

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test		☒ Initial		☐ Annual		☐ Special		Test Date		7-15-82	
Company				Connection							
Caulkins Oil Company											
Pool				Formation				Unit			
Basin Dakota				Dakota				M			
Completion Date		Total Depth		Plug Back TD		Elevation		Farm or Lease Name			
7-8-82		7489		7489		6628		Sanchez			
Coq. Size	Wt. 17#	d 4.950	Set At	Perforations:		Well No.					
5 1/2	15.5#	4.892	7489	From 7410 To 7159		4-E					
Thq. Size	Wt.	d	Set At	Perforations:		Unit		Sec.	Twp.	Rye.	
2 1/16	3.25	1.750	7342	From 7342 To		M		25	26N	6W	
Type Well - Single - Brdenhead - G.C. or G.O. Multiple						Packer Set At		County			
Gas - Gas Multiple						5589		Rio Arriba			
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State			
Tubing		#						New Mexico			
L	H	Gq	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps			
FLOW DATA						TUBING DATA		CASING DATA		Duration	
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							1653		617		7-Days
1.							213		1209		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, Mc/d				
1	14.1605		225	1.000	1.000	1.000	3,186				
2.											
3.											
4.											
5.											
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.						
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
2.					Specific Gravity Separator Gas _____ X X X X X X X X						
3.					Specific Gravity Flowing Fluid _____ X X X X X						
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.						
5.					Critical Temperature _____ R _____ R						
$P_c = 1665$ $P_c^2 = 2,772,225$											
NO.	P _t ²	P _w	P _t ²	P _t ² - P _w ²	(1) $\frac{P_c^2}{P_t^2 - P_w^2} = 1.264$		(2) $\left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 1.1921$				
1	50,625		579,021	2,193,204							
2											
3											
4											
5											
$AOF = Q \left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 3,798$											
Absolute Open Flow				3,798		Mcf @ 15.025		Angle of Slope @		75	
Slope, n											
Remarks:											
Approved By Division											
Conducted By:											
Calculated By:											
Checked By:											