

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

Form G-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1-9-73		JAN 20 1973	
Company The Superior Oil Company				Connection None		O.C.C.		
Pool Undesignated South Carlsbad (Strawn)				Formation Strawn		Unit ARTESIA, OFFICE		
Completion Date 12-30-72		Total Depth 11,915		Plug Back TD 11,825		Elevation KB: 3196		Farm or Lease Name Ryan
Csg. Size 7"	Wt. 26# & 23#	d 11,915	Set At 11,915	Perforations: From 10,484 To 10,490		Well No. 1		
Tbg. Size 2-3/8	Wt. 4.7	d 1.995	Set At 10,386	Perforations: From 10,493 To 10,500		Unit D	Sec. 5	Twp. 23-S
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual - G.G.				Packer Set At 10,386		County Eddy		
Producing Thru Tbg		Reservoir Temp. °F 167 @ 10,490		Mean Annual Temp. °F 60° F		Baro. Press. - P _a 13.2		State New Mexico
L 10,386	H 10,386	Gg .652	% CO ₂ --	% N ₂ --	% H ₂ S --	Prover --	Meter Run 3"	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
SI							4661	60	Pkr	--	206 hr.
1.	3 x 1-1/2			440	16.1	60	4478	60	--	--	1 1/2 hr.
2.	3 x 2-1/4			457	7.4	60	4179	60	--	--	1 hr.
3.	3 x 2-1/4			750	7.9	60	3871	60	--	--	1 hr.
4.	3 x 2-1/4			755	13.2	60	3419	60	--	--	1 hr.
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	11.13	85.42	453.2	1.000	1.238	1.048	1234
2	28.78	58.99	470.2	1.000	1.238	1.055	2218
3	28.78	77.65	763.2	1.000	1.238	1.083	2997
4	28.78	100.7	768.2	1.000	1.238	1.083	3886
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	456 Mcf/bbl.
1.	.68	520	1.39	.911	A.P.I. Gravity of Liquid Hydrocarbons	57.2 Deg.
2.	.70	520	1.39	.899	Specific Gravity Separator Gas	.652
3.	1.14	520	1.39	.853	Specific Gravity Flowing Fluid	.652
4.	1.15	520	1.39	.852	Critical Pressure	670 P.S.I.A.
5.					Critical Temperature	375 R

P _c 4674.2	P _c ² 21848	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.2830$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.712$
NO	P _i ²	P _w	P _w ²
1	20171		20228
2	17575		17754
3	15087		15397
4	11780		12278
5			

Absolute Open Flow		6653 Mcfd @ 15.025	Angle of Slope θ	Slope, n	0.651
Remarks:					
Approved By Commission:		Conducted By: J. C. Willner	Calculated By: J. C. Willner	Checked By: J.C. Willner	