STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

C/SF & C-122

RECEIVED
FEB 24 1982
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 12-28-81
Company: Yates Petroleum Corporation		Connection: Transwestern Pipeline Company		Unit: NM 10893
Pool: ~~Und. Abo~~		Formation: Abo		
Completion Date: 10-22-81	Total Depth: 4250'	Plug Back TD: 4205'	Elevation: 3812' GR, 3819' KB	Farm or Lease Name: Godfrey MP Federal
Csg. Size: 4-1/2" / Wt.: 9.5# / d: 5.012" / Set At: 4238'		Perforations: From 3695' To 3963'		Well No.: 4
Tbg. Size: 2-3/8" / Wt.: 4.7# / d: 1.995 / Set At: 3940'		Perforations: From --- To ---		Unit: P / Sec.: 3 / Twp.: 7S / Rge.: 25E
Type Well – Single – Bradenhead – G.C. or G.O. Multiple: Single		Packer Set At: None		County: Chaves
Producing Thru: Tubing	Reservoir Temp. °F: 90° @ 3829	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
3940	3940	0.655	1.47	5.84	0	----	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					1003				days
1.	4.026 x 1.250	380	13	60	920	62			24 hrs
2.	4.026 x 1.250	260	23	60	880	62			24 hrs
3.	4.026 x 1.250	315	33	62	800	64			24 hrs
4.	4.026 x 1.250	230	62	62	720	65			24 hrs
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	7.469	71.50	393.2	1.0000	1.236	1.036	684
2	7.469	79.27	273.2	1.0000	1.236	1.025	750
3	7.469	104.07	328.2	.9981	1.236	1.029	987
4	7.469	122.79	243.2	.9981	1.236	1.022	1156
5							

NO.	P_t	Temp. °R	T_r	Z
1	0.591	520	1.453	0.932
2	0.411	520	1.453	0.952
3	0.494	522	1.458	0.944
4	0.366	522	1.458	0.957
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas 0.655 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 665 P.S.I.A. _____ P.S.I.A.
Critical Temperature 358 R _____ R

P_c 1153.2 P_c^2 1330

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	870.9		877.6	452.4
2	797.8		806.1	523.9
3	661.3		675.5	654.5
4	537.6		558.3	771.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.330$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3245$

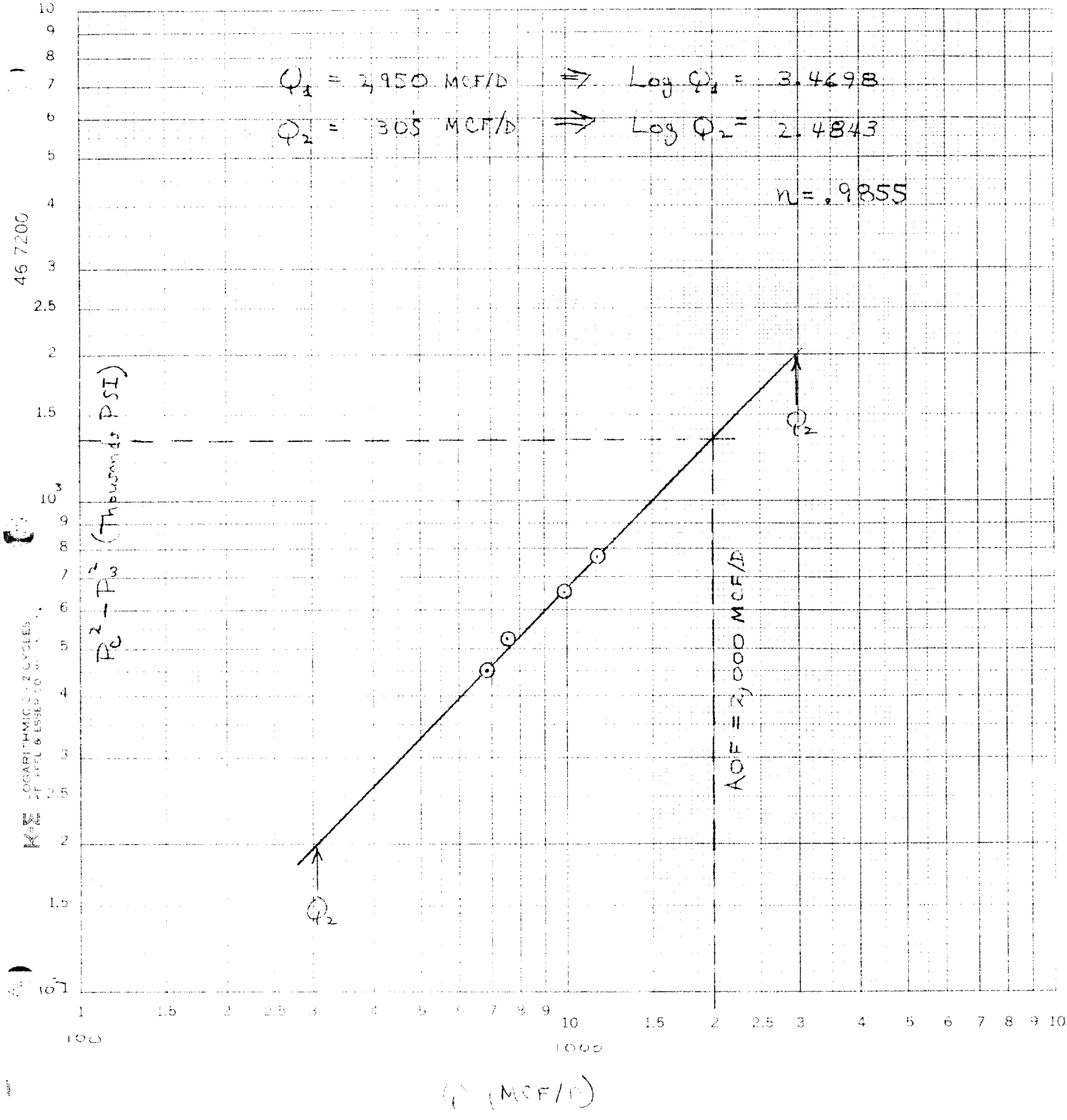
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2000$

Absolute Open Flow 2000 Mcfd @ 15.025 | Angle of Slope θ _____ | Slope, n 0.9855

Remarks: Static pressures by Bennett Wireline. Flowing pressures by DWT calculations.
Worksheet C-122D attached.

Approved By Division	Conducted By:	Calculated By:	Checked By:
	David Weaver	Albert R. Stall	

TES PETROLEUM CORPORA ON
Godfrey MF Federal Well No. 4
Unit P Sec. 3 T 7 S R 25 E



WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

C-122D
Adopted 9-1-65

COMPANY Yates Petroleum Corp. LEASE Godfrey MP Fed WELL NO. 4 DATE 2-22-82

LOCATION: Unit P Section 3 Township 7 S Range 25 E

L 7940 H 3940 L-H 1 G 0.655 % CO_2 1.47 % N_2 5.84 % H_2S 0

L-H 1.995 P_r .018231 OH 2581 P_{cr} 665 (TABLE IX & X) T_{cr} 358 (TABLE IX & X)

LINE	1ST RATE 1ST TRIAL	1ST RATE 2ND TRIAL	2ND RATE 1ST TRIAL	2ND RATE 2ND TRIAL	3RD RATE 1ST TRIAL	3RD RATE 2ND TRIAL	4TH RATE 1ST TRIAL	4TH RATE 2ND TRIAL
1	.710	.710	.785	.785	1.020	1.020	1.220	1.220
2	522	522	522	522	524	524	525	525
3	550	550	550	550	550	550	550	550
4	536	536	536	536	537	537	537.5	537.5
5	0.875	0.861	0.875	0.867	0.870	0.876	0.880	0.887
6	469	461.5	469	467.7	467.2	470.4	473.0	476.8
7	5.503	5.513	5.503	5.554	5.525	5.487	5.457	5.414
8	1.209	1.208	1.201	1.202	1.226	1.229	1.227	1.225
9	.173	0.187	0.173	0.188	0.187	0.180	0.185	0.184
10	1372	1372	1372	1372	1372	1372	733.2	733.2
11	876.1	877.1	737.2	737.2	661.3	661.3	537.6	537.6
12	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231
13	8.550	8.414	8.550	8.472	8.518	8.576	8.623	8.693
14	6.671	5.174	6.671	6.650	8.628	8.747	10.520	10.605
15	36.894	35.665	45.048	44.229	75.479	76.517	110.628	112.464
16	6.276	6.744	7.713	8.315	14.115	14.232	20.476	20.693
17	877.3	877.6	805.6	806.1	675.4	675.5	558.1	558.3
18	1060.7	1082.5	974.0	973.1	830.8	824.6	684.8	683.9
19	1027.9	1042.4	986.9	986.6	911.5	910.8	827.5	827.0
20	951.5	986.8	940.0	944.9	862.3	862.0	780.4	780.1
21	1.476	1.484	1.414	1.421	1.297	1.296	1.173	1.173
22	1.497	1.497	1.497	1.497	1.500	1.500	1.501	1.501
23	0.861	0.861	0.867	0.866	0.876	0.876	0.887	0.887