STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test			Test Date	
[X] Initial	[ ] Annual	[ ] Special	2-14-91	

Company	Connection		
BETTIS-BOYLE-STOVALL	FLARE		
Pool	**Formation**		**Unit**
N/A	PREMIER SAND		N/A

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
1-25-91	9700	1940	3577 G.L.	CROW FLATS FED 15

Csg. Size	Wt.	d	Set At	Perforations	Well No.
8.625	32.0	7.921	2000	From 1856 To 1874	#1
Tbg. Size	**Wt.**	**d**	**Set At**	**Perforations**	**Unit / Sec. / Twp. / Rge.**
2.375	4.7	1.995	1809	From – To –	15 / 16S / 28E

Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At	County
SINGLE(GAS)	1807	EDDY

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
TBG.(GAS)	80 @ 1855	60.0	13.2	N.M.

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
1855	1855	0.803	0.42	40.22	0.0	–	–	–

	FLOW DATA				TUBING DATA		BHP 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							877	80	72.0
1.	2.00 x 0.125	765	0	60	0	0	798	80	1.0
2.	2.00 x 0.141	705	0	60	0	0	738	80	1.0
3.	2.00 x 0.156	520	0	60	0	0	541	80	1.0
4.	2.00 x 0.172	480	0	60	0	0	516	80	1.0
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	0.26	.00	778.2	1.0000	1.1159	1.0445	238
2.	0.34	.00	718.2	1.0000	1.1159	1.0413	280
3.	0.42	.00	533.2	1.0000	1.1159	1.0311	256
4.	0.51	.00	493.2	1.0000	1.1159	1.0288	288
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	1.31	520	1.67	0.917
2.	1.21	520	1.67	0.922
3.	0.90	520	1.67	0.941
4.	0.83	520	1.67	0.945
5.				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.

Specific Gravity Separator Gas	0.803	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	0.803
Critical Pressure	595 P.S.I.A.	595 P.S.I.A.
Critical Temperature	312 R	312 R

P_c 840.4 P_c^2 706

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	658	766	587	119
2	564	710	504	202
3	307	524	275	432
4	280	501	251	456
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.5496$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.2448$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 359$

Absolute Open Flow 359 Mcfd @ 15.025 Angle of Slope θ 63.4 Slope, n 0.500

Remarks: TEST WAS RUN USING DRY CHOKE COEF. TO CALCULATE FLOW RATES
CHOKE SIZES WERE AS FOLLOWS 8/64 , 9/64 , 10/64 , 11/64

Approved By Division	Conducted By:	Calculated By:	Checked By:
	BENNETT-CATHEY	JIM SMITH	MONTY RANDOLPH