

Initial Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 69

Form C122-A
Revised 1-1-68

POOL NAME B sin	POOL SLOPE n = .75	FORMATION Dakota	COUNTY Rio Arriba
---------------------------	------------------------------	----------------------------	-----------------------------

75-977

COMPANY El Paso Natural Gas			WELL NAME AND NUMBER San Juan 27-4 Unit No. 54		
UNIT LETTER A	SECTION 32	TOWNSHIP 27	RANGE 4	PURCHASING PIPELINE El Paso Natural Gas	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 8415	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 8163
GAS PAY ZONE FROM 8170 TO 8406		WELL PRODUCING THRU CASING TUBING xx		GAS GRAVITY .688	GRAVITY X LENGTH 5616
DATE OF FLOW TEST FROM 5-13-69 TO 5-21-69			DATE SHUT-IN PRESSURE MEASURED 10-16-68		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) 436	(b) Flowing Tubing Pressure (DWt) 436	(c) Flowing Meter Pressure (DWt) 2359	(d) Flow Chart Static Reading 2188	(e) Meter Error (Item c - Item d) 0	(f) Friction Loss (a-c) or (b-c) 0	(g) Average Meter Pressure (Integr.) 436
(h) Corrected Meter Pressure (g+e) 436	(i) Avg. Wellhead Press. $P_f = (h+f)$ 436	(j) Shut-in Casing Pressure (DWt) 2359	(k) Shut-in Tubing Pressure (DWt) 2188	(l) P_c = higher value of (i) or (k) 2359	(m) Del. Pressure $P_d = \frac{50}{1180} P_c$ 1180	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 394	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume $Q =$ 394 MCF/D
---	--	---	--

WORKING PRESSURE CALCULATION

$(1-e^{-s})$.335	$(F_c Q_m)^2 (1000)$ 13722	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 4597	P_i^2 190096	$P_w^2 = P_i^2 + R^2$ 194693	$P_w = \sqrt{P_w^2}$ 441
-----------------------------	--------------------------------------	--	--------------------------	--	------------------------------------

DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$ 394	$\left[\frac{4172481}{5370188} \right]^n =$.7769	$=$.8274	$=$ 326 MCF/D
---	---	------------------	----------------------

REMARKS:

New well first delivered 4-15-69

SUMMARY

Item h **436** Psia
 P_c **2359** Psia
 Q **394** MCF/D
 P_w **441** Psia
 P_d **1180** Psia
 D **326** MCF/D

Company **EL PASO NATURAL GAS COMPANY**

By **H. E. McAnally** H. E. McAnally

Title **Well Test Engineer**

Witnessed By

Company

