

APR 132
JUN 21 1982
O.C.D.
ARTESIA, OFFICE

Type Test ☒ Initial 4 POINT ☐ Annual		Test Date RECEIVED JUN 21 1982		660 FS	
Company T.H. MC ELVAIN JR.		Connection AIR NEW WELL		660 FE	
Well No. UNDESIGNATED		Formation ABO		Unit P	
Completion Date 5-22-82		Total Length 4,201		Flow Back TD 4,200	
Perforations From 4.5 To 3,839		Perforations From 3,693 To 3,839		Form or License Name RATTLESNAKE STATE	
Perforations From 2.375 To 3,845		Perforations From OPEN To ENDED		Well No. 1	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 98		Mean Annual Temp. °F 60	
Baro. Press. - P _g 13.2		State N.M.		City CHAVES	
L 3766	H 3766	CO ₂ 0.7011	% CO ₂ 1.981	% N ₂ 12.118	% H ₂ S 2.00
Prover 2.00		Meter Run FLG.		Pipe FLG.	

FLOW DATA							TUBING DATA		B.H.P. DATA		Duration of Flow
Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. Dw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	CHOKE		
51						794		1092			
1	2.00	X	3/16	67	.0	89	722	88	1090	0/64	1 HR.
2	2.00	X	3/16	110	.0	69	794	88	1084	2/64	1 HR.
3	2.00	X	1/4	115	.0	78	872	88	1074	8/64	1 HR.
4	2.00	X	1/2	200	.0	69	728	85	941	14/64	1 HR.
5	2.00	X	1/2	233	.0	71	587	85	815	18/64	1 HR.

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 _{sp}	Rate of Flow Q, Mcfd
1	0.6082	.00	80.2	.9732	1.194	1.014	57
2	0.6082	.00	123.2	.9915	1.194	1.011	90
3	1.087	.00	128.2	.9831	1.194	1.010	165
4	4.279	.00	213.2	.9915	1.194	1.017	1098
5	4.279	.00	246.2	.9896	1.194	1.021	1271

NO.	H	Temp. °F	T _g	Z	Gas Liquid Hydrocarbon Ratio	Mcf/Lb.
1	.12	549	1.54	.973	A.P.I. Gravity of Liquid Hydrocarbons	
2	.19	529	1.49	.979	Specific Gravity Separator Gas	
3	.20	538	1.51	.980	Specific Gravity Flowing Fluid	
4	.32	529	1.49	.966	Critical Pressure	655
5	.38	531	1.49	.960	Critical Temperature	356

NO.	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	991.7	983.5	973.1	955.6	937.2	918.7	899.2	879.7	860.2	840.7
2	986.4	973.1	955.6	937.2	918.7	899.2	879.7	860.2	840.7	821.2
3	977.6	955.6	937.2	918.7	899.2	879.7	860.2	840.7	821.2	801.7
4	859.8	739.2	618.6	498.0	377.4	256.8	136.2	15.6	5.0	0.4
5	747.5	558.7	428.4	298.1	167.8	37.5	7.0	0.5	0.1	0.0

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.3041$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^{1/2} = 1.5080$$

$$A \cdot Q = C \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2425.0$$

Flow Rate per Flow	2425.0	Mcf @ 15.025	Angle of Slope @	52.25	Slope, n	.774
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Remarks: **BOTTOM HOLE PRESSURE MEASURED WITH AMARADA PRESSURE ELEMENTS.**

Approved By: JOHN SIEGWEIN	Conducted By: RICHARD TOWNLEY	Calculated By: RICHARD TOWNLEY	Checked By: RICHARD TOWNLEY
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