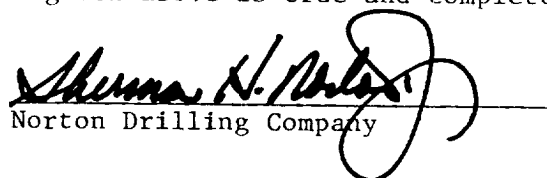


Deviation surveys taken on Beach Exploration's Bonds Federal #1
in Lea County, New Mexico:

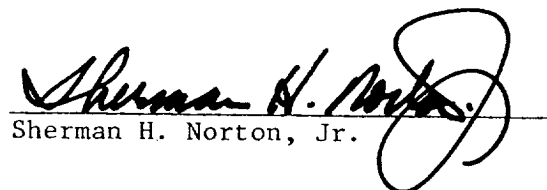
1980/A + 660/E
5-9-35

| <u>Depth</u> | <u>Degree</u> |
|--------------|---------------|
| 350 | 1.25 |
| 380 | 1.25 |
| 868 | .25 |
| 1347 | .25 |
| 1807 | .50 |
| 1095 | .50 |
| 2595 | .75 |
| 3053 | .75 |
| 3550 | 1.50 |
| 3842 | .50 |
| 4090 | 1.00 |
| 4578 | 1.25 |
| 5075 | .25 |
| 5574 | .75 |
| 6072 | .50 |
| 6559 | 1.00 |
| 7032 | 1.50 |
| 7516 | .50 |
| 7991 | .50 |
| 8488 | .50 |
| 8754 | .75 |
| 9230 | .50 |
| 9631 | .50 |
| 9825 | 1.00 |
| 9840 | 1.00 |

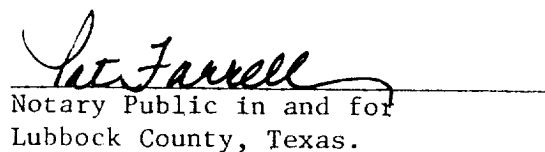
I hereby certify that I have personal knowledge of the facts placed
on this sheet and that such information given above is true and complete.


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 3rd day of January 1989.


Notary Public in and for
Lubbock County, Texas.

My Commission expires 4-9-92

RECEIVED

FEB 23 1989

OCD
NOBBS OFFICE