

Quarles Drilling Corp.  
Deviation Test  
*Enron oil & Gas* Grama Ridge 8 State, Well No. 1  
Lea County, New Mexico  
*1980/N & 660/E 8-22-84*

| <u>Course Length</u> | <u>Angle of Inclination</u> | <u>Displacement per Hundred Feet</u> | <u>Course Displacement</u> | <u>Accumulative Displacement</u> |
|----------------------|-----------------------------|--------------------------------------|----------------------------|----------------------------------|
| 230                  | 3/4                         | 1.31                                 | 3.01                       | 3.01                             |
| 226                  | 1                           | 1.75                                 | 3.95                       | 6.96                             |
| 184                  | 1                           | 1.75                                 | 3.22                       | 10.18                            |
| 94                   | 1/4                         | .44                                  | .41                        | 10.59                            |
| 366                  | 1/2                         | .87                                  | 3.18                       | 13.76                            |
| 130                  | 1                           | 1.75                                 | 2.27                       | 16.02                            |
| 470                  | 2                           | 3.49                                 | 16.40                      | 32.42                            |
| 155                  | 1-1/2                       | 2.62                                 | 4.06                       | 36.48                            |
| 249                  | 1-1/2                       | 2.62                                 | 6.52                       | 43.00                            |
| 232                  | 2                           | 3.49                                 | 8.09                       | 51.09                            |
| 230                  | 1-3/4                       | 3.05                                 | 7.02                       | 58.11                            |
| 248                  | 1-3/4                       | 3.05                                 | 7.56                       | 65.67                            |
| 293                  | 2-1/2                       | 4.35                                 | 12.74                      | 78.41                            |
| 262                  | 2                           | 3.49                                 | 9.14                       | 87.55                            |
| 250                  | 2                           | 3.49                                 | 8.72                       | 96.27                            |
| 234                  | 2                           | 3.49                                 | 8.16                       | 104.43                           |
| 230                  | 2-1/4                       | 3.93                                 | 9.04                       | 113.47                           |
| 280                  | 2-1/4                       | 3.93                                 | 11.00                      | 124.47                           |
| 251                  | 2-1/2                       | 4.35                                 | 10.91                      | 135.38                           |
| 253                  | 2-1/2                       | 4.35                                 | 11.00                      | 146.38                           |
| 392                  | 2-3/4                       | 4.80                                 | 18.81                      | 165.19                           |
| 355                  | 2                           | 3.49                                 | 12.38                      | 177.57                           |
| 530                  | 1-3/4                       | 3.05                                 | 16.16                      | 193.73                           |
| 510                  | 1-3/4                       | 3.05                                 | 15.56                      | 209.29                           |
| 479                  | 1-1/2                       | 2.62                                 | 12.55                      | 221.84                           |
| 466                  | 1-3/4                       | 3.05                                 | 14.21                      | 236.05                           |
| 498                  | 1-3/4                       | 3.05                                 | 15.09                      | 251.14                           |
| 407                  | 1-3/4                       | 3.05                                 | 12.41                      | 263.55                           |
| 526                  | 1-1/4                       | 2.18                                 | 11.47                      | 275.02                           |
| 303                  | 1-1/2                       | 2.62                                 | 7.94                       | 282.96                           |
| 505                  | 1                           | 1.75                                 | 8.84                       | 291.80                           |
| 505                  | 1-1/2                       | 2.62                                 | 13.23                      | 305.03                           |

-Continued-

I declare that I am authorized to make this certification, that I have personal knowledge of the Deviation Test and that such data and facts are true, correct, and complete to the best of my knowledge.

*Ray Felt*  
(Name)  
*Quarles Drilling Corp.*  
(Company)  
*2-2-88*  
(Date)

Subscribed and Sworn Before me This  
*2nd* day of *February*, 1988  
*Norman M. Beasley*  
Notary Public

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| <u>Course Length</u> | <u>Angle of<br/>Inclination</u> | <u>Displacement per<br/>Hundred Feet</u> | <u>Course<br/>Displacement</u> | <u>Accumulative<br/>Displacement</u> |
|----------------------|---------------------------------|------------------------------------------|--------------------------------|--------------------------------------|
| 484                  | 2-1/2                           | 4.35                                     | 21.05                          | 326.08                               |
| 200                  | 2-1/2                           | 4.35                                     | 8.70                           | 334.78                               |
| 281                  | 2-3/4                           | 4.80                                     | 13.49                          | 348.27                               |
| 242                  | 3                               | 5.23                                     | 12.65                          | 360.92                               |
| 135                  | 3-3/4                           | 6.54                                     | 8.83                           | 369.75                               |
| 64                   | 3                               | 5.23                                     | 3.34                           | 373.09                               |
| 62                   | 3-1/4                           | 5.67                                     | 3.51                           | 376.60                               |
| 64                   | 3                               | 5.23                                     | 3.34                           | 379.94                               |
| 25                   | 3-1/4                           | 5.67                                     | 1.41                           | 381.35                               |
| 114                  | 3-1/4                           | 5.67                                     | 6.46                           | 387.81                               |
| 146                  | 3-1/4                           | 5.67                                     | 9.71                           | 397.52                               |
| 301                  | 3-3/4                           | 6.54                                     | 19.68                          | 417.20                               |
| 174                  | 4-1/2                           | 7.85                                     | 13.65                          | 430.85                               |
| 175                  | 4                               | 6.98                                     | 12.21                          | 443.06                               |
| 258                  | 3-3/4                           | 6.54                                     | 16.61                          | 459.67                               |
| 267                  | 4-1/4                           | 7.41                                     | 19.78                          | 479.45                               |
| 235                  | 4                               | 6.98                                     | 16.40                          | 495.85                               |

Accumulative total displacement of well bore at total depth of 13,570 feet = 495.85 feet.

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