MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 7-11-87

Company: Amoco Production Company	Connection:		
Pool: Bravo Dome	Formation: Tubb		Unit: BDCDGU
Completion Date: 4-16-81	Total Depth: 2648	Plug Back TD: 2500	Elevation: 4810
Farm or Lease Name:			
Csg. Size: 5.50 / Wt.: 14 / d: 4.9 / Set At: 2598	Perforations: From 2265 To 2440		Well No.: 2034-101J
Tbg. Size: 2.875 / Wt.: 6.5 / d: 2.441 / Set At: 2249	Perforations: From To		Unit: J / Sec.: 10 / Twp.: 20 / Rge.: 34
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 2210		County: Union
Producing Thru: Tubing	Reservoir Temp. °F: 90	Mean Annual Temp. °F: 50	Baro. Press. – P_a: 12.25
			State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
			100	0	0		4.0	Flange

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					294		0		24 hrs
1.	4.026 x 2.375	189	26	60	186	60	0		24 hrs
2.	4.026 x 2.375	199	22	61	199	61	0		24 hrs
3.	4.026 x 2.375	210	16	62	218	62	0		24 hrs
4.	4.026 x 2.375	226	10	62	227	62	0		24 hrs
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.							1836
3.							1720
4.							1507
5.							1210

NO.	P_t	Temp. °R	T_t	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons ____ Deg.
Specific Gravity Separator Gas 1.529 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 1072 P.S.I.A. ____ P.S.I.A.
Critical Temperature 496 R ____ R

P_c 306.25 P_c^2 93.789

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		198.25	39,303	54,486
2		211.25	44,626	49,162
3		230.25	53,015	40,774
4		239.25	57,240	36,548
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7213$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.5091$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2770$

Absolute Open Flow 2770 Mcfd @ 15.025 — Angle of Slope θ 37.1548 — Slope, n 0.8208

Remarks: Test was run from a low flowing tubing pressure to a high flowing tubing pressure to minimize liquid loading effects.

Approved by Commission:	Conducted By:	Calculated By:	Checked By:
	RANDY MAHANNAH	RICHARD ROETH	