

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

Copy 651-
122
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 7/8/75		JUL 11 1975	
Company Franklin, Aston & Fair, Inc.				Connection Southern Union Gas Co.		Unit O.C.C.	
Pool South Loco Hills				Formation Morrow		ARTESIA, OFFICE	
Completion Date 12/21/73		Total Depth 11,300 11302		Plug Back TD 11,285		Elevation 3633 GR	
Farm or Lease Name McIntyre "A"		Well No. 6					
Csg. Size 4 1/2	Wt. 11.6 13.5	d 4.00 3.92	Set At 11,300	Perforations: From 11,224 To 11,234			
Tub. Size 2 3/8	Wt. 4.7	d 1.995	Set At 11,185	Perforations: From To		Unit Sec. Twp. Rge. 0 20 17S 30E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11,182		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 154 @ 11,000		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico							
L 11,182	H 11,182	G _g .680	% CO ₂ 0.40	% N ₂ 0.60	% H ₂ S ---	Prover	Meter Run 4"
						Taps Flange	

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							2691	78	Choke		24 hrs
1.	4	X	2,000	455	12.0	79	2419	80	13/64		1.5 "
2.	4	X	2,000	472	26.0	79	2234	81	16/64		1 "
3.	4	X	2,000	500	43.0	79	2010	82	19/64		1.5 "
4.	4	X	2,000	525	61.0	80	1752	83	22/64		1.5 "
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	19.81	74.96	468.2	.9822	1.213	1.048	1854
2	19.81	112.32	485.2	.9822	1.213	1.049	2781
3	19.81	148.55	513.2	.9822	1.213	1.052	3688
4	19.81	181.19	538.2	.9813	1.213	1.054	4503
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	27.76	Mcf/bbl.
1.	0.70	539	1.40	.911	A.P.I. Gravity of Liquid Hydrocarbons	57.0	Deg.
2.	0.72	539	1.40	.909	Specific Gravity Separator Gas	.680	XXXXXXX
3.	0.77	539	1.40	.903	Specific Gravity Flowing Fluid	XXXXX	.7507
4.	0.80	540	1.41	.901	Critical Pressure	670	P.S.I.A. 667
5.					Critical Temperature	384	R 408 R

P _c 2704.2 P _c ² 7312.7				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.0273$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8170$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²			
1		2454.4	6024.1	1288.6			
2		2301.7	5297.8	2014.9			
3		2123.8	4510.5	2802.2			
4		1925.0	3705.6	3607.1			
5							

Absolute Open Flow				8182	Mcf @ 15.025	Angle of Slope	49° 48'	Slope, n	.845
Remarks:									

Approved By Commission:	Conducted By: A. L. Ellerd	Calculated By: Donna Holler	Checked By:
-------------------------	-------------------------------	--------------------------------	-------------