

NEW MEXICO OIL CONSERVATION COMMISSION
MULTI-POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-65

JUN 13 1986

Type Test 4-POINT ☒ Initial ☐ Annual ☐ Special		Test Date 4-25-86		735 FSG	
Company MCKAY OIL COMPANY		TO AIR		2310 FEL	
Pool WEST PECOS SLOPE ABO		Formation ABO		Unit	
Completion Date 4-22-86		Total Depth 3430'		Plug Back To 3199'	
Elevation 4178'		Form or Lease Name REMMELE		Well No. 2	
Casing Size 4.5	Wt. 9.5	d 4.090	Set At 3343	Perforations: From 2882 To 3171	
Flow Size 2.375	Wt. 4.7	d 1.995	Set At 2844	Perforations: From OPEN To ENDED	
Type Well - Single - Blindhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE	
Producing Thru TUBING		Reservoir Temp. °F 104 @ 3026		Mean Annual Temp. °F 60°	
Baro. Press. - P _g 13.2		State NEW MEXICO		County CHAVES	
L 3026	H 3026	G _g .627	% CO ₂ .057	% N ₂ 5.510	% H ₂ S 0
Prover 0		Motor Run 2.000		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							925	70	935		72 HRS
1.	2.000 X .125			908	0.00	50	908	70	915		60 MIN
2.	2.000 X .1875			885	0.00	50	885	72	895		60 MIN
3.	2.000 X .21875			855	0.00	52	855	74	875		60 MIN
4.	2.000 X .250			825	0.00	52	825	74	850		
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	.2648	0.000	921.2	1.010	1.263	1.086	338
2	.6082	0.000	898.2	1.010	1.263	1.084	755
3	.8393	0.000	868.2	1.008	1.263	1.079	1001
4	1.087	0.000	838.2	1.008	1.263	1.076	1248
5							

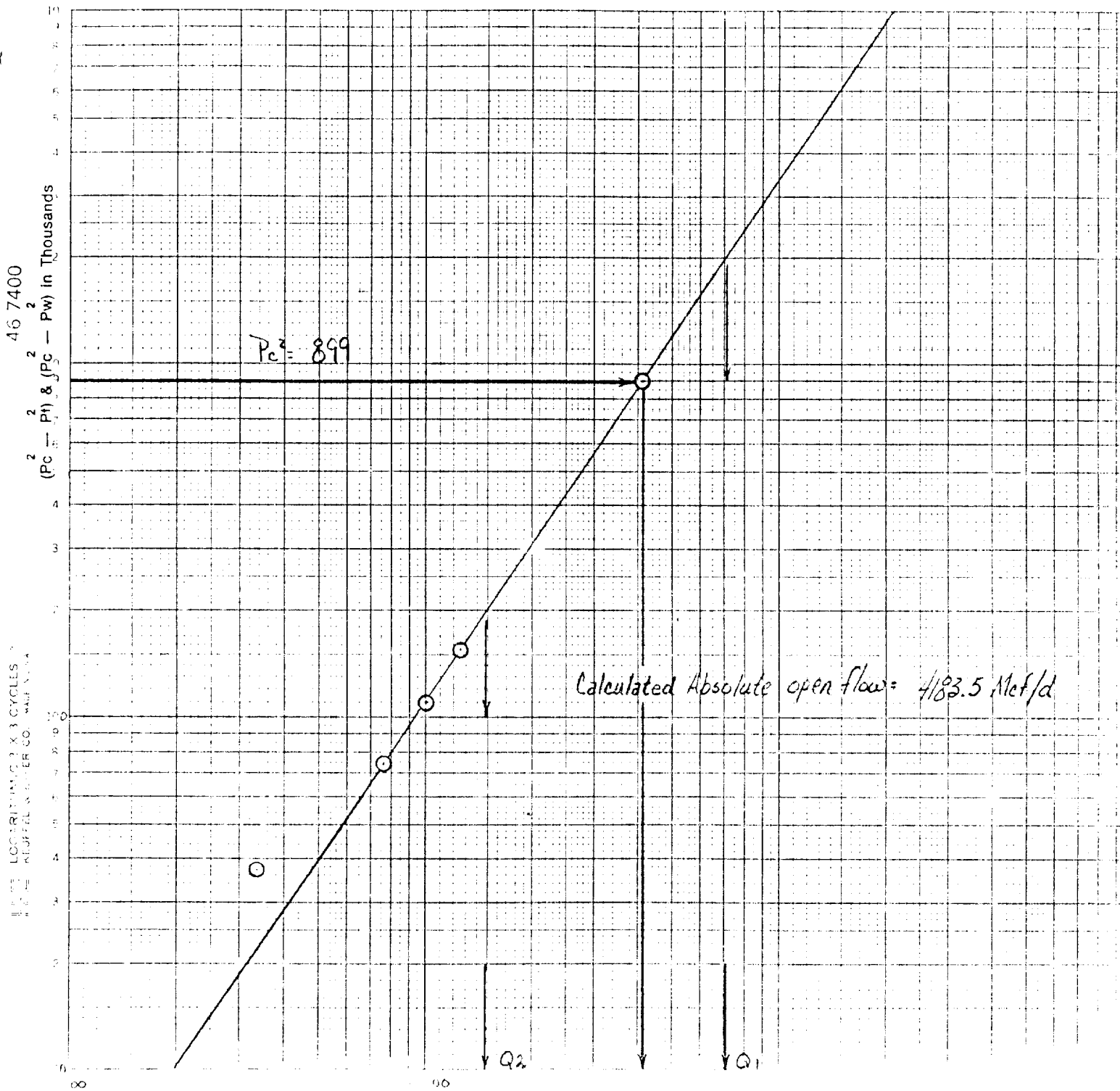
NO.	P _r	Temp. °R	T _r	Z	Gau Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	1.38	510	1.44	.848	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	1.35	510	1.44	.851	Specific Gravity Separator Gas _____
3	1.31	512	1.45	.859	Specific Gravity Flowing Fluid _____
4	1.26	512	1.45	.863	Critical Pressure _____ P.S.I.A.
5					Critical Temperature _____ °R

P _r 948.2	P _c 899	(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 5.8377$	(2) $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 3.3522$
NO.	P _r ²	P _w ²	P _r ² - P _w ²
1	928.2	862	37
2	908.2	825	74
3	888.2	789	110
4	863.2	745	154
5			

Absolute Open Flow 4183.5 Mcfd @ 15.025		Angle of Slope ° 55.57	Slope, n 0.6856
Remarks: CALCULATED WITH CASING PRESSURES			
Approved By Commission	Conducted By BENNETT & CATHEY	Calculated By RICHARD TOWNLEY	Checked By

WELL LOGGING SHEET

Operator McKay Oil Lease Remmele Well No. 2
 County Chaves Field West Pecos Slope Location 0 25 26.5 22 E
 Date of Test 1-25-86 Slope "n" 0.6856 Angle of Slope 35.57
 Calc. Abs. Potential 4183.5 MCF/D



$$\frac{\Delta P_1^2}{\Delta P_2^2} = \frac{Pc^2 - Pw_1^2}{Pc^2 - Pw_2^2} = \frac{1000}{800}$$

$$Q_1 = \underline{5335}$$

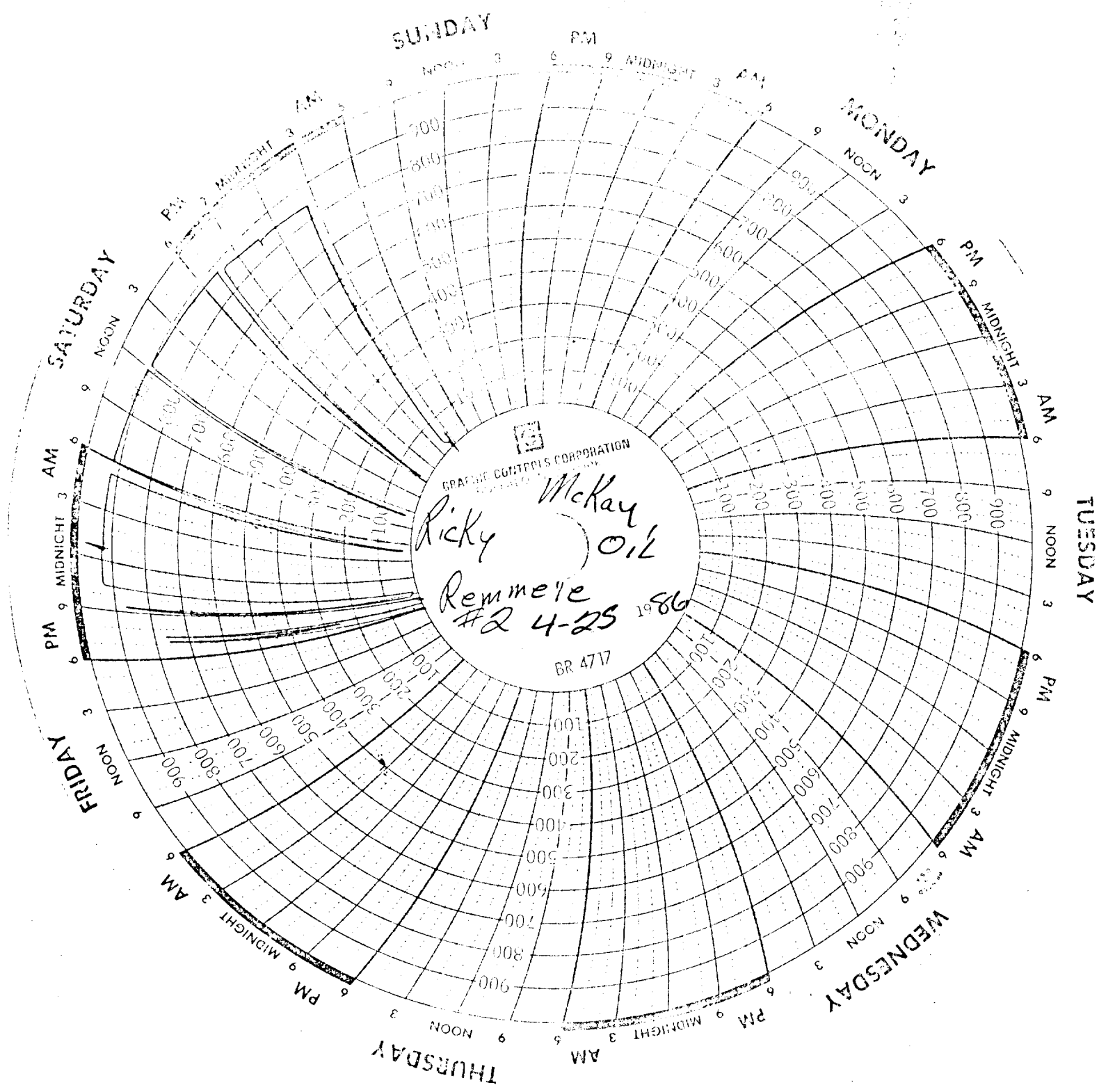
$$Q_2 = \underline{4400}$$

Q In MCF/Day

$$\text{LOG } Q_1 = \underline{3.7266}$$

$$\text{LOG } Q_2 = \underline{3.6430}$$

$$n = \underline{0.6856}$$



SUNDAY

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

SATURDAY