

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

RECEIVED

57
file
C-122 file
Form 9-122
Revised 9-1-65

Type Test ☐ Initial ☒ Annual ☐ Special		Test Date 5/4/77		MAY 14 1977	
Company EXXON USA Corp.			Connection El Paso Natural Gas Company		
Pool Laguna Grande Morrow			Formation Morrow		
Completion Date 3-2-1976		Total Depth 13700'		Plug Back TD 13390'	
Csg. Size 5"		Wt. 18.0		Elevation 3003DF	
Tbg. Size 2 7/8"		Wt. 6.5		Farm or Lease Name Laguna Grande Unit	
Perforations: From 13107' To 13258'		Set At 13695'		Well No. 1	
Perforations: From Open end To		Set At 12890'		Unit Sec. Twp. Rge. I 28 235 29E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 12890'	
Producing Thru TBG		Reservoir Temp. °F 206 @ 13183'		Baro. Press. - P _a 13.2	
Mean Annual Temp. °F 60		County Eddy		State New Mexico	
L H Gg 13183' 13183' 0.5804		% CO ₂ 1.601		% N ₂ 0.574	
% H ₂ S 0.00		Prover 4"		Meter Run 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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2402		Packer		48 hours
1.	4 6/64	1.500		643	1.4	75	2323				75 min.
2.	4 9/64	1.500		659	4.8	75	2210				75 min.
3.	4 10/64	1.500		659	8.4	80	2075				75 min.
4.	4 12/64	1.500		659	13.7	79	1890				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	10.84	30.31	656.2	.9859	1.313	1.045	444
2	10.84	56.80	672.2	.9859	1.313	1.044	832
3	10.84	75.14	672.2	.9813	1.313	1.043	1095
4	10.84	95.96	672.2	.9822	1.313	1.043	1399
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Nil	Mcf/bbl.
1	0.96	535	1.55	0.916	A.P.I. Gravity of Liquid Hydrocarbons	--	Deg.
2	0.94	535	1.55	0.918	Specific Gravity Separator Gas	.5804	X X X X X X X X
3	0.94	540	1.56	0.920	Specific Gravity Flowing Fluid	X X X X X	
4	0.94	539	1.56	0.920	Critical Pressure	684	P.S.I.A.
5					Critical Temperature	346	R

NO.	P _r	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	2415.2	5833.2	2336.9	5461.2	2.679	1.898
2			2225.8	4954.4		
3			2093.1	4381.2		
4			1912.0	3655.8		
5						

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2655$

Posted
40-2
6-15-79
R. A. Coleman

Absolute Open Flow 2655 Mcfd @ 15.025		Angle of Slope 57		Slope, n 0.650	
Remarks:					
Approved By Commission:		Conducted By: Jarrel Services, Inc		Calculated By: R. Reston	
				Checked By: Joe A. Coleman	