

NEW MEXICO OIL CONSERVATION COMMISSION.

WELL DELIVERABILITY TEST REPORT FOR 19 69

Form C122-A
Revised 1-1-68

POOL NAME Basin	POOL SLOPE n = .75	FORMATION Dakota	COUNTY Rio Arriba
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86-591

COMPANY El Paso Natural Gas Co.			WELL NAME AND NUMBER San Juan 27-4 Umit No. 50		
UNIT LETTER K	SECTION 19	TOWNSHIP 27	RANGE 4	PURCHASING PIPELINE El Paso Natural Gas Co.	
CASING O.D. - INCHES 4500	CASING I.D. - INCHES 4052	SET AT DEPTH - FEET 7910	TUBING O.D. - INCHES 2375	TUBING I.D. - INCHES 1995	TOP - TUBING PERF. - FEET 7672
GAS PAY ZONE FROM 7688 TO 7900		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .678	GRAVITY X LENGTH 5202
DATE OF FLOW TEST FROM 1-14-69 TO 1-22-69			DATE SHUT-IN PRESSURE MEASURED 1-17-68		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) ---	(b) Flowing Tubing Pressure (DWt) ---	(c) Flowing Meter Pressure (DWt) ---	(d) Flow Chart Static Reading ---	(e) Meter Error (Item c - Item d) 0	(f) Friction Loss (a-c) or (b-c) 0	(g) Average Meter Pressure (Integr.) 490
(h) Corrected Meter Pressure (g+e) 490	(i) Avg. Wellhead Press. $P_t = (h+f)$ 490	(j) Shut-in Casing Pressure (DWt) 2457	(k) Shut-in Tubing Pressure (DWt) 2439	(l) $P =$ higher value of (i) or (k) 2457	(m) Del. Pressure $P_d = \frac{50}{1229} P_c$ 1229	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 1243	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 1243 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$.315	$(F_c Q_m)^2 (1000)$ 136577	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 43022	P_t^2 240100	$P_w^2 = P_t^2 + R^2$ 283122	$P_w = \sqrt{P_w^2}$ 532
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DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{1243}{\left(\frac{4526408}{5753727} \right)^n} = \frac{1243}{(0.7866)^n} = \frac{1243}{0.8352} = 1038 \text{ MCF/D}$$

REMARKS:

New well first delivered 1-6-69

SUMMARY

Item h	490	Psia
P_c	2457	Psia
Q	1243	MCF/D
P_w	532	Psia
P_d	1229	Psia
D	1038	MCF/D

Company **EL PASO NATURAL GAS COMPANY**
By **H. L. Kendrick**
Title **Regional Well Test Engineer**
Witnessed By _____
Company _____



