

RECEIVED

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLForm C-122
Revised 9-1-83

SEP 09 '88

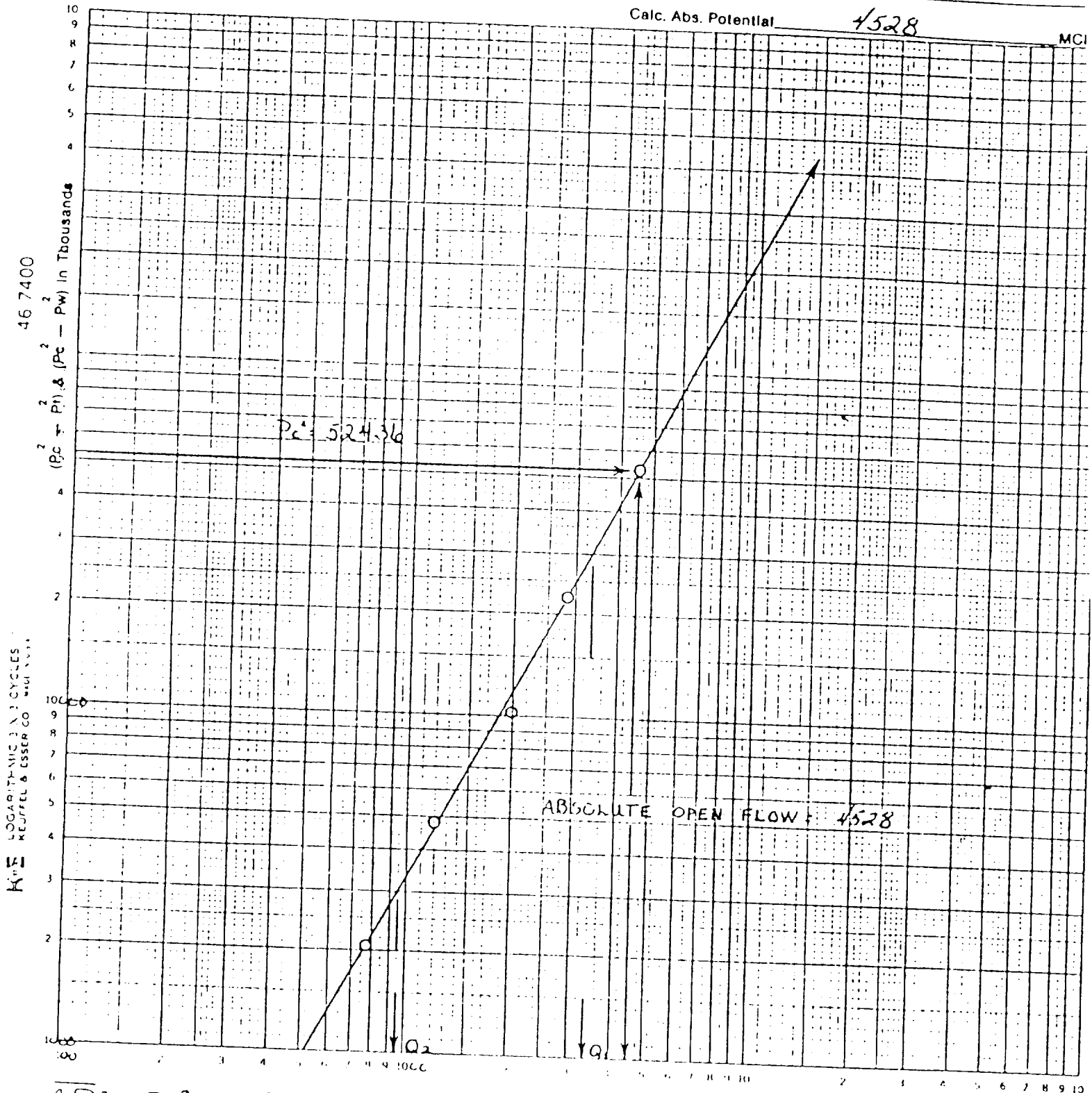
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File

Type Test 4-POINT ☒ Initial ☐ Annual ☐ Special		Test Date 12-31-83	
Company YATES PETROLEUM CORP.		Connection TO AIR	
Pool ROSS RANCH WOLFCAMP		Formation WOLFCAMP	
Completion Date		Total Depth 13,296	Plug Flow 13,296
Well Size 5.000		Well ID 19.5	Well Depth 4.276
Well ID 2.875		Well ID 6.9	Well ID 2.441
Well ID 12,745		Well ID 12,745	Well ID 12,745
Type Well - Single - (Floodhead - O.G. or A.O. Multiple) SINGLE		Perforations: From 11,738 To 13,112	Perforations: From 0 To 0
Producing thru TUBING		Reservoir Temp. °F 202 # 12,425	Mean Annual Temp. °F 60.0
L 12,425		H 12,425	Og 0.696
CO ₂ 0.34		N ₂ 0.44	H ₂ S 0
Proven 0		Water Run 4.0	Flange FLANGE
FLOW DATA			
NO.	Proven Line Size	Orifice Size	Press. p.s.i.g.
SI			
1	4.03 X 1.250	505	14.0
2	4.03 X 1.250	505	34.0
3	4.03 X 1.250	510	90.0
4	4.03 X 1.500	515	85.5
5			
TUBING DATA			
NO.	Proven Line Size	Orifice Size	Press. p.s.i.g.
SI			
1	4.03 X 1.250	505	14.0
2	4.03 X 1.250	505	34.0
3	4.03 X 1.250	510	90.0
4	4.03 X 1.500	515	85.5
5			
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{NP_m}$	Pressure P _m
1	7.47	85.18	518.2
2	7.47	132.74	518.2
3	7.47	217.00	523.2
4	10.84	212.51	528.2
5			
NO.	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{sp}
1	0.9636	1.1987	1.0471
2	0.9636	1.1987	1.0471
3	0.9777	1.1987	1.0524
4	0.9786	1.1987	1.0533
5			
NO.	Q, McM	Rate of Flow	
1	769.		
2	1199.		
3	1999.		
4	2846.		
5			
Gas Liquid Hydrocarbon Ratio 14.5			
A.P.I. Gravity of Liquid Hydrocarbons 54.0			
Specific Gravity Separator Gas 0.696			
Specific Gravity Flowing Fluid XXXXXX			
Critical Pressure 668. P.S.I.A.			
Critical Temperature 387. °F			
1,7241.3 1,52436			
NO.	P ₁	P ₂	P ₃
1	84313.	7097.	50368.
2	80536.	6901.	47630.
3	73140.	6506.	42325.
4	55282.	5469.	29908.
5			
(1) $\frac{P_0^2}{P_2^2 - P_1^2} = 2.3276$			
(2) $\left[\frac{P_2^2}{P_2^2 - P_1^2} \right]^n = 1.5907$			
AOF = 0 $\left[\frac{P_2^2}{P_2^2 - P_1^2} \right]^n = 4528.$			
Absolute Open Flow 4528. McM			
Well # 13 075			
Angle of Slope 61.2			
Slope, n 0.549			
BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS			

BACK PRESSURE CURVE

Operator Yates Lease Almost Texas Well No. 1
 County Lea Field 6007 Location 2 263 316
 Date of Test 12-31-83 Slope "n" 0.549 Angle of Slope 61.2

Calc. Abs. Potential 4528



$$\overline{\Delta P}_1^2 \quad P_c^2 - P_w^2 = 30,000$$

$$\overline{\Delta P}_2^2 \quad P_c^2 - P_w^2 = 3000$$

$$Q_1 = 3363$$

$$Q_2 = 1000$$

$$\text{LOG } Q_1 = 3.5267$$

$$\text{LOG } Q_2 = 2.9777$$