

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 11/28/73	
Company Southern Union Production Co.				Connection Southern Union Gas Company		
Pool Tapacito				Formation Pictured Cliffs		Unit
Completion Date 11/9/73		Total Depth 5870		Plug Back TD 5834		Elevation 6897
Farm or Lease Name Jicarilla "A"						Well No. 15
Csg. Size 5.500	Wt. 15.50	d 4.950	Set At 5869	Perforations: From 3605 To 3634		Unit G
Tbg. Size 1.900	Wt. 2.75	d 1.610	Set At 3610	Perforations: From 3602 To 3610		Sec. 14 Twp. 26N Rge. 4W
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual - Gas - Gas				Packer Set At 5554		County Rio Arriba
Producing Thru Tubing		Reservoir Temp. °F a		Mean Annual Temp. °F 12		State New Mexico
L	H	Gg 0.620	% 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	
SI	2"		3/4"				844		843		16 Days
1.							179	53°	629		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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.3650		191	1.0068	0.9837	1.018	2381
2.							
3.							
4.							
5.							

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

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		641	410,881	321,855
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.2766$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.0123$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4791$

Absolute Open Flow	4791	Mcfd @ 15.025	Angle of Slope °	Slope, n 0.85
--------------------	-------------	---------------	------------------	----------------------

Remarks:

Approved By Commission: NOV 29 1973	Conducted By: Kenneth E. Roddy	Calculated By: Kenneth E. Roddy	Checked By:
---	--	---	-------------

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

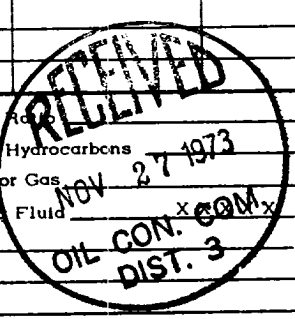
Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11/21/73	
Company Southern Union Production Co.				Connection Southern Union Gas Company			
Pool Blanco				Formation Mesaverde		Unit	
Completion Date 11/9/73		Total Depth 5870		Plug Back TD 5834		Elevation 6897 R.K.B.	
Farm or Lease Name Jicarilla A"		Well No. 15					
Csg. Size 5.500	Wt. 15.50	d 4.950	Set At 5869	Perforations: From 5724 To 5792		Unit 15	
Tbg. Size 1.900	Wt. 2.75	d 1.610	Set At 3610	Perforations: From 3602 To 3610		Unit G 14 26N 4W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual - Gas - Gas				Packer Set At 5554		County Rio Arriba	
Producing Thru Tubing		Reservoir Temp. °F @		Mean Annual Temp. °F 12		State New Mexico	
L 3591	H	Gg 0.700	% 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
SI	2"		3/4"				1115				7 Days
1.							95	55°			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		107	1.0048	0.9258	1.000	1231
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	
4.					Critical Pressure	P.S.I.A.
5.					Critical Temperature	R



P _c 1127	P _c ² 1,270,129		
NO.	P _t ²	P _w	P _w ²
1		80,011	1,190,118
2			
3			
4			
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.0672}{1.0672 - 1.0499} = 1.0672$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.0499}{1.0672 - 1.0499} = 1.0499$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1292$$

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1292$$

Absolute Open Flow 1292	Mcf @ 15.025	Angle of Slope θ	Slope, n 0.75
Remarks:			

Approved By Commission: NOV 27 1973	Conducted By: Kenneth E. Roddy	Calculated By: Kenneth E. Roddy	Checked By:
---	--	---	-------------