

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

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special					Test Date 12/2/73										
Company El Paso Natural Gas Company				Connection None											
Pool Rhodes				Formation Yates				Unit							
Completion Date 12-2-73		Total Depth 3130		Plug Back TD		Elevation 2981.9 Gr.		Farm or Lease Name Rhodes GSU							
Csq. Size 4 1/2	Wt. 10.5	d	Set At 3130	Perforations: From 2813 To 3012		Well No. 9									
Tbg. Size 2 3/8	Wt. 4.7	d	Set At 2742	Perforations: From To		Unit Sec. Twp. Rge. 10 26 37									
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At		County Lea								
Producing Thru Tbg.		Reservoir Temp. *F @		Mean Annual Temp. *F		Baro. Press. - P _g 13.2		State New Mexico							
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover 2"	Meter Run	Taps							
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	Duration of Flow				
SI							433	59	433	59	18 Hr.				
1.	2	x	1/8	414		63	414	60	415	60	45 Min				
2.	2	x	3/16	394		67	394	64	395	64	45 Min				
3.	2	x	7/32	382		69	382	66	384	66	30 Min				
4.	2	x	1/4	364		70	364	70	368	70	45 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, F _{pv}	Rate of Flow Q, Mcfd								
1	.2648		427.2	.9971	1.240	1.044	146								
2	.6082		407.2	.9933	1.240	1.041	317								
3	.8393		395.2	.9915	1.240	1.040	424								
4	1.087		377.2	.9905	1.240	1.038	523								
5															
NO.	P _r	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.										
1.	.64	523	1.39	.918	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		Specific Gravity Separator Gas _____ X X X X X X X X X								
2.	.61	527	1.40	.922	Specific Gravity Flowing Fluid _____ X X X X X		Critical Pressure _____ 670 _____ P.S.I.A. _____ P.S.I.A.								
3.	.59	529	1.40	.924	Critical Temperature _____ 375 _____ R _____ R										
4.	.56	530	1.40	.929											
5.															
P _c *446.2 P _c ² *199.1															
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{*3.701}{}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{*3.701}{}$										
1		482.2	183.4	*15.7	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{*1.936}{}$										
2		408.2	166.6	*32.5											
3		397.2	157.8	*41.3											
4		381.2	145.3	*53.8											
5															
Absolute Open Flow *1.936 Mcfd @ 15.025					Angle of Slope θ *45.0			Slope, n *1.000							
Remarks: No fluid made at these rates.															
Approved By Commission: 				Conducted By: R. Reston, R. Pagan				Calculated By: Rick Pagan				Checked By:			