

Int'l
Deliverability

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

Form C122-A
Revised 1-1-68

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

70-335

COMPANY El Paso Natural Gas Co.			WELL NAME AND NUMBER Sunray No. 1		
UNIT LETTER M	SECTION 5	TOWNSHIP 29	RANGE 8	PURCHASING PIPELINE EPNG	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 5604	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 5494
GAS PAY ZONE FROM 4664 TO 5514		WELL PRODUCING THRU CASING TUBING XX		GAS GRAVITY .659	GRAVITY X LENGTH 3621
DATE OF FLOW TEST FROM 8-26-70 TO 9-3-70			DATE SHUT-IN PRESSURE MEASURED 7-24-70		

PRESSURE DATA - ALL PRESSURES IN PSIA

(e) 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.) 366
(h) Corrected Meter Pressure (g+e) 366	(i) Avg. Wellhead Press. $P_i = (h+f)$ 366	(j) Shut-in Casing Pressure (DWt) 823	(k) Shut-in Tubing Pressure (DWt) 823	(l) P_e = higher value of (i) or (k) 823	(m) Del. Pressure $P_d = 80\% P_e$ 658	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 1735	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume Q = 1735 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$.232	$(F_c Q_m)^2 (1000)$ 266097	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 61734	P_i^2 133956	$P_w^2 = P_i^2 + R^2$ 195690	$P_w = \sqrt{P_w^2}$ 442
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DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 1735 \left[\frac{244365}{481639} \right]^n = (.5073)^n = .6011 = 1043 \text{ MCF/D}$$

REMARKS:

OWWO, 1st del. 8-5-70

SUMMARY

Item h 366 Psia
P_c 823 Psia
Q 1735 MCF/D
P_w 442 Psia
P_d 658 Psia
D 1043 MCF/D

Company EL PASO NATURAL GAS COMPANY

By H. E. McDonald

Title

Witnessed By

Company

