

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 RA
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87-053

COMPANY EL PASO NATURAL GAS CO.			WELL NAME AND NUMBER SJ 27-5 UNIT #40		
UNIT LETTER L	SECTION 18	TOWNSHIP 27	RANGE 5	PURCHASING PIPELINE EL PASO NATURAL GAS CO.	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7741	TUBING O.D. - INCHES 1.900	TUBING I.D. - INCHES 1.610	TOP - TUBING PERF. - FEET 7690
GAS PAY ZONE FROM 7464 TO 7899		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY 0.876	GRAVITY X LENGTH 5214
DATE OF FLOW TEST FROM 09/19/69 TO 09/27/69			DATE SHUT-IN PRESSURE MEASURED 07/31/69		

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	0	0	0	0	439
(h) Corrected Meter Pressure (g+e)	(i) Avg. Wellhead Press. $P_t = (h+f)$	(j) Shut-in Casing Pressure (DWt)	(k) Shut-in Tubing Pressure (DWt)	(l) $P_c =$ higher value of (i) or (k)	(m) Del. Pressure $P_d =$ % P_c	(n) Separator or Dehydrator Pr. (DWt) for critical flow only
439	439	2395	2624	2624	1312	

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
1246	1.0000	1.0000	Q = 1246 MCF/D

WORKING PRESSURE CALCULATION

$(1-e^{-5})$	$(F_c Q_m)^2 (1000)$	$R^2 = (1-e^{-5}) (F_c Q_m)^2 (1000)$	P_t^2	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.316	420,660	132925	192721	325650	571

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{1246}{\left[\frac{5164032}{8559726} \right]^{0.7872}} = \frac{1246}{0.6357} = 1041 \text{ MCF/D}$$

REMARKS:

New Well 1st Delivery Sept. 9, 1969.

SUMMARY

Item h 439 Psia
 P_c 2624 Psia
 Q 1246 MCF/D
 P_w 571 Psia
 P_d 1312 Psia
 D 1041 MCF/D

Company EL PASO NATURAL GAS CO.
 By R.E. Stauffer
 Title _____
 Witnessed By _____
 Company _____

