



Patterson Drilling Company

410 N. Loraine Street — (915) 682-9401
Midland, Texas 79701

February 3, 1999

Drilling Department
Santa Fe Energy Resources, Inc.
550 W Texas, Ste 1330
Midland, TX 79701

RE: Inclination Report
Shugart 23 Federal #1
Sec 23; T-18-S; R-31-E

Gentlemen:

The following is an inclination survey on the above referenced well located in Lea County, New Mexico:

254' - 0.25	7117' - 1.00
484' - 0.75	7611' - 1.00
669' - 0.50	8106' - 1.00
1104' - 0.75	8354' - 0.75
1605' - 0.75	8823' - 0.75
2105' - 0.50	9311' - 1.50
2604' - 0.50	9807' - 1.25
3126' - 0.75	10244' - 2.00
3618' - 0.50	10741' - 1.75
4111' - 0.25	10976' - 2.50
4807' - 0.50	11228' - 2.25
5302' - 0.75	11473' - 3.00
5795' - 0.75	11873' - 3.00
6284' - 0.50	11975' - 3.00
6778' - 1.00	

Sincerely,

Rebecca Edwards

Rebecca A. Edwards
Administrative Assistant

STATE OF TEXAS)
)
COUNTY OF MIDLAND)

The foregoing was acknowledged before me this 3rd day of February, 1999 by Rebecca A. Edwards.

MY COMMISSION EXPIRES:

Treva Forrester

NOTARY PUBLIC

