

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 10/8/72		NOV 13 1972	
Company Black River Corporation				Connection El Paso Natural Gas Company			
Well Washington Ranch				Formation Upper Morrow		Unit J.E.E. ARTESIA, OFFICE	
Completion Date May 18, 1972		Total Depth 7035		Plug Back TD 7003		Elevation 3731 KB	
Casing Size 5 1/2		Wt. 14#-5200 ^d 15.5#-TDI		Set At 7030		Perforations: From 6840 To 6852	
Tub. Size 2 7/8		Wt. 6.5		Set At 6872		Perforations: From 6907 To 6930	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G. Multiple				Packer Set At 6872		County Eddy	
Producing Thru 6591		Reservoir Temp. °F 148 @ 6900		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 6907		H 6907		G _g 0.657		% CO ₂ - % N ₂ - % H ₂ S -	
Prover X		Meter Run X		Taps Flange			

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				*	*				1850		43
1.	4	x	1,250	7.6	1.0	83			1690	78	1
2.	4	x	1,250	7.6	2.2	86			1558	81	1
3.	4	x	1,250	7.6	3.0	88			1451	82	1
4.	4	x	1,250	7.6	4.4	87			1268	82	1
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, Mcfd
1	7.469	29.4	866.2	.9786	1.234	1.078	286
2	7.469	64.8	866.2	.9759	1.234	1.076	627
3	7.469	88.3	866.2	.9741	1.234	1.076	853
4	7.469	129.5	866.2	.9750	1.234	1.076	1252
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1	1.29	543	1.45	.860	A.P.I. Gravity of Liquid Hydrocarbons		Deq.
2	1.29	546	1.46	.863	Specific Gravity Separator Gas	.657	XXXXXXXXXX
3	1.29	548	1.46	.863	Specific Gravity Flowing Fluid	XXXXXX	
4	1.29	547	1.46	.863	Critical Pressure	670	P.S.I.A.
5					Critical Temperature	375	R

P _c 1863.2	P _c ² 3471.5	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.899$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.899$
NO.	P _t ²	P _w	P _w ²
1	2900.9		2901.0
2	2468.7		2469.2
3	2143.9		2144.8
4	1641.5		1643.4
5			

ACF = Q	$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2378$
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Absolute Open Flow	2378	Mcf/d @ 15.025	Angle of Slope	Slope, n	1.000
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Remarks: * L-10 Chart - 100" 1500# meter

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
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