

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test		☒ Initial		☐ Annual		☐ Special		Test Date		2-15-81	
Company				Connection				Unit			
Dugan Production Corp.											
Pool				Formation				Unit			
Basin Dakota				Dakota							
Completion Date		Total Depth		Plug Back TD		Elevation		Farm or Lease Name			
2-5-81		6500'		6450'		6992 KB		MF			
Coq. Size	Wt.	d	Set At	Perforations		Well No.					
4 1/2"	10.5#	4.052	6491	From 6416 To 6438		#1					
Trq. Size	Wt.	d	Set At	Perforations		Unit		Sec.	Twp.	Rge.	
2-3/8"	4.7#	1.995	6441	From open end To		L		18	24N	9W	
Type Well - Single - Blindhead - G.G. or G.O. Multiple				Packer Set At				County			
Single - gas				6375'				San Juan			
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State			
tbg.								New Mexico			
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps			
		.65 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							1833				10 days
1.											
2.											
3.	1/2" pos. choke			14.5		600					3 hrs.
4.											
5.											
RATE OF FLOW CALCULATION											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super. Comp. Factor, F _{sp}	Rate of Flow O. Mold				
1											
2											
3	5.4315		26.5	1.000	.9608	1.000	138				
4											
5											
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio		Mol. Wt.				
1					A.P.I. Gravity of Liquid Hydrocarbons		Deg.				
2					Specific Gravity Separator Gas		XXXXXX				
3					Specific Gravity Flowing Fluid		XXXXXX				
4					Critical Pressure		P.S.I.A.		P.S.I.A.		
5					Critical Temperature		R		R		
$P_c = 1845$ $P_c^2 = 3,404,025$ (1) $\frac{P_c^2}{P_r^2 - P_w^2} = 1.0002$ (2) $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.0002$											
NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²	AOF = 0		$\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 138$			
1											
2											
3		26.5	702	3,403,328							
4											
5											
Absolute Open Flow						138		Mold @ 15.025		Angle of Slope	
Slope, n						.75					
Remarks											
Approved by Division				Conducted By		Calculated By		Checked By			
				Jacobs		Jacobs					