

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT A ONE POINT BACK PRESSURE TEST OR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 11-27-72		FEB 1 1973		
Company Midwest Oil Corporation				Connection None				Unit O. B. L.	
Pool South Carlsbad				Formation Atoka				Unit ARTESIA, OFFICE	
Completion Date 11-27-72		Total Depth 11850		Plug Back TD 10870		Elevation GL 3299		Farm or Lease Name M. W. State W	
Csg. Size 4 1/2	Wt. 11.60	d 	Set At 	Perforations: From 10,740 To 10,778				Well No. 1	
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 10,350	Perforations: From None To				Unit Sec. Twp. Rge. G 3 23 26	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single (when tested)					Packer Set At 10350		County Eddy		
Producing Thru Tbg.		Reservoir Temp. °F 181 @ 10,759		Mean Annual Temp. °F 		Baro. Press. - P _a 13.2		State New Mexico	
L 10,759	H 10,759	Gg .599	% CO ₂ 0.44	% N ₂ 0.64	% H ₂ S -0-	Prover 	Meter Run 4"	Taps Flg.	

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							4425	74			
1.	4	x	1.250	345	4.5	66	4265				1 hr
2.	4	x	1.250	390	18.0	91	3912				1 hr
3.	4	x	1.250	485	40.0	89	3207				1 hr
4.	4	x	1.250	580	49.0	81	2450				1 hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	7.469	40.15	358.2	.9743	1.292	1.029	396
2	7.469	85.19	403.2	.9715	1.292	1.028	821
3	7.469	141.17	498.2	.9732	1.292	1.034	1371
4	7.469	170.49	593.2	.9804	1.292	1.043	1682
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.53	526	1.49	.945	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.60	551	1.56	.947	Specific Gravity Separator Gas .599
3	.74	549	1.55	.935	Specific Gravity Flowing Fluid X.X.X.X.X
4	.88	541	1.53	.919	Critical Pressure 672 P.S.I.A.
5					Critical Temperature 354 R

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.126$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.632$
1		4278.9	18303.6	1330.7			
2		3908.3	15275.1	4265.1			
3		3230.2	10433.2	9264.4			
4		2481.6	6158.2	13539.4			
5							

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.237$			
Angle of Slope = 2.237	Meter @ 15.025	Angle of Slope = 57.0	Slope, n = .649

Remarks: No measurable amount of fluid made during test.			
Approved by Commission:	Conducted By: J. C. Roberts and Reggie Reston	Calculated By: Reggie Reston	Checked By: Joe B. Murray