

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 1972

Form C122-A
Revised 1-1-68

POOL NAME Basin	POOL SLOPE n = .75	FORMATION DK	COUNTY Rio Arriba
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87-327

COMPANY EL PASO NATURAL GAS COMPANY			WELL NAME AND NUMBER San Juan 27-4 Unit No. 56		
UNIT LETTER L	SECTION 21	TOWNSHIP 27	RANGE 4	PURCHASING PIPELINE El Paso Natural Gas Co.	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 8145	TUBING O.D. - INCHES 1.900	TUBING I.D. - INCHES 1.610	TOP - TUBING PERF. - FEET 8070
GAS PAY ZONE FROM 7852 TO 8036		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .652	GRAVITY X LENGTH 5262 ✓
DATE OF FLOW TEST FROM 1-23-72 TO 1-31-72			DATE SHUT-IN PRESSURE MEASURED 10-28-71		

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 Reading --	(e) Meter Error (Item c - Item d) 0	(f) Friction Loss (a-c) or (b-c) 0	(g) Average Meter Pressure (Integr.) 389
(h) Corrected Meter Pressure (g+e) 389 ✓	(i) Avg. Wellhead Press. $P_f = (h+f)$ 389 ✓	(j) Shut-in Casing Pressure (DWt) 2331	(k) Shut-in Tubing Pressure (DWt) 2331	(l) P_c = higher value of (j) or (k) 2331 ✓	(m) Del. Pressure $P_d = \frac{50}{100} P_c$ 1166 ✓	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 30	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 30 ✓ MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$	$(F_c Q_m)^2 (1000)$ Friction Negligible	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$	P_i^2	$P_w^2 = P_i^2 + R^2$ Use P_T^2	$P_w = \sqrt{P_w^2}$ 389
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 30 \text{ ✓}$	$\left(\frac{4074005}{5282240} \right)^n = \left(0.7713 \right)^n = 0.8230$	$= 25 \text{ ✓ MCF/D}$
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REMARKS:

SUMMARY

Item h 389 ✓ Psia
P_c 2331 ✓ Psia
Q 30 ✓ MCF/D
P_w 389 ✓ Psia
P_d 1166 ✓ Psia
D 25 ✓ MCF/D

Company EL PASO NATURAL GAS COMPANY

By *A. E. McNally*

Title

Witnessed By

Company

