Well file
C-122 file

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
DEC 29 1977
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 12-20-77

Company: Gulf Oil Corporation — Connection: Line

Pool: Angell Ranch Morrow (Undesignated) — Formation: Morrow — Unit: J

Completion Date: 12-9-77 — Total Depth: 11090 // 11090 — Plug Back TD: 10843/10843 — Elevation: 3368 gr.

Farm or Lease Name: Pacheco Federal

Csg. Size	Wt.	d	Set At	Perforations: From	To
5 1/2	17 & 20		11089	10742	10830

Well No.: # 1

Tbg. Size	Wt.	d	Set At	Perforations: From	To
2 3/8	4.7		10695		

Unit: J — Sec.: 31 — Twp.: 19 — Rge.: 28

Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single — Packer Set At: 10695 — County: Eddy

Producing Thru: Tbg. — Reservoir Temp. °F: 181 @ 10695 — Mean Annual Temp. °F: 60 — Baro. Press. – P_a: 13.2 — State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10695	10695	.623	2.04	1.12			4"	Flg.

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							2729				72 Hr.
1.	4	x	.750	535	2	72	2567				1 Hr.
2.	4	x	.750	535	20	92	2500				1 Hr.
3.	4	x	.750	540	43.5	101	2335				1 Hr.
4.	4	X	.750	540	39	103	2165				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	2.661	70.24	549.2	.9877	1.267	1.043	245
2.	2.661	104.71	543.2	.9706	1.267	1.043	357
3.	2.661	155.12	553.2	.9628	1.267	1.139	574
4.	2.661	221.89	553.2	.9610	1.267	1.139	819
5.							

NO.	P_t	Temp. °R	T_f	Z
1.	.82	523	1.46	.910
2.	.82	552	1.51	.920
3.	.82	561	1.54	.926
4.	.82	563	1.54	.926
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.

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

Specific Gravity Separator Gas .623 — XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX

Critical Pressure 671 P.S.I.A. — _____ P.S.I.A.

Critical Temperature 365 R — _____ R

P_c 2742.2 P_c^2 7519.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2580.7	6660.0	859.6
2		2514.1	6320.7	1199.0
3		2400.8	5763.8	1755.8
4		2184.0	4769.9	2749.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.735$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.735$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.240$

Absolute Open Flow 2,240 Mcfd @ 15.025 — Angle of Slope θ 45° — Slope, n 1.000

Remarks: _____

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	John Davis	Larry Davis	