

Initial
Deliverability Test

NEW MEXICO OIL CONSERVATION COMMISSION WELL DELIVERABILITY TEST REPORT FOR 19 71

Form C122-A
Revised 1-1-65

POOL NAME Aztec	POOL SLOPE n = .85	FORMATION PC	COUNTY San Juan
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87-275

COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER Lackey "A" No. 5		
UNIT LETTER 0	SECTION 11	TOWNSHIP 29	RANGE 10	PURCHASING PIPELINE El Paso Natural Gas Company	
CASING O.D. - INCHES 2.875	CASING I.D. - INCHES 2.441	SET AT DEPTH - FEET 2346	TUBING O.D. - INCHES No Tubing	TUBING I.D. - INCHES	TOP - TUBING PIPE - FEET
GAS PAY ZONE FROM 2214 TO 2254		WELL PRODUCING THRU CASING XX TUBING		GAS GRAVITY .648	GRAVITY X LENGTH 1435
DATE OF FLOW TEST FROM 9-23-71 TO 10-1-71			DATE SHUT-IN PRESSURE MEASURED 7-8-71		

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.) 183
(h) Corrected Meter Pressure (g+e) 183	(i) Avg. Wellhead Press. $P_i = (h+f)$ 183	(j) Shut-in Casing Pressure (DWt) 634	(k) Shut-in Tubing Pressure (DWt) -	(l) $P_c =$ higher value of (j) or (k) 634	(m) Del. Pressure $P_d = \frac{80}{507} \% P_c$ 507	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 1244	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume $Q = \frac{1244}{1.0000}$ 1244 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$ 0.099	$(F_c Q_m)^2 (1000)$ 47685	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 4721	P_i^2 33489	$P_w^2 = P_i^2 + R^2$ 38210	$P_w = \sqrt{P_w^2}$ 195
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{1244}{\left[\frac{144907}{363746} \right]^n} = \frac{1244}{(0.3984)^n} = \frac{1244}{0.4574} = 569$ MCF/D
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REMARKS:

New Well 1st Del. 9-8-71

SUMMARY

Item h	183	Psia
P_c	634	Psia
Q	1244	MCF/D
P_w	195	Psia
P_d	507	Psia
D	569	MCF/D

Company **EL PASO NATURAL GAS COMPANY**

By **J. E. McAnally**

Title

Witnessed By

Company

OCT 7 1971
OIL CONSERVATION
DIST. 3