MULTI-POINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 2-1-65

SF File 122 file

RECEIVED

JUN 8 1977

O. C. C.

ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special

Test Date: 5-25-77

Company: GULF OIL CORP.

Connection: AIR

Pool: CROOKED ~~CREEK~~ Creek (Morrow)

Formation: MORROW

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
5-11-77	10200	10158	3973 Gr.	FRANKLIN A FEDERAL

Csg. Size	Wt.	d	Set At	Perforations		Well No.
5.50"	17.00#	4.892"	10158	From 9723	To 9791	# 2
Tbg. Size	Wt.	d	Set At	Perforations		Unit / Sec. / Twp. / Rge.
2.375 EUE	4.70#	1.995"	9660	From	To	G / 9 / 24S / 24E

Type Well – Single – Bradenhead – G.C. or G.O. Multiple: Single Completion

Packer Set At: 9660

County: EDDY

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
Tubing	175 @ 9757	60	13.2	N.M.

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9757	9757	0.583	1.11	1.81	0.00		X	

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI							3133	70			
1.	4.00		1.50	540	2.00"	63	2765	70			1.00 Hr.
2.	4.00		1.50	554	6.20"	100	2535	70			1.00 Hr.
3.	4.00		1.50	556	11.00"	95	2245	70			1.00 Hr.
4.	4.00		1.50	561	18.00"	87	1840	70			1.00 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.	10.84	33.263	553.20	0.9971	1.3097	1.0400	490
2.	10.84	59.301	567.20	0.9636	1.3097	1.0310	836
3.	10.84	79.128	569.20	0.9680	1.3097	1.0340	1124
4.	10.84	101.664	574.20	0.9750	1.3097	1.0340	1455
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	0.82	523	1.52	0.918
2.	0.84	560	1.63	0.936
3.	0.85	555	1.62	0.933
4.	0.85	547	1.59	0.935
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons: None Produced Deg.

Specific Gravity Seperator Gas: 0.583 XXXXXXXXX

Specific Gravity Flowing Fluid: XXXXX 0.583

Critical Pressure: 673 P.S.I.A. 673 P.S.I.A.

Critical Temperature: 343 R 343 R

P_c^2 = 3146.2 P_c^2 = 9899

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		2779	7726	2172
2.		2552	6514	3384
3.		2266	5136	4763
4.		1869	3495	6404
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 1.54571 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.4341

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 2087

Absolute Open Flow: 2087 Mcfd @ 15.025

Angle of Slope θ: 50.38

Slope, n: 0.828

Remarks:

Approved by Commission:

Conducted By:

Calculated By:

Checked By: