

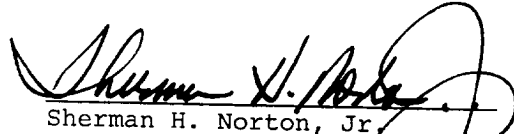
30-025-31987
Arco A Com Unit F
Deviation surveys taken on Rand Oil & Gas Company's Rand #1 well, Unit F
in Lea County, New Mexico: 1950/N 7 W 18-175-39E

<u>Depth</u>	<u>Degree</u>
223	.25
412	.25
914	.25
1400	.75
1900	.75
2312	.75
2800	1.25
3322	.75
3820	.75
4315	1.50
4816	1.50
4950	1.25
5467	1.00
5960	1.00
6380	1.25
6893	1.50
7383	1.00
7881	1.00
8384	1.25
8883	1.00
9370	.75
9854	2.00
10,221	1.75
10,697	1.50
11,193	1.75
11,692	1.75
12,137	2.75

I hereby certify that I have personal knowledge of the facts placed on this sheet and that such information given above is true and complete.

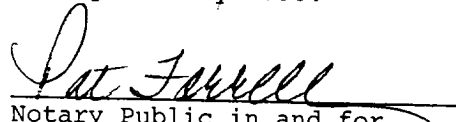

Norton Drilling Company

Before me, the undersigned authority, on this day personally appeared Sherman H. Norton, Jr., known to me to be the person whose name is subscribed hereto, who, after being duly sworn, on oath states that he is the drilling contractor of the well identified in this instrument and that such well was not intentionally deviated from the vertical whatsoever.


Sherman H. Norton, Jr.

SWORN AND SUBSCRIBED TO before me this 23rd day of July 1993.




Notary Public in and for
Lubbock County, Texas.