C-122

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
MAR 29 1974
O. C. C.
ARTESIA, OFFICE

Type Test: ☐ Initial ☐ Annual ☒ Special			Test Date: 3-20-74	
Company: Cities Service Oil Company	Connection: El Paso Natural Gas Company			Unit
Pool: Undesignated	Formation: Cherokee			
Completion Date: 11-1-73	Total Depth: 11315	Plug Back TD: ~~10589~~ 10470	Elevation: 3280.5GL	Farm or Lease Name: Government S
Csg. Size: 5 1/2 / Wt.: 17&20 / d: / Set At: 10589		Perforations: From 10463 To 10470		Well No.: 1
Tbg. Size: 2 7/8 / Wt.: 6.5 / d: 2.441 / Set At: 10330		Perforations: From open To end		Unit: H / Sec.: 3 / Twp.: 20 / Rge.: 28
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 10330		County: Eddy County
Producing Thru: Tbg.	Reservoir Temp. °F: 170 @ 10470	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico
L: 10330 / H: 10330 / Gg: .648	% CO_2:	% N_2:	% H_2S:	Prover: / Meter Run: 4" / Taps: Flg.

FLOW DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI							2120	74			24 hr.
1.	4	x	.750	624	17.60	67	1530	58			1 hr.
2.	4	x	.750	624	26.00	80	1338	66			1 hr.
3.	4	x	.750	624	33.00	82	1085	68			1 hr.
4.	4	x	.750	624	45.00	82	914	67			1 hr.
5.											

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	2.661	105.90	637.2	.9933	1.242	1.065	370
2.	2.661	128.71	637.2	.9813	1.242	1.057	441
3.	2.661	145.01	637.2	.9795	1.242	1.057	496
4.	2.661	169.33	637.2	.9795	1.242	1.057	579
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.95	527	1.42	.881
2.	.95	540	1.45	.895
3.	.95	542	1.46	.895
4.	.95	542	1.46	.895
5.				

Gas Liquid Hydrocarbon Ratio 34.1 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 59.5 @ 60 Deg.
Specific Gravity Separator Gas .648 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX G Mix. 731
Critical Pressure 670 P.S.I.A. 668 P.S.I.A.
Critical Temperature 372 R 401 R

P_c 2133.2 P_c^2 4550.5

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			2382.9	2167.6
2			1827.9	2722.6
3			1208.9	3341.6
4			863.7	3686.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.234$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.234$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = .714$

Absolute Open Flow 714 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1.000

Remarks: Made 2.32 Bbls. condensate during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Reggie Reston	J. B. Murray	