

Initial
Deliverability

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

Form C122-A
Revised 1-1-68

POOL NAME Undesignated	POOL SLOPE n = .75	FORMATION Chacra	COUNTY San Juan
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87-182

COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER Lackey No. 2		
UNIT LETTER K	SECTION 26	TOWNSHIP 28	RANGE 9	PURCHASING PIPELINE El Paso Natural Gas Co.	
CASING O.D. - INCHES 2.875	CASING I.D. - INCHES 2.441	SET AT DEPTH - FEET 3392	TUBING O.D. - INCHES No Tubing	TUBING I.D. - INCHES	TOP - TUBING PERF. - FEET
GAS PAY ZONE FROM 3196 TO 3334		WELL PRODUCING THRU CASING XX TUBING		GAS GRAVITY .642	GRAVITY X LENGTH 2052
DATE OF FLOW TEST FROM 9-22-70 TO 9-30-70			DATE SHUT-IN PRESSURE MEASURED 4-30-70		

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.) 445
(h) Corrected Meter Pressure (g+e) 445	(i) Avg. Wellhead Press. $P_t = (h+f)$ 445	(j) Shut-in Casing Pressure (DWt) 1027	(k) Shut-in Tubing Pressure (DWt) ---	(l) P_c = higher value of (j) or (k) 1027	(m) Del. Pressure $P_d = 80$ $P_d = 822$ % P_c	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 182	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 182 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_t^2	$P_w^2 = P_t^2 + R^2$ Use P_t^2	$P_w = \sqrt{P_w^2}$ 445
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DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 182 \left[\frac{379045}{856704} \right]^n = (0.4424)^n = 0.5424 = 99 \text{ MCF/D}$$

REMARKS: First Delivered after OWWO on September 1, 1970.

SUMMARY

Item h	445	Psia
P_c	1027	Psia
Q	182	MCF/D
P_w	445	Psia
P_d	822	Psia
D	99	MCF/D

Company EL PASO NATURAL GAS COMPANY
By N. S. M. [Signature]
Title
Witnessed By
Company

