

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 Dakota Formation Dakota County RA  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 10-7-59  
Operator Skelly Oil Company Lease Jicarilla "B" Well No. 20  
Unit D Sec. 31 Twp. 25N Rge. 5W Pay Zone: From 7042 To 7070  
Casing: OD 7" WT. 20 & 23# Set At 7211 Tubing: OD 2" WT. 4.7 T. Perf. 7086  
Produced Through: Casing \_\_\_\_\_ Tubing x Gas Gravity: Measured .673 Estimated \_\_\_\_\_  
Date of Flow Test: From 9-14-59 To 9-22-59\* Date S.I.P. Measured 6-25-59  
Meter Run Size 4" Orifice Size 2" Type Chart SR 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 (7.10) <sup>2</sup> x sp. const. 10.00 \_\_\_\_\_ = 504 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = \_\_\_\_\_ psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 504 psia (i)  
Wellhead casing shut-in pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (j)  
Wellhead tubing shut-in pressure (Dwt) 2307 psig + 12 = 2319 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 2319 psia (l)  
Flowing Temp. (Meter Run) 75 °F + 460 \_\_\_\_\_ = 535 °Abs (m)  
P<sub>d</sub> = ½ P<sub>c</sub> = ½ (l) \_\_\_\_\_ = 1159 psia (n)

$$Q = \text{(integrated)} \times \left( \frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right)^* = \text{MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \text{ } 2717 \left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \text{ } .8179^{.75} = .8600 = 2337 \text{ MCF/da.}$$

SUMMARY

P<sub>c</sub> = 2319 psia  
Q = 2717 Mcf/day  
P<sub>w</sub> = 667 psia  
P<sub>d</sub> = 1159 psia  
D = 2337 Mcf/day

Company Skelly Oil Company  
By P. E. Cooper  
Title District Superintendent  
Witnessed by \_\_\_\_\_  
Company \_\_\_\_\_

- \* 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> R <sup>2</sup>	(1-e <sup>-s</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>4769</u>	<u>0.293</u>	<u>652.3</u>	<u>191.1</u>		<u>254</u>	<u>254</u>	<u>667</u>

Note: Flowing through 24/64" choke



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