

## Results of Directional Survey

|             |                     |           |                                        |
|-------------|---------------------|-----------|----------------------------------------|
| API number: | <b>30-025-40580</b> |           |                                        |
| OGRID:      |                     | Operator: | <b>EOG RESOURCES INC</b>               |
|             |                     | Property: | <b>BLACK BEAR 36 STATE</b> # <b>4H</b> |

|         |        |          |           |            |            |             |            |
|---------|--------|----------|-----------|------------|------------|-------------|------------|
| surface | ULSTR: | <b>O</b> | <b>36</b> | <b>T</b>   | <b>25S</b> | <b>R</b>    | <b>33E</b> |
|         |        |          |           | <b>220</b> | <b>FSL</b> | <b>1340</b> | <b>FEL</b> |

|              |           |               |            |             |            |             |            |
|--------------|-----------|---------------|------------|-------------|------------|-------------|------------|
| BH Loc       | ULSTR:    | <b>B</b>      | <b>36</b>  | <b>T</b>    | <b>25S</b> | <b>R</b>    | <b>33E</b> |
| <b>14390</b> | <b>MD</b> | <b>9481.9</b> | <b>TVD</b> | <b>236</b>  | <b>FNL</b> | <b>1671</b> | <b>FEL</b> |
|              |           |               |            | <b>5044</b> | <b>FSL</b> |             |            |

|             |           |               |            |            |            |             |            |
|-------------|-----------|---------------|------------|------------|------------|-------------|------------|
| Top Perf/OH | ULSTR:    | <b>O</b>      | <b>36</b>  | <b>T</b>   | <b>25S</b> | <b>R</b>    | <b>33E</b> |
| <b>9987</b> | <b>MD</b> | <b>9595.7</b> | <b>TVD</b> | <b>645</b> | <b>FSL</b> | <b>1629</b> | <b>FEL</b> |

|              |           |               |            |             |            |             |            |
|--------------|-----------|---------------|------------|-------------|------------|-------------|------------|
| Bot Perf/OH  | ULSTR:    | <b>B</b>      | <b>36</b>  | <b>T</b>    | <b>25S</b> | <b>R</b>    | <b>33E</b> |
| <b>14278</b> | <b>MD</b> | <b>9485.5</b> | <b>TVD</b> | <b>348</b>  | <b>FNL</b> | <b>1673</b> | <b>FEL</b> |
|              |           |               |            | <b>4932</b> | <b>FSL</b> |             |            |

|              |              |         |         |         |
|--------------|--------------|---------|---------|---------|
|              | MD           | N/S     | E/W     | VD      |
|              | 9983         | 421.30  | -288.80 | 9595.8  |
| TOP PERFS/OH | <b>9987</b>  | 425.30  | -288.81 | 9595.74 |
|              | 10015        | 453.30  | -288.90 | 9595.30 |
|              | 14225        | 4658.90 | -333.90 | 9486.20 |
| BOT PERFS/OH | <b>14278</b> | 4711.90 | -333.08 | 9485.45 |
|              | 14296.1      | 4730.00 | -332.80 | 9485.20 |

|              |              |         |         |         |
|--------------|--------------|---------|---------|---------|
| NEXT TO LAST | 14347        | 4780.80 | -332.20 | 9483.60 |
| LAST READING | 14390        | 4823.80 | -331.40 | 9481.90 |
| TD           | <b>14390</b> | 4823.80 | -331.40 | 9481.90 |

|                  |      |    |      |    |
|------------------|------|----|------|----|
| Surface Location | 220  | FS | 1340 | FE |
| Projected BHL    | 5044 | FS | 1671 | FE |
| Location of      |      |    |      |    |
| Top Perfs/OH     | 645  | FS | 1629 | FE |
| Bottom Perfs/OH  | 4932 | FS | 1673 | FE |

### SUMMARY of Subsurface Locations

|                  |              |      |    |      |    |             |
|------------------|--------------|------|----|------|----|-------------|
| Surface Location | O-36-25S-33E | 220  | FS | 1340 | FE | Vert. Depth |
|                  |              |      |    |      |    |             |
| Top Perfs/OH     | O-36-25S-33E | 645  | FS | 1629 | FE | 9595.74     |
| Bottom Perfs/OH  | B-36-25S-33E | 4932 | FS | 1673 | FE | 9485.45     |
|                  |              |      |    |      |    |             |
| Projected TD     | B-36-25S-33E | 5044 | FS | 1671 | FE | 9481.90     |



## **EOG Resources, Inc.**

Lea County

Black Bear "36" State

#4H

OH

Design: OH

## **PathfinderX & Y Report**

02 August, 2012

SUR: O-36-25s-33e, 220/S & 1340/E  
BHL: B-5044/S & 1671/E  
API # 30-025-40580

**PATHFINDER<sup>®</sup>**  
A Schlumberger Company

|                  |                       |                                     |                                   |
|------------------|-----------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | EOG Resources, Inc.   | <b>Local Co-ordinate Reference:</b> | Well #4H                          |
| <b>Project:</b>  | Lea County            | <b>TVD Reference:</b>               | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Site:</b>     | Black Bear "36" State | <b>MD Reference:</b>                | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Well:</b>     | #4H                   | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db         |

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project</b>     | Lea County                           |                      |                |
| <b>Map System:</b> | US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)              |                      |                |
| <b>Map Zone:</b>   | New Mexico East 3001                 |                      |                |

|                              |                       |                          |                  |
|------------------------------|-----------------------|--------------------------|------------------|
| <b>Site</b>                  | Black Bear "36" State |                          |                  |
| <b>Site Position:</b>        |                       | <b>Northing:</b>         | 393,927.000 usft |
| <b>From:</b>                 | Map                   | <b>Easting:</b>          | 750,632.000 usft |
| <b>Position Uncertainty:</b> | 0.0 usft              | <b>Slot Radius:</b>      | 13-3/16 "        |
|                              |                       | <b>Latitude:</b>         | 32.080           |
|                              |                       | <b>Longitude:</b>        | -103.524         |
|                              |                       | <b>Grid Convergence:</b> | 0.43 °           |

|                             |              |          |                            |
|-----------------------------|--------------|----------|----------------------------|
| <b>Well</b>                 | #4H          |          |                            |
| <b>Well Position</b>        | <b>+N/-S</b> | 0.0 usft | <b>Northing:</b>           |
|                             | <b>+E/-W</b> | 0.0 usft | <b>Easting:</b>            |
| <b>Position Uncertainty</b> | 0.0 usft     |          | <b>Wellhead Elevation:</b> |
|                             |              |          | <b>Latitude:</b>           |
|                             |              |          | <b>Longitude:</b>          |
|                             |              |          | <b>Ground Level:</b>       |

|                  |                   |                    |                       |
|------------------|-------------------|--------------------|-----------------------|
| <b>Wellbore</b>  | OH                |                    |                       |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination</b>    |
|                  | IGRF200510        | 5/15/2012          | (°)                   |
|                  |                   |                    | 7.43                  |
|                  |                   |                    | <b>Dip Angle</b>      |
|                  |                   |                    | (°)                   |
|                  |                   |                    | 60.06                 |
|                  |                   |                    | <b>Field Strength</b> |
|                  |                   |                    | (nT)                  |
|                  |                   |                    | 48,484                |

|                          |                         |                      |                  |
|--------------------------|-------------------------|----------------------|------------------|
| <b>Design</b>            | OH                      |                      |                  |
| <b>Audit Notes:</b>      |                         |                      |                  |
| <b>Version:</b>          | 1.0                     | <b>Phase:</b>        | ACTUAL           |
|                          |                         | <b>Tie On Depth:</b> | 0.0              |
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N/-S</b>         | <b>+E/-W</b>     |
|                          | (usft)                  | (usft)               | (usft)           |
|                          | 0.0                     | 0.0                  | 0.0              |
|                          |                         |                      | <b>Direction</b> |
|                          |                         |                      | (°)              |
|                          |                         |                      | 356.02           |

|                       |                      |                          |                    |
|-----------------------|----------------------|--------------------------|--------------------|
| <b>Survey Program</b> | <b>Date</b> 8/2/2012 |                          |                    |
| <b>From</b>           | <b>To</b>            | <b>Survey (Wellbore)</b> | <b>Tool Name</b>   |
| (usft)                | (usft)               |                          |                    |
| 1,063.0               | 14,390.0             | MWD #1 (OH)              | MWD                |
|                       |                      |                          | <b>Description</b> |
|                       |                      |                          | MWD - Standard     |

|                  |                       |                                     |                                   |
|------------------|-----------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | EOG Resources, Inc.   | <b>Local Co-ordinate Reference:</b> | Well #4H                          |
| <b>Project:</b>  | Lea County            | <b>TVD Reference:</b>               | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Site:</b>     | Black Bear "36" State | <b>MD Reference:</b>                | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Well:</b>     | #4H                   | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db         |

| Survey       |            |                      |               |                 |               |               |                  |                     |                    |                   |  |  |
|--------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|--|--|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |  |
| 920.0        | 0.96       | 162.33               | 919.9         | -2,429.0        | -11.7         | 1.1           | -11.7            | 0.00                | 393,841.31         | 751,484.12        |  |  |
| 1,063.0      | 0.97       | 178.82               | 1,062.9       | -2,286.0        | -14.0         | 1.5           | -14.1            | 0.19                | 393,838.96         | 751,484.51        |  |  |
| 1,249.0      | 0.18       | 212.48               | 1,248.9       | -2,100.0        | -15.9         | 1.4           | -15.9            | 0.44                | 393,837.14         | 751,484.38        |  |  |
| 1,433.0      | 0.09       | 356.00               | 1,432.9       | -1,916.0        | -16.0         | 1.2           | -16.0            | 0.14                | 393,837.04         | 751,484.22        |  |  |
| 1,621.0      | 0.88       | 326.58               | 1,620.9       | -1,728.0        | -14.6         | 0.4           | -14.6            | 0.43                | 393,838.39         | 751,483.41        |  |  |
| 1,811.0      | 0.97       | 330.80               | 1,810.9       | -1,538.0        | -12.0         | -1.2          | -11.9            | 0.06                | 393,841.01         | 751,481.83        |  |  |
| 2,001.0      | 0.88       | 316.28               | 2,000.8       | -1,348.1        | -9.5          | -3.0          | -9.3             | 0.13                | 393,843.47         | 751,480.03        |  |  |
| 2,190.0      | 0.62       | 1.27                 | 2,189.8       | -1,159.1        | -7.5          | -3.9          | -7.2             | 0.33                | 393,845.54         | 751,479.05        |  |  |
| 2,380.0      | 0.88       | 19.99                | 2,379.8       | -969.1          | -5.1          | -3.4          | -4.8             | 0.19                | 393,847.94         | 751,479.57        |  |  |
| 2,568.0      | 0.44       | 69.10                | 2,567.8       | -781.1          | -3.4          | -2.3          | -3.3             | 0.36                | 393,849.55         | 751,480.74        |  |  |
| 2,757.0      | 0.35       | 154.30               | 2,756.8       | -592.1          | -3.7          | -1.3          | -3.6             | 0.29                | 393,849.29         | 751,481.67        |  |  |
| 2,947.0      | 1.32       | 36.04                | 2,946.8       | -402.1          | -2.5          | 0.2           | -2.5             | 0.80                | 393,850.54         | 751,483.21        |  |  |
| 3,137.0      | 1.85       | 84.04                | 3,136.7       | -212.2          | -0.4          | 4.5           | -0.7             | 0.72                | 393,852.63         | 751,487.55        |  |  |
| 3,327.0      | 0.26       | 7.68                 | 3,326.7       | -22.2           | 0.4           | 7.7           | -0.2             | 0.95                | 393,853.37         | 751,490.66        |  |  |
| 3,516.0      | 0.53       | 341.76               | 3,515.7       | 166.8           | 1.6           | 7.4           | 1.1              | 0.17                | 393,854.63         | 751,490.44        |  |  |
| 3,705.0      | 0.97       | 276.77               | 3,704.7       | 355.8           | 2.6           | 5.6           | 2.3              | 0.47                | 393,855.65         | 751,488.58        |  |  |
| 3,893.0      | 0.35       | 302.25               | 3,892.6       | 543.7           | 3.1           | 3.5           | 2.9              | 0.36                | 393,856.14         | 751,486.51        |  |  |
| 4,083.0      | 1.06       | 47.72                | 4,082.6       | 733.7           | 4.6           | 4.3           | 4.3              | 0.63                | 393,857.63         | 751,487.32        |  |  |
| 4,273.0      | 0.62       | 251.60               | 4,272.6       | 923.7           | 5.5           | 4.6           | 5.2              | 0.87                | 393,858.49         | 751,487.65        |  |  |
| 4,461.0      | 0.35       | 20.18                | 4,460.6       | 1,111.7         | 5.7           | 3.9           | 5.4              | 0.47                | 393,858.71         | 751,486.88        |  |  |
| 4,651.0      | 1.41       | 322.17               | 4,650.6       | 1,301.7         | 8.1           | 2.6           | 7.9              | 0.66                | 393,861.10         | 751,485.64        |  |  |
| 4,841.0      | 1.76       | 157.80               | 4,840.6       | 1,491.7         | 7.2           | 2.3           | 7.1              | 1.65                | 393,860.25         | 751,485.31        |  |  |
| 5,002.0      | 1.93       | 188.59               | 5,001.5       | 1,652.6         | 2.3           | 2.8           | 2.1              | 0.62                | 393,855.28         | 751,485.84        |  |  |
| 5,113.0      | 2.11       | 199.12               | 5,112.4       | 1,763.5         | -1.5          | 1.9           | -1.6             | 0.37                | 393,851.50         | 751,484.89        |  |  |
| 5,302.0      | 2.29       | 220.51               | 5,301.3       | 1,952.4         | -7.7          | -1.7          | -7.5             | 0.44                | 393,845.34         | 751,481.30        |  |  |
| 5,492.0      | 5.36       | 229.98               | 5,490.8       | 2,141.9         | -16.3         | -11.0         | -15.5            | 1.64                | 393,836.74         | 751,472.04        |  |  |
| 5,681.0      | 6.33       | 235.44               | 5,678.9       | 2,330.0         | -27.8         | -26.3         | -26.0            | 0.59                | 393,825.16         | 751,456.70        |  |  |

|                  |                       |                                     |                                   |
|------------------|-----------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | EOG Resources, Inc.   | <b>Local Co-ordinate Reference:</b> | Well #4H                          |
| <b>Project:</b>  | Lea County            | <b>TVD Reference:</b>               | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Site:</b>     | Black Bear "36" State | <b>MD Reference:</b>                | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Well:</b>     | #4H                   | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db         |

| Survey                                                     |             |                      |               |                 |               |               |                  |                     |                    |                   |  |
|------------------------------------------------------------|-------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|--|
| MD<br>(usft)                                               | Inc.<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |
| 5,870.0                                                    | 6.86        | 240.88               | 5,866.6       | 2,517.7         | -39.2         | -44.7         | -36.1            | 0.43                | 393,813.75         | 751,438.25        |  |
| 6,060.0                                                    | 6.16        | 239.78               | 6,055.4       | 2,706.5         | -49.9         | -63.5         | -45.4            | 0.37                | 393,803.10         | 751,419.53        |  |
| 6,249.0                                                    | 5.72        | 237.41               | 6,243.4       | 2,894.5         | -60.1         | -80.2         | -54.4            | 0.27                | 393,792.92         | 751,402.83        |  |
| 6,439.0                                                    | 5.36        | 239.52               | 6,432.5       | 3,083.6         | -69.7         | -95.8         | -62.9            | 0.22                | 393,783.32         | 751,387.21        |  |
| 6,629.0                                                    | 5.63        | 243.18               | 6,621.6       | 3,272.7         | -78.4         | -111.8        | -70.4            | 0.23                | 393,774.62         | 751,371.24        |  |
| 6,818.0                                                    | 6.77        | 244.66               | 6,809.5       | 3,460.6         | -87.3         | -130.1        | -78.1            | 0.61                | 393,765.66         | 751,352.90        |  |
| 7,006.0                                                    | 5.80        | 244.66               | 6,996.4       | 3,647.5         | -96.1         | -148.7        | -85.6            | 0.52                | 393,756.86         | 751,334.30        |  |
| 7,195.0                                                    | 5.10        | 240.85               | 7,184.5       | 3,835.6         | -104.3        | -164.7        | -92.7            | 0.42                | 393,748.68         | 751,318.33        |  |
| 7,384.0                                                    | 4.92        | 242.00               | 7,372.8       | 4,023.9         | -112.2        | -179.2        | -99.5            | 0.11                | 393,740.78         | 751,303.84        |  |
| 7,573.0                                                    | 4.84        | 242.47               | 7,561.1       | 4,212.2         | -119.7        | -193.4        | -106.0           | 0.05                | 393,733.29         | 751,289.61        |  |
| 7,759.0                                                    | 5.54        | 241.52               | 7,746.3       | 4,397.4         | -127.6        | -208.2        | -112.9           | 0.38                | 393,725.38         | 751,274.76        |  |
| 7,948.0                                                    | 5.36        | 238.47               | 7,934.5       | 4,585.6         | -136.6        | -223.8        | -120.7           | 0.18                | 393,716.41         | 751,259.22        |  |
| 8,138.0                                                    | 5.72        | 244.05               | 8,123.6       | 4,774.7         | -145.4        | -239.9        | -128.4           | 0.34                | 393,707.63         | 751,243.14        |  |
| 8,326.0                                                    | 5.54        | 240.77               | 8,310.7       | 4,961.8         | -153.9        | -256.2        | -135.8           | 0.20                | 393,699.10         | 751,226.80        |  |
| 8,515.0                                                    | 5.10        | 243.09               | 8,498.9       | 5,150.0         | -162.2        | -271.7        | -142.9           | 0.26                | 393,690.84         | 751,211.35        |  |
| 8,703.0                                                    | 2.37        | 247.11               | 8,686.5       | 5,337.6         | -167.5        | -282.7        | -147.5           | 1.46                | 393,685.55         | 751,200.31        |  |
| 8,893.0                                                    | 0.53        | 259.25               | 8,876.4       | 5,527.5         | -169.1        | -287.2        | -148.8           | 0.98                | 393,683.86         | 751,195.83        |  |
| 9,067.0                                                    | 0.97        | 218.38               | 9,050.4       | 5,701.5         | -170.4        | -288.9        | -150.0           | 0.38                | 393,682.55         | 751,194.12        |  |
| 9,139.0                                                    | 2.29        | 354.54               | 9,122.4       | 5,773.5         | -169.5        | -289.4        | -149.0           | 4.26                | 393,683.51         | 751,193.61        |  |
| <b>KOP - 9139.0 'MD, 9122.4 'TVD, -169.5 'N, -289.4 'E</b> |             |                      |               |                 |               |               |                  |                     |                    |                   |  |
| 9,169.0                                                    | 5.72        | 4.04                 | 9,152.3       | 5,803.4         | -167.4        | -289.3        | -146.9           | 11.61               | 393,685.59         | 751,193.66        |  |
| 9,201.0                                                    | 9.67        | 6.51                 | 9,184.0       | 5,835.1         | -163.1        | -288.9        | -142.7           | 12.38               | 393,689.86         | 751,194.07        |  |
| 9,232.0                                                    | 14.60       | 7.75                 | 9,214.3       | 5,865.4         | -156.7        | -288.1        | -136.3           | 15.92               | 393,696.32         | 751,194.90        |  |
| 9,264.0                                                    | 19.52       | 7.01                 | 9,244.9       | 5,896.0         | -147.4        | -286.9        | -127.1           | 15.39               | 393,705.63         | 751,196.09        |  |
| 9,296.0                                                    | 23.83       | 5.66                 | 9,274.6       | 5,925.7         | -135.6        | -285.6        | -115.5           | 13.56               | 393,717.37         | 751,197.38        |  |
| 9,327.0                                                    | 27.08       | 3.59                 | 9,302.6       | 5,953.7         | -122.4        | -284.6        | -102.3           | 10.87               | 393,730.65         | 751,198.44        |  |
| 9,359.0                                                    | 30.51       | 1.64                 | 9,330.6       | 5,981.7         | -107.0        | -283.9        | -87.0            | 11.11               | 393,746.04         | 751,199.13        |  |

Company: EOG Resources, Inc.  
Project: Lea County  
Site: Black Bear "36" State  
Well: #4H  
Wellbore: OH  
Design: OH

Local Co-ordinate Reference:  
TVD Reference:  
MD Reference:  
North Reference:  
Survey Calculation Method:  
Database:

Well #4H  
KB = 25 @ 3348.9usft (Cactus 139)  
KB = 25 @ 3348.9usft (Cactus 139)  
Grid  
Minimum Curvature  
EDM 5000.1 Single User Db

| Survey                                            |            |                      |               |                 |               |               |                  |                     |                    |                   |  |
|---------------------------------------------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|--|
| MD<br>(usft)                                      | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |
| 9,390.0                                           | 33.41      | 0.11                 | 9,356.9       | 6,008.0         | -90.6         | -283.6        | -70.7            | 9.71                | 393,762.45         | 751,199.37        |  |
| 9,421.0                                           | 37.11      | 358.81               | 9,382.2       | 6,033.3         | -72.7         | -283.8        | -52.8            | 12.18               | 393,780.34         | 751,199.20        |  |
| 9,452.0                                           | 40.63      | 358.23               | 9,406.4       | 6,057.5         | -53.2         | -284.3        | -33.4            | 11.42               | 393,799.78         | 751,198.69        |  |
| 9,484.0                                           | 43.26      | 357.60               | 9,430.2       | 6,081.3         | -31.8         | -285.1        | -12.0            | 8.32                | 393,821.16         | 751,197.91        |  |
| 9,515.0                                           | 46.69      | 356.96               | 9,452.1       | 6,103.2         | -10.0         | -286.1        | 9.9              | 11.16               | 393,843.04         | 751,196.87        |  |
| 9,545.0                                           | 50.56      | 356.53               | 9,471.9       | 6,123.0         | 12.5          | -287.4        | 32.4             | 12.94               | 393,865.51         | 751,195.59        |  |
| 9,576.0                                           | 53.82      | 356.22               | 9,490.9       | 6,142.0         | 36.9          | -289.0        | 56.9             | 10.55               | 393,889.95         | 751,194.04        |  |
| 9,607.0                                           | 56.28      | 356.24               | 9,508.7       | 6,159.8         | 62.3          | -290.6        | 82.3             | 7.94                | 393,915.30         | 751,192.37        |  |
| 9,639.0                                           | 60.06      | 356.61               | 9,525.5       | 6,176.6         | 89.4          | -292.3        | 109.5            | 11.85               | 393,942.43         | 751,190.67        |  |
| 9,670.0                                           | 63.40      | 357.90               | 9,540.2       | 6,191.3         | 116.7         | -293.6        | 136.8            | 11.38               | 393,969.70         | 751,189.37        |  |
| 9,702.0                                           | 67.27      | 359.45               | 9,553.6       | 6,204.7         | 145.8         | -294.3        | 165.8            | 12.87               | 393,998.76         | 751,188.70        |  |
| 9,734.0                                           | 71.49      | 0.96                 | 9,564.8       | 6,215.9         | 175.7         | -294.2        | 195.7            | 13.91               | 394,028.71         | 751,188.82        |  |
| 9,764.0                                           | 74.39      | 1.78                 | 9,573.6       | 6,224.7         | 204.4         | -293.5        | 224.2            | 10.01               | 394,057.37         | 751,189.50        |  |
| 9,796.0                                           | 77.82      | 1.89                 | 9,581.3       | 6,232.4         | 235.4         | -292.5        | 255.1            | 10.72               | 394,088.42         | 751,190.50        |  |
| 9,827.0                                           | 80.46      | 1.63                 | 9,587.2       | 6,238.3         | 265.8         | -291.6        | 285.4            | 8.56                | 394,118.85         | 751,191.43        |  |
| 9,858.0                                           | 83.27      | 1.81                 | 9,591.6       | 6,242.7         | 296.5         | -290.6        | 316.0            | 9.08                | 394,149.52         | 751,192.35        |  |
| 9,890.0                                           | 86.70      | 1.37                 | 9,594.4       | 6,245.5         | 328.4         | -289.8        | 347.7            | 10.81               | 394,181.38         | 751,193.24        |  |
| 9,922.0                                           | 88.99      | 0.70                 | 9,595.6       | 6,246.7         | 360.3         | -289.2        | 379.5            | 7.46                | 394,213.35         | 751,193.82        |  |
| 9,952.0                                           | 89.87      | 0.34                 | 9,595.9       | 6,247.0         | 390.3         | -288.9        | 409.4            | 3.17                | 394,243.34         | 751,194.09        |  |
| 9,982.0                                           | 90.46      | 0.01                 | 9,595.8       | 6,246.9         | 420.3         | -288.8        | 439.4            | 2.25                | 394,273.34         | 751,194.18        |  |
| LP - 9982.0 'MD, 9595.8 'TVD, 420.3 'N, -288.8 'E |            |                      |               |                 |               |               |                  |                     |                    |                   |  |
| 9,983.0                                           | 90.48      | 0.00                 | 9,595.8       | 6,246.9         | 421.3         | -288.8        | 440.4            | 2.25                | 394,274.34         | 751,194.18        |  |
| 10,015.0                                          | 91.10      | 359.84               | 9,595.3       | 6,246.4         | 453.3         | -288.9        | 472.3            | 2.00                | 394,306.34         | 751,194.14        |  |
| 10,078.0                                          | 91.80      | 358.84               | 9,593.7       | 6,244.8         | 516.3         | -289.6        | 535.1            | 1.94                | 394,369.31         | 751,193.41        |  |
| 10,171.0                                          | 92.07      | 358.31               | 9,590.6       | 6,241.7         | 609.2         | -291.9        | 628.0            | 0.64                | 394,462.23         | 751,191.10        |  |
| 10,265.0                                          | 91.54      | 357.96               | 9,587.6       | 6,238.7         | 703.1         | -295.0        | 721.9            | 0.68                | 394,556.14         | 751,188.04        |  |
| 10,360.0                                          | 92.77      | 357.71               | 9,584.1       | 6,235.2         | 798.0         | -298.5        | 816.8            | 1.32                | 394,651.00         | 751,184.45        |  |

|                  |                       |                                     |                                   |
|------------------|-----------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | EOG Resources, Inc.   | <b>Local Co-ordinate Reference:</b> | Well #4H                          |
| <b>Project:</b>  | Lea County            | <b>TVD Reference:</b>               | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Site:</b>     | Black Bear "36" State | <b>MD Reference:</b>                | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Well:</b>     | #4H                   | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db         |

| Survey       |             |                      |               |                 |               |               |                  |                     |                    |                   |  |
|--------------|-------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|--|
| MD<br>(usft) | Inc.<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |
| 10,454.0     | 91.36       | 356.59               | 9,580.7       | 6,231.8         | 891.8         | -303.2        | 910.7            | 1.92                | 394,744.82         | 751,179.78        |  |
| 10,549.0     | 90.22       | 356.39               | 9,579.4       | 6,230.5         | 986.6         | -309.0        | 1,005.7          | 1.22                | 394,839.63         | 751,173.97        |  |
| 10,643.0     | 90.84       | 355.86               | 9,578.5       | 6,229.6         | 1,080.4       | -315.4        | 1,099.7          | 0.87                | 394,933.41         | 751,167.62        |  |
| 10,736.0     | 91.71       | 357.58               | 9,576.4       | 6,227.5         | 1,173.2       | -320.7        | 1,192.6          | 2.07                | 395,026.23         | 751,162.30        |  |
| 10,830.0     | 93.65       | 359.26               | 9,572.0       | 6,223.1         | 1,267.1       | -323.3        | 1,286.4          | 2.73                | 395,120.08         | 751,159.71        |  |
| 10,924.0     | 92.42       | 359.97               | 9,567.0       | 6,218.1         | 1,360.9       | -323.9        | 1,380.1          | 1.51                | 395,213.95         | 751,159.08        |  |
| 11,018.0     | 91.80       | 358.98               | 9,563.6       | 6,214.7         | 1,454.9       | -324.8        | 1,473.9          | 1.24                | 395,307.88         | 751,158.21        |  |
| 11,112.0     | 92.42       | 359.09               | 9,560.1       | 6,211.2         | 1,548.8       | -326.4        | 1,567.7          | 0.67                | 395,401.80         | 751,156.63        |  |
| 11,206.0     | 90.57       | 357.62               | 9,557.7       | 6,208.8         | 1,642.7       | -329.1        | 1,661.6          | 2.51                | 395,495.72         | 751,153.93        |  |
| 11,301.0     | 89.25       | 359.74               | 9,557.8       | 6,208.9         | 1,737.7       | -331.3        | 1,756.5          | 2.63                | 395,590.69         | 751,151.75        |  |
| 11,395.0     | 91.28       | 0.15                 | 9,557.4       | 6,208.5         | 1,831.7       | -331.3        | 1,850.2          | 2.20                | 395,684.68         | 751,151.66        |  |
| 11,489.0     | 90.92       | 0.72                 | 9,555.6       | 6,206.7         | 1,925.7       | -330.6        | 1,944.0          | 0.72                | 395,778.66         | 751,152.37        |  |
| 11,584.0     | 91.63       | 1.82                 | 9,553.5       | 6,204.6         | 2,020.6       | -328.5        | 2,038.5          | 1.38                | 395,873.61         | 751,154.47        |  |
| 11,679.0     | 91.28       | 2.54                 | 9,551.1       | 6,202.2         | 2,115.5       | -324.9        | 2,132.9          | 0.84                | 395,968.51         | 751,158.09        |  |
| 11,773.0     | 91.71       | 2.57                 | 9,548.6       | 6,199.7         | 2,209.4       | -320.7        | 2,226.3          | 0.46                | 396,062.39         | 751,162.28        |  |
| 11,867.0     | 91.89       | 357.39               | 9,545.6       | 6,196.7         | 2,303.3       | -320.8        | 2,320.0          | 5.51                | 396,156.31         | 751,162.24        |  |
| 11,962.0     | 91.45       | 354.49               | 9,542.9       | 6,194.0         | 2,398.0       | -327.5        | 2,415.0          | 3.09                | 396,251.02         | 751,155.52        |  |
| 12,056.0     | 90.22       | 357.13               | 9,541.5       | 6,192.6         | 2,491.7       | -334.3        | 2,508.9          | 3.10                | 396,344.75         | 751,148.65        |  |
| 12,150.0     | 91.36       | 359.90               | 9,540.2       | 6,191.3         | 2,585.7       | -336.8        | 2,602.8          | 3.19                | 396,438.70         | 751,146.22        |  |
| 12,245.0     | 89.16       | 357.24               | 9,539.8       | 6,190.9         | 2,680.7       | -339.2        | 2,697.7          | 3.63                | 396,533.65         | 751,143.85        |  |
| 12,340.0     | 91.28       | 357.35               | 9,539.4       | 6,190.5         | 2,775.5       | -343.6        | 2,792.7          | 2.23                | 396,628.54         | 751,139.37        |  |
| 12,434.0     | 91.98       | 356.89               | 9,536.7       | 6,187.8         | 2,869.4       | -348.4        | 2,886.6          | 0.89                | 396,722.38         | 751,134.64        |  |
| 12,529.0     | 94.70       | 0.33                 | 9,531.2       | 6,182.3         | 2,964.2       | -350.7        | 2,981.3          | 4.61                | 396,817.17         | 751,132.34        |  |
| 12,624.0     | 93.83       | 0.47                 | 9,524.1       | 6,175.2         | 3,058.9       | -350.0        | 3,075.8          | 0.93                | 396,911.90         | 751,133.00        |  |
| 12,719.0     | 91.89       | 0.94                 | 9,519.4       | 6,170.5         | 3,153.8       | -348.8        | 3,170.4          | 2.10                | 397,006.77         | 751,134.17        |  |
| 12,814.0     | 91.36       | 1.70                 | 9,516.7       | 6,167.8         | 3,248.7       | -346.6        | 3,264.9          | 0.98                | 397,101.71         | 751,136.36        |  |
| 12,908.0     | 90.66       | 0.43                 | 9,515.1       | 6,166.2         | 3,342.7       | -344.9        | 3,358.5          | 1.54                | 397,195.68         | 751,138.10        |  |

|                  |                       |                                     |                                   |
|------------------|-----------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | EOG Resources, Inc.   | <b>Local Co-ordinate Reference:</b> | Well #4H                          |
| <b>Project:</b>  | Lea County            | <b>TVD Reference:</b>               | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Site:</b>     | Black Bear "36" State | <b>MD Reference:</b>                | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Well:</b>     | #4H                   | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db         |

| Survey                                                                                |            |                      |               |                 |               |               |                   |                     |                    |                   |  |
|---------------------------------------------------------------------------------------|------------|----------------------|---------------|-----------------|---------------|---------------|-------------------|---------------------|--------------------|-------------------|--|
| MD<br>(usft)                                                                          | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec.<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |
| 13,000.0                                                                              | 89.16      | 0.38                 | 9,515.2       | 6,166.3         | 3,434.7       | -344.2        | 3,450.3           | 1.63                | 397,287.67         | 751,138.75        |  |
| 13,095.0                                                                              | 90.31      | 358.67               | 9,515.6       | 6,166.7         | 3,529.7       | -345.0        | 3,545.1           | 2.17                | 397,382.66         | 751,137.97        |  |
| 13,189.0                                                                              | 91.19      | 357.45               | 9,514.4       | 6,165.5         | 3,623.6       | -348.2        | 3,639.0           | 1.60                | 397,476.60         | 751,134.78        |  |
| 13,284.0                                                                              | 92.95      | 0.55                 | 9,511.0       | 6,162.1         | 3,718.5       | -349.9        | 3,733.8           | 3.75                | 397,571.51         | 751,133.13        |  |
| 13,376.0                                                                              | 92.51      | 0.61                 | 9,506.6       | 6,157.7         | 3,810.4       | -348.9        | 3,825.4           | 0.48                | 397,663.40         | 751,134.06        |  |
| 13,470.0                                                                              | 91.54      | 1.19                 | 9,503.3       | 6,154.4         | 3,904.3       | -347.5        | 3,919.0           | 1.20                | 397,757.32         | 751,135.53        |  |
| 13,565.0                                                                              | 92.59      | 0.33                 | 9,499.8       | 6,150.9         | 3,999.3       | -346.2        | 4,013.6           | 1.43                | 397,852.25         | 751,136.79        |  |
| 13,658.0                                                                              | 92.15      | 0.83                 | 9,496.0       | 6,147.1         | 4,092.2       | -345.3        | 4,106.3           | 0.72                | 397,945.17         | 751,137.73        |  |
| 13,750.0                                                                              | 92.24      | 1.70                 | 9,492.5       | 6,143.6         | 4,184.1       | -343.2        | 4,197.8           | 0.95                | 398,037.08         | 751,139.76        |  |
| 13,845.0                                                                              | 90.04      | 1.74                 | 9,490.6       | 6,141.7         | 4,279.0       | -340.4        | 4,292.3           | 2.32                | 398,132.01         | 751,142.61        |  |
| 13,940.0                                                                              | 91.89      | 1.03                 | 9,489.0       | 6,140.1         | 4,374.0       | -338.1        | 4,386.9           | 2.09                | 398,226.96         | 751,144.91        |  |
| 14,035.0                                                                              | 91.71      | 0.90                 | 9,486.0       | 6,137.1         | 4,468.9       | -336.5        | 4,481.5           | 0.23                | 398,321.90         | 751,146.51        |  |
| 14,130.0                                                                              | 88.90      | 0.57                 | 9,485.5       | 6,136.6         | 4,563.9       | -335.3        | 4,576.1           | 2.98                | 398,416.88         | 751,147.73        |  |
| 14,225.0                                                                              | 90.31      | 1.05                 | 9,486.2       | 6,137.3         | 4,658.9       | -333.9        | 4,670.8           | 1.57                | 398,511.87         | 751,149.07        |  |
| 14,296.1                                                                              | 91.30      | 0.71                 | 9,485.2       | 6,136.3         | 4,730.0       | -332.8        | 4,741.6           | 1.47                | 398,582.95         | 751,150.16        |  |
| <b>Hardline Crossing - 14296.1 'MD, 91.30 °INC, 9485.2 'TVD, 4730.0 'N, -332.8 'E</b> |            |                      |               |                 |               |               |                   |                     |                    |                   |  |
| 14,320.0                                                                              | 91.63      | 0.60                 | 9,484.5       | 6,135.6         | 4,753.8       | -332.6        | 4,765.5           | 1.47                | 398,606.84         | 751,150.44        |  |
| 14,347.0                                                                              | 92.33      | 1.07                 | 9,483.6       | 6,134.7         | 4,780.8       | -332.2        | 4,792.3           | 3.12                | 398,633.82         | 751,150.83        |  |
| 14,390.0                                                                              | 92.33      | 1.07                 | 9,481.9       | 6,133.0         | 4,823.8       | -331.4        | 4,835.1           | 0.00                | 398,676.78         | 751,151.63        |  |
| <b>PROJECTED BHL - 14390.0 'MD, 9481.9 'TVD, 4823.8 'N, -331.4 'E</b>                 |            |                      |               |                 |               |               |                   |                     |                    |                   |  |

|                  |                       |                                     |                                   |
|------------------|-----------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | EOG Resources, Inc.   | <b>Local Co-ordinate Reference:</b> | Well #4H                          |
| <b>Project:</b>  | Lea County            | <b>TVD Reference:</b>               | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Site:</b>     | Black Bear "36" State | <b>MD Reference:</b>                | KB = 25 @ 3348.9usft (Cactus 139) |
| <b>Well:</b>     | #4H                   | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | OH                    | <b>Database:</b>                    | EDM 5000.1 Single User Db         |

| Design Annotations    |                       |                   |              |                                                                                |
|-----------------------|-----------------------|-------------------|--------------|--------------------------------------------------------------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                                                                        |
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                                                                                |
| 9,139.0               | 9,122.4               | -169.5            | -289.4       | KOP - 9139.0 'MD, 9122.4 'TVD, -169.5 'N, -289.4 'E                            |
| 9,982.0               | 9,595.8               | 420.3             | -288.8       | LP - 9982.0 'MD, 9595.8 'TVD, 420.3 'N, -288.8 'E                              |
| 14,296.1              | 9,485.2               | 4,730.0           | -332.8       | Hardline Crossing - 14296.1 'MD, 91.30 °INC, 9485.2 'TVD, 4730.0 'N, -332.8 'I |
| 14,390.0              | 9,481.9               | 4,823.8           | -331.4       | PROJECTED BHL - 14390.0 'MD, 9481.9 'TVD, 4823.8 'N, -331.4 'E                 |

|                   |                    |             |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|