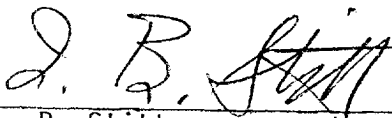


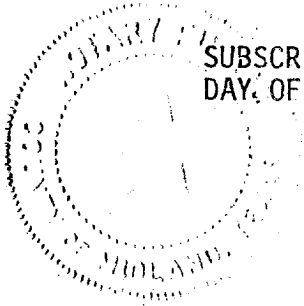
GIFFORD, MITCHELL & WISENBAKER
DEVIATION SURVEY

Spotted Tail Federal #1

Depth	Degrees	Interval	Feet of Deviation
320	1/2	320	2.79
598	1/2	278	2.43
1086	3	488	25.54
1317	4	231	16.11
1942	1 1/2	625	16.36
2459	1	517	9.02
		2459	72.25


I. B. Stitt

SUBSCRIBED AND SWORN BEFORE ME THIS 11th
DAY OF SEPTEMBER, 1978.



MARIANNE P. PEARCE
NOTARY PUBLIC
MIDLAND COUNTY, TEXAS
MY COMMISSION EXPIRES 1-26-80


Notary Public
Marianne Pearce
Midland County, Texas.