

NEW MEXICO OIL CONSERVATION COMMISSION
MULTI-JOINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 12-1-55

Pool Guns Ridge - Narrow Gas		Formation Pennsylvanian - Narrow		County Lee	
Initial I		Annual		Date of Test March 23 - 25, 1966	
Company The Superior Oil Company		Lease Government "A"		Well No. 1	
Unit F	Sec. 10	Twp. 22-S	Range 34-E	Purchaser None	
Casing 7-5/8" 5" (liner)	Wt. 20.75 11.75	I.D. 6.875" 4.175"	Set at 11,930 11,765'-11,400'	Perf. - 12,950'	To - 12,963'
Tubing 2-3/8"	Wt. 4.70	I.D. 1.993	Set at 12,800	Perf. (open-ended)	To -
Gas Pay:	From 12,930	To 12,963	L 12,950	G .647	GL 8304
Producing Through:		Casing I	Tubing I	Type Well - Single - Braden head - G.G. or G.O. Dual Single	
Date of Completion 3-26-66		Packer 12,800		Reservoir Temp. 175° F	

OBSERVED DATA

Tested Through:								Type of Taps Flange		
Prover ☐ Choke ☐ Meter ☒										
FLOW DATA						TUBING DATA		CASING DATA		DURATION OF FLOW HR.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig.	Diff. h _w	Temp. °F.	Press. psig.	Temp. °F.	Press. psig.	Temp. °F.	
SI	-	-	-	-	-	6130	60	0	-	-
1.	5"	1-1/4"	365	19	86	3213	60	0	-	22
2.	5"	1-1/4"	365	30	86	2325	67	0	-	7-1/2
3.	5"	1-1/4"	320	40	79	2036	64	0	-	16-1/2
4.	5"	1-1/4"	375	71	92	1124	78	0	-	6
5.										

FLOW CALCULATIONS

No.	Coefficient (24 Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCF P D @ 15.025 psia
1.	9.781	64.769	3236.2	.9741	.9918	1.0000	884
2.	9.781	104.911	2326.2	.9766	.9918	1.0000	1030
3.	9.781	131.616	2040.2	.9802	.9918	1.0016	1333
4.	9.781	164.027	1147.2	.9766	.9918	1.0092	1000
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio **78.431** cf/bbl. Specific Gravity Separator Gas **.610**
 Gravity of Liquid Hydrocarbons **46°** deg. Specific Gravity Flowing Fluid **.647**
 F_c **9.936** (1-e^{-S}) **.435** P_c **6163.2** P_c² **37,985.0**

No.	$\frac{P_w}{P_t}$ psia	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-S})	P _w ²	P _c ² - P _w ²	Cal P _w	$\frac{P_w}{P_c}$
1.	3236.2	10,480.4	8.167	67.027	29.157	10,437.557	27547.4	3230.7	92.4
2.	2326.2	5,442.9	10.366	106.379	46.275	5,402.775	11466.2	2347.3	41.3
3.	2040.2	4,160.9	13.246	175.430	76.312	4,275.512	11380.5	2067.7	33.5
4.	1147.2	1,306.1	15.967	255.366	111.179	1,427.279	36757.7	1196.6	19.4
5.									

ABSOLUTE POTENTIAL: **1675 MWD** MCFPD; n **1.000 (2.414)**

COMPANY **The Superior Oil Company** WITNESSED _____

ADDRESS **Box 1900, Midland, Texas 79701** COMPANY _____

AGENT AND TITLE *J. J. Burleigh*
Production Engineer

