STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 8750[illegible]

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

c/SF
File

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 11 6 90	
Company: SENDERO PETROLEUM		Connection: AIR			
Pool: INDIAN BASIN U/Penn		Formation: CISCO PENN		Unit	
Completion Date: 11 1 90	Total Depth: 9355	Plug Back TD: 7310	Elevation: 11	Farm or Lease Name: PRONG HORN FED	
Csg. Size: 5.500 / Wt.: 15.5 / d: 4.950 / Set At: 7693		Perforations: From 7244 To 7279		Well No.: 1	
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 7154		Perforations: From To		Unit: P / Sec.: 8 / Twp.: T21S / Rge.: R23E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE (GAS)		Packer Set At: 7154		County: EDDY	
Producing Thru: TBG (GAS)	Reservoir Temp. °F: 105 @7262	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NM	
L: 7262 / H: 7262	Gg: .661	% CO_2: .56	% N_2: 1.09	% H_2S: 00	Prover: 0 / Meter Run: 4.0 / Taps: FLANGE

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI					1798	60			72.0
1.	4.00X1.500	40	30.0	65	1430	60			3.0
2.	4.00X1.750	40	35.0	61	1195	60			1.0
3.	4.00X2.000	40	50.0	59	245	59			2.3
4.	4.00X2.000	40	34.0	59	140	58			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	10.85	39.95	53.2	.9952	1.2300	1.0064	534
2.	14.94	43.15	53.2	.9990	1.2300	1.0066	797
3	19.83	51.58	53.2	1.0010	1.2300	1.0066	1268
4.	19.83	42.53	53.2	1.0010	1.2300	1.0066	1045
5.							

NO.	P_t	Temp. °R	T_r	Z
1	.08	525	1.41	.987
2.	.08	521	1.39	.987
3.	.08	519	1.39	.987
4.	.08	519	1.39	.987
5				

Gas Liquid Hydrocarbon Ratio .0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons ____ Deg.
Specific Gravity Separator Gas .661 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .661
Critical Pressure 670 P.S.I.A. 670 P.S.I.A.
Critical Temperature 374 R 374 R

P_c 1811.2 P_c^2 3280

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	2083	1444	2085	1195
2	1460	1212	1470	1811
3	67	323	105	3176
4	23	223	50	3231
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0329$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0291$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1305$

Absolute Open Flow 1305 Mcfd @ 15.025 | Angle of Slope θ 48.5 | Slope, n .885

Remarks: 1ST RATE 12/64 2ND RATE 18/64 3RD RATE 26/64 32/64

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