PRESTON FEDERAL NO. 1
VOLUMETRIC DRAINAGE CALCULATION

Volumetric Parameters		Source
P_i	= ± 2800	BHP Survey - 1/71
Bg_i	= 211 SCF/cu ft	PVT Report - RFL Labs - 11/91
Net Pay	= 59 ft	Open hole logs - 2% Ø cutoff
Porosity	= 4.7%	Open hole logs - thickness wgt ave.
Sw_i	= 25%	Capillary Pressure data - SCAL Inc.
Rec Factor	= 85%	Industry Rule-of-Thumb
EUR	= 9.5 BCFG	P/Z vs. Gp plot

Drainage Calculation

1. OGIP = $43560\ Ah\ \emptyset\ (1 - Sw_i)Bg_i$

2. EUR = OGIP * RF

3. EUR = $43560\ Ah\ \emptyset\ (1 - Sw_i)Bg_i\ RF$

   solve for Area

4. A = $EUR/43560\ \emptyset h(1 - Sw_i)Bg_i\ RF$

   A = $(9.5\ BCFG)/[43560\ ft^2/Acre)(.047)(59\ ft)(1 - .25)(211\ SCF/ft^3)(.85)]$

   A = 585 Acres

   r_d = 2847 ft

Where:
- OGIP = Original Gas-in-Place
- EUR = Estimated Ultimate Recovery
- RF = Recovery Factor
- r_d = Drainage Radius
- P_i = Initial Reservoir Pressure
- Bg_i = Initial Gas Formation Volume Factor
- Sw_i = Initial Water Saturation

BEFORE EXAMINER
OIL CONSERVATION DIVISION
EXHIBIT NO. 8
CASE NO. 10519
Submitted by Conoco Inc
Hearing Date 8-20-92