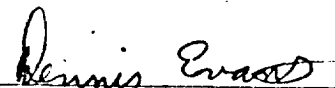


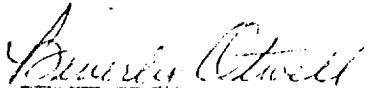
AMOCO PRODUCTION COMPANY  
EMPIRE SOUTH DEEP UNIT WELL NO. 19  
2280 FNL X 660 FEL, Sec 36, Unit H, T-17-S, R-28-E  
EDDY COUNTY, NEW MEXICO

DEVIATION SURVEY

| <u>Depth in Feet</u> | <u>Deviation-In Degrees</u> |
|----------------------|-----------------------------|
| 100                  | 1/2                         |
| 290                  | 1/4                         |
| 389                  | 1/4                         |
| 680                  | 1/2                         |
| 1105                 | 3/4                         |
| 1601                 | 3/4                         |
| 2125                 | 1 1/2                       |
| 2314                 | 1 3/4                       |
| 2511                 | 1 1/4                       |
| 2783                 | 1                           |
| 2900                 | 1 1/4                       |
| 2957                 | 1                           |
| 3237                 | 1 1/4                       |
| 3482                 | 1 1/4                       |
| 3825                 | 1 1/4                       |
| 4046                 | 1 1/4                       |
| 4265                 | 3/4                         |
| 4545                 | 1 1/4                       |
| 4763                 | 1 3/4                       |
| 4877                 | 1 1/4                       |
| 5145                 | 2                           |
| 5300                 | 1 1/2                       |
| 5458                 | 1 1/2                       |
| 5638                 | 1 1/2                       |
| 5850                 | 1 1/2                       |
| 5980                 | 1 1/2                       |
| 6160                 | 1 3/4                       |
| 6316                 | 3                           |
| 6378                 | 2 3/4                       |
| 6470                 | 2 1/4                       |
| 6564                 | 3                           |
| 6660                 | 2 1/2                       |
| 6780                 | 2 1/2                       |
| 6886                 | 2 3/4                       |
| 6980                 | 3                           |
| 7103                 | 3 3/4                       |
| 7197                 | 3 3/4                       |
| 7282                 | 3 1/2                       |
| 7425                 | 3                           |
| 7529                 | 3                           |
| 7693                 | 2 1/4                       |
| 7842                 | 2 1/4                       |
| 8115                 | 2 1/4                       |
| 8400                 | 2                           |
| 8825                 | 1/2                         |
| 9300                 | 3/4                         |
| 9667                 | 1                           |
| 10,130               | 1 3/4                       |
| 10,245               | 1 1/2                       |
| 10,734               | 1 1/4                       |
| 10,859               | 1 1/2                       |
| 11,200               | 1 1/2                       |

The above is true and correct to the best of my knowledge.

  
Assist. Admin. Analyst

  
Notary Public for  
Hockley County, Texas

11-7-78