

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: 4-9-85									
Company: Amoco Production Company		Connection:									
Pool: Bravo Dome Carbon Dioxide		Formation:									
Unit - 640 acre area		Tubh:									
Completion Date: 1-13-72	Total Depth: 2713	Plug Back TD: 2646	Elevation: 4979								
Csg. Size: 4-1/2	Wt.: 9.5	Set At: 2678	Perforations: From 2369 To 2631								
Tbg. Size: 2-3/8	Wt.: 4.7	Set At: 2330	Perforations: From To								
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single		Packer Set At: 2330	Well No.: 2133 361K								
Producing Thru: Tubing	Reservoir Temp. °F: 90° @ 2500	Mean Annual Temp. °F: 50	Baro. Press. - P _a : 12.2								
L: 2500	H: 2500	G _g : 1.529	% CO ₂ : 100 % N ₂ : 0 % H ₂ S: 0								
Prover: 4.0		Meter Run: 4.0	Taps: Flange								
FLOW DATA											
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	TUBING DATA		CASING DATA		Duration of Flow
							Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							312				
1.	4.026 x 2.125			200	39	54	212.2	50			24 hr.
2.	4.026 x 2.125			219	29	56	231.2	50			24 hr.
3.	4.026 x 2.125			237	23	57	249.2	50			24 hr.
4.	4.026 x 2.125			257	16	59	269.2	50			24 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 _{pv}	Rate of Flow Q, Mcfd				
1											
2							1670				
3							1560				
4							1438				
5							1259				
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.						
1.					A.P.I. Gravity of Liquid Hydrocarbons: 0 Deg.						
2.					Specific Gravity Separator Gas: 1.529	X X X X X X X X					
3.					Specific Gravity Flowing Fluid: X X X X X						
4.					Critical Pressure: 1072 P.S.I.A.	P.S.I.A.					
5.					Critical Temperature: 547 R	R					
P _c 324.2 P _c ² 105,106											
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$					
1		212.2		60.077	$\frac{P_c^2}{P_c^2 - P_w^2} = 1.75$	$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.29$					
2		271.2		51.652							
3		249.2		43.005							
4		269.2		32.637							
5											
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$					2160						
Absolute Open Flow: 2160 Mcfd @ 15.025					Angle of Slope ϕ : Slope, n: .46						
Remarks:											
Approved By Commission:		Conducted By:		Calculated By: D. D. Kimble		Checked By:					

2133 361K

46 7200

46 7200

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$Q = MCF$

$AOF = 2160$

$P_c^2 - P_w^2$

