



## **EOG Resources - Midland**

**Lea County, NM (NAD 83 NME)**

**Adder 31 State**

**#506H**

**OH**

**Plan: Plan #0.1**

## **Standard Planning Report**

**11 March, 2019**

Database: EDM 5000.14  
Company: EOG Resources - Midland  
Project: Lea County, NM (NAD 83 NME)  
Site: Adder 31 State  
Well: #506H  
Wellbore: OH  
Design: Plan #0.1

Local Co-ordinate Reference: Well #506H  
TVD Reference: KB = 25 @ 3532.0usft  
MD Reference: KB = 25 @ 3532.0usft  
North Reference: Grid  
Survey Calculation Method: Minimum Curvature

|             |                             |               |                |
|-------------|-----------------------------|---------------|----------------|
| Project     | Lea County, NM (NAD 83 NME) |               |                |
| Map System: | US State Plane 1983         | System Datum: | Mean Sea Level |
| Geo Datum:  | North American Datum 1983   |               |                |
| Map Zone:   | New Mexico Eastern Zone     |               |                |

|                       |                |                   |                   |
|-----------------------|----------------|-------------------|-------------------|
| Site                  | Adder 31 State |                   |                   |
| Site Position:        |                | Northing:         | 425,513.00 usft   |
| From:                 | Map            | Easting:          | 765,412.00 usft   |
| Position Uncertainty: | 0.0 usft       | Slot Radius:      | 13-3/16 "         |
|                       |                | Latitude:         | 32° 10' 3.867 N   |
|                       |                | Longitude:        | 103° 36' 33.017 W |
|                       |                | Grid Convergence: | 0.39 °            |

|                      |          |                     |                   |
|----------------------|----------|---------------------|-------------------|
| Well                 | #506H    |                     |                   |
| Well Position        | +N/-S    | 443.0 usft          | Northing:         |
|                      | +E/-W    | 1,144.0 usft        | Easting:          |
| Position Uncertainty | 0.0 usft | Wellhead Elevation: | Ground Level:     |
|                      |          |                     | 3,507.0 usft      |
|                      |          |                     | Latitude:         |
|                      |          |                     | 32° 10' 8.174 N   |
|                      |          |                     | Longitude:        |
|                      |          |                     | 103° 36' 19.673 W |

|           |            |             |                 |
|-----------|------------|-------------|-----------------|
| Wellbore  | OH         |             |                 |
| Magnetics | Model Name | Sample Date | Declination     |
|           |            |             | (°)             |
|           | IGRF2015   | 3/11/2019   | 6.78            |
|           |            |             | Dip Angle       |
|           |            |             | (°)             |
|           |            |             | 59.98           |
|           |            |             | Field Strength  |
|           |            |             | (nT)            |
|           |            |             | 47,723.34299909 |

|                   |                  |        |               |
|-------------------|------------------|--------|---------------|
| Design            | Plan #0.1        |        |               |
| Audit Notes:      |                  |        |               |
| Version:          | Phase:           | PLAN   | Tie On Depth: |
|                   |                  |        | 0.0           |
| Vertical Section: | Depth From (TVD) | +N/-S  | +E/-W         |
|                   | (usft)           | (usft) | (usft)        |
|                   | 0.0              | 0.0    | 0.0           |
|                   |                  |        | Direction     |
|                   |                  |        | (°)           |
|                   |                  |        | 355.99        |

|                          |                |                         |                     |
|--------------------------|----------------|-------------------------|---------------------|
| Plan Survey Tool Program | Date 3/11/2019 |                         |                     |
| Depth From               | Depth To       | Survey (Wellbore)       | Tool Name           |
| (usft)                   | (usft)         |                         |                     |
| 1                        | 0.0            | 16,032.8 Plan #0.1 (OH) | MWD                 |
|                          |                |                         | OWSG MWD - Standard |
|                          |                |                         | Remarks             |

|               |             |         |          |         |        |             |             |             |        |                      |
|---------------|-------------|---------|----------|---------|--------|-------------|-------------|-------------|--------|----------------------|
| Plan Sections |             |         |          |         |        |             |             |             |        |                      |
| Measured      | Inclination | Azimuth | Vertical | +N/-S   | +E/-W  | Dogleg      | Build       | Turn        | TFO    | Target               |
| Depth         | (°)         | (°)     | Depth    | (usft)  | (usft) | Rate        | Rate        | Rate        | (°)    |                      |
| (usft)        |             |         | (usft)   |         |        | (°/100usft) | (°/100usft) | (°/100usft) |        |                      |
| 0.0           | 0.00        | 0.00    | 0.0      | 0.0     | 0.0    | 0.00        | 0.00        | 0.00        | 0.00   |                      |
| 1,300.0       | 0.00        | 0.00    | 1,300.0  | 0.0     | 0.0    | 0.00        | 0.00        | 0.00        | 0.00   |                      |
| 1,536.0       | 4.72        | 201.15  | 1,535.7  | -9.1    | -3.5   | 2.00        | 2.00        | 0.00        | 201.15 |                      |
| 10,395.1      | 4.72        | 201.15  | 10,364.8 | -688.9  | -266.5 | 0.00        | 0.00        | 0.00        | 0.00   |                      |
| 10,631.1      | 0.00        | 0.00    | 10,600.5 | -698.0  | -270.0 | 2.00        | -2.00       | 0.00        | 180.00 | KOP(Adder 31 State 1 |
| 11,381.1      | 90.00       | 359.54  | 11,078.0 | -220.6  | -273.8 | 12.00       | 12.00       | -0.06       | 359.54 |                      |
| 16,032.8      | 90.00       | 359.54  | 11,078.0 | 4,431.0 | -311.0 | 0.00        | 0.00        | 0.00        | 0.00   | PBHL(Adder 31 State  |



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 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature

## Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 100.0                 | 0.00            | 0.00        | 100.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 200.0                 | 0.00            | 0.00        | 200.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 300.0                 | 0.00            | 0.00        | 300.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 400.0                 | 0.00            | 0.00        | 400.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 500.0                 | 0.00            | 0.00        | 500.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 600.0                 | 0.00            | 0.00        | 600.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 700.0                 | 0.00            | 0.00        | 700.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 800.0                 | 0.00            | 0.00        | 800.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 900.0                 | 0.00            | 0.00        | 900.0                 | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,000.0               | 0.00            | 0.00        | 1,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,100.0               | 0.00            | 0.00        | 1,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,200.0               | 0.00            | 0.00        | 1,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,300.0               | 0.00            | 0.00        | 1,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,400.0               | 2.00            | 201.15      | 1,400.0               | -1.6         | -0.6         | -1.6                    | 2.00                    | 2.00                   | 0.00                  |
| 1,500.0               | 4.00            | 201.15      | 1,499.8               | -6.5         | -2.5         | -6.3                    | 2.00                    | 2.00                   | 0.00                  |
| 1,536.0               | 4.72            | 201.15      | 1,535.7               | -9.1         | -3.5         | -8.8                    | 2.00                    | 2.00                   | 0.00                  |
| 1,600.0               | 4.72            | 201.15      | 1,599.5               | -14.0        | -5.4         | -13.6                   | 0.00                    | 0.00                   | 0.00                  |
| 1,700.0               | 4.72            | 201.15      | 1,699.2               | -21.6        | -8.4         | -21.0                   | 0.00                    | 0.00                   | 0.00                  |
| 1,800.0               | 4.72            | 201.15      | 1,798.8               | -29.3        | -11.3        | -28.5                   | 0.00                    | 0.00                   | 0.00                  |
| 1,900.0               | 4.72            | 201.15      | 1,898.5               | -37.0        | -14.3        | -35.9                   | 0.00                    | 0.00                   | 0.00                  |
| 2,000.0               | 4.72            | 201.15      | 1,998.2               | -44.7        | -17.3        | -43.4                   | 0.00                    | 0.00                   | 0.00                  |
| 2,100.0               | 4.72            | 201.15      | 2,097.8               | -52.3        | -20.2        | -50.8                   | 0.00                    | 0.00                   | 0.00                  |
| 2,200.0               | 4.72            | 201.15      | 2,197.5               | -60.0        | -23.2        | -58.2                   | 0.00                    | 0.00                   | 0.00                  |
| 2,300.0               | 4.72            | 201.15      | 2,297.1               | -67.7        | -26.2        | -65.7                   | 0.00                    | 0.00                   | 0.00                  |
| 2,400.0               | 4.72            | 201.15      | 2,396.8               | -75.4        | -29.2        | -73.1                   | 0.00                    | 0.00                   | 0.00                  |
| 2,500.0               | 4.72            | 201.15      | 2,496.5               | -83.0        | -32.1        | -80.6                   | 0.00                    | 0.00                   | 0.00                  |
| 2,600.0               | 4.72            | 201.15      | 2,596.1               | -90.7        | -35.1        | -88.0                   | 0.00                    | 0.00                   | 0.00                  |
| 2,700.0               | 4.72            | 201.15      | 2,695.8               | -98.4        | -38.1        | -95.5                   | 0.00                    | 0.00                   | 0.00                  |
| 2,800.0               | 4.72            | 201.15      | 2,795.4               | -106.1       | -41.0        | -102.9                  | 0.00                    | 0.00                   | 0.00                  |
| 2,900.0               | 4.72            | 201.15      | 2,895.1               | -113.7       | -44.0        | -110.4                  | 0.00                    | 0.00                   | 0.00                  |
| 3,000.0               | 4.72            | 201.15      | 2,994.8               | -121.4       | -47.0        | -117.8                  | 0.00                    | 0.00                   | 0.00                  |
| 3,100.0               | 4.72            | 201.15      | 3,094.4               | -129.1       | -49.9        | -125.3                  | 0.00                    | 0.00                   | 0.00                  |
| 3,200.0               | 4.72            | 201.15      | 3,194.1               | -136.8       | -52.9        | -132.7                  | 0.00                    | 0.00                   | 0.00                  |
| 3,300.0               | 4.72            | 201.15      | 3,293.8               | -144.4       | -55.9        | -140.2                  | 0.00                    | 0.00                   | 0.00                  |
| 3,400.0               | 4.72            | 201.15      | 3,393.4               | -152.1       | -58.8        | -147.6                  | 0.00                    | 0.00                   | 0.00                  |
| 3,500.0               | 4.72            | 201.15      | 3,493.1               | -159.8       | -61.8        | -155.1                  | 0.00                    | 0.00                   | 0.00                  |
| 3,600.0               | 4.72            | 201.15      | 3,592.7               | -167.5       | -64.8        | -162.5                  | 0.00                    | 0.00                   | 0.00                  |
| 3,700.0               | 4.72            | 201.15      | 3,692.4               | -175.1       | -67.7        | -170.0                  | 0.00                    | 0.00                   | 0.00                  |
| 3,800.0               | 4.72            | 201.15      | 3,792.1               | -182.8       | -70.7        | -177.4                  | 0.00                    | 0.00                   | 0.00                  |
| 3,900.0               | 4.72            | 201.15      | 3,891.7               | -190.5       | -73.7        | -184.9                  | 0.00                    | 0.00                   | 0.00                  |
| 4,000.0               | 4.72            | 201.15      | 3,991.4               | -198.2       | -76.7        | -192.3                  | 0.00                    | 0.00                   | 0.00                  |
| 4,100.0               | 4.72            | 201.15      | 4,091.0               | -205.8       | -79.6        | -199.8                  | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0               | 4.72            | 201.15      | 4,190.7               | -213.5       | -82.6        | -207.2                  | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0               | 4.72            | 201.15      | 4,290.4               | -221.2       | -85.6        | -214.6                  | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0               | 4.72            | 201.15      | 4,390.0               | -228.9       | -88.5        | -222.1                  | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0               | 4.72            | 201.15      | 4,489.7               | -236.5       | -91.5        | -229.5                  | 0.00                    | 0.00                   | 0.00                  |
| 4,600.0               | 4.72            | 201.15      | 4,589.3               | -244.2       | -94.5        | -237.0                  | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0               | 4.72            | 201.15      | 4,689.0               | -251.9       | -97.4        | -244.4                  | 0.00                    | 0.00                   | 0.00                  |
| 4,800.0               | 4.72            | 201.15      | 4,788.7               | -259.6       | -100.4       | -251.9                  | 0.00                    | 0.00                   | 0.00                  |
| 4,900.0               | 4.72            | 201.15      | 4,888.3               | -267.2       | -103.4       | -259.3                  | 0.00                    | 0.00                   | 0.00                  |
| 5,000.0               | 4.72            | 201.15      | 4,988.0               | -274.9       | -106.3       | -266.8                  | 0.00                    | 0.00                   | 0.00                  |
| 5,100.0               | 4.72            | 201.15      | 5,087.6               | -282.6       | -109.3       | -274.2                  | 0.00                    | 0.00                   | 0.00                  |
| 5,200.0               | 4.72            | 201.15      | 5,187.3               | -290.2       | -112.3       | -281.7                  | 0.00                    | 0.00                   | 0.00                  |



# Planning Report

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 Project: Lea County, NM (NAD 83 NME)  
 Site: Adder 31 State  
 Well: #506H  
 Wellbore: OH  
 Design: Plan #0.1

Local Co-ordinate Reference: Well #506H  
 TVD Reference: KB = 25 @ 3532.0usft  
 MD Reference: KB = 25 @ 3532.0usft  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature

## Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 5,300.0               | 4.72            | 201.15      | 5,287.0               | -297.9       | -115.2       | -289.1                  | 0.00                    | 0.00                   | 0.00                  |
| 5,400.0               | 4.72            | 201.15      | 5,386.6               | -305.6       | -118.2       | -296.6                  | 0.00                    | 0.00                   | 0.00                  |
| 5,500.0               | 4.72            | 201.15      | 5,486.3               | -313.3       | -121.2       | -304.0                  | 0.00                    | 0.00                   | 0.00                  |
| 5,600.0               | 4.72            | 201.15      | 5,586.0               | -320.9       | -124.1       | -311.5                  | 0.00                    | 0.00                   | 0.00                  |
| 5,700.0               | 4.72            | 201.15      | 5,685.6               | -328.6       | -127.1       | -318.9                  | 0.00                    | 0.00                   | 0.00                  |
| 5,800.0               | 4.72            | 201.15      | 5,785.3               | -336.3       | -130.1       | -326.4                  | 0.00                    | 0.00                   | 0.00                  |
| 5,900.0               | 4.72            | 201.15      | 5,884.9               | -344.0       | -133.1       | -333.8                  | 0.00                    | 0.00                   | 0.00                  |
| 6,000.0               | 4.72            | 201.15      | 5,984.6               | -351.6       | -136.0       | -341.3                  | 0.00                    | 0.00                   | 0.00                  |
| 6,100.0               | 4.72            | 201.15      | 6,084.3               | -359.3       | -139.0       | -348.7                  | 0.00                    | 0.00                   | 0.00                  |
| 6,200.0               | 4.72            | 201.15      | 6,183.9               | -367.0       | -142.0       | -356.2                  | 0.00                    | 0.00                   | 0.00                  |
| 6,300.0               | 4.72            | 201.15      | 6,283.6               | -374.7       | -144.9       | -363.6                  | 0.00                    | 0.00                   | 0.00                  |
| 6,400.0               | 4.72            | 201.15      | 6,383.2               | -382.3       | -147.9       | -371.0                  | 0.00                    | 0.00                   | 0.00                  |
| 6,500.0               | 4.72            | 201.15      | 6,482.9               | -390.0       | -150.9       | -378.5                  | 0.00                    | 0.00                   | 0.00                  |
| 6,600.0               | 4.72            | 201.15      | 6,582.6               | -397.7       | -153.8       | -385.9                  | 0.00                    | 0.00                   | 0.00                  |
| 6,700.0               | 4.72            | 201.15      | 6,682.2               | -405.4       | -156.8       | -393.4                  | 0.00                    | 0.00                   | 0.00                  |
| 6,800.0               | 4.72            | 201.15      | 6,781.9               | -413.0       | -159.8       | -400.8                  | 0.00                    | 0.00                   | 0.00                  |
| 6,900.0               | 4.72            | 201.15      | 6,881.5               | -420.7       | -162.7       | -408.3                  | 0.00                    | 0.00                   | 0.00                  |
| 7,000.0               | 4.72            | 201.15      | 6,981.2               | -428.4       | -165.7       | -415.7                  | 0.00                    | 0.00                   | 0.00                  |
| 7,100.0               | 4.72            | 201.15      | 7,080.9               | -436.1       | -168.7       | -423.2                  | 0.00                    | 0.00                   | 0.00                  |
| 7,200.0               | 4.72            | 201.15      | 7,180.5               | -443.7       | -171.6       | -430.6                  | 0.00                    | 0.00                   | 0.00                  |
| 7,300.0               | 4.72            | 201.15      | 7,280.2               | -451.4       | -174.6       | -438.1                  | 0.00                    | 0.00                   | 0.00                  |
| 7,400.0               | 4.72            | 201.15      | 7,379.8               | -459.1       | -177.6       | -445.5                  | 0.00                    | 0.00                   | 0.00                  |
| 7,500.0               | 4.72            | 201.15      | 7,479.5               | -466.8       | -180.6       | -453.0                  | 0.00                    | 0.00                   | 0.00                  |
| 7,600.0               | 4.72            | 201.15      | 7,579.2               | -474.4       | -183.5       | -460.4                  | 0.00                    | 0.00                   | 0.00                  |
| 7,700.0               | 4.72            | 201.15      | 7,678.8               | -482.1       | -186.5       | -467.9                  | 0.00                    | 0.00                   | 0.00                  |
| 7,800.0               | 4.72            | 201.15      | 7,778.5               | -489.8       | -189.5       | -475.3                  | 0.00                    | 0.00                   | 0.00                  |
| 7,900.0               | 4.72            | 201.15      | 7,878.2               | -497.5       | -192.4       | -482.8                  | 0.00                    | 0.00                   | 0.00                  |
| 8,000.0               | 4.72            | 201.15      | 7,977.8               | -505.1       | -195.4       | -490.2                  | 0.00                    | 0.00                   | 0.00                  |
| 8,100.0               | 4.72            | 201.15      | 8,077.5               | -512.8       | -198.4       | -497.7                  | 0.00                    | 0.00                   | 0.00                  |
| 8,200.0               | 4.72            | 201.15      | 8,177.1               | -520.5       | -201.3       | -505.1                  | 0.00                    | 0.00                   | 0.00                  |
| 8,300.0               | 4.72            | 201.15      | 8,276.8               | -528.2       | -204.3       | -512.6                  | 0.00                    | 0.00                   | 0.00                  |
| 8,400.0               | 4.72            | 201.15      | 8,376.5               | -535.8       | -207.3       | -520.0                  | 0.00                    | 0.00                   | 0.00                  |
| 8,500.0               | 4.72            | 201.15      | 8,476.1               | -543.5       | -210.2       | -527.5                  | 0.00                    | 0.00                   | 0.00                  |
| 8,600.0               | 4.72            | 201.15      | 8,575.8               | -551.2       | -213.2       | -534.9                  | 0.00                    | 0.00                   | 0.00                  |
| 8,700.0               | 4.72            | 201.15      | 8,675.4               | -558.9       | -216.2       | -542.3                  | 0.00                    | 0.00                   | 0.00                  |
| 8,800.0               | 4.72            | 201.15      | 8,775.1               | -566.5       | -219.1       | -549.8                  | 0.00                    | 0.00                   | 0.00                  |
| 8,900.0               | 4.72            | 201.15      | 8,874.8               | -574.2       | -222.1       | -557.2                  | 0.00                    | 0.00                   | 0.00                  |
| 9,000.0               | 4.72            | 201.15      | 8,974.4               | -581.9       | -225.1       | -564.7                  | 0.00                    | 0.00                   | 0.00                  |
| 9,100.0               | 4.72            | 201.15      | 9,074.1               | -589.6       | -228.0       | -572.1                  | 0.00                    | 0.00                   | 0.00                  |
| 9,200.0               | 4.72            | 201.15      | 9,173.7               | -597.2       | -231.0       | -579.6                  | 0.00                    | 0.00                   | 0.00                  |
| 9,300.0               | 4.72            | 201.15      | 9,273.4               | -604.9       | -234.0       | -587.0                  | 0.00                    | 0.00                   | 0.00                  |
| 9,400.0               | 4.72            | 201.15      | 9,373.1               | -612.6       | -237.0       | -594.5                  | 0.00                    | 0.00                   | 0.00                  |
| 9,500.0               | 4.72            | 201.15      | 9,472.7               | -620.2       | -239.9       | -601.9                  | 0.00                    | 0.00                   | 0.00                  |
| 9,600.0               | 4.72            | 201.15      | 9,572.4               | -627.9       | -242.9       | -609.4                  | 0.00                    | 0.00                   | 0.00                  |
| 9,700.0               | 4.72            | 201.15      | 9,672.0               | -635.6       | -245.9       | -616.8                  | 0.00                    | 0.00                   | 0.00                  |
| 9,800.0               | 4.72            | 201.15      | 9,771.7               | -643.3       | -248.8       | -624.3                  | 0.00                    | 0.00                   | 0.00                  |
| 9,900.0               | 4.72            | 201.15      | 9,871.4               | -650.9       | -251.8       | -631.7                  | 0.00                    | 0.00                   | 0.00                  |
| 10,000.0              | 4.72            | 201.15      | 9,971.0               | -658.6       | -254.8       | -639.2                  | 0.00                    | 0.00                   | 0.00                  |
| 10,100.0              | 4.72            | 201.15      | 10,070.7              | -666.3       | -257.7       | -646.6                  | 0.00                    | 0.00                   | 0.00                  |
| 10,200.0              | 4.72            | 201.15      | 10,170.4              | -674.0       | -260.7       | -654.1                  | 0.00                    | 0.00                   | 0.00                  |
| 10,300.0              | 4.72            | 201.15      | 10,270.0              | -681.6       | -263.7       | -661.5                  | 0.00                    | 0.00                   | 0.00                  |
| 10,395.1              | 4.72            | 201.15      | 10,364.8              | -688.9       | -266.5       | -668.6                  | 0.00                    | 0.00                   | 0.00                  |
| 10,400.0              | 4.62            | 201.15      | 10,369.7              | -689.3       | -266.6       | -669.0                  | 2.00                    | -2.00                  | 0.00                  |
| 10,500.0              | 2.62            | 201.15      | 10,469.5              | -695.2       | -268.9       | -674.7                  | 2.00                    | -2.00                  | 0.00                  |



# Planning Report

Database: EDM 5000.14  
 Company: EOG Resources - Midland  
 Project: Lea County, NM (NAD 83 NME)  
 Site: Adder 31 State  
 Well: #506H  
 Wellbore: OH  
 Design: Plan #0.1

Local Co-ordinate Reference: Well #506H  
 TVD Reference: KB = 25 @ 3532.0usft  
 MD Reference: KB = 25 @ 3532.0usft  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature

## Planned Survey

| Measured Depth (usft)            | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 10,600.0                         | 0.62            | 201.15      | 10,569.4              | -697.8       | -269.9       | -677.2                  | 2.00                    | -2.00                  | 0.00                  |
| 10,631.1                         | 0.00            | 0.00        | 10,600.5              | -698.0       | -270.0       | -677.4                  | 2.00                    | -2.00                  | 0.00                  |
| <b>KOP(Adder 31 State #506H)</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,650.0                         | 2.27            | 359.54      | 10,619.4              | -697.6       | -270.0       | -677.0                  | 12.00                   | 12.00                  | 0.00                  |
| 10,675.0                         | 5.27            | 359.54      | 10,644.4              | -696.0       | -270.0       | -675.4                  | 12.00                   | 12.00                  | 0.00                  |
| 10,700.0                         | 8.27            | 359.54      | 10,669.2              | -693.0       | -270.0       | -672.4                  | 12.00                   | 12.00                  | 0.00                  |
| 10,725.0                         | 11.27           | 359.54      | 10,693.8              | -688.8       | -270.1       | -668.2                  | 12.00                   | 12.00                  | 0.00                  |
| 10,750.0                         | 14.27           | 359.54      | 10,718.2              | -683.3       | -270.1       | -662.7                  | 12.00                   | 12.00                  | 0.00                  |
| 10,775.0                         | 17.27           | 359.54      | 10,742.3              | -676.5       | -270.2       | -655.9                  | 12.00                   | 12.00                  | 0.00                  |
| 10,800.0                         | 20.27           | 359.54      | 10,765.9              | -668.4       | -270.2       | -647.9                  | 12.00                   | 12.00                  | 0.00                  |
| 10,825.0                         | 23.27           | 359.54      | 10,789.1              | -659.2       | -270.3       | -638.6                  | 12.00                   | 12.00                  | 0.00                  |
| 10,850.0                         | 26.27           | 359.54      | 10,811.8              | -648.7       | -270.4       | -628.2                  | 12.00                   | 12.00                  | 0.00                  |
| 10,875.0                         | 29.27           | 359.54      | 10,834.0              | -637.0       | -270.5       | -616.5                  | 12.00                   | 12.00                  | 0.00                  |
| 10,900.0                         | 32.27           | 359.54      | 10,855.4              | -624.3       | -270.6       | -603.8                  | 12.00                   | 12.00                  | 0.00                  |
| 10,925.0                         | 35.27           | 359.54      | 10,876.2              | -610.4       | -270.7       | -589.9                  | 12.00                   | 12.00                  | 0.00                  |
| 10,950.0                         | 38.27           | 359.54      | 10,896.2              | -595.4       | -270.8       | -575.0                  | 12.00                   | 12.00                  | 0.00                  |
| 10,975.0                         | 41.27           | 359.54      | 10,915.4              | -579.4       | -270.9       | -559.0                  | 12.00                   | 12.00                  | 0.00                  |
| 11,000.0                         | 44.27           | 359.54      | 10,933.8              | -562.4       | -271.1       | -542.1                  | 12.00                   | 12.00                  | 0.00                  |
| 11,025.0                         | 47.27           | 359.54      | 10,951.2              | -544.5       | -271.2       | -524.2                  | 12.00                   | 12.00                  | 0.00                  |
| 11,030.7                         | 47.96           | 359.54      | 10,955.1              | -540.3       | -271.3       | -520.0                  | 12.00                   | 12.00                  | 0.00                  |
| <b>FTP(Adder 31 State #506H)</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,050.0                         | 50.27           | 359.54      | 10,967.7              | -525.7       | -271.4       | -505.4                  | 12.00                   | 12.00                  | 0.00                  |
| 11,075.0                         | 53.27           | 359.54      | 10,983.2              | -506.1       | -271.5       | -485.8                  | 12.00                   | 12.00                  | 0.00                  |
| 11,100.0                         | 56.27           | 359.54      | 10,997.6              | -485.7       | -271.7       | -465.4                  | 12.00                   | 12.00                  | 0.00                  |
| 11,125.0                         | 59.27           | 359.54      | 11,010.9              | -464.5       | -271.9       | -444.3                  | 12.00                   | 12.00                  | 0.00                  |
| 11,150.0                         | 62.27           | 359.54      | 11,023.1              | -442.7       | -272.0       | -422.6                  | 12.00                   | 12.00                  | 0.00                  |
| 11,175.0                         | 65.27           | 359.54      | 11,034.2              | -420.3       | -272.2       | -400.2                  | 12.00                   | 12.00                  | 0.00                  |
| 11,200.0                         | 68.27           | 359.54      | 11,044.0              | -397.3       | -272.4       | -377.3                  | 12.00                   | 12.00                  | 0.00                  |
| 11,225.0                         | 71.27           | 359.54      | 11,052.7              | -373.9       | -272.6       | -353.9                  | 12.00                   | 12.00                  | 0.00                  |
| 11,250.0                         | 74.27           | 359.54      | 11,060.1              | -350.0       | -272.8       | -330.0                  | 12.00                   | 12.00                  | 0.00                  |
| 11,275.0                         | 77.27           | 359.54      | 11,066.2              | -325.8       | -273.0       | -305.8                  | 12.00                   | 12.00                  | 0.00                  |
| 11,300.0                         | 80.27           | 359.54      | 11,071.1              | -301.2       | -273.2       | -281.4                  | 12.00                   | 12.00                  | 0.00                  |
| 11,325.0                         | 83.27           | 359.54      | 11,074.7              | -276.5       | -273.4       | -256.7                  | 12.00                   | 12.00                  | 0.00                  |
| 11,350.0                         | 86.27           | 359.54      | 11,077.0              | -251.6       | -273.6       | -231.8                  | 12.00                   | 12.00                  | 0.00                  |
| 11,375.0                         | 89.27           | 359.54      | 11,077.9              | -226.6       | -273.8       | -206.9                  | 12.00                   | 12.00                  | 0.00                  |
| 11,381.1                         | 90.00           | 359.54      | 11,078.0              | -220.6       | -273.8       | -200.8                  | 12.00                   | 12.00                  | 0.00                  |
| 11,400.0                         | 90.00           | 359.54      | 11,078.0              | -201.6       | -274.0       | -182.0                  | 0.00                    | 0.00                   | 0.00                  |
| 11,500.0                         | 90.00           | 359.54      | 11,078.0              | -101.6       | -274.8       | -82.1                   | 0.00                    | 0.00                   | 0.00                  |
| 11,600.0                         | 90.00           | 359.54      | 11,078.0              | -1.6         | -275.6       | 17.7                    | 0.00                    | 0.00                   | 0.00                  |
| 11,700.0                         | 90.00           | 359.54      | 11,078.0              | 98.4         | -276.4       | 117.5                   | 0.00                    | 0.00                   | 0.00                  |
| 11,800.0                         | 90.00           | 359.54      | 11,078.0              | 198.4        | -277.2       | 217.3                   | 0.00                    | 0.00                   | 0.00                  |
| 11,900.0                         | 90.00           | 359.54      | 11,078.0              | 298.4        | -278.0       | 317.1                   | 0.00                    | 0.00                   | 0.00                  |
| 12,000.0                         | 90.00           | 359.54      | 11,078.0              | 398.4        | -278.8       | 416.9                   | 0.00                    | 0.00                   | 0.00                  |
| 12,100.0                         | 90.00           | 359.54      | 11,078.0              | 498.4        | -279.6       | 516.7                   | 0.00                    | 0.00                   | 0.00                  |
| 12,200.0                         | 90.00           | 359.54      | 11,078.0              | 598.3        | -280.4       | 616.5                   | 0.00                    | 0.00                   | 0.00                  |
| 12,300.0                         | 90.00           | 359.54      | 11,078.0              | 698.3        | -281.2       | 716.3                   | 0.00                    | 0.00                   | 0.00                  |
| 12,400.0                         | 90.00           | 359.54      | 11,078.0              | 798.3        | -282.0       | 816.1                   | 0.00                    | 0.00                   | 0.00                  |
| 12,500.0                         | 90.00           | 359.54      | 11,078.0              | 898.3        | -282.8       | 915.9                   | 0.00                    | 0.00                   | 0.00                  |
| 12,600.0                         | 90.00           | 359.54      | 11,078.0              | 998.3        | -283.6       | 1,015.7                 | 0.00                    | 0.00                   | 0.00                  |
| 12,700.0                         | 90.00           | 359.54      | 11,078.0              | 1,098.3      | -284.4       | 1,115.5                 | 0.00                    | 0.00                   | 0.00                  |
| 12,800.0                         | 90.00           | 359.54      | 11,078.0              | 1,198.3      | -285.2       | 1,215.4                 | 0.00                    | 0.00                   | 0.00                  |
| 12,900.0                         | 90.00           | 359.54      | 11,078.0              | 1,298.3      | -286.0       | 1,315.2                 | 0.00                    | 0.00                   | 0.00                  |
| 13,000.0                         | 90.00           | 359.54      | 11,078.0              | 1,398.3      | -286.8       | 1,415.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,100.0                         | 90.00           | 359.54      | 11,078.0              | 1,498.3      | -287.6       | 1,514.8                 | 0.00                    | 0.00                   | 0.00                  |

**Database:** EDM 5000.14  
**Company:** EOG Resources - Midland  
**Project:** Lea County, NM (NAD 83 NME)  
**Site:** Adder 31 State  
**Well:** #506H  
**Wellbore:** OH  
**Design:** Plan #0.1

**Local Co-ordinate Reference:** Well #506H  
**TVD Reference:** KB = 25 @ 3532.0usft  
**MD Reference:** KB = 25 @ 3532.0usft  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

**Planned Survey**

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 13,200.0              | 90.00           | 359.54      | 11,078.0              | 1,598.3      | -288.4       | 1,614.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,300.0              | 90.00           | 359.54      | 11,078.0              | 1,698.3      | -289.2       | 1,714.4                 | 0.00                    | 0.00                   | 0.00                  |
| 13,400.0              | 90.00           | 359.54      | 11,078.0              | 1,798.3      | -290.0       | 1,814.2                 | 0.00                    | 0.00                   | 0.00                  |
| 13,500.0              | 90.00           | 359.54      | 11,078.0              | 1,898.3      | -290.8       | 1,914.0                 | 0.00                    | 0.00                   | 0.00                  |
| 13,600.0              | 90.00           | 359.54      | 11,078.0              | 1,998.3      | -291.6       | 2,013.8                 | 0.00                    | 0.00                   | 0.00                  |
| 13,700.0              | 90.00           | 359.54      | 11,078.0              | 2,098.3      | -292.4       | 2,113.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,800.0              | 90.00           | 359.54      | 11,078.0              | 2,198.3      | -293.2       | 2,213.4                 | 0.00                    | 0.00                   | 0.00                  |
| 13,900.0              | 90.00           | 359.54      | 11,078.0              | 2,298.3      | -294.0       | 2,313.2                 | 0.00                    | 0.00                   | 0.00                  |
| 14,000.0              | 90.00           | 359.54      | 11,078.0              | 2,398.3      | -294.8       | 2,413.0                 | 0.00                    | 0.00                   | 0.00                  |
| 14,100.0              | 90.00           | 359.54      | 11,078.0              | 2,498.3      | -295.6       | 2,512.8                 | 0.00                    | 0.00                   | 0.00                  |
| 14,200.0              | 90.00           | 359.54      | 11,078.0              | 2,598.3      | -296.3       | 2,612.7                 | 0.00                    | 0.00                   | 0.00                  |
| 14,300.0              | 90.00           | 359.54      | 11,078.0              | 2,698.3      | -297.1       | 2,712.5                 | 0.00                    | 0.00                   | 0.00                  |
| 14,400.0              | 90.00           | 359.54      | 11,078.0              | 2,798.3      | -297.9       | 2,812.3                 | 0.00                    | 0.00                   | 0.00                  |
| 14,500.0              | 90.00           | 359.54      | 11,078.0              | 2,898.3      | -298.7       | 2,912.1                 | 0.00                    | 0.00                   | 0.00                  |
| 14,600.0              | 90.00           | 359.54      | 11,078.0              | 2,998.3      | -299.5       | 3,011.9                 | 0.00                    | 0.00                   | 0.00                  |
| 14,700.0              | 90.00           | 359.54      | 11,078.0              | 3,098.3      | -300.3       | 3,111.7                 | 0.00                    | 0.00                   | 0.00                  |
| 14,800.0              | 90.00           | 359.54      | 11,078.0              | 3,198.3      | -301.1       | 3,211.5                 | 0.00                    | 0.00                   | 0.00                  |
| 14,900.0              | 90.00           | 359.54      | 11,078.0              | 3,298.3      | -301.9       | 3,311.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,000.0              | 90.00           | 359.54      | 11,078.0              | 3,398.3      | -302.7       | 3,411.1                 | 0.00                    | 0.00                   | 0.00                  |
| 15,100.0              | 90.00           | 359.54      | 11,078.0              | 3,498.3      | -303.5       | 3,510.9                 | 0.00                    | 0.00                   | 0.00                  |
| 15,200.0              | 90.00           | 359.54      | 11,078.0              | 3,598.3      | -304.3       | 3,610.7                 | 0.00                    | 0.00                   | 0.00                  |
| 15,300.0              | 90.00           | 359.54      | 11,078.0              | 3,698.2      | -305.1       | 3,710.5                 | 0.00                    | 0.00                   | 0.00                  |
| 15,400.0              | 90.00           | 359.54      | 11,078.0              | 3,798.2      | -305.9       | 3,810.3                 | 0.00                    | 0.00                   | 0.00                  |
| 15,500.0              | 90.00           | 359.54      | 11,078.0              | 3,898.2      | -306.7       | 3,910.2                 | 0.00                    | 0.00                   | 0.00                  |
| 15,600.0              | 90.00           | 359.54      | 11,078.0              | 3,998.2      | -307.5       | 4,010.0                 | 0.00                    | 0.00                   | 0.00                  |
| 15,700.0              | 90.00           | 359.54      | 11,078.0              | 4,098.2      | -308.3       | 4,109.8                 | 0.00                    | 0.00                   | 0.00                  |
| 15,800.0              | 90.00           | 359.54      | 11,078.0              | 4,198.2      | -309.1       | 4,209.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,900.0              | 90.00           | 359.54      | 11,078.0              | 4,298.2      | -309.9       | 4,309.4                 | 0.00                    | 0.00                   | 0.00                  |
| 16,000.0              | 90.00           | 359.54      | 11,078.0              | 4,398.2      | -310.7       | 4,409.2                 | 0.00                    | 0.00                   | 0.00                  |
| 16,032.8              | 90.00           | 359.54      | 11,078.0              | 4,431.0      | -311.0       | 4,441.9                 | 0.00                    | 0.00                   | 0.00                  |

**PBHL(Adder 31 State #506H)**
**Design Targets**
**Target Name**

| - hit/miss target<br>- Shape                                                                                                       | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude         | Longitude         |
|------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------------|-------------------|
| KOP(Adder 31 State #50)<br>- plan hits target center<br>- Point                                                                    | 0.00          | 0.00         | 10,600.5   | -698.0       | -270.0       | 425,258.00      | 766,286.00     | 32° 10' 1.285 N  | 103° 36' 22.869 W |
| PBHL(Adder 31 State #50)<br>- plan hits target center<br>- Point                                                                   | 0.00          | 0.00         | 11,078.0   | 4,431.0      | -311.0       | 430,387.00      | 766,245.00     | 32° 10' 52.041 N | 103° 36' 22.943 W |
| FTP(Adder 31 State #50)<br>- plan misses target center by 163.4usft at 11030.7usft MD (10955.1 TVD, -540.3 N, -271.3 E)<br>- Point | 0.00          | 0.00         | 11,078.0   | -648.0       | -270.0       | 425,308.00      | 766,286.00     | 32° 10' 1.780 N  | 103° 36' 22.866 W |