

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Copy 65F
C-122
Form C-12
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 9-28-73		OCT 3 1973	
Company Yates Petroleum Corp		Connection		Unit C. C. C.	
Pool Undesignated		Formation Atoka		ARTESIA OFFICE	
Completion Date 9-25-73		Total Depth 8340	Plug Back TD 8339	Elevation 3627' KB	Farm or Lease Name Federal "CR" Com
Csg. Size 7"	Wt. 26#	Set At 8340	Perforations: From 7945 To 7963		Well No. 1
Tub. Size 2 3/8	Wt. 4.7#	Set At 7944	Perforations: From To		Unit M
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. Multiple			Packer Set At 7872	County Eddy	
Producing Thru 2 3/8" Hg	Reservoir Temp. °F 129	Mean Annual Temp. °F	Baro. Press. - P _a 13.2	State New Mexico	
L 7944	H 7944	G _a 0.606	% CO ₂ 0.36	% N ₂ 0.35	% H ₂ S Nil
Prover Barton		Meter Run 3"	Taps Flange		

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							2301	70			69 hrs
1.	3		1.750	733	8	70	2065	72			1 hr
2.	3		1.750	735	22	53	1655	73			1 hr
3.	3		1.750	750	36	52	1223	76			1 hr
4.	3		1.750	755	42	74	879	76			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	15.87	77.263	746.2	.9905	1.285	1.064	1660
2	15.87	128.298	748.2	.9877	1.285	1.063	2747
3	15.87	165.756	763.2	.9887	1.235	1.065	3559
4	15.87	178.450	768.2	.9868	1.285	1.066	3828
5.							

NO.	P _t	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio	Mcfd/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	55.9
2.					Specific Gravity Separator Gas	0.606
3.					Specific Gravity Flowing Fluid	XXXXXX
4.					Critical Pressure	673.6 P.S.I.A.
5.					Critical Temperature	361.4 °R

P _c	2868	P _c ²	8.225
NO.	P _w	P _w ²	P _c ² - P _w ²
1	2599	6.755	1.470
2	2125	4.521	3.704
3	1738	3.021	5.204
4	1428	2.039	6.186
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{8.225}{3.494}$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.6572}{1}$	
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4552$		OCT 2 1973	

Absolute Open Flow	4552	Mcfd @ 15.025	Angle of Slope	59° 28'	Slope, n	0.590
Remarks: Witnessed by Jack Moore & Brent Linebarrier (TWPL), Lonnie Jordan (NGPL)						
Approved By Commission:	Conducted By:	Calculated By:	Checked By:			
	Eddie Mahfood	Eddie Mahfood				