NEW MEXICO OIL CONSERVATION COMMISSION

MULTI-POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 10-1-

Type Test: [X] Initial [ ] Annual [ ] Special | Test Date: 5-23-77

Company: GULF OIL CORP.	Connection: AIR		
Pool:	Formation: EUMONT		Unit:
Completion Date: 5-23-77	Total Depth: 3950	Plug Back TD: 3828	Elevation: 3610 Gr.
Csg. Size: 4 1/2 / Wt.: 11.5 / d: 3.476 / Set At: 3913	Perforations: From 3729 To 3782		Farm or Lease Name: S.E. FELTON
Tbg. Size: 2 3/8 / Wt.: 4.70 / d: 1.995 / Set At: 3763	Perforations: From To		Well No.: 2
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single	Packer Set At		Unit: 28 / Sec.: 21S / Twp.: 36E / Rge.:
Producing Thru: Tubing	Reservoir Temp. °F: 125 @ 3756	Mean Annual Temp. °F: 60	Baro. Press. - P_a: 13.2
			County: LEA
			State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3756	3756	.7389	4.655	1.003			OWT	

NO.	FLOW DATA: Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							364	70			
1.	2.0		.25	7.5		68	254	70			1Hr.
2.	2.0		.25	20.0		68	239	70			1Hr.
3.	2.0		.375	17.0		68	226	70			1Hr.
4.	2.0		.750	12.0		68	201	70			1Hr.
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	26.1			.9924	1.164		30
2.	47.1			.9924	1.164		54
3.	90.0			.9924	1.164		104
4.	288.0			.9924	1.164		333
5							

NO.	P_t	Temp. °R	T_r	Z
1	NOT APPLICABLE FOR			
2.	THESE LOW PRESSURES			
3.				
4.				
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.

Specific Gravity Separator Gas _____ XXXXXXXXXX

Specific Gravity Flowing Fluid XXXXX

Critical Pressure _____ P.S.I.A. _____ P.S.I.A.

Critical Temperature _____ R _____ R

P_c 377.2 P_c^2 142

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	71.3		71.4	70.6
2	63.6		63.6	78.4
3	57.2		57.4	84.6
4	45.8		47.7	94.3
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.50583$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.50583$

$AOF = Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 501$ Mcfd

Absolute Open Flow 501 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1.00

Remarks:

Approved By Commission: Conducted By: Calculated By: Checked By: