N MEXICO OIL CONSERVATION COMM ON

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: 1/20/89	
Company: BTA Oil Producers			Connection: Llano, Inc.		
Pool: Gem, East			Formation: Morrow		Unit:
Completion Date: 1-11-89	Total Depth: 13,630		Plug Back TD: 13,523	Elevation: 3609RKB	Farm or Lease Name: Gem,8705 JV-P
Csg. Size: 5" / Wt.: 23.2 / d: 4.044 / Set At: 13,630			Perforations: From 13,199 To 13,226		Well No.: 2
Tbg. Size: 2-7/8 / Wt.: 6.5 / d: 2.441 / Set At: 13,118			Perforations: From To		Unit: C / Sec.: 2 / Twp.: 20-S / Rge.: 33-E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 12,014		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 188 @ 13,212'	Mean Annual Temp. °F: 60° F	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
13,118	13,118	.689	0.57	0.54	0		4.026	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	4.026	x	1.500					47	Pkr	47	SI 192 hrs
1.	4.026	x	1.500	725	3.5	108	3780	47	Pkr		1 hr
2.	4.026	x	1.500	775	14	74	2895	50	Pkr		1 hr
3.	4.026	x	1.500	800	22.5	74	2290	52	Pkr		1 hr
4.	4.026	x	1.500	870	37	79	1673	56	Pkr		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	10.84	50.8	738.2	0.9568	1.205	1.062	674
2.	10.84	105.0	788.2	0.9868	1.205	1.086	1470
3	10.84	135.3	813.2	0.9868	1.205	1.089	1899
4.	10.84	180.8	883.2	0.9822	1.205	1.093	2535
5.							

NO.	P_t	Temp. °R	T_f	Z
1	1.10	568	1.48	.887
2.	1.18	534	1.39	.848
3.	1.22	534	1.39	.844
4.	1.32	539	1.40	.837
5.				

Gas Liquid Hydrocarbon Ratio 25000 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 54.1 Deg.
Specific Gravity Separator Gas 0.689 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 669 P.S.I.A. P.S.I.A.
Critical Temperature 385 R R

P_c 6443.2 P_c^2 41515

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		5780.2	33411	8104
2		4694.2	22036	19479
3		3878.2	15040	26475
4		2803.2	7858	33657
5				

(1) $\frac{P_f^2}{P_f^2 - P_w^2} = 1.23$ (2) $\left[\frac{P_f^2}{P_f^2 - P_w^2}\right]^n = 1.23$

AOF = Q $\left[\frac{P_f^2}{P_f^2 - P_w^2}\right]^n = 3118$

Absolute Open Flow 3118 Mcfd @ 15.025 Angle of Slope @ 45° Slope, n 1.00

Remarks:

FEB 27 1989

Approved By Commission: ORIGINAL SIGNED BY JERRY SEXTON DISTRICT I SUPERVISOR | Conducted By: BTA Oil Producers | Calculated By: T.J. Williams | Checked By: