

DRAINAGE AREA CALCULATIONS JALMAT & EUMONT FIELDS

AVERAGE POROSITY (ϕ) = 11%
 AVERAGE WATER SATURATION (S_w) = 39%
 RESERVOIR TEMPERATURE = 85° F

INITIAL BHP; $P_i = 1300\#$

$$P_R = \frac{P}{P_c} = \frac{1300}{669} = 1.94; \quad T_R = \frac{T_c}{382} = \frac{545}{382} = 1.43; \quad Z = 0.79$$

ABANDONMENT BHP; $P_A = 100\#$

$$P_R = \frac{100}{669} = 0.15; \quad T_R = 1.43; \quad Z = 0.98$$

$$\text{INITIAL } BG_I; \frac{.02829 Z T}{P} = \frac{.02829 (0.79) 545}{1300} = \frac{1}{BG_I}; \quad BG_I = 106.7 \text{ SCF/FT}^3$$

$$\text{ABANDONMENT } BG_A; \frac{.02829 (0.98) 545}{100} = \frac{1}{BG_A}; \quad BG_A = 6.6 \text{ SCF/FT}^3$$

$$\begin{aligned} \text{RECOVERABLE GIP/A}\cdot\text{F} &= 43560 (\phi)(1-S_w)(BG_I - BG_A) = \\ &= 43560 (.11)(1-.39)(106.7-6.6) = 292,600 \text{ SCF/A}\cdot\text{F} \end{aligned}$$

$$\text{DRAINAGE AREA} = \frac{\text{RECOVERABLE GAS}}{(\text{RECOVERABLE GAS/A}\cdot\text{F})(\text{NET PAY})} = \text{ACRES}$$

WELL LOCATION			ULTIMATE RECOVERY (MMSCF)	NET PAY (FT)	DRAINAGE AREA (ACRES)
SECTION	UNIT	No.			
11	B	14	1975	180	37.5
11	K	62	1925	148	44.5
11	E	42	6550	77	290.7
11	M	36	11750	91	441.3
12	N	7	5000	163	104.8
14	D	11	4200	138	104.0
14	F	28	550	184	10.2

EXHIBIT No. 5

CASE No. 9275

DATE DECEMBER 16, 1987