Initial Deliverability Test

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 69

Form C122-A
Revised 1-1-65

POOL NAME	POOL SLOPE	FORMATION	COUNTY
Blanco	n = .85	PC	

27-027

COMPANY			WELL NAME AND NUMBER		
El Paso Natural Gas Company			Woodriver No. 4		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
H	5	30	9	SJNG	
CASING O.D. - INCHES	CASING I.D. - INCHES	SET AT DEPTH - FEET	TUBING O.D. - INCHES	TUBING I.D. - INCHES	TOP - TUBING PERF. - FEET
2.875	2.441	3143	No tubing		
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 3089 TO 3110		CASING XX	TUBING	.665	2048
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 3-13-69 TO 3-21-69			6-27-69		

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 c)	(f) Friction Loss (a-c) or (b-c)	(g) Average Meter Pressure (Integr.)
--	--	--	--	0	0	262 274
(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**
274	274	790	--	790	P_d = 80 %P_c = 632	

FLOW RATE CORRECTION (METER ERROR)

5084
8

Integrated Volume - MCF/D	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item c}}}$	Corrected Volume
637	1.0000	1.0000	Q = 637 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	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.138	12503	1725	75076	76801	277

DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 637 \left[\left(\frac{224676}{547299}\right)^n = (0.4105)^n = 0.4692\right] = 299 \text{ MCF/D}$$

REMARKS:
New Well first Del. July 18-69.

SUMMARY

Item h	274	Psia
P_c	790	Psia
Q	637	MCF/D
P_w	277	Psia
P_d	632	Psia
D	299	MCF/D

1.0117

Company El Paso Natural Company
By
Title
Witnessed By
Company

SEP 16 1969
OIL CON. COM.
DIST. 3