

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 Mesav - Mesaverte FORMATION Mesaverte COUNTY San Juan  
PURCHASING PIPELINE Southern Union Gathering Company DATE TEST FILED January 31, 1957

OPERATOR B. Delhi-Taylor Oil Corp. LEASE Archuleta WELL NO. 1  
UNIT 1 SEC. 29 TWP. 30N RGE. 6W PAY ZONE: From 1750 To 1800  
CASING: OD 7 5/8 WT. 24.50 SET AT 0-295 TUBING: OD 1.315 WT. 6.35 T.Perf. 182  
PRODUCED THROUGH: CASING TUBING 1 GAS GRAVITY: MEASURED 0.40 ESTIMATED  
DATE OF FLOW TEST: From 12/11/56 To 1/4/57 \*Date S.I.P. MEASURED 1/15/57  
METER RUN SIZE 1.000 ORIFICE SIZE 1.900 TYPE CHART Normal TYPE TAPS Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 625 psig + 12 = 637 psia (a)  
Flowing tubing pressure (Dwt) 509 psig + 12 = 521 psia (b)  
Flowing meter pressure (Dwt) 507 psig + 12 = 519 psia (c)  
Flowing meter pressure (meter reading when Dwt. measurement taken:  
Normal chart reading. . . . . 550 psig + 12 = 570 psia (d)  
Square root chart reading ( )  $2 \times$  spring constant = 7 psia (d)  
Meter error (c) - (d) or (d) - (c). . . . .  $\pm$  = 0 psi (e)  
Friction loss, Flowing column to meter:  
(b) - (c) Flow through tubing: (a) - (c) Flow through casing... = 2 psi (f)  
Seven day average static meter pressure (from meter chart):  
Normal chart average reading. . . . . 505 psig + 12 = 517 psia (g)  
Square root chart average reading ( )  $2 \times$  sp. const. = 7 psia (g)  
Corrected seven day avge. meter press. (P<sub>f</sub>) (g) + (e) = 517 psia (h)  
P<sub>t</sub> = (h) + (f) . . . . . = 519 psia (i)  
Wellhead casing shut-in pressure (Dwt) 640 psig + 12 = 652 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 657 psig + 12 = 669 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through. . . . . = 649 psia (l)  
Flowing Temp. (Meter Run). . . . . 78 °F + 460 = 538 °Abs (m)  
P<sub>d</sub> =  $\frac{1}{2}$  P<sub>c</sub> =  $\frac{1}{2}$  (l) . . . . . = 324.5 psia (n)

Gas 1/2" Linear 2525'-1.031'

FLOW RATE CALCULATION

$$Q = \frac{1.415}{(\text{integrated})} \times \left( \frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{24.042}{23.875} = \frac{1.0070}{1} \right) = 1.415 \text{ MCF/da.}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{1.415}{\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{546.375}{305.670} }^n \frac{1.3160}{1} = 1.800 \text{ MCF/da.}$$

SUMMARY

P<sub>c</sub> = 649 psia  
Q = 1.415 Mcf/day  
P<sub>w</sub> = 669 psia  
P<sub>d</sub> = 324.5 psia  
D = 1.800 Mcf/day

Company Delhi-Taylor Oil Corporation  
By J. E. Heger  
Title Dist. Engineer  
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> | (FcQ) <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>1948</u><br><u>1495</u> | <u>0.107</u><br><u>0.116</u> | <u>276.992</u><br><u>61.696</u> | <u>28.998</u><br><u>7.157</u>           | <u>313.396</u>                         | <u>349.151</u>                               | <u>669</u>     |



OK