

RECEIVED NOV 19 1984

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 11-15-84		710 FNL	
Company MCKAY OIL COMPANY				Connection AIR NEW WELL			660 FEL	
Pool PECOS SLOPE				Formation ABO			Unit A	
Completion Date 9-16-84		Total Depth 4172.		Plug Back To 4172.		Elevation		Farm or Lease Name MCKAY HARVEY FEDERAL
Case Size 4.500	Wt. 10.5	d 4.052	Set At 4229.	Perforations: From 4011. To 4052.		Well No. # 2		
Req. Size 2.375	Wt. 4.7	d 1.995	Set At 4002.	Perforations: From 0. To 0.		Unit A	Sec. 20	Twp. 9S
Type Well - Single - Blindhead - G.G. or G.O. Multiple SINGLE					Factor Set At		County CHAVES	
Producing thru TUBING		Reservoir Temp. °F 106 - 4032.		Mean Annual Temp. °F 60.0		Laro. Press. - P _a 13.2		State NEW MEXICO
L 4032.	H 4032.	C _g 0.679	% CO ₂ 0.03	% N ₂ 8.59	% H ₂ O 0.	Prover 2.0	Motor Run 0	Tap FLANGE

FLOW DATA						TUBING DATA		B.H.P. 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.		CHOKE
51							856		952.		544.0
1.	2.00 X 0.190			200.	0.	60.	820.	0.	907.	8/64	1.0
2.	2.00 X 0.190			425.	0.	60.	779.	0.	867.	10/64	1.0
3.	2.00 X 0.190			650.	0.	62.	720.	0.	805.	12/64	1.0
4.	2.00 X 0.220			625.	0.	62.	650.	0.	717.	16/64	1.0
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. Compres. Factor, F _{sp}	Rate of Flow O. Moid
1	0.63	0.	213.2	1.0000	1.2136	1.0200	165.
2	0.63	0.	438.2	1.0000	1.2136	1.0411	346.
3	0.63	0.	663.2	0.9981	1.2136	1.0613	533.
4	0.85	0.	638.2	0.9981	1.2136	1.0590	694.
5							

NO.	γ_l	Temp. °R	γ_g	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	0.33	520.	1.45	0.961	0.	0.	0.679	XXXXXX	654.	360.
2	0.67	520.	1.45	0.923	0.	0.	XXXXX	XXXXX	654.	360.
3	1.01	522.	1.45	0.888						
4	0.98	522.	1.45	0.892						
5										

NO.	r_c^2	r_w^2	r_e^2	$r_c^2 - r_w^2$	(1) $\frac{r_c^2}{r_e^2 - r_w^2} = 2.3614$	(2) $\left[\frac{r_c^2}{r_e^2 - r_w^2} \right]^n = 2.1996$
1	847.	826.	683.	67.		
2	775.	791.	625.	124.		
3	669.	735.	541.	209.		
4	533.	657.	432.	317.		
5						

Absolute Open Flow				Angle of Slope		Slope, n	
1526.				47.5		0.917	

Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.			
Approved By Commission	Conducted By DON BENNETT	Calculated By BENNETT & CATHEY INC.	Checked By