

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

RECEIVED
DEC 04 1984
OIL CON. DIV.
DIST. 3

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11-29-84	
Company Alex N. Campbell				Connection EPNG	
Pool Basin Dakota				Formation Dakota	
Completion Date 11-17-84		Total Depth 6265'		Plug back TD 6216	
Elevation 5976 GL		Form or Lease Name Tonkin Federal			
Csq. Size 4.500	Wt. 10.5	d 4.052	Set At 6264'	Perforations: From 6095 To 6174'	
Trq. Size 1.900	Wt. 2.9	d 1.610	Set At 6126'	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Gas - Single				Packer Set At None	
Producing Thru tubing		Reservoir Temp. °F #		Mean Annual Temp. °F	
Baro. Press. - P _a 12.0 est.		State New Mexico			
L	H	Gg .70 est	% 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	Duration of Flow
SI	9 days						1710		1726		
1.	2 inch X .750						66		483	60°F	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	12.3650		78	1.0000	.9258	1.012	904
2.							
3.							
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 1738 P_c^2 3,020,644					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.0883}{}$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.0655}{}$
NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$	
1		495	245,025	2775619	
2					
3					
4					
5					
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{963}{}$					

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 963$$

Absolute Open Flow	963	Mcfd @ 15.025	Angle of Slope @	Slope, n .75
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Remarks: Well unloaded 8.3 bbls condensate during test.

Approved By Division	Conducted By:	Calculated By: Kevin H. McCord	Checked By:
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