

NEW MEXICO OIL CONSERVATION COMMISSION
MULTI-POINT AND ONE-POINT BACK PRESSURE TEST FOR GAS WELL
RECEIVED BY

45th
Form F-114
Revised 5-1

NOV 14 1985

Type Test ☐ Initial ☐ Annual ☒ Special		Test Date 5-14-85	
Company ✓ CHAMA		Connection ARTESIA, C.S. TO AIR NEW WELL	
Pool W.D. W.D. W.D.		Formation MORROW	
Completion Date 5-4-85		Total Depth 9264 9256	Plug Back To 9130
Elevation 3467		Farm or Lease Name OSAGE BOYD	
Test Size 4.500	Wt. 11.6	d 4.000	Set At 9130
Perforations: From 8866 To 9110		Well No. 1	
Test Size 2.375	Wt. 4.7	d 1.995	Set At 8798
Perforations: From 0 To 0		Unit Loc. Twp. Rge. E 15 19S 25E	
Type Well - Single - Broadhead - G.C. or G.O. Multiple SINGLE		Perfor. Set At 8798	County EDDY
Producing Time TUBING	Reservoir Temp. °F 212 @ 8993	Mean Annual Temp. °F 60.0	State NEW MEXICO
L 8993	H 8993	Cg 0.697	% CO ₂ 9.17
		% N ₂ 0.94	% H ₂ O 0
		Prover 2.0	Motor Run 0

FLOW DATA						TUBING DATA		B.H.P. 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.	
51							2730	212	3476	
1.	2.00	X	0.063	2520	0	60	2520	212	3199	24/64
2.	2.00	X	0.094	2073	0	60	2073	212	2667	24/64
3.	2.00	X	0.125	1407	0	59	1407	212	2028	24/64
4.	2.00	X	0.188	600	0	55	600	212	1262	24/64
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. Compres. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	0.06	0	2533.2	1.0000	1.1978	1.1896	231
2	0.14	0	2086.2	1.0000	1.1978	1.1862	417
3	0.26	0	1420.2	1.0010	1.1978	1.1440	515
4	0.61	0	613.2	1.0048	1.1978	1.0615	475
5							

NO.	P _h	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	3.59	520	1.40	0.707	0	0	0.697	XXXXXX	706	371
2	2.95	520	1.40	0.711				XXXXXX		
3	2.01	519	1.40	0.764						
4	0.87	515	1.39	0.887						
5										

P _h 2740.0 P _w 7507				
NO.	P _h ²	P _w ²	P _w ²	P _h ² - P _w ²
1	10318	2516	6330	1177
2	7183	2097	4399	3108
3	4166	1607	2583	4925
4	1626	1018	1036	6472
5				

(1) $\frac{P_h^2}{P_h^2 - P_w^2} = 1.5244$

AOR = Q $\left[\frac{P_h^2}{P_h^2 - P_w^2} \right]^n = 652$

(2) $\left[\frac{P_h^2}{P_h^2 - P_w^2} \right]^n = 1.2656$

Post #10-2
1-17-86
Comp + BIK

Absolute Open Flow	652	Mcf @ 15.025	Angle of Slope °	60.8	Slope, n	0.5591
Remarks: B.H.P. MEASURED WITH AMARADA PRESSURE ELEMENT						
Approved By Commission	Conducted By	Calculated By	Checked By			
	BENNETT & CATHEY	RICHARD TWONLEY				