

NEW MEXICO OIL CONSERVATION COMMISSION
WELL DELIVERABILITY TEST REPORT FOR 1969

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. 42		
UNIT LETTER K	SECTION 8	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 8000	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 7765
GAS PAY ZONE FROM 7794 TO 7996		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .662	GRAVITY X LENGTH 5140
DATE OF FLOW TEST FROM 1-14-69 TO 1-22-69			DATE SHUT-IN PRESSURE MEASURED 9-10-68		

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.) 483
(h) Corrected Meter Pressure (g+e) 483	(i) Avg. Wellhead Press. $P_i = (h-f)$ 483	(j) Shut-in Casing Pressure (DWt) 2563	(k) Shut-in Tubing Pressure (DWt) 2608	(l) $P_c =$ higher value of (i) or (k) 2608	(m) Del. Pressure $P_d = \frac{50}{1304} \% P_c$ 1304	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 511	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 511 MCF/D
---	--	---	--

WORKING PRESSURE CALCULATION

$(1-e^{-s})$.312	$(F_c Q_m)^2 (1000)$ 23083	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 7202	P_i^2 233289	$P_w^2 = P_i^2 + R^2$ 240491	$P_w = \sqrt{P_w^2}$ 490
-----------------------------	--------------------------------------	--	--------------------------	--	------------------------------------

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{511}{\left(\frac{5101248}{6561173} \right)^n} = \frac{511}{.7774^n} = \frac{511}{.8278} = 423 \text{ MCF/D}$$

REMARKS:

New well first delivered 12-20-68

SUMMARY

Item h **483** Psia
 P_c **2608** Psia
 Q **511** MCF/D
 P_w **490** Psia
 P_d **1304** Psia
 D **423** MCF/D

Company **EL PASO NATURAL GAS COMPANY**
 Title **Regional Well Test Engineer**
 Witnessed By _____
 Company _____

