

OIL CONSERVATION DIVISION

P. O. BOX 2088

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

RECEIVED
Form C-122
Revised 10-1-78
JAN 25 1991

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

OIL CON. DIV.
DIST. 3

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-6-90		DIST. 3	
Company Dugan Production Corp.				Connection None			
Pool Basin Fruitland Coal				Formation Fruitland Coal		Unit	
Completion Date		Total Depth		Plug Back TD 1160'		Elevation	
Csg. Size 4 1/2"		Wt. 11.6#		Set At 1160'		Perforations: From 1008' To 1132'	
Tbg. Size 2-3/8"		Wt. 4.7#		Set At 1152'		Perforations: From To	
Type Well - Single - Brodenhead - G.G. or G.O. Multiple single				Packer Set At none		County San Juan	
Producing Thru tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _g 12	
L		H		G _g .59		% 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	Shut-in			---	---	---	140	---	160	---	SI
1.	2"		1 1/4"				2	70	10	70	3 hrs.
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.112		14	.9905	1.291	.9985	19.97
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	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 152	P _c ² 23,104				
NO.	P _t ²	P _w	R _w ²	P _c ² - R _w ²	
1		22	484	22620	(1) $\frac{P_c^2}{P_c^2 - R_w^2} = 1.02$
2					(2) $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 1.017$
3					
4					
5					

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 20$$

Absolute Open Flow 20 Mcfd @ 15.025 Angle of Slope 0 Slope, n .85

Remarks:

Approved By Division Conducted By: M. Brown Calculated By: J. Alexander Checked By: