

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 SAN JUAN
PURCHASING PIPELINE EL PASO NATURAL GAS COMPANY DATE TEST FILED 1-15-56

OPERATOR BENSON-MONTIN LEASE SHEETS WELL NO. 2
UNIT N SEC. 12 TWP. 25N RGE. 6W PAY ZONE: From 2700 To 2759
CASING: OD 5-1/2" WT. 14* SET AT 2706 TUBING: OD 1-1/4" WT. 2.4* T.Perf. 2713-18
PRODUCED THROUGH: CASING x TUBING GAS GRAVITY: MEASURED 0.665 ESTIMATED
DATE OF FLOW TEST: From 12-31-55 To 1-6-56 *Date S.I.P. MEASURED 1-15-56
METER RUN SIZE 4" ORIFICE SIZE 2.500 TYPE CHART Sq. Rt. TYPE TAPS Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 331 psig + 12 = 343 psia (a)
Flowing tubing pressure (Dwt) 337 psig + 12 = 349 psia (b)
Flowing meter pressure (Dwt) 322 psig + 12 = 334 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading. psig + 12 = psia (d)
Square root chart reading (3.15) ² x spring constant 5 = 332 psia (d)
Meter error (c) - (d) or (d) - (c) = 7.2 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing... = 9 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading psig + 12 = psia (g)
Square root chart average reading (7.95) ² x sp. const. 5 = 316 psia (g)
Corrected seven day avge. meter press. (P_f) (g) + (e) = 318 psia (h)
P_t = (h) + (f) = 327 psia (i)
Wellhead casing shut-in pressure (Dwt) 545 psig + 12 = 557 psia (j)
Wellhead tubing shut-in pressure (Dwt) 545 psig + 12 = 557 psia (k)
P_c = (j) or (k) whichever well flowed through. = 557 psia (l)
Flowing Temp. (Meter Run) 68 °F + 460 = 528 °Abs (m)
P_d = $\frac{1}{2}$ P_c = $\frac{1}{2}$ (l) = 279 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{3.745}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \frac{1.003}{1.176} = 3.756 \text{ MCF/da.}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{3.756}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} = \frac{232,408}{192,062} = 4.417 \text{ MCF/da.}$$

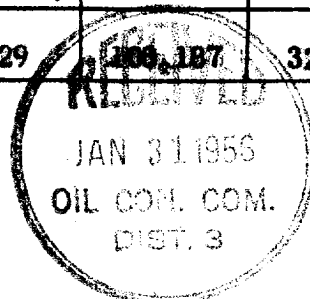
SUMMARY
P_c = 557 psia
Q = 3.756 Mcf/day
P_w = 329 psia
P_d = 279 psia
D = 4.417 Mcf/day
Company BENSON-MONTIN
By Shirley P. Starks
Title Engineer
Witnessed by
Company

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

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-s})	(F _c Q) ²	(F _c Q) ²	(1-e ^{-s})	P _t ²	P _t ² + R ²	P _w
			R ²		(Column 1)		
1804	0.123	10,230	1258		106,929	108,187	329

** From EPMS Chart #74-219-01 Q = (29,957) 24
(192)



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