

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 6-21-79		10-5 1978	
Company Depco				Connection			
Pool Buffalo Valley Penn				Formation Morrow		Unit	
Completion Date 6-17-79		Total Depth 9397		Plug Back TD 9107		Elevation 3566 Gr	
Form or Lease Name Brotar Com.				Well No. 1			
Csg. Size 4 1/2	Wt. 11.6	d	Set At 9397	Perforations: From 8974 To 9024		Unit Sec. Twp. Rge. D 20 15S 28E	
Tbg. Size 2 3/8	Wt. 4.7	d	Set At 8938	Perforations: From Open Ended			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8938		County	
Producing Thru Tubing		Reservoir Temp. *F 144		Mean Annual Temp. *F 8999		Baro. Press. - P _a New Mexico	
L 8999	H	G _g .683	% CO ₂ .38	% N ₂ 1.15	% H ₂ S Trace	Prover	Meter Run X
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. *F	Duration of Flow
1.	2" x 1.250"			354.3	5.76	78	1 Hr.
2.	2" x 1.250"			361.8	7.56	79	1 Hr.
3.	2" x 1.250"			361.8	10.24	79	1 Hr.
4.	2" x 1.250"			361.8	14.44	79	1 Hr.
5.							
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor F _{sp}	Rate of Flow Q, Mscf
1	8.120	46.01	367.5	.9831	1.210	1.038	461
2	8.120	53.24	375.0	.9822	1.210	1.038	533
3	8.120	61.97	375.0	.9822	1.210	1.038	621
4	8.120	73.59	375.0	.9822	1.210	1.038	737
5							
NO.	P _r	Temp. *F	T _r	Z	Gas-Liquid Hydrocarbon Ratio 31,620 Mcf/Ebl.		
1	.549	538	1.394	.928	A.P.L. Gravity of Liquid Hydrocarbons		
2	.560	539	1.396	.929	Specific Gravity Separator Gas .683 X X X X X X X X		
3	.560	539	1.396	.929	Specific Gravity Flowing Fluid X X X X X		
4	.560	539	1.396	.929	Critical Pressure 669 P.S.I.A. P.S.I.A.		
5					Critical Temperature 386 R R		
NO.	P _r ²	P _s	P _s ²	P _r ² - P _s ²	(1) $\frac{P_r^2}{P_s^2 - P_r^2} = 1.332$		
1		2140.2	4580	3889	(2) $\left[\frac{P_r^2}{P_s^2 - P_r^2} \right]^n = 1.332$		
2		1921.2	3691	4778			
3		1680.2	2823	5646	ACF = 0 $\left[\frac{P_r^2}{P_s^2 - P_r^2} \right]^n = 981$		
4		1452.2	2109	6360			
5							
Absolute Open Flow 980				Mscf @ 15.025		Angle of Slope = 45°	
Remarks:				Slope = 1.000			
Approved By Commission				Consented By Jones			
				Checked By Harrington			