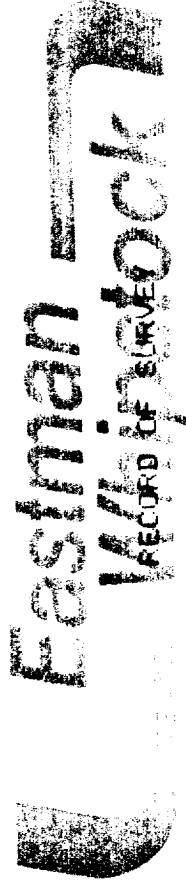


SANTA FE ENERGY CORP.
VERNON FEDERAL COM. WELL NO. Y-1
EDDY COUNTY, NEW MEXICO BD2-70
AUGUST 16, 1984

EASTMAN WHIPSTOCK INC.
GYROSCOPIC MULTI-SHOT SURVEY
SURVEYOR: TIM STEPHENS
MAGNETIC MULTI-SHOT SURVEY
SURVEYOR: TIM STEPHENS
MAGNETIC MULTI-SHOT SURVEY
SURVEYOR: STEVE COVINGTON

WT0884-G0481
(0'-2640')
WT0884-S0498
(2640'-9248')
WT0984-S0013
(9248'-11989')



RADIUS OF CURVATURE METHOD