

- MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12-22-83			
Company Dugan Production Corp.				Connection					
Pool Basin Dakota				Formation Dakota				Unit	
Completion Date 12-14-83		Total Depth 5900'		Plug Back TD 5758'		Elevation 5535' GL		Farm or Lease Name Riviera	
Csq. Size 4-1/2"	Wt. 10.5	d 4.052	Set At 5900'	Perforations: From 5653 To 5704		Well No. 1			
Thq. Size 2-1/16 IJ	Wt. 3.25	d 1.751	Set At 5652'	Perforations: From open end To		Unit Sec. Twp. Rge. B 18 30N 14W			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - gas						Packer Set At		County San Juan	
Producing Thru tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _g		State	
L	H	Gg .65 est.	% 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.		Temp. °F
SI							1650		1700		7 days
1.											
2.											
3.	9/16" pos. chk			220		68°			650		3 hrs
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							
2							
3	6.8294		232	.9924	.9608	1.022	1544
4							
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1758$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1292$
1						
2						
3		662	438,244	2,492,700	AOOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1743$	
4						
5						

Absolute Open Flow _____ 1743 _____ Mcfd @ 15.025		Angle of Slope @ _____		Slope, n _____ .75	
Remarks: _____					

Approved By Division _____	Conducted By: _____ Brown	Calculated By: _____ Jacobs	Checked By: _____ DIV. DIST. 3
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