

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLForm C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☒ Special					Test Date 3-7-78				
Company Dugan Production Corp.				Connection New Well					
Pool Basin Dakota				Formation Dakota				Unit	
Completion Date 1-14-78		Total Depth 6598'		Plug Back TD 6510'		Elevation 6115' RKB		Farm or Lease Name Ms. Nona	
Csg. Size 4-1/2"	Wt. 10.5#	d 4.052"	Set At 6595'	Perforations: From 6398' To				Well No. #2	
Tbg. Size 1-1/2"	Wt. 2.9#	d	Set At 6469'	Perforations: From Open End To				Unit Sec. Twp. Rge. A 15 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 _a 12.0		State NM	
L	H	Gg .68	% CO ₂	% N ₂	% H ₂ S	Prover Orifice Meter	Meter Run 4"	Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Meter PSIG	Meter Diff.	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							1940		1940		STP
1.	4" X 1.000			206	5.5	70°	526		815		12 hr
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	15.029	4.7	5.5	.991	1.213	1.057	494
2.							
3.							
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

P _c 1952 P _c ² 3, 810, 304				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		827	683.929	3,126,375
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.21876$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1599$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 573$

Absolute Open Flow 573 _____ Mcfd @ 15.025		Angle of Slope θ _____	Slope, n .75
Remarks: _____			
Approved By Commission:		Conducted By: Fred S. Hamrick Garner Kennedy	Calculated By: F. S. H.
		Checked By:	