

MAY 18 1993

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

Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

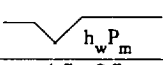
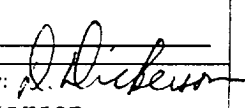
OIL CONSERVATION DIVISION

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

MAY 20 1993

dst
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Barbara Fasken						Lease or Unit Name Skelly Federal					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5/14/93		Well No. 2			
Completion Date 5/12/93		Total Depth 10,200		Plug Back TD 10,058		Elevation 4137' GL		Unit Ltr. - Sec. - TWP - Rge. F 9 21s 24e			
Csg. Size 4 1/2	Wt. 11.6	d 4.000	Set At 10,200	Perforations: From: 9865 To: 9873				County Eddy			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 9,673	Perforations: From: Open To: Ended				Pool Cemetery			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 9633		Formation Morrow			
Producing Thru Tubing		Reservoir Temp. °F 155 @ 9870		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection NGPL			
L	H	Gg 0.625	% CO ₂ 0.83	% N ₂ 0.20	% H ₂ S	Prover		Meter Run 3.068		Taps FLG	
FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	Orifice X 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						2606	60	PACKER		19 Hrs.	
1.	3.068 x	1.625	889	2.25	91	2540				1 Hr.	
2.	3.068 x	1.625	901	6.76	86	2477				1 Hr.	
3.	3.068 x	1.625	913	16.81	80	2299				1 Hr.	
4.	3.068 x	1.625	936	31.92	81	2098				1 Hr.	
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.	13.24	45.05	902.2	0.9715	1.265	1.068	783				
2.	13.24	78.61	914.2	0.9759	1.265	1.071	1376				
3.	13.24	124.78	926.2	0.9813	1.265	1.078	2211				
4.	13.24	174.06	949.2	0.9804	1.265	1.078	3081				
5.											
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 206.9 Mcf/bbl.						
1.	1.34	551	1.51	0.876	A.P. I. Gravity of Liquid Hydrocarbons 58.7 @ 60 Deg.						
2.	1.36	546	1.50	0.871	Specific Gravity Separator Gas 0.625 XXXXXXXXXXXX						
3.	1.40	540	1.48	0.861	Specific Gravity Flowing Fluid XXXXX						
4.	1.41	541	1.48	0.860	Critical Pressure 671 P.S.I.A. P.S.I.A.						
5.					Critical Temperature 365 R R						
P _c 3344.2 * P _c 11183.7											
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.409$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.266$						
1.		3280.2	10759.7	424.0	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 6.982$						
2.		3217.2	10350.4	833.3							
3.		3029.2	9176.1	2007.6							
4.		2811.2	7902.8	3280.9							
5.											
Absolute Open Flow 6982 Mcfd @ 15.025						Angle of Slope Θ 56.3°		Slope, n 0.667			
Remarks: * Bottom Hole Pressure @ 9870' (-5733) used for pressure calculations											
Well made 1.5 bbls. condensate during test											
Approved By Division				Conducted By: Jarrel Services, Inc.				Calculated By: Donnie Dickerson			
								Checked By:  D. Dickerson			