NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
MAR 14 1978
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 2-3-78

Company: Yates Petroleum Corp.	Connection: El Paso Natural Gas Company			Unit: ~~NM-17100~~
Pool: ~~Undesignated~~ Wildcat Strawn	Formation: Strawn			
Completion Date: 12-31-77	Total Depth: 11,580'	Plug Back TD: 10,424'	Elevation: 3244' KB	Farm or Lease Name: Stonewall "DS" Fed.
Csg. Size: 5½" / Wt.: 17# / d: 4.892 / Set At:	Perforations: From 10243 To 10361			Well No.: 2
Tbg. Size: 2-3/8" / Wt.: 4.6# / d: 1.995 / Set At: 10211	Perforations: From To			Unit: J / Sec.: 29 / Twp.: 20S / Rge.: 28E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 10,211'			County: Eddy County
Producing Thru: tubing	Reservoir Temp. °F: 159° @ 10,302'	Mean Annual Temp. °F: 62°	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10,295	10,295	.591	1.02	.27	Nil		4"	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					1620	59			days
1.	4 X 0.375	550	38	75	560	60			1 hour
2.									
3.									
4.									
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	0.6670	147.56	573	.9859	1.301	1.0425	132
2.							
3.							
4.							
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.85	535	1.52	0.920
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio: None Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .591 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 675 P.S.I.A. P.S.I.A.
Critical Temperature: 352 R R

P_c 2074.4 P_c^2 4303

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			506	3797
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1333$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1333$

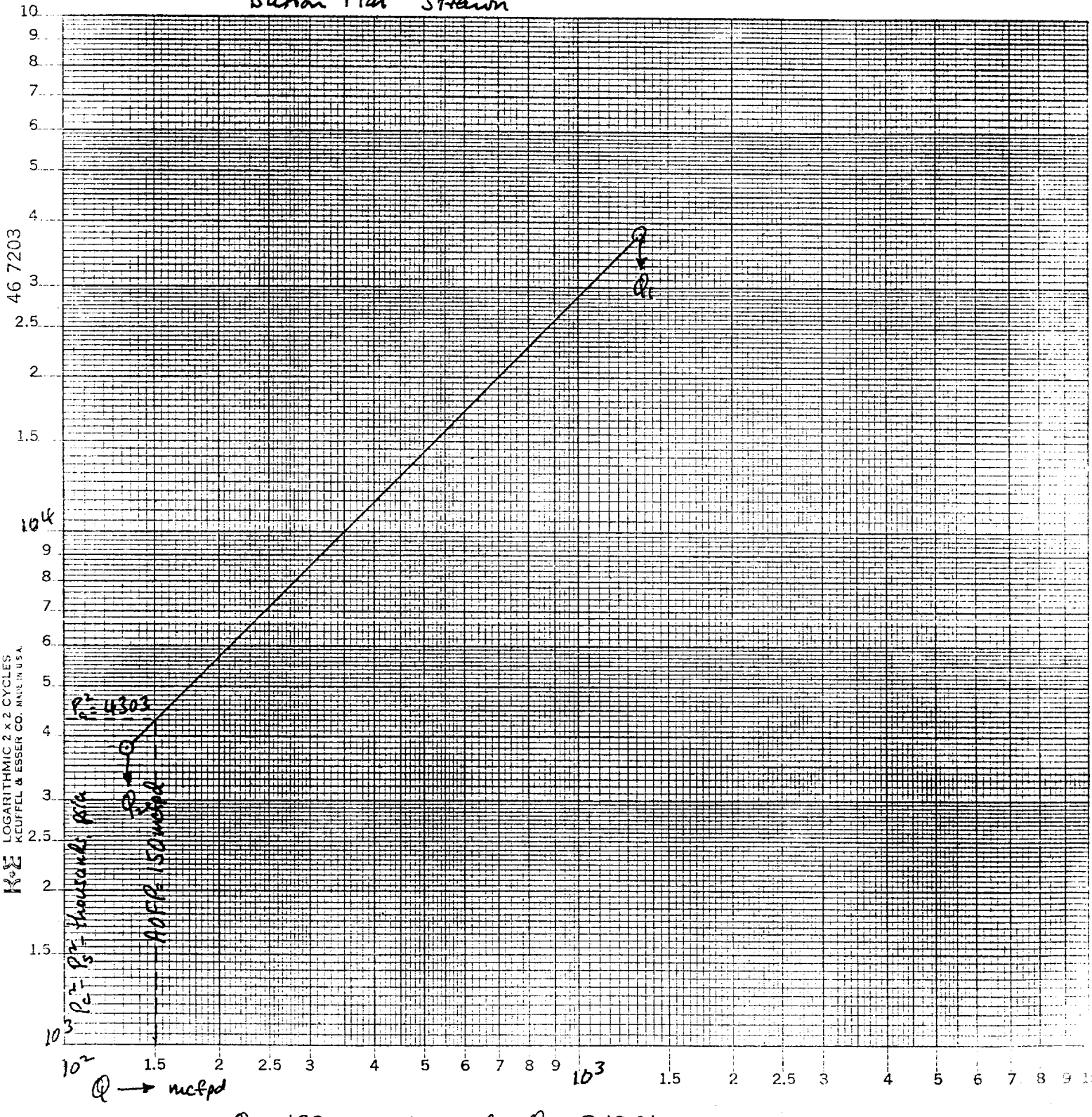
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 150 MCFPD

Absolute Open Flow: 150 Mcfd @ 15.025 — Angle of Slope θ: 45° — Slope, n: 1.000

Remarks: Low volume well. Pressures by DWT. Calculation worksheet attached.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Bill Trembley, Jr.	Eddie Mahfood	

YPC- Stonewall DS Fed #2
1980/S 1980/E Sec 29-20S-28E.
Burton Flat Strawn



$Q_1 = 1320$ mcfpd log $Q_1 = 3.1206$

$Q_2 = 132$ mcfpd log $Q_2 = 2.1206$

$n = 1.0000$