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

JUN 18 1971

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6/8/1971	
Company Black River Corporation			Connection None		U. C. C. ARTESIA, OFFICE
Prod. Wildcat			Formation Morrow		
Completion Date 6/6/1971		Total Depth 7045	Plug Back TD 7000		Elevation 3741 KB
Form or Lease Name Cities-Federal					Well No. 1
Cas. Size 4-1/2	Wt. 10.5	Set At 7043	Perforations: From 6795 To 6844		Unit F
Tub. Size 2-7/8	Wt. 6.5	2.441	Set At 6750	Perforations: From To	Sec. 34 Twp. 25S Rwy. 24E
Type Well - Single - Dracoonhead - G.G. or G.C. Multiple Single				Pecker Set At 6750	County Eddy
Producing Thru Tubing		Reservoir Temp. °F 148 @ 6820	Mean Annual Temp. °F 60		State New Mexico
L 6820	H 6820	Gg 0.573	% CO ₂ 0.60	% N ₂ 0.26	% H ₂ S - -
Prover				Meter Run 4"	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	
1.							2581		Pkr.		
2.	4 x	2.25		580	19	93	2429	96			45
3.	4 x	2.25		590	45	85	2328	96			50
4.	4 x	2.25		590	93	70	2180	98			40
5.	4 x	2.25		900	97	67	2037	98			60
6.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{P_m P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcia
1.	26.64	106.17	593.2	.9697	1.321	1.035	3609
2.	25.64	164.75	603.2	.9768	1.321	1.036	5647
3.	25.64	236.85	603.2	.9905	1.321	1.047	8319
4.	25.64	297.57	913.2	.9933	1.321	1.071	10722

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcia/bbl.
1.	.878	553	1.59	0.933	A.P.I. Gravity of Liquid Hydrocarbons		Dug.
2.	.893	545	1.57	0.932	Specific Gravity Separator Gas	0.573	XXXXXXXXXX
3.	.893	530	1.52	0.912	Specific Gravity Flowing Fluid	XXXXXX	
4.	1.350	527	1.51	0.872	Critical Pressure	675	P.S.I.A.
					Critical Temperature	348	R

NO.	P _r ²	P _w ²	R _r ²	R _w ²	R _r ² - R _w ²
1.	5964.3	2461.4	6058.5	671.4	
2.	5481.2	2390.6	5715.0	1014.9	
3.	4810.1	2303.6	5306.6	1423.3	
4.	4203.3	2244.4	5037.3	1692.6	

Accurate Open Flow 41,500 Mcia @ 15.025 Angle of Slope 0°

Remarks:

Approved By Commission: _____

Consented By: *[Signature]* Calculated By: *[Signature]* Checked By: _____

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JUN 14 1971
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO