

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 7-14-70		JUL 20 1970		
Company THE SUPERIOR OIL COMPANY				Connection TRANSWESTERN PIPELINE COMPANY				Unit O. C. C.	
Pool SOUTH CARLSBAD				Formation STRAWN				ARTESIA, OFFICE	
Completion Date 11-27-69		Total Depth 11,950'		Plug Back TD 11,900'		Elevation 3245' KB		Farm or Lease Name COLLATT ESTATE COMM.	
Csg. Size 5"	Wt. 15.0#	d 11,950'	Set At	Perforations: From 10,453' To 10,493'		Well No. 1			
Thq. Size 2-3/8"	Wt. 4.70#	d 1,995	Set At 10,350'	Perforations: From NONE To		Unit Sec. Twp. Rge. J 1 23-S 26-E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 10,350'		County EDDY			
Producing Thru TUBING		Reservoir Temp. °F 180 @ 10,473'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO	
L 10,350	H SAME	Gg 0.652	% CO ₂ 0	% N ₂ 0	% H ₂ S 0	Prover X	Meter Run F	Taps F	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							3421				
1.	4.00 x 1.500			395	16	67	3408	70	Pkr	-	60 Min
2.	4.00 x 1.500			805	28	80	3379	70	Pkr	-	45 Min
3.	4.00 x 1.500			810	66	68	3315	70	Pkr	-	40 Min
4.	4.00 x 1.500			1000	97	68	3224	70	Pkr	-	30 Min
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	✓ 10.84	✓ 80.84	✓ 408.2	✓ 0.9933	1.238	✓ 1.040	1,121
2	✓ 10.84	✓ 151.47	✓ 818.2	✓ 0.9813	1.238	✓ 1.075	2,142
3	✓ 10.84	✓ 233.26	✓ 823.2	✓ 0.9924	1.238	✓ 1.083	3,364
4	✓ 10.84	✓ 313.68	✓ 1013.2	✓ 0.9924	1.238	✓ 1.103	4,607
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	36.8 Mcf/bbl.
1.	✓ 0.590	✓ 527	✓ 1.40	✓ 0.924	A.P.I. Gravity of Liquid Hydrocarbons	62.0 Deg.
2.	✓ 1.20	✓ 540	✓ 1.44	✓ 0.865	Specific Gravity Separator Gas	0.652
3.	✓ 1.21	✓ 528	✓ 1.41	✓ 0.853	Specific Gravity Flowing Fluid	0.727
4.	✓ 1.49	✓ 528	✓ 1.41	✓ 0.822	Critical Pressure	670 P.S.I.A.
5.					Critical Temperature	375 °R

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{11,794}{566}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{4,995}{23,012}$
1	3421.2		11,749	45		
2	3392.2		11,673	121		
3	3328.2		11,485	309		
4	3237.2		11,228	566		
5						

Absolute Open Flow		23,012 Mcfd @ 15.025	Angle of Slope	62°	Slope, n	0.530
Remarks:						
Approved By Commission:		Conducted By:	Calculated By:	Checked By:		
RLS 7/23/70		O. V. SIVAGE	O. V. SIVAGE			