

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

1- D-7
1- Form C-112
Revised 9-1-65
1- C-122 File

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 2-3-78		RECEIVED	
Company Yates Petroleum Corporation						Connection El Paso Natural Gas Co.			
Pool <u>Permian Basin Permian</u> <u>Wildcat</u>						Formation Cisco		Unit O.C.C.	
Completion Date 10-21-77		Total Depth 8750'		Plug Back TD 7000'		Elevation 3593' KB		Farm or Lease ARTERIA, OFFICE	
Csg. Size 4 1/2"	Wt. 10.5#	d 4.052	Set At 7000'	Perforations: From 6919 To 6954'		Well No. 1		La Cama Com	
Tbg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 6867'	Perforations: From To		Unit Sec. Twp. Rge. F 20 18S 25E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple						Packer Set At 6867'		County Eddy	
Producing Thru tubing		Reservoir Temp. °F 126 @ 6936		Mean Annual Temp. °F 62		Baro. Press. - P _g 13.2		State New Mexico	
L 6924	H 6924	G _g 0.730	% CO ₂ 0.55	% N ₂ 0.24	% H ₂ S	Prover	Meter Run 4"	Taps 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							1840	43			months
1.	4.026 x 1.250			580	16	68	1720	48			1 hour
2.				582	28	68	1656	52			1 hour
3.				583	46	68	1564	55			1 hour
4.				584	64	68	1472	58			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	7.469	97.423	593.2	.9924	1.199	1.0697	926
2	7.469	129.095	595.2	.9924	1.199	1.0698	1227
3	7.469	165.606	596.2	.9924	1.199	1.0700	1575
4	7.469	195.501	597.2	.9924	1.199	1.0700	1859
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.884	528	1.357	.8740	84.97 Mcf/bbl.	56.5 Deg.	0.696	XXXXXXX	671 P.S.I.A.	389 R
2	0.887	528	1.357	.8737				0.730		
3	0.889	528	1.357	.8735						
4	0.890	528	1.357	.8734						
5										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1			5063	706
2			4669	1100
3			4163	1606
4			3700	2069
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.7883$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3648 \text{ MCFPD}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.9623$$

Absolute Open Flow 3648 Mcfd @ 15.025	Angle of Slope @ 56° 40'	Slope, n 0.6574
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Remarks: Pressures by DWT. Calculations worksheet C-112D attached.

Approved By Commission:	Conducted By: Don Weaver	Calculated By: Eddie M. Mahfood	Checked By:
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