NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOI. AND ONE POINT BACK PRESSURE TEST FOR S WELL

Form C-122

C/S File

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 01/22/91	
Company: Yates Petroleum Corp	Connection: Amoco Pipeline		JAN 06 '95
Pool: Upper Penn/Wolfcamp	Formation: Dagger Draw		Unit: O. C. D. ARTESIA, OFFICE
Completion Date: 01/17/1991	Total Depth: 8980	Plug Back TD: 8850	Elevation: 3770
Farm or Lease Name: Alexandre AHX Federal			
Csg. Size: 5.500 / Wt.: 17.000 / d: 4.892 / Set At: 8980	Perforations: From 6076 To 7555		Well No.: 1
Tbg. Size: 2.375 / Wt.: 4.700 / d: 1.995 / Set At: 7494	Perforations: From 6076 To 7555		Unit: C / Sec.: 33 / Twp.: 19S / Rge.: 24E
Type Well: Single	Packer Set At: 5991		County: Eddy
Producing Thru: Tubing	Resv. Temp. °F: 141 @ 7400	Mean Temp. °F: 62	Baro. Press. - Pa: 13.2
State: New Mexico			

L	H	Gg	$\%CO_2$	$\%N_2$	$\%H_2S$	Prover	Meter Run	Taps
7494	7494	0.702	0.928	0.664	0.000	0.000	3.000	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	250	0			0
1.	3.068	x	0.500	73	51.0	55	150	62			24
2.	3.068	x	0.500	69	61.8	56	124	62			24
3.	3.068	x	0.500	73	78.0	58	99	62			24
4.	3.068	x	0.500	73	89.0	57	73	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	1.183	66.3	86.2	1.0048	1.194	1.010	95
2	1.183	71.5	82.6	1.0039	1.194	1.009	102
3	1.183	82.0	86.2	1.0019	1.194	1.010	117
4	1.183	87.6	86.2	1.0029	1.194	1.010	125
5							

NO.	Pr	Temp °R	Tr	Z
1	0.13	515	1.33	0.981
2	0.12	516	1.34	0.982
3	0.13	518	1.34	0.981
4	0.13	517	1.34	0.981
5				

Gas Liquid Hydrocarbon Ratio	102 Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	48.400 Deg.	
Specific Gravity Separator Gas	0.702	XXXXXXXXXX
Specific Gravity Flowing Fluid	XXXXXXXXXX	0.732
Critical Pressure	671 P.S.I.A.	670 P.S.I.A.
Critical Temperature	386 R	396 R

Pc 263.2 Pc^2 69.3

NO.	Pt^2	Pw	Pw^2	$Pc^2 - Pw^2$
1	26.6	164.0	26.9	42.4
2	18.8	138.3	19.1	50.1
3	12.6	114.0	13.0	56.3
4	7.4	88.9	7.9	61.4
5				

(1) $\frac{Pc^2}{Pc^2 - Pw^2} = 1.231$ (2) $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n = 1.167$

AOF = Q $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n = 137$

Absolute Open Flow 137 Mcfd @ 15.025 Angle of Slope 0 37 Slope, n 0.744

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Juan Fuentes	Andrea Carpenter	

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

DATE 01/22/91

COMPANY Yates Petroleum Corp LEASE Alexandre AHX Federal WELL NO. 1

LOCATION: Unit C Section 33 Township 19S Range 24E

L 7494 H 7494 L / H 1.000 G 0.732 %CO_2 0.928 %N_2 0.664 %H_2S 0.000

d 1.995 Fr 0.017777 GH 5488.6 Pcr 670.3 Tcr 396.3

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	0.095	0.102	0.117	0.125	
2 Tw(W.H.°R)	522	522	522	522	
3 Ts(B.H.°R)	601	601	601	601	
4 T = (Tw+Ts) / 2	561.2	561.2	561.2	561.2	
5 Z (Est.)	0.967	0.972	0.977	0.982	
6 TZ	542.5	545.4	548.3	551.2	
7 GH / TZ	10.117	10.063	10.011	9.958	
8 e^s(Table XIV)	1.461	1.458	1.456	1.453	
9 1-e^-s(Table XIV)	0.316	0.314	0.313	0.312	
10 Pt	163.2	137.2	112.2	86.2	
11 Pt^2 / 1000	26.6	18.8	12.6	7.4	
12 Fr (Table XV)	0.017777	0.017777	0.017777	0.017777	
13 Fc = FrTZ	9.644	9.696	9.746	9.798	
14 FcQm	0.92	0.99	1.14	1.23	
15 L / $H(FcQm)^2$	0.8	1.0	1.3	1.5	
16 Fw = L / $H(FcQm)^2(1-e^{-s})$	0.26	0.31	0.41	0.47	
17 $Pw^2 = Pt^2+Fw$	26.9	19.1	13.0	7.9	
18 $Ps^2 = e^sPw^2$	39.3	27.9	18.9	11.5	
19 Ps	198.3	167.0	137.5	107.1	
20 P = (Pt+Ps) / 2	180.7	152.1	124.9	96.7	
21 Pr = (P / Pcr)	0.27	0.23	0.19	0.14	
22 Tr = (T / Tcr)	1.42	1.42	1.42	1.42	
23 Z (Table XI)	0.967	0.972	0.977	0.982	

Company: Yates Petroleum Corp
Well: Alexandre AHX Federal #1
Location: C 33-19S-24E

County: Eddy
Date: 01-22-91