

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

Form O-122
Revised 5-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special		Test Date 6 - 2 - 76		JUN 21 1976	
Company MESA PETROLEUM COMPANY		Connection Pipeline TRANSWESTERN GAS CO.			
Well Name Fast Draw morrow		Formation MORROW		Unit O. F. C. ARTESIA, OFFICE	
Completion Date 4- 21- 76		Total Depth 13946		Plug Back TD 13985	
Elevation 3057 D. F.		Farm or Lease Name NASH DRAW Unit		Well No. 2	
Casing Size 5.00" 23.00#		Set At 1.670" 13946		Perforations From 13416 To 13654	
Casing Size 2.375EUE 4.70#		Set At 1.995" 13400		Perforations From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple		Packer Set At 13400		County Eddy	
Dual Completion Gas-Gas		Duro. Press. - 14 13.2		State New Mexico	
Tubing 182 13535		Mean Annual Temp. °F 60		Date	
L H Gv		% CO ₂ % N ₂ % H ₂ S		Prover Meter / ton	
13535 13535 0.571		0.97 0.00 0.00		X	

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
1.	4.00		1.88	675	8.00"	90	4200	60			0.50 Hr.
2.	4.00		1.88	675	16.00"	86	4000	60			0.50 Hr.
3.	4.00		1.88	675	31.00"	83	3830	60			0.50 Hr.
4.	4.00		1.88	675	52.00"	76	3550	60			3.00 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, Mcfd
1.	17.26	74.200	688.20	0.9723	1.3234	1.0430	1719
2.	17.26	104.934	688.20	0.9759	1.3234	1.0440	2442
3.	17.26	146.062	688.20	0.9786	1.3234	1.0450	3412
4.	17.26	189.173	688.20	0.9850	1.3234	1.0480	4460
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.	1.02	550	1.59	0.899		None Produced	0.571		672	346
2.	1.02	546	1.58	0.899						
3.	1.02	543	1.57	0.899						
4.	1.02	536	1.55	0.899						
5.										

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²
1.	4228.9		17884	3398
2.	4045.2		16364	4918
3.	3906.4		15260	6022
4.	3673.9		13498	7784
5.				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.73399$

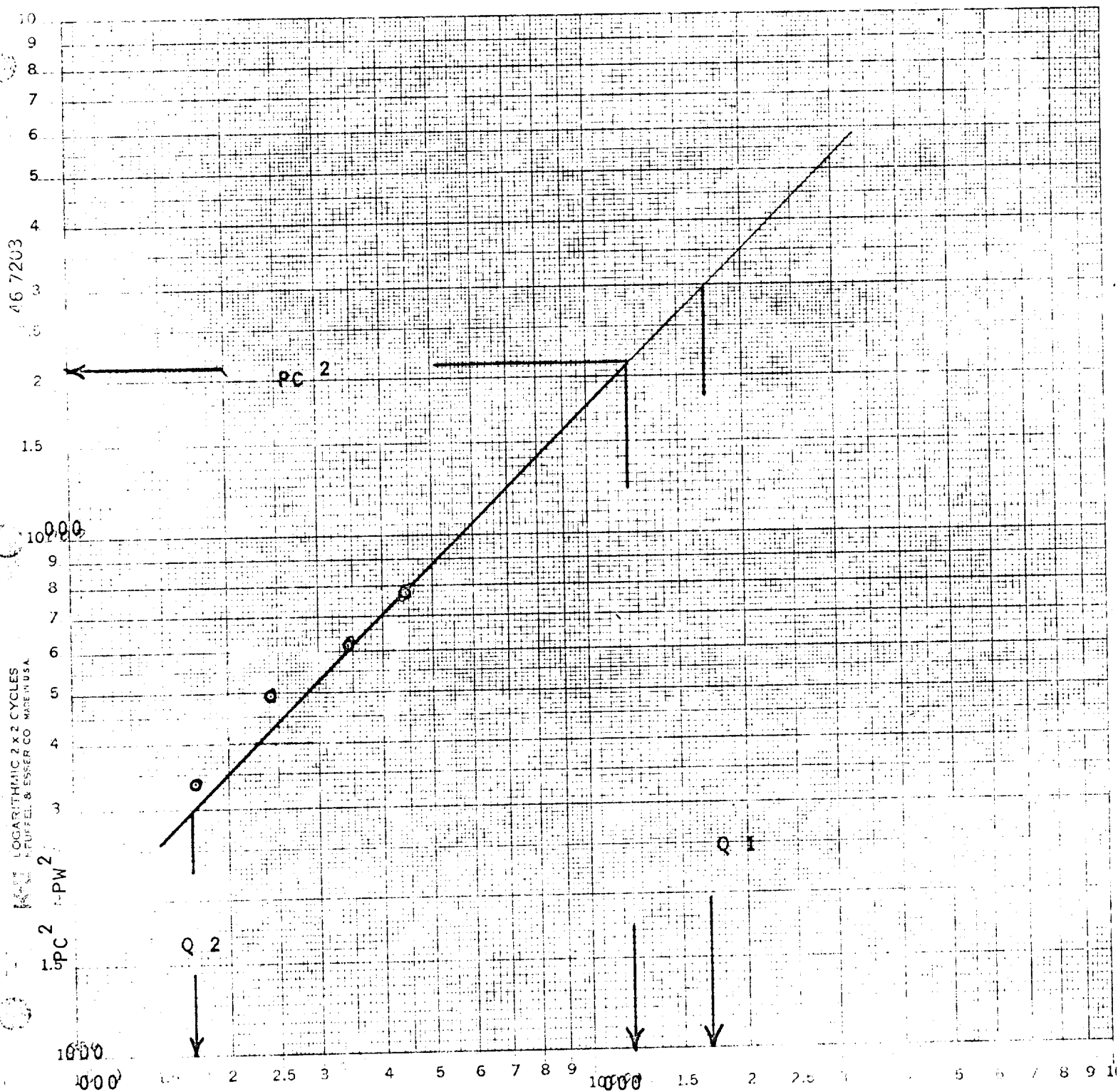
AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 12194$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.7340$

Actual or Open Flow	12194	Mcfd @ 15.025	Angle of Slope @	45.00	Slope, n	1.000
Remarks:						

Approved by Commission:	Conducted By: LARRY DAVIS	Calculated By: LARRY DAVIS	Checked By:
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OPEI OR: MESA PETROLEUM COMPA.
LEASE: MORROW
WELL NO.: 2
COUNTY EDDY
DATE: JUNE 2, 1976



Q IN MCF/DAY

Q1= 17000 MCF LOG Q. 4.23045

Q2 = 1700 MCF LOG Q² $\frac{3,23045}{1,00000}$

ABSOLUTE OPEN FLOW 12194 MCF/DAY