

NEW MEXICO OIL CONSERVATION COMMISSION
INITIAL WELL DELIVERABILITY TEST REPORT FOR 1967

Form C122-A
Revised 1-1-66

POOL NAME Basin	POOL SLOPE n = .75	FORMATION Dakota	COUNTY Rio Arriba
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75677

COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER San Juan 27-5-Unit No. 102		
UNIT LETTER N	SECTION 12	TOWNSHIP 27	RANGE 5	PURCHASING PIPELINE El Paso Natural Gas Company	
CASING O.D. - INCHES 5.500	CASING I.D. - INCHES 4.950	SET AT DEPTH - FEET 7927	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 8066
GAS PAY ZONE FROM 8010 TO 8220		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .678	GRAVITY X LENGTH 5469
DATE OF FLOW TEST FROM 11-1-67 TO 11-9-67			DATE SHUT-IN PRESSURE MEASURED 8-23-67		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) 512	(b) Flowing Tubing Pressure (DWt) 512	(c) Flowing Meter Pressure (DWt) 2482	(d) Flow Chart Static Reading 2540	(e) Meter Error (Item c - Item d) 2540	(f) Friction Loss (a - c) or (b - c) 1270	(g) Average Meter Pressure (Integr.) 512
(h) Corrected Meter Pressure (g + e) 512	(i) Avg. Wellhead Press. $P_t = (h + f)$ 512	(j) Shut-in Casing Pressure (DWt) 2482	(k) Shut-in Tubing Pressure (DWt) 2540	(l) $P_c =$ higher value of (j) or (k) 2540	(m) Del. Pressure $P_d = 50\% P_c$ 1270	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 1385	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 1385 MCF/D
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WORKING PRESSURE CALCULATION

$(1 - e^{-s})$.328	$(F_c Q_m)^2 (1000)$ 169572	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$ 55620	P_t^2 262144	$P_w^2 = P_t^2 + R^2$ 317764	$P_w = \sqrt{P_w^2}$ 564
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 1385$	$\left[\frac{4838700}{6133836} \right]^n = .7889$	$= .8372$	$= 1160$ MCF/D
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REMARKS:

New Well. First Delivered 10-11-67.

SUMMARY

Item h	512	Psia
P_c	2540	Psia
Q	1385	MCF/D
P_w	564	Psia
P_d	1270	Psia
D	1160	MCF/D

ek

Company El Paso Natural Gas Company
By H. L. Kendrick
Title Regional Well Test Engineer
Witnessed By _____
Company _____

