

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

Form C-122
 Revised 9-1-65

RECEIVED

Type Test 4POINT ☒ Initial ☐ Annual ☐ Special				Test Date 3/19/87		330 FWL	
Company MCKAY OIL CORP.				Connection TO AIR		JUN 10 '88	
Pool WEST PECOS SLOPE				Formation ABO		450 FSL	
Completion Date 1/16/87		Total Length 3378		Flag Back To 3234		Location 4017	
Csg. Size 4.5		Wt. 11.6		Set At 4.000		3327	
Perforations: From 2734.5 To 3145		Well No. 1		Perforations: From OPEN ENDED		Unit M	
Trq. Size 2.375		Wt. 4.7		Set At 1.995		2675	
Type Well - Single - Prodenhead - G.G. or G.O. Multiple SINGLE		Packer Set At NONE		County CHAVES		State NEW MEXICO	
Producing Thru TUBING		Reservoir Temp. °F 99 @ 2940		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 2940		H 2940		G _g .633		% CO ₂ 1.92	
				% N ₂ 4.884		% H ₂ S 0	
				Prover 2.000		Meter Run 0	
						Turn 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	Duration of Flow
SI							820	65	820	65	72 HRS
1.	2.000	.125		785	0.00	64	785	64	785	64	60 MIN
2.	2.000	.1875		710	0.00	60	710	60	712	60	60 MIN
3.	2.000	.21875		615	0.00	58	615	58	620	58	60 MIN
4.	2.000	.250		515	0.00	56	515	56	520	56	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 _{sp}	Rate of Flow Q, Mscf
1	.2648	0.00	798.2	.9962	1.257	1.065	282
2	.6082	0.00	723.2	1.0000	1.257	1.061	587
3	.8393	0.00	628.2	1.0020	1.257	1.052	699
4	1.087	0.00	528.2	1.0040	1.257	1.044	756
5							

NO.	η	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.L. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	1.19	524	1.49	.882			.633		669	351
2.	1.08	520	1.48	.889						
3.	.94	518	1.48	.903						
4.	.79	516	1.47	.917						
5.										

NO.	P _r ²	P _w ²	P _w ²	P _r ² - P _w ²
1	637	798.2	637	57
2	523	725.2	526	168
3	395	633.2	401	293
4	279	533.2	284	410
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 4.13095$

ADP = 0 $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1193.0$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.03247$

FACT = 0.2
 5-15-87
 Camp & BK

Absolute Open Flow	1193.0	Mscf @ 15.025	Angle of Slope @	63.5	Slope, n	0.500
Remarks:						
Approved By Commission:						
Conducted By:		Calculated By:		Checked By:		
BENNETT & CATHEY		RICHARD TOWNLEY				