

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

45F
File
Form C-122
Revised 9-1-66

RECEIVED BY

JUN 28 1984

O. C. D.
ARTESIA, OFFICE

Type Test 4 POINT ☒ Initial ☐ Annual ☐ Special		Test Date 3-27-84	
Company CHAMA PETROLEUM CO.		Connection TO AIR NEW WELL	
Pool UD MORROW		Formation MORROW	
Completion Date 3-24-84	Total Depth 9755.	Plug Hole 9325.	Elevation 3500.
Well Size 4.500	Wt. 11.6	Set At 3.000	9755.
Trp. Size 2.375	Wt. 4.7	Lot At 1.995	9025.
Type Well - Single - Headhead - G.O. or G.O. Multiple		Packer Set At 9025.	
Producing Thru TUBING	Reservoir Temp. °F 204 @ 9244.	Mean Annual Temp. °F 60.0	Leak. Press. - P _a 13.2
L 9244.	H 9244.	G _g 1.009	% CO ₂ 42.88
			% N ₂ 3.80
			% H ₂ O 0.
			Provd 0
			Motor Run 4.0
			Type FLANGE

NO.	Provd Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	TUBING DATA		B.H.P. DATA		Duration of Flow
							Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	CHOKE	
51							2327.		3442.		69.5
1.	4.03	X	1.500	237.	1.0	66.	2135.	0	3407.	5/64	1.0
2.	4.03	X	1.500	230.	4.1	70.	1922.	0	3057.	8/64	1.0
3.	4.03	X	1.500	230.	7.7	69.	1220.	0	2591.	12/64	1.0
4.	4.03	X	1.500	230.	12.0	63.	285.	0	1413.	14.5/64	1.0
5.											
RATE OF FLOW CALCULATIONS											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super. Compres. Factor, F _{pv}	Rate of Flow Q, Mscf/d
1	11.61	15.82	250.2	0.9943	0.9955	1.0254	186.
2	11.61	31.58	243.2	0.9905	0.9955	1.0241	370.
3	11.61	43.41	243.2	0.9915	0.9955	1.0242	510.
4	11.61	54.02	243.2	0.9971	0.9955	1.0250	638.
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	0	Mcf/bbl.
1	0.30	526.	1.30	0.951	A.P.I. Gravity of Liquid Hydrocarbons	0	Deq.
2	0.29	530.	1.31	0.953	Specific Gravity Separator Gas	1.009	XXXXXXX
3	0.29	529.	1.31	0.953	Specific Gravity Flowing Fluid	XXXXXX	1.009
4	0.29	523.	1.30	0.952	Critical Pressure	834.	P.s.i.a. 834.
5					Critical Temperature	404.	P.s.i.a. 404.

P_t 2304.5 P_c 5311.

NO.	P _t ²	P _w	P _w ²	P _t ² - P _w ²	(1) $\frac{P_t^2}{P_t^2 - P_w^2} = 2.3923$	(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 1.5467$
1	11698.	2281.	5203.	108.	AOF = Q $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 788.8$	
2	9426.	2053.	4216.	1095.		
3	6782.	1758.	3091.	2220.		
4	2034.	1004.	1008.	4303.		
5						

Absolute Open Flow 788.8 Mscf @ 15.025 Angle of Slope 63.5 Slope, n .500

Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.

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