

Initial
Deliverability Test

NEW MEXICO OIL CONSERVATION COMMISSION
WELL DELIVERABILITY TEST REPORT FOR 1971

Form C122-A
Revised 1-1-68

POOL NAME	POOL SLOPE	FORMATION	COUNTY
SOUTH BLANCO	n = .85	PC	SAN JUAN

87-326

COMPANY			WELL NAME AND NUMBER		
EL PASO NATURAL GAS COMPANY			HOWELL No. 10		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
C	35	28	8	EL PASO NATURAL GAS CO;	
CASING O.D. - INCHES	CASING I.D. - INCHES	SET AT DEPTH - FEET	TUBING O.D. - INCHES	TUBING I.D. - INCHES	TOP - TUBING PERF. - FEET
2.875	2.441	2796	No Tbg.		
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 2640	TO 2700	CASING XX	TUBING	.626	1653 ✓
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 12-8-71	TO 12-16-71	8-23-71			

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 Recsing	(e) Meter Error (Item c - Item d)	(f) Friction Loss (a-c) or (b-c)	(g) Average Meter Pressure (Integr.)
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(h) Corrected Meter Pressure (g+e)	(i) Avg. Wellhead Press. $P_i = (h+f)$	(j) Shut-in Casing Pressure (DWt)	(k) Shut-in Tubing Pressure (DWt)	(l) P_c = higher value of (j) or (k)	(m) Del. Pressure $P_d =$ 80 % P_c	(n) Separator or Dehydrator Pr. (DWt) for critical flow only
297 ✓	297 ✓	947	--	947	758 ✓	

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$	Corrected Volume
406	1.0000	1.0000	Q = 406 ✓ MCF/D

WORKING PRESSURE CALCULATION

$(1-e^{-s})$ ✓	$(F_c Q_m)^2 (1000)$	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ ✓	P_t^2 ✓	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$ ✓
0.113	5079	574	88209	88783	298

DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$	406 ✓	$\left(\frac{322245}{808026} \right)^n =$	$(0.3988) \dots^n =$	0.4578 ✓	$=$	186 ✓ MCF/D
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REMARKS:

New Well 1st Del 11-19-71

SUMMARY

Item h 297 ✓ Psia
P_c 947 ✓ Psia
Q 406 ✓ MCF/D
P_w 298 ✓ Psia
P_d 758 ✓ Psia
D 186 ✓ MCF/D

Company EL PASO NATURAL GAS COMPANY
By H. E. M. Analy
Title
Witnessed By
Company

