

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special		Test Date 10-24-79		OCT 29 1979	
Company Hondo Oil & Gas Company		Connection Not Connected			
Pool Undesignated <i>Morrow</i>		Formation Morrow		Unit B.E.E. ARTESIA, OFFICE	
Completion Date 10-2-79		Total Depth 10506		Perforations 10415 3634 GR	
Csg. Size 4.5		Set At 11.6 4.000		Well No. 2	
Trq. Size 2.375		Set At 4.7 1.995		Unit Sec. Twp. Rge. F 9 18S 28E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 162 @ 10370		State New Mexico	
Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		Meter Run 4"	
L 10262		H 10262		Flg. Flg.	
Gg 0.631		% CO ₂ 0.52		% H ₂ S -	
% N ₂ 0.48		Prover -		Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							3089		Pkr.		113 Hrs.
1.	4 x 1.25			315	11	69	3016	68			1 Hr.
2.	4 x 1.25			319	29	87	2975	72			1 Hr.
3.	4 x 1.25			558	47	88	2853	70			1 Hr.
4.	4 x 1.25			810	84	83	2574	71			1 Hr.
5.											

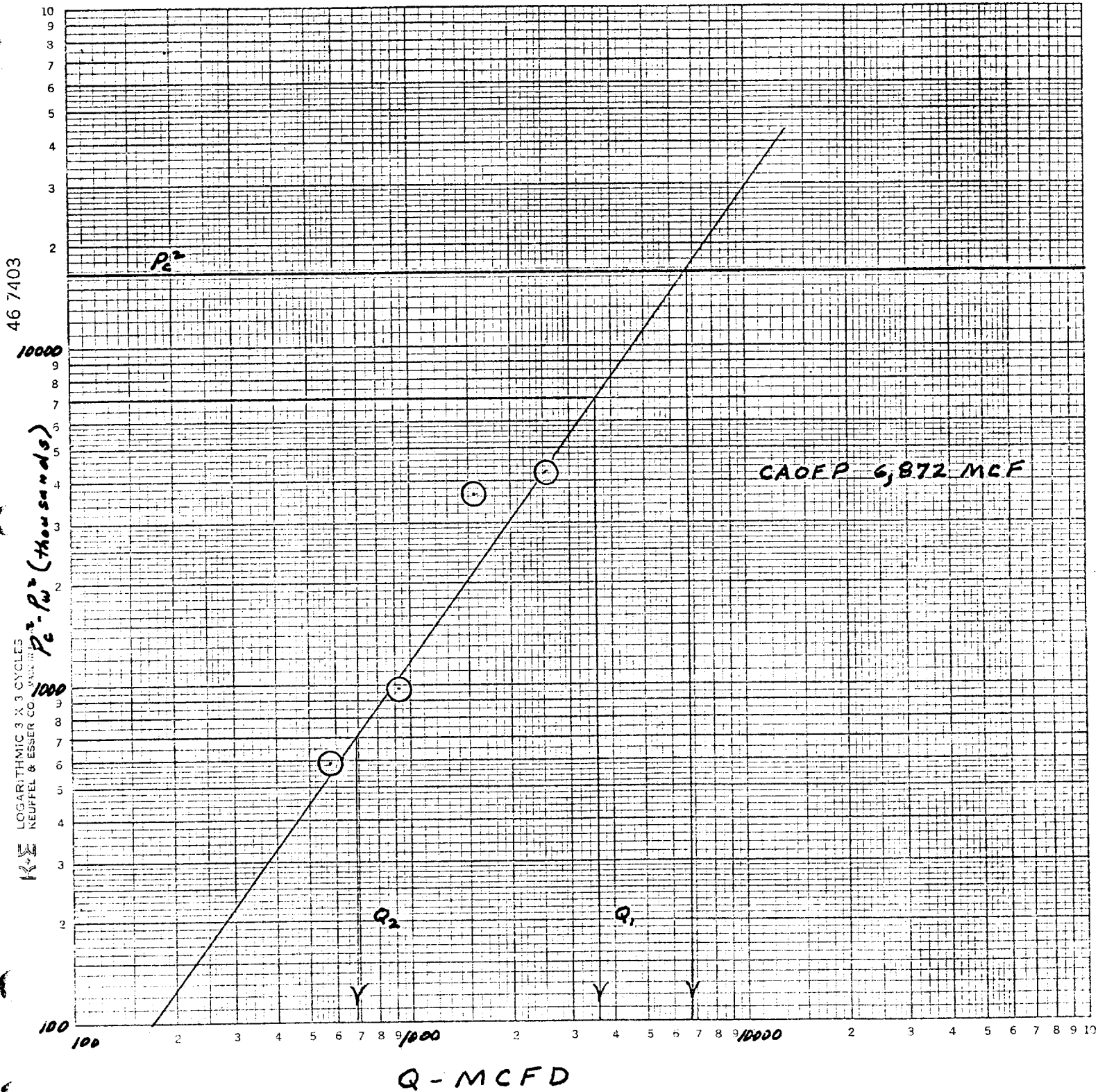
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcf/d
1	7.469	60.08	328.2	0.9915	1.259	1.029	576
2	7.469	98.15	332.2	0.9750	1.259	1.025	922
3	7.469	163.85	571.2	0.9741	1.259	1.043	1565
4	7.469	262.96	823.2	0.9786	1.259	1.065	2577
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.49	529	1.47	0.945	78.33	52.5	0.631	XXXXXX	674	361
2	0.49	547	1.52	0.952				XXXXX		
3	0.85	548	1.52	0.920					P.S.I.A.	P.S.I.A.
4	1.22	543	1.50	0.882					R	R
5										

$P_c = 4076.2$ $P_w = 16615.4$				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 3.9274$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.6667$	
NO.	P _c ²	P _w ²	P _c ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 6872$			
1	4003.2	16025.6	589.8				
2	3954.2	15635.7	979.7				
3	3601.2	12968.6	3646.8				
4	3519.2	12384.8	4230.6				
5							

Absolute Open Flow		6872		Mcf/d @ 15.025		Angle of Slope @		54.4		Slope, n		0.717			
Remarks: B.H.P. at mid point of perforations 10370. Produced 3 bbls. distillate. Gravity 52.5 @ 60°F. Well was originally tested on 10-8-79 (1200 MCF). This test is after well was treated.															
Approved By Consultant:				Conducted By:				Calculated By:				Checked By:			
				C. Johnson				J. Cogburn				L.C. Hudry			

HONDO OIL & GAS COMPANY
 Exxon State No. 2
 Unit F, Section 9, T18S, R28E
 Eddy County, New Mexico
 October 26, 1979



Q_1	3600	Log	3.5563025
Q_2	690	Log	2.8388491
		$n =$	0.7174534 = 0.717