NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122 c/s1

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 6/13/1999	
Company: Yates Petroleum Corp			Connection: Agave Energy Company		
Pool: Foor Ranch			Formation: Wolfcamp		Unit:
Completion Date: 5/13/1999	Total Depth: 6570		Plug Back TD: 5800	Elevation: 3923	Farm or Lease Name: SUNNY SIDE AMS STATE
Csg. Size: 5.500 / Wt.: 15.500 / d: 4.950 / Set At: 6570			Perforations: From 5364 To 5709		Well No.: 2
Tbg. Size: 2.875 / Wt.: 6.500 / d: 2.441 / Set At: 5290			Perforations: From 5364 To 5709		Unit: B / Sec.: 1 / Twp.: 10S / Rge.: 26E
Type Well: Single			Packer Set At: 5299		County: Chaves
Producing Thru: Tubing	Resv. Temp. °F: 114 @ 5500		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
6570	6570	0.644	0.123	3.393	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	1300	0			0
1.	2.067	x	1.375	1000	13.0	60	1110	60			24
2.	2.067	x	1.375	1000	17.0	60	1073	60			24
3.	2.067	x	1.375	1000	21.0	60	1037	60			24
4.	2.067	x	1.375	1000	25.0	60	1000	60			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	114.8	1013.2	1.0000	1.246	1.095	1598
2.	10.200	131.2	1013.2	1.0000	1.246	1.095	1827
3.	10.200	145.9	1013.2	1.0000	1.246	1.095	2031
4.	10.200	159.2	1013.2	1.0000	1.246	1.095	2216
5.							

NO.	Pr	Temp °R	Tr	Z
1.	1.52	520	1.44	0.833
2.	1.52	520	1.44	0.833
3.	1.52	520	1.44	0.833
4.	1.52	520	1.44	0.833
5.				

Gas Liquid Hydrocarbon Ratio	0 Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.	
Specific Gravity Separator Gas	0.644	xxxxxxxxxx
Specific Gravity Flowing Fluid	xxxxxxxxxx	0.644
Critical Pressure	665 P.S.I.A.	665 P.S.I.A.
Critical Temperature	360 °R	360 °R

Pc 1313.2 Pc^2 1724.5

NO.	Pt^2	Pw	Pw^2	$Pc^2 - Pw^2$
1.	1261.6	1130.9	1278.9	445.6
2.	1179.8	1096.6	1202.6	521.9
3.	1102.9	1063.6	1131.2	593.3
4.	1026.6	1029.8	1060.4	664.1
5.				

(1) $\frac{Pc^2}{Pc^2 - Pw^2}$ = 3.304 (2) $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n$ = 2.723

AOF = Q $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n$ = 4975

Absolute Open Flow	4975 Mcfd @ 15.025		Angle of Slope θ	40	Slope, n 0.838
Remarks:					
Approved By Commission:	Conducted By: Robbie Morris		Calculated By: Katie Brunson		Checked By: Pinson McWhorter

MAY 2000 RECEIVED OCD - ARTESIA

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

DATE 6/13/1999

COMPANY Yates Petroleum Corp LEASE SUNNY SIDE AMS STATE WELL NO. 2

LOCATION: Unit B Section 1 Township 10S Range 26E

L 6570 H 6570 L / H 1.000 G 0.644 %CO_2 0.123 %N_2 3.693 %H_2S 0.000

d 2.441 Fr 0.010495 GH 4231.1 Pcr 664.8 Tcr 360.0

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	1.598	1.827	2.031	2.216	
2 Tw(W.H.°R)	520	520	520	520	
3 Ts(B.H.°R)	574	574	574	574	
4 T = (Tw+Ts) / 2	546.7	546.7	546.7	546.7	
5 Z (Est.)	0.839	0.843	0.847	0.851	
6 TZ	458.5	460.8	463.0	465.3	
7 GH / TZ	9.227	9.183	9.139	9.093	
8 e^s(Table XIV)	1.413	1.411	1.409	1.406	
9 1-e^-s(Table XIV)	0.293	0.291	0.290	0.289	
10 Pt	1123.2	1086.2	1050.2	1013.2	
11 Pt^2 / 1000	1261.6	1179.8	1102.9	1026.6	
12 Fr (Table XV)	0.010495	0.010495	0.010495	0.010495	
13 Fc = FrTZ	4.812	4.836	4.859	4.883	
14 FcQm	7.69	8.84	9.87	10.82	
15 L / H$(FcQm)^2$	59.1	78.1	97.4	117.1	
16 Fw = L / H$(FcQm)^2$(1-e^-s)	17.30	22.74	28.25	33.82	
17 Pw^2 = Pt^2+Fw	1278.9	1202.6	1131.2	1060.4	
18 Ps^2 = e^sPw^2	1807.7	1697.0	1593.7	1491.4	
19 Ps	1344.5	1302.7	1262.4	1221.2	
20 P = (Pt+Ps) / 2	1233.8	1194.4	1156.3	1117.2	
21 Pr = (P / Pcr)	1.86	1.80	1.74	1.68	
22 Tr = (T / Tcr)	1.52	1.52	1.52	1.52	
23 Z (Table XI)	0.839	0.843	0.847	0.851	

Company: Yates Petroleum Corp
Well: SUNNY SIDE AMS STATE #2
Location: B 1-10S-26E

County: Chaves
Date: 6-13-1999