

COLLINS AND WARE, INC.  
QUAHADA RIDGE 31 FEDERAL NO.1, slot #1  
DELAWARE SAND, EDDY COUNTY, NEW MEXICO

SURVEY LISTING Page 4  
Your ref : LAT. NO.1  
Last revised : 21-Nov-94

| Measured<br>Depth | Inclin.<br>Degrees | Azimuth<br>Degrees | True Vert.<br>Depth | R E C T A N G U L A R<br>C O O R D I N A T E S | Dogleg<br>Deg/100ft | Vert<br>Sect |
|-------------------|--------------------|--------------------|---------------------|------------------------------------------------|---------------------|--------------|
| 6130.00           | 69.70              | 330.60             | 6115.10             | 10.99 N                                        | 23.50 W             | 138.03       |
| 6135.00           | 73.40              | 331.50             | 6116.68             | 15.14 N                                        | 25.80 W             | 75.94        |
| 6140.00           | 81.50              | 333.60             | 6117.77             | 19.47 N                                        | 28.05 W             | 167.10       |
| 6145.00           | 88.10              | 335.40             | 6118.22             | 23.96 N                                        | 30.19 W             | 136.78       |
| 147.00            | 89.58              | 336.68             | 6118.26             | 25.78 N                                        | 31.00 W             | 97.83        |
|                   |                    |                    |                     |                                                |                     | 25.78        |
|                   |                    |                    |                     |                                                |                     | END OF CURVE |
| 6150.00           | 91.80              | 338.60             | 6118.22             | 28.56 N                                        | 32.14 W             | 97.83        |
| 6160.00           | 93.10              | 340.20             | 6117.80             | 37.91 N                                        | 35.66 W             | 20.60        |
| 6170.00           | 95.60              | 342.80             | 6117.04             | 47.36 N                                        | 38.82 W             | 36.01        |
| 6180.00           | 97.60              | 344.20             | 6115.89             | 56.89 N                                        | 41.64 W             | 24.36        |
| 6190.00           | 98.70              | 348.20             | 6114.47             | 66.50 N                                        | 44.00 W             | 41.09        |
|                   |                    |                    |                     |                                                |                     | 66.50        |
| 6200.00           | 99.40              | 350.60             | 6112.90             | 76.21 N                                        | 45.82 W             | 24.71        |
| 6210.00           | 98.50              | 353.00             | 6111.34             | 85.98 N                                        | 47.23 W             | 25.36        |
| 6220.00           | 96.40              | 356.20             | 6110.04             | 95.85 N                                        | 48.16 W             | 38.05        |
| 6230.00           | 94.40              | 358.60             | 6109.10             | 105.80 N                                       | 48.61 W             | 31.16        |
| 6240.00           | 92.10              | 3.40               | 6108.54             | 115.78 N                                       | 48.44 W             | 53.15        |
|                   |                    |                    |                     |                                                |                     | 115.78       |
| 6250.00           | 89.30              | 5.80               | 6108.41             | 125.74 N                                       | 47.64 W             | 36.88        |
| 6260.00           | 89.90              | 12.20              | 6108.48             | 135.61 N                                       | 46.07 W             | 64.28        |
| 6270.00           | 91.20              | 15.40              | 6108.39             | 145.32 N                                       | 43.69 W             | 34.54        |
| 6280.00           | 90.30              | 13.00              | 6108.26             | 155.01 N                                       | 41.23 W             | 25.63        |
| 290.00            | 87.50              | 10.60              | 6108.45             | 164.80 N                                       | 39.19 W             | 36.87        |
|                   |                    |                    |                     |                                                |                     | 164.80       |
| 6300.00           | 88.90              | 17.00              | 6108.76             | 174.50 N                                       | 36.81 W             | 65.48        |
| 6310.00           | 91.40              | 24.20              | 6108.74             | 183.85 N                                       | 33.29 W             | 76.21        |
| 6320.00           | 90.30              | 25.80              | 6108.59             | 192.92 N                                       | 29.06 W             | 19.41        |
| 6330.00           | 89.60              | 26.60              | 6108.60             | 201.89 N                                       | 24.65 W             | 10.63        |
| 6340.00           | 90.90              | 29.80              | 6108.55             | 210.70 N                                       | 19.92 W             | 34.54        |
|                   |                    |                    |                     |                                                |                     | 210.70       |

All data is in feet unless otherwise stated  
Coordinates from structure and TVD from wellhead.  
Vertical section is from N 0.00 E 0.00 on azimuth 0.00 degrees.  
Declination is 0.00 degrees, Convergence is 0.00 degrees.  
Calculation uses the minimum curvature method.  
Presented by Baker Hughes INTEQ