

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

c/s File
 Form C-122
 Revised 9-1-65

JAN 05 1983

Type Test ☒ Initial 4 POINT ☐ Annual ☐ Special				Test Date 12-29-82		O. C. D.	
Company STEVENS OPERATING CORP. ✓				Connection AIR NEW WELL		ARTESIA OFFICE	
Pool PECOS SLOPE <i>U.D. / 11/82</i>				Formation ABO		Unit #	
Completion Date 12-22-82 / 1-1-83		Total Depth 4530.		Plug Back 4488.		Elevation 0.	
Farm or Lease Name NICHOLAS DALE <i>Fed.</i>		Well No. 2		Unit N		Sec. Twp. Rge. 33 7S 26E	
Casing Size 4.500		Wt. 10.5		Perforations: From 4001. To 4319.		Well No.	
Tub. Size 2.375		Wt. 4.7		Perforations: From 0. To 0.		Unit Sec. Twp. Rge. N 33 7S 26E	
Type Well - Single - Bradenhead - G.O. or G.O. Multiple SINGLE				Packer Set At 3918.		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 111° 4160.		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2	
L 4160.		H 4160.		C _g 0.663		Prover 2.0	
		% CO ₂ 0.04		% N ₂ 5.27		% H ₂ S 0.	
						Meter Run 0.	
						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.		CHOKE
51							832	38			29.5 HRS.
1.	2.00 X 0.094			550	0	48	802	38	0	9/64	1
2.	2.00 X 0.188			360	0	50	752	42	0	11/64	1
3.	2.00 X 0.188			580	0	49	703	34	0	12/64	1
4.	2.00 X 0.188			660	0	48	662	36	0	32/64	1
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow O. Mcd
1	0.14	0	563.2	1.0117	1.2281	1.0589	104.
2	0.61	0	373.2	1.0098	1.2281	1.0379	293.
3	0.61	0	593.2	1.0107	1.2281	1.0617	477.
4	0.61	0	673.2	1.0117	1.2281	1.0713	547.
5							

NO.	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	0.85	508.	1.40	0.892	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	0.57	510.	1.40	0.982	Specific Gravity Separator Gas _____ 0.663
3	0.90	509.	1.40	0.887	Specific Gravity Flowing Fluid _____ XXXXX
4	1.02	508.	1.40	0.871	Critical Pressure _____ 660. P.S.I.A.
5					Critical Temperature _____ 364. P.S.I.A.

P ₁ 848.7 P ₂ 720.			
NO.	P ₁ ²	P _w ²	P _e ² - R _w ²
1	665.	819.	670.
2	586.	768.	590.
3	513.	721.	520.
4	456.	681.	463.
5			

$$(1) \frac{P_e^2}{R_e^2 - R_w^2} = 2.8022$$

$$AOF = O \left[\frac{R_e^2}{R_e^2 - R_w^2} \right]^n = 1533.$$

$$(2) \left[\frac{R_e^2}{R_e^2 - R_w^2} \right]^n = 2.8022$$

*Post ID-2
1-7-83
Bennett & BK*

Absolute Open Flow	1533.	Mcd @ 15.025	Angle of Slope @	45.0	Slope, n	1.000
Remarks:						
Approved By Commission: _____ Conducted By: DON BENNETT Calculated By: BENNETT-CATHEY Checked By: _____						