Initial Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 1970

Form C122-A
Revised 1-1-68

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

87-178

COMPANY			WELL NAME AND NUMBER		
El Paso Natural Gas Company			San Juan 27-5 Unit No.118		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
K	22	27	5	EPNG	
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	7822	1.900	1.610	7745
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 7533 TO 7756		CASING	TUBING XX	.652	5050
DATE OF FLOW TEST		DATE SHUT-IN PRESSURE MEASURED			
FROM 9-14-70 TO 9-22-70		6-26-70			

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)	(f) Friction Loss (a-c) or (b-c)	(g) Average Meter Pressure (Integr.)
-	-	-	-	0	0	411
(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 P_d = ____ %P_c**	**(n) Separator or Dehydrator Pr. (DWt) for critical flow only**
411	411	2587	2232	2587	1294	

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
977	1.0000	1.0000	Q = 977 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	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.307	258612	79394	168921	248315	498

DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 977 \left[\left(\frac{5018133}{6444254}\right)^n = (.7786)^n = .8289\right] = 810 \text{ MCF/D}$$

REMARKS:

New Well, 1st del. Aug. 26, 1970

SUMMARY OK

Item h	411	Psia
P_c	2587	Psia
Q	977	MCF/D
P_w	498	Psia
P_d	1294	Psia
D	810	MCF/D

Company EL PASO NATURAL GAS COMPANY
By A. E. McAnally
Title
Witnessed By
Company

RECEIVED
OCT 6 1970
OIL CON. COM.
DIST. 3