

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 Roelofs #1		
UNIT LETTER N	SECTION 22	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 7648	TUBING O.D. - INCHES 1.660	TUBING I.D. - INCHES 1.380	TOP - TUBING PERF. - FEET 7570
GAS PAY ZONE FROM 7272 TO 7608		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .678	GRAVITY X LENGTH 5132 ✓
DATE OF FLOW TEST FROM 1/25/68 TO 2/2/68			DATE SHUT-IN PRESSURE MEASURED 9/18/67		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) 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)	(f) Friction Loss (a - c) or (b - c)	(g) Average Meter Pressure (Integr.)
702	522	516	$\frac{7.2}{518}$	- 2 ✓	+ 6 ✓	497
(h) Corrected Meter Pressure (g + e)	(i) Avg. Wellhead Press. $P_t = (h + f)$	(j) Shut-in Casing Pressure (DWt)	(k) Shut-in Tubing Pressure (DWt)	(l) P_c = higher value of (j) or (k)	(m) Del. Pressure $P_d = \frac{50}{\%P_c}$	(n) Separator or Dehydrator Pr. (DWt) for critical flow only
495 ✓	501 ✓	2241	2241	2241 ✓	1120 ✓	—

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$	Corrected Volume
375	.9961 ✓	.9980 ✓	Q = 374 MCF/D

WORKING PRESSURE CALCULATION

$(1 - e^{-s})$	$(F_c Q_m)^2 (1000)$	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$	P_t^2	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.311 ✓	84,785 ✓	26,368 ✓	251,001 ✓	277,369 ✓	527 ✓

DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$	374 ✓	$\left[\frac{3,767,681}{4,744,712} \right]^n$	$(.7941)^n$	$.75$	$.8412$	$=$	315 MCF/D
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REMARKS:

SUMMARY

Item h **495** ✓ Psia
 P_c **2241** ✓ Psia
 Q **374** ✓ MCF/D
 P_w **527** ✓ Psia
 P_d **1120** ✓ Psia
315 ✓ MCF/D

Company **Jerome P. McHugh**
 By **Agent**
 Title **Agent**
 Witnessed By _____
 Company _____

