

Initial
Deliverability Test.

NEW MEXICO OIL CONSERVATION COMMISSION WELL DELIVERABILITY TEST REPORT FOR 19 70

Form C122-A
Revised 1-1-68

POOL NAME Basin	POOL SLOPE n = .75	FORMATION DK	COUNTY RA
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87-179

COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER San Juan 28-6 Unit No. 149		
UNIT LETTER A	SECTION 27	TOWNSHIP 28	RANGE 6	PURCHASING PIPELINE EPNG	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7868	TUBING O.D. - INCHES 1.900	TUBING I.D. - INCHES 1.610	TOP - TUBING PERF. - FEET 7800
GAS PAY ZONE FROM 7612 TO 7817		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .652	GRAVITY X LENGTH 5086
DATE OF FLOW TEST FROM 9-23-70 TO 9-30-70			DATE SHUT-IN PRESSURE MEASURED 4-17-70		

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) 0	(f) Friction Loss (a-c) or (b-c) 0	(g) Average Meter Pressure (Integr.) 451
(h) Corrected Meter Pressure (g+e) 451	(i) Avg. Wellhead Press. $P_t = (h+f)$ 451	(j) Shut-in Casing Pressure (DWt) 2692	(k) Shut-in Tubing Pressure (DWt) 2701	(l) P_c = higher value of (j) or (k) 2701	(m) Del. Pressure $P_d = \frac{50}{1351} \% P_c$	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 878	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 878 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$.309	$(F_c Q_m)^2 (1000)$ 208857	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 64537	P_t^2 203401	$P_w^2 = P_t^2 + R^2$ 267938	$P_w = \sqrt{P_w^2}$ 518
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DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{878}{\left[\frac{5470200}{7027463} \right]^n} = \frac{878}{(.7784)^n} = \frac{878}{.8287} = 728 \text{ MCF/D}$$

REMARKS:

New well, 1st del. August 28, 1970.

SUMMARY

Item h 451 Psia
P_c 2701 Psia
Q 878 MCF/D
P_w 518 Psia
P_d 1351 Psia
D 728 MCF/D

Company EL PASO NATURAL GAS COMPANY

By D. E. McAnally

Title

Witnessed By

Company

