

EXICO OIL CONSERVATION COMMISSIC MULTI-POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 12-1-55

Pool Gramma Ridge - Morrow Gas		Formation Pennsylvanian - Morrow		County Lea	
Initial X		Annual		Special	
Company The Superior Oil Company		Lease Government "A"		Date of Test March 23 - 25, 1966	
Unit F		Sec. 10		Twp. 22-S	
Range 34-E		Purchaser None		Well No. 1	
Casing 7-5/8"		Wt. 29.7#		I.D. 6.875"	
Set at 11,920		Perf. -		To -	
Casing 5" (liner)		Wt. 18#		I.D. 4.276"	
Set at 11,745'-13,400'		Perf. 12,958'		To 12,963'	
Tubing 2-3/8"		Wt. 4.7#		I.D. 1.995	
Set at 12,880		Perf. (open-ended)		To -	
Gas Pay: 12,958		To 12,963		L 12,958	
G .647		GL 8384		Bar. Press. 13.2	
Producing Through:		Casing		Tubing X	
Date of Completion 3-16-66		Packer 12,880		Reservoir Temp. 175° F	

OBSERVED DATA

Tested Through: Prover ☐ Choke ☐ Meter ☒								Type of Taps Flange		
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	-	-	-	-	-	6150	60	0	-	-
1.	3"	1-1/4"	365	19	88	3213	60	0	-	22
2.	3"	1-1/4"	365	30	85	2525	67	0	-	7-1/2
3.	3"	1-1/4"	370	48	79	2036	64	0	-	16-1/2
4.	3"	1-1/4"	375	71	92	1134	78	0	-	6
5.										

FLOW CALCULATIONS

No.	Coefficient (24 Hour)	$\sqrt{h_w P_t}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCF PD @ 15,025 psia
1.	9.781	84.769	3226.2	.9741	.9918	1.0289	824
2.	9.781	106.511	2538.2	.9768	.9918	1.0289	1038
3.	9.781	135.616	2049.2	.9822	.9918	1.0316	1333
4.	9.781	166.017	1147.2	.9706	.9918	1.0292	1609
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 78.431 cf/bbl. Specific Gravity Separator Gas .610
 Gravity of Liquid Hydrocarbons 49° deg. Specific Gravity Flowing Fluid .647
 F_c 9.936 (1-e^{-S}) .435 P_c 6163.2 P_c² 37,985.0

No.	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	P _w P _c
1.	3226.2	10,408.4	8.187	67.027	29.157	10,437.557	27547.4	3230.7	52.4
2.	2538.2	6,442.5	10.314	106.379	46.275	6,488.775	31496.2	2547.3	41.3
3.	2049.2	4,199.2	13.245	175.430	76.312	4,275.512	33709.5	2067.7	33.5
4.	1147.2	1,316.1	15.987	255.584	111.179	1,427.279	36557.7	1194.6	19.4
5.									

ABSOLUTE POTENTIAL: 1675 MCFD MCFPD; n 1.000 (2,414)

COMPANY The Superior Oil Company WITNESSED _____

ADDRESS Box 1900, Midland, Texas 79701 COMPANY _____

AGENT AND TITLE J. Burkitt
Petroleum Engineer

HOBBS OFFICE U.C.C.
JUN 3 11 16 AM '66

THE SUPREMACY OIL COMPANY
 Government "A" No. 1
 GRAMA RIDGE(Morrow Gas)FIELD
 F - 10 - 22S - 34E
 Lea County, New Mexico
 Date: 3-23-66



