

Initial
Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 70

Form C122-A
Revised 1-1-68

POOL NAME Blanco	POOL SLOPE $n = .85$	FORMATION PC	COUNTY SJ
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COMPANY El Paso Natural Gas Co		WELL NAME AND NUMBER Hardie A No. 3		
UNIT LETTER D	SECTION 26	TOWNSHIP 29	RANGE 8	PURCHASING PIPELINE EPNG
CASING O.D. - INCHES 2.875	CASING I.D. - INCHES 2.441	SET AT DEPTH - FEET 3135	TUBING O.D. - INCHES 1.660	TUBING I.D. - INCHES 1.380
GAS PAY ZONE FROM 3054 TO 3070		WELL PRODUCING THRU CASING TUBING xx		TOP - TUBING PERF. - FEET 3051
DATE OF FLOW TEST FROM 11-30-70 TO 12-8-70		DATE SHUT-IN PRESSURE MEASURED 4-27-70		

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.) 405
(h) Corrected Meter Pressure (g + e) 405	(i) Avg. Wellhead Press. $P_f = (h + f)$ 405	(j) Shut-in Casing Pressure (DWt) 787	(k) Shut-in Tubing Pressure (DWt) -	(l) P_c = higher value of (i) or (k) 787	(m) Del. Pressure $P_d = 80 \% P_c$ 630	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 157	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume $Q = 157$ MCF/D
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WORKING PRESSURE CALCULATION

$(1 - e^{-s})$.130	$(F_c Q_m)^2 (1000)$ 14941	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$ 1942	P_t^2 164025	$P_w^2 = P_t^2 + R^2$ 165967	$P_w = \sqrt{P_w^2}$ 407
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DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 157 \left[\frac{222469}{453402} \right]^n = .4906 = .5459 = 86 \text{ MCF/D}$$

REMARKS:

Installed tubing 10-9-70.

SUMMARY

Item h	405	Psia
P_c	787	Psia
Q	157	MCF/D
P_w	407	Psia
P_d	630	Psia
D	86	MCF/D

Company **EL PASO NATURAL GAS CO**
By **R.E. Stauffer**
Title
Witnessed By
Company

