

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

Form C-122
Revised 9-1-65

RECEIVED

1-57
1-File
1-C-122

Type Test <u>after workover</u> ☒ Initial ☐ Annual ☐ Special				Test Date 4-2-79		APR 13 1979	
Company CITIES SERVICE OIL COMPANY				Connection EPNG		O. C. C. ARTESIA, OFFICE	
Pool <u>Bureau Hill 11-225</u>				Formation MORROW		Unit J	
Completion Date		Total Depth 11,526'		Packer Back TD		Elevation	
Farm or Lease Name IVES "A" COM. #				Well No. 1			
Csq. Size 5 1/2"	Wt. d	Set At 11,526	Perforations: From 11,225 To 11,507		Unit Sec. Twp. Rge. J 30 21s 27E		
Tbg. Size 2 7/8"	Wt. d	Set At 11,223	Perforations: From OPEN To END				
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 187 @ 11,336		Mean Annual Temp. °F		Baro. Press. - P _a 13.2	
State N.M.							
L 11,336	H 11,336	Gg .589	% CO ₂ .96	% N ₂ 57	% 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							3687				72 Hrs
1.	4	x	1.750	520	9.0	64	3120	61			1 Hr 15 M.
2.	4	x	1.750	527	13.7	62	2867	64			1 Hr
3.	4	x	1.750	534	19.4	60	2572	66			1 Hr
4.	4	x	1.750	534	26.0	63	2125	65			1 Hr 15 M.
5.											

RATE OF FLOW CALCULATIONS							
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	14.93	69.27	533.2	.9962	1.303	1.042	1399
2	14.93	86.03	540.2	.9981	1.303	1.044	1744
3	14.93	103.03	547.2	1.0000	1.303	1.044	2093
4	14.93	119.28	547.2	.9971	1.303	1.044	2416
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.79	524	1.50	.921	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.80	522	1.49	.918	Specific Gravity Separator Gas .589 X X X X X X X X
3.	.81	520	1.49	.917	Specific Gravity Flowing Fluid X X X X X
4.	.81	523	1.49	.917	Critical Pressure 672 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 350 R _____ R

*P_c 3775.5 P_c² 14254.4

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		3227.0	10413.5	3840.9
2		2978.1	8869.1	5385.3
3		2682.0	7193.1	7061.3
4		2239.0	5013.1	9241.3
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.542$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.298$

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.135$

Absolute Open Flow 3,135 Mcfd @ 15.025		Angle of Slope θ 59°	Slope, n .601
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Remarks: * CALCULATED FROM KNOWN B.H.P. B.H.P. MEASURED WITH KUSTER GAUGE.
TOTAL FLUID 1 BBL DURING TEST.

Approved By Commission:	Conducted By: M.C.T.	Calculated By: R.R.	Checked By: J.W.W.
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