Drainage Area Calculation
Example: El Paso 23 #1

$$\text{Area} = \frac{\text{EUR}}{\text{Porosity} * \text{Height} * \text{Gas Saturation} * [(1 / \text{Bgi}) - (1 / \text{Bgf})]}$$

Where:

EUR =	1.6E+9 scf
Gas Gravity =	0.67
Porosity =	5%
Height =	60 ft
Gas Saturation =	1 - Sw
Water Saturation =	40%
Initial Pressure =	9,180 psia
Final Pressure =	500 psia
Initial Formation Volume Factor =	2.75E-3 ft3/scf
Final Formation Volume Factor =	17.5E-3 ft3/scf

$$\text{Area} = \frac{1.6\text{E+9 scf}}{(43{,}560 \text{ ft2/Ac})(5\%)(60 \text{ ft})(1\text{-}0.4)((1 / 2.75\text{E-3 ft3/scf}) - (1 / 17.5\text{E-3 ft3/scf}))}$$

Area = 67 acres

BEFORE THE
OIL CONSERVATION COMMISSION
Case No.11837 Exhibit No. 14
Submitted By:
Burlington Resources
Hearing Date: August 21, 1997