Init. Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 1969

Form C122-A
Revised 1-1-68

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

75-902

COMPANY			WELL NAME AND NUMBER		
El Paso Natural Gas			San Juan 27-4 Unit No. 43		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
H	17	27	4	El Paso Natural Gas	
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	4.012	8258	2.375	1.995	7993
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 8014 TO 8219		CASING	TUBING XX	.678	5419
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 12-13-68 TO 12-21-68			10-7-68		

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	456
(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**
456	456	2553	2564	2564	P_d = 50 %P_c = 1282	

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
582	1.0000	1.0000	Q = 582 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	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.326	29943	9761	207936	217697	467

DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 582 \left[\left(\frac{4930572}{6356399}\right)^n = (.7756)^n = .8264\right] = 481 \text{ MCF/D}$$

REMARKS:
New well first delivered 11-18-68

RECEIVED
JAN 9 1969
OIL CON. COM.
DIST. 3

SUMMARY

Item h	456	Psia
P_c	2564	Psia
Q	582	MCF/D
P_w	467	Psia
P_d	1,282	Psia
D	481	MCF/D

Company EL PASO NATURAL GAS
By H. E. Hendrick
Title Regional Well Test Engineer
Witnessed By
Company

cc