

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

Form O-122
Revised 9-1-65

Copy 451
C-122

FEB 20 1974

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 12-10-73	
Company C & K PETROLEUM, INC.		Connection NONE YET	
Pool W.C.		Formation MORROW	
Completion Date 12-1-73		Total Depth 11975'	Plug Back TD 11914'
Casing Size 5 1/2" O.D.		Wt. 17#	Set At 11960'
Tag. Size 2-7/8" EUE		Wt. 6.50#	Set At 11399'
Type Well - Single - Brazenhead - G.G. or G.O. Multiple SINGLE		Packer Set At 11399	
Producing Thru TUBING		Reservoir Temp. °F 196 @ 11500	Mean Annual Temp. °F 60
Baro. Press. - P _a 13.2		State NEW MEXICO	
L 11399		H 11399	G _g 0.573
% CO ₂ 0.93		% N ₂ 0.48	% H ₂ S --
Prover --		Meter Run X	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.	Temp. °F	
1.	4.000		1.250	255	11	89	3790				75 MIN.
2.	DITTO			230	21	87	3687				75 "
3.	"			310	44	90	3505				60 "
4.	"			330	76	78	3201				105 "

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 _{pv}	Rate of Flow Q, Mcfd
1.	7.403	54.32	268.2	0.9732	1.321	1.017	530
2.	DITTO	78.47	293.2	0.9750	DITTO	1.019	769
3.	"	121.08	333.2	0.9723	"	1.021	1186
4.	"	161.50	343.2	0.9831	"	1.024	1604

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	No. LIQUIDS	Mcf/cub. Deg.
1.	0.40	549	1.59	0.967	A.P.I. Gravity of Liquid Hydrocarbons	--	
2.	0.44	547	1.58	0.963	Specific Gravity Separator Gas	0.573	X X X X X X X X
3.	0.50	550	1.59	0.959	Specific Gravity Flowing Fluid	X X X X X	
4.	0.51	538	1.55	0.954	Critical Pressure	672	P.S.I.A.
5.					Critical Temperature	346	R

NO.	P _r ²	P _w ²	P _w ² - P _r ²	P _r ² - P _w ²
1.	4317.2	23205	2300	
2.	4590.2	21998	3507	
3.	4488.2	20144	5361	
4.	4036.2	16291	9214	

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

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

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

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ARTESIA, NEW MEXICO

Absolute Open Flow 4300		Mcf/d @ 15.025		Angle of Slope @ 49° 20" Slope, n 0.850	
Remarks: *USED AMERADA BOMB CHOKE SIZES: RATE #1 - 3/64", RATE #2 - 5/64", RATE #3 - 7/64", RATE #4 - 9/64".					
Approved by Commission:	Conducted By: George E. Legendre	Calculated By: H.E. L.	Checked By:		