

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 1-27-79			
Company Benson Mineral Group, Inc.				Connection None					
Pool Rusty Chacra Extension				Formation Chacra				Unit	
Completion Date 6-30-78		Total Depth 1882'		Plug Back TD		Elevation 6802' GR		Farm or Lease Name Navajo 21	
Crp. Size 4 1/2"	Wt. 9.5#	d 4.090	Set At 1879'	Perforations: From 1543 To 1630		Well No. #1			
Tub. Size 2 3/8"	Wt. 2.375#	d 1.995	Set At 1836	Perforations: Open-Ended From To		Unit Sec. Twp. Rge. 21- 22N- 7W			
Type Well - Single - Bradenhead - C.G. or G.O. Multiple Single				Facker Set At None		County Sandoval			
Producing Thru tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F 60		Baro. Press. - P _a		State New Mexico	
L 1836	H	Gg .60	% 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.	
51	7 months						415	60	410	60
1.							35		105	
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	12.365		47	1.0	1.0	1.0	581
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 427	P _c ² 182329	
NO.	P _t ²	P _w
1		117
		13689
		168640
2		
3		
4		
5		

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{182329}{168640}$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 621$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.07$$

Absolute Open Flow	621	Mcf/d @ 15.025	Angle of Slope θ	
Remarks:				

Approved By Commission:	Conducted By: Kurt Nelson	Calculated By: Sue Johnson	Checked By: Paul Ellison
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