

OIL CONSERVATION DIVISION

Form C-122
Revised 10-1-78STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501 3 NMOCD 1 File 1 Celsius-Den

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

1 Celsius-SLC

Type Test ☒ Initial ☐ Annual ☐ Special										Test Date 2-1-89			
Company DUGAN PRODUCTION CORP.						Connection							
Pool Basin Dakota						Formation Dakota						Unit	
Completion Date				Total Depth 6024'		Plug Back TD 5922'		Elevation 5685' GL		Farm or Lease Name Nice			
Csg. Size 4 1/2"		Wt. 10.5 #		Set At 6024'		Perforations: From To				Well No. 2			
Thq. Size 2-1/16"		Wt. 3.3 #		Set At 5820'		Perforations: From To				Unit Sec. Twp. Rge. C 4 30N 14W			
Type Well - Single - Brdenhead - G.G. or G.O. Multiple single								Packer Set At		County San Juan			
Producing Thru				Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico			
L		H		Gg .650		% 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			
1.							1590		1680		7 days		
2.													
3.	1/2" choke						70		320		3 hrs		
4.													
5.													
RATE OF FLOW CALCULATIONS													
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Fl.	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd						
1.													
2.													
3.	5.4315		82	.9887	.9837	1.000	433						
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 1692 P _c ² 2,862,864					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0400$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0299$								
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 446$								
1.													
2.													
3.		332	110,224	2,752,640									
4.													
5.													
Absolute Open Flow 446 Mcfd @ 15.025					Angle of Slope 0					Slope .75			
Remarks:													
Approved By Division				Conducted By:				Calculated By:				Checked By:	