

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

Form C-122
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special						Test Date 10-18-76									
Company Doyle Hartman				Connection None											
Pool Jalmat				Formation Yates				Unit C							
Completion Date 10/18/76			Total Depth 3750		Plug Back TD		Elevation		Farm or Lease Name Citgo State AS						
Csg. Size 4 1/2		Wt. 9.5	d	Set At 3750	Perforations: From 2995 To 3496		Well No. 1								
Tbg. Size 2 3/8		Wt. 4.7	d	Set At 2978	Perforations: From To		Unit C		Sec. 2	Twp. 24	Rye. 34				
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At		County Lea							
Producing Thru Tbg.		Reservoir Temp. °F P		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico							
L	H	G _g .606 assumed		% 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							247		230		24 hrs.				
1.	2 x 1/8			246		70	246		229		30 Min.				
2.	2 x 7/32			242		71	242		226		30 Min.				
3.	2 x 5/16			234		71	234		222		30 Min.				
4.	2 x 1/2			200		73	200		210		30 Min.				
5.	2 x 3/4			130		72	130		187		1 hr.				
RATE OF FLOW CALCULATIONS															
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Fl.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd								
1.	.2648		259.2	.9905	1.285	1.023	71								
2.	.8393		255.2	.9896	1.285	1.022	278								
3.	1.672		247.2	.9896	1.285	1.021	537								
4.	4.279		213.2	.9877	1.285	1.018	1179								
5.	9.453		143.2	.9887	1.285	1.012	1740								
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>Dry</u> Mcf/bbl.										
1.	.39	530	1.46	.955	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.										
2.	.38	531	1.47	.957	Specific Gravity Separator Gas _____ X X X X X X X X										
3.	.37	531	1.47	.959	Specific Gravity Flowing Fluid _____ X X X X X										
4.	.32	533	1.47	.965	Critical Pressure <u>671</u> P.S.I.A. _____ P.S.I.A.										
5.	.21	532	1.47	.977	Critical Temperature <u>362</u> R _____ R										
P _c 260.2 P _c ² 67.70															
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.451$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.451$								
1		242.2	58.66	9.04											
2		239.2	57.22	10.48											
3		235.2	55.32	12.38											
4		223.2	49.82	17.88											
5		200.2	40.08	27.62	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.265$										
Absolute Open Flow <u>4,265</u> Mcfd @ 15.025						Angle of Slope θ <u>45°</u>			Slope, n <u>1.000</u>						
Remarks:															
Approved By Commission:				Conducted By: Rick Pagan				Calculated By: Rick Pagan				Checked By:			