EW MEXICO OIL CONSERVATION C ISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 5-24-80	
Company: The Superior Oil Company		Connection:			
Pool: West Tonto		Formation: Morrow		Unit:	
Completion Date: 5/28/80	Total Depth: 13,800' MD	Plug Back TD: 13,654'	Elevation: GL 3660'	Farm or Lease Name: Bondurant Fed Com	
Csg. Size: 5-1/2" / Wt.: 17# / d: / Set At: 13,800		Perforations: From To		Well No.: 1	
Tbg. Size: 2-7/8" / Wt.: 6.5# / d: / Set At: 13,463'		Perforations: From 13,524' To 13,550'		Unit: I / Sec.: 1 / Twp.: 19S / Rge.: 32E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single Gas		Packer Set At: 13,463'		County: Lea	
Producing Thru: Tubing	Reservoir Temp. °F: 166 @ 13,800'	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
13537	13537	.642	.15	.36			4.0	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							4906	185	24
1.	4.026 x 2.000	150	10.	60			4639	185	1
2.	4.026 x 2.000	150	20.	61			4488	185	1
3.	4.026 x 2.000	190	28.	50			4288	185	1
4.	4.026 x 2.000	245	38.	42			3990	185	1
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	19.81	40.40	163.2	1.0000	1.2484	1.0158	1015
2.	19.81	57.13	163.2	0.9990	1.2484	1.0158	1434
3.	19.81	75.43	203.2	1.0098	1.2484	1.0214	1924
4.	19.81	99.05	258.2	1.0178	1.2484	1.0293	2567
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.24	520	1.40	.969
2.	.24	521	1.41	.969
3.	.30	510	1.38	.958
4.	.39	502	1.36	.944
5.				

Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 0 Deg.

Specific Gravity Separator Gas	.642	xxxxxxxxx
Specific Gravity Flowing Fluid	xxxxx	.642
Critical Pressure	670 P.S.I.A.	670 P.S.I.A.
Critical Temperature	370 R	370 R

P_c 3433.0 P_c^2 11786.

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	21643	3215	10335	1451
2	20261	3093	9565	2220
3	18500	2934	8610	3176
4	16026	2703	7307	4479
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.6313$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.2246$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5600$

Absolute Open Flow: 5600 Mcfd @ 15.025 | Angle of Slope θ: 51. | Slope, n: .810

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
Orig. Signed by Jerry Sexton Dist. I, Supv.	Jarrel Services		V.A.Jochen