

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 71

Form C122-A
Revised 1-1-68

POOL NAME Aztec	POOL SLOPE n = .85	FORMATION PC	COUNTY SJ
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87-209

COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER Lackey No. 3		
UNIT LETTER 0	SECTION 19	TOWNSHIP 29	RANGE 9	PURCHASING PIPELINE EPNG	
CASING O.D. - INCHES 2.875	CASING I.D. - INCHES 2.441	SET AT DEPTH - FEET 2165	TUBING O.D. - INCHES no tubing	TUBING I.D. - INCHES	TOP - TUBING PERF. - FEET
GAS PAY ZONE FROM 2006 TO 2042		WELL PRODUCING THRU CASING XX TUBING		GAS GRAVITY .654	GRAVITY X LENGTH 1312
DATE OF FLOW TEST FROM 12-24-70 TO 1-1-71			DATE SHUT-IN PRESSURE MEASURED 8-31-70		

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.) 180
(h) Corrected Meter Pressure (g+e) 180	(i) Avg. Wellhead Press. $P_i = (h+f)$ 180	(j) Shut-in Casing Pressure (DWt) 726	(k) Shut-in Tubing Pressure (DWt) -	(l) P_i = higher value of (i) or (k) 726	(m) Del. Pressure $P_d =$ 80 % P_i 581	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 713	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 713 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$.091	$(F_c Q_m)^2 (1000)$ 15665	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 1425	P_i^2 32400	$P_w^2 = P_i^2 + R^2$ 33825	$P_w = \sqrt{P_w^2}$ 184
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DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{713}{\left(\frac{189515}{493251} \right)^n} = \frac{713}{.3842^n} = \frac{713}{.4435} = 316 \text{ MCF/D}$$

REMARKS:

New well, 1st del. 12-10-70.

SUMMARY

Item h **180** Psia
 P_c **726** Psia
 Q **713** MCF/D
 P_w **184** Psia
 P_d **581** Psia
 D **316** MCF/D

Company **EL PASO NATURAL GAS COMPANY**

By **A. E. McNally**

Title

Witnessed By

Company

