

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 3-17-75		APR 15 1975	
Company The Superior Oil Company		Connection El Paso			
Pool Burton Flat		Formation Morrow		Unit O. C. C. ARTESIA, OFFICE	
Completion Date 11-9-74		Total Depth 11,785		Plug Back TD 11,516	
		Elevation 3242' KB		Farm or Lease Name Government "D" Com	
Csg. Size 5-1/2	Wt. 17 & 20#	Set At 11,785'	Perforations: From 11,429 To 11,439'		Well No. 2
Tqg. Size 2-7/8"	Wt. 6.50#	Set At 11,302'	Perforations: From Open To		Unit Sec. Twp. Rge. E- 12 21S 27E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11,294	
Producing Thru		Reservoir Temp. °F @		Mean Annual Temp. °F	
				Baro. Press. - P _g	
				County Eddy	
				State New Mexico	
L 11,434	H 11,434	G _g 0.597	% CO ₂ -	% N ₂ -	% H ₂ S -
Prover			Meter Run X		
Taps F					

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							3690	60	Pkr	
1.	4.026 x 1.250			578	2.6"	67	3466	60	Pkr	
2.	4.026 x 1.250			578	7.3"	72	3239	60	Pkr	
3.	4.026 x 1.250			593	10.2"	74	3084	60	Pkr	
4.	4.026 x 1.250			585	16.0"	74	2831	60	Pkr	
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.469	39.21	591.2	0.9933	1.294	1.054	397
2	7.469	65.69	591.2	0.9887	1.294	1.054	661
3	7.469	78.63	606.2	0.9868	1.294	1.055	791
4	7.469	97.83	598.2	0.9868	1.294	1.054	982
5							

NO.					F _r		Temp. °R		T _r		Z		Gas Liquid Hydrocarbon Ratio		660 Mcf/bbl.	
1					0.88		527		1.47		0.901		A.P.I. Gravity of Liquid Hydrocarbons		61 Deg.	
2					0.88		532		1.49		0.901		Specific Gravity Separator Gas		0.597	
3					0.90		534		1.49		0.899		Specific Gravity Flowing Fluid		XXXXXX	
4					0.89		534		1.49		0.900		Critical Pressure		P.S.I.A. 671	
5													Critical Temperature		R 358	

P _c 3703.2 P _c ² 13,713.7				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{13,713.7}{5,613.3}$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.909$	
NO.	P _w	P _w ²	P _c ² - P _w ²				
1	12104.8	12106.8	1606.9				
2	10576.8	10581.9	3131.8				
3	9592.6	9599.7	4114.0				
4	8089.5	8100.4	5613.3				
5							

Absolute Open Flow				1,875 Mcfd @ 15.025		Angle of Slope		54.1		Slope, n		0.724	
Remarks:													
Approved By Commission:				Conducted By: Hanson				Calculated By: Sivage				Checked By:	