

$$m = \frac{1.151 \Delta P}{P_D}$$

$$P_D = \frac{1.151 \Delta P}{m}$$

$$= \frac{7.08 \Delta P}{q \mu B} Kh$$

$$Kh = \frac{q \mu B}{7.08} \frac{P_D}{\Delta P}$$

$$\eta = \frac{6.328 K}{c \mu \phi}$$

$$m = \frac{q \mu b}{6.15 Kh}$$

$$q = \text{MOPD}$$

$$\mu = \text{cP}$$

$$B = \text{RB/STB}$$

$$K = \text{darcys}$$

$$h = \text{feet}$$

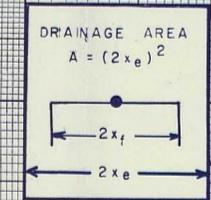
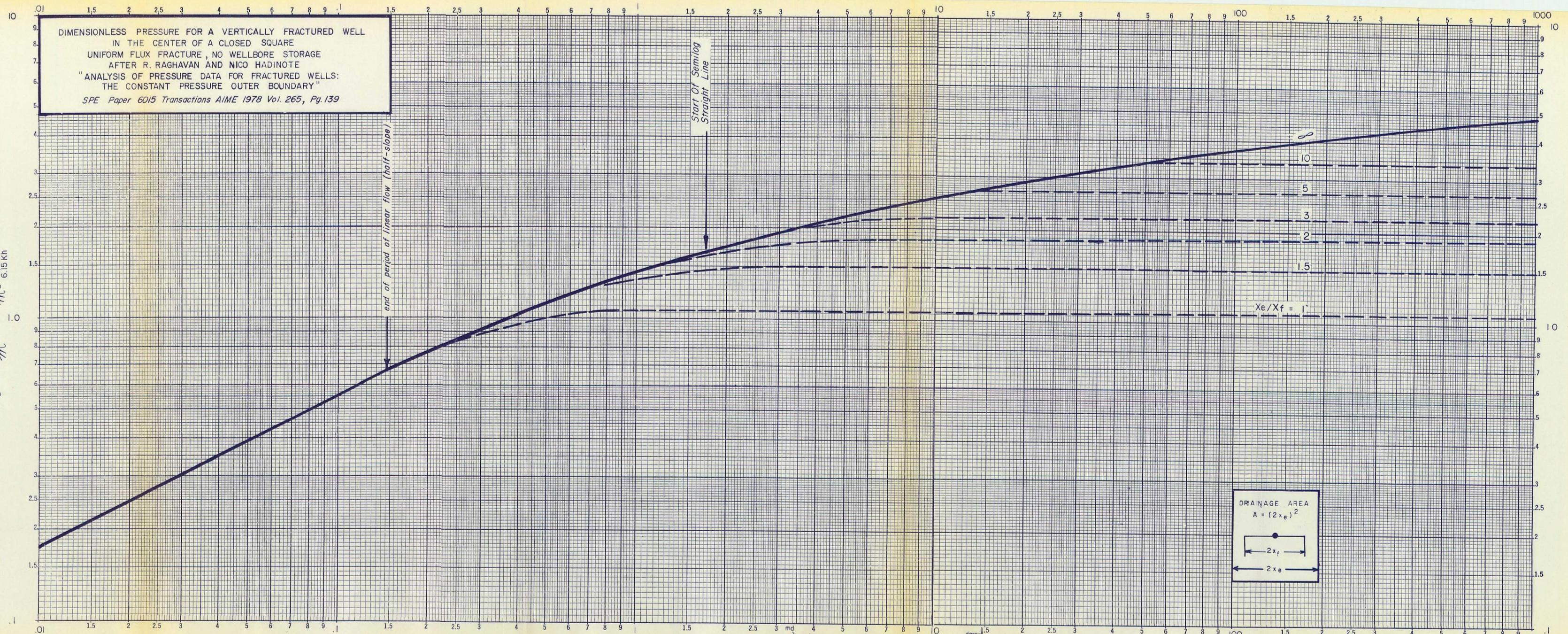
$$C = \Delta V/V/\text{psi}$$

$$X_f = \text{fracture half-length}$$

$$X_e = \text{distance to outer boundary}$$

$$t = \text{days}$$

$$P_D = \frac{1.151 \Delta P}{m} \quad \eta = \frac{q \mu B}{6.15 Kh}$$



$$tDX_f = \frac{0.002637 \text{ kt}^2}{\phi c \mu X_f^2} = \frac{\eta t}{X_f^2} \quad \text{Days for } \eta = \frac{6.328 K}{c \mu \phi}$$