

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2008
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1-14-81				
Company J. Gregory Merrion & Robert L. Bayless					Connection				
Pool South Blanco					Formation Pictured Cliffs		Unit		
Completion Date 1-14-81		Total Depth 3110		Plug Back TD 3071'		Elevation 7336 GL		Farm or Lease Name Badland Flats	
Csg. Size 2-7/8		Wt. 6.5		d 2.441		Set At 3107		Perforations: From 2976 To 3006	
Tbg. Size		Wt.		d		Set At		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single-tubingless					Packer Set At none		County Sandoval		
Producing thru casing		Reservoir Temp. °F 105 @ 3000		Mean Annual Temp. °F		Baro. Press. - P _a 12		State New Mexico	
L		H		G _g		% CO ₂		% N ₂	
						% H ₂ S		Prover X	
								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.	
SI				635						
1.	2"		3/4							60
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	Supercompress. Factor F _{sp}	Rate of Flow Q, Mscf/d
1	12.49		68 psig	1.00	.9608	0.0035	963
2.							
3.							
4.							
5.							

NO.	P _i	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1										
2.										
3.										
4.										
5.										

NO.	P _i	P _w	P _i ²	P _w ²	P _i ² - P _w ²
1	6400	101	10286	408323	
2.					
3.					
4.					
5.					

$$(1) \frac{P_c^2}{P_i^2 - P_w^2} = 1.025$$

$$AOF = Q \left[\frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 983$$

$$(2) \left[\frac{P_c^2}{P_i^2 - P_w^2} \right]^n = 1.021$$

Absolute Open Flow		983 MCF/day	Mscf @ 15.025	Angle of Slope	0.85
--------------------	--	-------------	---------------	----------------	------

Remarks:

Approved By Division	Conducted By John C. Anderson	Calculated By J. Gregory Merrion	Checked By
----------------------	----------------------------------	-------------------------------------	------------