

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-31-77			
Company Dugan Production Corp.				Connection					
Pool South Gallegos Fruitland				Formation Fruitland				Unit DIST. 3	
Completion Date 8-23-77		Total Depth 1450'		Plug Back TD 1385'		Elevation 6037' GR		Farm or Lease Name Western Federal	
Csg. Size 2-7/8"	Wt. 6.4#	d	Set At 1412'	Perforations: From 1210' To 1238'		Well No. 7			
Tbg. Size 1-1/4"	Wt. 2.3#	d	Set At 1248'	Perforations: From Open End To		Unit Sec. Twp. Rge. M 7 26N 11W			
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 _a		State New Mexico	
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps	
		.62 est							

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							209		239		7 days
1.											
2.											
3.	1/2" Pos Choke			3					27		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	5.4315		15	1.000	.9837	1.000	80
4							
5							

NO.	P _r	Temp. °R	T _r	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 251 P_c² 63,001

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1				
2				
3		39	1,521	61,480
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0247$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^{n \cdot .85} = 1.0210$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 82$

Absolute Open Flow 82 Mcfd @ 15.025		Angle of Slope θ _____	Slope, n .85
Remarks: _____			
Approved By Commission:		Conducted By: Charles Hall	Calculated By: Charles Hall
		Checked By:	