NEW MEXICO OIL CONSERVATION COMMISSION

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: 3-2-82	
Company: BTA OIL PRODUCERS	Connection: LLANO, INC.			
Pool: Antelope Ridge	Formation: Atoka		Unit:	
Completion Date: 1-30-82	Total Depth: 13,380	Plug Back TD: 13,360	Elevation: 3408' KB	Farm or Lease Name: State 2, 8006 JV-P
Csg. Size: 5"/liner / Wt.: 18 / d: 4.276 / Set At: 12550-13380	Perforations: From 12,867 To 12,184			Well No.: 1
Tbg. Size: 2-7/8" / Wt.: 6.50 / d: 2.441 / Set At: 11800	Perforations: From To			Unit: N / Sec.: 2 / Twp.: 23S / Rge.: 34E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 11,800'		County: Lea
Producing Thru: Tbg	Reservoir Temp. °F: @ 161	Mean Annual Temp. °F:	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11,800	12,867	0.652	0.26	0.96	0		4.026	F

	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					6150				
1.	4.026 x 2.500	540	4	68	6031	60	csg		1 hr.
2.	4.026 x 2.500	555	18	68	5749	60	csg		1 hr.
3.	4.026 x 2.500	565	35	60	5401	60	csg		1 hr.
4.	4.026 x 2.500	575	65	60	4992	60	csg		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	32.64	47.04	553.2	0.9924	1.238	1.055	1,990
2.	32.64	101.13	568.2	0.9924	1.238	1.056	4,283
3.	32.64	142.26	578.2	1.0000	1.238	1.057	6,076
4.	32.64	195.53	588.2	1.0000	1.238	1.058	8,359
5.							

NO.	P_t	Temp. °R	T_f	Z
1.	0.83		1.42	0.899
2.	0.85		1.42	0.897
3.	0.86		1.40	0.896
4.	0.88		1.40	0.893
5.				

Gas Liquid Hydrocarbon Ratio 15,280 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 51.5 Deg.
Specific Gravity Separator Gas 0.652 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.863
Critical Pressure 669 P.S.I.A. 663 P.S.I.A.
Critical Temperature 372 R 441 R

P_c 6163.2 P_c^2 37985

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	36532		36626	1359
2	33203		33501	4484
3	29314		29925	8060
4	25052		26146	11839
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{37985}{11839}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.1661$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 18106$

Absolute Open Flow 18,106 Mcfd @ 15.025 Angle of Slope θ 56-3/4 Slope, n 0.6630

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
		O. V. Savage	