

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-15-88			
Company DUGAN PRODUCTION CORP.				Connection					
Pool Wildcat				Formation Pictured Cliffs				Unit	
Completion Date 4-7-88		Total Depth 1255'		Plug Back TD 1045'		Elevation 5596' GL		Farm or Lease Name Gibraltar	
Cas. Size 2-7/8"	Wt. 6.4#	d	Set At 1239'	Perforations: From 883' To 1040'		Well No. 1			
Thg. Size None	Wt.	d	Set At	Perforations: From To		Unit Sec. Twp. Rge. G 9 30N 14W			
Type Well - Single - Brdenhead - G.G. or G.O. Multiple Single - gas						Packer Set At		County San Juan	
Producing Thru casing		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _g		State New Mexico	
L	H	G _g .62	% 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									405		7 days
1.											
2.											
3.	7/16" pos. choke					64°			2.5		3 hours
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	4.1423		14.5	.9962	.9837	1.000	59
4							
5							

NO.	P _r	Temp. °R	T _g	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

P _c 417 P _c ² 173,889				
NO	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1				
2				
3		14.5	210	173679
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0012$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 59$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0010$

Absolute Open Flow	59	Mcfd @ 15.025	Angle of Slope @	Slope, n .85
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Remarks: _____

Approved By Division	Conducted By:	Calculated By:	Checked By:
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