

Drainage Area Calculation Based
on Cumulative Production 12-1-85

$$A = \frac{OOIP * Bo}{7758 * \phi h * (1-Sw)}$$

A = Area drained by production

OOIP = Original oil in place in area = $\frac{Np}{RF}$

Np = Oil Produced - Stock Tank bbls.

RF = Recovery Factor = 29.3%

7758 = Units conversion factor

ϕh = Average porosity feet for drainage area

Sw = Water saturation = 33%

Bo = Formation volume factor = 1.451 Reserv bbl/stk.tk.bbl.

SCOTT No. 1

Oil produced = 131,370 BO

Current production - 40 BOPD

ϕh = 2.3 (Average for Scott and Gilliam)

$$A = \frac{(131,370 \div .293) * 1.451}{7758 * 2.3 * .67} = 54 \text{ Acres}$$

GILLIAM No. 1

Oil Produced = 70,403

Current production = 60 BOPD

ϕh = 1.57

$$A = \frac{(70403 \div .293) * 1.451}{7758 * 1.57 * .67} = 43 \text{ Acres}$$

