

RESERVES  
FOWLER PADDOCK GAS POOL  
LEA COUNTY, NEW MEXICO

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
<i>Van Am</i>	EXHIBIT NO. <u>6R</u>
CASE NO. <u>2742-43-44 Reported</u>	

The average pool pressure on 1/1/64 was 1818 psig with a total pool cumulative gas recovery of 1,477 MMCF.

<u>Pressure, psig</u>	<u>Pressure, psia</u>	<u>Z</u>	<u>P/Z</u>
P <sub>i</sub> = 2000 (Initial)	2013.2	0.750	2684
P = 1818 (1/1/64)	1831.2	0.763	2400
P <sub>a</sub> = 200 (Abandonment)	213.2	0.97	220

Using following gas balance

$$G = g \frac{P_i/Z_i - P_a/Z_a}{P_i/Z_i - P/Z}$$

Where: G = ultimate gas recovery, MMCF

g = cumulative gas recovery to pressure P, MMCF

$$G = 1477 \frac{2684 - 220}{2684 - 2400}$$

$$G = 1477 \frac{2464}{284}$$

Ultimate gas recovery = 12,800 MMCF

Pore volume reserves = 8.75 MMCF/acre from Exhibit 14, Case 2744 ✓

Total acres =  $\frac{12,800}{8.75}$  = 1460 acres

Acres/well =  $1460/4$  = 365 acres/well