

3 OCC ✓
1 EPNG
1 McHugh
1 File

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

Form C122-A
Revised 1-1-66

POOL NAME Basin Dakota	POOL SLOPE n = .75	FORMATION Dakota	COUNTY Rio Arriba
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COMPANY Jerome P. McHugh			WELL NAME AND NUMBER Apache #7		
UNIT LETTER D	SECTION 20	TOWNSHIP 26N	RANGE 3W	PURCHASING PIPELINE EPNG Co.	
CASING O.D. - INCHES 4.500"	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 8217'	TUBING O.D. - INCHES 1.660	TUBING I.D. - INCHES 1.380	TOP - TUBING PERF. - FEET 8131'
GAS PAY ZONE FROM 7972' TO 8159'		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .678	GRAVITY X LENGTH 5513' ✓
DATE OF FLOW TEST FROM 1-20-70 TO 1-28-70			DATE SHUT-IN PRESSURE MEASURED 11-13-69		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) 662	(b) Flowing Tubing Pressure (DWt) 283	(c) Flowing Meter Pressure (DWt) 283	(d) Flow Chart Static Reading 5.4 292	(e) Meter Error (Item c - Item d) - 9 ✓	(f) Friction Loss (a - c) or (b - c) - 0 ✓	(g) Average Meter Pressure (Integr.) 361
(h) Corrected Meter Pressure (g + e) 352 ✓	(i) Avg. Wellhead Press. $P_t = (h + f)$ 352 ✓	(j) Shut-in Casing Pressure (DWt) 2232	(k) Shut-in Tubing Pressure (DWt) 1984	(l) P_c = higher value of (j) or (k) 2232 ✓	(m) Del. Pressure $P_d = 50$ % P_c 1116 ✓	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 247	Quotient of $\frac{\text{Item c}}{\text{Item d}}$.9692 ✓	$\times \sqrt{\frac{\text{Item c}}{\text{Item d}}}$.9845 ✓	Corrected Volume Q = 243 ✓ MCF/D
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WORKING PRESSURE CALCULATION

$(1 - e^{-s})$ 0.330 ✓	$(F_c Q_m)^2 (1000)$ 35,793 ✓	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$ 11,812 ✓	P_t^2 123,904 ✓	$P_w^2 = P_t^2 + R^2$ 135,716 ✓	$P_w = \sqrt{P_w^2}$ 369 ✓
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 243$ ✓	$\left[\frac{3,736,368}{4,846,108} \right]^n \left(.7710 \right)^n \frac{.75}{.8228} = 200$ ✓ MCF/D
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REMARKS:

Well first delivered 12-31-69

SUMMARY	
Item h	352 ✓ Psia
P_c	2232 ✓ Psia
Q	243 ✓ MCF/D
P_w	369 ✓ Psia
P_d	1116 ✓ Psia
D	200 ✓ MCF/D

Company Jerome P. McHugh
By *John R. Jank*
Title Agent
Witnessed By _____
Company _____



