

RECEIVED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

OCT 29 1987

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10-16-87		OIL CON. DIV DIST. 3	
Company Wintershall Corporation					Connection			
Pool Basin Dakota					Formation Dakota		Unit	
Completion Date June 9, 1987			Total Depth 6100		Plug Back TD 5950		Elevation 5612 GL	
Ceq. Size 5 1/2			WI. 15.5		Set AI 6096		Perforations: From 5822 To 5898	
Thg. Size 2 3/8			WI. 4.7		Set AI 5905		Perforations: From To	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single					Packer Set AI None		Farm or Lease Name Ute Mountain Ute	
Producing Thru Tubing			Reservoir Temp. °F 172 @ 5840		Mean Annual Temp. °F		Baro. Press. - P _a 12.0	
L		H		G _g		% CO ₂		% N ₂
						% H ₂ S		Prover 2" positive choke nipple
								Meter Run
								Tape
FLOW DATA					TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F
SI	123 days						1701	60
1.	2" x 3/4"						314	74
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	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd	
1	11.00		326	.9868	1.240	1.029	4515	
2.								
3.								
4.								
5.								
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl. A.P.I. Gravity of Liquid Hydrocarbons _____ Deg. Specific Gravity Separator Gas _____ Specific Gravity Flowing Fluid _____ Critical Pressure _____ P.S.I.A. _____ P.S.I.A. Critical Temperature _____ R _____ R			
1					XXXXXXXXXXXX			
2.					XXXXXX			
3.								
4.								
5.								
P _c 1760 P _c ² 3097600 NO. P _t ² P _w P _w ² P _c ² - P _w ²					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1950$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1429$			
1		711	505521	2592079	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5160$			
2								
3								
4								
5								
Absolute Open Flow 5160 Mcfd @ 15.025					Angle of Slope @		Slope, n 75	
Remarks: TIGHT HOLE								
Approved By Division			Conducted By: Teffeller, Inc.		Calculated By:		Checked By:	