

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT, AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12-4-74		DEC 18 1974	
Company Skelly Oil Company				Connection Pending				O. C. C.	
Pool Forty Niner Ridge (Undesignated)				Formation Morrow				Unit ARTESIA, OFFICE	
Completion Date 11-26-74		Total Depth 14,600		Plug Back TD 14,600		Elevation 3213 DF		Farm or Lease Name Forty Niner Ridge Unit	
Csg. Size Liner 4-1/2"	Wt. 13.5	d 3.920	Set At 11,048	Perforations: From 13805' To 14156'		Well No. 2			
Tbg. Size 2-3/8	Wt. 4.7	d 1.995	Set At 12,500	Perforations: From -- To --		Unit G 21 23 30		Sec. Twp. Rge.	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 12,500		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 190 @ 14600		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 13981	H 13981	G _g .575	% CO ₂ 1.31	% N ₂ 0.59	% H ₂ S --	Prover --	Meter Run 4"	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.	
SI							4389			
1.	4		1-3/4	750	17"	103	881	73	Packer	
2.	4		1-3/4	750	16"	103	997	73		1.5
3.	4		1-3/4	750	15"	100	1295	71		2
4.	4		1-3/4	750	13"	96	1747	70		2
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.	14.93	113.831	762.2	.9610	1.319	1.042	2245
2.	14.93	110.432	762.2	.9610	1.319	1.042	2178
3.	14.93	106.925	762.2	.9636	1.319	1.043	2116
4.	14.93	99.542	762.2	.9671	1.319	1.044	1979
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	2.05	533	1.56	.843			0.575	X X X X X X X X	675	342
2.	2.14	533	1.56	.839				X X X X X		
3.	2.08	531	1.55	.838						
4.	2.97	530	1.55	.802						
5.										

P _c 4402.2 P _c ² 19379					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.11$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.11$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.492$			
1.		1387	1924	17455				
2.		1442	2079	17300				
3.		1402	1966	17413				
4.		2005	4020	15359				
5.								

Absolute Open Flow 2492 Mcfd @ 15.025		Angle of Slope θ 450		Slope, n 1	
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Remarks: **BHP's measured with Amerada BHP gauge.**
Slope greater than one; therefore slope = 1 drawn through highest flow rate.

Approved By Commission:	Conducted By: Joe Banks	Calculated By: Jerrel Marburger	Checked By:
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