

# DRILTECH MWD SURVEY REPORT



Company: EOG Resources, Inc  
 Well: Brown Bear 36 State #702H  
 Location: Lea Co., NM  
 Rig: H&P 260

Job Number: 2015-072-EODT-NM  
 Vertical Section Plane: 353.73  
 WELL API #: 30-025-42538  
 Tie Into: Surface

Calculation Method Minimum Curvature

| Survey # | Survey Tool Type | Survey Depth (ft) | Inclination (deg) | Azimuth (deg) | Course Length (ft) | True Vertical Depth (ft) | Vertical Section (ft) | Coordinates |          | Closure Distance (ft) | Closure Angle (deg) | Dogleg Severity (d/100') | Build Rate (d/100') |
|----------|------------------|-------------------|-------------------|---------------|--------------------|--------------------------|-----------------------|-------------|----------|-----------------------|---------------------|--------------------------|---------------------|
|          |                  |                   |                   |               |                    |                          |                       | N/S (ft)    | E/W (ft) |                       |                     |                          |                     |
| Tie In   | Surf             | 0.00              | 0.00              | 0.00          | 0.00               | 0.00                     | 0.00                  | 0.00        | 0.00     | 0.00                  | 0.00                | 0.00                     | 0.00                |
| 1        | MWD              | 175.00            | 1.60              | 269.30        | 175                | 174.98                   | 0.24                  | 0.03        | 2.44     | W                     | 2.44                | 269.30                   | 0.91                |
| 2        | MWD              | 355.00            | 1.90              | 266.30        | 180                | 354.89                   | 0.61                  | 0.25        | 7.93     | W                     | 7.94                | 268.17                   | 0.17                |
| 3        | MWD              | 509.00            | 1.60              | 268.60        | 154                | 508.82                   | 0.91                  | 0.47        | 12.63    | W                     | 12.64               | 267.87                   | -0.19               |
| 4        | MWD              | 601.00            | 1.60              | 269.70        | 92                 | 600.79                   | 1.15                  | 0.51        | 15.20    | W                     | 15.21               | 268.08                   | 0.00                |
| 5        | MWD              | 692.00            | 1.40              | 263.20        | 91                 | 691.75                   | 1.28                  | 0.65        | 17.57    | W                     | 17.59               | 267.89                   | -0.22               |
| 6        | MWD              | 785.00            | 1.40              | 270.40        | 93                 | 784.73                   | 1.40                  | 0.77        | 19.84    | W                     | 19.85               | 267.77                   | 0.00                |
| 7        | MWD              | 880.00            | 1.90              | 265.60        | 95                 | 879.69                   | 1.58                  | 0.89        | 22.57    | W                     | 22.59               | 267.75                   | 0.53                |
| 8        | MWD              | 975.00            | 2.30              | 265.80        | 95                 | 974.62                   | 1.70                  | 1.15        | 26.04    | W                     | 26.06               | 267.48                   | 0.42                |
| 9        | MWD              | 1070.00           | 2.80              | 262.80        | 95                 | 1069.53                  | 1.74                  | 1.58        | 30.24    | W                     | 30.28               | 267.02                   | 0.53                |
| 10       | MWD              | 1166.00           | 2.60              | 253.00        | 96                 | 1165.42                  | 1.29                  | 2.51        | 34.65    | W                     | 34.74               | 265.86                   | -0.21               |
| 11       | MWD              | 1260.00           | 2.50              | 243.50        | 94                 | 1259.33                  | 0.19                  | 4.05        | 38.53    | W                     | 38.74               | 264.01                   | -0.11               |
| 12       | MWD              | 1353.00           | 2.60              | 248.80        | 93                 | 1352.24                  | -1.06                 | 5.71        | 42.31    | W                     | 42.69               | 262.31                   | 0.11                |
| 13       | MWD              | 1446.00           | 2.60              | 241.90        | 93                 | 1445.14                  | -2.39                 | 7.47        | 46.13    | W                     | 46.74               | 260.80                   | 0.00                |
| 14       | MWD              | 1539.00           | 2.30              | 237.90        | 93                 | 1538.06                  | -3.98                 | 9.45        | 49.58    | W                     | 50.47               | 259.20                   | -0.32               |
| 15       | MWD              | 1632.00           | 3.20              | 259.80        | 93                 | 1630.95                  | -4.98                 | 10.91       | 53.71    | W                     | 54.81               | 258.52                   | 0.97                |
| 16       | MWD              | 1726.00           | 3.20              | 257.60        | 94                 | 1724.80                  | -5.44                 | 11.93       | 58.86    | W                     | 60.05               | 258.54                   | 0.00                |
| 17       | MWD              | 1819.00           | 3.20              | 259.80        | 93                 | 1817.66                  | -5.89                 | 12.95       | 63.95    | W                     | 65.24               | 258.55                   | 0.00                |
| 18       | MWD              | 1913.00           | 3.00              | 261.10        | 94                 | 1911.52                  | -6.18                 | 13.80       | 68.96    | W                     | 70.32               | 258.69                   | -0.21               |
| 19       | MWD              | 2006.00           | 2.80              | 262.80        | 93                 | 2004.40                  | -6.33                 | 14.46       | 73.62    | W                     | 75.02               | 258.89                   | -0.22               |
| 20       | MWD              | 2193.00           | 4.00              | 268.30        | 187                | 2191.07                  | -5.89                 | 15.22       | 84.67    | W                     | 86.03               | 259.81                   | 0.64                |
| 21       | MWD              | 2286.00           | 4.00              | 271.80        | 93                 | 2283.84                  | -5.17                 | 15.22       | 91.15    | W                     | 92.41               | 260.52                   | 0.00                |
| 22       | MWD              | 2379.00           | 3.90              | 274.60        | 93                 | 2376.62                  | -4.12                 | 14.86       | 97.55    | W                     | 98.67               | 261.34                   | -0.11               |
| 23       | MWD              | 2473.00           | 3.90              | 269.90        | 94                 | 2470.41                  | -3.17                 | 14.61       | 103.93   | W                     | 104.95              | 262.00                   | 0.00                |
| 24       | MWD              | 2566.00           | 4.20              | 260.70        | 93                 | 2563.17                  | -3.01                 | 15.17       | 110.45   | W                     | 111.49              | 262.18                   | 0.32                |
| 25       | MWD              | 2659.00           | 4.80              | 232.60        | 93                 | 2655.90                  | -5.21                 | 18.08       | 116.91   | W                     | 118.30              | 261.21                   | 0.65                |
| 26       | MWD              | 2753.00           | 4.90              | 231.00        | 94                 | 2749.56                  | -9.41                 | 23.00       | 123.15   | W                     | 125.28              | 259.42                   | 0.11                |
| 27       | MWD              | 2847.00           | 4.20              | 228.20        | 94                 | 2843.27                  | -13.58                | 27.82       | 128.84   | W                     | 131.81              | 257.82                   | -0.74               |
| 28       | MWD              | 2941.00           | 3.50              | 231.20        | 94                 | 2937.05                  | -17.12                | 31.91       | 133.64   | W                     | 137.40              | 256.57                   | -0.74               |
| 29       | MWD              | 3034.00           | 3.00              | 227.50        | 93                 | 3029.90                  | -20.09                | 35.33       | 137.65   | W                     | 142.11              | 255.60                   | -0.54               |
| 30       | MWD              | 3127.00           | 2.30              | 221.90        | 93                 | 3122.80                  | -22.77                | 38.37       | 140.69   | W                     | 145.82              | 254.75                   | -0.75               |
| 31       | MWD              | 3220.00           | 2.60              | 233.70        | 93                 | 3215.72                  | -25.07                | 41.00       | 143.63   | W                     | 149.37              | 254.07                   | 0.32                |
| 32       | MWD              | 3315.00           | 2.60              | 237.00        | 95                 | 3310.62                  | -27.12                | 43.45       | 147.18   | W                     | 153.46              | 253.55                   | 0.00                |
| 33       | MWD              | 3408.00           | 3.30              | 246.10        | 93                 | 3403.50                  | -28.88                | 45.69       | 151.39   | W                     | 158.14              | 253.21                   | 0.75                |
| 34       | MWD              | 3502.00           | 3.20              | 244.20        | 94                 | 3497.35                  | -30.58                | 47.92       | 156.23   | W                     | 163.41              | 252.95                   | -0.11               |

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Location: Lea Co., NM  
WELL API #: 30-025-42538  
Rig: H&P 260  
Tie Into: Surface

Calculation Method Minimum Curvature

| Survey # | Survey Tool Type | Survey Depth (ft) | Inclination (deg) | Azimuth (deg) | Course Length (ft) | True Vertical Depth (ft) | Vertical Section (ft) | Coordinates |          | Closure       |             | Dogleg Severity (d/100') | Build Rate (d/100') |      |
|----------|------------------|-------------------|-------------------|---------------|--------------------|--------------------------|-----------------------|-------------|----------|---------------|-------------|--------------------------|---------------------|------|
|          |                  |                   |                   |               |                    |                          |                       | N/S (ft)    | E/W (ft) | Distance (ft) | Angle (deg) |                          |                     |      |
| 35       | MWD              | 3595.00           | 5.50              | 241.70        | 93                 | 3590.07                  | -33.12                | 51.17       | S        | 162.49        | W           | 170.36                   | 252.52              | 2.47 |
| 36       | MWD              | 3689.00           | 6.00              | 241.60        | 94                 | 3683.60                  | -36.66                | 55.64       | S        | 170.78        | W           | 179.61                   | 251.95              | 0.53 |
| 37       | MWD              | 3784.00           | 4.90              | 241.40        | 95                 | 3778.17                  | -40.07                | 59.94       | S        | 178.71        | W           | 188.49                   | 251.46              | 1.16 |
| 38       | MWD              | 3878.00           | 4.20              | 241.60        | 94                 | 3871.87                  | -42.89                | 63.50       | S        | 185.26        | W           | 195.84                   | 251.08              | 0.74 |
| 39       | MWD              | 3972.00           | 2.80              | 245.40        | 94                 | 3965.69                  | -44.91                | 66.10       | S        | 190.38        | W           | 201.52                   | 250.85              | 1.51 |
| 40       | MWD              | 4067.00           | 3.00              | 254.70        | 95                 | 4060.57                  | -46.03                | 67.72       | S        | 194.88        | W           | 206.31                   | 250.84              | 0.54 |
| 41       | MWD              | 4161.00           | 5.50              | 269.00        | 94                 | 4154.31                  | -46.00                | 68.45       | S        | 201.76        | W           | 213.06                   | 251.26              | 2.66 |
| 42       | MWD              | 4256.00           | 5.50              | 268.30        | 95                 | 4248.87                  | -45.22                | 68.66       | S        | 210.86        | W           | 221.76                   | 251.96              | 0.07 |
| 43       | MWD              | 4350.00           | 4.90              | 268.30        | 94                 | 4342.48                  | -44.54                | 68.91       | S        | 219.38        | W           | 229.95                   | 252.56              | 0.64 |
| 44       | MWD              | 4445.00           | 3.50              | 269.00        | 95                 | 4437.23                  | -43.95                | 69.08       | S        | 226.34        | W           | 236.64                   | 253.03              | 1.47 |
| 45       | MWD              | 4539.00           | 3.50              | 248.10        | 94                 | 4531.06                  | -44.46                | 70.20       | S        | 231.87        | W           | 242.26                   | 253.15              | 1.35 |
| 46       | MWD              | 4633.00           | 3.70              | 241.70        | 94                 | 4624.87                  | -46.37                | 72.71       | S        | 237.20        | W           | 248.09                   | 252.96              | 0.48 |
| 47       | MWD              | 4728.00           | 3.30              | 225.40        | 95                 | 4719.70                  | -49.22                | 76.09       | S        | 241.85        | W           | 253.53                   | 252.54              | 1.12 |
| 48       | MWD              | 4821.00           | 4.00              | 204.30        | 93                 | 4812.51                  | -53.67                | 80.92       | S        | 245.09        | W           | 258.10                   | 251.73              | 1.62 |
| 49       | MWD              | 4915.00           | 4.90              | 202.70        | 94                 | 4906.23                  | -60.01                | 87.61       | S        | 247.98        | W           | 263.01                   | 250.54              | 0.97 |
| 50       | MWD              | 5009.00           | 4.90              | 224.20        | 94                 | 4999.89                  | -66.07                | 94.20       | S        | 252.33        | W           | 269.34                   | 249.53              | 1.94 |
| 51       | MWD              | 5104.00           | 4.00              | 247.50        | 95                 | 5094.61                  | -69.58                | 98.37       | S        | 258.22        | W           | 276.33                   | 249.15              | 2.11 |
| 52       | MWD              | 5198.00           | 3.50              | 259.10        | 94                 | 5188.41                  | -70.73                | 100.17      | S        | 264.07        | W           | 282.43                   | 249.23              | 0.96 |
| 53       | MWD              | 5292.00           | 4.00              | 256.00        | 94                 | 5282.21                  | -71.40                | 101.51      | S        | 270.07        | W           | 288.51                   | 249.40              | 0.57 |
| 54       | MWD              | 5387.00           | 5.10              | 258.30        | 95                 | 5376.91                  | -72.25                | 103.16      | S        | 277.42        | W           | 295.98                   | 249.60              | 1.16 |
| 55       | MWD              | 5481.00           | 6.70              | 258.60        | 94                 | 5470.41                  | -73.13                | 105.09      | S        | 286.89        | W           | 305.53                   | 249.88              | 1.70 |
| 56       | MWD              | 5576.00           | 7.40              | 260.90        | 95                 | 5564.69                  | -73.93                | 107.16      | S        | 298.36        | W           | 317.02                   | 250.24              | 0.74 |
| 57       | MWD              | 5670.00           | 6.90              | 261.60        | 94                 | 5657.96                  | -74.44                | 108.94      | S        | 309.92        | W           | 328.51                   | 250.63              | 0.53 |
| 58       | MWD              | 5763.00           | 6.30              | 261.30        | 93                 | 5750.34                  | -74.86                | 110.53      | S        | 320.49        | W           | 339.02                   | 250.97              | 0.65 |
| 59       | MWD              | 5857.00           | 6.20              | 257.90        | 94                 | 5843.78                  | -75.60                | 112.37      | S        | 330.55        | W           | 349.13                   | 251.22              | 0.41 |
| 60       | MWD              | 5952.00           | 6.20              | 257.60        | 95                 | 5938.23                  | -76.67                | 114.55      | S        | 340.58        | W           | 359.33                   | 251.41              | 0.00 |
| 61       | MWD              | 6046.00           | 6.30              | 249.80        | 94                 | 6031.67                  | -78.45                | 117.42      | S        | 350.38        | W           | 369.53                   | 251.47              | 0.11 |
| 62       | MWD              | 6140.00           | 7.20              | 250.20        | 94                 | 6125.02                  | -81.07                | 121.20      | S        | 360.76        | W           | 380.58                   | 251.43              | 0.96 |
| 63       | MWD              | 6235.00           | 7.40              | 250.50        | 95                 | 6219.25                  | -83.86                | 125.26      | S        | 372.13        | W           | 392.64                   | 251.40              | 0.21 |
| 64       | MWD              | 6329.00           | 6.90              | 248.90        | 94                 | 6312.52                  | -86.69                | 129.31      | S        | 383.10        | W           | 404.34                   | 251.35              | 0.53 |
| 65       | MWD              | 6422.00           | 6.50              | 247.50        | 93                 | 6404.88                  | -89.60                | 133.33      | S        | 393.18        | W           | 415.17                   | 251.27              | 0.43 |
| 66       | MWD              | 6515.00           | 6.20              | 246.00        | 93                 | 6497.31                  | -92.60                | 137.39      | S        | 402.63        | W           | 425.43                   | 251.16              | 0.32 |
| 67       | MWD              | 6609.00           | 5.80              | 245.40        | 94                 | 6590.79                  | -95.64                | 141.43      | S        | 411.59        | W           | 435.21                   | 251.04              | 0.43 |
| 68       | MWD              | 6703.00           | 5.50              | 245.30        | 94                 | 6684.34                  | -98.55                | 145.29      | S        | 420.00        | W           | 444.42                   | 250.92              | 0.32 |
| 69       | MWD              | 6796.00           | 5.30              | 244.70        | 93                 | 6776.92                  | -101.36               | 148.99      | S        | 427.93        | W           | 453.12                   | 250.80              | 0.22 |
| 70       | MWD              | 6890.00           | 4.90              | 243.70        | 94                 | 6870.55                  | -104.15               | 152.62      | S        | 435.45        | W           | 461.43                   | 250.68              | 0.43 |
| 71       | MWD              | 6984.00           | 4.20              | 244.60        | 94                 | 6964.26                  | -106.66               | 155.88      | S        | 442.16        | W           | 468.83                   | 250.58              | 0.74 |
| 72       | MWD              | 7078.00           | 3.90              | 242.80        | 94                 | 7058.02                  | -108.93               | 158.82      | S        | 448.11        | W           | 475.43                   | 250.49              | 0.32 |



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Calculation Method Minimum Curvature

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|----------|------------------|-------------------|-------------------|---------------|--------------------|--------------------------|-----------------------|-------------|----------|-----------------------|---------------------|--------------------------|---------------------|
| 73       | MWD              | 7173.00           | 3.30              | 243.80        | 95                 | 7152.83                  | -111.01               | N/S (ft)    | E/W (ft) | 481.34                | 250.40              | 0.64                     | -0.63               |
| 74       | MWD              | 7267.00           | 3.20              | 242.60        | 94                 | 7246.68                  | -112.88               | 161.50      | S 453.44 | W 486.63              | 250.32              | 0.13                     | -0.11               |
| 75       | MWD              | 7362.00           | 3.20              | 238.40        | 95                 | 7341.53                  | -114.97               | 163.90      | S 458.20 | W 491.85              | 250.21              | 0.25                     | 0.00                |
| 76       | MWD              | 7456.00           | 3.00              | 241.20        | 94                 | 7435.40                  | -117.04               | 166.51      | S 462.81 | W 496.85              | 250.11              | 0.27                     | -0.21               |
| 77       | MWD              | 7550.00           | 2.80              | 238.90        | 94                 | 7529.28                  | -118.94               | 169.07      | S 467.20 | W 501.54              | 250.01              | 0.25                     | -0.21               |
| 78       | MWD              | 7645.00           | 2.50              | 229.30        | 95                 | 7624.17                  | -121.09               | 171.44      | S 471.32 | W 505.75              | 249.88              | 0.56                     | -0.32               |
| 79       | MWD              | 7739.00           | 2.50              | 229.80        | 94                 | 7718.09                  | -123.39               | 173.99      | S 474.88 | W 509.60              | 249.72              | 0.02                     | 0.00                |
| 80       | MWD              | 7834.00           | 1.60              | 230.30        | 95                 | 7813.02                  | -125.28               | 176.65      | S 478.00 | W 512.80              | 249.59              | 0.95                     | -0.95               |
| 81       | MWD              | 7927.00           | 1.60              | 234.00        | 93                 | 7905.99                  | -126.64               | 178.84      | S 480.60 | W 515.28              | 249.50              | 0.11                     | 0.00                |
| 82       | MWD              | 8015.00           | 1.40              | 237.00        | 88                 | 7993.96                  | -127.73               | 180.43      | S 482.65 | W 517.51              | 249.44              | 0.24                     | -0.23               |
| 83       | MWD              | 8109.00           | 1.40              | 227.00        | 94                 | 8087.93                  | -128.93               | 181.74      | S 484.55 | W 519.69              | 249.36              | 0.26                     | 0.00                |
| 84       | MWD              | 8204.00           | 1.20              | 233.70        | 95                 | 8182.90                  | -130.13               | 183.15      | S 486.35 | W 521.72              | 249.29              | 0.26                     | -0.21               |
| 85       | MWD              | 8298.00           | 1.10              | 235.90        | 94                 | 8276.89                  | -131.04               | 184.53      | S 488.00 | W 523.55              | 249.24              | 0.12                     | -0.11               |
| 86       | MWD              | 8392.00           | 0.90              | 237.50        | 94                 | 8370.87                  | -131.79               | 185.62      | S 489.54 | W 525.15              | 249.20              | 0.21                     | -0.21               |
| 87       | MWD              | 8475.00           | 0.70              | 234.00        | 83                 | 8453.86                  | -132.33               | 186.52      | S 490.91 | W 526.28              | 249.17              | 0.25                     | -0.24               |
| 88       | MWD              | 8570.00           | 0.90              | 228.70        | 95                 | 8548.85                  | -133.04               | 187.17      | S 491.87 | W 527.54              | 249.12              | 0.22                     | 0.21                |
| 89       | MWD              | 8664.00           | 0.90              | 217.10        | 94                 | 8642.84                  | -134.00               | 188.00      | S 492.90 | W 528.86              | 249.05              | 0.19                     | 0.00                |
| 90       | MWD              | 8759.00           | 1.10              | 224.20        | 95                 | 8737.83                  | -135.13               | 189.08      | S 493.90 | W 530.32              | 248.97              | 0.25                     | 0.21                |
| 91       | MWD              | 8853.00           | 1.10              | 221.20        | 94                 | 8831.81                  | -136.31               | 190.32      | S 494.99 | W 531.94              | 248.88              | 0.06                     | 0.00                |
| 92       | MWD              | 8947.00           | 1.10              | 224.50        | 94                 | 8925.79                  | -137.49               | 191.65      | S 496.21 | W 533.56              | 248.80              | 0.07                     | 0.00                |
| 93       | MWD              | 9041.00           | 1.20              | 224.20        | 94                 | 9019.77                  | -138.69               | 192.97      | S 497.44 | W 535.27              | 248.71              | 0.11                     | 0.11                |
| 94       | MWD              | 9135.00           | 1.40              | 235.80        | 94                 | 9113.75                  | -139.85               | 194.32      | S 498.76 | W 537.29              | 248.64              | 0.35                     | 0.21                |
| 95       | MWD              | 9229.00           | 1.40              | 230.80        | 94                 | 9207.72                  | -141.02               | 195.67      | S 500.39 | W 539.50              | 248.58              | 0.13                     | 0.00                |
| 96       | MWD              | 9323.00           | 1.60              | 193.40        | 94                 | 9301.69                  | -142.88               | 197.04      | S 502.23 | W 541.35              | 248.43              | 1.04                     | 0.21                |
| 97       | MWD              | 9417.00           | 1.60              | 213.60        | 94                 | 9395.66                  | -145.12               | 199.05      | S 503.43 | W 543.18              | 248.23              | 0.60                     | 0.00                |
| 98       | MWD              | 9511.00           | 1.40              | 211.50        | 94                 | 9489.62                  | -147.03               | 201.42      | S 504.46 | W 545.18              | 248.08              | 0.22                     | -0.21               |
| 99       | MWD              | 9606.00           | 1.40              | 215.50        | 95                 | 9584.59                  | -148.82               | 203.49      | S 505.78 | W 547.09              | 247.95              | 0.10                     | 0.00                |
| 100      | MWD              | 9700.00           | 1.40              | 220.30        | 94                 | 9678.57                  | -150.46               | 205.42      | S 507.06 | W 549.08              | 247.83              | 0.12                     | 0.00                |
| 101      | MWD              | 9791.00           | 1.20              | 223.60        | 91                 | 9769.54                  | -151.84               | 207.23      | S 508.47 | W 550.94              | 247.73              | 0.23                     | -0.22               |
| 102      | MWD              | 9888.00           | 1.20              | 224.20        | 97                 | 9866.52                  | -153.14               | 208.77      | S 509.85 | W 552.80              | 247.65              | 0.01                     | 0.00                |
| 103      | MWD              | 9982.00           | 1.10              | 229.60        | 94                 | 9960.50                  | -154.27               | 210.24      | S 511.26 | W 554.56              | 247.58              | 0.16                     | -0.11               |
| 104      | MWD              | 10076.00          | 0.90              | 235.40        | 94                 | 10054.49                 | -155.13               | 211.53      | S 512.63 | W 556.14              | 247.53              | 0.24                     | -0.21               |
| 105      | MWD              | 10170.00          | 1.10              | 239.30        | 94                 | 10148.47                 | -155.85               | 212.53      | S 513.92 | W 557.75              | 247.50              | 0.22                     | 0.21                |
| 106      | MWD              | 10263.00          | 0.90              | 232.80        | 93                 | 10241.46                 | -156.60               | 213.41      | S 515.31 | W 559.34              | 247.47              | 0.25                     | -0.22               |
| 107      | MWD              | 10356.00          | 0.90              | 219.80        | 93                 | 10334.45                 | -157.48               | 214.31      | S 516.66 | W 560.69              | 247.42              | 0.22                     | 0.00                |
| 108      | MWD              | 10451.00          | 0.70              | 206.90        | 95                 | 10429.44                 | -158.48               | 215.31      | S 517.71 | W 561.80              | 247.34              | 0.28                     | -0.21               |
| 109      | MWD              | 10544.00          | 0.90              | 206.60        | 93                 | 10522.43                 | -159.57               | 216.40      | S 518.45 | W 562.78              | 247.26              | 0.22                     | 0.22                |
| 110      | MWD              | 10638.00          | 0.70              | 207.60        | 94                 | 10616.42                 | -160.67               | 217.56      | S 519.03 | W 563.79              | 247.17              | 0.21                     | -0.21               |



# DRILTECH MWD SURVEY REPORT

Company: EOG Resources, Inc  
Well: Brown Bear 36 State #702H  
Location: Lea Co., NM  
Rig: H&P 260

Job Number: 2015-072-EODT-NM  
Vertical Section Plane: 353.73  
WELL API #: 30-025-42538  
Tie Into: Surface

Calculation Method Minimum Curvature

| Survey # | Survey Tool Type | Survey Depth (ft) | Inclination (deg) | Azimuth (deg) | Course Length (ft) | True Vertical Depth (ft) | Vertical Section (ft) | Coordinates |            | Closure Distance (ft) | Closure Angle (deg) | Dogleg Severity (d/100') | Build Rate (d/100') |
|----------|------------------|-------------------|-------------------|---------------|--------------------|--------------------------|-----------------------|-------------|------------|-----------------------|---------------------|--------------------------|---------------------|
| 111      | MWD              | 10750.00          | 0.70              | 214.30        | 112                | 10728.41                 | -161.76               | 219.90      | S 520.33 W | 564.89                | 247.09              | 0.07                     | 0.00                |
| 112      | MWD              | 10844.00          | 0.70              | 195.70        | 94                 | 10822.40                 | -162.73               | 220.93      | S 520.81 W | 565.73                | 247.01              | 0.24                     | 0.00                |
| 113      | MWD              | 10938.00          | 1.20              | 199.90        | 94                 | 10916.39                 | -164.14               | 222.41      | S 521.30 W | 566.76                | 246.90              | 0.54                     | 0.53                |
| 114      | MWD              | 11032.00          | 1.20              | 181.30        | 94                 | 11010.37                 | -166.00               | 224.32      | S 521.66 W | 567.84                | 246.73              | 0.41                     | 0.00                |
| 115      | MWD              | 11127.00          | 0.70              | 205.50        | 95                 | 11105.36                 | -167.48               | 225.83      | S 521.93 W | 568.69                | 246.60              | 0.66                     | -0.53               |
| 116      | MWD              | 11221.00          | 0.20              | 80.20         | 94                 | 11199.36                 | -167.96               | 226.32      | S 522.02 W | 568.97                | 246.56              | 0.88                     | -0.53               |
| 117      | MWD              | 11315.00          | 1.40              | 245.10        | 94                 | 11293.35                 | -168.32               | 226.78      | S 522.89 W | 569.95                | 246.55              | 1.70                     | 1.28                |
| 118      | MWD              | 11410.00          | 2.30              | 281.80        | 95                 | 11388.30                 | -168.10               | 226.88      | S 525.81 W | 572.67                | 246.66              | 1.52                     | 0.95                |
| 119      | MWD              | 11504.00          | 2.80              | 274.40        | 94                 | 11482.21                 | -167.09               | 226.32      | S 529.95 W | 576.25                | 246.87              | 0.64                     | 0.53                |
| 120      | MWD              | 11598.00          | 3.50              | 282.70        | 94                 | 11576.07                 | -165.73               | 225.51      | S 535.04 W | 580.62                | 247.15              | 0.89                     | 0.74                |
| 121      | MWD              | 11693.00          | 3.70              | 284.30        | 95                 | 11670.88                 | -163.71               | 224.12      | S 540.84 W | 585.43                | 247.49              | 0.24                     | 0.21                |
| 122      | MWD              | 11787.00          | 3.20              | 284.30        | 94                 | 11764.71                 | -161.72               | 222.72      | S 546.32 W | 589.97                | 247.82              | 0.53                     | -0.53               |
| 123      | MWD              | 11881.00          | 3.20              | 291.30        | 94                 | 11858.56                 | -159.58               | 221.12      | S 551.30 W | 593.99                | 248.15              | 0.42                     | 0.00                |
| 124      | MWD              | 11975.00          | 3.20              | 306.80        | 94                 | 11952.42                 | -156.58               | 218.59      | S 555.85 W | 597.29                | 248.53              | 0.92                     | 0.00                |
| 125      | MWD              | 12022.00          | 7.70              | 12.30         | 47                 | 11999.23                 | -152.69               | 214.73      | S 556.23 W | 596.24                | 248.89              | 14.90                    | 9.57                |
| 126      | MWD              | 12069.00          | 12.30             | 23.40         | 47                 | 12045.50                 | -145.35               | 207.05      | S 553.57 W | 591.02                | 249.49              | 10.57                    | 9.79                |
| 127      | MWD              | 12116.00          | 19.70             | 19.00         | 47                 | 12090.65                 | -133.82               | 194.95      | S 549.00 W | 582.58                | 250.45              | 15.94                    | 15.74               |
| 128      | MWD              | 12163.00          | 24.80             | 13.90         | 47                 | 12134.14                 | -117.39               | 177.88      | S 544.05 W | 572.39                | 251.89              | 11.59                    | 10.85               |
| 129      | MWD              | 12211.00          | 31.50             | 9.20          | 48                 | 12176.45                 | -95.83                | 155.70      | S 539.62 W | 561.63                | 253.91              | 14.69                    | 13.96               |
| 130      | MWD              | 12258.00          | 35.00             | 10.40         | 47                 | 12215.75                 | -71.08                | 130.31      | S 535.22 W | 550.85                | 256.32              | 7.58                     | 7.45                |
| 131      | MWD              | 12305.00          | 38.90             | 9.40          | 47                 | 12253.30                 | -43.95                | 102.48      | S 530.37 W | 540.18                | 259.06              | 8.40                     | 8.30                |
| 132      | MWD              | 12351.00          | 43.60             | 7.10          | 46                 | 12287.88                 | -14.59                | 72.48       | S 526.05 W | 531.02                | 262.16              | 10.73                    | 10.22               |
| 133      | MWD              | 12399.00          | 46.10             | 5.00          | 48                 | 12321.91                 | 18.48                 | 38.82       | S 522.50 W | 523.94                | 265.75              | 6.05                     | 5.21                |
| 134      | MWD              | 12446.00          | 48.20             | 3.00          | 47                 | 12353.87                 | 52.38                 | 4.45        | S 520.10 W | 520.12                | 269.51              | 5.45                     | 4.47                |
| 135      | MWD              | 12493.00          | 51.20             | 2.10          | 47                 | 12384.27                 | 87.80                 | 31.36       | N 518.52 W | 519.46                | 273.46              | 6.55                     | 6.38                |
| 136      | MWD              | 12540.00          | 55.80             | 2.00          | 47                 | 12412.21                 | 125.17                | 69.10       | N 517.17 W | 521.76                | 277.61              | 9.79                     | 9.79                |
| 137      | MWD              | 12587.00          | 58.20             | 2.10          | 47                 | 12437.81                 | 164.17                | 108.49      | N 515.76 W | 527.04                | 281.88              | 5.11                     | 5.11                |
| 138      | MWD              | 12634.00          | 59.80             | 4.40          | 47                 | 12462.02                 | 203.90                | 148.71      | N 513.47 W | 534.57                | 286.15              | 5.40                     | 3.40                |
| 139      | MWD              | 12681.00          | 63.70             | 1.30          | 47                 | 12484.27                 | 244.76                | 190.05      | N 511.43 W | 545.60                | 290.39              | 10.13                    | 8.30                |
| 140      | MWD              | 12728.00          | 68.60             | 359.00        | 47                 | 12503.27                 | 287.47                | 233.02      | N 511.33 W | 561.92                | 294.50              | 11.34                    | 10.43               |
| 141      | MWD              | 12775.00          | 72.10             | 0.60          | 47                 | 12519.07                 | 331.47                | 277.27      | N 511.48 W | 581.80                | 298.46              | 8.11                     | 7.45                |
| 142      | MWD              | 12821.00          | 76.00             | 0.20          | 46                 | 12531.71                 | 375.39                | 321.49      | N 511.17 W | 603.86                | 302.17              | 8.52                     | 8.48                |
| 143      | MWD              | 12851.00          | 80.80             | 359.70        | 30                 | 12537.74                 | 404.60                | 350.87      | N 511.20 W | 620.03                | 304.46              | 16.08                    | 16.00               |
| 144      | MWD              | 12925.00          | 90.30             | 359.50        | 74                 | 12543.47                 | 477.90                | 424.56      | N 511.71 W | 664.91                | 309.68              | 12.84                    | 12.84               |
| 145      | MWD              | 12957.00          | 90.60             | 359.50        | 32                 | 12543.22                 | 509.74                | 456.56      | N 511.99 W | 685.99                | 311.72              | 0.94                     | 0.94                |
| 146      | MWD              | 13051.00          | 91.70             | 1.10          | 94                 | 12541.34                 | 603.10                | 550.53      | N 511.50 W | 751.48                | 317.10              | 2.07                     | 1.17                |
| 147      | MWD              | 13145.00          | 91.70             | 1.60          | 94                 | 12538.55                 | 696.23                | 644.46      | N 509.29 W | 821.41                | 321.68              | 0.53                     | 0.00                |
| 148      | MWD              | 13239.00          | 88.70             | 0.00          | 94                 | 12538.22                 | 789.50                | 738.44      | N 507.98 W | 896.29                | 325.48              | 3.62                     | -3.19               |

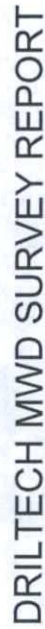


# DRILTECH MWD SURVEY REPORT

Company: EOG Resources, Inc  
Job Number: 2015-072-EODT-NM  
Well: Brown Bear 36 State #702H  
Vertical Section Plane: 353.73  
Location: Lea Co., NM  
WELL API #: 30-025-42538  
Rig: H&P 260  
Tie Into: Surface

Calculation Method Minimum Curvature

| Survey # | Survey Tool Type | Survey Depth (ft) | Inclination (deg) | Azimuth (deg) | Course Length (ft) | True Vertical Depth (ft) | Vertical Section (ft) | Coordinates |            | Closure Distance (ft) | Closure Angle (deg) | Dogleg Severity (d/100') | Build Rate (d/100') |
|----------|------------------|-------------------|-------------------|---------------|--------------------|--------------------------|-----------------------|-------------|------------|-----------------------|---------------------|--------------------------|---------------------|
| 149      | MWD              | 13334.00          | 89.00             | 0.70          | 95                 | 12540.13                 | 883.85                | 833.42      | N 507.40 W | 975.72                | 328.67              | 0.80                     | 0.32                |
| 150      | MWD              | 13428.00          | 90.80             | 0.20          | 94                 | 12540.29                 | 977.20                | 927.41      | N 506.66 W | 1056.78               | 331.35              | 1.99                     | 1.91                |
| 151      | MWD              | 13522.00          | 92.00             | 0.60          | 94                 | 12537.99                 | 1070.53               | 1021.38     | N 506.00 W | 1139.85               | 333.65              | 1.35                     | 1.28                |
| 152      | MWD              | 13616.00          | 89.70             | 356.00        | 94                 | 12536.60                 | 1164.19               | 1115.30     | N 508.79 W | 1225.87               | 335.48              | 5.47                     | -2.45               |
| 153      | MWD              | 13710.00          | 89.00             | 356.50        | 94                 | 12537.66                 | 1258.09               | 1209.09     | N 514.94 W | 1314.17               | 336.93              | 0.92                     | -0.74               |
| 154      | MWD              | 13804.00          | 91.70             | 358.30        | 94                 | 12537.09                 | 1351.89               | 1302.98     | N 519.20 W | 1402.61               | 338.27              | 3.45                     | 2.87                |
| 155      | MWD              | 13898.00          | 91.00             | 357.90        | 94                 | 12534.87                 | 1445.59               | 1396.90     | N 522.32 W | 1491.35               | 339.50              | 0.86                     | -0.74               |
| 156      | MWD              | 13992.00          | 88.90             | 358.50        | 94                 | 12534.96                 | 1539.29               | 1490.85     | N 525.27 W | 1580.67               | 340.59              | 2.32                     | -2.23               |
| 157      | MWD              | 14086.00          | 91.50             | 2.30          | 94                 | 12534.63                 | 1632.63               | 1584.82     | N 524.61 W | 1669.39               | 341.68              | 4.90                     | 2.77                |
| 158      | MWD              | 14181.00          | 89.70             | 358.80        | 95                 | 12533.63                 | 1726.94               | 1679.79     | N 523.70 W | 1759.53               | 342.68              | 4.14                     | -1.89               |
| 159      | MWD              | 14274.00          | 88.20             | 359.00        | 93                 | 12535.34                 | 1819.54               | 1772.75     | N 525.49 W | 1849.00               | 343.49              | 1.63                     | -1.61               |
| 160      | MWD              | 14368.00          | 91.10             | 359.30        | 94                 | 12535.91                 | 1913.11               | 1866.73     | N 526.88 W | 1939.66               | 344.24              | 3.10                     | 3.09                |
| 161      | MWD              | 14463.00          | 87.80             | 0.40          | 95                 | 12536.82                 | 2007.55               | 1961.71     | N 527.13 W | 2031.30               | 344.96              | 3.66                     | -3.47               |
| 162      | MWD              | 14557.00          | 91.10             | 3.40          | 94                 | 12537.73                 | 2100.57               | 2055.63     | N 524.01 W | 2121.37               | 345.70              | 4.74                     | 3.51                |
| 163      | MWD              | 14651.00          | 88.50             | 3.90          | 94                 | 12538.05                 | 2193.15               | 2149.43     | N 518.03 W | 2210.98               | 346.45              | 2.82                     | -2.77               |
| 164      | MWD              | 14746.00          | 89.40             | 4.40          | 95                 | 12539.80                 | 2286.57               | 2244.17     | N 511.16 W | 2301.64               | 347.17              | 1.08                     | 0.95                |
| 165      | MWD              | 14840.00          | 89.70             | 6.50          | 94                 | 12540.53                 | 2378.60               | 2337.73     | N 502.23 W | 2391.07               | 347.88              | 2.26                     | 0.32                |
| 166      | MWD              | 14934.00          | 87.30             | 3.00          | 94                 | 12542.99                 | 2470.81               | 2431.36     | N 494.45 W | 2481.12               | 348.50              | 4.51                     | -2.55               |
| 167      | MWD              | 15028.00          | 85.90             | 357.40        | 94                 | 12548.57                 | 2564.01               | 2525.15     | N 494.12 W | 2573.04               | 348.93              | 6.13                     | -1.49               |
| 168      | MWD              | 15123.00          | 86.40             | 355.80        | 95                 | 12554.95                 | 2658.67               | 2619.77     | N 499.74 W | 2667.00               | 349.20              | 1.76                     | 0.53                |
| 169      | MWD              | 15217.00          | 90.40             | 358.50        | 94                 | 12557.58                 | 2752.44               | 2713.59     | N 504.41 W | 2760.07               | 349.47              | 5.13                     | 4.26                |
| 170      | MWD              | 15311.00          | 91.00             | 356.20        | 94                 | 12556.43                 | 2846.24               | 2807.47     | N 508.75 W | 2853.20               | 349.73              | 2.53                     | 0.64                |
| 171      | MWD              | 15404.00          | 90.10             | 357.10        | 93                 | 12555.54                 | 2939.11               | 2900.31     | N 514.19 W | 2945.53               | 349.95              | 1.37                     | -0.97               |
| 172      | MWD              | 15498.00          | 93.10             | 357.10        | 94                 | 12552.91                 | 3032.90               | 2994.14     | N 518.94 W | 3038.78               | 350.17              | 3.19                     | 3.19                |
| 173      | MWD              | 15593.00          | 93.40             | 356.90        | 95                 | 12547.53                 | 3127.60               | 3088.86     | N 523.90 W | 3132.97               | 350.37              | 0.38                     | 0.32                |
| 174      | MWD              | 15687.00          | 94.70             | 356.20        | 94                 | 12540.89                 | 3221.25               | 3182.45     | N 529.55 W | 3226.20               | 350.55              | 1.57                     | 1.38                |
| 175      | MWD              | 15781.00          | 88.90             | 353.90        | 94                 | 12537.94                 | 3315.13               | 3276.01     | N 537.65 W | 3319.83               | 350.68              | 6.64                     | -6.17               |
| 176      | MWD              | 15876.00          | 90.60             | 359.20        | 95                 | 12538.35                 | 3409.97               | 3370.79     | N 543.37 W | 3414.31               | 350.84              | 5.86                     | 1.79                |
| 177      | MWD              | 15970.00          | 86.40             | 1.10          | 94                 | 12540.81                 | 3503.33               | 3464.74     | N 543.12 W | 3507.05               | 351.09              | 4.90                     | -4.47               |
| 178      | MWD              | 16064.00          | 89.00             | 359.70        | 94                 | 12544.58                 | 3596.61               | 3558.65     | N 542.47 W | 3599.76               | 351.33              | 3.14                     | 2.77                |
| 179      | MWD              | 16158.00          | 90.30             | 356.90        | 94                 | 12545.16                 | 3690.29               | 3652.59     | N 545.26 W | 3693.07               | 351.51              | 3.28                     | 1.38                |
| 180      | MWD              | 16252.00          | 91.30             | 358.30        | 94                 | 12543.84                 | 3784.07               | 3746.50     | N 549.19 W | 3786.54               | 351.66              | 1.83                     | 1.06                |
| 181      | MWD              | 16346.00          | 91.00             | 356.90        | 94                 | 12541.96                 | 3877.83               | 3840.40     | N 553.13 W | 3880.02               | 351.80              | 1.52                     | -0.32               |
| 182      | MWD              | 16441.00          | 88.00             | 356.30        | 95                 | 12542.79                 | 3972.70               | 3935.21     | N 558.76 W | 3974.68               | 351.92              | 3.22                     | -3.16               |
| 183      | MWD              | 16535.00          | 91.00             | 358.60        | 94                 | 12543.61                 | 4066.48               | 4029.10     | N 562.94 W | 4068.24               | 352.05              | 4.02                     | 3.19                |
| 184      | MWD              | 16629.00          | 91.80             | 359.50        | 94                 | 12541.31                 | 4160.04               | 4123.06     | N 564.50 W | 4161.52               | 352.20              | 1.28                     | 0.85                |
| 185      | MWD              | 16723.00          | 92.60             | 2.70          | 94                 | 12537.70                 | 4253.19               | 4216.96     | N 562.70 W | 4254.33               | 352.40              | 3.51                     | 0.85                |
| 186      | MWD              | 16816.00          | 85.50             | 359.30        | 93                 | 12539.24                 | 4345.35               | 4309.86     | N 561.07 W | 4346.22               | 352.58              | 8.46                     | -7.63               |



EOG Resources, Inc  
Brown Bear 36 State #702H  
Lea Co., NM  
H&P 260

|                         |                  |
|-------------------------|------------------|
| Job Number:             | 2015-072-EODT-NM |
| Vertical Section Plane: | 353.73           |
| WELL API #:             | 30-025-42538     |
| Tie Into:               | Surface          |

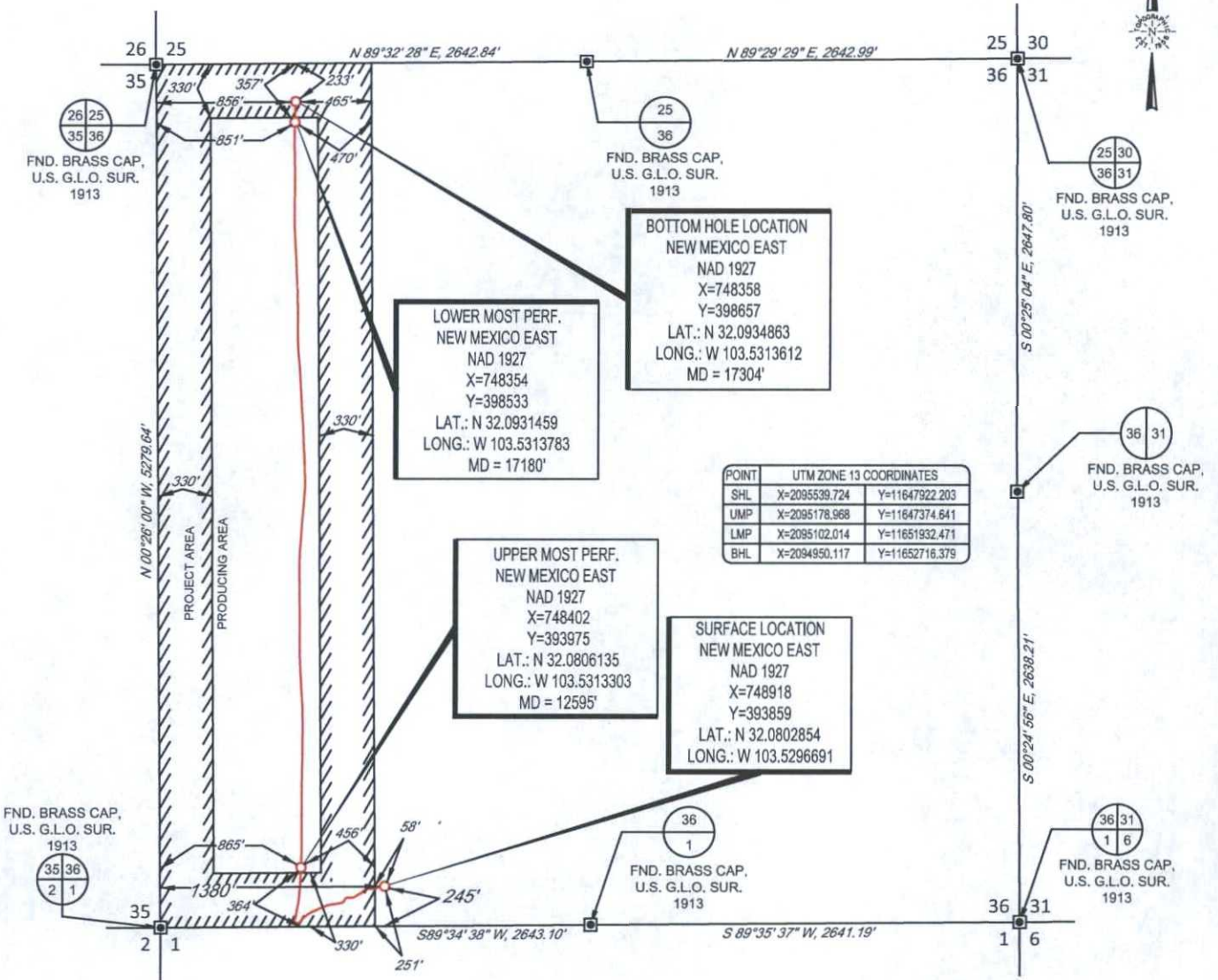
Calculation Method Minimum Curvature

[illegible]

SCALE: 1" = 1000'

0' 500' 1000'

SECTION 36, TOWNSHIP 25-S, RANGE 33-E, N.M.P.M.  
LEA COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: BROWN BEAR 36 STATE #702H  
SECTION 36 TWP 25-S RGE 33-E SURVEY N.M.P.M.  
COUNTY LEA STATE NM ELEVATION 3319'  
DESCRIPTION 245' FSL & 1380' FWL



**TOPOGRAPHIC**  
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WWW.TOPOGRAPHIC.COM



Michael Blake Brown, P.S. No. 18329  
AUGUST 19, 2015



BROWN BEAR 36 STATE  
#702H AS-COMPLETED

REVISION:

INT DATE

DATE: 08/19/15

FILE:AD\_BROWNBear36STATE\_702H

DRAWN BY: G.J.U.

SHEET: 1 OF 1

NOTES:

1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927.
3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY EOG RESOURCES, INC. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.