

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT / ONE POINT BACK PRESSURE TEST OR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 6-21-76		JUN 28 1976	
Company Yates Petroleum Corporation					Connection Permo-Penn		O. C. C.	
Pool Richard Knob					Formation Permo-Penn		Unit ARTESIA, OFFICE	
Completion Date 5-11-76		Total Depth 8190'		Plug Back TD 6772'		Elevation 3605 KB		Farm or Lease Name Gable "FV" Com
Csg. Size 4 1/2"	Wt. 10.5	d	Set At 6772	Perforations: From 6485 To 6663		Well No. 1		
Tbg. Size 2-3/8"	Wt. 4.7	d	Set At 6444	Perforations: From To		Unit Sec. Twp. Rje. H 29 17S 25E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 6444		County Eddy	
Producing Thru Tbg		Reservoir Temp. °F # 121		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2		State New Mexico
L 6580	H 6580	G _g 0.662	% CO ₂ 1.93	% N ₂ 0.79	% H ₂ S Nil	Prover 2"	Meter Run	Taps

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
1.	2"	Adj. Ch	20/64"				1846	82			1 month
2.	2"		28/64"				266	66			1 1/2 hrs.
3.	2"		32/64"				167	67			1 hr
4.	2"		36/64"				130	67			1 hr
5.							95	67			1 hr

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.	1.645		279.2	.9943	1.229	1.052	590
2.	3.231		180.2	.9933	1.229	1.031	733
3.	4.194		143.2	.9933	1.229	1.024	750
4.	5.290		108.2	.9933	1.229	1.019	712
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio 85.710 Mcf/bbl.	
1.	.412	436	1.169	.903	A.P.I. Gravity of Liquid Hydrocarbons 49.6 Deg.	
2.	.266	437	1.172	.940	Specific Gravity Separator Gas XXXXXXXXXX	
3.	.212	437	1.172	.953	Specific Gravity Flowing Fluid XXXXX .662	
4.	.160	437	1.172	.964	Critical Pressure P.S.I.A. 677 P.S.I.A.	
5.					Critical Temperature R 373 R	

P _t 2349.2 P _c ² 5519				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		523.2	274	5245
2		475.2	226	5293
3		446.2	199	5320
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0374$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 778 \text{ MCFPD}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0374$$

Absolute Open Flow 778 Mcfd @ 15.025	Angle of Slope 45 deg.	Slope, n 1.00
Remarks: BHP by Bennett Wireline Service		
Approved By Commission:	Conducted By: Don Weaver	Calculated By: Eddie Mahfood
Checked By:		