

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

Form C-122
 Revised 9-1-65

File
RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5-26-66		FEB 7 1967	
Company MOBIL OIL CORP. AGENT FOR CHEVRON OIL CO.				Connection MARATHON		O. C. C. ARTESIA, OFFICE	
Pool INDIAN BASIN				Formation UPPER PENNSYLVANIAN		Unit BOGLE FLATS	
Completion Date 5-21-66		Total Depth 7263'		Plug Back TD 7229'		Elevation 4186' DF	
Csg. Size 4 1/2		Wt. 9.50		Set At 7263		Perforations: From 7071 To 7196	
Tbg. Size 2 3/8		Wt. 4.70		Set At 7000		Perforations: OPEN ENDED From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 7000'		Well No. 9	
Producing Thru TUBING		Reservoir Temp. °F 138# 7134		Mean Annual Temp. °F -		Baro. Press. - P _a 13.2	
L 7071		H 7111		% CO ₂ 0.80		% N ₂ 0.35	
G _g .711		% H ₂ S 0.28		Prover 3"		Meter Run FL	
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.
SI							Temp. °F
1.	3		1.625	7.4	8.3	72	2313
2.	3		1.625	7.5	6.5	78	1985
3.	3		1.625	7.5	5.0	82	2091
4.	3		1.625	7.5	3.5	84	2177
5.							2257
METER FACTOR (100 x 1000) RATE OF FLOW CALCULATIONS = <u>3.162</u>							
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.	13.24	61.42	547.6	.9887	1.186	1.064	3208
2.	13.24	48.75	562.5	.9831	1.186	1.062	2527
3.	13.24	37.50	562.5	.9795	1.186	1.059	1931
4.	13.24	26.25	562.5	.9777	1.186	1.059	1349
5.							
NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio <u>DRY GAS</u> Mcf/bbl.		
1.	0.82	532	1.36	0.884	A.P.I. Gravity of Liquid Hydrocarbons <u>-</u> Deg.		
2.	0.84	538	1.38	0.887	Specific Gravity Separator Gas <u>0.711</u> XXXXXXXXXX		
3.	0.84	542	1.39	0.891	Specific Gravity Flowing Fluid <u>XXXXXX</u> -		
4.	0.84	544	1.39	0.891	Critical Pressure <u>671</u> P.S.I.A. - P.S.I.A.		
5.					Critical Temperature <u>391</u> R - R		
$P_c = 2870.2$ $P_w = 8238.0$					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 9.399$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8.410$		
NO.	P _t ²	P _w ²	R _t ²	R _w ²	AOF = Q $\left[\frac{R_c^2}{R_c^2 - R_w^2} \right]^n = 26976$		
1.	2713.2	7361.5	8765	679.9			
2.	2749.2	7558.1	679.9	580.5			
3.	2767.2	7657.4	580.5	357.6			
4.	2807.2	7880.4	357.6				
5.							
Absolute Open Flow <u>26976</u> Mcfd @ 15.025				Angle of Slope Θ <u>-</u>		Slope, n <u>.951</u>	
Remarks: * BHP @ (-2948) 7134' MID POINT OF CASING PERFORATIONS							
Approved By Commission: <i>[Signature]</i>		Conducted By: COLEMAN PETRO. ENG.		Calculated By: JOE A. COLEMAN		Checked By: JOE A. COLEMAN	