

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date						
Company Caulkins Oil Company					Connection						
Pool Basin Dakota					Formation Dakota						
Completion Date 7-3-84			Total Depth 7630'		Plug Back TD 7630'		Elevation 6723 Gr		Farm or Lease Name Breech "D"		
Csg. Size 5 1/2"		Wt. 17# 15.5#		4.950 4.892		Set At 7630'		Perforations: From 7486' To 7274'		Well No. 346-M	
Thq. Size 1 1/2"		Wt. 2.9#		1.900		Set At 7413'		Perforations: From 7413' To		Unit Sec. Twp. Rge. I 22 26N 6W	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple Gas Gas Multiple								Packer Set At 5574'		County Rio Arriba	
Producing Thru Tubing			Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _g		State New Mexico		
L		H		G _g		% CO ₂		% N ₂		% H ₂ S	
Prover		Meter Run		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.	Temp. °F	of Flow
SI							1707				7 Days
1.							89				3 Hours
2.											
3.											
4.											
5.											

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 Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	14.1605		101	1.000	1.000	1.000	1,432
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	
2.					Specific Gravity Separator Gas _____ XXXXXXXXXX	
3.					Specific Gravity Flowing Fluid _____ XXXXX	
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.	
5.					Critical Temperature _____ R _____ R	

P _c 1719 P _c ² 2,954,961				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1	10,201	420	176,400	2,778,561
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.063$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0472$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,500$$

Absolute Open Flow 1,500 Mcfd @ 15.025		Angle of Slope 75	Slope, n
Remarks:			

Approved By Division	Conducted By:	Calculated By:	Checked By:
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