

Adopted 9-1-65

DATE 7/11/83

COMPANY Yates Petroleum Corporation LEASE Sacra "SA" WELL NO. 3

LOCATION: Unit M Section 35 Township 6S Range 25E

L 3570.0 H 3570.0 L/H 1.000 G .643 %CO2 .11 %N2 6.03 %H2S 0.00

d 1.995 Fr .017777 GH 2295.5 Pcr 660.9 Tcr 353.1

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.118	.181	.205	.240	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	561.0	561.0	561.0	561.0	0.0
4 T=(Tw+Ts)/2	541.5	541.5	541.5	541.5	0.0
5 Z(Est.)	.927	.937	.945	.969	0.000
6 TZ	502.1	507.4	511.7	524.8	0.0
7 GH/TZ	4.572	4.524	4.486	4.374	0.000
8 e ^s (Table XIV)	1.187	1.185	1.183	1.178	0.000
9 1-e ^{-s} (Table XIV)	.158	.156	.155	.151	0.000
10 Pt	513.2	443.2	388.2	223.2	0.0
11 Pt ² /1030	263.4	196.4	150.7	49.8	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.928	9.022	9.097	9.330	0.000
14 FcQm	1.056	1.630	1.864	2.241	0.000
15 L/H(FcQm) ²	1.116	2.658	3.475	5.023	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.176	.415	.538	.760	0.000
17 Pw ² =Pt ² +Fw	263.5	196.8	151.2	50.6	0.0
18 Ps ² =e ^s Pw ²	312.8	233.2	178.9	59.6	0.0
19 Ps	559.3	482.9	423.0	244.1	0.0
20 P=(Pt+Ps)/2	536.3	463.1	405.6	233.7	0.0
21 Pr=(P/Pcr)	.81	.70	.61	.35	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.927	.937	.945	.969	0.000