

Initial
Deliverability Test

NEW MEXICO OIL CONSERVATION COMMISSION WELL DELIVERABILITY TEST REPORT FOR 19 68

Form CT22-A
Revised 1-1-68

POOL NAME Blanco	POOL SLOPE n = .75	FORMATION MV	COUNTY SJ
----------------------------	------------------------------	------------------------	---------------------

70-191

COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER Sunray E No. 1		
UNIT LETTER A	SECTION 9	TOWNSHIP 30	RANGE 10	PURCHASING PIPELINE El Paso Natural Gas Company	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 5833	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 5723
GAS PAY ZONE FROM 4780 TO 5740		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .671	GRAVITY X LENGTH 3840
DATE OF FLOW TEST FROM 12/28/67 TO 01/05/68			DATE SHUT-IN PRESSURE MEASURED 11/01/67		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) 0	(b) Flowing Tubing Pressure (DWt) 0	(c) Flowing Meter Pressure (DWt) 0	(d) Flow Chart Static Reading 0	(e) Meter Error (Item c - Item d) 0	(f) Friction Loss (a-c) or (b-c) 0	(g) Average Meter Pressure (Integr.) 449
(h) Corrected Meter Pressure (g+e) 449	(i) Avg. Wellhead Press. $P_w = (h+f)$ 449	(j) Shut-in Casing Pressure (DWt) 810	(k) Shut-in Tubing Pressure (DWt) 521	(l) $P_c =$ higher value of (j) or (k) 810	(m) Del. Pressure $P_d =$ 80 % P_c 648	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 768	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume $Q =$ 768 MCF/D
---	--	---	--

WORKING PRESSURE CALCULATION

$(1-e^{-s})$.244	$(F_c Q_m)^2 (1000)$ 52,143	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 12723	P_i^2 201601	$P_w^2 = P_i^2 + R^2$ 214324	$P_w = \sqrt{P_w^2}$ 463
-----------------------------	---------------------------------------	---	--------------------------	--	------------------------------------

DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$ 768	$\left(\frac{236196}{441776} \right)^n =$ 0.5346	$=$.6252	$=$ 480 MCF/D
---	--	------------------	----------------------

REMARKS:

CORRECTED COPY

First Delivered after OWWO 11-27-67. *OK*

SUMMARY

Item h **449** Psia
 P_c **810** Psia
 Q **768** MCF/D
 P_w **463** Psia
 P_d **648** Psia
 D **480** MCF/D

Company **El Paso Natural Gas Company**
 By *[Signature]*
 Title _____



CONFIDENTIAL
NOV 1964
PAGE 3