

## RESERVE ESTIMATE

S.W. Bronco Field

Lea County, New Mexico

I. To establish recovery factor for fractured carbonate reservoirs in Tatum basin:

Bronco W. (Devonian) Field -

$$1,373,000 \text{ bbls oil} / (140 \text{ acres}) \times (75' \text{ avg. pay}) = \underline{130 \text{ bbls/acre - ft.}}$$

Jenkins, N.E. (Devonian) Field

$$975,000 \text{ bbls oil (est. ultimate)} / (288 \text{ acres}) \times (26' \text{ avg pay}) = \underline{130 \text{ bbls/acre - ft.}}$$

II. Decline Curve Analysis (see attached Reserves and Economics sheets)

Estimated ultimate recovery -

$$\text{Lowe "20" \#1} = \underline{172,018 \text{ bbls oil}}$$

$$\text{Lowe "20" \#2} = \underline{127,360 \text{ bbls oil}}$$

III. Determination of Drainage Area -

Drainage area = Recoverable reserves/Recovery factor x pay thickness

Lowe "20" #1-

$$\text{Drainage area} = 172,018 \text{ bbls} / (130 \text{ bbls/acre-ft} \times 19') = \underline{69.6 \text{ acres}}$$

Lowe "20" #2-

$$\text{Drainage area} = 127,360 \text{ bbls} / (130 \text{ bbls/acre-ft} \times 13') = \underline{75.4 \text{ acres}}$$

**BEFORE THE  
OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico

Case No. 11409 (Reopened) Exhibit No. 4

Submitted by: Maralo, Inc.

Hearing Date: April 17, 1997