

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

Form C-121
Revised 6-1-65

Type Test ☐ Initial ☐ Annual ☐ Special				Test Date 10-7-72		RECEIVED	
Company BLACK RIVER CORPORATION				Location EL PASO NATURAL GAS COMPANY		NOV 15 1972	
Pool WASHINGTON RANCH				Formation MORROW LOWER M-3		Unit	
Completion Date 4-7-72		Total Tests 7053		Flow Back TD 7012		Elevation 3743 KB	
Casing Size 5-1/2" 15.516		Set At L.950		Perforations: From 6842 To 6954		Well No. 1	
Tub. Size 2-7/8 6.5		Set At 2.441		Perforations: From 6913 To 6944		Unit Sec. Twp. Range 3 3 26S 24E	
Type Well - Single - Bradenood - G.G. or G.O. Multiple				Packer Set At 6865		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 116 @ 6890		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 6865		H 6865		G _g 0.580		% CO ₂ % N ₂ % H ₂ S Prover - - -	
Meter Run 1"		Taps FLANGE		State NEW MEXICO			

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.	1"	x	2.25	841.8	2.0	70	2175.0	79	PKR		23.5 HRS.
2.	1"	x	2.25	853.2	7.3	56	2059.0	82			1.0 "
3.	1"	x	2.25	853.2	15.2	71	1968.0	82			1.0 "
4.	1"	x	2.25	853.2	28.1	74	1840.0	84			1.0 "
5.	1"	x	2.25	853.2	28.2	74	1851.0	85			11.0 "

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_{r1}}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	25.64	11.35	855.0	.9905	1.313	1.065	31.68
2	25.64	79.53	866.1	1.004	1.313	1.058	281.1
3	25.64	114.76	866.1	.9896	1.313	1.052	1022
4	25.64	156.01	866.1	.9868	1.313	1.050	5113
5	25.64	156.01	866.1	.9868	1.313	1.050	5113

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio TSTM	Mcf/bbl.
1	1.27	530	1.51	.981	A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2	1.01	524	1.47	.993	Specific Gravity Separator Gas	XXXXXXX
3	1.01	531	1.52	.901	Specific Gravity Flowing Fluid	XXXXX
4	1.01	531	1.53	.907	Critical Pressure	672 P.S.I.A. P.S.I.A.
5	1.01	531	1.53	.907	Critical Temperature	350 R R

NO.	P _r ²	P _s ²	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1	2464.2	8072	350.0		4.2278	2.7752
2	2413.2	5824	598.0			
3	2329.2	5424	997.0			
4	2214.2	4903	1519.0			
5	2224.2	4947	1575.0			

Absolute Open Flow		15,105 Mcfd @ 15.025		Angle of Slope θ		54.7°		Slope, n		0.708	
Remarks: BHP's MEASURED @ 6890 WITH AMERADA GAGE											
Approved By Commission:				Conducted By:				Calculated By:			
				MCT				RLW			
								Checked By:			