



Patterson Drilling Company

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

June 29, 1999

ARCO Permian
P. O. Box 1610
Midland, TX 79702

Re: Deviation Report
Crooked Canyon Federal #1

Gentlemen:

The following is a deviation survey on the above-referenced well located in Eddy County, New Mexico.

1482' - 2.25	4234' - 1.00
1600' - 2.00	4544' - 1.25
1691' - 2.00	4854' - 0.50
1881' - 2.00	5165' - 0.50
2098' - 1.50	5475' - 1.50
2270' - 2.00	5790' - 0.75
2470' - 1.50	6100' - 1.00
2782' - 1.75	6412' - 1.00
3081' - 1.75	6912' - 2.25
3279' - 1.50	7182' - 2.00
3449' - 1.25	7624' - 2.25
3641' - 0.75	7891' - 2.25
3931' - 0.75	8200' - 1.75

Sincerely,

Treva Forrester

STATE OF TEXAS)
)
COUNTY OF MIDLAND)

The foregoing was acknowledged before me this 29th day of June, 1999 by Treva Forrester.

MY COMMISSION EXPIRES:

NOTARY PUBLIC

