NEW MEXICO OIL CONSER[illegible]ON COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
SEP 8 1972
O. C. C.
ARTESIA, OFFICE

Type Test: [XX] Initial [ ] Annual [ ] Special				Test Date: 8/31/72	
Company: Amoco Production Company		Connection: Southern Union Gas CO. - Temporary			Unit
Pool: Empire Penn		Formation: Morrow Sand			
Completion Date: 5/10/72	Total Depth: 10,324'		Plug Back TD: 10,275'	Elevation: 3641' RDB	Farm or Lease Name: State Fed. Gas COM
Csg. Size: 5-1/2" / Wt.: 15.5-17# / d: 4.892 / Set At: 10,324'			Perforations: From 10,033' To 10,062'		Well No.: 1
Tbg. Size: 2-3/8" / Wt.: 4.7 / d: 1.995 / Set At: 9,711			Perforations: From open end To		Unit: E / Sec.: 28 / Twp.: 17S / Rge.: 28E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 9705'		County: Eddy
Producing Thru: 2-3/8" tbg	Reservoir Temp. °F: 142 @ 10,048'	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9711	9711	0.650	0.41	0.58	0.00	-	4"	Flange

	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	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI								Pkr	-	72 hrs
1.	4.026	x 1.000	680	8.0	90	680	60	Pkr	-	24 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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	4.753	74.43	693.2	0.9723	1.240	1.058	451
2.							
3.							
4.							
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	1.03	550	1.48	0.894
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio 75,167 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 54.0 Deg.
Specific Gravity Separator Gas 0.650 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.690
Critical Pressure 671 P.S.I.A. 670 P.S.I.A.
Critical Temperature 373 R 386 R

P_c 3531.2 P_c^2 12,469

NO	P_t^2	P_w *	P_w^2	$P_c^2 - P_w^2$
1		1346.2	1812.3	10,657
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.170$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.170$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 528$

Absolute Open Flow 528 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n 1.000**

Remarks: * Pc and Pw measured with bottom hole pressure recorder
** Slope of 1.000 assumed since well pressure would not stabilize on smaller choke settings to give more than one point.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Wilbur Wilson	Edward Snook	Jim York