

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

Form CI22-A
Revised 1-1-66

POOL NAME Basin	POOL SLOPE n = .75	FORMATION Dakota	COUNTY Rio Arriba
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COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER San Juan 27-5 Unit No. 108		
UNIT LETTER I	SECTION 15	TOWNSHIP 27	RANGE 5	PURCHASING PIPELINE El Paso Natural Gas Company	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7880	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 7584
GAS PAY ZONE FROM 7612 TO 7828		WELL PRODUCING THRU BASIC TUBING X		GAS GRAVITY .663	GRAVITY X LENGTH 5028
DATE OF FLOW TEST FROM 10-16-67 TO 10-24-67			DATE SHUT-IN PRESSURE MEASURED 8-16-67		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWI) 505	(b) Flowing Tubing Pressure (DWI) 505	(c) Flowing Meter Pressure (DWI) 2504	(d) Flow Chart Static Reading 2099	(e) Meter Error (Item c - Item d) 2504	(f) Friction Loss (a - c) or (b - c) 1252	(g) Average Meter Pressure (Integr.) 505
(h) Corrected Meter Pressure (g / e) 505	(i) Avg. Wellhead Press. $P_t = (h + f)$ 505	(j) Shut-in Casing Pressure (DWI) 2504	(k) Shut-in Tubing Pressure (DWI) 2099	(l) P_c = higher value of (j) or (k) 2504	(m) Del. Pressure $P_d = 50$ % P_c 1252	(n) Separator or Dehydrator Pr. (DWI) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 601	Quotient of Item c / Item d 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 601 MCF/D
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WORKING PRESSURE CALCULATION

$(1 - e^{-R})$.306	$(P_c Q_m)^2 (1000)$ 31934	$R^2 = (1 - e^{-R}) (P_c Q_m)^2 (1000)$ 9772	P_t^2 255025	$P_w^2 = P_t^2 + R^2$ 264797	$P_w = \sqrt{P_w^2}$ 515
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 601$	$\left[\frac{4702512}{600519} \right]^{.75} = .7830$	$.8325$	500 MCF/D
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REMARKS:

New Well First Delivered 9-29-67.

SUMMARY

Item h	505	Psia
P_c	2504	Psia
Q	601	MCF/D
P_w	515	Psia
P_d	1252	Psia
D	500	MCF/D

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

