Initial Deliverability Test

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 68

Form C122-A
Revised 1-1-68

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

86-583

COMPANY			WELL NAME AND NUMBER		
El Paso Natural Gas Company			San Juan 28-5 Unit No. 76		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
G	21	28	5	El Paso Natural Gas Company	
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	8058	2.375	1.995	7874
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 7898 TO 8048		CASING	TUBING XX	.598	4709
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 12-7-68 TO 12-15-68			9-17-68		

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	449
(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**	**(n) Separator or Dehydrator Pr. (DWt) for critical flow only**
449	449	2729	2718	2729	P_d = 50 %P_c 1365	

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
822	1.0000	1.0000	Q = 822 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	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.290	59722	17319	201601	218920	468

DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 822 \left[\left(\frac{5584216}{7228521}\right)^n = (.7725)^{\frac{8240}{.8238}}\right] = 677 \text{ MCF/D}$$

REMARKS: New Well First Delivered 11-8-68. CORRECTED COPY

SUMMARY

Item h	449	Psia
P_c	2729	Psia
Q	822	MCF/D
P_w	468	Psia
P_d	1365	Psia
D	677	MCF/D

Company EL PASO NATURAL GAS COMPANY

By H. L. Kendrick

Title Regional Well Test Engineer

Witnessed By

Company

RECEIVED
JAN 2 1969
OIL CON. COM.
DIST. 3