



## EOG Resources

Lea County, NM (NAD 27 NME)  
Endurance 36 State Com  
#704H

OH

Survey: Driltech MWD

## Standard Survey Report

15 August, 2016

HOBBS OCT  
MAR 15 2017  
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## Survey Report

|                  |                             |                                     |                                       |
|------------------|-----------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | EOG Resources               | <b>Local Co-ordinate Reference:</b> | Well #704H                            |
| <b>Project:</b>  | Lea County, NM (NAD 27 NME) | <b>TVD Reference:</b>               | 3335' + 25' RKB @ 3360.01ft (H&P 659) |
| <b>Site:</b>     | Endurance 36 State Com      | <b>MD Reference:</b>                | 3335' + 25' RKB @ 3360.01ft (H&P 659) |
| <b>Well:</b>     | #704H                       | <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, NM (NAD 27 NME)          |                      |                |
| <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>                  | Endurance 36 State Com |                          |                   |
| <b>Site Position:</b>        |                        | <b>Northing:</b>         | 365,036.00 usft   |
| <b>From:</b>                 | Map                    | <b>Easting:</b>          | 749,506.00 usft   |
| <b>Position Uncertainty:</b> | 0.00 ft                | <b>Slot Radius:</b>      | 13.200 in         |
|                              |                        | <b>Latitude:</b>         | 32° 0' 3.760 N    |
|                              |                        | <b>Longitude:</b>        | 103° 31' 42.470 W |
|                              |                        | <b>Grid Convergence:</b> | 0.43 °            |

|                             |         |                            |                                  |
|-----------------------------|---------|----------------------------|----------------------------------|
| <b>Well</b>                 | #704H   |                            |                                  |
| <b>Well Position</b>        | +N/-S   | 0.00 ft                    | <b>Northing:</b> 365,060.00 usft |
|                             | +E/-W   | 0.00 ft                    | <b>Easting:</b> 748,766.00 usft  |
| <b>Position Uncertainty</b> | 0.00 ft | <b>Wellhead Elevation:</b> | 0.00 ft                          |
|                             |         | <b>Latitude:</b>           | 32° 0' 4.052 N                   |
|                             |         | <b>Longitude:</b>          | 103° 31' 51.061 W                |
|                             |         | <b>Ground Level:</b>       | 3,335.01 ft                      |

Wellbore OH

| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|-----------|------------|-------------|-----------------|---------------|---------------------|
|           | IGRF2015   | 7/5/2016    | 7.02            | 59.88         | 47,908              |

Design OH

|                      |        |
|----------------------|--------|
| <b>Audit Notes:</b>  |        |
| <b>Version:</b>      | 1.0    |
| <b>Phase:</b>        | ACTUAL |
| <b>Tie On Depth:</b> | 0.00   |

| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
|-------------------|-----------------------|------------|------------|---------------|
|                   | 0.00                  | 0.00       | 0.00       | 359.37        |

Survey Program Date 8/15/2016

| From (ft) | To (ft)   | Survey (Wellbore) | Tool Name | Description    |
|-----------|-----------|-------------------|-----------|----------------|
| 192.00    | 19,364.00 | Driltech MWD (OH) | MWD       | MWD - Standard |

Survey

| Measured Depth (ft)                | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 0.00                               | 0.00            | 0.00        | 0.00                | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 192.00                             | 1.41            | 223.69      | 191.98              | -1.71      | -1.63      | -1.69                 | 0.73                  | 0.73                 | 0.00                |
| <b>192' MD: Begin Driltech MWD</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 384.00                             | 1.41            | 229.31      | 383.92              | -4.96      | -5.05      | -4.90                 | 0.07                  | 0.00                 | 2.93                |
| 571.00                             | 1.23            | 236.17      | 570.87              | -7.57      | -8.47      | -7.48                 | 0.13                  | -0.10                | 3.67                |
| 754.00                             | 1.58            | 218.59      | 753.82              | -10.64     | -11.67     | -10.51                | 0.30                  | 0.19                 | -9.61               |
| 875.00                             | 1.76            | 226.50      | 874.77              | -13.22     | -14.06     | -13.07                | 0.24                  | 0.15                 | 6.54                |
| 985.00                             | 2.82            | 214.20      | 984.68              | -16.62     | -16.81     | -16.44                | 1.06                  | 0.96                 | -11.18              |
| 1,151.00                           | 2.46            | 203.12      | 1,150.50            | -23.28     | -20.50     | -23.05                | 0.38                  | -0.22                | -6.67               |
| 1,245.00                           | 2.46            | 209.80      | 1,244.42            | -26.88     | -22.30     | -26.64                | 0.30                  | 0.00                 | 7.11                |
| 1,338.00                           | 2.64            | 199.96      | 1,337.33            | -30.63     | -24.02     | -30.36                | 0.51                  | 0.19                 | -10.58              |





# Survey Report

|                  |                             |                                     |                                       |
|------------------|-----------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | EOG Resources               | <b>Local Co-ordinate Reference:</b> | Well #704H                            |
| <b>Project:</b>  | Lea County, NM (NAD 27 NME) | <b>TVD Reference:</b>               | 3335' + 25' RKB @ 3360.01ft (H&P 659) |
| <b>Site:</b>     | Endurance 36 State Com      | <b>MD Reference:</b>                | 3335' + 25' RKB @ 3360.01ft (H&P 659) |
| <b>Well:</b>     | #704H                       | <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

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Bulld Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 1,431.00            | 3.34            | 180.27      | 1,430.20            | -35.35     | -24.76     | -35.08                | 1.33                  | 0.75                 | -21.17              |
| 1,524.00            | 3.52            | 181.68      | 1,523.03            | -40.91     | -24.86     | -40.64                | 0.21                  | 0.19                 | 1.52                |
| 1,617.00            | 3.52            | 181.68      | 1,615.86            | -46.62     | -25.03     | -46.34                | 0.00                  | 0.00                 | 0.00                |
| 1,711.00            | 3.70            | 176.76      | 1,709.67            | -52.53     | -24.94     | -52.26                | 0.38                  | 0.19                 | -5.23               |
| 1,805.00            | 3.70            | 174.82      | 1,803.48            | -58.58     | -24.49     | -58.31                | 0.13                  | 0.00                 | -2.06               |
| 1,898.00            | 3.87            | 175.53      | 1,896.27            | -64.70     | -23.98     | -64.43                | 0.19                  | 0.18                 | 0.76                |
| 1,992.00            | 3.87            | 176.40      | 1,990.06            | -71.03     | -23.53     | -70.76                | 0.06                  | 0.00                 | 0.93                |
| 2,086.00            | 4.05            | 178.51      | 2,083.83            | -77.51     | -23.25     | -77.25                | 0.25                  | 0.19                 | 2.24                |
| 2,180.00            | 3.70            | 180.10      | 2,177.62            | -83.86     | -23.17     | -83.60                | 0.39                  | -0.37                | 1.69                |
| 2,273.00            | 3.87            | 175.88      | 2,270.42            | -89.99     | -22.95     | -89.74                | 0.35                  | 0.18                 | -4.54               |
| 2,366.00            | 3.70            | 176.40      | 2,363.21            | -96.12     | -22.53     | -95.87                | 0.19                  | -0.18                | 0.56                |
| 2,460.00            | 4.05            | 176.23      | 2,457.00            | -102.46    | -22.12     | -102.21               | 0.37                  | 0.37                 | -0.18               |
| 2,553.00            | 4.05            | 171.31      | 2,549.77            | -108.98    | -21.41     | -108.74               | 0.37                  | 0.00                 | -5.29               |
| 2,647.00            | 4.22            | 168.32      | 2,643.52            | -115.65    | -20.21     | -115.42               | 0.29                  | 0.18                 | -3.18               |
| 2,741.00            | 2.99            | 174.65      | 2,737.33            | -121.48    | -19.28     | -121.26               | 1.37                  | -1.31                | 6.73                |
| 2,836.00            | 2.46            | 177.99      | 2,832.23            | -125.98    | -18.98     | -125.77               | 0.58                  | -0.56                | 3.52                |
| 2,930.00            | 2.64            | 174.30      | 2,926.13            | -130.15    | -18.69     | -129.94               | 0.26                  | 0.19                 | -3.93               |
| 3,025.00            | 2.64            | 169.37      | 3,021.03            | -134.48    | -18.07     | -134.27               | 0.24                  | 0.00                 | -5.19               |
| 3,121.00            | 3.17            | 161.29      | 3,116.91            | -139.17    | -16.81     | -138.97               | 0.70                  | 0.55                 | -8.42               |
| 3,215.00            | 3.34            | 153.38      | 3,210.76            | -144.08    | -14.75     | -143.91               | 0.51                  | 0.18                 | -8.41               |
| 3,309.00            | 3.17            | 155.66      | 3,304.61            | -148.89    | -12.45     | -148.75               | 0.23                  | -0.18                | 2.43                |
| 3,404.00            | 2.99            | 161.11      | 3,399.47            | -153.63    | -10.57     | -153.51               | 0.36                  | -0.19                | 5.74                |
| 3,499.00            | 3.34            | 161.99      | 3,494.33            | -158.61    | -8.91      | -158.50               | 0.37                  | 0.37                 | 0.93                |
| 3,594.00            | 2.99            | 167.79      | 3,589.18            | -163.66    | -7.53      | -163.57               | 0.50                  | -0.37                | 6.11                |
| 3,688.00            | 2.64            | 158.65      | 3,683.07            | -168.07    | -6.22      | -167.99               | 0.60                  | -0.37                | -9.72               |
| 3,781.00            | 2.99            | 142.65      | 3,775.96            | -172.00    | -3.97      | -171.94               | 0.92                  | 0.38                 | -17.20              |
| 3,875.00            | 3.34            | 125.43      | 3,869.81            | -175.53    | -0.25      | -175.52               | 1.07                  | 0.37                 | -18.32              |
| 3,969.00            | 3.34            | 116.46      | 3,963.66            | -178.34    | 4.43       | -178.38               | 0.56                  | 0.00                 | -9.54               |
| 4,062.00            | 4.22            | 148.10      | 4,056.46            | -182.45    | 8.66       | -182.54               | 2.39                  | 0.95                 | 34.02               |
| 4,155.00            | 4.93            | 153.73      | 4,149.17            | -188.94    | 12.24      | -189.06               | 0.90                  | 0.76                 | 6.05                |
| 4,248.00            | 4.40            | 152.67      | 4,241.86            | -195.69    | 15.65      | -195.85               | 0.58                  | -0.57                | -1.14               |
| 4,342.00            | 3.87            | 154.08      | 4,335.61            | -201.75    | 18.69      | -201.94               | 0.57                  | -0.56                | 1.50                |
| 4,436.00            | 3.70            | 157.95      | 4,429.41            | -207.41    | 21.21      | -207.64               | 0.33                  | -0.18                | 4.12                |
| 4,530.00            | 3.87            | 146.17      | 4,523.20            | -212.86    | 24.12      | -213.11               | 0.85                  | 0.18                 | -12.53              |
| 4,624.00            | 4.40            | 139.84      | 4,616.96            | -218.25    | 28.21      | -218.55               | 0.74                  | 0.56                 | -6.73               |
| 4,718.00            | 4.05            | 142.13      | 4,710.70            | -223.63    | 32.57      | -223.97               | 0.41                  | -0.37                | 2.44                |
| 4,811.00            | 4.22            | 141.42      | 4,803.46            | -228.90    | 36.72      | -229.29               | 0.19                  | 0.18                 | -0.76               |
| 4,904.00            | 4.57            | 142.83      | 4,896.19            | -234.52    | 41.10      | -234.96               | 0.39                  | 0.38                 | 1.52                |
| 4,999.00            | 4.75            | 149.16      | 4,990.87            | -240.92    | 45.40      | -241.40               | 0.57                  | 0.19                 | 6.66                |
| 5,092.00            | 3.87            | 173.77      | 5,083.62            | -247.34    | 47.71      | -247.85               | 2.18                  | -0.95                | 26.46               |
| 5,186.00            | 3.87            | 195.04      | 5,177.41            | -253.56    | 47.23      | -254.06               | 1.52                  | 0.00                 | 22.63               |
| 5,280.00            | 3.34            | 193.63      | 5,271.22            | -259.28    | 45.77      | -259.77               | 0.57                  | -0.56                | -1.50               |
| 5,374.00            | 3.52            | 189.76      | 5,365.05            | -264.79    | 44.63      | -265.26               | 0.31                  | 0.19                 | -4.12               |



# Survey Report

**Company:** EOG Resources  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** Endurance 36 State Com  
**Well:** #704H  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well #704H  
**TVD Reference:** 3335' + 25' RKB @ 3360.01ft (H&P 659)  
**MD Reference:** 3335' + 25' RKB @ 3360.01ft (H&P 659)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Single User Db

## Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 5,467.00            | 3.17            | 197.32      | 5,457.90            | -270.06    | 43.38      | -270.52               | 0.60                  | -0.38                | 8.13                |
| 5,560.00            | 2.99            | 201.37      | 5,550.76            | -274.77    | 41.73      | -275.21               | 0.30                  | -0.19                | 4.35                |
| 5,654.00            | 2.99            | 209.63      | 5,644.63            | -279.19    | 39.63      | -279.60               | 0.46                  | 0.00                 | 8.79                |
| 5,747.00            | 2.99            | 210.68      | 5,737.51            | -283.38    | 37.19      | -283.77               | 0.06                  | 0.00                 | 1.13                |
| 5,840.00            | 2.64            | 212.97      | 5,830.40            | -287.26    | 34.79      | -287.63               | 0.40                  | -0.38                | 2.46                |
| 5,935.00            | 2.11            | 209.10      | 5,925.31            | -290.63    | 32.75      | -290.97               | 0.58                  | -0.56                | -4.07               |
| 6,029.00            | 2.46            | 210.51      | 6,019.24            | -293.88    | 30.88      | -294.20               | 0.38                  | 0.37                 | 1.50                |
| 6,215.00            | 1.76            | 204.18      | 6,205.11            | -299.92    | 27.68      | -300.21               | 0.40                  | -0.38                | -3.40               |
| 6,308.00            | 1.76            | 220.17      | 6,298.07            | -302.32    | 26.18      | -302.59               | 0.53                  | 0.00                 | 17.19               |
| 6,401.00            | 1.41            | 220.53      | 6,391.03            | -304.28    | 24.51      | -304.53               | 0.38                  | -0.38                | 0.39                |
| 6,495.00            | 1.41            | 212.09      | 6,485.00            | -306.14    | 23.15      | -306.37               | 0.22                  | 0.00                 | -8.98               |
| 6,588.00            | 1.41            | 215.25      | 6,577.98            | -308.04    | 21.88      | -308.26               | 0.08                  | 0.00                 | 3.40                |
| 6,682.00            | 1.41            | 214.55      | 6,671.95            | -309.94    | 20.56      | -310.14               | 0.02                  | 0.00                 | -0.74               |
| 6,776.00            | 1.41            | 227.21      | 6,765.92            | -311.67    | 19.05      | -311.87               | 0.33                  | 0.00                 | 13.47               |
| 6,869.00            | 1.41            | 220.88      | 6,858.89            | -313.32    | 17.46      | -313.49               | 0.17                  | 0.00                 | -6.81               |
| 6,962.00            | 1.58            | 224.74      | 6,951.86            | -315.09    | 15.81      | -315.25               | 0.21                  | 0.18                 | 4.15                |
| 7,055.00            | 1.41            | 224.22      | 7,044.83            | -316.82    | 14.11      | -316.96               | 0.18                  | -0.18                | -0.56               |
| 7,149.00            | 1.41            | 229.14      | 7,138.80            | -318.41    | 12.43      | -318.53               | 0.13                  | 0.00                 | 5.23                |
| 7,243.00            | 1.58            | 214.02      | 7,232.77            | -320.24    | 10.83      | -320.34               | 0.46                  | 0.18                 | -16.09              |
| 7,337.00            | 1.23            | 215.25      | 7,326.74            | -322.14    | 9.52       | -322.22               | 0.37                  | -0.37                | 1.31                |
| 7,431.00            | 0.53            | 317.73      | 7,420.73            | -322.64    | 8.65       | -322.72               | 1.53                  | -0.74                | 109.02              |
| 7,524.00            | 0.70            | 11.35       | 7,513.73            | -321.76    | 8.47       | -321.84               | 0.62                  | 0.18                 | 57.66               |
| 7,618.00            | 0.88            | 9.76        | 7,607.72            | -320.49    | 8.70       | -320.57               | 0.19                  | 0.19                 | -1.69               |
| 7,712.00            | 0.35            | 234.41      | 7,701.72            | -319.95    | 8.59       | -320.02               | 1.23                  | -0.56                | -143.99             |
| 7,806.00            | 0.88            | 230.02      | 7,795.71            | -320.58    | 7.81       | -320.64               | 0.57                  | 0.56                 | -4.67               |
| 7,900.00            | 1.94            | 202.60      | 7,889.68            | -322.51    | 6.64       | -322.56               | 1.31                  | 1.13                 | -29.17              |
| 7,994.00            | 1.76            | 220.88      | 7,983.63            | -325.07    | 5.09       | -325.11               | 0.65                  | -0.19                | 19.45               |
| 8,078.00            | 1.76            | 213.67      | 8,067.59            | -327.12    | 3.53       | -327.14               | 0.26                  | 0.00                 | -8.58               |
| 8,172.00            | 1.76            | 212.97      | 8,161.55            | -329.53    | 1.94       | -329.53               | 0.02                  | 0.00                 | -0.74               |
| 8,266.00            | 2.29            | 262.19      | 8,255.50            | -331.00    | -0.71      | -330.97               | 1.87                  | 0.56                 | 52.36               |
| 8,360.00            | 2.29            | 261.31      | 8,349.42            | -331.54    | -4.42      | -331.47               | 0.04                  | 0.00                 | -0.94               |
| 8,454.00            | 2.46            | 257.26      | 8,443.34            | -332.27    | -8.25      | -332.15               | 0.25                  | 0.18                 | -4.31               |
| 8,548.00            | 2.99            | 290.49      | 8,537.24            | -331.85    | -12.51     | -331.69               | 1.74                  | 0.56                 | 35.35               |
| 8,643.00            | 2.99            | 292.60      | 8,632.11            | -330.03    | -17.12     | -329.82               | 0.12                  | 0.00                 | 2.22                |
| 8,737.00            | 2.82            | 286.09      | 8,725.99            | -328.45    | -21.60     | -328.19               | 0.39                  | -0.18                | -6.93               |
| 8,831.00            | 2.64            | 280.12      | 8,819.88            | -327.43    | -25.96     | -327.12               | 0.36                  | -0.19                | -6.35               |
| 8,925.00            | 2.64            | 278.89      | 8,913.78            | -326.71    | -30.23     | -326.36               | 0.06                  | 0.00                 | -1.31               |
| 9,018.00            | 2.46            | 276.78      | 9,006.69            | -326.15    | -34.33     | -325.75               | 0.22                  | -0.19                | -2.27               |
| 9,112.00            | 2.29            | 275.19      | 9,100.61            | -325.74    | -38.20     | -325.30               | 0.19                  | -0.18                | -1.69               |
| 9,206.00            | 1.23            | 305.96      | 9,194.57            | -324.98    | -40.89     | -324.51               | 1.47                  | -1.13                | 32.73               |
| 9,301.00            | 1.23            | 315.98      | 9,289.54            | -323.64    | -42.42     | -323.16               | 0.23                  | 0.00                 | 10.55               |
| 9,394.00            | 0.88            | 306.83      | 9,382.53            | -322.50    | -43.68     | -322.00               | 0.42                  | -0.38                | -9.84               |
| 9,489.00            | 0.70            | 282.75      | 9,477.52            | -321.93    | -44.83     | -321.42               | 0.39                  | -0.19                | -25.35              |





# Survey Report

|                  |                             |                                     |                                       |
|------------------|-----------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | EOG Resources               | <b>Local Co-ordinate Reference:</b> | Well #704H                            |
| <b>Project:</b>  | Lea County, NM (NAD 27 NME) | <b>TVD Reference:</b>               | 3335' + 25' RKB @ 3360.01ft (H&P 659) |
| <b>Site:</b>     | Endurance 36 State Com      | <b>MD Reference:</b>                | 3335' + 25' RKB @ 3360.01ft (H&P 659) |
| <b>Well:</b>     | #704H                       | <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

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 9,583.00            | 0.53            | 229.84      | 9,571.52            | -322.09    | -45.73     | -321.56               | 0.60                  | -0.18                | -56.29              |
| 9,676.00            | 0.70            | 189.41      | 9,664.51            | -322.92    | -46.15     | -322.40               | 0.49                  | 0.18                 | -43.47              |
| 9,769.00            | 0.88            | 180.45      | 9,757.50            | -324.20    | -46.25     | -323.67               | 0.23                  | 0.19                 | -9.63               |
| 9,863.00            | 1.23            | 184.14      | 9,851.49            | -325.93    | -46.33     | -325.40               | 0.38                  | 0.37                 | 3.93                |
| 9,957.00            | 1.06            | 310.17      | 9,945.48            | -326.37    | -47.06     | -325.84               | 2.17                  | -0.18                | 134.07              |
| 10,051.00           | 1.58            | 312.81      | 10,039.45           | -324.93    | -48.68     | -324.38               | 0.56                  | 0.55                 | 2.81                |
| 10,145.00           | 1.94            | 305.08      | 10,133.41           | -323.14    | -50.93     | -322.56               | 0.46                  | 0.38                 | -8.22               |
| 10,238.00           | 2.11            | 298.40      | 10,226.35           | -321.42    | -53.73     | -320.81               | 0.31                  | 0.18                 | -7.18               |
| 10,332.00           | 1.94            | 291.19      | 10,320.29           | -320.02    | -56.73     | -319.38               | 0.33                  | -0.18                | -7.67               |
| 10,425.00           | 2.46            | 295.58      | 10,413.22           | -318.59    | -60.00     | -317.91               | 0.59                  | 0.56                 | 4.72                |
| 10,518.00           | 2.99            | 294.71      | 10,506.12           | -316.71    | -64.00     | -315.99               | 0.57                  | 0.57                 | -0.94               |
| 10,611.00           | 4.40            | 289.78      | 10,598.92           | -314.49    | -69.56     | -313.71               | 1.55                  | 1.52                 | -5.30               |
| 10,704.00           | 4.40            | 284.86      | 10,691.65           | -312.37    | -76.37     | -311.51               | 0.41                  | 0.00                 | -5.29               |
| 10,798.00           | 4.75            | 285.04      | 10,785.35           | -310.43    | -83.61     | -309.50               | 0.37                  | 0.37                 | 0.19                |
| 10,891.00           | 5.10            | 282.58      | 10,878.00           | -308.53    | -91.37     | -307.51               | 0.44                  | 0.38                 | -2.65               |
| 10,984.00           | 5.98            | 282.23      | 10,970.57           | -306.61    | -100.13    | -305.49               | 0.95                  | 0.95                 | -0.38               |
| 11,077.00           | 5.98            | 280.99      | 11,063.06           | -304.66    | -109.62    | -303.43               | 0.14                  | 0.00                 | -1.33               |
| 11,139.00           | 5.81            | 278.01      | 11,124.73           | -303.61    | -115.90    | -302.31               | 0.56                  | -0.27                | -4.81               |
| 11,268.00           | 3.70            | 295.94      | 11,253.29           | -300.87    | -126.11    | -299.47               | 1.98                  | -1.64                | 13.90               |
| 11,362.00           | 1.41            | 357.11      | 11,347.20           | -298.39    | -128.90    | -296.96               | 3.47                  | -2.44                | 65.07               |
| 11,456.00           | 4.57            | 61.44       | 11,441.08           | -295.45    | -125.67    | -294.05               | 4.42                  | 3.36                 | 68.44               |
| 11,549.00           | 3.52            | 51.95       | 11,533.85           | -291.91    | -120.16    | -290.58               | 1.34                  | -1.13                | -10.20              |
| 11,643.00           | 2.99            | 71.81       | 11,627.70           | -289.37    | -115.56    | -288.08               | 1.32                  | -0.56                | 21.13               |
| 11,736.00           | 0.53            | 33.49       | 11,720.65           | -288.25    | -113.02    | -286.99               | 2.79                  | -2.65                | -41.20              |
| 11,830.00           | 2.82            | 106.97      | 11,814.61           | -288.57    | -110.57    | -287.33               | 2.89                  | 2.44                 | 78.17               |
| 11,923.00           | 2.46            | 107.85      | 11,907.51           | -289.85    | -106.48    | -288.66               | 0.39                  | -0.39                | 0.95                |
| 12,016.00           | 2.11            | 104.69      | 12,000.44           | -290.89    | -102.92    | -289.74               | 0.40                  | -0.38                | -3.40               |
| 12,109.00           | 2.46            | 111.89      | 12,093.36           | -292.07    | -99.42     | -290.96               | 0.49                  | 0.38                 | 7.74                |
| 12,205.00           | 1.23            | 28.57       | 12,189.32           | -291.93    | -97.01     | -290.85               | 2.73                  | -1.28                | -86.79              |
| 12,252.00           | 8.27            | 3.44        | 12,236.14           | -288.11    | -96.57     | -287.03               | 15.27                 | 14.98                | -53.47              |
| 12,299.00           | 15.84           | 5.37        | 12,282.07           | -278.34    | -95.76     | -277.27               | 16.13                 | 16.11                | 4.11                |
| 12,346.00           | 23.93           | 10.64       | 12,326.23           | -262.55    | -93.40     | -261.51               | 17.61                 | 17.21                | 11.21               |
| 12,392.00           | 31.67           | 13.10       | 12,366.89           | -241.59    | -88.93     | -240.60               | 17.01                 | 16.83                | 5.35                |
| 12,439.00           | 37.48           | 9.76        | 12,405.58           | -215.46    | -83.71     | -214.52               | 13.00                 | 12.36                | -7.11               |
| 12,486.00           | 40.29           | 12.40       | 12,442.16           | -186.52    | -78.02     | -185.65               | 6.94                  | 5.98                 | 5.62                |
| 12,533.00           | 45.75           | 9.24        | 12,476.51           | -155.03    | -72.05     | -154.23               | 12.49                 | 11.62                | -6.72               |
| 12,580.00           | 53.49           | 6.95        | 12,506.94           | -119.61    | -67.05     | -118.87               | 16.88                 | 16.47                | -4.87               |
| 12,627.00           | 60.70           | 6.78        | 12,532.46           | -80.46     | -62.34     | -79.77                | 15.34                 | 15.34                | -0.36               |
| 12,674.00           | 65.98           | 5.72        | 12,553.54           | -38.72     | -57.78     | -38.08                | 11.41                 | 11.23                | -2.26               |
| 12,721.00           | 72.32           | 3.79        | 12,570.26           | 5.03       | -54.15     | 5.62                  | 14.02                 | 13.49                | -4.11               |
| 12,768.00           | 80.94           | 2.03        | 12,581.12           | 50.65      | -51.85     | 51.22                 | 18.70                 | 18.34                | -3.74               |
| 12,796.00           | 84.46           | 0.10        | 12,584.68           | 78.41      | -51.33     | 78.97                 | 14.31                 | 12.57                | -6.89               |
| 12,827.00           | 87.27           | 0.10        | 12,586.91           | 109.33     | -51.28     | 109.89                | 9.06                  | 9.06                 | 0.00                |
| 12,889.00           | 88.33           | 359.74      | 12,589.29           | 171.28     | -51.37     | 171.84                | 1.81                  | 1.71                 | -0.58               |





# Survey Report

Company: EOG Resources  
 Project: Lea County, NM (NAD 27 NME)  
 Site: Endurance 36 State Com  
 Well: #704H  
 Wellbore: OH  
 Design: OH

Local Co-ordinate Reference: Well #704H  
 TVD Reference: 3335' + 25' RKB @ 3360.01ft (H&P 659)  
 MD Reference: 3335' + 25' RKB @ 3360.01ft (H&P 659)  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature  
 Database: EDM 5000.1 Single User Db

## Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 12,984.00           | 89.56           | 359.04      | 12,591.04           | 266.26     | -52.38     | 266.82                | 1.49                  | 1.29                 | -0.74               |
| 13,078.00           | 90.26           | 357.46      | 12,591.19           | 360.21     | -55.25     | 360.80                | 1.84                  | 0.74                 | -1.68               |
| 13,173.00           | 91.67           | 358.69      | 12,589.59           | 455.14     | -58.44     | 455.75                | 1.97                  | 1.48                 | 1.29                |
| 13,267.00           | 92.02           | 1.15        | 12,586.56           | 549.08     | -58.57     | 549.69                | 2.64                  | 0.37                 | 2.62                |
| 13,362.00           | 90.79           | 1.15        | 12,584.23           | 644.03     | -56.66     | 644.62                | 1.29                  | -1.29                | 0.00                |
| 13,456.00           | 89.03           | 1.68        | 12,584.38           | 738.00     | -54.34     | 738.55                | 1.96                  | -1.87                | 0.56                |
| 13,550.00           | 89.56           | 1.85        | 12,585.54           | 831.95     | -51.45     | 832.46                | 0.59                  | 0.56                 | 0.18                |
| 13,644.00           | 90.26           | 1.85        | 12,585.69           | 925.90     | -48.41     | 926.38                | 0.74                  | 0.74                 | 0.00                |
| 13,738.00           | 89.03           | 2.21        | 12,586.27           | 1,019.84   | -45.08     | 1,020.27              | 1.36                  | -1.31                | 0.38                |
| 13,832.00           | 90.26           | 2.56        | 12,586.85           | 1,113.75   | -41.17     | 1,114.14              | 1.36                  | 1.31                 | 0.37                |
| 13,927.00           | 89.03           | 359.57      | 12,587.44           | 1,208.72   | -39.41     | 1,209.08              | 3.40                  | -1.29                | -3.15               |
| 14,021.00           | 90.79           | 0.98        | 12,587.59           | 1,302.71   | -38.95     | 1,303.06              | 2.40                  | 1.87                 | 1.50                |
| 14,115.00           | 88.33           | 0.10        | 12,588.31           | 1,396.70   | -38.07     | 1,397.03              | 2.78                  | -2.62                | -0.94               |
| 14,209.00           | 88.86           | 0.62        | 12,590.61           | 1,490.67   | -37.48     | 1,490.99              | 0.79                  | 0.56                 | 0.55                |
| 14,303.00           | 90.09           | 0.62        | 12,591.48           | 1,584.66   | -36.46     | 1,584.96              | 1.31                  | 1.31                 | 0.00                |
| 14,398.00           | 89.91           | 359.92      | 12,591.48           | 1,679.65   | -36.01     | 1,679.95              | 0.76                  | -0.19                | -0.74               |
| 14,492.00           | 89.91           | 359.22      | 12,591.62           | 1,773.65   | -36.72     | 1,773.95              | 0.74                  | 0.00                 | -0.74               |
| 14,586.00           | 91.50           | 358.87      | 12,590.47           | 1,867.63   | -38.29     | 1,867.94              | 1.73                  | 1.69                 | -0.37               |
| 14,680.00           | 90.26           | 359.22      | 12,589.02           | 1,961.60   | -39.85     | 1,961.92              | 1.37                  | -1.32                | 0.37                |
| 14,774.00           | 90.44           | 359.04      | 12,588.45           | 2,055.59   | -41.28     | 2,055.92              | 0.27                  | 0.19                 | -0.19               |
| 14,869.00           | 90.97           | 358.34      | 12,587.28           | 2,150.56   | -43.45     | 2,150.90              | 0.92                  | 0.56                 | -0.74               |
| 14,963.00           | 90.97           | 358.87      | 12,585.69           | 2,244.51   | -45.74     | 2,244.88              | 0.56                  | 0.00                 | 0.56                |
| 15,057.00           | 91.85           | 359.39      | 12,583.38           | 2,338.47   | -47.17     | 2,338.85              | 1.09                  | 0.94                 | 0.55                |
| 15,151.00           | 90.62           | 359.39      | 12,581.35           | 2,432.44   | -48.17     | 2,432.83              | 1.31                  | -1.31                | 0.00                |
| 15,244.00           | 90.09           | 359.39      | 12,580.77           | 2,525.44   | -49.16     | 2,525.82              | 0.57                  | -0.57                | 0.00                |
| 15,339.00           | 89.03           | 358.87      | 12,581.50           | 2,620.42   | -50.60     | 2,620.82              | 1.24                  | -1.12                | -0.55               |
| 15,432.00           | 90.62           | 359.22      | 12,581.79           | 2,713.41   | -52.15     | 2,713.81              | 1.75                  | 1.71                 | 0.38                |
| 15,526.00           | 90.44           | 359.04      | 12,580.92           | 2,807.39   | -53.58     | 2,807.81              | 0.27                  | -0.19                | -0.19               |
| 15,619.00           | 92.55           | 359.57      | 12,578.49           | 2,900.35   | -54.70     | 2,900.77              | 2.34                  | 2.27                 | 0.57                |
| 15,713.00           | 87.62           | 359.74      | 12,578.35           | 2,994.32   | -55.27     | 2,994.74              | 5.25                  | -5.24                | 0.18                |
| 15,806.00           | 88.86           | 359.39      | 12,581.21           | 3,087.27   | -55.98     | 3,087.70              | 1.39                  | 1.33                 | -0.38               |
| 15,899.00           | 90.62           | 358.34      | 12,581.63           | 3,180.24   | -57.82     | 3,180.69              | 2.20                  | 1.89                 | -1.13               |
| 15,993.00           | 89.21           | 357.28      | 12,581.77           | 3,274.17   | -61.41     | 3,274.65              | 1.88                  | -1.50                | -1.13               |
| 16,086.00           | 91.32           | 356.93      | 12,581.34           | 3,367.05   | -66.11     | 3,367.57              | 2.30                  | 2.27                 | -0.38               |
| 16,180.00           | 90.09           | 357.28      | 12,580.18           | 3,460.92   | -70.85     | 3,461.49              | 1.36                  | -1.31                | 0.37                |
| 16,274.00           | 89.21           | 0.45        | 12,580.76           | 3,554.88   | -72.71     | 3,555.47              | 3.50                  | -0.94                | 3.37                |
| 16,367.00           | 88.86           | 1.68        | 12,582.32           | 3,647.85   | -70.99     | 3,648.41              | 1.37                  | -0.38                | 1.32                |
| 16,460.00           | 91.50           | 1.33        | 12,582.03           | 3,740.81   | -68.54     | 3,741.34              | 2.86                  | 2.84                 | -0.38               |
| 16,554.00           | 88.33           | 2.38        | 12,582.17           | 3,834.75   | -65.50     | 3,835.24              | 3.55                  | -3.37                | 1.12                |
| 16,648.00           | 91.67           | 2.21        | 12,582.17           | 3,928.66   | -61.74     | 3,929.10              | 3.56                  | 3.55                 | -0.18               |
| 16,742.00           | 88.50           | 4.14        | 12,582.03           | 4,022.50   | -56.53     | 4,022.88              | 3.95                  | -3.37                | 2.05                |
| 16,836.00           | 86.39           | 2.73        | 12,586.22           | 4,116.23   | -50.91     | 4,116.54              | 2.70                  | -2.24                | -1.50               |
| 16,929.00           | 87.98           | 0.62        | 12,590.79           | 4,209.07   | -48.19     | 4,209.34              | 2.84                  | 1.71                 | -2.27               |





# Survey Report

Company: EOG Resources  
Project: Lea County, NM (NAD 27 NME)  
Site: Endurance 36 State Corn  
Well: #704H  
Wellbore: OH  
Design: OH

Local Co-ordinate Reference: Well #704H  
TVD Reference: 3335' + 25' RKB @ 3360.01ft (H&P 659)  
MD Reference: 3335' + 25' RKB @ 3360.01ft (H&P 659)  
North Reference: Grid  
Survey Calculation Method: Minimum Curvature  
Database: EDM 5000.1 Single User Db

## Survey

| Measured Depth (ft)                | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|------------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 17,023.00                          | 87.10           | 358.69      | 12,594.82           | 4,302.97   | -48.76     | 4,303.25              | 2.25                  | -0.94                | -2.05               |
| 17,116.00                          | 88.15           | 359.57      | 12,598.68           | 4,395.88   | -50.17     | 4,396.17              | 1.47                  | 1.13                 | 0.95                |
| 17,210.00                          | 86.74           | 358.51      | 12,602.87           | 4,489.77   | -51.74     | 4,490.07              | 1.88                  | -1.50                | -1.13               |
| 17,305.00                          | 91.85           | 358.16      | 12,604.04           | 4,584.69   | -54.50     | 4,585.01              | 5.39                  | 5.38                 | -0.37               |
| 17,399.00                          | 92.02           | 359.39      | 12,600.86           | 4,678.62   | -56.51     | 4,678.95              | 1.32                  | 0.18                 | 1.31                |
| 17,492.00                          | 92.02           | 0.62        | 12,597.58           | 4,771.56   | -56.50     | 4,771.89              | 1.32                  | 0.00                 | 1.32                |
| 17,586.00                          | 90.97           | 358.69      | 12,595.13           | 4,865.52   | -57.07     | 4,865.85              | 2.34                  | -1.12                | -2.05               |
| 17,680.00                          | 92.38           | 359.92      | 12,592.38           | 4,959.47   | -58.21     | 4,959.81              | 1.99                  | 1.50                 | 1.31                |
| 17,774.00                          | 90.09           | 356.40      | 12,590.36           | 5,053.37   | -61.22     | 5,053.74              | 4.47                  | -2.44                | -3.74               |
| 17,867.00                          | 95.37           | 359.74      | 12,585.93           | 5,146.17   | -64.36     | 5,146.57              | 6.72                  | 5.68                 | 3.59                |
| 17,961.00                          | 92.90           | 1.33        | 12,579.15           | 5,239.91   | -63.48     | 5,240.29              | 3.12                  | -2.63                | 1.69                |
| 18,055.00                          | 90.97           | 1.15        | 12,575.98           | 5,333.83   | -61.45     | 5,334.18              | 2.06                  | -2.05                | -0.19               |
| 18,149.00                          | 89.74           | 358.87      | 12,575.39           | 5,427.82   | -61.43     | 5,428.17              | 2.76                  | -1.31                | -2.43               |
| 18,243.00                          | 90.09           | 358.16      | 12,575.53           | 5,521.79   | -63.87     | 5,522.16              | 0.84                  | 0.37                 | -0.76               |
| 18,336.00                          | 87.10           | 357.99      | 12,577.81           | 5,614.70   | -66.99     | 5,615.09              | 3.22                  | -3.22                | -0.18               |
| 18,429.00                          | 90.44           | 359.39      | 12,579.81           | 5,707.64   | -69.11     | 5,708.05              | 3.89                  | 3.59                 | 1.51                |
| 18,523.00                          | 87.62           | 358.34      | 12,581.40           | 5,801.59   | -70.98     | 5,802.02              | 3.20                  | -3.00                | -1.12               |
| 18,616.00                          | 89.56           | 358.34      | 12,583.69           | 5,894.52   | -73.67     | 5,894.98              | 2.09                  | 2.09                 | 0.00                |
| 18,710.00                          | 89.74           | 359.74      | 12,584.26           | 5,988.50   | -75.24     | 5,988.97              | 1.50                  | 0.19                 | 1.49                |
| 18,804.00                          | 86.57           | 359.39      | 12,587.29           | 6,082.44   | -75.96     | 6,082.91              | 3.39                  | -3.37                | -0.37               |
| 18,896.00                          | 90.79           | 358.16      | 12,589.41           | 6,174.37   | -77.92     | 6,174.86              | 4.78                  | 4.59                 | -1.34               |
| 18,989.00                          | 85.87           | 357.64      | 12,592.12           | 6,267.24   | -81.33     | 6,267.76              | 5.32                  | -5.29                | -0.56               |
| 19,083.00                          | 86.39           | 0.10        | 12,598.46           | 6,361.00   | -83.18     | 6,361.53              | 2.67                  | 0.55                 | 2.62                |
| 19,176.00                          | 87.45           | 358.87      | 12,603.46           | 6,453.86   | -84.01     | 6,454.39              | 1.74                  | 1.14                 | -1.32               |
| 19,270.00                          | 94.31           | 358.69      | 12,602.02           | 6,547.77   | -86.01     | 6,548.32              | 7.30                  | 7.30                 | -0.19               |
| 19,364.00                          | 93.26           | 359.57      | 12,595.81           | 6,641.55   | -87.43     | 6,642.11              | 1.46                  | -1.12                | 0.94                |
| 19,458.00                          | 90.62           | 0.80        | 12,592.63           | 6,735.49   | -87.13     | 6,736.04              | 3.10                  | -2.81                | 1.31                |
| 19,551.00                          | 91.32           | 0.80        | 12,591.06           | 6,828.47   | -85.83     | 6,829.00              | 0.75                  | 0.75                 | 0.00                |
| 19551'MD: Final MWD Survey         |                 |             |                     |            |            |                       |                       |                      |                     |
| 19,652.00                          | 91.32           | 0.80        | 12,588.73           | 6,929.43   | -84.42     | 6,929.94              | 0.00                  | 0.00                 | 0.00                |
| 19652'MD: Projected to Total Depth |                 |             |                     |            |            |                       |                       |                      |                     |

## Survey Annotations

| Measured Depth (ft) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Comment                            |
|---------------------|---------------------|------------|------------|------------------------------------|
| 192.00              | 191.98              | -1.71      | -1.63      | 192'MD: Begin Driltech MWD         |
| 19,551.00           | 12,591.06           | 6,828.47   | -85.83     | 19551'MD: Final MWD Survey         |
| 19,652.00           | 12,588.73           | 6,929.43   | -84.42     | 19652'MD: Projected to Total Depth |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_