

POOL NAME	POOL SLOPE	FORMATION	COUNTRY
Basin	$n = .75$	Deloto	Rio Arriba

86-660

COMPANY		WELL NAME AND NUMBER			
El Paso Natural Gas Company		San Juan 27-4 Unit No. 59			
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
G	4	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 OF TUBING PERF. - FEET
4.500	4.032	8641	1.900	1.610	8586
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 8104	TO 8572	CASING	TUBING XX	.592	5083
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 10-27-71 TO 11-4-71			6-17-71		

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.)
-	-	-	-	0	0	206
(h) Corrected Meter Pressure (g-e)	(i) Avg. Wellhead Press. $P_1 = (h + f)$	(j) Shut-in Casing Pressure (DWT)	(k) Shut-in Tubing Pressure (DWT)	(l) $P_c =$ higher value of (j) or (k)	(m) Del. Pressure $P_d = \frac{50}{1306} P_c$	(n) Separator or Dehydrator Pr. (DWT) for critical flow only
406	406	2611	2611	2611	1306	

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
875	1.0000	1.0000	875 ✓ MCF/D

WORKING PRESSURE CALCULATION

$(1-e^{-s})$ 0.309	$(F_c Q_m)^2 (1000)$ 207432	$R^2 = (1-e^{-s}) (F_c Q_T)^2 (1000)$ 64096	P_i^2 164836	$P_w^2 = P_i^2 + R^2$ 228932	$P_w = \sqrt{P_w^2}$ 478
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DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_n^2} \right]^n = \frac{875}{\left(\frac{5111685}{6588389} \right)^n} = \left(0.7759 \right)^n = \frac{0.8267}{} = \frac{725}{} \text{ MCF}$$

REMARKS: New Well - First Delivered 10-8-71

SUMMARY

Item h	406	Psia
P _c	2511	Psia
Q _c	875	MCF/D
P _w	473	Psia
P _d	1306	Psia
D	723	MCF/D

Company EL PASO NATURAL GAS COMPANY
By H E McQuerry
Title _____
Witnessed By _____
Company _____

