N MEXICO OIL CONSERVATION COM ION

MULTIPOINT , ND ONE POINT BACK PRESSURE TES[FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 9/11/80	
Company: The Superior Oil Company		Connection:			
Pool:		Formation: Morrow		Unit: West Lynch Deep Unit	
Completion Date: 9/12/80	Total Depth: 13,875'	Plug Back TD: 13,771'	Elevation: 3,728'	Farm or Lease Name: West Lynch Deep Unit	
Csg. Size: 5-1/2" / Wt.: 17# / d: 4.892 / Set At: 13,875'		Perforations: From To		Well No.: 1	
Tbg. Size: 2-7/8" / Wt.: 6.5 / d: 2.441 / Set At: 13,540		Perforations: From 13,724 To 13,740		Unit: — Sec.: 28 Twp.: 20S Rge.: 34E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 13,540' & 13,135'		County: Lea	
Producing Thru: Tubing	Reservoir Temp. °F: 287	Mean Annual Temp. °F: 74	Baro. Press. – P_a: 13.2	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
13,732	13,732	.678	0.68	0.40	0		2.900	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	2.900	2.000				4474	74	PKR	-------	SI 72 hr
1.	2.900	2.000	510	21.0	85	1289	79	PKR	-------	6.5
2.	2.900	2.000	500	14.0	82	1922	79	PKR	-------	1.25
3.	2.900	2.000	505	9.0	82	2420	79	PKR	-------	1.0
4.	2.900	2.000	490	4.0	80	3412	79	PKR	-------	1.0
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	28993.85	104.8198	523.2	.9768	.9407	1.048	2927
2.	28993.85	84.7632	513.2	.9795	.9407	1.049	2375
3.	28993.85	68.2920	518.2	.9795	.9407	1.049	1905
4.	28993.85	44.8642	503.2	.9813	.9407	1.049	1260
5.							

NO.	P_t	Temp. °R	T_f	Z
1	2.80	643	1.39	.713
2.	3.98	643	1.39	.715
3.	4.87	643	1.39	.752
4.	6.54	643	1.39	.867
5.				

Gas Liquid Hydrocarbon Ratio 14.8 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 55.2 Deg.
Specific Gravity Separator Gas .678 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .914
Critical Pressure 673 P.S.I.A. 666 P.S.I.A.
Critical Temperature 381 R 460 R

P_c 6501 P_c^2 42,263

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	1696		5779	36484
2	3745		11096	31167
3	5920		16080	26183
4	11732		27458	14805
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.539$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.539$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3400$

Absolute Open Flow 3400 Mcfd @ 15.025 Angle of Slope θ 45.0 Slope, n 1.000

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	FESCO, Inc.	R. N. Aycock	Vonda Flanagan