NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 7-21-78	
Company: Amoco Production Company			Connection: El Paso Natural Gas		Unit
Pool: Many Gates Morrow			Formation		
Completion Date: 3-16-78	Total Depth: 9540		Plug Back TD: 9486	Elevation: 4058	Farm or Lease Name: State DQ
Csg. Size: 5.500 / Wt.: 17.0 / d: 4.892 / Set At: 9540			Perforations: From 9342 To 9350		Well No.: 1
Tbg. Size: 2.000 / Wt.: 4.6 / d: 1.995 / Set At: 9219			Perforations: From 0 To 0		Unit: C / Sec.: 32 / Twp.: 9S / Rge.: 30E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 9190		County: Chaves
Producing Thru: Tubing	Reservoir Temp. °F: 156 @ 9346		Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.2	State: New Mexico
L: 9346 / H: 9346 / Gg: 0.652	% CO_2: 0.84	% N_2: 1.10	% H_2S: 0	Prover: 0	Meter Run: 4.0 / Taps: 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					1482	85			24.0
1.	4.03 x 1.250	684	1.0	98	1273	92	0	0	1.0
2.	4.03 x 1.250	684	2.2	100	1167	94	0	0	1.0
3.	4.03 x 1.250	686	4.0	101	1083	93	0	0	1.0
4.	4.03 x 1.250	686	6.2	104	999	91	0	0	1.0
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	26.40	697.2	0.9653	1.2384	1.0539	248
2.	7.47	39.61	697.2	0.9636	1.2384	1.0532	372
3.	7.47	52.88	699.2	0.9628	1.2384	1.0530	496
4.	7.47	66.11	699.2	0.9602	1.2384	1.0519	618
5.							

NO.	P_t	Temp. °R	T_t	Z
1.	1.04	558	1.51	0.900
2.	1.04	560	1.51	0.901
3.	1.04	561	1.51	0.902
4.	1.04	564	1.52	0.904
5.				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.

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

Specific Gravity Separator Gas 0.652 XXXXXXXXXX

Specific Gravity Flowing Fluid XXXXX

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

Critical Temperature 370 R 370 R

P_c 1487.7 P_c^2 2187

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	1654	1270	1612	574
2	1393	1165	1358	829
3	1202	1083	1174	1013
4	1025	1001	1003	1184
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.8474$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.8474$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1141$

Absolute Open Flow 1141 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	GRD (Amoco)	RMB (Amoco)