

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

Form C-122
Revised 9-1-65

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C-122

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Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special					Test Date 9-9-75		SEP 22 1975								
Company Skelly Oil Company				Connection Pending				Unit O. C. C.							
Pool Eldorado				Formation Lower Perm				ARTESIA, OFFICE							
Completion Date 8-4-75		Total Depth 15,120'		Plug Back TD 14,660'		Elevation 3475 OR		Farm or Lease Name Todd 2 State							
Csg. Size 5 7/8"	Wt. 23.60	d 4.800	Set At 14,966'	Perforations: From 13,508' To 14,622'		Well No. 1		Unit Sec. Twp. Rge. 2 24 31							
Tbg. Size 2 7/8"	Wt. 6.5	d 2.441	Set At 11,968'	Perforations: From - To -		County Eddy		State New Mexico							
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11,968'		Prover 4"		Meter Run Flange							
Producing Thru 14072		Reservoir Temp. °F 14072		Mean Annual Temp. °F .586		Baro. Press. - P _a .73		Taps 1.07							
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	Duration of Flow				
1.	4	1	730	21"	80	743	82	Packer			3				
2.	4	1	660	16.5"	80	706	70				3				
3.	4	1	660	15"	72	703	75				2				
4.	4	1	640	10.2"	72	692	73				2.5				
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.	4.7524	324.0	743.2	.9813	1.306	1.050	709								
2.	4.7524	105.4	673.2	.9813	1.306	1.045	671								
3.	4.7524	300.4	673.2	.9887	1.306	1.049	647								
4.	4.7524	81.6	653.2	.9887	1.306	1.048	525								
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.	3.30	540	1.56	.907			.586	XXXXXX	675	342					
2.	3.30	540	1.56	.915				XXXXXX							
3.	3.30	532	1.53	.909											
4.	3.30	532	1.53	.911											
5.															
$P_c = 881.2$ $P_c^2 = 35762.8$															
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.02$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.02$								
1.	766.6	587.7	35175												
2.	723.4	523.2	35240												
3.	720.0	518.4	35244												
4.	916.6	840.2	24923												
5.															
Absolute Open Flow					812.4	Mcf/d @ 15.025	Angle of Slope θ	45.0	Slope, n	1.000					
Remarks:															
Approved By Commission:				Conducted By: Odis Hendley				Calculated By: Jerral Marburger				Checked By:			