

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 69

Form C122-A
Revised 1-1-68

POOL NAME BASIN	POOL SLOPE n = .75	FORMATION DAKOTA	COUNTY SJ
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COMPANY EL PASO NATURAL GAS CO.			WELL NAME AND NUMBER HUERFANO UNIT #190		
UNIT LETTER B	SECTION 1	TOWNSHIP 25	RANGE 10	PURCHASING PIPELINE EL PASO NATURAL GAS CO.	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 6837	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 6615
GAS PAY ZONE FROM 6642 TO 6731		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY 0.678	GRAVITY X LENGTH 4485
DATE OF FLOW TEST FROM 05/20/69 TO 05/28/69			DATE SHUT-IN PRESSURE MEASURED 04/15/69		

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.) 417
(h) Corrected Meter Pressure (g+e) 417	(i) Avg. Wellhead Press. $P_t = (h+f)$ 417	(j) Shut-in Casing Pressure (DWt) 1916	(k) Shut-in Tubing Pressure (DWt) 1914	(l) P_c = higher value of (i) or (k) 1916	(m) Del. Pressure $P_d = 50\% P_c$ 958	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 706	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0000	Corrected Volume $Q =$ 706 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$.278	$(F_c Q_m)^2 (1000)$ 44.068	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 12250	P_t^2 173889	$P_w^2 = P_t^2 + R^2$ 186139	$P_w = \sqrt{P_w^2}$ 431
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DELIVERABILITY CALCULATION

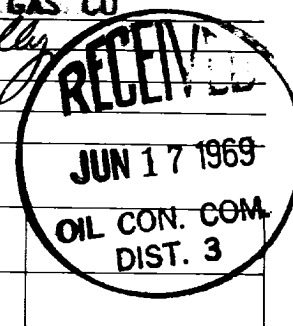
$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$ 706	$\left(\frac{2753292}{3484917} \right)^n =$ 0.7900	$=$ 0.8380	$=$ 592 MCF/D
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REMARKS: **New Well First Delivered 5-1-69**

SUMMARY

Item h **417** Psia
 P_c **1916** Psia
 Q **706** MCF/D
 P_w **431** Psia
 P_d **958** Psia
 D **592** MCF/D

Company **EL PASO NATURAL GAS CO.**
 By **D. B. M. S. Amelby**
 Title _____
 Witnessed By _____
 Company _____



ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

[illegible]

ALL PRESSURES IN PSI

[illegible]

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCFD 100	Quotient of Item a Item b $\frac{10000}{10000} = 1$	$\sqrt{\frac{\text{Item a}}{\text{Item b}}}$ $\sqrt{\frac{10000}{10000}} = 1$	Corrected Volume 100
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WORKING PRESSURE CALCULATION

$(1 - e^{-x})$	$(1 - e^{-x})(1 + \frac{x}{n})$	$(1 - e^{-x})(1 + \frac{x}{n} + \frac{x^2}{2n^2})$	$(1 - e^{-x})(1 + \frac{x}{n} + \frac{x^2}{2n^2} + \frac{x^3}{6n^3})$	$(1 - e^{-x})(1 + \frac{x}{n} + \frac{x^2}{2n^2} + \frac{x^3}{6n^3} + \frac{x^4}{24n^4})$	$(1 - e^{-x})(1 + \frac{x}{n} + \frac{x^2}{2n^2} + \frac{x^3}{6n^3} + \frac{x^4}{24n^4} + \frac{x^5}{120n^5})$
188.	4408	15520	11388	18813	431

DELIVERABILITY CALCULATION

$$D = 0 \quad \left[\frac{b_{c2} - b_{m2}}{b_{c2} - b_{f2}} \right] = 100 \quad \left(\frac{344011}{525355} \right) = 0.655 \quad (0.1000) = 0.9880 = 225 \quad \text{MCFAD}$$

REMARKS: New Well First Delivered 5-1-69

SUMMARY

MCFLD	585	W	6
Paid	550	W	6
Paid	431	P	6
MCFLD	100	W	6
Paid	1810	P	6
Paid	411	P	6

Company _____
By _____
Title _____
Witnessed By _____
Company _____

EL PASO NATURAL GAS CO.

