

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6-22-72		RECEIVED	
Company BLACK RIVER CORPORATION				Connection			
Pool WASHINGTON RANCH				Formation MORROW Lower		Unit O.C.C.	
Completion Date 6-11-72		Total Depth 7125		Plug Back TD 7075		Elevation 3780	
Casing Size 5-1/2"		WT. 15.5		Set At 7125		Perforations: From To	
Tubing Size 2-7/8"		WT. 6.5		Set At 6975		Perforations: From Open To Ended	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple				Packer Set At 6975		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 148		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 6975		H 6975		Gg 0.580		State NEW MEXICO	
				% CO ₂		% N ₂	
				% H ₂ S		Prover	
						Meter Run 4"	
						Caps 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.	1"	X	2.25"	170.0	2.0	73	1763.0	88	PKR	CHOKE	1.0
2.	1"	X	2.25"	170.0	4.0	70	1513.0	86			1.0
3.	1"	X	2.25"	175.0	9.0	66	1262.0	85			1.0
4.	1"	X	2.25"	180.0	18.5	70	952.0	84			2.0
5.	1"	X	2.25"	670.0	22.0	68	1266.0	82			14.0

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	25.64	31.09	183.2	.9877	1.313	1.036	1071
2	25.64	43.96	183.2	.9905	1.313	1.037	1520
3	25.64	66.28	188.2	.9943	1.313	1.039	2305
4	25.64	95.52	193.2	.9905	1.313	1.038	3306
5	25.64	122.6	683.2	.9924	1.313	1.054	4317

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio TSTM	Mcf/bbl.
1	0.72	533	1.52	0.931	A.P.I. Gravity of Liquid Hydrocarbons	
2	0.72	530	1.51	0.930	Specific Gravity Separator Gas	0.580
3	0.73	526	1.50	0.927	Specific Gravity Flowing Fluid	XXXXXX
4	0.73	530	1.51	0.929	Critical Pressure	672
5	1.02	528	1.51	0.901	Critical Temperature	350

NO.	P _e ²	P _w ²	P _r ²	P _e ² - P _w ²	(1) $\frac{P_e^2}{P_e^2 - P_w^2} =$	(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n =$
1	2120.2	1495.2	1425.3		1.3820	1.3820
2	1869.2	1493.9	1426.6			
3	1578.2	1490.7	1429.8			
4	1242.2	1543.1	1377.4			
5	1279.2	1636.4	1424.1			

Absolute Open Flow 5967 Mcfd @ 15.025				Angle of Slope @ 45°		Slope, n 1.000 LIMIT.	
Remarks: AMERADA BOMB @ 69851. USED LONG FLOW RATE TO CALCULATE AOF - SEE PLOT FOR REASON							
Approved By Commission:		Conducted By: D. MYSON & W. SUTTON		Calculated By: R. WEST		Checked By:	