NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

APR - 5 1976

ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 3-12-76	
Company: Cities Service Oil Comany			Connection: El Paso Natural Gas Company		
Pool: Burton Flat			Formation: Wolfcamp		Unit
Completion Date: 3-12-76	Total Depth: 11,447'		Plug Back TD: 10,800'	Elevation: 3570.8' gr.	Farm or Lease Name: Government "AB"
Csg. Size: 5½" / Wt.: 17# / d: 4.892" / Set At: 11,447'			Perforations: From 9196' To 9208'		Well No.: 1
Tbg. Size: 2 7/8" / Wt.: 6.4# / d: 2.441" / Set At: 9093'			Perforations: From open To ended		Unit: K / Sec.: 11 / Twp.: 20S / Rge.: 28E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 9093'		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 162° @ 9202'	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
9202'	9202'	0.6816	0.079	1.200	-0-	-----	4"	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	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2793.0		Packer	Choke	
1.	4" X 1.500"	7.50	6.60	72	1947.0	69		15/64"	60 Min.
2.	4" X 1.500"	7.50	5.50	72	1939.0	70		13/64"	60 Min.
3.	4" X 1.500"	7.50	4.00	72	1995.0	71		11/64"	60 Min.
4.	4" X 1.500"	7.45	2.90	72	2092.0	71		9/64"	60 Min.
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	Meter Factor $\sqrt{h_w P_m}$ 50" – 1000#	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	10.84	2.236	562.5	0.9887	1.211	1.056	1517
2.	10.84	2.236	562.5	0.9887	1.211	1.056	1264
3.	10.84	2.236	562.5	0.9887	1.211	1.056	919
4.	10.84	2.236	555.0	0.9887	1.211	1.057	663
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.82	532	1.40	.897
2.	0.82	532	1.40	.897
3.	0.82	532	1.40	.897
4.	0.83	532	1.40	.895
5.				

Gas Liquid Hydrocarbon Ratio 6.804 Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons 54.7 Deg.

Specific Gravity Separator Gas 1.0745 XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX

Critical Pressure 672 P.S.I.A. ____ P.S.I.A.

Critical Temperature 381 R ____ R

P_f 4248.2 P_f^2 18047

NO	P_t^2	P_s	P_s^2	$P_f^2 - P_s^2$
1	3842	34.2.2	11575	6472
2	3811	3359.2	11284	6763
3	4034	3424.2	11725	6322
4	4432	3562.2	12689	5358
5				

(1) $\frac{P_f^2}{P_f^2 - P_s^2} = 2.7885$ (2) $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 2.7885$

AOF = Q $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 4230$

Absolute Open Flow 4230 Mcfd @ 15.025 Angle of Slope θ 45.0° Slope, n 1.000 Limite

Remarks: Bottom hole pressures measured with kuster gauge @ 9202'
Points do not line up – slope too flat – drew 1.000 limited slope through highest rate of flow.
well producing quite a bit of distillate.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Don Tyson	R. West	J.W.W.