

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

Form C-122
Revised 9-1-65

MAY 11 1987

Type Test 4POINT ☒ Initial ☐ Annual ☐ O. C. ☒ Special				Test Date 3/19/87		890 FWL	
Company MCKAY OIL CORP.				Connection ARTESIA, OFFICE		660 FWL FNL	
Pool WEST PECOS SLOPE (N)				Formation ABO		Unit	
Completion Date 3/16/87		Total Length 3400		Flag back To 3942		Elevation 4214	
Csg. Size 4.5		ID 4.090		Set At 3030		Perforations: From 2714 To 2856	
Tub. Size 2.375		ID 1.995		Set At 2645		Perforations: From OPEN To EDED	
Type well - Single - Production - G.C. or G.O. Multiple SINGLE				Packer set At NONE		County CHAVES	
Producing thru TUBING		Reservoir Temp. °F 98 @ 2785		Mean Annual Temp. °F 60		State NEW MEXICO	
L 2785		H 2785		Gg .616		% CO ₂ 1.42	
				% N ₂ 5.617		% 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.	
SI							662	68	660	68
1.	2.000		.125	640	0.00	68	640	68	641	68
2.	2.000		.1875	612	0.00	70	612	70	615	70
3.	2.000		.21875	568	0.00	70	568	70	570	70
4.	2.000		.250	530	0.00	68	530	68	538	68
5.	2.000		.3125	460	0.00	66	460	66	470	66

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w L^3 m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compens. Factor, Fpv	Rate of Flow Q, Mcf/d
1	0.2648	0.00	653.2	.9924	1.274	1.051	230
2	0.6082	0.00	625.2	.9905	1.274	1.047	502
3	0.8393	0.00	581.2	.9905	1.274	1.044	645
4	1.087	0.00	543.2	.9924	1.274	1.041	777
5	1.672	0.00	473.2	.9943	1.274	1.036	1038

NO.	η	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mc/Std.
1.	.99	528	1.52	.906	A.P.I. Gravity of Liquid Hydrocarbons	0
2.	.95	530	1.53	.912	Specific Gravity Separator Gas	.616
3.	.89	530	1.53	.918	Specific Gravity Flowing Fluid	X X X X X
4.	.83	528	1.52	.922	Critical Pressure	656 P.S.I.A.
5.	.72	526	1.52	.931	Critical Temperature	347 °F

NO.	P ₁	P _w	P ₂	P ₂ ² - P _w ²
1	427	654.2	428	25
2	391	628.2	395	58
3	338	583.2	340	113
4	295	551.2	304	149
5	224	483.2	233	220

(1) $\frac{P_2^2}{P_2^2 - P_w^2} = 2.0591$

AOF = Q $\left[\frac{P_2^2}{P_2^2 - P_w^2} \right]^n = 1762.4$

(2) $\left[\frac{P_2^2}{P_2^2 - P_w^2} \right]^n = 1.6979$

Post ID-2
5-15-87
comp + RK

Absolute Open Flow	1762	Mcf/d @ 15.025	Angle of Slope @	53.75	Slope, n	0.233
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Remarks:

Approved by Commission	Conducted By	Calculated By	Checked By:
	BENNETT & CATHEY	RICHARD TOWNLEY	