

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

87-315

COMPANY			WELL NAME AND NUMBER		
EL PASO NATURAL GAS COMPANY			San Juan 27-4 Unit No. 57		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
M	28	27	4	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
4.500	4.052	8517	1.900	1.610	8448
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 8254	TO 8468	CASING	TUBING XX	.688	5812 ✓
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 1-6-72	TO 1-14-72	9-16-71			

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)	(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. $P_t = (h+f)$	(j) Shut-in Casing Pressure (DWt)	(k) Shut-in Tubing Pressure (DWt)	(l) $P_c =$ higher value of (j) or (k)	(m) Del. Pressure $P_d = 50\% P_c$	(n) Separator or Dehydrator Pr. (DWt) for critical flow only
388	388	2337	2327	2337	1169 ✓	

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
234	1.0000	1.0000	Q = 234 ✓ 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 ✓	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
0.345	14835	5118	150544	155662	395 ✓

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 234 \left[\frac{4095008}{5305907} \right]^n = \left(\frac{0.7718}{0.8234} \right)^n = 193 \text{ MCF/D}$$

REMARKS:

New Well 1st Del. 11-4-71

SUMMARY

Item h 388 Psia
 P_c 2337 Psia
 Q 234 MCF/D
 P_w 395 Psia
 P_d 1169 Psia
 D 193 MCF/D

Company EL PASO NATURAL GAS COMPANY
 By *[Signature]*
 Title
 Witnessed By
 Company

