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: 7-10-87

Company: Amoco Production Company	Connection:			
Pool: Bravo Dome	Formation: Tubb			Unit: BDCDGU
Completion Date: 9-29-79	Total Depth: 2625	Plug Back TD: 2574	Elevation: 4811	Farm or Lease Name:
Csg. Size: 4.50 / Wt.: 9.5 / d: 4.1 / Set At: 2625	Perforations: From 2205 To 2500			Well No.: 2034-081F
Tbg. Size: 2.375 / Wt.: 4.5 / d: 1.995 / Set At: 2146	Perforations: From To			Unit: F / Sec.: 8 / Twp.: 20 / Rge.: 34
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 2146		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					309		0		24 hrs
1.	4.026 x 1.750	198	29	58	197	58	0		24 hrs
2.	4.026 x 1.750	207	24	59	206	59	0		24 hrs
3.	4.026 x 1.750	219	19	60	217	60	0		24 hrs
4.	4.026 x 1.750	234	13	61	232	61	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							1014
2.							914
3.							876
4.							748
5.							

NO.	P_t	Temp. °R	T_f	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 321.25 P_c^2 103,201

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		209.25	43,786	59,415
2		218.25	47,633	55,567
3		229.25	52,555	50,645
4		244.25	59,658	43,524
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7370$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.7156$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1740$

Absolute Open Flow: 1740 Mcfd @ 15.025 — Angle of Slope θ: 44.3504 — Slope, n: 0.9776

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	