

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

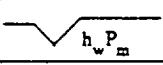
Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

51

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator ARCO PERMAIN					Lease or Unit Name HAMOND 17 FED COM					
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 8/6/97		Well No.			
Completion Date 5/19/97		Total Depth 9680		Plug Back TD 9633		Elevation		Unit Ltr. - Sec. - TWP - Rge. T 17.18-S 27-E		
Csg. Size 5 1/2	Wt. 17#	d 4.892	Set At 9680	Perforations: From: 9473 To: 9494			County Eddy			
Tbg. Size 2 3/8	Wt. 4.7#	d 1.995	Set At 9407	Perforations: From: To:			Formation Morrow			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9416		Connection Sales				
Producing Thru Tbg		Reservoir Temp. °F 168.2		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2		Miles Run 3.068		
L 9416	H 9416	Gg .632	% CO ₂ .58	% N ₂ .39	% H ₂ S	Prover		Taps F/G		
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							1290		PKR	
1.	3.068 X 2.000			32.4	4	91°	1145	84°		
2.	3.068 X 2.000			34.8	7.8	87°	1070	86°		
3.	3.068 X 2.000			41.0	12.2	87°	1000	84°		
4.	3.068 X 2.000			41.0	18.5	87°	910	82°		
5.										
RATE OF FLOW CALCULATIONS										
NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd			
1.	21.32	11.38	32.4	.9715	1.258	1.041	308			
2.	21.32	16.47	34.8	.9750	1.258	1.043	449			
3.	21.32	22.36	41.0	.9750	1.258	1.043	609			
4.	21.32	27.54	41.0	.9750	1.258	1.043	751			
5.										
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio N/A Mcf/bbl.					
1.	.81	551	1.51	.922	A.P. I. Gravity of Liquid Hydrocarbons N/A Deg.					
2.	.81	547	1.50	.919	Specific Gravity Separator Gas XXXXXXXXXX					
3.	.81	547	1.50	.919	Specific Gravity Flowing Fluid N/A XXXXX					
4.	.81	547	1.50	.915	Critical Pressure 673 P.S.I.A. P.S.I.A.					
5.					Critical Temperature 364 R R					
P _c 1303.2 - P _c 1698.3					$1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.048 \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.048$					
NO.	P _i	P _w	P _w ²	P _c ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.538$					
1.	1341.4	1159.4	1344.2	354.1						
2.	1173.3	1085.9	1179.3	519.1						
3.	1026.6	1018.6	1037.6	660.8						
4.	852.3	932.3	869.2	829.1						
5.										
Absolute Open Flow 1.538 Mcfd @ 15.025					Angle of Slope θ 45°		Slope, n 1.000			
Remarks: * No fluid made during test										
Approved By Division			Conducted By: Pro Well Testing			Calculated By: M. B.			Checked By: B. M.	