

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

Form C-122
 Revised 9-1-65

RECEIVED

C/SF
C-122

Type Test ☒ Initial 4 POINT ☐ Annual ☐ Special		Test Date 3-25-82		APR 5 1982	
Company <i>Viking Petr. Inc.</i> JACK GRYNBURG & ASSOCIATES		Connection TO AIR NEW WELL		O.C.D.	
Well UNDESIGNATED <i>Per. 1/2" 1/2"</i>		Formation ABO		Unit F ARTESIA, OFFICE	
Completion Date 3-21-82		Total Depth 4,136 FEET		Plug back TD 4,050	
Elevation		Perforations: From 3,850 To 3,942		Farm or Lease Name GRYNBURG, <i>State</i> FEDERAL	
Well No. 4		Perforations: From OPEN To ENDED		Unit Sec. Twp. Rje. F 32 5S 24E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 104° 3,896		Mean Annual Temp. °F 60°	
Baro. Press. - P _a 13.2		State NEW MEXICO			
L 3,896	H 3,896	G _g 0.707	% CO ₂ 6.10	% N ₂ 8.06	% H ₂ S 2.00
Prover 2.00		Meter Run		Taps FLANGE	

FLOW DATA							TUBING DATA		BHP 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	
SI							690		763		102 HRS.
1.	2.000	X	.1875	325	0	62°	607	58°	675	19/64	1 HR.
2.	2.000	X	.1875	450	0	56°	512	52°	571	14/64	1 HR.
3.	2.000	X	.250	295	0	54°	405	50°	452	16/64	1 HR.
4.	2.000	X	.250	224	0	60°	224	50°	321	48/64	1 HR.
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 Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	.6237	0	338.2	.9981	1.1893	1.0292	258
2	.6237	0	463.2	1.0039	1.1893	1.0420	359
3	1.1150	0	308.2	1.0058	1.1893	1.0281	423
4	1.1150	0	237.2	1.0000	1.1893	1.0212	321
5							

NO.	R _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/LbL.
1	.50	522	1.46	.944	A.P.L. Gravity of Liquid Hydrocarbons _____ Deg.
2	.68	516	1.44	.921	Specific Gravity Separator Gas .7070 X X X X X X X X
3	.45	514	1.43	.946	Specific Gravity Flowing Fluid X X X X X
4	.35	520	1.45	.959	Critical Pressure 681 P.S.I.A. _____ P.S.I.A.
5					Critical Temperature 359 R _____ R

NO.	P _c ²	P _w ²	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.5608$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2493$
1		688.2	473.6	129.0		
2		584.2	341.3	261.0		
3		465.2	216.4	386.0		
4		334.2	111.7	491.0		
5						

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 528.5$

Absolute Open Flow 528.5 Mcfd @ 15.025		Angle of Slope .5000		Slope, n 63.4	
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Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS

Approved By Commission:	Conducted By: RICHARD TOWNLEY	Calculated By: BENNETT-CATHEY	Checked By:
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