



Job Number: WTX0200D149  
 Company: CONCHO RESOURCES  
 Lease/Well: SO. SHOEBAR 10 ST. #1  
 Location: LEA CO, NM  
 Rig Name: WEK #4  
 RKB:  
 G.L. or M.S.L.:

State/Country: LEA CO, NEW MEXICO  
 Declination: 9.32 EAST  
 Grid:  
 File name: C:\WINSERVE\SHOEBAR.SVY  
 Date/Time: 29-Mar-00 / 15:52  
 Curve Name:

DAILEY INTERNATIONAL INC.

WINSERVE SURVEY CALCULATIONS  
 Minimum Curvature Method  
 Vertical Section Plane .00  
 Vertical Section Referenced to Wellhead  
 Rectangular Coordinates Referenced to Wellhead

SUR: 660/S & 2310/E  
 Ø - 10 - 175 - 35e  
 BHL: 1400/S & 3341/E  
 K - 10 - 175 - 35e  
 30 - 025 - 34698

| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | True<br>Vertical<br>Depth | N-S<br>FT | E-W<br>FT | Vertical<br>Section<br>FT | CLOSURE<br>Distance<br>FT | Direction<br>Deg | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|---------------------------|------------------|-------------------------------|
| .00                     | .00                  | .00                       | .00                       | .00       | .00       | .00                       | .00                       | .00              | .00                           |
| 8800.00                 | .87                  | 222.71                    | 8799.66                   | -49.09    | -45.32    | -49.09                    | 66.81                     | 222.71           | .01                           |
| 8923.00                 | 1.10                 | 227.00                    | 8922.64                   | -50.58    | -46.81    | -50.58                    | 68.92                     | 222.78           | .20                           |
| 8985.00                 | 2.80                 | 280.90                    | 8984.61                   | -50.70    | -48.74    | -50.70                    | 70.33                     | 223.87           | 3.75                          |
| 9016.00                 | 4.10                 | 295.00                    | 9015.55                   | -50.09    | -50.48    | -50.09                    | 71.12                     | 225.22           | 4.98                          |
| 9047.00                 | 5.50                 | 300.00                    | 9046.44                   | -48.88    | -52.77    | -48.88                    | 71.93                     | 227.19           | 4.71                          |
| 9079.00                 | 6.40                 | 306.10                    | 9078.27                   | -47.06    | -55.54    | -47.06                    | 72.80                     | 229.73           | 3.43                          |
| 9110.00                 | 7.10                 | 309.10                    | 9109.06                   | -44.84    | -58.43    | -44.84                    | 73.65                     | 232.50           | 2.53                          |
| 9142.00                 | 7.90                 | 313.40                    | 9140.78                   | -42.08    | -61.56    | -42.08                    | 74.57                     | 235.65           | 3.05                          |
| 9172.00                 | 8.70                 | 317.20                    | 9170.47                   | -39.00    | -64.60    | -39.00                    | 75.46                     | 238.88           | 3.23                          |
| 9204.00                 | 9.80                 | 319.60                    | 9202.05                   | -35.15    | -68.01    | -35.15                    | 76.55                     | 242.67           | 3.64                          |
| 9266.00                 | 11.50                | 322.90                    | 9262.98                   | -26.20    | -75.16    | -26.20                    | 79.59                     | 250.78           | 2.91                          |
| 9329.00                 | 12.60                | 324.80                    | 9324.59                   | -15.57    | -82.91    | -15.57                    | 84.36                     | 259.36           | 1.86                          |
| 9393.00                 | 13.80                | 325.10                    | 9386.90                   | -3.61     | -91.30    | -3.61                     | 91.37                     | 267.74           | 1.88                          |
| 9488.00                 | 14.40                | 323.80                    | 9479.04                   | 15.22     | -104.76   | 15.22                     | 105.86                    | 278.26           | .71                           |
| 9551.00                 | 15.10                | 323.70                    | 9539.96                   | 28.15     | -114.24   | 28.15                     | 117.66                    | 283.84           | 1.11                          |
| 9614.00                 | 16.20                | 322.50                    | 9600.63                   | 41.74     | -124.45   | 41.74                     | 131.26                    | 288.54           | 1.82                          |
| 9675.00                 | 16.90                | 322.00                    | 9659.10                   | 55.48     | -135.09   | 55.48                     | 146.04                    | 292.33           | 1.17                          |
| 9738.00                 | 17.90                | 321.10                    | 9719.22                   | 70.23     | -146.81   | 70.23                     | 162.74                    | 295.56           | 1.64                          |
| 9802.00                 | 18.80                | 320.50                    | 9779.96                   | 85.84     | -159.54   | 85.84                     | 181.17                    | 298.28           | 1.44                          |
| 9865.00                 | 19.90                | 321.00                    | 9839.40                   | 102.00    | -172.75   | 102.00                    | 200.62                    | 300.56           | 1.77                          |
| 9927.00                 | 21.50                | 319.50                    | 9897.40                   | 118.85    | -186.77   | 118.85                    | 221.37                    | 302.47           | 2.72                          |
| 9991.00                 | 23.00                | 316.10                    | 9956.63                   | 136.77    | -203.06   | 136.77                    | 244.83                    | 303.96           | 3.09                          |
| 10053.00                | 24.10                | 312.90                    | 10013.47                  | 154.12    | -220.73   | 154.12                    | 269.21                    | 304.92           | 2.72                          |

| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | True<br>Vertical<br>Depth | N-S<br>FT | E-W<br>FT | Vertical<br>Section<br>FT | C L O S U R E  |                  | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|----------------|------------------|-------------------------------|
|                         |                      |                           |                           |           |           |                           | Distance<br>FT | Direction<br>Deg |                               |
| 10117.00                | 25.10                | 311.00                    | 10071.66                  | 171.92    | -240.55   | 171.92                    | 295.67         | 305.55           | 1.99                          |
| 10180.00                | 25.80                | 308.00                    | 10128.55                  | 189.13    | -261.44   | 189.13                    | 322.67         | 305.88           | 2.33                          |
| 10405.00                | 26.25                | 307.00                    | 10330.74                  | 249.22    | -339.76   | 249.22                    | 421.36         | 306.26           | .28                           |
| 10623.00                | 26.25                | 309.00                    | 10526.26                  | 308.57    | -415.73   | 308.57                    | 517.73         | 306.58           | .41                           |
| 10877.00                | 26.00                | 311.00                    | 10754.31                  | 380.45    | -501.40   | 380.45                    | 629.40         | 307.19           | .36                           |
| 11189.00                | 25.00                | 312.00                    | 11035.92                  | 469.43    | -602.01   | 469.43                    | 763.40         | 307.95           | .35                           |
| 11442.00                | 23.50                | 312.00                    | 11266.59                  | 538.96    | -679.23   | 538.96                    | 867.08         | 308.43           | .59                           |
| 11499.00                | 22.70                | 311.00                    | 11319.02                  | 553.78    | -695.97   | 553.78                    | 889.41         | 308.51           | 1.56                          |
| 11559.00                | 19.60                | 307.60                    | 11374.97                  | 567.52    | -712.69   | 567.52                    | 911.05         | 308.53           | 5.55                          |
| 11588.00                | 17.20                | 308.50                    | 11402.48                  | 573.16    | -719.90   | 573.16                    | 920.20         | 308.53           | 8.33                          |
| 11621.00                | 16.70                | 305.00                    | 11434.05                  | 578.91    | -727.60   | 578.91                    | 929.81         | 308.51           | 3.44                          |
| 11652.00                | 17.60                | 301.10                    | 11463.67                  | 583.89    | -735.26   | 583.89                    | 938.90         | 308.45           | 4.71                          |
| 11686.00                | 18.80                | 300.40                    | 11495.97                  | 589.32    | -744.39   | 589.32                    | 949.43         | 308.37           | 3.59                          |
| 11718.00                | 18.60                | 301.80                    | 11526.28                  | 594.62    | -753.18   | 594.62                    | 959.61         | 308.29           | 1.54                          |
| 11750.00                | 18.50                | 301.50                    | 11556.62                  | 599.96    | -761.84   | 599.96                    | 969.72         | 308.22           | .43                           |
| 11780.00                | 18.30                | 301.60                    | 11585.09                  | 604.91    | -769.91   | 604.91                    | 979.12         | 308.16           | .67                           |
| 11810.00                | 19.20                | 299.60                    | 11613.50                  | 609.82    | -778.21   | 609.82                    | 988.68         | 308.08           | 3.69                          |
| 11843.00                | 20.20                | 298.60                    | 11644.56                  | 615.23    | -787.93   | 615.23                    | 999.67         | 307.98           | 3.20                          |
| 11876.00                | 20.90                | 298.10                    | 11675.46                  | 620.73    | -798.13   | 620.73                    | 1011.09        | 307.87           | 2.19                          |
| 11906.00                | 19.50                | 296.70                    | 11703.62                  | 625.50    | -807.32   | 625.50                    | 1021.28        | 307.77           | 4.94                          |
| 11938.00                | 20.40                | 296.40                    | 11733.70                  | 630.38    | -817.09   | 630.38                    | 1031.99        | 307.65           | 2.83                          |
| 11971.00                | 21.80                | 297.60                    | 11764.48                  | 635.77    | -827.67   | 635.77                    | 1043.67        | 307.53           | 4.44                          |
| 12002.00                | 22.40                | 297.50                    | 11793.21                  | 641.17    | -838.01   | 641.17                    | 1055.16        | 307.42           | 1.94                          |
| 12032.00                | 23.20                | 298.00                    | 11820.86                  | 646.58    | -848.30   | 646.58                    | 1066.62        | 307.31           | 2.74                          |
| 12064.00                | 24.00                | 298.30                    | 11850.19                  | 652.62    | -859.60   | 652.62                    | 1079.27        | 307.21           | 2.53                          |
| 12096.00                | 24.90                | 298.70                    | 11879.32                  | 658.95    | -871.24   | 658.95                    | 1092.36        | 307.10           | 2.86                          |
| 12126.00                | 24.70                | 298.50                    | 11906.55                  | 664.97    | -882.28   | 664.97                    | 1104.81        | 307.00           | .72                           |
| 12156.00                | 25.40                | 300.20                    | 11933.73                  | 671.20    | -893.35   | 671.20                    | 1117.40        | 306.92           | 3.35                          |
| 12186.00                | 25.30                | 302.20                    | 11960.84                  | 677.85    | -904.34   | 677.85                    | 1130.18        | 306.85           | 2.87                          |
| 12219.00                | 24.40                | 302.90                    | 11990.78                  | 685.31    | -916.03   | 685.31                    | 1144.01        | 306.80           | 2.87                          |
| 12251.00                | 22.90                | 301.40                    | 12020.09                  | 692.14    | -926.89   | 692.14                    | 1156.80        | 306.75           | 5.05                          |
| 12283.00                | 23.20                | 298.80                    | 12049.54                  | 698.42    | -937.73   | 698.42                    | 1169.25        | 306.68           | 3.32                          |
| 12314.00                | 24.30                | 296.90                    | 12077.92                  | 704.25    | -948.77   | 704.25                    | 1181.58        | 306.59           | 4.32                          |
| 12396.00                | 22.50                | 294.00                    | 12153.17                  | 718.27    | -978.15   | 718.27                    | 1213.55        | 306.29           | 2.61                          |
| 12521.00                | 20.75                | 291.00                    | 12269.37                  | 735.93    | -1020.68  | 735.93                    | 1258.33        | 305.79           | 1.66                          |

| Projection to Bit |       |        |          |        |          |        |         |        |      |
|-------------------|-------|--------|----------|--------|----------|--------|---------|--------|------|
| 12551.00          | 20.33 | 290.28 | 12297.46 | 739.64 | -1030.53 | 739.64 | 1268.49 | 305.67 | 1.63 |

SURFACE LOCATION

660' FSL + 2310' FEL

BH LOCATION

1400' FSL + 1949 FWL

520' FSL

2310' FEL

2470' FWL

