

Initial
Deliverability Test

NEW MEXICO OIL CONSERVATION COMMISSION WELL DELIVERABILITY TEST REPORT FOR 19 70

Form C122-A
Revised 1-1-68

POOL NAME Basin	POOL SLOPE .75	FORMATION DK	COUNTY RA
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87-152

COMPANY El Paso Natural Gas Co		WELL NAME AND NUMBER San Juan 27-5 Unit No. 121			
UNIT LETTER K	SECTION 28	TOWNSHIP 27	RANGE 5	PURCHASING PIPELINE EPNG	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7630	TUBING O.D. - INCHES 1.900	TUBING I.D. - INCHES 1.610	TOP - TUBING PERF. - FEET 7582
GAS PAY ZONE FROM 7400 TO 7598		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .642	GRAVITY X LENGTH 4868
DATE OF FLOW TEST FROM 7-4-70 TO 7-12-70			DATE SHUT-IN PRESSURE MEASURED 4-23-70		

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.) 416
(h) Corrected Meter Pressure (g + e) 416	(i) Avg. Wellhead Press. $P_t = (h + f)$ 416	(j) Shut-in Casing Pressure (DWt) 2607	(k) Shut-in Tubing Pressure (DWt) 1232	(l) P_w = higher value of (i) or (k) 2607	(m) Del. Pressure $P_d = 50\%$ 1304	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 775	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume $Q = 775$ MCF/D
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WORKING PRESSURE CALCULATION

$(1 - e^{-s})$.298	$(F_c Q_m)^2 (1000)$ 162728	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$ 48493	P_t^2 173056	$P_w^2 = P_t^2 + R^2$ 221549	$P_w = \sqrt{P_w^2}$ 471
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n$	775	$\left(\frac{5096033}{6574900} \right)^{.8260}$	$\left(\frac{.7750}{.8260} \right)^{.8260}$	640 MCF/D
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REMARKS:

New well, 1st del. June 8, 1970.

SUMMARY

Item h **416** Psia
 P_c **2607** Psia
 Q **775** MCF/D
 P_w **471** Psia
 P_d **1304** Psia
 D **640** MCF/D

Company **EL PASO NATURAL GAS COMPANY**

By **J. E. Williams**

Title

Witnessed By

Company

