

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 6-25-71	
Company CITIES SERVICE OIL COMPANY						Connection	
Pool SOUTH CARLSBAD						Formation MORROCO	
Completion Date 6-11-71		Total Depth 11820		Plug Back TD 11754		Elevation 3184 ft.	
Farm or Lease Name SPENCER 'A'						Well No. 1	
Csg. Size 7" 11	Wt. 26	d 6.276	Set At 10609	Perforations Selective fire, 11401, 11406, 46, 48, 50, 54, 63, 65, 68, 70		Unit 1	
Tbg. Size 2 3/8"	Wt. 4.6	d 1.995	Set At 10465	Perforations: From To		Unit 30	Sec. 22S
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G. Multiple						Packer Set At 10463	
Producing Thru tbg.						State New Mexico	
Reservoir Temp. °F 11401 136		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		County Eddy	
L 10270	H 11401	G _g .583	% CO ₂ 1.01	% N ₂ .28	% H ₂ S -	Prover Orifice	Meter Run 3"
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	5.1.		(24 hr)				3812	89	RECEIVED JUL 15 1971 P.C.C.		
1.	3		2.250	350	8	63	3707	89			50 min
2.	3		2.250	555	19	62	3485	82			1 hr
3.	3		2.250	720	32	53	3185	86			1 hr
4.	3		2.250	680	72	52	2559	89			1 hr
5.											

RATE OF FLOW CALCULATIONS								ARTESIA, OFFICE	
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd		
1	28.78	53.9	363.2	0.9971	1.310	1.029	2,085		
2	28.78	103.9	568.2	0.9981	1.310	1.044	4,082		
3	28.78	153.17	733.2	1.007	1.310	1.062	6,176		
4	28.78	223.41	693.2	1.008	1.310	1.059	8,987		
5									

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	
1	.54	523	1.50	.945	No liquid	
2	.84	522	1.50	.917	.583 X X X X X X X X	
3	1.08	513	1.47	.885	.583 X X X X X	
4	1.02	512	1.47	.892	676 P.S.I.A. P.S.I.A.	
5					349 R R	

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	3812	14,531	3743	14010	2.822	2.143
2			3586	12859		
3			3405	11594		
4			3063	9382		
5						

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ **19.25 MM**

Point 4

Absolute Open Flow **19.25 MM** Mcfd @ 15.025

Angle of Slope θ _____

Slope, n **.71047**

Remarks: _____

Approved By Commission:	Conducted By: Nichols, Talbot, Bennett	Calculated By: Brad Bennett	Checked By: <i>B. Bennett</i>
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