NEW MEXICO OIL CONSERVATION COMMISSION — Form C-122

MULTIPOIN ND ONE POINT BACK PRESSURE TEST FOR S WELL

GSF File

Type Test			Test Date	
[X] Initial	[ ] Annual	[ ] Special	03/28/93	

Company	Connection	
Yates Petroleum Corp	Transwestern Pipeline Co	

Pool	Formation	Unit
Abo	Pecos Slope	

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
01/01/93	4300	4228	3622	Hancock AHC Com

Csg. Size	Wt.	d	Set At	Perforations:		Well No.
4.500	10.500	4.052	4300	From 3905	To 4178	2

Tbg. Size	Wt.	d	Set At	Perforations:		Unit	Sec.	Twp.	Rge.
2.375	4.700	1.995	3896	From 3905	To 4178	C	28	6S	26E

Type Well	Packer Set At	County
Single	3896	Chaves

Producing Thru	Resv. Temp. °F	Mean Temp. °F	Baro. Press. - Pa	State
Tubing	100 @ 4042	62	13.2	New Mexico

L	H	Gg	%CO_2	%N_2	%H_2S	Prover	Meter Run	Taps
3896	3896	0.651	0.014	6.459	0.000	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	400	0			0
1.	2.067	x	1.375	320	24.0	55	340	62			24
2.	2.067	x	1.375	320	27.0	58	333	62			24
3.	2.067	x	1.375	306	28.7	52	327	62			24
4.	2.067	x	1.375	320	33.0	61	320	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	89.4	333.2	1.0048	1.240	1.030	1170
2.	10.200	94.8	333.2	1.0019	1.240	1.029	1237
3.	10.200	95.7	319.1	1.0078	1.240	1.029	1255
4.	10.200	104.9	333.2	0.9990	1.240	1.029	1363
5.							

NO.	Pr	Temp °R	Tr	Z
1.	0.51	515	1.45	0.943
2.	0.51	518	1.46	0.944
3.	0.48	512	1.44	0.944
4.	0.51	521	1.47	0.945
5.				

Gas Liquid Hydrocarbon Ratio	0 Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.	
Specific Gravity Separator Gas	0.651	xxxxxxxxxx
Specific Gravity Flowing Fluid	xxxxxxxxxx	0.651
Critical Pressure	659 P.S.I.A.	659 P.S.I.A.
Critical Temperature	355 °R	355 °R

Pc 413.2 Pc^2 170.7

NO.	Pt^2	Pw	Pw^2	$Pc^2 - Pw^2$
1.	124.8	379.4	143.9	26.8
2.	119.9	375.9	141.3	29.4
3.	115.7	371.2	137.8	32.9
4.	111.0	370.2	137.1	33.7
5.				

(1) $\frac{Pc^2}{Pc^2 - Pw^2}$ = 5.799 (2) $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n$ = 3.281

AOF = Q $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n$ = 4058

Absolute Open Flow	Angle of Slope θ	Slope, n
4058 Mcfd @ 15.025	34	0.676

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Paul Hanes	Andrea Carpenter	

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

DATE 03/28/93

COMPANY Yates Petroleum Corp LEASE Hancock AHC Com WELL NO. 2

LOCATION: Unit C Section 28 Township 6S Range 26E

L 3896 H 3896 L / H 1.000 G 0.651 %CO_2 0.014 %N_2 6.459 %H_2S 0.000

d 1.995 Fr 0.017777 GH 2535.1 Pcr 659.5 Tcr 354.6

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	1.170	1.237	1.255	1.363	
2 Tw(W.H.°R)	522	522	522	522	
3 Ts(B.H.°R)	560	560	560	560	
4 T = (Tw+Ts) / 2	540.7	540.7	540.7	540.7	
5 Z (Est.)	0.945	0.946	0.946	0.947	
6 TZ	510.8	511.2	511.7	512.0	
7 GH / TZ	4.963	4.959	4.955	4.952	
8 e^s(Table XIV)	1.205	1.204	1.204	1.204	
9 1-e^-s(Table XIV)	0.170	0.170	0.170	0.169	
10 Pt	353.2	346.2	340.2	333.2	
11 Pt^2 / 1000	124.8	119.9	115.7	111.0	
12 Fr (Table XV)	0.017777	0.017777	0.017777	0.017777	
13 Fc = FrTZ	9.081	9.088	9.096	9.101	
14 FcQm	10.63	11.24	11.41	12.40	
15 L / H$(FcQm)^2$	112.9	126.3	130.2	153.8	
16 Fw = L / H$(FcQm)^2$(1-e^-s)	19.17	21.44	22.08	26.06	
17 $Pw^2 = Pt^2+Fw$	143.9	141.3	137.8	137.1	
18 $Ps^2 = e^sPw^2$	173.4	170.2	166.0	165.1	
19 Ps	416.4	412.5	407.4	406.3	
20 P = (Pt+Ps) / 2	384.8	379.4	373.8	369.7	
21 Pr = (P / Pcr)	0.58	0.58	0.57	0.56	
22 Tr = (T / Tcr)	1.52	1.52	1.52	1.52	
23 Z (Table XI)	0.945	0.946	0.946	0.947	

Company Yates Petroleum Corp
Well Hancock AHC Com #2
Location C 28-6S-26E

County Chaves
Date 03-28-93