

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 Ballard Formation Pictured Cliffs County Rio Arriba

Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 9-15-60

Operator Arizona Exploration Lease Jicarilla "D" Well No. 2  
Unit M Sec. 19 Twp. 24N Rge. 4W Pay Zone: From 2484 To 2506  
Casing: OD 8 5/8 WT. 24 Set At 2560 Tubing: OD 2 3/8 T. Perf. 2460  
Produced Through: Casing \_\_\_\_\_ Tubing X Gas Gravity: Measured 0.716 Estimated \_\_\_\_\_  
Date of Flow Test: From 8-21-60 To 8-29-60 \* Date S.I.P. Measured October 20, 1959  
Meter Run Size Maxx 4.067 Orifice Size 1.000 Type Chart L-10 Type Taps Fl.

## OBSERVED DATA

Flowing casing pressure (Dwt) 331 psig + 12 = 343 psia (a)  
Flowing tubing pressure (Dwt) 325 psig + 12 = 337 psia (b)  
Flowing meter pressure (Dwt) 325 psig + 12 = 337 psia (c)  
Flowing meter pressure (meter reading when Dwt. measurement taken):  
Normal chart reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (d)  
Square root chart reading (6.90)<sup>2</sup> x spring constant 0.707 = 337 psia (d)  
Meter error (c) - (d) or (d) - (c) ± \_\_\_\_\_ = 0 psi (e)  
Friction loss, Flowing column to meter:  
(b) - (c) Flow through tubing; (a) - (c) Flow through casing \_\_\_\_\_ = 0 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. 0.707 = 341 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 341 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 341 psia (i)  
Wellhead casing shut-in pressure (Dwt) 734 psig + 12 = 746 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 734 psig + 12 = 746 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 746 psia (l)  
Flowing Temp. (Meter Run) \_\_\_\_\_ °F + 460 \_\_\_\_\_ = 521 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 373 psia (n)

## FLOW RATE CALCULATION

$$Q = \frac{488}{(\text{Integrated})} \times \left( \frac{\sqrt{(c)} = 18.358}{\sqrt{(d)} = 18.358} = 1.000 \right) = 488 \text{ MCF/da}$$

## DELIVERABILITY CALCULATION

$$D = Q \frac{488}{\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.9741}} = 475 \text{ MCF/da.}$$

(0.9695)<sup>0.95</sup> = .9604      469

## SUMMARY

P<sub>c</sub> = 746 psia  
Q = 488 Mcf/day  
P<sub>w</sub> = 345 psia  
P<sub>d</sub> = 373 psia  
D = 475 Mcf/day

Company ARIZONA EXPLORATIONS, INC.  
By M. B. JONES Morris B. Jones  
Title Consulting Engineer  
Witnessed by G. Credicott  
Company Arizona Explorations, Inc.

- \* 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> )<br>R <sup>2</sup> | P <sub>t</sub> <sup>2</sup><br>(Column i) | P <sub>t</sub> <sup>2</sup> + R <sup>2</sup> | P <sub>w</sub> |
|------|----------------------|---------------------------------|------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------|----------------|
| 1761 | 0.120                | 21.054                          | 2526                                                                   | 116,281                                   | 118,807                                      | 344.7          |

F<sub>c</sub> = 9.402

**RECEIVED**

OIL CON. COM.  
DIST. 3

