NEW MEXICO OIL CONSERVATION COMMSSION

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
OCT 17 1973
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 10-11-73	
Company: The Superior Oil Company		Connection: Trans Western			Unit
Pool: South Carlsbad Morrow		Formation: Morrow			
Completion Date: 8-17-73	Total Depth: 11,900		Plug Back TD: 11,850	Elevation: RKB: 3235'	Farm or Lease Name: Stephens
Csg. Size: 5-1/2" / Wt.: 20# & 17# / d: 4.778 / Set At: 11,900'			Perforations: From 11,346' To 11,824'		Well No.: 1
Tbg. Size: 2-7/8" / Wt.: 6.5# / d: 2.441 / Set At: 11,289'			Perforations: From None To		Unit: F / Sec.: 7 / Twp.: 23-S / Rge.: 27-E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 11,250		County: Eddy
Producing Thru: Tbg	Reservoir Temp. °F: 176° @ 11,300	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11,289	11,289	0.578	- - -	- - -	- -	- -	2"	Flange

	FLOW DATA				TUBING DATA		CASING DATA		
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
SI					3252	--	Pkr	Pkr	2 Weeks +
1.	2.067 x 0.875	976.8	5.7	82	2723	70	- -	- -	2 Hr 15 Min
2.	2.067 x 0.875	996.8	16.3	84	2521	70	- -	- -	2 Hr 15 Min
3.	2.067 x 0.875	996.8	35.0	75	2100	70	- -	- -	3 Hr
4.	2.067 x 0.875	996.8	51.4	75	1831	70	- -	- -	3 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	3.729	75.12	990	.9795	1.315	1.065	384.3
2.	3.729	128.31	1010	.9777	1.315	1.065	655.1
3.	3.729	188.02	1010	.9859	1.315	1.070	972.6
4.	3.729	227.85	1010	.9859	1.315	1.070	1179.0
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	1.47	542	1.57	.881
2.	1.50	544	1.57	.881
3.	1.50	535	1.55	.873
4.	1.50	535	1.55	.873
5.				

Gas Liquid Hydrocarbon Ratio	-0- Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	- - - Deg.	
Specific Gravity Separator Gas	0.578	xxxxxxxxx
Specific Gravity Flowing Fluid	xxxxx	0.578
Critical Pressure	672 P.S.I.A.	672 P.S.I.A.
Critical Temperature	346 R	346 R

P_c 3265.2 P_c^2 10662

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	7487	2736.2	7487	3175
2	6422	2535.8	6430	4232
3	4466	2118.2	4487	6175
4	3401	1848.2	3416	7246
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.727$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.727$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1680$

Absolute Open Flow 1680 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1.00

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	James C. Willner	James C. Willner	