

MULTIPOINT AND ONE POINT BACK PRESSURE TEST

RECEIVED BY
FOR GAS WELL

AUG 7 - 1987

O. C. D.

ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-24-87	
Company MCKAY OIL CORPORATION		Connection Air	
Pool West Pecos Slope		Formation Abo	
Completion Date 7-24-87		Total Depth 4276'	
Plug Back TD 3920'		Elevation 4193 GL	
Farm or Lease Name Inexco State		Well No. #1	
Casing Size 4-1/2" 11.6#		Set At 4.000 4269'	
Perforations: From 2978' To 3804.5'		Unit Sec. Twp. Rce. N 32 5S 22E	
Thru Size 2-3/8" 4.7#		Set At 1.995 2938	
Perforations: From -- To --		County Chaves	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single		Packer Set At -----	
Producing Thru Tubing		Reservoir Temp. °F 92 # 3391.25	
Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico		Meter Run --	
L 3391.25		H 3391.25	
G _g 0.584		% CO ₂ 0.00	
% N ₂ 5.501		% H ₂ S 0.00	
Prover 2.00		Taps --	

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							860		865	
1.	2.000	.250	115	--	88	812	88	815	88	60 MIN
2.	2.000	.375	71	--	88	766	88	771	88	60 MIN
3.	2.000	.375	106	--	84	685	84	686	84	60 MIN
4.	2.000	.500	56	--	80	470	80	615	80	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 Q, Mcfd
1	1.087	--	128.2	.9741	1.309	1.007	179
2	2.378	--	84.2	.9741	1.309	1.005	257
3	2.378	--	119.2	.9777	1.309	1.007	365
4	4.279	--	69.2	.9813	1.309	1.004	382
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.19	548	1.64	.986	0	
2	0.13	548	1.64	.990	0	
3	0.18	544	1.62	.987	0.584	
4	0.10	540	1.61	.992		
5						

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²
1	878.2	771.2	828.2	685.9	85.3
2			784.2	615.0	156.2
3			699.2	488.9	282.3
4			628.2	394.6	376.6
5					

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 9.041$		(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3.715$	
AOF = 0 $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 665$		Post ID 2 8-28-87 comp & B14	

Absolute Open Flow 665 Mcfd @ 15.025		Angle of Slope @ 59.20		Slope, n 0.596	
Remarks: Well started making water in last half of 4th flow period, increasing to 1.0 BW per hour.					
Approved By Division		Conducted By: D. Kelton		Calculated By: C. Sanders	
				Checked By: P. Stewart	

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