

Initial Deliverability Test

NEW MEXICO OIL CONSERVATION COMMISSION  
GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA  
EXCEPT BARKER DOME STORAGE AREA)

Pool Undesignated Formation Dakota County RA  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 4-27-59  
Operator Skelly Oil Company Lease Fanning "F" Well No. 1  
Unit A Sec. 2 Twp. 24N Rge. 6W Pay Zone: From 6394 To 7026  
Casing: OD 7" WT. 23 1/2 Set At 7053' Tubing: OD 2" WT. 4.70 T. Perf. 7017  
Produced Through: Casing    Tubing X Gas Gravity: Measured .680 Estimated     
Date of Flow Test: From 3-29-59 To 4-6-59 \* Date S.I.P. Measured October 17, 1936  
Meter Run Size 4" Orifice Size 1.500" Type Chart 2q. Rt. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt)    psig + 12 =    psia (a)  
Flowing tubing pressure (Dwt)    psig + 12 =    psia (b)  
Flowing meter pressure (Dwt)    psig + 12 =    psia (c)  
Flowing meter pressure (meter reading when Dwt. measurement taken:  
Normal chart reading    psig + 12 =    psia (d)  
Square root chart reading (    )<sup>2</sup> x spring constant    =    psia (d)  
Meter error (c) - (d) or (d) - (c)    ±    =    psi (e)  
Friction loss, Flowing column to meter:  
(b) - (c) Flow through tubing: (a) - (c) Flow through casing    =    psi (f)  
Seven day average static meter pressure (from meter chart):  
Normal chart average reading    psig + 12 =    psia (g)  
Square root chart average reading ( 6.95 )<sup>2</sup> x sp. const. 10.00 = 483 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e)    =    psia (h)  
P<sub>t</sub> = (h) + (f)    = 483 psia (i)  
Wellhead casing shut-in pressure (Dwt)    psig + 12 =    psia (j)  
Wellhead tubing shut-in pressure (Dwt) 2200 psig + 12 = 2212 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through    = 2212 psia (l)  
Flowing Temp. (Meter Run) 70 °F + 460    = 530 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l)    = 1106 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{Q}{(Integrated)} \times \left( \frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \text{MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 1205 \text{ MCF/da.}$$

SUMMARY

P <sub>c</sub> =	<u>2212</u>	psia	Company	<u>Skelly Oil Company</u>
Q =	<u>1522</u>	Mcf/day	By	<u>P. E. Cosper</u> (Signed) P. E. Cosper
P <sub>w</sub> =	<u>542</u>	psia	Title	<u>District Superintendent</u>
P <sub>d</sub> =	<u>1106</u>	psia	Witnessed by	<u>  </u>
D =	<u>1205</u>	Mcf/day	Company	<u>  </u>

\* This is date of completion test.  
\* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e <sup>-S</sup> )	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-S</sup> ) R <sup>2</sup>	P <sub>t</sub> <sup>2</sup> (Column i)	P <sub>t</sub> <sup>2</sup> + R <sup>2</sup>	P <sub>w</sub>
<u>4772</u>	<u>0.293</u>	<u>204.2</u>	<u>60</u>	<u>233.3</u>	<u>273.3</u>	<u>542</u>



OK

