NEW MEXICO OIL CONSERVATION COMMIS N

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122 C/SF File

Type Test			Test Date	
[X] Initial	[ ] Annual	[ ] Special	03/16/1992	

Company	Connection	
Yates Petroleum Corp	Transwestern Pipeline	

Pool	Formation	Unit
Atoka	Undesignated	

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
12/11/91	9075	8638	3690	Oakason NV Federal

Csg. Size	Wt.	d	Set At	Perforations		Well No.
5.500	17.000	4.892	9074	From 8475	To 8538	2

Tbg. Size	Wt	d	Set At	Perforations:		Unit	Sec.	Twp.	Rge.
2.375	4.700	1.995	8400	From 8475	To 8538	F	26	19S	24E

Type Well	Packer Set At	County
Single	8400	Eddy

Producing Thru	Resv. Temp. °F	Mean Temp. °F	Baro. Press. - Pa	State
Tubing	168 @ 8861	62	13.2	New Mexico

L	H	Gg	%CO_2	%N_2	%H_2S	Prover	Meter Run	Taps
8400	8400	0.595	0.331	0.700	0.000	0.000	4.000	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	1800	0			0
1.	4.026	x	1.250	600	2.0	54	1650	62			24
2.	4.026	x	1.250	600	8.0	50	1300	62			24
3.	4.026	x	1.250	600	16.0	59	950	62			24
4.	4.026	x	1.250	600	22.0	57	600	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.	7.469	35.0	613.2	1.0058	1.296	1.054	359
2.	7.469	70.0	613.2	1.0098	1.296	1.055	723
3.	7.469	99.1	613.2	1.0010	1.296	1.052	1010
4.	7.469	116.1	613.2	1.0029	1.296	1.053	1187
5.							

NO	Pr	Temp °R	Tr	Z
1.	0.91	514	1.46	0.901
2.	0.91	510	1.45	0.898
3.	0.91	519	1.47	0.904
4	0.91	517	1.47	0.903
5.				

Gas Liquid Hydrocarbon Ratio	0 Mcf/bbl	
A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.	
Specific Gravity Separator Gas	0.595	xxxxxxxxxx
Specific Gravity Flowing Fluid	xxxxxxxxxx	0.595
Critical Pressure	672 P.S.I.A.	672 P.S.I.A.
Critical Temperature	352 °R	352 °R

Pc 1813.2 Pc^2 3287.7

NO	Pt^2	Pw	Pw^2	$Pc^2 - Pw^2$
1.	2766.2	1664.1	2769.3	518.4
2.	1724.5	1318.1	1737.3	1550.4
3.	927.8	976.6	953.7	2334.0
4	376.0	643.0	413.5	2874.2
5.				

(1) $\frac{Pc^2}{Pc^2 - Pw^2} = 1.409$ (2) $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n = 1.318$

AOF = Q $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n = 1331$

Absolute Open Flow 1331 Mcfd @ 15.025 Angle of Slope 0 39 Slope, n 0.806

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Ed Perry	Andrea Carpenter	

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

DATE 03/16/1992

COMPANY Yates Petroleum Corp LEASE Oakason NV Federal WELL NO. 2

LOCATION: Unit F Section 26 Township 19S Range 24E

L 8400 H 8400 L/H 1.000 G 0.595 %CO_2 0.331 %N_2 0.700 %H_2S 0.000

d 1.995 Fr 0.017777 GH 4998.0 Pcr 672.4 Tcr 351.8

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	0.359	0.723	1.010	1.187	
2 Tw(W.H.°R)	522	522	522	522	
3 Ts(B.H.°R)	628	628	628	628	
4 T = (Tw+Ts) / 2	574.7	574.7	574.7	574.7	
5 Z (Est.)	0.846	0.866	0.893	0.927	
6 TZ	486.1	497.4	513.4	532.8	
7 GH / TZ	10.283	10.048	9.735	9.380	
8 e^s(Table XIV)	1.470	1.457	1.441	1.422	
9 1-e^-s(Table XIV)	0.320	0.314	0.306	0.297	
10 Pt	1663.2	1313.2	963.2	613.2	
11 Pt^2 / 1000	2766.2	1724.5	927.8	376.0	
12 Fr (Table XV)	0.017777	0.017777	0.017777	0.017777	
13 Fc = FrTZ	8.641	8.842	9.127	9.472	
14 FcQm	3.11	6.39	9.22	11.24	
15 L / H$(FcQm)^2$	9.6	40.8	84.9	126.4	
16 Fw = L / H$(FcQm)^2(1-e^{-s})$	3.09	12.83	25.97	37.49	
17 $Pw^2 = Pt^2+Fw$	2769.3	1737.3	953.7	413.5	
18 $Ps^2 = e^sPw^2$	4071.4	2532.0	1373.9	587.9	
19 Ps	2017.8	1591.2	1172.1	766.7	
20 P = (Pt+Ps) / 2	1840.5	1452.2	1067.7	690.0	
21 Pr = (P / Pcr)	2.74	2.16	1.59	1.03	
22 Tr = (T / Tcr)	1.63	1.63	1.63	1.63	
23 Z (Table XI)	0.846	0.866	0.893	0.927	

Company: Yates Petroleum Corp
Well: Oakason NV Federal #2
Location: F 26-19S-24E

County: Eddy
Date: 03-16-1992