

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

RECEIVED
C-122 file
Revised 9-1-65

JUN 4 1982

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-8-82		O. C. D. ARTESIA OFFICE	
Company Yates Petroleum Corporation		Connection Transwestern Pipeline Co.			
Pool Kennedy Farms		Formation Morrow		Unit	
Completion Date 2-25-82		Total Depth 8420KB		Play Back To 8294KB	
				Elevation 3346KB	
Csg. Size 5 1/2	Wt. 17#	d 4.892	Set At 8420	Perforations: From 8239 To 8279KB	
Tub. Size 2-7/8"	Wt. 6.5#	d 2441	Set At 8237	Perforations: From 8209 To 8212KB	
Type Well - Single - Pradenhed - G.G. or G.O. Multiple SINGLE				Packer Set At 8202KB	
Producing Thru Tbng		Reservoir Temp. °F 141 @ 8259		Mean Annual Temp. °F 62	
				Baro. Press. - P _a 13.2	
L 8252	H 8252	Gg 0.6605	% CO ₂ 0.33	% N ₂ 0.36	% H ₂ S NIL
				Prover -	Meter Run 2"
				Type flanged	

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
51							2712	61			wks
1.	2.067 x 1.500			420	17	60	2486	67			16 hrs
2.	2.067 x 1.500			436	31	63	2381	68			24 hrs
3.	2.067 x 1.500			444	56	65	2277	68			24 hrs
4.	2.067 x 1.500			448	86	67	2198	68			24 hrs
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mhd
1	12.76	85.82	433.2	1.0000	1.260	1.0421	1438
2	12.76	118.01	449.2	0.9971	1.260	1.0426	1972
3	12.76	160.01	457.2	0.9952	1.260	1.0431	2671
4	12.76	199.16	461.2	0.9933	1.260	1.0427	3316
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.	0.643	520	1.417	.9208	92.54	60.8	0.630	X X X X X X X X	674	367
2.	0.666	523	1.425	.9199				X X X X X		
3.	0.678	525	1.431	.9190						
4.	0.684	527	1.436	.9198						
5.										

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²
1			10129	1858	
2			9340	2647	
3			8590	3397	
4			8058	3929	
5					

P _r 3462.2 P _w 11987		(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 3.5287$		(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3.5287$	
		AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 9425$			

Absolute Open Flow 9425 Mhd @ 15.025		Angle of Slope 45 deg		Slope, n 1.000	
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Remarks: Static pressured by Bennett Wireline, flowing pressures by DWT. Calculations worksheet C122D attached	
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Approved By Commission:	Conducted By:	Calculated By: Eddie Mahfood	Checked By:
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DATE

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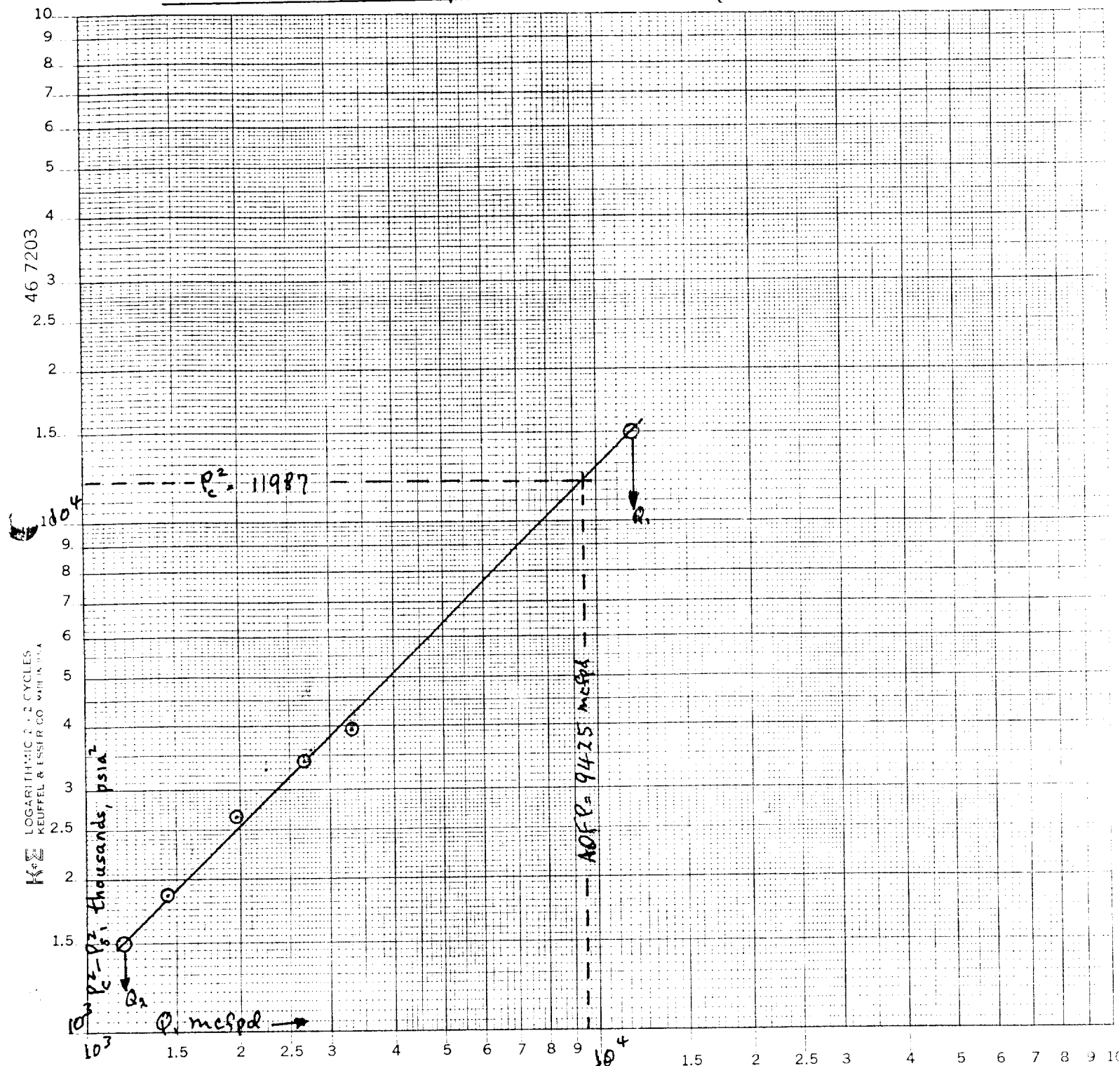
100

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LINE	FUNCTION	UNIT	VALUE	UNIT	VALUE	UNIT	VALUE	UNIT	VALUE
1	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
2	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
3	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
4	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
5	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
6	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
7	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
8	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
9	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
10	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
11	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
12	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
13	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
14	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
15	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
16	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
17	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
18	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
19	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
20	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
21	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
22	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438
23	$\Delta T = T_1 - T_2$	°C	1.438	°C	1.438	°C	1.438	°C	1.438

YPC - Ralph SJ Com. No. 1

E-10-17s-26E, Kennedy Farms, Morrow, Eddy Co. N.M.



$$Q_1 = 11750 \text{ mcfpd}$$

$$Q_2 = 1175 \text{ mcfpd}$$

$$\log Q_1 = 4.0700$$

$$\log Q_2 = 3.0700$$

$$n = 1.0000$$