

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
JAN 12 1983

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 12-29-82		OIL CON. DIV. DIST. 3	
Company Dugan Production Corp.		Connection		Unit	
Pool Basin		Formation Dakota		Form or Lease Name Big Bird	
Completion Date 10-23-82		Total Depth 6540'		Plug Back TD 6498'	
Elevation 6759 GL		Well No. 1		Unit Sec. Twp. Rge. L 5 T24N R9W	
Coq. Size 4 1/2"	Wt. 10.5	d 4.052	Set At 6540'	Perforations: From 6427' To 6439'	County San Juan
Tiq. Size 1 1/2"	Wt. 2.9	d 1.610	Set At 6453'	Perforations: From Open Ended To	State New Mexico
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Single Gas				Packer Set At None	
Producing Thru Tubing		Reservoir Temp. °F p		Mean Annual Temp. °F	
Baro. Press. - P _a		Prover		Meter Run	
L	H	Gg 0.64	% CO ₂	% N ₂	% H ₂ S

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							1520		1975		
1.											
2.											
3.	2		7/16				15	40	60		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.	4.1423		27	1.0198	0.9682	1.000	110
4.							
5.							

NO.	P _t	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 1987	P _c ² 39.48 x 10 ⁵				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	
1					(1) $\frac{P_c^2}{P_t^2 - P_w^2} = 1.0013$
2		72	5184	39.43 x 10 ⁵	(2) $\left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 1.001$
3					
4					
5					

Absolute Open Flow 110 Mcfd @ 15.025 Angle of Slope 0.75

Remarks:

Approved By Division Thomas A. Dugan Conducted By Thomas A. Dugan Calculated By Thomas A. Dugan Checked By