NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR S WELL

Form C-122
Revised 4-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 10-23-78	
Company: Amoco Production Company			Connection: El Paso Natural Gas Company		
Pool: Jalmat			Formation: Yates Seven Rivers		Unit
Completion Date: 7-6-78	Total Depth: 3712		Plug Back TD: 3664	Elevation: 3158	Farm or Lease Name: Langlie C. Federal
Csg. Size: 5.500 / Wt.: 14.0 / d: 5.012	Set At: 3712		Perforations: From 2986 To 3130		Well No.: 1
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995	Set At: 2800		Perforations: From 0 To 0		Unit: N / Sec.: 9 / Twp.: 25S / Rge.: 37E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 0		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 89 @ 3058		Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3058	3058	0.944	1.47	1.45	0.06	0	4.0	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						158	39			73.0
1.	4.03	1.500	32	4.0	47	151	39	0	0	1.0
2.	4.03	1.500	33	9.0	47	141	42	0	0	0.7
3.	4.03	1.500	33	16.0	47	139	42	0	0	0.7
4.	4.03	1.500	34	24.0	47	130	42	0	0	0.7
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	10.84	13.45	45.2	1.0127	1.0292	1.0101	153
2.	10.84	20.39	46.2	1.0127	1.0292	1.0103	233
3.	10.84	27.19	46.2	1.0127	1.0292	1.0103	310
4.	10.84	33.66	47.2	1.0127	1.0292	1.0105	384
5.							

NO.	P_t	Temp. °R	T_t	Z
1.	0.07	507	1.10	0.980
2.	0.07	507	1.10	0.980
3.	0.07	507	1.10	0.980
4.	0.07	507	1.10	0.979
5.				

Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons: 0 Deg.

Specific Gravity Separator Gas: 0.944 XXXXX

Specific Gravity Flowing Fluid: XXXXX 0.964

Critical Pressure: 660 P.S.I.A. 660 P.S.I.A.

Critical Temperature: 460 R 460 R

P_c 171.7 P_c^2 29

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	27	165	27	2
2	24	157	25	5
3	23	156	24	5
4	21	150	22	7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.1861$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.9345$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1128$

Absolute Open Flow: 1128 Mcfd @ 15.025 Angle of Slope θ: 53.1 Slope, n: 0.752

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	John West Eng.	CCW	RMB