

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-12-79		JUN 18 1979	
Company Yates Petroleum Corp.				Connection Transwestern Pipeline Company				O. C. C. ARTERIA, OFFICE	
Pool Eagle Creek Strawn				Formation Strawn				Unit K-4942	
Completion Date 3-28-79		Total Depth 8678'		Plug Back TD 8043'		Elevation 3470' KB		Farm or Lease Name Arco "EC" State	
Csg. Size 5-1/2"	Wt. 17#	d 4.892	Set At 8678' KB	Perforations: From 7952 To 7978		Well No. 1			
Tbg. Size 2-3/8"	Wt. 6.5#	d 2.441	Set At 7906' KB	Perforations: From To		Unit B	Sec. 36	Twp. 17S	Rge. 25E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 7906' KB		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 137^a 7950		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico	
L 7956	H 7956	G _g .655	% CO ₂ 2.86	% N ₂ 0.77	% H ₂ S Nil	Prover	Meter Run 4"	Tape 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							1764	46			72 hour
1.	4.026 x 0.750			180	5	60	1285	48			1 hour
2.				180	11	60	1088	51			1 hour
3.				180	21	60	889	55			1 hour
4.				180	39	60	531	60			1 hour
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	2.661	31.08	193.2	1.000	1.241	1.0185	105
2	2.661	46.10	193.2	1.000	1.241	1.0185	155
3	2.661	63.70	193.2	1.000	1.241	1.0185	214
4	2.661	86.80	193.2	1.000	1.241	1.0185	292
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 500.1 Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons 59.3 Deg.	Specific Gravity Separator Gas .649	Specific Gravity Flowing Fluid .655	Critical Pressure 681 P.S.I.A.	Critical Temperature 367.5 °R
1	0.284	520	1.415	.964						
2	0.284	520	1.415	.964						
3	0.284	520	1.415	.964						
4	0.284	520	1.415	.964						
5.										

P _c 2235.2 P _c ² 4996		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1522$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1522$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	
1			2605	2391	
2			1851	3145	
3			1225	3771	
4			660	4336	
5					

Absolute Open Flow 336 Mcfd @ 15.025		Angle of Slope 45 degrees		Slope, n 1.000	
Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT. Calculations worksheet C-122D attached.					
Approved By Commission:		Conducted By: David Weaver		Calculated By: Eddie Mahfood	
Checked By:					