

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1-3-71	
Company READING & BATES, INC.				Connection NONE		
Pool WILDCAT				Formation QUEEN		Unit
Completion Date 12-30-70		Total Depth 2675		Plug Back TD 2640		Elevation 4133 GR
Farm or Lease Name R & J FEDERAL						Well No. 1
Csg. Size 4 1/2"	Wt. 9.5#	d 3.96	Set At 2675	Perforations: From 2604 To 2609		
Thq. Size 2 3/8"	Wt. 4.7#	d 1.96	Set At 2560	Perforations: From OPEN END To		Unit Sec. Twp. Rge. A 20 12 31
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES
Producing Thru TUBING		Reservoir Temp. °F 90 @ 2600		Mean Annual Temp. °F		State NEW MEXICO
L	H	Gg	% CO ₂ 0.05	% N ₂ 58.7	% H ₂ S 0	Prover X
						Meter Run Taps

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover 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				1080		70			1080		69.0 HRS
1.	2 inch		1/8	970		70			985		1.5
2.	"		5/16	810		68			820		2.5
3.	"		3/8	680		60			765		3.0
4.	"		1/2	470		55			670		3.0
5.	"		1/2	470		44			665		22.0

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{V_w P_m}$	Pressure PROVER PSIA P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	0.3418		983.2	0.9905	0.8289	1.0404	277
2	2.1577		823.2	0.9924	"	1.0400	1520
3	3.0691		693.2	1.0000	"	1.0314	1819
4	5.5233		483.2	1.0048	"	1.0242	2276
5	5.5233		483.2	1.0157	"	1.0249	2303

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2					Specific Gravity Separator Gas 0.873 XXXXXXXXXX
3					Specific Gravity Flowing Fluid XXXXXX
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.641$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.477$
1		998.2	996.4	196.7		
2		833.2	694.2	500.9		
3		778.2	605.6	589.5		
4		683.2	466.8	728.3		
5		678.2	460.0	735.2		

ACF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3361$

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.641$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.477$

Absolute Open Flow 3,400 Mcfd @ 15.025	Angle of Slope 48°	Slope, n 0.90
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Remarks:

Approved By Commission:	Conducted By: <i>Paul S. Brown</i>	Calculated By: <i>Harold M. Harris</i>	Checked By:
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