

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

C/SF
C-122 MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 3-12-82		MAY - 7 1982							
Company Yates Petroleum Corporation		Connection Transwestern Pipeline Company									
Pool Pecos Slope Abo.		Formation Abo		Unit LG-250							
Completion Date 12-31-81		Total Length 4150'		Plug Back TD 4087'		Elevation 3838' KB 3932' GR		Farm or Lease Name Margaret RO State			
Coq. Size 4-1/2"		Wt. 9.5#		Set At 4150'		Perforations: From 3601' To 3750'		Well No. 1			
Tqg. Size 2-3/8"		Wt. 4.7#		Set At 3658'		Perforations: From - To -		Unit Sec. Twp. Rge. K 36 4S 24E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At None		County Chaves					
Producing Thru Tubing		Reservoir Temp. *F 93° 4147		Mean Annual Temp. *F 60		Baro. Press. - P _a 13.2		State New Mexico			
L 3658		H 3658		C _g 0.668		% CO ₂ 0.79		% N ₂ 5.73			
						% H ₂ S 0		Prover ---			
								Meter Run 2"			
								Taps Flange			
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	of Flow
SI							998				days
1.	2.067 x 1.000			230	10	54	912	64			24 hrs
2.	2.067 x 1.000			230	24	54	850	64			24 hrs
3.	2.067 x 1.000			375	36	63	790	66			24 hrs
4.	2.067 x 1.000			375	75	63	747	66			24 hrs
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	4.946	49.32	243.2	1.006	1.224	1.024	307				
2	4.946	76.40	243.2	1.006	1.225	1.024	476				
3	4.946	118.22	388.2	0.9971	1.224	1.037	740				
4	4.946	170.63	388.2	0.9971	1.224	1.037	1068				
5											
NO.	P _i	Temp. *F	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/gal.						
1	0.367	514	1.412	0.954	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
2	0.367	514	1.412	0.954	Specific Gravity Separator Gas 0.668 XXXXXXXXXX						
3	0.586	523	1.437	0.930	Specific Gravity Flowing Fluid XXXXX						
4	0.586	523	1.437	0.930	Critical Pressure 662 P.S.I.A. P.S.I.A.						
5					Critical Temperature 364 R R						
P _c 1011.2		P _c ² 1022.5									
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.246$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.217$						
1	837.6		838.8	183.7	AOI = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3,300$						
2	745.1		748.0	274.5							
3	645.1		652.2	370.3							
4	577.9		592.8	429.7							
5											
Absolute Open Flow 3,300		Mcf/d @ 15.025				Angle of Slope @			Slope, n 1.444		
Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT calculations. Worksheet C-122D attached											
Approved By Division			Conducted By: David Weaver			Calculated By: Albert R. Stall			Checked By:		