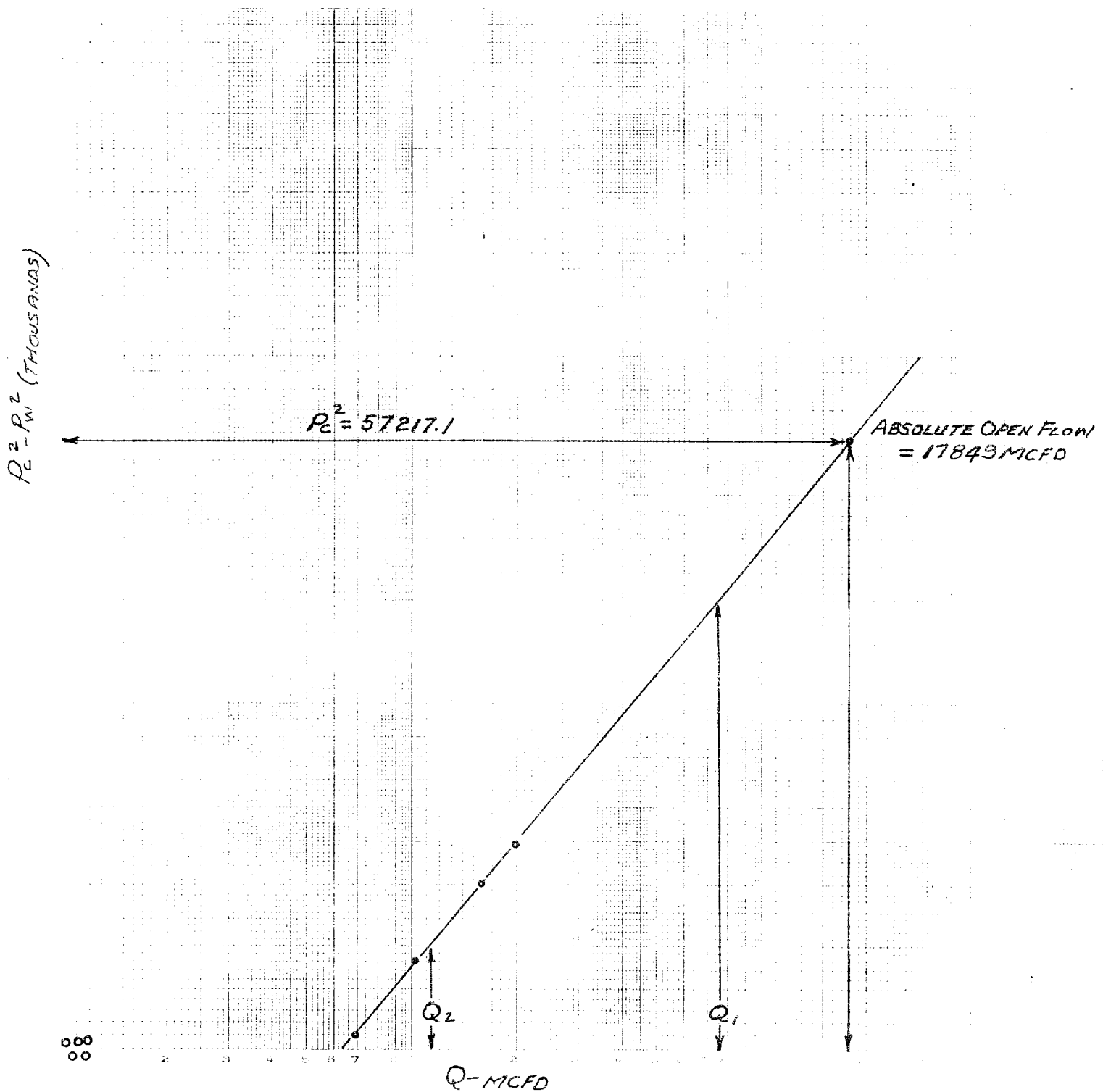


NEW MEXICO OIL CONSERVATION COMMISSION MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10/31/80	
Company HNG Oil Company		Connection None	
Pool Undesignated		Formation Morrow	
Completion Date 10/31/80		Total Depth -	Plug Back TD 13217'
		Elevation 3650' KB	Form or Lease Name San Simon 6 State Com
Casing Size 7" 5" 4" 2 3/8"	Wt. 23 15 13.5 4.70	Set At 11014 11352 13300 10782	Perforations: From 13110 To 13117 Open ended
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual		Packer Set At 11332'	Well No. 1
Producing Thru Tubing	Reservoir Temp. °F 172 @ 13124'	Mean Annual Temp. °F 60	Unit Sec. Twp. Rge. H 6 22S 32E
L 13114	H -	Gg 0.654	County Lea
% CO ₂ 0.47	% N ₂ 0.20	% H ₂ S 0.00	State New Mexico
FLOW DATA		Prover 6 X 1.500	Meter Run F
NO.	Prover Line Size	X	Orifice Size
SI			
1.	6 4/64	1.500	520
2.	6 6/64	1.500	480
3.	6 8.5/64	1.500	470
4.	6 10/64	1.500	410
5.			
TUBING DATA			
NO.	Prover Line Size	X	Orifice Size
SI			
1.	6 4/64	1.500	520
2.	6 6/64	1.500	480
3.	6 8.5/64	1.500	470
4.	6 10/64	1.500	410
5.			
CASING DATA			
NO.	Prover Line Size	X	Orifice Size
SI			
1.	6 4/64	1.500	520
2.	6 6/64	1.500	480
3.	6 8.5/64	1.500	470
4.	6 10/64	1.500	410
5.			
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1	10.70	51.63	533.2
2	10.70	76.85	493.2
3	10.70	116.27	483.2
4	10.70	145.43	423.2
5			
NO.	R _f	Temp. °R	T _f
1	0.79	558	1.50
2	0.73	556	1.50
3	0.72	541	1.46
4	0.63	532	1.43
5			
Gas Liquid Hydrocarbon Ratio 20.70			
A.P.I. Gravity of Liquid Hydrocarbons 56.0			
Specific Gravity Separator Gas 0.654			
Specific Gravity Flowing Fluid XXXXX			
Critical Pressure 673 P.S.I.A.			
Critical Temperature 371 °R			
P _c 7564.2 P _c ² 57217.1			
NO.	P _c	P _w *	P _w ²
1		7491.2	56118.1
2		7444.2	55416.1
3		7363.2	54201.0
4		7301.2	53307.5
5			
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 52.063$			
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 25.967$			
ADP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 17849$			
Absolute Open Flow 17849 Mcf/D			
Angle of Slope 50° 31'			
Slope, n 0.824			
Remarks: * BOTTOM HOLE PRESSURE * (-9474) 13124' USED FOR PRESSURE CALCULATIONS			
63.54 BO/D - 10.59 BO DURING TEST			
Approved By Commission: Cdr. Sheld by Jury Seater Dist. J. Supac		Conducted By: JARREL SERVICES, INC.	
Calculated By: Joe A. Coleman		Checked By: Joe A. Coleman	

COMPANY: HNG Oil C any
 WELL: San Simon 6 State Com, No. 1
 LOCATION: H 6 22s 35e
 COUNTY: Lea
 DATE: October 31, 1980
 FORMATION: Morrow



$$Q_1 = 7500 MCFD; \log Q_1 = 3.87506$$

$$Q_2 = 1125 MCFD; \log Q_2 = 3.05115$$

$$n = 0.82391 = 0.824$$