

**NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 3-2-82	
Company BTA OIL PRODUCERS				Connection LLANO, INC.		
Pool Antelope Ridge				Formation Morrow		Unit
Completion Date 8/19/81		Total Depth 13,410'		Plug Back TD 13,380'		Elevation 3402' KB
Csg. Size 5" liner		Wt. 18	d 4,276'	Set At 13,410'	Perforations: From 13,240' To 13,296'	
Tbg. Size 2-7/8"		Wt. 6.5	d 2.441	Set At 12,400'	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 12,400'		County Lea
Producing Thru tbg		Reservoir Temp. °F 165 @ 13,296'		Mean Annual Temp. °F		Baro. Press. - P _a 13.2
L 12,400'		H 13,296'	Gg 0.594	% CO ₂ 0.56	% N ₂ 0.20	% H ₂ S 0
					Prover	Meter Run X
						Taps F

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
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.	
SI							5564	60	Pkr	
1.	3.067 x 1.250			485	3	74	5354	60	Pkr	1 hr.
2.	3.067 x 1.250			485	21	74	5076	60	Pkr	1 hr.
3.	3.067 x 1.250			500	93	68	4353	60	Pkr	1 hr.
4.	3.067 x 2.250			545	20	66	2882	60	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	7.577	38.66	498.2	0.9868	1.298	1.038	389
2	7.577	102.28	498.2	0.9868	1.298	1.038	1030
3	7.577	218.47	513.2	0.9924	1.298	1.039	2215
4	28.78	105.66	558.2	0.9943	1.298	1.043	4093
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	52.67 Mcf/bbl.
					A.P.I. Gravity of Liquid Hydrocarbons	48.2 Deg.
1.	0.74		1.51	0.928	Specific Gravity Separator Gas	0.594
2.	0.74		1.51	0.928	Specific Gravity Flowing Fluid	XXXXXX
3.	0.76		1.49	0.926	Critical Pressure	672 P.S.I.A.
4.	0.83		1.49	0.920	Critical Temperature	354 R
5.						

P _c 5577.2 P _c ² 31105				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1	28807		28810	2295
2	25900		25917	5188
3	19064		19136	11969
4	8382		8586	22519
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.38$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5,545$

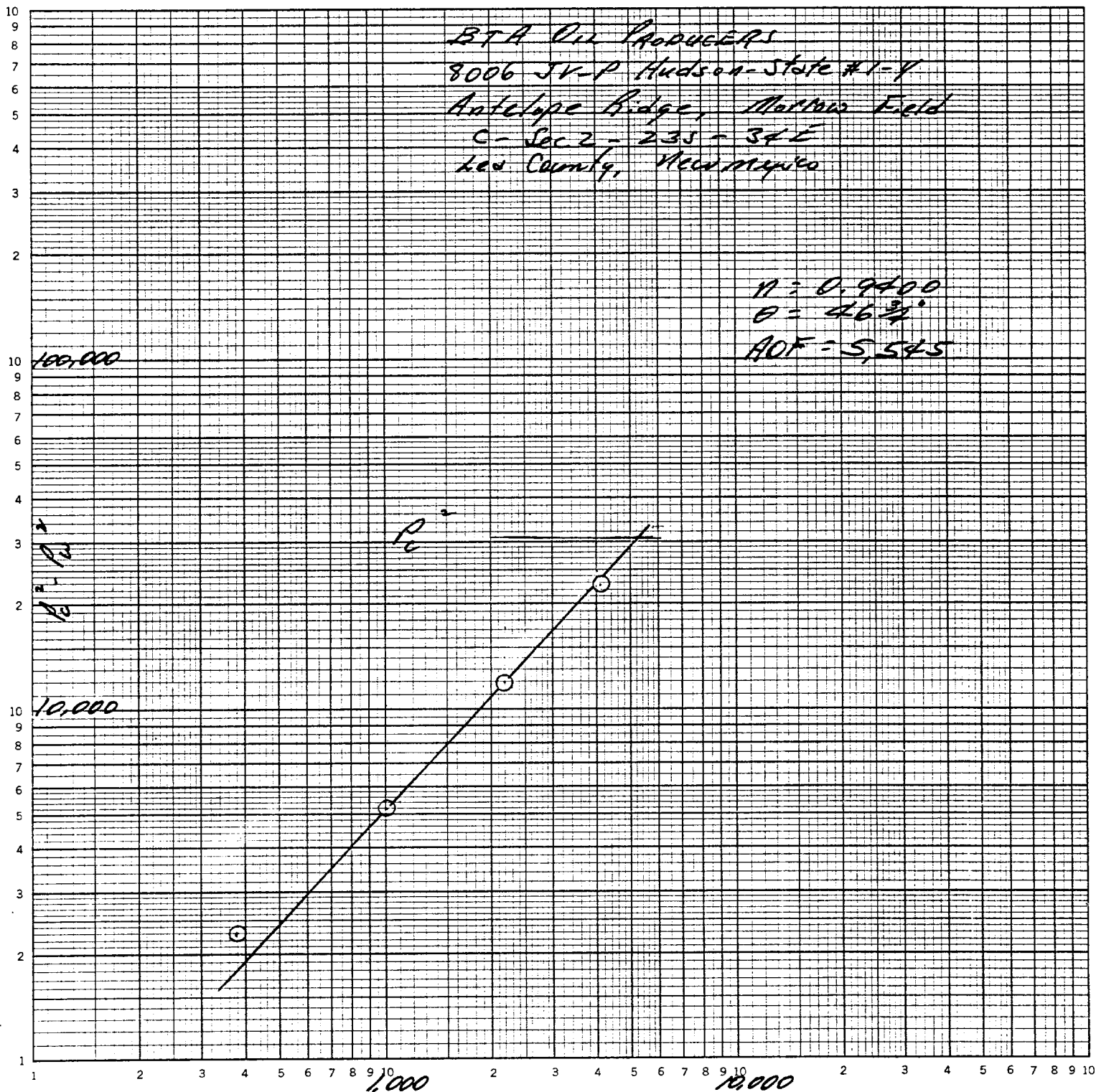
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3548$

Absolute Open Flow	5,545 Mcfd @ 15.025	Angle of Slope @	46-3/4	Slope, n	0.940
Remarks:					
Approved By Commission:		Conducted By:		Calculated By: <i>D. V. Shing</i>	
				Checked By:	

46 7400

LOGARITHMIC 3 X 3 CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

K-E



Q (mcf/d)



WORKSHEET FOR CALCULATION OF STAINLESS STEEL COLUMN WELLHEAD PRESSURE (P_w)

COMPANY BTH Oil Properties LEASE 8006 JV-1 Hudson State WELL NO. 1-1 DATE 3-2-82

LOCATION: Unit C Section 26 Township 23-S Range 34-E

L	H	LAH	G	%CO ₂	%N ₂	%H ₂ S	O
12,400	13,296	0.9326	0.654	0.56	0.20	0	0

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[illegible]