

NEW MEXICO OIL CONSERVATION COMMISSION
INITIAL WELL DELIVERABILITY TEST REPORT FOR 1968

Form C122-A
 Revised 1-1-66

POOL NAME Basin Dakota	POOL SLOPE n = .75	FORMATION Dakota	COUNTY San Juan
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COMPANY Jerome P. McHugh			WELL NAME AND NUMBER Hardie #2		
UNIT LETTER D	SECTION 28	TOWNSHIP 29N	RANGE 8W	PURCHASING PIPELINE El Paso Natural Gas Co.	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7580	TUBING O.D. - INCHES 1.660	TUBING I.D. - INCHES 1.380	TOP - TUBING PERF. - FEET 7519
GAS PAY ZONE FROM 7294 TO 7556		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .678	GRAVITY X LENGTH 5098
DATE OF FLOW TEST FROM 1/24/68 TO 2/1/68			DATE SHUT-IN PRESSURE MEASURED 8/2/67		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) 718	(b) Flowing Tubing Pressure (DWt) 534	(c) Flowing Meter Pressure (DWt) 531	(d) Flow Chart Static Reading 7.3 533	(e) Meter Error (Item c - Item d) - 2	(f) Friction Loss (a - c) or (b - c) + 3	(g) Average Meter Pressure (Integr.) 504
(h) Corrected Meter Pressure (g + e) 502	(i) Avg. Wellhead Press. $P_t = (h + f)$ 505	(j) Shut-in Casing Pressure (DWt) 2206	(k) Shut-in Tubing Pressure (DWt) 1936	(l) P_c = higher value of (j) or (k) 2206	(m) Del. Pressure $P_d =$ 50 % P_c 1103	(n) Separator or Dehydrator Pr. (DWt) for critical flow only _____

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 521	Quotient of $\frac{\text{Item c}}{\text{Item d}}$.9962	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$.9981	Corrected Volume $Q =$ 520 MCF/D
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WORKING PRESSURE CALCULATION

$(1 - e^{-s})$.310	$(F_c Q_m)^2 (1000)$ 163,901	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$ 50,809	P_t^2 255,025	$P_w^2 = P_t^2 + R^2$ 305,834	$P_w = \sqrt{P_w^2}$ 553
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$ 520	$\left[\frac{3,649,827}{4,560,602} \right]^n =$.8003	$\left[\frac{.75}{.8461} \right]^n =$.440 MCF/D
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REMARKS:

SUMMARY

Item h	502	Psia
P_c	2206	Psia
Q	520	MCF/D
P_w	553	Psia
P_d	1103	Psia
D	440	MCF/D

OK

RECEIVED
MAR 1 1968
OIL CON. COM.
DIST. 3

Company **Jerome P. McHugh**
 By **J. A. Dugan**
 Title **Agent**
 Witnessed By _____
 Company _____

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