

Initial
Deliverability

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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87-228

COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER Lackey No. 4		
UNIT LETTER H	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 2184	TUBING O.D. - INCHES no tubing	TUBING I.D. - INCHES	TOP - TUBING PERF. - FEET
GAS PAY ZONE FROM 2018 TO 2060		WELL PRODUCING THRU CASING XX TUBING		GAS GRAVITY .652	GRAVITY X LENGTH 1316
DATE OF FLOW TEST FROM 3-15-71 TO 3-23-71			DATE SHUT-IN PRESSURE MEASURED 1-1-71		

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.) 181
(h) Corrected Meter Pressure (g+e) 181	(i) Avg. Wellhead Press. $P_i = (h+f)$ 181	(j) Shut-in Casing Pressure (DWt) 722	(k) Shut-in Tubing Pressure (DWt) -	(l) P_c = higher value of (j) or (k) 722	(m) Del. Pressure $P_d = 80\% P_c$ 578	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 217	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 217 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$ Friction Neg.	$(F_c Q_m)^2 (1000)$	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$	P_i^2	$P_w^2 = P_i^2 + R^2$ Use P_t	$P_w = \sqrt{P_w^2}$ 181
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 217$	$\left(\frac{187200}{488523} \right)^n = .3831$	$.4424$	$= 96$ MCF/D
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REMARKS:

New well, 1st del. 2-16-71.

SUMMARY

Item h 181 Psia
P_c 722 Psia
Q 217 MCF/D
P_w 181 Psia
P_d 578 Psia
D 96 MCF/D

Company EL PASO NATURAL GAS COMPANY
By B. E. McNally
Title
Witnessed By
Company

