NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 10-1-78

[X] Initial [ ] Annual [ ] Special		6.19.81	
Gulf Oil Corp.	Air		
	~~Loving~~ Morrow		K
6/16/81	12,700	12,656	3042 GL
Lentini Fed. Com			
7-5/8,5" Liner	d	12,700	Perf. 12,276 To 12,313
Well No. 1			
2-3/8" N/80	d	12,240	From To
Unit K Sec. 9 Twp. 23S Rge. 28E			
Single Gas			
County Eddy			
Tubing	196° 12,240	60°	13.2
State New Mexico			

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Flg.
12,240	12,240	.5787	1.007	.288			4"	Flg.

FLOW DATA | TUBING DATA | CASING DATA

NO.	Prover Line Size	X	Orifice Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	Duration of Flow
SI							4185				72 hrs
1.	4	x	1.750	540	3.0	103	3915				1 hr
2.	4	x	1.750	540	10.0	95	3655				1 hr
3.	4	x	1.750	550	20.0	94	3345				1 hr
4.	4	x	1.750	560	39.0	92	2855				1 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	14.93	40.74	553.2	.9610	1.314	1.033	793
2	14.93	74.38	553.2	.9680	1.314	1.034	1460
3	14.93	106.13	563.2	.9688	1.314	1.036	2090
4	14.93	149.52	573.2	.9706	1.314	1.036	2949
5							

NO.	P_t	Temp °R	T_r	Z
1	.82	563	1.61	.938
2	.82	555	1.59	.935
3	.84	554	1.58	.932
4	.85	552	1.58	.931
5				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl
A.P.I. Gravity of Liquid Hydrocarbons: deg.
Specific Gravity Separator Gas: .5787
Specific Gravity Flowing Gas: XXXXX
Critical Pressure: 672 P.S.I.A. P.S.I.A.
Critical Temperature: 350 °R °R

1	4198.2	17624.9		
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.940$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.761$

Answer $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5.194$

NO.	P_w	P_w^2	$P_c^2 - P_w^2$
1		3932.1	15461.4 2163.5
2		3679.9	13541.7 4083.2
3		3383.5	11448.1 6176.8
4		2922.4	8540.4 9084.5
5			

Absolute Open Flow: 5,194 Mcfd @ Pressure Base
Angle of Slope: 49.5° Slope n: .854

Remarks:

Approved By Commission: Conducted By: Davis Services, Inc. Calculated By: Rick Pagan Checked By: