

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

Form C-122
 Revised 9-65

MAR 26 1973

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-9-73			
Company C & K PETROLEUM				Connection NONE YET		O.C.C. ARTESIA, OFFICE	
Pool 21. ATOKA WEST Morrow Gas				Formation MORROW		Unit #	
Completion Date 3-3-73		Total Depth 8938		Plug Back TD 8931		Elevation 3430 G.L.	
Farm or Lease Name VANDIVER Com.							
Csg. Size 4 1/2" OD	Wt. 9.50	d 4.090	Set At 8939	Perforations From 8816 To 8802		Well No. 1	
Tbg. Size 2 1/2" EUE	Wt. 6.50	d 2.441	Set At 8664	Perforations From OPEN END To		Unit Sec. Twp. Rge. M 18 18S 26E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 8664		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 146 @ 8700		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State NEW MEXICO							
L 8700	H 8700	G _g .642	% CO ₂ 0.53	% N ₂ 2.65	% H ₂ S --	Prover X	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
SI	19.5 HRS.						2333				
1.	4.000 x 2.000			360	6.5	60	2237	63	PACKER		75 MIN
2.	DITTO			580	13.0	88	2170	64	"		75 "
3.	"			580	59.0	74	1836	63	"		105 "
4.	"			807	98.0	73	1475	65	"		90
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 Q, Mcfd
1	21.08	49.25	373.2	1.000	1.248	1.036	1342
2	21.08	87.82	593.2	.9741	1.248	1.045	2352
3	21.08	187.08	593.2	.9868	1.248	1.050	5100
4	21.08	283.51	820.2	.9877	1.248	1.071	7890
5							

NO.	P _t	Temp. °R	T _r	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	0.56	520	1.44	0.931	34.595 Mcf/bbl.	58 Deg.	0.642	XXXXXXX	669 P.S.I.A.	372 R
2	0.89	548	1.52	0.916						
3	0.89	534	1.48	0.907						
4	1.23	533	1.47	0.872						
5										

P _c * 3025.2		P _c ² 9151.8		$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{9151.8}{4549.9}$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.9525$	
NO.	P _t ²	* P _w	P _w ²	P _c ² - P _w ²			
1	2905.2	8440.2	711.6				
2	2827.2	7993.1	1187.7				
3	2501.2	6256.0	2895.8				
4	2145.2	4601.9	4549.9				
5							

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 15,405$				Absolute Open Flow 15,405 Mcfd @ 15.025		Angle of Slope 46°		Slope, n 0.956	
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Remarks: *USED AMERADA TYPE B.H.P. BOMB.			
Approved By Commission: _____ Conducted By: <u>Narry E. Legendre</u> Calculated By: <u>Narry E. Legendre</u> Checked By: _____			
HARRY E. LEGENDRE (APEX ENGINEERING CO)			

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posted
 3-30-73