NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test			Test Date	
☐ Initial	☐ Annual	☒ Special	9-1-78	

Company	Connection		
Amoco Production Company	El Paso Natural Gas Comp		
Pool	**Formation**		**Unit**
Langlie Mattix Queen	Queen		

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
12-10-63	7712	3665	3287	State D Tract 15

Csg. Size	Wt.	d	Set At	Perforations:	Well No.
4.500	11.6	4.000	7712	From 3230 To 3290	3
Tbg. Size	**Wt.**	**d**	**Set At**	**Perforations:**	**Unit Sec. Twp. Rge.**
2.375	4.7	1.995	3214	From 0 To 0	B 16 24S 37E

Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At	County
Single	0	Lea

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
Tubing	94 @ 3260	60.0	13.2	New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3260	3260	0.705	3.03	1.25	0	0	4.0	Flange

FLOW DATA				TUBING DATA		CASING DATA		
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
				178	69			2.0
4.03 x 2.000	69	2.0	72	168	69	0	0	1.0
4.03 x 2.000	70	5.0	72	150	69	0	0	0.7
4.03 x 2.000	72	9.0	70	139	69	0	0	0.7
4.03 x 2.000	74	15.0	68	129	70	0	0	0.7

RATE OF FLOW CALCULATIONS

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
19.81	12.82	82.2	0.9887	1.1910	1.0081	302
19.81	20.40	83.2	0.9887	1.1910	1.0082	480
19.81	27.69	85.2	0.9905	1.1910	1.0085	653
19.81	36.17	87.2	0.9924	1.1910	1.0089	854

P_t	Temp. °R	T_t	Z
0.12	532	1.39	0.984
0.12	532	1.39	0.984
0.13	530	1.38	0.983
0.13	528	1.38	0.982

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.
Specific Gravity Separator Gas 0.705 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.705
Critical Pressure 678 P.S.I.A. 678 P.S.I.A.
Critical Temperature 383 R 383 R

P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
33	184	34	3
27	172	30	7
23	169	29	8
20	172	30	7

P_c^2

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.2534$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5.2534$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4489$

Absolute Open Flow 4489 Mcfd @ 15.025 Angle of Slope θ 45.0 Slope, n 1.000

Remarks:

Approved By Commission	Conducted By:	Calculated By:	Checked By:
John W. Runyan	John West Engineering	C. C. Weaver	R. M. Bauer