

ELVIS NO. 1 DRAINAGE AREA

I. ORIGINAL OIL IN PLACE

A. Basic Volumetric Equation: $N = 7,758 * A * H * \phi * (1 - S_{wi}) / B_{oi}$

Where:

- N = Original Oil in Place, STB
- A = Reservoir Area, Acres
- H = Reservoir Thickness, Feet
- ϕ = Reservoir Porosity
- S_{wi} = Initial Water Saturation
- B_{oi} = Initial Oil Formation Volume Factor, Bbls/STB

B. Elvis No. 1 Input Values

VALUE	ORIGINAL (5/97)	CURRENT (9/99)
H	50 feet	45 feet
ϕ	12%	8%
S_{wi}	30%	
B_{oi}	2.38 bbl/STB	

C. Original Oil in Place by Spacing Unit

Spacing Unit	OIL IN PLACE, BBLs		Comments
	Original Values	Current Values	
40 acres	547,600	328,600	State-Wide Spacing
80 acres	1,095,200	657,100	***
160 acres	2,190,500	1,314,300	Current Spacing

II. RECOVERY EFFICIENCIES

A. Recovery Efficiency Equation: $R = EUR/N$

Where: R = Recovery Efficiency
 EUR = Estimated Ultimate Recovery, STB
 N = Original Oil in Place, STB

B. Theoretical Devonian Recovery Efficiencies

- (1) 44% - API Bulletin D14 {carbonate water drive reservoirs}
- (2) 43% - Czaze & Buckley Correlation

C. Elvis No. 1 Recovery Efficiencies

NOTE: RECOVERY EFFICIENCIES BASED UPON EUR ESTIMATE OF 600,000 BBLs.

SPACING UNIT, ACRES	RECOVERY EFFICIENCY	
	ORIGINAL VALUES	CURRENT VALUES
40	110%	183%
80	55%	91%
160	27%	46%

D. CONCLUSION: Elvis No. 1 is effectively draining approximately 160 acres.

EXHIBIT NO. 7
 CASE NO. 11733 (Reopened)
 Submitted by: Conoco Inc.
 Hearing Date: September 16, 1999