

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

C-15F
Ziler
C-122 file

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-17-80		Recompletion	
Company TEXAS OIL AND GAS				Connection TransWestern and El Paso Natural Gas Company			
Pool EAST BURTON FLAT <i>Strawn</i>				Formation Strawn		Unit E	
Completion Date 10-7-80		Total Depth 11,760		Plug Back TD 10570		Elevation	
Casing Size 4 1/2"		Wt. 13.5		Set At 11,735		Perforations: From 10,526 To 10,548	
Tubg. Size 2 3/8		Wt. 4.7		Set At 10,477		Perforations: From To	
Type Well - Single - Brindenhead - G.C. or G.O. Multiple Single				Packer Set At 10,477		County Eddy	
Producing Thru TBG.		Reservoir Temp. °F 179 @ 10,538		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 10,538		H 10,538		G _g .673		% CO ₂ .359	
				% N ₂ 1.161		% H ₂ S	
				Prover		Meter Run 4	
						Taps Flg.	

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							2395				
1.	4 X .750			263	8.5	75	2302	65			1 Hr.
2.	4 X .750			260	12	78	2260	68			1 Hr.
3.	4 X .750			260	26	79	2192	70			1 Hr.
4.	4 X .750			270	32	78	2116	70			1 Hr.
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 _{pv}	Rate of Flow Q, Mscf
1	2.661	48.45	276.2	.9859	1.219	1.027	159
2	2.661	57.26	273.2	.9831	1.219	1.027	188
3	2.661	84.28	273.2	.9822	1.219	1.027	276
4	2.661	95.20	283.2	.9831	1.219	1.027	312
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.41	535	1.40	.948	38.958	54.5 @ 60	.673	XXXXXX	669	382
2	.41	538	1.41	.949				XXXXXX		
3	.41	539	1.41	.949						
4	.42	538	1.41	.948						
5										

P _c 2594.1 P _r ² 6729.4				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.515$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.553$	
NO.	P _i	P _w	P _w ²	P _c ² - P _w ²			
1*	3366.2	2523.6	6368.6	360.8			
2*	3308.2	2478.3	6142.0	587.4			
3*	3233.2	2419.5	5854.0	875.4			
4*	3140.2	2347.2	5509.3	1220.1			
5*	3455.2						

AOI = 0 $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 797$

OCT 24 1980

O. C. D.

Absolute Open Flow 797 Mscf @ 15.025		Angle of Slope @ 61.250		ARTESIA, OFFICE Slope, n .549	
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Remarks: 1 bbl condensate during test.
*Bottom hole pressures.

Approved By Division	Conducted By: Winnford Sutton (John West Engr.)	Calculated By: Witnessed by: Reggie Reston	Checked By:
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