

Int.
Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 69

Form C122-A
Revised 1-1-68

POOL NAME Basin	POOL SLOPE n = .75	FORMATION Dakota	COUNTY Rio Arriba
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86-551

COMPANY El Paso Natural Gas			WELL NAME AND NUMBER San Juan 27-5 Unit No. 100		
UNIT LETTER M	SECTION 1	TOWNSHIP 27	RANGE 5	PURCHASING PIPELINE El Paso Natural Gas	
CASING O.D. - INCHES 5.500	CASING I.D. - INCHES 4.950	SET AT DEPTH - FEET 8749	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 8631
GAS PAY ZONE FROM 8487 TO 8664		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .628	GRAVITY X LENGTH 5420
DATE OF FLOW TEST FROM 6-23-69 TO 7-01-69			DATE SHUT-IN PRESSURE MEASURED 5-29-69		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) 470	(b) Flowing Tubing Pressure (DWt) 470	(c) Flowing Meter Pressure (DWt) 1165	(d) Flow Chart Static Reading 1196	(e) Meter Error (Item c - Item d) 1196	(f) Friction Loss (a-c) or (b-c) 598	(g) Average Meter Pressure (Integr.) 470
(h) Corrected Meter Pressure (g+e) 470	(i) Avg. Wellhead Press. $P_i = (h+f)$ 470	(j) Shut-in Casing Pressure (DWt) 1165	(k) Shut-in Tubing Pressure (DWt) 1196	(l) P_c = higher value of (j) or (k) 1196	(m) Del. Pressure $P_d = \frac{50}{598} \% P_c$ 598	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 286	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 286 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-5})$.326	$(F_c Q_m)^2 (1000)$ 7230	$R^2 = (1-e^{-5}) (F_c Q_m)^2 (1000)$ 2357	P_i^2 220900	$P_w^2 = P_i^2 + R^2$ 223257	$P_w = \sqrt{P_w^2}$ 473
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$ 286	$\left[\frac{1072812}{1207159} \right]^n =$ 0.8887	$=$ 0.9152	$=$ 262 MCF/D
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REMARKS:

Installed Stop Cock 5-17-69

SUMMARY

Item h **470** Psia
 P_c **1196** Psia
 Q_c **286** MCF/D
 P_w **473** Psia
 P_d **598** Psia
 D **262** MCF/D

Company **EL PASO NATURAL GAS COMPANY**
 By **H. L. Kendrick**
 Title **Division Well Test Engineer**
 Witnessed By _____
 Company _____

