N . MEXICO OIL CONSERVATION COMM. ON

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 12-13-70	
Company: Cities Service Oil		Connection: -			
Pool: Undesignated		Formation: Morrow		Unit: B	
Completion Date: 12-13-70	Total Depth: 11,341	Plug Back TD: 11,735	Elevation:	Farm or Lease Name: Strackbein A	
Csg. Size: 5½ / Wt.: 17# & 20# / d: / Set At: 11,325		Perforations: From 11,763 To 11,773 and 11,400 To 11,460		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 11,310		Perforations: From To		Unit: E / Sec.: 32 / Twp.: 22S / Rge.: 27E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 11310		County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: 11340 @ 178	Mean Annual Temp. °F: 68	Baro. Press. – P_a: 13.2	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11,310	11,316	.58	1.04	.24	-	Orifice	4"	Flange

NO.	FLOW DATA: Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						2907				
1.	4	2	900	9.5	86	2365	72			1 hr
2.	4	2	910	15	83	1932	72			1 hr
3.	4	2	920	15	83	1708	72			1 hr
4.	4	2	930	24	80	1259	72			1 hr
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, Fpv	Rate of Flow Q, Mcfd
1	19.81	93.03	913.2	.9759	1.313	1.063	2.512
2	19.81	117.7	923.2	.9736	1.313	1.065	3.191
3	19.81	123.6	933.2	.9706	1.313	1.066	3.516
4	19.81	150.14	943.2	.9613	1.313	1.063	4.031
5							

NO.	P_t	Temp. °R	T_r	Z
1	1.35	546	1.55	.885
2	1.37	543	1.54	.881
3	1.33	543	1.54	.880
4	1.40	540	1.53	.877
5				

Gas Liquid Hydrocarbon Ratio - Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons No Liquid Deg.
Specific Gravity Separator Gas .58 XXXXXXXXX
Specific Gravity Flowing Fluid .58 XXXXX
Critical Pressure 676 P.S.I.A. P.S.I.A.
Critical Temperature 352 R R

P_c 3713.2 P_c^2 13786

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3234.2	1.046	340
2		2862.2	819	567
3		2631.2	692	694
4		2231.2	525	861
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 1.61

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.208

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 5.25 mm

Point 4

Absolute Open Flow 5.250 Mcfd @ 15.025 Angle of Slope θ Slope, n .533

Remarks: Pw was taken from bottom hole pressure bomb.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Jerry Sexton	Jerry Sexton	