

NE MEXICO OIL CONSERVATION COMMISS
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

copy to SF
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-24-77		APR 7 1977	
Company Harvey E. Yates Co., Inc.				None				D.C.C.	
Well Wildcat				Morrow				ARTESIA, OFFICE	
Completion Date 3-22-77		Total Depth 11338		Perforations 11348		Casing 3955 KB		Travis Deep Unit	
Size 4 1/2	Wt. 11.60	d 4.000	Set At 11338	Perforations From 10844 To 10851		Well No. 1		Unit Sec Two Rpt	
Thg. Size 2 3/8	Wt. 4.70	d 1.995	Set At 10838	Perforations From To		Unit Sec Two Rpt K 18 185 29E		County Eddy	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10772		State New Mexico	
Producing Thru Tubing		Reservoir Temp. °F 180 @ 10818		Mean Annual Temp. °F 70		B io. Press. - P _u 13.2		Meter Run X Flange	
L 10848	H 10848	Gg 0.647	% CO ₂ 0.03	% N ₂	% H ₂ S	Prover			

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											
1.	3"	x	1.750	495	3	74	3140	70	Pkr		60 min.
2.	3"	x	1.750	495	8.5	76	3106	70	"		60 min.
3.	3"	x	1.750	495	33	69	3011	70	"		60 min.
4.	3"	x	1.750	495	80	60	2870	70	"		60 min.
5.											

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	15.61	39.046	508.2	0.9868	1.243	1.048	783.5
2	15.61	65.724	508.2	0.9850	1.243	1.048	1316.4
3	15.61	129.501	508.2	0.9915	1.243	1.051	2618.4
4	15.61	201.633	508.2	1.0000	1.243	1.054	4123.6
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 38.905 Mcf/bbl.
1	0.76	534	1.43	0.910	A.P.I. Gravity of Liquid Hydrocarbons 56.20 @ 60°F Deg.
2	0.76	536	1.43	0.910	Specific Gravity Separator Gas 0.647 XXXXXXXXXX
3	0.76	529	1.41	0.906	Specific Gravity Flowing Fluid XXXXX
4	0.76	520	1.39	0.901	Critical Pressure 670 P.S.I.A. P.S.I.A.
5					Critical Temperature 374 R R

P _f 4391.2	P _f ² 19283	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 9.6366816$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8,522,714$
NO.	P _s	P _s ²	P _f ² - P _s ²
1	4351.2	18933	350
2	4322.2	18681	602
3	4247.2	18039	1244
4	4157.2	17282	2001
5			

35,144.3	Mcf @ 15.025	Angle of Slope @ 46° 32'	Slope 0.91375
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Remarks: BHP measured with Amerada RPG-3 gauge Serial No. 12468N 0-6000 psi

Approved By Commission:	Conducted By: Tefteller, Inc.	Calculated By: G. W. Taylor	Checked By:
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POSTED
IP-3 + book
4-8-77