

COMPANY Kates Petroleum Inc. LEASE Redman "Ox" 55. WELL NO. #1-Y DATE 12/1/81

LOCATION: Unit P Section 34 Township 4S Range 24E

L 3490 H 3490 L/H 1.000 G .652 %CO₂ 0.15 %N₂ 6.38 %H₂S 0

d 2.441 F₁ .010163 GH 2471 P_{CT} 659 T_{CT} 358

1st Rate 2nd Rate 3rd Rate P_{CT} TABLE B X T_{CT} TABLE B X

LINE	Trial #1	Trial #2	Trial #1	Trial #2	Trial #1	Trial #2	Trial #1	Trial #2	Trial #1	Trial #2
1 Q _m	.396	.396	.260	.260	.188	.188	.124	.124		
2 T _w (W.H. °R)	527	527	527	527	527	527	527	527		
3 T _s (B.H. °R)	560	560	560	560	560	560	560	560		
4 T = $(\frac{W}{2} + \frac{L}{2})$	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5		
5 Δ (Est.)	.903	.704	.900	.696	.537	.533	.872	.872		
6 T ₂	490.8	506.2	489.15	486.98	482.05	479.91	474.5	473.3		
7 GH-TZ	5.0348	4.8811	5.0576	5.0741	5.1257	5.1489	5.2079	5.2138		
8 e ⁵ (Table XIV)	1.208	1.201	1.209	1.210	1.212	1.213	1.216	1.216		
9 1-e ⁵ (Table XIV)	.1172	.164	.173	.174	.175	.176	.178	.178		
10 F ₁	632.2	632.2	711.2	711.2	800.2	800.2	833.2	833.2		
11 P ₁ Z (Table)	394.7	394.7	505.81	505.81	640.32	640.32	780.04	780.04		
12 F ₁ Table (V)	.010763	.010763	.010763	.010763	.010763	.010763	.010763	.010763		
13 F ₂ = F ₁ T ₂	5.2825	5.4482	5.2641	5.2413	5.1886	5.1663	5.1070	5.1070		
14 F ₂ Z _m	2.0919	2.1575	1.3688	1.3601	.9453	.9411	0.633	.6325		
15 L/H (F ₂ Q _m) ^{1/2}	4.3759	4.6548	1.8737	1.8457	.9815	.9430	0.4010	.4000		
16 F ₂ = L/H (F ₂ Q _m) ² (1-e ⁻⁵)	.7527	.7774	.3341	.3231	.1665	.1660	0.0714	.0712		
17 P ₁ Z _m = P ₁ Z _m + F ₂	400.45	400.48	506.13	506.13	640.49	640.49	780.11	780.11		
18 F ₂ Z _m = e ⁵ P ₁ Z _m	483.75	490.77	611.91	612.42	776.27	776.91	948.62	948.62		
19 F ₂	695.52	698.40	730.25	732.57	881.06	881.42	973.97	973.97		
20 F ₂ = $(\frac{F_2}{2} + \frac{F_1}{2})$	663.86	662.86	746.72	746.87	840.63	840.81	928.58	928.58		
21 F ₂ = (P ₁ P ₂)	1.01	1.01	1.13	1.13	1.28	1.28	1.41	1.41		
22 T ₁ = (T/T ₂)	1.52	1.52	1.57	1.57	1.52	1.52	1.52	1.52		
23 Z (Table XI)	.974	.904	.896	.876	.883	.882	.872	.872		