

Deliverable

NEW MEXICO OIL CONSERVATION COMMISSION WELL DELIVERABILITY TEST REPORT FOR 1969

Form C122-A
Revised 1-1-68

POOL NAME Basin	POOL SLOPE n = .75	FORMATION Dakota	COUNTY Rio Arriba
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75-907

COMPANY El Paso Natural Gas			WELL NAME AND NUMBER Vaughn No. 8		
UNIT LETTER A	SECTION 26	TOWNSHIP 26	RANGE 6	PURCHASING PIPELINE El Paso Natural Gas	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.012	SET AT DEPTH - FEET 7528	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 7166
GAS PAY ZONE FROM 7196 TO 7448		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .678	GRAVITY X LENGTH 4859
DATE OF FLOW TEST FROM 1-30-69 TO 2-07-69			DATE SHUT-IN PRESSURE MEASURED 11-18-68		

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.)
				0	0	505
(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 (i) or (k)	(m) Del. Pressure $P_d = 50$ % P_c	(n) Separator or Dehydrator Pr. (DWt) for critical flow only
505	505	2584	2528	2584	1292	

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
929	1.0000	1.0000	Q = 929 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_i^2	$P_w^2 = P_i^2 + R^2$	$P_w = \sqrt{P_w^2}$
0.298	76290	22734	255025	277759	527

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 929 \left[\frac{5007792}{6399297} \right]^n = 0.7825 = 0.8319 = 773 \text{ MCF/D}$$

REMARKS:

New well first delivered 12-15-68

SUMMARY

Item h	505	Psia
P_c	2584	Psia
Q	929	MCF/D
P_w	527	Psia
P_d	1292	Psia
D	773	MCF/D

Company EL PASO NATURAL GAS COMPANY

By E. McAnally

Title Well Test Engineer

Witnessed By

Company



