

NEW MEXICO OIL AND GAS COMMISSION
WELL DELIVERABILITY TEST REPORT FOR 19 69

Form C122-A
Revised 1-1-68

WELL NAME Basin		POOL SLOPE n = .75	FORMATION Dakota	COUNTY Rio Arriba	
75-930					
COMPANY El Paso Natural Gas			WELL NAME AND NUMBER San Juan 27-4 Unit No. 51		
WELL LETTER H	SECTION 29	TOWNSHIP 27	RANGE 4	PURCHASING PIPELINE El Paso Natural Gas	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.012	SET AT DEPTH - FEET 8173	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 7934
GAS PAY ZONE FROM 7945 TO 8167		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .678	GRAVITY X LENGTH 5379
DATE OF FLOW TEST FROM 1-14-69 TO 1-22-69			DATE SHUT-IN PRESSURE MEASURED 10-22-68		

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)	f) Friction Loss (a-c) or (b-c)	g) Average Meter Pressure (Integr.)
				0	0	491
h) Corrected Meter Pressure (g+e)	i) Avg. Wellhead Press. $P_t = (h+f)$	j) Shut-in Casing Pressure (DWt)	k) Shut-in Tubing Pressure (DWt)	l) P_c = higher value of (i) or (k)	m) Del. Pressure $P_d = \frac{50}{1287} P_c$	n) Separator or Dehydrator Pr. (DWt) for critical flow only
491	491	256	2573	2573		

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 1390	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 1390 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-5})$.324	$(F_c Q_m)^2 (1000)$ 170791	$R^2 = (1-e^{-5}) (F_c Q_m)^2 (1000)$ 55336	P_t^2 241081	$P_w^2 = P_t^2 + R^2$ 296417	$P_w = \sqrt{P_w^2}$ 544
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DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{1390}{\left[\frac{4963960}{6323912} \right]^n} = \frac{1390}{(.7849)^n} = \frac{1390}{.8337} = 1159 \text{ MCF/D}$$

REMARKS:

New well first delivered 12-24-68

SUMMARY

Item h	491	Psia
P_c	2573	Psia
Q	1390	MCF/D
P_w	544	Psia
P_d	1287	Psia
D	1159	MCF/D

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

