

Initial Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION
WELL DELIVERABILITY TEST REPORT FOR 1970

Form C122-A
Revised 1-1-68

POOL NAME Basin	POOL SLOPE n = .75	FORMATION DK	COUNTY RA
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86-640

COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER San Juan 27-5 Unit No. 119		
UNIT LETTER K	SECTION 24	TOWNSHIP 27	RANGE 5	PURCHASING PIPELINE EPNG	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7789	TUBING O.D. - INCHES 1.900	TUBING I.D. - INCHES 1.610	TOP - TUBING PERF. - FEET 7758
GAS PAY ZONE FROM 7559 TO 7770		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .677	GRAVITY X LENGTH 5252
DATE OF FLOW TEST FROM 7-4-70 TO 7-12-70			DATE SHUT-IN PRESSURE MEASURED 5-11-70		

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.) 456
(h) Corrected Meter Pressure (g+e) 456	(i) Avg. Wellhead Press. P _i = (h+f) 456	(j) Shut-in Casing Pressure (DWt) 2533	(k) Shut-in Tubing Pressure (DWt) 2657	(l) P _c = higher value of (j) or (k) 2657	(m) Del. Pressure P _d = 50 % P _c 1329	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 565	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 565 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$.317	$(F_c Q_m)^2 (1000)$ 86488	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 27417	P_i^2 207936	$P_w^2 = P_i^2 + R^2$ 235353	$P_w = \sqrt{P_w^2}$ 485
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$	$\frac{565}{\left(\frac{5293408}{6824296} \right)^n} =$	$\left(\frac{.7756}{.8265} \right)^n =$	$.8265^6 =$	467 MCF/D
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REMARKS:

New well, 1st del. June 10, 1970.

SUMMARY

Item h	456	Psia
P _c	2657	Psia
Q	565	MCF/D
P _w	485	Psia
P _d	1329	Psia
D	467	MCF/D

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

