

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1-9-95		Use: SF 078584	
Company McElvain Oil and Gas Inc.				Connection EPNG				
Pool Ballard				Formation Pictured Cliff				Unit
Completion Date 12-29-94		Total Depth		Plug Back TD 2555		Elevation 6933 GL		Farm or Lease Name Federal "A" Com
Csg. Size 4.500	Wt. 10.5	d 4.052	Set At 2581	Perforations: From 2410 To 2480		Well No. 1		
Th. Size 1.900	Wt. 2.9	d 1.610	Set At 2453	Perforations: From open To ended		Unit B	Sec. 13	Twp. 24
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At None		County Rio Arriba		
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _i 12 psia		State NM
L	H	G _g .650	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps

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.	
SI	11 days						631		634	
1.	2"		.750				25	60	211	
2.										
3.										
4.										
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	12,3650		37	1.000	.9608	1.005	
2.							
3.							
4.							
5.							

NO.	P _i	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.										
2.										
3.										
4.										
5.										

P _c 646 P _c ² 417316				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.13528$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.11388$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²			
1		223	49729	367587			
2							
3							
4							
5							

Absolute Open Flow 492 Mcfd @ 15.025				Angle of Slope @		Slope, n .85	
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Remarks: Mist of water throughout test. No show of condensate.

Approved By Division	Conducted By: Joe Elledge	Calculated By: Joe Elledge	Checked By: Larry VanRyan
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