well file

NE MEXICO OIL CONSERVATION COMMS N

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

RECEIVED

SEP 22 1972

OIL CONSERVATION COMM.
ARTESIA, OFFICE

Type Test: ☐ Initial ☒ Annual ☐ Special				Test Date: 1-11-72	
Company: CITIES SERVICE OIL COMPANY		Connection: Transwestern Pipeline Co.			Unit: 8
Pool: South Carlsbad		Formation: Morrow			
Completion Date: 12-18-70	Total Depth: 11,841		Plug Back TD: 11,795	Elevation:	Farm or Lease Name: Strackbein "A"
Csg. Size: 5½" / Wt.: 17 & 20# / d: 4.778 / Set At: 11,825			Perforations: From 11763 To 11773; From 11400 To 11480		Well No.: 1
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 11310			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: 178° @ 11840	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11310	11310	.58	1.04	.24	--	Orifice	2"	Flange

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	BHP ~~Press~~ p.s.i.g.	Temp. °F	Duration of Flow
SI	24 hrs.				3024		3912		
1.	2 x 1.375	975	3	73	2960		3799		1 hr.
2.	2 x 1.375	980	7.5	74	2910		3736		1 hr.
3.	2 x 1.375	990	21	77	2771		3611		2 hrs.
4.	2 x 1.375	925	52	76	2410		3209		3½ hrs.
5.	72 hrs. S.I.				3428		4389		

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	10.20	54.45	988.2	.9877	1.313	1.071	771
2.	10.20	86.31	993.2	.9868	1.313	1.071	1222
3.	10.20	145.15	1003.2	.9840	1.313	1.070	2047
4.	10.20	220.88	938.2	.9850	1.313	1.066	3106
5.							

NO.	P_t	Temp. °R	T_r	Z
1	1.46	533	1.53	.871
2.	1.47	534	1.53	.871
3.	1.48	537	1.54	.873
4.	1.39	536	1.54	.880
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas .580 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 672 P.S.I.A. _____ P.S.I.A.
Critical Temperature 350 R _____ R

P_c 3925.2 P_c^2 15,407.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3812.2	14532.9	874.3
2		3749.2	14056.5	1350.7
3		3624.2	13134.8	2272.4
4		3222.2	10382.6	5024.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 6.78$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 6.51$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 13,326$

Point 3

Absolute Open Flow 13,326 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n .98

Remarks: P_w taken from BHP bomb.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Bennett & Nichols	Nichols	Bennett