

NEW MEXICO CONSERVATION COMMISSION WELL DELIVERABILITY TEST REPORT FOR 19 71

Form C122-A

REV. 5-63 11-1-68

POOL NAME Basin	POOL SLOPE .75	FORMATION Dk	COUNTY R. A.
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86-657

COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER San Juan 27-5 Unit No. 128		
WELL LETTER K	SECTION 27	TOWNSHIP 27	RANGE 5	PURCHASING PIPELINE EPNG	
CASING O.D. - INCHES 4.5000	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7699	TUBING O.D. - INCHES 1.900	TUBING I.D. - INCHES 1.610	TOP OF TUBING FEET 7669
GAS FLOW RATE FROM 7444 TO 7670		WELL PRODUCING TIME TURNING XX		GAS GRAVITY .648	GRAVITY LENGTH 4970
DATE OF FLOW TEST FROM 8-24-71 TO 9-1-71			DATE SHUT-IN PRESSURE MEASURED 5-28-71		

PRESSURE - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWI) —	(b) Flowing Tubing Pressure (DWI) —	(c) Flowing Meter Pressure (DWI) —	(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 (Integral) 449
(h) Corrected Meter Pressure (g+e) 449	(i) Avg. Well Head Press. $P_w = (h + f)$ 449	(j) Shut-in Casing Pressure (DWI) 1734	(k) Shut-in Tubing Pressure (DWI) 2029	(l) P_c = higher value of (j) or (k) 2029	(m) Del. Pressure $P_d = \frac{50}{1015} P_c$	(n) Separator or Dehydrator Pr. (DWI) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 758	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume $Q = 758$ MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$ 0.303	$(F_c Q_m)^2 (1000)$ 155668	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 47167	P_t^2 201601	$P_w^2 = P_t^2 + R^2$ 248768	$P_w = \sqrt{P_w^2}$ 499
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 758$	$\left(\frac{3086616}{3868073} \right)^n = 0.7980$	0.8443	$= 640$ MCF/D
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REMARKS: New well 1st del. August 4, 1971

SUMMARY

Item h	449	Psia
P_c	2029	Psia
Q	758	MCF/D
P_w	499	Psia
P_d	1015	Psia
D	640	MCF/D

Company **EL PASO NATURAL GAS COMPANY**
By **H. E. McCall**
Title
Witnessed By
Company

