

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

RECEIVED
Form 24
Revised 9-1-65

JUL 1 1972

Type Test ☒ Initial ☐ Annual ☒ Special						Test Date 6-22-72		O. C. C.	
Company EL PASO NATURAL GAS COMPANY				Connection None				ARTESIA, OFFICE	
Pool Sand Dunes South				Formation Pennsylvanian				Unit	
Completion Date 6-22-72		Total Depth 15,200'		Plug Back TD 14,539'		Elevation 3402		Farm or Lease Name Sundance Fed	
Csg. Size 9 5/8"	Wt. 53.5	d	Set At 12,500'	Perforations: From To		Well No. 1			
Tbg. Size	Wt.	d	Set At	Perforations: From 13,691 To 13,699 14,264 To 14,379		Unit Sec. Twp. Rge. F 4 24 31			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - (2 Strings tubing)						Packer Set At 12,161		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 216 @ 14,390		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico	
L *.13,109	H 13,109	Gg .588	% CO ₂	% N ₂	% H ₂ S	Prover		Meter Run 4"	Taps 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							6553	74			144 hrs.
1.	4	x	1.500	700	5.00	104	6230	90			1 Hr.
2.	4	x	1.500	705	9.50	105	5786	89			1 Hr.
3.	4	x	1.500	710	19.50	94	5202	87			1 Hr.
4.	4	x	1.500	715	32.00	74	4337	87			1 Hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	10.84	59.72	713.2	.9602	1.304	1.043	845
2	10.84	82.60	718.2	.9594	1.304	1.043	1,168
3	10.84	118.75	723.2	.9688	1.304	1.044	1,698
4	10.84	152.65	728.2	.9868	1.304	1.057	2,251
5.							

NO.	P _r	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.	1.06	564	1.61	.919	Dry					
2.	1.07	565	1.61	.919						
3.	1.08	564	1.58	.918						
4.	1.08	534	1.53	.895						
5.										

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²
1	6566.2	43115.0	36982.2	4132.8	
2			33639.3	9475.7	
3			27215.4	15899.6	
4			18951.7	24163.3	
5					

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 1.784$$

$$ACF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3.376$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.500$$

Absolute Open Flow	3,376	Mcfd @ 15.025	Angle of Slope θ	55	Slope, n	.700
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Remarks: * Average tubing string on Atoka and Morrow.
No fluids made.

Approved By Commission:	Conducted By: J. C. Roberts Randy Kiker, Reggie	Calculated By: J. B. Murray	Checked By:
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