

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 7-7-72	
Company David Fasken				Connection Transwestern Pipeline Co.		
Pool Boyd Morrow				Formation Morrow		Unit
Completion Date 3-1-72		Total Depth 9250		Plug Back TD 9054		Elevation 3527 Gr.
Farm or Lease Name Arco "9" Morrison						Well No. 1
Csg. Size 4-1/2	Wt. 13.50	d 3.920"	Set At 9249	Perforations: 8970 8994 From To 9012 9032		Unit B
Tbg. Size 2-3/8	Wt. 4.70	d 1.995"	Set At 8832	Perforations: From To		Sec. Twp. Rge. 9 19-S 25-E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual G.G.				Packer Set At 8835'		County Eddy
Producing Thru Tubing		Reservoir Temp. °F 168 @ 8801		Mean Annual Temp. °F		State New Mexico
L 9001	H 9001	Gg 0.595	% CO ₂	% N ₂	% H ₂ S	Prover Meter Run Taps 2" Flange

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" x 1.375			720	58	70	928	68	695	67	72
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	10.55	206.2	733.2	0.9905	1.296	1.059	2957
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	1.09	356	1.49	0.891	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____
3.					Specific Gravity Flowing Fluid _____
4.					Critical Pressure _____ P.S.I.A.
5.					Critical Temperature _____ R

NO.	P _r ²	** P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.17$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.87$
1.		1268	1610	1373		
2.						
3.						
4.						
5.						

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 5520$

Absolute Open Flow 5520 Mcfd @ 15.025

RECEIVED

JUL 26 1972

Angle of Slope θ <u>51°</u> ARTESIA		Stope, n <u>0.811</u> ***
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Remarks: ** Calculated - giving consideration to gas gravity and friction in tubing.

*** Previous Back Pressure Test

* Not stabilized - still building

Approved By Commission:	Conducted By: Henry Engineering	Calculated By: Robert H. Angevine	Checked By:
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