

C/SF
FILE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

NOV 08 '88

Type Test 4 POINT ☒ Initial ☐ Annual ☐ Special				Test Date 6-25-87		330 W O.C.D.	
Company MCKAY OIL CORP. ✓				Connection TO AIR		773 N ARTESIA, OFFICE	
Pool WEST PECOS SLOPE ABO				Formation ABO		Unit	
Completion Date 6-22-87		Total Depth 3400		Plug Back TD 3151		Elevation 4303	
Csg. Size 4.5		Wt. 11.6		Set At 4.000		Well No. 2	
Thq. Size 2.375		Wt. 4.7		Set At 1.995		Well No. 2	
Perforations: From 2695 To 3020		Perforations: From OPEN To ENDED		Unit D		Sec. 34 Twp. 5S Rge. 21E	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 60°		Baro. Press. - P ₀ 13.2		State NEW MEXICO	
L 2366		H 2366		G _g 0.626		% CO ₂ .083	
				% N ₂ 5.318		% H ₂ S 0	
Prover 2.000		Meter Run 0		Taps 0			

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.							810	74	810	74	72 HRS.
1.	2.000		.1875	730	0.00	64	730	75	730	75	60 MIN
2.	2.000		.21875	607	0.00	65	607	75	634	75	60 MIN
3.	2.000		.250	417	0.00	66	555	74	622	74	60 MIN
4.	2.000		.3125	335	0.00	66	482	74	592	74	60 MIN
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 O. Mcfd
1	.6082	0.00	536.2	.9962	1.264	1.061	435.6
2	1.087	0.00	620.2	.9952	1.264	1.051	891.3
3	1.672	0.00	430.2	.9943	1.264	1.047	947.2
4	2.378	0.00	348.2	.9943	1.264	1.041	1083.2
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	1.21	524	1.48	.888	A.P.L. Gravity of Liquid Hydrocarbons	0
2	.91	525	1.48	.905	Specific Gravity Separator Gas	0.626
3	.86	526	1.49	.913	Specific Gravity Flowing Fluid	XXXXXX
4	.75	526	1.49	.923	Critical Pressure	661 P.S.I.A.
5					Critical Temperature	354 R

NO.	P _i ²	P _w	P _w ²	P _i ² - P _w ²
1	823.2	678	552	126
2	743.2	419	259	259
3	635.2	403	275	275
4	605.2	366	312	312
5				

(1) $\frac{P_c^2}{P_i^2 - P_w^2} = 2.1731$

(2) $\left[\frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 2.1731$

AOF = Q $\left[\frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 2353.9$

Post ID-2
8-14-87
Comp & CK.

Absolute Open Flow	2354 Mcfd @ 15.025	Angle of Slope	45°	Slope, n	1.000
Remarks:					
Approved By Division					
Conducted By:		Calculated By:		Checked By:	