

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
4565

Type Test ☒ Initial ☐ FOUR POINT ☐ Annual ☐ Special		Test Date 2-22-82		MAR - 4 1982	
Company VIKING PETROLEUM, INC.		Connection AIR NEW WELL		O. C. D. ARTESIA, OFFICE	
Pool <i>Recos Slope abo</i> UNDESIGNATED		Formation ABO		Unit F	
Completion Date 2-16-82		Total Depth 4107		Plug Back TD 4107	
Elevation 3932 KB		Farm or Lease Name GRYNBERG, STATE Com		Well No. 1-35	
Coj. Size 4.500	Wt. 10.5	d 4.052	Set At 4107	Perforations: From 3769 To 4000	
Thq. Size 2.375	Wt. 4.70	d 1.995	Set At 3713	Perforations: From OPEN To ENDED	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE				Packer Set At NONE	
Producing Thru TUBING		Reservoir Temp. °F 100 # 3885		Mean Annual Temp. °F 60°	
Baro. Press. - P _a 13.2		State NEW MEXICO		County CHAVES	
L 3885	H 3885	G _g .6813	% CO ₂ 3.8246	% N ₂ 5.9666	% H ₂ S Prover
Meter Run 3.000		Taps FLANGE			

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.	Temp. °F	
SI							968		1080		125 HRS.
1.	3.00	X	1.750	410	13.0	40	932	60	1062		1
2.	3.00	X	1.750	430	29.0	45	894	61	1042		1
3.	3.00	X	1.750	430	60.0	50	828	63	1021		1
4.	3.00	X	1.750	600	77.5	64	727	65	1002		1
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	16.0100	74.17	423.2	1.0198	1.2118	1.0443	1532
2	16.0100	113.37	443.2	1.0147	1.2118	1.0448	2332
3	16.0100	163.07	443.2	1.0098	1.2118	1.0426	3331
4	16.0100	218.00	613.2	.9962	1.2118	1.0535	4439
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/lbl.
1	.63	500	1.39	.917	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.66	505	1.40	.916	Specific Gravity Separator Gas .6810 XXXXXXXX
3	.66	510	1.42	.920	Specific Gravity Flowing Fluid XXXXX
4	.91	524	1.46	.901	Critical Pressure 676 P.S.I.A. _____ P.S.I.A.
5					Critical Temperature 360 R _____ R

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 7.2871$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 6.2056$
1	1093.2	1075.2	1156.1	39.0	AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 27,546.6$	
2	1055.2	1113.4	82.0			
3	1034.2	1069.6	126.0			
4	1015.2	1030.6	164.0			
5						

Absolute Open Flow 27,546.6 Mcfd @ 15.025 Angle of Slope 47.4 Slope, n 9191

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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