HUMPHREY QUEEN UNIT #31 WIW LANGLIE MATTIX QUEEN FIELD LEA COUNTY, NEW MEXICO

Stimulation and Completion Program

1. GIH and clean out to PBTD ±3625'.

2. Spot ± 100 gal. 3450 - 3595'. Run PDC log and correlate to Gearhart Dual Laterlog dated 12/9/82. Perforate the Penrose with 1 jspf as follows:

3550 - 3554' 3560 - 3562' 3568 - 3572' 3582 - 3592' (24 holes)

3. Pump spot acid away. Acidize with 2000 gals. 15% N.E. acid* and ± 30 RCNBS. Swab back and test.

4. If conditions warrant, frac down tubing with 12500 gals. Terra frac 'T' 1400** and 20,000 lb. 20/40 sand and 10,000 lb. 10/20 sand at ±15 BPM.

a. Pump 3000 gal. Terra Frac 'T' 1400 pad.
b. Pump 1000 gal. Terra Frac 'T' 1400 with 1 ppg 20/40 sand.
c. Pump 1500 gal. Terra Frac 'T' 1400 with 2 ppg 20/40 sand.
d. Pump 2000 gal. Terra Frac 'T' 1400 with 3 ppg 20/40 sand.
e. Pump 2500 gal. Terra Frac 'T' 1400 with 4 ppg 20/40 sand
f. Pump 2500 gal. Terra Frac 'T' 1400 with 4 ppg 10/20 sand
f. Pump 2500 gal. Terra Frac 'T' 1400 with 4 ppg 10/20 sand
g. Flush to perfs and shut in.

5. Test as directed. Set RBP ±3545'. Spot ±100 gals. 15% N.E. acid 3475' - 3540'. Perf Penrose with 1 jspf as follows:

3478 - 3482' 3484 - 3514' 3520 - 3526' 3530 - 3536' 3538 - 3540' (53 holes)

6. Pump spot acid away. Acidize with 3900 gals. 15% N.E. HCL* and ± 60 RCNBS. Swab back and test.

7. If conditions warrant, frac down tubing with 25,000 gals. Terra frac 'T' 1400** and 40,000 lbs. 20/40 sand and 20,000 lbs. 10/20 sand at ± 15 BPM.

a. Pump 6000 gals. Terra frac 'T' 1400 pad.
b. Pump 2000 gals. Terra frac 'T' 1400 with 1 ppg 20/40 sand.
c. Pump 3000 gals. Terra frac 'T' 1400 with 2 ppg 20/40 sand.
d. Pump 4000 gals. Terra frac 'T' 1400 with 3 ppg 20/40 sand.
e. Pump 5000 gals. Terra frac 'T' 1400 with 4 ppg 20/40 sand.
f. Pump 5000 gals. Terra frac 'T' 1400 with 4 ppg 10/20 sand.
g. Flush to perfs and shut in.

8. Test as directed. Set RBP ±3474'. Spot ±100 gals. 15% N.E. acid 3418' - 3470'. Perf Queen with 1 jspf as follows: 3418'-3422' 3424'-3436' 3438-3448'

3452-3466'

9. Pump spot acid away. Acidize with 3300 gals. 15% N.E. HCL* and ± 50 RCNBS. Test.

10. If conditions warrant, frac as in step 7. Test as directed. Pull RBP at 3474' and 3545'.

C-108 Requirement IX

JUN I () 1983 HOBBS C.D. HOBBS C.D.