



KEN REYNOLDS-PRESIDENT
GARY W. CHAPPELL-VICE PRESIDENT

DRILLING CO., INC. - OIL WELL DRILLING CONTRACTORS

P. O. Box 1498 ROSWELL, NEW MEXICO 88202-1498
505/623-5070 505/746-2719
ROSWELL, NM ARTESIA, NM

December 15, 1998

Santa Fe Energy, Inc.
550 W. Texas, Suite 1330
Midland, Texas 79701

RE: Old Ranch Knoll "8" Federal #3



Gentlemen:

The following is a Deviation Survey on the above referenced well located in Eddy County, New Mexico.

1,828' - 1/4°	3,900' - 1 3/4°	5,572' - 1 3/4°	6,299' - 2 3/4°	7,119' - 2 1/2°
2,113' - 1°	4,216' - 2°	5,667' - 2°	6,394' - 2°	7,277' - 2°
2,366' - 1°	4,311' - 1 3/4°	5,763' - 2°	6,488' - 1 3/4°	7,583' - 1 1/4°
2,650' - 1°	4,406' - 1 3/4°	5,888' - 2 1/4°	6,614' - 2°	7,866' - 1 1/4°
2,956' - 1°	4,532' - 1 1/4°	5,982' - 1 3/4°	6,709' - 1 3/4°	8,064' - 2 1/4°
3,280' - 3/4°	4,847' - 1 1/2°	6,077' - 2 1/2°	6,835' - 2°	8,273' - 1 1/4°
3,594' - 1°	5,162' - 1 1/2°	6,204' - 2 1/4°	6,962' - 2 1/4°	8,550' - 1 1/2°

Sincerely,

Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)

COUNTY OF CHAVES)

The foregoing was acknowledged before me this 15th day of December 1998 by Gary W. Chappell.

MY COMMISSION EXPIRES

JUNE 20, 2000

NOTARY PUBLIC