

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 9-17-78			
Company Benson Mineral Group, Inc.				Connection None					
Pool Wildcat				Formation Chacra				Unit	
Completion Date 9-17-78		Total Depth 2100'		Plug Back TD		Elevation 6917 GR		Farm or Lease Name Federal 20-22-6	
Cng. Size 4 1/2"	Wt. 9.5#	d 4.090	Set At 2100'	Perforations: From 1798 To 1848		Well No. 1			
Tub. Size 2 3/8"	Wt. 4.7	d 1.995	Set At 1886	Perforations: Open - ended From To		Unit Soc. Twp. Rge. 20 22N 6W			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At None		County Sandoval	
Producing Thru Tubing		Reservoir Temp. °F 60		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico	
L 1886	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.		Temp. °F
SI	9 days						260	60	280	60	
1.	3/4" choke						25		130		3 hrs.
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		37	1.0	1.0	1.0	458
2.							
3.							
4.							
5.							

NO.	P _f	Temp. °R	T _f	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

NO.	P _f ²	P _w	P _w ²	P _f ² - P _w ²
1		142	20164	65100
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{85264}{65100}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.257$

AOFP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 576$

Absolute Open Flow	576	Mcf/d @ 15.025	Angle of Slope →	Slope, n 85
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Remarks:

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