the choke further will cause additional deterioration in the flow capacity by bringing in more water.

To date, our post-treatment testing has yielded three stabilized surface data points for the Multi-Point flow test. The flowing surface data has been extrapolated to bottomhole conditions for all calculations. UNOCAL hereby respectively requests that this data be accepted as sufficient to meet the regulatory requirements for gas well testing. If this meets with your approval, UNOCAL will officially submit Form C-122.

The following data has been attached for your review:

- Red Hills Fed Com #28-1 Production History from original completion.
- The three data points used in the Multi-Point back-pressure test. Each point was selected after two days of stabilized flow.
- 3) Log-Log plot of flow test. Least squares fit of three points yields an 'n' value of .522.