NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
DEC 28 1976
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 12/14/76	
Company: Atlantic Richfield Company ✓	Connection: El Paso Natural Gas Company			
Pool: Avalon Morrow	Formation: Morrow		Unit:	
Completion Date: 01/21/76	Total Depth: 11050	Plug Back TD: 11005	Elevation: 3283	Farm or Lease Name: State BT Com
Csg. Size: 5.5 / Wt.: 15.5 / d: 4.982 / Set At: 11049	Perforations: From 10714 To 10921			Well No.: 1
Tbg. Size: 2.875 / Wt.: 6.5 / d: 2.441 / Set At: 10628	Perforations: From To			Unit: C / Sec.: 16 / Twp.: 21S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 10628			County: Eddy
Producing Thru: Tbg	Reservoir Temp. °F: 168 @ 10600	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10628	10628	0.579	0.88	0.46	Tr		4"	Flg.

	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					2234		Pkr		24 hrs.
1.	4 x 1.750	395	2.89	54	2012	70			1 hr
2.	4 x 1.750	396	7.84	64	1795	70			1 hr
3.	4 x 1.750	396	15.21	66	1515	70			1 hr
4.	4 x 1.750	396	23.04	68	1206	70			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	14.93	34.35	408.2	1.0060	1.314	1.034	701
2	14.93	56.64	409.2	0.9962	1.314	1.032	1142
3	14.93	78.89	409.2	0.9943	1.314	1.031	1587
4	14.93	97.10	409.2	0.9924	1.314	1.030	1947
5							

NO.	P_t	Temp. °R	T_t	Z
1	0.60	514	1.50	0.939
2.	0.61	524	1.53	0.942
3.	0.61	526	1.54	0.943
4.	0.61	528	1.54	0.943
5				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: --- Deg.
Specific Gravity Separator Gas: 0.579 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX ---
Critical Pressure: 675 P.S.I.A. --- P.S.I.A.
Critical Temperature: 342 R --- R

P_c 2247.2 P_c^2 5049.9

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2026.8	4107.9	942.0
2		1811.8	3282.6	1767.3
3		1536.8	2361.8	2688.1
4		1236.0	1527.7	3522.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.434$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.326$

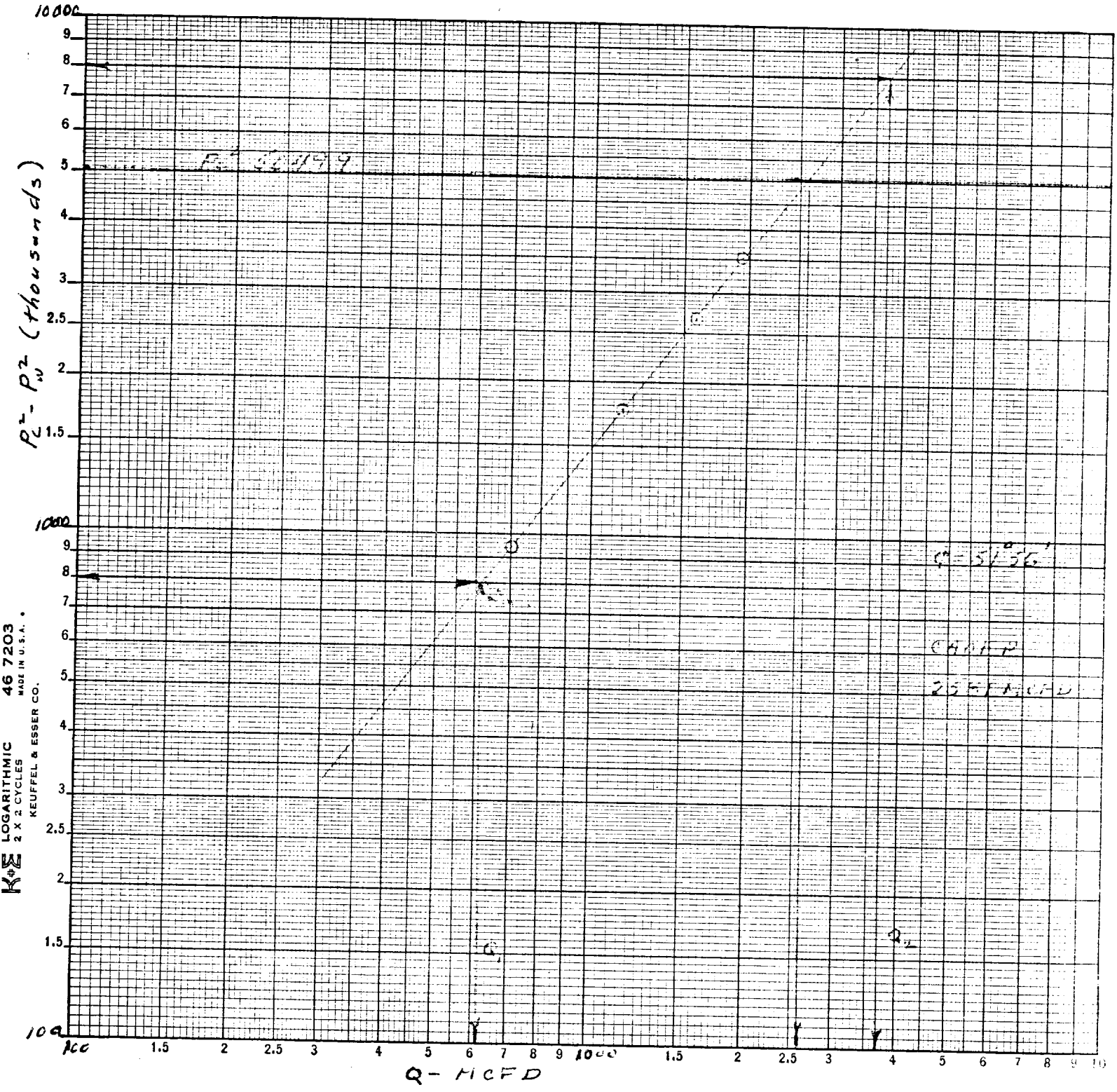
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2581$

Absolute Open Flow: 2581 Mcfd @ 15.025 Angle of Slope θ: 51° 56' Slope, n: 0.783

Remarks: No fluid produced during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Rick Pagan	Rick Pagan	L. C. Hudry

Atlantic Richfield
Pate BT Com. 1
C-16-T-21S-R26E
Eddy County, N.M.
12-14-76



Q_2 = 3700 Log 3.568202

Q_1 = 610 Log 2.785330

n = 0.782872

= 0.783