N MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
AUG - 7 1978
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 7/27/78	
Company: Gulf Oil Corporation		Connection: E.P.N.G.			
Pool: Angell Ranch Morrow		Formation: Morrow		Unit: I	
Completion Date: 4/8/78	Total Depth: 11150	Plug Back TD: 11116	Elevation: GL 3464	Farm or Lease Name: Eddy G.L. St. Comm	
Csg. Size: 5 1/2 / Wt.: 17 / d: / Set At: 11150		Perforations: From 11024 To 11041		Well No.: # 1	
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: / Set At: 10946		Perforations: From To		Unit: I / Sec.: 25 / Twp.: 19 / Rge.: 27	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 10946		County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: 183 @ Perfs	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
10946	10946	.619	.73	.32			4"	Flange

	FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						2900				
1.	4	X 1.000	640	6.5	58	2275				1 Hr
2.	4	X 1.000	640	13.0	53	1800				1 Hr
3.	4	X 1.000	640	18.0	58	1200				1 Hr
4.	4	X 1.000	640	36.0	65	640				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	4.753	65.16	653.2	1.002	1.271	1.064	420
2.	4.753	92.15	653.2	1.007	1.271	1.065	597
3.	4.753	108.43	653.2	1.002	1.271	1.064	698
4.	4.753	153.35	653.2	.9952	1.271	1.060	977
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.97	518	1.42	.884
2.	.97	513	1.41	.882
3.	.97	518	1.42	.884
4.	.97	525	1.44	.890
5.				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .619 (XXXXXXXXX)
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 671 P.S.I.A. (P.S.I.A.)
Critical Temperature: 365 R (R)

P_c 2913.2 P_c^2 8486.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2289.4	5241.4	3245.3
2		1816.3	3299.0	5187.7
3		1219.9	1488.2	6998.5
4		679.2	461.3	8025.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.057$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.057$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.033$

Absolute Open Flow: 1,033 Mcfd @ 15.025 | Angle of Slope θ: 45° | Slope, n: 1.000

Remarks:

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