Copy to SF
C-122

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

Form C-122
Revised 9-1-65

RECEIVED
JUN 21 1974
O. C. C.
ARTESIA, OFFICE

f. 4861
10 9-74

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 6-10-74	
Company: The Superior Oil Company		Connection: Transwestern			
Pool: Undesignated Denton Comp. Mesa		Formation: Mississippian			
Completion Date: 12-11-73	Total Depth: 6910	Plug Back TD: 6491	Elevation: 3979 KB	Farm or Lease Name: Chatten & Muncy	
Csg. Size: 5-1/2" / Wt.: 15.5-1/2 / d: / Set At: 6910		Perforations: From 6436' To 6458'		Well No.: 1	
Tbg. Size: 2-7/8" / Wt.: 6.50 / d: 2.441 / Set At: 6379		Perforations: From To		Unit: O / Sec.: 18 / Twp.: 6S / Rge.: 28E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 6340		County: Chaves	
Producing Thru: Tbg	Reservoir Temp. °F: @ 109	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico	
L: 6436 / H: 6436	Gg: 0.663	% CO_2: -	% N_2: 4.0	% H_2S: -	Prover: / Meter Run: 4 / Taps: Flange

NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI						1560	80	Pkr	--	4 Hr.
1.	4 x 1.00		730	15	76	742	80	Pkr	--	24 + Hr.
2.	4 x 1.00		750	5	94	1098	80	Pkr	--	2 Hr.
3.	4 x 1.00		760	2-1/2	96	1207	80	Pkr	--	2 Hr
4.	4 x 1.00		760	1	91	1338	80	Pkr	--	2 Hr.
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	4.753	105.65	742.2	0.9850	1.228	1.066	641
2.	4.753	61.77	762.2	0.9688	1.228	1.059	370
3.	4.753	43.97	772.2	0.9671	1.228	1.060	263
4.	4.753	27.81	772.2	0.9715	1.228	1.061	167
5.							

NO.	P_t	Temp. °R	T_f	Z
1.	1.12	536	1.46	0.880
2.	1.15	554	1.51	0.891
3.	1.16	556	1.51	0.890
4.	1.16	551	1.50	0.888
5.				

Gas Liquid Hydrocarbon Ratio: Trace Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 58 Deg.
Specific Gravity Separator Gas: 0.663 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 663 P.S.I.A. 663 P.S.I.A.
Critical Temperature: 367 R 367 R

P_c 1572.2 P_c^2 2471.8

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	570.3		573.5	1898.3
2	1234.8		1234.8	1237.0
3	1488.9		1488.9	982.9
4	1825.7		1825.7	646.1
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{2471.8}{1898.3}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = (1.3021)^{1.00}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 834.7

Absolute Open Flow: 834.7 Mcfd @ 15.025 | Angle of Slope θ: 45° | Slope, n: 1.00

Remarks: Very weak well. Pressure depleting rapidly. Tested in decending order. Shut in pressure decreased 456 psi after producing five days.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Hanson	O. V. Sivage	