

INITIAL WELL DELIVERABILITY TEST REPORT FOR 1967

FORM 1-1-66
Revised 1-1-66

POOL NAME Blanco	POOL SLOPE n = .75	FORMATION Mesa Verde	COUNTY San Juan
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70034

COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER Howell C No. 2		
UNIT LETTER B	SECTION 3	TOWNSHIP 29	RANGE 8	PURCHASING PIPELINE El Paso Natural Gas Company	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 5260	TUBING O.D. - INCHES 2 7/32	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 5182
GAS PAY ZONE FROM 4610 TO 5218		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .690	GRAVITY X LENGTH 3576
DATE OF FLOW TEST FROM 11-6-67 TO 11-14-67			DATE SHUT-IN PRESSURE MEASURED 10-5-67		

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)	(f) Friction Loss (a - c) or (b - c)	(g) Average Meter Pressure (Integr.) 496
(h) Corrected Meter Pressure (g + e) 496	(i) Avg. Wellhead Press. $P_t = (h + f)$ 496	(j) Shut-in Casing Pressure (DWt) 859	(k) Shut-in Tubing Pressure (DWt) 816	(l) $P_c =$ higher value of (j) or (k) 859	(m) Del. Pressure $P_d = \frac{80}{687} \% P_c$	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 2126	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.6000	Corrected Volume Q = 2126 MCF/D
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WORKING PRESSURE CALCULATION

$(1 - e^{-5})$.229	$(F_c Q_m)^2 (1000)$ 399560	$R^2 = (1 - e^{-5}) (F_c Q_m)^2 (1000)$ 91493	P_t^2 246016	$P_w^2 = P_t^2 + R^2$ 337515	$P_w = \sqrt{P_w^2}$ 581
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 2126$	$\left[\frac{265912}{400366} \right]^n = .6641$	$\left[\frac{1}{.7358} \right]^n = .7358$	$= 1564$ MCF/D
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REMARKS:

OWO. First Delivered after Workover 10-20-67.

SUMMARY

Item h	496	Psia
P_c	859	Psia
Q	2126	MCF/D
P_w	581	Psia
P_d	687	Psia
D	1564	MCF/D

Company El Paso Natural Gas Company
By L. Kendrick
Title Regional Well Test Engineer
Witnessed By _____
Company _____

