NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
OCT 27 1972
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 9-23-72

Company: Michael & Corinne Grace	Connection: None	Unit:	
Pool: South Carlsbad	Formation: Morrow		
Completion Date:	Total Depth:	Plug Back TD:	Elevation:
Farm or Lease Name: Go Po Go			
Csg. Size:	Wt.:	d:	Set At:
Perforations: From 11,382 To 11,404			
Well No.: 2			
Tbg. Size: 2 7/8	Wt.:	d:	Set At:
Perforations: From To			
Unit: Sec.: Twp.: Rge.:			
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 11,360	County: Eddy	
Producing Thru: 2 7/8	Reservoir Temp. °F: NA @	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
11,393	11,393	0.582	.01	0	0		4.026	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					3240	75	Packer		
1.	4.026 x 2.250	225	5"	83	3217	75			60 min.
2.	4.026 x 2.250	510	7"	78	3202	75			60 min.
3.	4.026 x 2.250	520	15.5"	56	3170	76			60 min.
4.	4.026 x 2.250	510	31.5"	84	3129	77			60 min.
5.	4.026 x 2.250	760	79.0"	74	2845	79			60 min.

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	25.64	34.51	238.2	.9786	1.311	1.015	1,152
2.	25.64	60.52	523.2	.9831	1.311	1.037	2,073
3.	25.64	90.91	533.2	1.004	1.311	1.047	3,212
4.	25.64	128.37	523.2	.9777	1.311	1.034	4,363
5.	25.64	247.15	773.2	.9868	1.311	1.059	8,682

NO.	P_t	Temp. °R	T_r	Z
1.	0.35	543	1.55	.968
2.	0.78	538	1.54	.929
3.	0.79	516	1.47	.915
4.	0.78	544	1.55	.931
5.	1.15	534	1.53	.896

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons None Deg.
Specific Gravity Separator Gas 0.582 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 676.8 P.S.I.A. -- P.S.I.A.
Critical Temperature 351.2 R -- R

P_c 4110.2 P_c^2 16,892

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	3230.2	4094.2	16,761	131
2	3215.2	4078.2	16,630	262
3	3183.2	4052.2	16,419	473
4	3142.2	4024.2	16,192	700
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 16,892$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 6.25$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 54,263$

Absolute Open Flow 54,263 Mcfd @ 15.025 — Angle of Slope θ 51.5 — Slope, n 0.788

Remarks: H_2S 0.15 gr. per 100 cu. ft.
No fluid produced on test

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Chas. A. Lutz	Chas. A. Lutz	