KNOX INDUSTRIES INC.
FEDERAL 3C NO. 2
1880' FWL AND 660' FNL SEC 3 T-9S R-35E
LEA COUNTY NEW MEXICO

Examiner
Case No. 10280
EXHIBIT NO. 11

RESERVES BY VOLUMETRIC CALCULATIONS:

$$\text{OIL IN PLACE} = \frac{7758Ah\emptyset(1-Sw)}{Bo}$$

A = 80 ACRES
h = 15 FEET
$\emptyset$ = 14 PERCENT
Sw = 25 PERCENT

$$\text{OIL IN PLACE} = \frac{(7758)(80)(15)(.14)(.75)}{1.2}$$

$$= 814{,}590 \text{ BARRELS}$$

$$\text{RECOVERABLE OIL} = (.15)(814{,}590)$$

$$= 122{,}189 \text{ BARRELS}$$

RESERVES BY PRESSURE PERFORMANCE:

INITIAL BOTTOM HOLE PRESSURE = 1600 PSI
BOTTOM HOLE PRESSURE 2-14-91 = 1545 PSI
RESERVOIR PRESSURE DRAWDOWN = 55 PSI

CUMULATIVE PRODUCTION 2-14-91 = 6,619 BARRELS OF OIL

$$\text{RECOVERY PER PSI DRAWDOWN} = \frac{6619}{55} = 120.345 \text{ BBL/PSI DRAWDOWN}$$

ESTIMATED RESERVOIR ABANDONMENT PRESSURE = 500 PSI

REMAINING RESERVES AS OF 2-14-91 = 1045 X 120.345
= 125,760 BARRELS OF OIL

ULTIMATE RESERVES = 125,760 + 6,619 = 132,379 BARRELS

NOTE THE GOOD AGREEMENT BETWEEN THE VOLUMTRICALLY CALCULATED RESERVES USING 80 ACRE DRAINAGE WITH THE RESERVES OBTAINED BY EXTRAPOLATING THE RESERVOIR PRESSURE PERFORMANCE. THIS INDICATES THAT 80 ACRE SPACING WOULD BE THE PROPER SPACING TO BE USED IN THIS FIELD.

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BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

Case No. 10280 Exhibit No. 11

Submitted by: Petroleum Production Management Inc.

Hearing Date: August 3, 1995