

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

Copy 6.51
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5-5-75		MAY 21 1975	
Company CITIES SERVICE OIL COMPANY		Connection EL PASO NAT. GAS CO..			
Pool UNDESIGNATED ATOKA SAND		Formation		Unit O.C.C. ARTESIA, OFFICE	
Completion Date 5-5-75		Total Depth 11520'		Plug Back TD 10800'	
Elevation 3241 GR.		Farm or Lease Name GOVERNMENT "AC"			
Csg. Size 5 1/2"	Wt. 17#&20#	d 4.892 4.778	Set At 11519	Perforations: From 10589' To 10709'	
Tbg. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 10479'	Perforations: From OPEN To ENDED	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 10483'	
Producing Thru TUBING		Reservoir Temp. °F 184° @ 10649'		Mean Annual Temp. °F 60°	
Baro. Press. - P _a 13.2		State NEW MEXICO			
L 10479'	H 10479'	G _g 0.6198	% CO ₂ 0.287	% N ₂ 1.393	% H ₂ S --0--
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	L-10 READINGS						3279.0			CHOKE	71 HRS.
1.	4" X 1.000"			6.80	2.30	83	3038.0	76		5/64	60 MIN.
2.	4" X 1.000"			6.80	4.20	86	2769.0	76		7/64	60 "
3.	4" X 1.000"			6.80	6.40	84	2387.0	77		8.5/64	60 "
4.	4" X 1.000"			6.80	8.50	78	1942.0	77		11/64	60 "
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$ METER FACTOR	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	4.753	3.162	462.4	.9786	1.270	1.036	303
2	4.753	3.162	462.4	.9759	1.270	1.035	551
3	4.753	3.162	462.4	.9777	1.270	1.036	841
4	4.753	3.162	462.4	.9831	1.270	1.038	1126
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	0.69	543	1.50	.931	21.687	59.0	0.6198	X X X X X	670	362
2.	0.69	546	1.51	.933						
3.	0.69	544	1.50	.931						
4.	0.69	539	1.49	.929						
5.										

P _t 4318.2 P _s 18647			
NO.	P _t ²	P _s ²	P _s ² - P _t ²
1	9310	4073.2	16591
2	7741	3745.2	14027
3	5761	3270.2	10694
4	3823	2711.2	7351
5		2702.2	7302

$$(1) \frac{P_F^2}{P_F^2 - P_S^2} = 1.6508$$

$$AOF = Q \left[\frac{P_F^2}{P_F^2 - P_S^2} \right]^n = 1676$$

$$(2) \left[\frac{P_F^2}{P_F^2 - P_S^2} \right]^n = 1.4888$$

Absolute Open Flow	1676	Mcfd @ 15.025	Angle of Slope θ	51.5°	Slope, n	0.794
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Remarks: **BOTTOM HOLE PRESSURES MEASURED WITH AMERADA GAUGE @ 10649 FEET**
L-10 100" X 1000# METER RANGE

Approved By Commission:	Conducted By: D. TYSON	Calculated By: R. WEST	Checked By: J.W.W.
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