

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

C 151-
Form C-122
Revision 9-1-83

RECEIVED BY

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O. C. D.
ARTESIA, OFFICE

Type Test: ☐ Initial ☒ Annual ☒ Special				Test Date: 7-11-84	
Company: TRANSWESTERN GAS SUPPLY			Connection: TO AIR		
Pool: ANTELOPE RIDGE <i>Wind Field</i>			Formation: ABO		Unit:
Completion Date: 10-20-82		Total Depth: 3600 3610		Plug Hole: 3504	Elevation: 4458
Perforations: 3576		Perforations: 3504		Farm or Lease Name: ANTELOPE FEDERAL	
Well Size: 4.500	Wt.: 10.5	d: 4.052	Set At: 3576	From: 3504	To: 3109
Well Size: 2.375	Wt.: 4.7	d: 1.995	Set At: 2968	From: OPEN	To: ENDED
Type Well - Single - Freedomhead - G.O. or G.O. Multiple				Packer Set At:	
SINGLE				CHAVES	
Producing thru TUBING		Reservoir Temp. °F: 105 # 3078		Mean Annual Temp. °F: 60°	
L: 3078		H: 3078		Base. Press. - P _g : 13.2	
Q _g : .619		% CO ₂ : .052		% N ₂ : 5.109	
Prover: 2		Meter Run: 0		Type: 0	

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.		TEMP °F
SI							388	80	389	80	24HRS
1	2.00 X 0.0625			384	0.00	84	384	80	384	80	60
2	2.00 X 0.125			359	0.00	84	359	80	360	80	60
3	2.00 X 0.1875			317	0.00	81	317	81	319	81	60
4	2.00 X 0.250			254	0.00	80	254	81	258	81	60
5											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{sp}	Rate of Flow Q, Mcfd
1	0.06405	0.00	397.2	0.9777	1.271	1.029	32
2	0.2648	0.00	372.2	0.9777	1.271	1.027	126
3	0.6082	0.00	330.2	0.9804	1.271	1.024	256
4	1.087	0.00	267.2	0.9813	1.271	1.019	369
5							

NO.	P ₁	Temp. °F	Q	Z	Gas Liquid Hydrocarbon Ratio _____ Mat/bbl.
1	0.60	544	1.55	.945	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	0.56	544	1.55	.949	Specific Gravity Separator Gas: .619
3	0.50	541	1.54	.953	Specific Gravity Flowing Fluid: XXXXXX
4	0.40	540	1.54	.963	Critical Pressure: 662 P.S.I.A.
5					Critical Temperature: 351 °F

1	402.2	P ₁ ²	161.8	P _w ²	R _w ²	R _e ² - R _w ²
1				397.2	157.8	4.0
2				373.2	139.3	22.5
3				332.2	110.4	51.4
4				271.2	73.5	88.3
5						

(1) $\frac{P_c^2}{R_e^2 - R_w^2} = 1.8324$

AOF = Q $\left[\frac{R_e^2}{R_e^2 - R_w^2} \right]^n = 597$

(2) $\left[\frac{R_e^2}{R_e^2 - R_w^2} \right]^n = 1.6185$

Absolute Open Flow: 597	Mcfd @ 15.025	Angle of Slope: 51.5	Slope, n: .795
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Remarks:

Approved By Commission:	Conducted By: RICHARD TOWNLEY	Calculated By: BENNETT & CATHEY	Checked By:
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