

Adopted 9-1-65

DATE 7/21/83

COMPANY Yates Petroleum Corporation LEASE McCrea "SF" Com WELL NO. 1

LOCATION: Unit C Section 14 Township 9S Range 25E

L 3804.0 H 3804.0 L/H 1.000 G .681 %CO₂ 1.99 %N₂ 9.23 %H₂S 0.00

d 2.441 Fr .010495 GH 2590.5 Pcr 662.3 Tcr 353.6

LINE		1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm		.104	.138	.156	.158	0.000
2 Tw(W.H.°R)		522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)		551.0	551.0	551.0	551.0	0.0
4 T=(Tw+Ts)/2		536.5	536.5	536.5	536.5	0.0
5 Z(Est.)		.875	.897	.930	.938	0.000
6 TZ		469.7	481.3	499.0	503.3	0.0
7 GH/TZ		5.515	5.382	5.192	5.147	0.000
8 e ^s (Table XIV)		1.230	1.224	1.215	1.213	0.000
9 1-e ^{-s} (Table XIV)		.187	.183	.177	.175	0.000
10 Pt		863.2	703.2	473.2	418.2	0.0
11 Pt ² /1000		745.1	494.5	223.9	174.9	0.0
12 Fr(Table XV)		.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ		4.929	5.051	5.238	5.283	0.000
14 FcQm		.515	.698	.815	.835	0.000
15 L/H(FcQm) ²		.265	.487	.665	.697	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})		.050	.089	.118	.122	0.000
17 Pw ² =Pt ² +Fw		745.2	494.6	224.0	175.0	0.0
18 Ps ² =e ^s Pw ²		916.4	605.2	272.2	212.3	0.0
19 Ps		957.3	777.9	521.7	460.7	0.0
20 P=(Pt+Ps)/2		910.2	740.6	497.5	439.5	0.0
21 Pr=(P/Pcr)		1.37	1.12	.75	.66	0.00
22 Tr=(T/Tcr)		1.52	1.52	1.52	1.52	0.00
23 Z(Table XI)		.875	.897	.930	.938	0.000