

MEXICO OIL CONSERVATION COMM. ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

5F
122 file
Form C-122
Revised 9-1-65
file

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 4-11-77		SPUD DATE: 10-7-75	
Company Exxon Corporation				Connection El Paso Natural Gas Company			
Pool Red Lake Penn				Formation Morrow Gas		Unit L O.C.C. ARTEZIA, OFFICE	
Completion Date 12-23-75		Total Depth 9360		Plug Back TD 9299		Elevation 3403 R.K.B.	
Farm or Lease Name Red Lake Fed.Com. #2		Well No. 1		Unit L		Sec. Twp. Rge. 6 18 S 27 E	
Csg. Size 4 1/2		Wt. 13.5		Set At 3.92		Perforations: From 9216 To 9240	
Tbg. Size 2-3/8		Wt. 4.7		Set At 1.995		Perforations: From open To end	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9044		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 166 @ 9216		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico		L *9.295		H 9295		G _g .608	
% CO ₂ .389		% N ₂ 0.275		% H ₂ S 0.0		Prover 4"	
Meter Run 4"		Type Flg.					

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							2073		shut-in		48 hrs.
1.	4 x 2.000			460	5.8	82	1840				75 min.
2.	4 x 2.000			463	7.8	82	1752				45 min.
3.	4 x 2.000			463	12.3	82	1552				75 min.
4.	4 x 2.000			468	16.8	86	1322				75 min.
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	19.81	52.39	473.2	.9795	1.282	1.036	1350
2	19.81	60.95	476.2	.9795	1.282	1.036	1571
3	19.81	76.53	476.2	.9795	1.282	1.036	1972
4	19.81	89.91	481.2	.9759	1.282	1.035	2306
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ 291 _____ Mcf/bbl.
1.	.71	542	1.51	.931	A.P.I. Gravity of Liquid Hydrocarbons _____ 57 @ 60 _____ Deg.
2.	.71	542	1.51	.931	Specific Gravity Separator Gas _____ .608 _____
3.	.71	542	1.51	.931	Specific Gravity Flowing Fluid _____ X X X X X _____
4.	.72	546	1.53	.933	Critical Pressure _____ 671 _____ P.S.I.A.
5.					Critical Temperature _____ 358 _____ R

P _c 2086.2 P _c ² 4352.2	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.800$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.367$			
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	
1		1866.7	3484.4	867.8	
2		1784.4	3184.1	1168.1	
3		1599.6	2558.7	1793.5	
4		1390.9	1934.6	2417.6	
5					

Absolute Open Flow _____ 3153 _____ Mcfd @ 15.025		Angle of Slope θ _____ 62 _____	Slope, n _____ .532 _____
Remarks: Well made 1.76 bbls. condensate. *Equivalent length.			
Approved By Commission:		Conducted By: D.Weaver of Jerral Services	Calculated By: Reggie Reston
		Checked By:	