

OPEN FLOW TEST DATA

DATE 6-24-68

Operator Atlantic Richfield Company		Lease State "E" Gas Com. No. 1	
Location Unit 0, Sec. 16 - 29N - 10W		County San Juan	State New Mexico
Formation Dakota		Pool Basin Dakota	
Casing: Diameter 4 1/2" O.D.	Set At: Feet 6520	Tubing: Diameter 2" EUE	Set At: Feet 6315
Pay Zone: From 6336	To 6410	Total Depth: 6521	Shut In 6/17/68 (7 days)
Stimulation Method SWF		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches 0.750		Choke Constant: C c.f.p. 9.453	
Shut-In Pressure, Casing, PSIG 1883	+ 12 = PSIA 1895	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 1883
Flowing Pressure: P PSIG 310	+ 12 = PSIA 322		Working Pressure: P _w PSIG 705
Temperature: T = 87 °F	n = 0.75	Fpv (From Tables) 0.970	Gravity 0.60
F _t = 0.975			F _g = 1.291

$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_t \times F_g \times F_{pv}$$

$$Q = (9.453)(322)(0.975)(1.291)(0.970) = 3,716 \text{ MCF/D}$$

$$\text{OPEN FLOW} = Aof = Q \left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$Aof = \left(\frac{3,591,025}{3,076,936} \right)^n = (3,716)(1.1670)^{.75} = (3,716)(1.123)$$

$$Aof = 4,173 \text{ MCF/D}$$

TESTED BY A. P. Beer

WITNESSED BY D. D. Wood



Albert P. Beer
Sr. Oper. Engr.