

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	
COMPANY El Paso Natural Gas				WELL NAME AND NUMBER San Juan 27-4 Unit No. 52	
UNIT LETTER L	SECTION 29	TOWNSHIP 27	RANGE 4	PURCHASING PIPELINE El Paso Natural Gas	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 8390	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 8159
GAS PAY ZONE FROM 8185 TO 8373		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .706	GRAVITY X LENGTH 5760
DATE OF FLOW TEST FROM 5-13-69 TO 5-21-69			DATE SHUT-IN PRESSURE MEASURED 10-29-68		

75-978

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) 436	(b) Flowing Tubing Pressure (DWt) 436	(c) Flowing Meter Pressure (DWt) 2465	(d) Flow Chart Static Reading 2490	(e) Meter Error (Item c - Item d) 0	(f) Friction Loss (a-c) or (b-c) 0	(g) Average Meter Pressure (Integr.) 436
(h) Corrected Meter Pressure (g+e) 436	(i) Avg. Wellhead Press. $P_t = (h+f)$ 436	(j) Shut-in Casing Pressure (DWt) 2465	(k) Shut-in Tubing Pressure (DWt) 2490	(l) P_c = higher value of (j) or (k) 2490	(m) Del. Pressure $P_d = \frac{50}{1245} P_c$ 1245	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 455	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 455 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-5})$.342	$(F_c Q_m)^2 (1000)$ 18,301	$R^2 = (1-e^{-5}) (F_c Q_m)^2 (1000)$ 6259	P_t^2 190096	$P_w^2 = P_t^2 + R^2$ 196355	$P_w = \sqrt{P_w^2}$ 443
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DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{455}{\left(\frac{4650075}{6003745} \right)^n} = \frac{.7745}{.8255} = 376 \text{ MCF/D}$$

REMARKS:

New well first delivered 4-15-69

SUMMARY

Item h 436 Psia
 P_c 2490 Psia
 Q 455 MCF/D
 P_w 443 Psia
 P_d 1245 Psia
 D 376 MCF/D

Company EL PASO NATURAL GAS COMPANY
 By H. E. McAnally H. E. McAnally
 Title Well Test Engineer
 Witnessed By _____
 Company _____

