NE[illegible]EXICO OIL CONSERVATION COMMISSION
MULTIPOINT / [illegible] ONE POINT BACK PRESSURE TEST FOR GA[illegible]ELL

Form C-122

C/SF File

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 08/07/1988	
Company: Yates Petroleum Corp			Connection: Transwestern Pipeline Co		Unit:
Pool: Wolfcamp			Formation: Foor Ranch		
Completion Date: 08/06/1988	Total Depth: 6300		Plug Back TD: 6246	Elevation: 3810	Farm or Lease Name: Enron AEY State #1
Csg. Size: 5.500 / Wt.: 15.500 / d: 4.950 / Set At: 6300			Perforations: From 5302 To 5307		Well No.: 1
Tbg. Size: 2.875 / Wt.: 6.500 / d: 2.441 / Set At: 5825			Perforations: From 5302 To 5307		Unit: K / Sec.: 25 / Twp.: 9S / Rge.: 26E
Type Well: Single			Packer Set At: 5825		County: Chaves
Producing Thru: Tubing	Resv. Temp. °F: 121 @ 5975		Mean Temp. °F: 62	Baro. Press. - Pa: 24.0	State: New Mexico

L	H	Gg	%CO_2	%N_2	%H_2S	Prover	Meter Run	Taps
5825	5825	0.645	1.519	0.967	1.176	0.000	2.000	Flange

	FLOW DATA						TUBING DATA		CASING DATA		
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI.	0.000	x	0.000	0	0.0	0	1020	0			0
1.	2.067	x	1.375	360	18.0	97	830	62			24
2.	2.067	x	1.375	360	40.0	95	673	62			24
3.	2.067	x	1.375	343	57.1	99	517	62			24
4.	2.067	x	1.375	360	77.0	98	360	62			24
5.		x									

RATE OF FLOW CALCULATIONS

NO	Coefficient (24 Hour)	$\sqrt{hwPm}$	Pressure Pm	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	10.200	83.1	384.0	0.9662	1.245	1.028	1049
2.	10.200	123.9	384.0	0.9679	1.245	1.029	1567
3.	10.200	144.8	366.9	0.9645	1.245	1.027	1821
4.	10.200	172.0	384.0	0.9653	1.245	1.028	2167
5.							

NO	Pr	Temp °R	Tr	Z
1	0.56	557	1.52	0.946
2	0.56	555	1.51	0.945
3	0.54	559	1.52	0.949
4	0.56	558	1.52	0.946
5				

Gas Liquid Hydrocarbon Ratio	0 Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.	
Specific Gravity Separator Gas	0.645	xxxxxxxxxx
Specific Gravity Flowing Fluid	xxxxxxxxxx	0.645
Critical Pressure	683 P.S.I.A.	683 P.S.I.A.
Critical Temperature	367 °R	367 °R

Pc 1044.0 Pc^2 1089.9

NO.	Pt^2	Pw	Pw^2	$Pc^2 - Pw^2$
1	729.3	858.1	736.4	353.5
2	485.8	708.6	502.1	587.8
3	292.7	561.5	315.3	774.6
4	147.5	424.7	180.4	909.6
5				

(1) $\frac{Pc^2}{Pc^2 - Pw^2}$ = 1.854 (2) $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n$ = 1.608

AOF = Q $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n$ = 2520

Absolute Open Flow 2520 Mcfd @ 15.025 | Angle of Slope θ 38 | Slope, n 0.769

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	David Weaver	Andrea Carpenter	

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (Pw) C-122D

DATE 08/07/1988

COMPANY Yates Petroleum Corp LEASE Enron AEY State #1 WELL NO. 1

LOCATION: Unit K Section 25 Township 9S Range 26E

L 5825 H 5825 L / H 1.000 G 0.645 %CO_2 1.519 %N_2 0.967 %H_2S 1.176

d 2.441 Fr 0.010495 GH 3757.1 Pcr 683.0 Tcr 367.1

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	1.049	1.567	1.821	2.167	
2 Tw(W.H.°R)	522	522	522	522	
3 Ts(B.H.°R)	581	581	581	581	
4 T = (Tw+Ts) / 2	551.2	551.2	551.2	551.2	
5 Z (Est.)	0.871	0.892	0.914	0.936	
6 TZ	480.0	491.8	504.0	516.1	
7 GH / TZ	7.827	7.640	7.455	7.279	
8 e^s(Table XIV)	1.341	1.332	1.323	1.314	
9 1-e^-s(Table XIV)	0.254	0.249	0.244	0.239	
10 Pt	854.0	697.0	541.0	384.0	
11 Pt^2 / 1000	729.3	485.8	292.7	147.5	
12 Fr (Table XV)	0.010495	0.010495	0.010495	0.010495	
13 Fc = FrTZ	5.038	5.161	5.289	5.417	
14 FcQm	5.28	8.09	9.63	11.74	
15 L / H$(FcQm)^2$	27.9	65.4	92.7	137.8	
16 Fw = L / H$(FcQm)^2(1-e^{-s})$	7.10	16.30	22.62	32.93	
17 $Pw^2 = Pt^2+Fw$	736.4	502.1	315.3	180.4	
18 $Ps^2 = e^{s}Pw^2$	987.6	668.7	417.0	237.0	
19 Ps	993.8	817.7	645.8	486.8	
20 P = (Pt+Ps) / 2	923.9	757.4	593.4	435.4	
21 Pr = (P / Pcr)	1.35	1.11	0.87	0.64	
22 Tr = (T / Tcr)	1.50	1.50	1.50	1.50	
23 Z (Table XI)	0.871	0.892	0.914	0.936	

Company: Yates Petroleum Corp

Well: Baron AEY State #1 #1

Location: K 25-9S-26E

County: Chaves

Date: 08-07-1988