

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

Form C-122
Revised 9-1-65

RECEIVED

F ✓
C-122
Oper

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 6-25-80		SEP 9 1980	
Company Yates Petroleum Corp. ✓				Connection Transwestern			O. C. D.	
Pool Boyd Morrow				Formation Morrow			Unit ARTESIA, OFFICE	
Completion Date 5-20-80		Total Depth 9260'		Plug Back TD 9191'		Elevation 3455' KB		Farm or Lease Name Rio Penasco "KD" ^
Csg. Size 5-1/2	Wt. 17#	d 4.892	Set At 9249'	Perforations: From 8976' To 9005'		Well No. #1- Com		
Thq. Size 2-7/8	Wt. 6.5#	d 2.441	Set At 8941'	Perforations: From 8944' To 8947'		Unit Sec. Twp. Rge. N 2-T19S-R25E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8941'		County Eddy Co.		
Producing Thru Tubing		Reservoir Temp. °F 147 @ 8993		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico
L 8982	H 8982	G _g 0.591	% CO ₂ 0.60	% N ₂ 0.24	% H ₂ S Nil	Prover --	Meter Run 4	Taps Flanged

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow Days	
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
SI							2960	99			
1.	4.067	x	2.000	357	10	78	2824	100			1 hr
2.	"	"	"	359	19	78	2698	101			1 hr
3.	"	"	"	360	36	78	2493	102			1 hr
4.	"	"	"	361	73	78	2018	103			1 hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	19.81	60.84	370.2	.9831	1.304	1.0274	1587
2	19.81	84.09	372.2	.9831	1.304	1.0273	2194
3	19.81	115.91	373.2	.9831	1.304	1.0272	3024
4	19.81	165.28	374.2	.9831	1.304	1.0271	4311
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 1150 Mcf/Ebl.
1.	0.549	538	1.528	.9473	A.P.I. Gravity of Liquid Hydrocarbons 51.7 Deg.
2.	0.552	538	1.528	.9476	Specific Gravity Separator Gas 0.588
3.	0.554	538	1.528	.9478	Specific Gravity Flowing Fluid X X X X X
4.	0.555	538	1.528	.9479	Critical Pressure 674 P.S.I.A.
5.					Critical Temperature 352 R

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.9413$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.4582$
1			12273	1126	AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 6286$	
2			11248	2151		
3			9698	3701		
4			6497	6902		
5						

Absolute Open Flow 6286 Mcfd @ 15.025		Angle of Slope @ 60.38 deg.		Slope, n 0.5686
Remarks: Static pressures by Bennett Wireline flowing pressures by DWT. Calculations worksheet C122-D attached. (well was still cleaning up).				
Approved By Commission:		Conducted By: Don Weaver		Calculated By: Eddie Mahfood
Checked By:				