

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

CORRECTED TEST

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 7/15/68	
Company SOUTHERN UNION PRODUCTION CO.				Connection SOUTHERN UNION GAS COMPANY		
Pool TAPACITO				Formation PICTURED CLIFFS		Unit
Completion Date 6/22/68		Total Depth 8065		Plug Back TD 8040		Elevation 6973
Farm or Lease Name JICARILLA "E"						Well No. 10
Top. Size 7.625	Wt. 26.40	d 6.969	Set At 3687	Perforations: From 3576 To 3602		Unit Sec. Twp. Rye. 1 22 26N 4W
Thg. Size 4.500	Wt. 10.50	d 4.052	Set At 8062	Perforations: From 3583 To 3591		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple DUAL - GAS - GAS				Packer Set At 7690		County RIO ARriba
Producing Thru TUBING		Reservoir Temp. °F 6		Mean Annual Temp. °F 12		State NEW MEXICO
L 3571	H	Gg .700	% CO ₂	% N ₂	% H ₂ S	Prover Meter Run

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	2"		3/4"				660		651		20 DAYS
1.							178	55	568		3 HOURS
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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	12.3650		190	.9915	.9258	1.022	2,204
2							
3							
4							
5							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	Mcft/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 672	P _c ² 451,584		
NO.	P _t ²	P _w	P _w ²
1	36,100	580	336,400
2			
3			
4			
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.9205$

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 7,039$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.1939$

Adjusted Open Flow 7,039 Mcfd @ 15.025	Angle of Slope θ	Slope, n .85
Remarks:		
Approved By Commission: Conducted By: JOHN SHIPLEY Calculated By: WAYNE WARRINGTON Checked By: WAYNE WARRINGTON		

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special					Test Date: 7/15/68	
Company: Southern Union Production Co.				Connection: Southern Union Gas Company		
Pool: Tapacito				Formation: Pictured Cliffs		Unit:
Completion Date: 6/22/68		Total Depth: 8065		Plug Back TD: 8040		Elevation: 6973
Casing Size: 7.625		WT: 26.40		Set At: 3687		Perforations: From To
Tub. Size: 1.900		WT: 2.75		Set At: 3591		Perforations: From 3583 To 3591
Type Well - Single - Bradenhead - G.G. or G.O. Multiple				Packer Set At: 7690		County: Do Arriba
Producing Thru: Tubing		Reservoir Temp. °F: @		Mean Annual Temp. °F: 12		State: New Mexico
L: 3571	H:	Gg: .700	% CO ₂ :	% N ₂ :	% H ₂ S:	Prover: Meter Run: Date:

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	
1.	2"		3/4"				660		651		20 days
2.							178	55°	568		3 hours
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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	12.3650		190	.9915	.9250	1.022	2,204
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 : 663	P _c ² : 439,569	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.2607$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 7.556$
NO.	P _w	P _w ²	P _c ² - P _w ²
1	580	336,400	103,169
2			
3			
4			
5			

Absolute Open Flow: 7.556 Mcfd @ 15.025		Angle of Slope θ : .85
Remarks: _____		
ORIGINAL SIGNED BY: JOHN WARRINGTON		
Approved By Commission:	Conducted By: John Shipley	Calculated By: J. Warrington
		Checked By: J. Warrington