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

Form C-122
Revised 9-1-65

RECEIVED
OCT 26 1981
O. C. D.
ARTESIA, OFFICE

C/SF C-122

Type Test: ☐ Initial ☐ Annual ☐ Special | Test Date: 10-13-81

Company: Amoco Production Company ✓	Connection: El Paso Natural Gas Company			
Pool: Happy Valley Morrow	Formation: Morrow			Unit:
Completion Date: 6/19/81	Total Depth: 11904	Plug Back TD: 11560	Elevation: 3599	Farm or Lease Name: State IM Com
Csg. Size: 5.500 / Wt.: 17.0 / d: 4.892 / Set At: 11904	Perforations: From 11346 To 11542			Well No.: 1
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 11155	Perforations: From 11578 To 11812			Unit: I / Sec.: 16 / Twp.: 22 / Rge.: 26
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 11155			County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 187 @ 11444	Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.2	State:

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11444	11444	0.617	3.00	0.99	0	0	4.0	Flange

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					3598	73			46.0
1.	4.00 x 1.250	436	4.0	74	3540	73	0	0	0.5
2.	4.00 x 1.250	436	16.0	84	3513	73	0	0	0.5
3.	4.00 x 1.250	436	33.6	91	3461	73	0	0	0.5
4.	4.00 x 1.250	436	54.8	92	3394	74	0	0	0.5
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	7.47	42.39	449.2	0.9868	1.2726	1.0347	411
2.	7.47	84.78	449.2	0.9777	1.2726	1.0325	814
3.	7.47	122.93	449.2	0.9715	1.2726	1.0309	1170
4.	7.47	156.84	449.2	0.9706	1.2726	1.0307	1492
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	0.66	534	1.50	0.934
2.	0.66	544	1.53	0.938
3.	0.66	551	1.55	0.941
4.	0.66	552	1.55	0.941
5.				

Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 0 Deg.
Specific Gravity Separator Gas: 0.617 xxxxxxxxx
Specific Gravity Flowing Fluid: xxxxx 0.617
Critical Pressure: 683 P.S.I.A. 683 P.S.I.A.
Critical Temperature: 356 R 356 R

P_c 3611.2 P_c^2 13040

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	12625	3538	12519	521
2	12434	3514	12345	695
3	12070	3465	12006	1034
4	11609	3401	11570	1470
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 8.8707$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5.7453$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 8445$

Absolute Open Flow: 8445 Mcfd @ 15.025 | Angle of Slope θ: 51.3 | Slope, n: .801

Remarks: First point excluded from calculations due to being apparently erroneous.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
		B. A. Hemmeline	L. W. Sheppard