

MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED BY 22
JUL 09 1984
O. C. D.
ARTESIA, OFFICE

Type Test [] Initial [] Annual [x] Special				Test Date 5/14/84	
Company ✓ Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool Kennedy Farms <i>W-2-12</i>				Formation Kenney	
Completion Date 3/2/83		Total Depth 8875.0'		Elevation 3217.0'	
Csg Size Int. 4.500"		Set At 8872.0'		Perforations: From 3723.0' To 8743.0'	
Tbg Size Int. 2.375"		Set At 8666.0'		Perforations: From 0.0' To 0.0'	
Type Well Single				Packer Set At 8667.0'	
Producing Thru Bore Temp. °F 151 @ 8733'				Sano. Press. - Pa 13.2 psia.	
Tubing L 8666.0' H 8666.0' Gg .622 NO02 5H2 36 0.00 Prover Meter Run 2.000" Taps Flange				State New Mexico	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Size	Orifice Size	Press. psia	Diff. in	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	
51	3.000	3.000	0	0.0	70	2356	0	0	0	0 hrs.
1.	2.067	2.067	345	17.7	75	1975	62	0	0	24 hrs.
2.	2.067	2.067	352	23.2	75	1852	62	0	0	24 hrs.
3.	2.067	2.067	350	32.1	75	1513	62	0	0	24 hrs.
4.	2.067	2.067	375	78.0	75	1185	62	0	0	24 hrs.
5.	3.000	3.000	0	0.0	0	0	0	0	0	0 hrs.

RATE OF FLOW CALCULATIONS

NO	Coefficient (2" NO02)	Pressure Pa	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	3.229	79.62	333.30	.985	1.028	382
2.	3.229	91.72	361.20	.985	1.028	440
3.	3.229	137.96	363.00	.985	1.028	659
4.	3.229	169.73	383.20	.986	1.030	786
5.	0.000	0.00	0.00	0.000	0.000	0

NO	Pa	Pb	Pc	Z	Gas Liquid Hydrocarbon Ratio 125.000 Mcf/bbl.	P.P.I. Gravity of Liquid Hydrocarbons 0.800 Deg.
1.	.53	533	1.48	.945	Specific Gravity Separator Gas .622	xxxxxxx
2.	.54	535	1.48	.946	Specific Gravity Flowing Fluid	xxxxx .659
3.	.54	535	1.48	.945	Critical Pressure	673.7 PSIA 672.4 PSIA
4.	.57	535	1.48	.942	Critical Temperature	561.1°R 373.4°R
5.	0.00	0	0.00	0.000		

Pc 2363.2	Pc2 5334.7					
NO	Pt2	Po	Pc2	Pc2-Po2(1)	Pc2 = 1.3606 (2)	Pc2 = 1.2715
1.	3852.9	1939.1	3956.4	1625.3		
2.	3482.7	1867.4	3497.8	3397.4		
3.	2329.3	1523.7	2339.9	3344.9	POF = 0	1000 Mcfd
4.	1425.7	1294.8	1451.5	4103.2		
5.	0.0	0.0	0.0	0.0		

Absolute Open Flow 1000 Mcfd @ 15.025 Angle of Slope 0 38 Slope, n .780

Remarks:

No sale of oil yet. unable to obtain API gravity.

Approved By:	Conducted By:	Calculated By:	Checked By:
	Tracy Richardson	Andie Carpenter	

Adopted 9-1-65

DATE 7/6/84

COMPANY Yates Petroleum Corporation Lease Derry "EE" Co. WELL NO. 2

LOCATION: Unit 5 Section 20 Township 17S Range 26E

L 8666.9 H 3109.0 L/H 1.000 G 695 XCO2 .70 XH2 .36 XH2S 0.00

d 1.955 Fc .017777 Gr 173.6 Pcr 672.4 Tcr 373.4

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 T_m	.332	.440	.539	.786	0.000
2 $T_c(W.H.^{\circ}R)$	522.0	522.0	522.0	522.0	0.0
3 $T_s(B.H.^{\circ}R)$	611.0	611.0	611.0	611.0	0.0
4 $T = (T_c + T_s) / 2$	566.5	566.5	566.5	566.5	0.0
5 $Z(Est.)$	.791	.783	.799	.828	0.000
6 TZ	443.4	443.6	452.6	469.2	0.0
7 GH/TZ	12.919	12.880	12.624	12.178	0.000
8 $a = (T / T_m) (100)$	1.623	1.621	1.605	1.579	0.000
9 $1 - a = b$ (Table XIIV)	.334	.383	.377	.367	0.000
10 P_t	1938.2	1966.2	1526.2	1198.2	0.0
11 $P_t \times 1000$	3952.0	3482.7	2329.3	1435.7	0.0
12 F_c (Table XV)	.017777	.017777	.017777	.017777	0.000000
13 $F_c = F_c TZ$	7.835	7.886	8.046	8.341	0.000
14 $F_c G_m$	3.261	3.471	5.366	6.560	0.000
15 $L / H (F_c G_m) / 2$	9.053	12.044	20.157	43.034	0.000
16 $F_u = L / H (F_c G_m) (1 - a - b)$	3.458	4.614	10.618	15.776	0.000
17 $P_u^2 = P_t^2 + F_u$	3956.4	3437.3	2339.9	1451.5	0.0
18 $P_u^2 = a^2 P_u^2$	6421.1	5652.0	3756.5	2291.5	0.0
19 P_u	2534.0	2377.5	1938.2	1513.0	0.0
20 $P = (P_t + P_u) / 2$	2261.1	2121.9	1732.2	1356.0	0.0
21 $P_c = (P_u - P_c r)$	3.38	3.16	2.58	2.02	0.00
22 $T_r = (T / T_c r)$	1.52	1.52	1.52	1.52	0.00
23 Z (Table XI)	.791	.783	.799	.828	0.000

Company	Yucca Petroleum Corporation
Well	Barro "EE" Com No. 2
Location	W-25-175-288
County	Edgar
Date	7-8-84

$P_o^2 - P_w^2$, THOUSANDS

