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FILE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

JUN 1 1987

Type Test 4 PR. ☒ Initial ☐ Annual ☐ Special		Test Date DEC 20 '88		5-20-87	
Company MCKAY OIL CORP ✓		Connection TO AIR		O.C.D.	
Pool WEST PECOS SLOPE		Formation ABO		ARTESIA, OFFICE	
Completion Date 5-17-87		Total Depth 3456		Elevation 4137	
Casing Size 4.5		Set At 3430		Perforations: From 2919.5 To 2955	
Tubing Size 2.375		Set At 2883		Perforations: From OPEN To ENDED	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple SINGLE		Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 99 # 2937		Mean Annual Temp. °F 60	
Bore. Press. - P ₀ 13.2		State NEW MEXICO			
L 2937	H 2937	G _g .639	% CO ₂ .134	% N ₂ 6.930	Prover 2.000
FLOW DATA		TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w
SI					
1.	2.000	.125	915	0.00	73
2.	2.000	.21875	852	0.00	77
3.	2.000	.250	804	0.00	78
4.	2.000	.3125	710	0.00	79
5.					
RATE OF FLOW CALCULATIONS					
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g
1	0.2648	0.00	928.2	.9877	1.251
2	0.8393	0.00	865.2	.9840	1.251
3	1.087	0.00	817.2	.9831	1.251
4	1.672	0.00	723.2	.9822	1.251
5					
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	1.41	533	1.51	.870	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	1.31	537	1.52	.880	Specific Gravity Separator Gas _____
3	1.24	538	1.53	.888	Specific Gravity Flowing Fluid _____
4	1.10	539	1.53	.900	Critical Pressure _____ P.S.I.A.
5					Critical Temperature _____ °R
$P_r = 949.2$ $P_r^2 = 901$					
NO.	P _r	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.3836$
1	928.2	929.2	863	38	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.8273$
2	865.2	870.2	757	144	
3	817.2	823.2	668	233	
4	723.2	738.2	523	378	
5					
$AOIF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2861.4$					
Absolute Open Flow		2861		Mcf @ 15.025	
Angle of Slope		55.25		Slope, n	
0.694					
Remarks:					
Approved By Division		Conducted By:		Calculated By:	
		RICHARD TOWNLEY		RICHARD TOWNLEY	
				Checked By:	