

NEW MEXICO OIL CONSERVATION COMM. ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122
Revised 9-1-65

RECEIVED
MAY 10 1971

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5-15-71	
Company MOUNTAIN STATES PETROLEUM CORP.				Connection TRANSWESTERN	
Pool ATOKA				Formation MORROW	
Completion Date 10-15-70		Total Depth 9000		Plug Back TD 8934	
Elevation 3447 KB		Farm or Lease Name McCAW GAS COMM.			
Csq. Size 4.500	Wt. 11.6	d 4.0	Set At 8970	Perforations: From 8800-8824 To 8888-8898	
Tng. Size 2.375	Wt. 4.7	d 1.495	Set At 8795	Perforations: From 8725 To 8734	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 8653	
Producing Thru TBG		Reservoir Temp. °F 133° 8900		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico			
L 8725	H 8725	G _g 0.618	% CO ₂ 0.5	% N ₂ 0.4	% H ₂ S 0.0004
Prover —		Meter Run 4.026		Taps FLGE	

FLOW DATA							TUBING DATA		CASING DATA		Duration
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	* Press. BHP p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	of Flow
SI	-	-	-	-	-	-	3667	-	PKR	-	25.5 hrs
1.	4.026		1.750	795	8	74	3535	66	-	-	14.35m
2.	"		"	800	16	76	3428	64	-	-	14.57m
3.	"		"	810	27	76	3288	62	-	-	14.30m
4.	"		"	820	40	71	3140	62	-	-	14.59m
5.	"		"	825	62	73	2892	62	-	-	14.29m

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mc/d
1	14.93	80.41	803.2	0.9868	1.272	1.069	1611
2.	"	114.07	813.2	0.9850	"	1.068	2279
3.	"	149.08	823.2	0.9850	"	1.068	2978
4.	"	182.56	833.2	0.9896	"	1.073	3681
5.	"	227.97	838.2	0.9887	"	1.072	4589

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
					84.863	53	0.618	XXXXXX	673	363
1.	1.20	534	1.47	0.875						
2.	1.21	536	1.48	0.877						
3.	1.22	536	1.48	0.876						
4.	1.24	531	1.46	0.868						
5.	1.25	533	1.47	0.870						

NO.	P _e ²	P _w 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	12590	3548.2	954	2.654	1.868
2	11542	3441.2	1702		
3	10898	3301.2	2646		
4	9943	3153.2	3601		
5	8440	2905.2	5104		

AOE = Q $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 8,572$

Absolute Open Flow 8,600 Mc/d @ 15.025		Angle of Slope @ 0.64	
Remarks: * PRESSURES BY BHP INSTRUMENT SET AT 8760'			
Approved By Commission:	Conducted By: C.R. Appleton	Calculated By: C.R. Appleton	Checked By: