

PENNZOIL COMPANY  
STATE 16 #4  
LEA COUNTY, NEW MEXICO

| Measured<br>Depth<br>Feet | Incl.<br>Angle<br>Degs. | Hole<br>Direction<br>Degs. | True<br>Verticle<br>Depth<br>Feet | R e c t a n g u l a r<br>C o o r d i n a t e s |             | Dog-Leg<br>Severity<br>DG/100 Ft |
|---------------------------|-------------------------|----------------------------|-----------------------------------|------------------------------------------------|-------------|----------------------------------|
|                           |                         |                            |                                   | N/S<br>feet                                    | E/W<br>feet |                                  |
| 3600.00                   | 0.80                    | N 87.00 E                  | 3599.67                           | 16.25 N                                        | 2.09 W      | 0.21                             |
| 3700.00                   | 0.50                    | S 89.00 E                  | 3699.67                           | 16.27 N                                        | 0.95 W      | 0.30                             |
| 3800.00                   | 0.50                    | S 77.00 E                  | 3799.66                           | 16.17 N                                        | 0.09 W      | 0.10                             |
| 3900.00                   | 0.20                    | S 66.00 E                  | 3899.66                           | 15.97 N                                        | 0.49 E      | 0.31                             |
| 4000.00                   | 0.10                    | S 21.00 E                  | 3999.66                           | 15.79 N                                        | 0.66 E      | 0.15                             |
| 4100.00                   | 0.40                    | S 53.00 E                  | 4099.66                           | 15.44 N                                        | 0.92 E      | 0.32                             |
| 4200.00                   | 0.50                    | S 46.00 E                  | 4199.66                           | 14.93 N                                        | 1.52 E      | 0.11                             |
| 4300.00                   | 0.50                    | S 39.00 E                  | 4299.65                           | 14.29 N                                        | 2.11 E      | 0.06                             |
| 4350.00                   | 0.60                    | S 69.00 E                  | 4349.65                           | 14.01 N                                        | 2.49 E      | 0.60                             |
| 4433.00                   | 0.20                    | S 79.00 E                  | 4432.65                           | 13.85 N                                        | 3.05 E      | 0.49                             |
| 4495.00                   | 0.10                    | S 86.00 E                  | 4494.65                           | 13.83 N                                        | 3.21 E      | 0.16                             |
| 4588.00                   | 0.80                    | S 6.00 W                   | 4587.64                           | 13.33 N                                        | 3.63 E      | 0.87                             |
| 4681.00                   | 0.70                    | S 16.00 W                  | 4680.64                           | 12.13 N                                        | 3.40 E      | 0.18                             |
| 4774.00                   | 0.60                    | S 6.00 E                   | 4773.63                           | 11.09 N                                        | 3.30 E      | 0.29                             |
| 4867.00                   | 0.80                    | S 6.00 W                   | 4866.62                           | 9.96 N                                         | 3.30 E      | 0.27                             |
| 4960.00                   | 0.60                    | S 27.00 W                  | 4959.62                           | 8.87 N                                         | 2.98 E      | 0.35                             |
| 5053.00                   | 0.80                    | S 32.00 W                  | 5052.61                           | 7.88 N                                         | 2.42 E      | 0.22                             |
| 5146.00                   | 1.00                    | S 48.00 W                  | 5145.60                           | 6.77 N                                         | 1.49 E      | 0.34                             |
| 5239.00                   | 1.00                    | S 44.00 W                  | 5238.58                           | 5.64 N                                         | 0.32 E      | 0.08                             |
| 5333.00                   | 1.00                    | S 9.00 W                   | 5332.57                           | 4.20 N                                         | 0.40 W      | 0.64                             |
| 5426.00                   | 1.10                    | S 11.00 W                  | 5425.55                           | 2.52 N                                         | 0.70 W      | 0.11                             |
| 5519.00                   | 1.20                    | S 34.00 W                  | 5518.53                           | 0.80 N                                         | 1.41 W      | 0.50                             |
| 5612.00                   | 1.00                    | S 39.00 W                  | 5611.52                           | 0.63 S                                         | 2.47 W      | 0.24                             |
| 5705.00                   | 0.70                    | S 42.00 W                  | 5704.51                           | 1.68 S                                         | 3.36 W      | 0.33                             |
| 5798.00                   | 0.90                    | S 36.00 W                  | 5797.50                           | 2.69 S                                         | 4.18 W      | 0.23                             |
| 5891.00                   | 1.10                    | S 2.00 W                   | 5890.48                           | 4.20 S                                         | 4.70 W      | 0.66                             |
| 5984.00                   | 1.20                    | S 6.00 W                   | 5983.47                           | 6.06 S                                         | 4.83 W      | 0.14                             |
| 6077.00                   | 1.30                    | S 22.00 W                  | 6076.44                           | 8.02 S                                         | 5.32 W      | 0.39                             |
| 6170.00                   | 1.20                    | S 21.00 W                  | 6169.42                           | 9.91 S                                         | 6.06 W      | 0.11                             |
| 6263.00                   | 1.00                    | S 20.00 W                  | 6262.40                           | 11.58 S                                        | 6.69 W      | 0.22                             |
| 6356.00                   | 1.00                    | S 26.00 W                  | 6355.39                           | 13.08 S                                        | 7.32 W      | 0.11                             |
| 6449.00                   | 0.80                    | S 41.00 W                  | 6448.38                           | 14.29 S                                        | 8.13 W      | 0.33                             |
| 6542.00                   | 1.00                    | S 42.00 W                  | 6541.37                           | 15.39 S                                        | 9.09 W      | 0.22                             |
| 6636.00                   | 1.00                    | S 61.00 W                  | 6635.35                           | 16.40 S                                        | 10.37 W     | 0.35                             |
|                           |                         |                            |                                   | 17.10 S                                        | 11.70 W     | 0.00                             |