

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-27-72		APR 28 1972	
Company Yates Petroleum Corp		Connection Unconnected			
Pool Boyd Morrow		Formation Morrow		Unit O. C. C. ARTESIA, OFFICE	
Completion Date 4-27-72		Total Depth 9222'		Plug Back TD 9061'	
Elevation 3572 KB		Farm or Lease Name Johnston BE Fed.		Well No. 1	
Csg. Size 4 1/2"	Wt. 10.5	Set At 9097KB	Perforations: From 8975 To 9001	Unit Sec. Twp. Rge. A 8 19S 25E	
Tbg. Size 2 3/8"	Wt. 4.6	Set At 8934 KB	Perforations: From To	Country Eddy	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8934	
Producing Thru Tubing		Reservoir Temp. °F # 130		Mean Annual Temp. °F	
Baro. Press. - P _a 13		State New Mexico		Meter Run	
L H		Gg 0.593		% CO ₂ 0.67	
% N ₂ 0.25		% H ₂ S Nil		Prover Orifice Well Tester	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in Hg	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
Sl											
1.	2" x 1"			11.8	24.0	48	2743		Sealed		
2.	2" x 1"			23.6	48.0	43	2591	20	-		2 nrs
3.	2" x 1 1/4"			15.5	31.6	10	2448	20	-		1 hr
4.	2" x 1 1/4"			32.0	65.1	42	2335	0	-		2 1/2 hrs
5.							2169	20	-		1

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	520	24"	.9659	1.0117	1.0058	1.0010	512
2.	809	48"	.9717	1.0168	1.0058	1.0018	805
3.	1044	31.6"	.9675	1.0518	1.0058	1.0016	1070
4.	1688	65.1	.9746	1.0178	1.0058	1.0029	1689
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Mcf/bbl.
1.							
2.							
3.							
4.							
5.							
					Specific Gravity Separator Gas	0.593	XXXXXXX
					Specific Gravity Flowing Fluid	XXXXX	XXXXXXX
					Critical Pressure	675.2	P.S.I.A.
					Critical Temperature	354.6	P.S.I.A.

NO.	P _t ²	P _w	R _w ²	P _t ² - R _w ²	$(1) \frac{P_c^2}{P_t^2 - R_w^2} = 8.237$ $(2) \left[\frac{P_c^2}{P_t^2 - R_w^2} \right]^n = 5.23$ $AOF = Q \left[\frac{P_c^2}{P_t^2 - R_w^2} \right]^n = 4.210 \text{ MMCFPD}$
1.		*3294	10.850	0.805	
2.		*3200	10.240	1.415	
3.		*3080	9.485	2.169	
4.		*2866	8.214	3.441	

Absolute Open Flow		Mcf/d @ 15.025	Angle of Slope @ 38.1 deg.	Slope, n 0.784
Remarks: *Bottom Hole Pressure at 8938 (center of perf.) AOF Potential Test				
Conducted by Yates Petroleum Corp & Witnessed By Transwestern Pipeline Co.				
Approved By Commission:	Conducted By: Jack Moore (TW) & Don Weaver (Yates)	Calculated By: Eddie Mahfood	Checked By:	