

# **Devon Energy**

Eddy County, NM (NAD-83)

Agate PWU 21-22

9H

30-015-44116

OH

Design: OH

## **Standard Survey Report**

06 October, 2017

# LEAM Drilling Systems LLC

## Survey Report

|           |                          |                            |                                     |
|-----------|--------------------------|----------------------------|-------------------------------------|
| Company:  | Devon Energy             | Local Control Point:       | Well 9H                             |
| Project:  | Eddy County, NM (NAD-83) | North Arrow:               | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Site:     | Agate PWU 21-22          | North Arrow:               | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Well:     | 9H                       | North Arrow:               | Grid                                |
| Wellbore: | OH                       | Survey Calculation Method: | Minimum Curvature                   |
| Design:   | OH                       | Database:                  | EDM 5000.1 Multi User Db            |

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

|                       |                 |                   |                   |
|-----------------------|-----------------|-------------------|-------------------|
| Site:                 | Agate PWU 21-22 |                   |                   |
| Site Position:        |                 | Northing:         | 601,009.77 usft   |
| From:                 | Map             | Easting:          | 616,495.30 usft   |
| Position Uncertainty: | 0.00 usft       | Slot Radius:      | 13-3/16 "         |
|                       |                 | Latitude:         | 32° 39' 7.1485 N  |
|                       |                 | Longitude:        | 104° 5' 20.8896 W |
|                       |                 | Grid Convergence: | 0.13 °            |

|                      |           |                     |                   |
|----------------------|-----------|---------------------|-------------------|
| Well:                | 9H        |                     |                   |
| Well Position        | +N-S      | 0.00 usft           | Northing:         |
|                      | +E-W      | 0.00 usft           | Easting:          |
| Position Uncertainty | 0.00 usft | Wellhead Elevation: | 0.00 usft         |
|                      |           | Latitude:           | 32° 39' 7.1485 N  |
|                      |           | Longitude:          | 104° 5' 20.8896 W |
|                      |           | Ground Level:       | 3,334.20 usft     |

|           |            |            |               |
|-----------|------------|------------|---------------|
| Wellbore: | OH         |            |               |
| Magnetics | Model Name | Model Date | Model Version |
|           | HDGM       | 4/11/2017  | 7.48          |
|           |            |            | 60.52         |
|           |            |            | 48,228        |

|                   |                  |               |           |
|-------------------|------------------|---------------|-----------|
| Design:           | OH               |               |           |
| Audit Notes:      |                  |               |           |
| Version:          | 1.0              | Phase:        | ACTUAL    |
|                   |                  | Tie On Depth: | 0.00      |
| Vertical Section: | Depth From (NVD) | SWC           | Direction |
|                   | 0.00             | 0.00          | 0.00      |
|                   |                  |               | 90.17     |

|                |             |                   |                                                  |
|----------------|-------------|-------------------|--------------------------------------------------|
| Survey Program | OH - NAD-83 |                   |                                                  |
| From (USF)     | To (USF)    | Survey (Wellbore) | Tool Type                                        |
| 50.00          | 200.00      | Survey #1 (OH)    | NS-GYRO-MS                                       |
| 293.00         | 8,997.00    | Survey #2 (OH)    | LEAM MWD+HDGM                                    |
| 9,016.00       | 18,681.00   | Survey #3 (OH)    | MWD+HRGM+SAG+MS                                  |
| 18,780.00      | 18,780.00   | Survey #4 (OH)    | Project                                          |
|                |             |                   | North sensing gyrocompassing m/s                 |
|                |             |                   | MWD+HDGM                                         |
|                |             |                   | OWSG MWD + HRGM + Sag + Multi-Station Correction |
|                |             |                   | Projection                                       |

|                      |            |                    |                      |
|----------------------|------------|--------------------|----------------------|
| Survey:              |            |                    |                      |
| Measured Depth (USF) | 1000 (USF) | Actual Depth (USF) | Wellbore Depth (USF) |
| 0.00                 | 0.00       | 0.00               | 0.00                 |
| SHL (Agate 9H)       |            |                    |                      |
| 50.00                | 0.26       | 51.76              | 50.00                |
| 100.00               | 0.31       | 96.49              | 100.00               |
| 150.00               | 0.19       | 28.71              | 150.00               |
| 200.00               | 0.41       | 38.00              | 200.00               |
|                      |            |                    |                      |
| 293.00               | 0.30       | 19.30              | 293.00               |
| 384.00               | 0.20       | 358.60             | 384.00               |

# LEAM Drilling Systems LLC

## Survey Report

|           |                          |                           |                                     |
|-----------|--------------------------|---------------------------|-------------------------------------|
| Company:  | Devon Energy             | Well:                     | Well 9H                             |
| Project:  | Eddy County, NM (NAD-83) | Top of Hole:              | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Site:     | Agate PWU 21-22          | Bottom of Hole:           | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Well:     | 9H                       | Grid:                     | Grid                                |
| Wellbore: | OH                       | Minimum Curvature:        | Minimum Curvature                   |
| Design:   | OH                       | EDM 5000.1 Multi User Db: | EDM 5000.1 Multi User Db            |

| Measured Depth (ft) | Correction (ft) | ASPHALT (ft) | Vertical Depth (ft) | True (ft) | True (ft) | Vertical Section (ft) | Doping Rate (ft/1000) | Strike (ft) | True (ft) |
|---------------------|-----------------|--------------|---------------------|-----------|-----------|-----------------------|-----------------------|-------------|-----------|
| 445.00              | 0.30            | 32.60        | 444.99              | 1.51      | 1.08      | 1.08                  | 0.29                  | 0.16        | 55.74     |
| 537.00              | 0.20            | 5.30         | 536.99              | 1.88      | 1.23      | 1.22                  | 0.17                  | -0.11       | -29.67    |
| 628.00              | 0.30            | 15.60        | 627.99              | 2.26      | 1.30      | 1.30                  | 0.12                  | 0.11        | 11.32     |
| 719.00              | 0.30            | 17.30        | 718.99              | 2.72      | 1.44      | 1.43                  | 0.01                  | 0.00        | 1.87      |
| 812.00              | 0.30            | 44.80        | 811.99              | 3.13      | 1.68      | 1.67                  | 0.15                  | 0.00        | 29.57     |
| 903.00              | 0.30            | 52.40        | 902.99              | 3.44      | 2.04      | 2.03                  | 0.04                  | 0.00        | 8.35      |
| 995.00              | 0.30            | 44.20        | 994.99              | 3.76      | 2.40      | 2.39                  | 0.05                  | 0.00        | -8.91     |
| 1,087.00            | 0.20            | 36.90        | 1,086.99            | 4.06      | 2.66      | 2.65                  | 0.11                  | -0.11       | -7.93     |
| 1,178.00            | 0.20            | 29.50        | 1,177.99            | 4.33      | 2.84      | 2.82                  | 0.03                  | 0.00        | -8.13     |
| 1,270.00            | 0.20            | 328.20       | 1,269.99            | 4.60      | 2.83      | 2.82                  | 0.22                  | 0.00        | -66.63    |
| 1,361.00            | 0.40            | 306.50       | 1,360.99            | 4.93      | 2.49      | 2.48                  | 0.25                  | 0.22        | -23.85    |
| 1,456.00            | 0.40            | 291.10       | 1,455.98            | 5.24      | 1.92      | 1.90                  | 0.11                  | 0.00        | -16.21    |
| 1,552.00            | 0.60            | 293.70       | 1,551.98            | 5.57      | 1.14      | 1.13                  | 0.21                  | 0.21        | 2.71      |
| 1,648.00            | 0.70            | 304.90       | 1,647.97            | 6.10      | 0.20      | 0.18                  | 0.17                  | 0.10        | 11.67     |
| 1,743.00            | 0.60            | 315.60       | 1,742.97            | 6.79      | -0.62     | -0.64                 | 0.17                  | -0.11       | 11.26     |
| 1,839.00            | 0.70            | 318.20       | 1,838.96            | 7.59      | -1.37     | -1.39                 | 0.11                  | 0.10        | 2.71      |
| 1,934.00            | 0.70            | 317.50       | 1,933.95            | 8.45      | -2.14     | -2.17                 | 0.01                  | 0.00        | -0.74     |
| 2,030.00            | 0.80            | 321.90       | 2,029.95            | 9.41      | -2.95     | -2.98                 | 0.12                  | 0.10        | 4.58      |
| 2,125.00            | 0.80            | 324.10       | 2,124.94            | 10.47     | -3.75     | -3.78                 | 0.03                  | 0.00        | 2.32      |
| 2,221.00            | 0.80            | 334.00       | 2,220.93            | 11.61     | -4.44     | -4.47                 | 0.14                  | 0.00        | 10.31     |
| 2,317.00            | 0.80            | 330.30       | 2,316.92            | 12.80     | -5.06     | -5.10                 | 0.05                  | 0.00        | -3.85     |
| 2,412.00            | 0.70            | 332.50       | 2,411.91            | 13.89     | -5.66     | -5.70                 | 0.11                  | -0.11       | 2.32      |
| 2,508.00            | 0.80            | 334.30       | 2,507.90            | 15.01     | -6.22     | -6.27                 | 0.11                  | 0.10        | 1.88      |
| 2,603.00            | 0.80            | 339.40       | 2,602.89            | 16.23     | -6.74     | -6.79                 | 0.07                  | 0.00        | 5.37      |
| 2,699.00            | 1.00            | 16.30        | 2,698.88            | 17.66     | -6.74     | -6.80                 | 0.63                  | 0.21        | 38.44     |
| 2,795.00            | 1.70            | 41.50        | 2,794.85            | 19.53     | -5.57     | -5.62                 | 0.94                  | 0.73        | 26.25     |
| 2,890.00            | 2.50            | 52.30        | 2,889.79            | 21.85     | -2.99     | -3.06                 | 0.94                  | 0.84        | 11.37     |
| 2,985.00            | 3.40            | 56.30        | 2,984.66            | 24.68     | 0.99      | 0.92                  | 0.97                  | 0.95        | 4.21      |
| 3,081.00            | 4.00            | 57.90        | 3,080.46            | 28.04     | 6.20      | 6.11                  | 0.63                  | 0.63        | 1.67      |
| 3,176.00            | 4.70            | 59.40        | 3,175.19            | 31.78     | 12.35     | 12.26                 | 0.75                  | 0.74        | 1.58      |
| 3,272.00            | 5.10            | 60.50        | 3,270.84            | 35.89     | 19.45     | 19.35                 | 0.43                  | 0.42        | 1.15      |
| 3,367.00            | 5.10            | 60.70        | 3,365.46            | 40.03     | 26.81     | 26.69                 | 0.02                  | 0.00        | 0.21      |
| 3,411.00            | 5.10            | 61.10        | 3,409.29            | 41.94     | 30.23     | 30.10                 | 0.08                  | 0.00        | 0.91      |
| 3,545.00            | 4.90            | 60.20        | 3,542.78            | 47.66     | 40.41     | 40.27                 | 0.16                  | -0.15       | -0.67     |
| 3,640.00            | 4.60            | 59.60        | 3,637.45            | 51.60     | 47.21     | 47.06                 | 0.32                  | -0.32       | -0.63     |
| 3,736.00            | 4.80            | 57.10        | 3,733.13            | 55.73     | 53.91     | 53.74                 | 0.30                  | 0.21        | -2.60     |
| 3,831.00            | 5.20            | 58.90        | 3,827.77            | 60.11     | 60.93     | 60.75                 | 0.45                  | 0.42        | 1.89      |
| 3,927.00            | 4.50            | 57.80        | 3,923.42            | 64.37     | 67.84     | 67.65                 | 0.74                  | -0.73       | -1.15     |
| 4,023.00            | 5.10            | 59.60        | 4,019.09            | 68.53     | 74.71     | 74.51                 | 0.64                  | 0.63        | 1.88      |
| 4,118.00            | 6.00            | 66.60        | 4,113.64            | 72.64     | 82.91     | 82.69                 | 1.18                  | 0.95        | 7.37      |
| 4,214.00            | 6.20            | 69.00        | 4,209.10            | 76.49     | 92.35     | 92.12                 | 0.34                  | 0.21        | 2.50      |
| 4,310.00            | 6.10            | 71.90        | 4,304.54            | 79.94     | 102.04    | 101.80                | 0.34                  | -0.10       | 3.02      |
| 4,405.00            | 5.80            | 62.10        | 4,399.03            | 83.75     | 111.08    | 110.83                | 1.11                  | -0.32       | -10.32    |

# LEAM Drilling Systems LLC

## Survey Report

|          |                          |                                     |
|----------|--------------------------|-------------------------------------|
| Company  | Devon Energy             | Well 9H                             |
| Project  | Eddy County, NM (NAD-83) | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Site     | Agate PWU 21-22          | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Well     | 9H                       | Grid                                |
| Wellbore | OH                       | Minimum Curvature                   |
| Depth    | OH                       | EDM 5000.1 Multi User Db            |

| Measured Depth (usft)            | Interval (ft) | Interval (ft) | True Vertical Depth (ft) | Interval (ft) | Interval (ft) | Interval (ft) | Depth Rate (ft/100usft) | Build Rate (ft/100usft) | Turn Rate (ft/100usft) |
|----------------------------------|---------------|---------------|--------------------------|---------------|---------------|---------------|-------------------------|-------------------------|------------------------|
| 4,501.00                         | 4.50          | 54.10         | 4,494.65                 | 88.23         | 118.42        | 118.16        | 1.54                    | -1.35                   | -8.33                  |
| 4,596.00                         | 4.30          | 52.30         | 4,589.37                 | 92.59         | 124.26        | 123.98        | 0.26                    | -0.21                   | -1.89                  |
| 4,692.00                         | 4.70          | 53.20         | 4,685.07                 | 97.15         | 130.25        | 129.96        | 0.42                    | 0.42                    | 0.94                   |
| 4,787.00                         | 5.00          | 56.00         | 4,779.73                 | 101.80        | 136.80        | 136.50        | 0.40                    | 0.32                    | 2.95                   |
| 4,883.00                         | 5.00          | 63.30         | 4,875.37                 | 106.01        | 144.01        | 143.69        | 0.66                    | 0.00                    | 7.60                   |
| 4,978.00                         | 4.60          | 61.60         | 4,970.03                 | 109.69        | 151.06        | 150.73        | 0.45                    | -0.42                   | -1.79                  |
| 5,074.00                         | 4.30          | 65.30         | 5,065.74                 | 113.02        | 157.71        | 157.38        | 0.43                    | -0.31                   | 3.85                   |
| 5,169.00                         | 4.70          | 62.80         | 5,160.45                 | 116.29        | 164.41        | 164.06        | 0.47                    | 0.42                    | -2.63                  |
| 5,265.00                         | 4.70          | 64.20         | 5,256.13                 | 119.80        | 171.45        | 171.09        | 0.12                    | 0.00                    | 1.46                   |
| 5,361.00                         | 4.90          | 60.50         | 5,351.79                 | 123.53        | 178.56        | 178.19        | 0.38                    | 0.21                    | -3.85                  |
| 5,456.00                         | 4.40          | 56.70         | 5,446.48                 | 127.53        | 185.14        | 184.76        | 0.62                    | -0.53                   | -4.00                  |
| 5,552.00                         | 4.50          | 56.80         | 5,542.19                 | 131.61        | 191.36        | 190.97        | 0.10                    | 0.10                    | 0.10                   |
| 5,648.00                         | 4.80          | 61.40         | 5,637.87                 | 135.60        | 198.04        | 197.64        | 0.50                    | 0.31                    | 4.79                   |
| 5,743.00                         | 4.00          | 60.00         | 5,732.59                 | 139.16        | 204.40        | 203.99        | 0.85                    | -0.84                   | -1.47                  |
| 5,839.00                         | 4.10          | 59.00         | 5,828.35                 | 142.60        | 210.24        | 209.82        | 0.13                    | 0.10                    | -1.04                  |
| 5,935.00                         | 5.00          | 66.00         | 5,924.05                 | 146.07        | 217.01        | 216.57        | 1.10                    | 0.94                    | 7.29                   |
| 6,030.00                         | 4.70          | 67.80         | 6,018.71                 | 149.22        | 224.39        | 223.95        | 0.35                    | -0.32                   | 1.89                   |
| 6,126.00                         | 4.00          | 66.40         | 6,114.43                 | 152.05        | 231.10        | 230.65        | 0.74                    | -0.73                   | -1.46                  |
| 6,189.69                         | 3.67          | 66.08         | 6,177.98                 | 153.76        | 235.00        | 234.54        | 0.52                    | -0.52                   | -0.50                  |
| <b>SL Crossing - 6189.69' MD</b> |               |               |                          |               |               |               |                         |                         |                        |
| 6,222.00                         | 3.50          | 65.90         | 6,210.23                 | 154.58        | 236.85        | 236.39        | 0.52                    | -0.52                   | -0.57                  |
| 6,317.00                         | 3.30          | 58.90         | 6,305.06                 | 157.18        | 241.83        | 241.37        | 0.48                    | -0.21                   | -7.37                  |
| 6,413.00                         | 4.00          | 58.00         | 6,400.86                 | 160.38        | 247.04        | 246.56        | 0.73                    | 0.73                    | -0.94                  |
| 6,514.00                         | 4.70          | 58.00         | 6,501.57                 | 164.44        | 253.54        | 253.05        | 0.69                    | 0.69                    | 0.00                   |
| 6,610.00                         | 3.70          | 59.70         | 6,597.31                 | 168.09        | 259.55        | 259.05        | 1.05                    | -1.04                   | 1.77                   |
| 6,706.00                         | 3.20          | 73.20         | 6,693.14                 | 170.43        | 264.79        | 264.28        | 0.99                    | -0.52                   | 14.06                  |
| 6,801.00                         | 4.40          | 70.40         | 6,787.93                 | 172.42        | 270.76        | 270.24        | 1.28                    | 1.26                    | -2.95                  |
| 6,897.00                         | 5.00          | 55.30         | 6,883.61                 | 176.03        | 277.67        | 277.14        | 1.43                    | 0.63                    | -15.73                 |
| 6,993.00                         | 4.40          | 50.70         | 6,979.29                 | 180.75        | 283.95        | 283.42        | 0.74                    | -0.63                   | -4.79                  |
| 7,088.00                         | 4.20          | 56.80         | 7,074.02                 | 184.96        | 289.69        | 289.14        | 0.53                    | -0.21                   | 6.42                   |
| 7,184.00                         | 4.40          | 66.20         | 7,169.75                 | 188.37        | 296.00        | 295.44        | 0.76                    | 0.21                    | 9.79                   |
| 7,279.00                         | 4.70          | 76.30         | 7,264.45                 | 190.76        | 303.11        | 302.55        | 0.90                    | 0.32                    | 10.63                  |
| 7,375.00                         | 3.60          | 88.70         | 7,360.20                 | 191.76        | 309.95        | 309.38        | 1.47                    | -1.15                   | 12.92                  |
| 7,470.00                         | 4.10          | 87.80         | 7,454.99                 | 191.96        | 316.32        | 315.75        | 0.53                    | 0.53                    | -0.95                  |
| 7,566.00                         | 3.30          | 74.70         | 7,550.79                 | 192.82        | 322.42        | 321.84        | 1.21                    | -0.83                   | -13.65                 |
| 7,661.00                         | 2.50          | 67.20         | 7,645.67                 | 194.35        | 326.96        | 326.39        | 0.93                    | -0.84                   | -7.89                  |
| 7,757.00                         | 1.20          | 57.70         | 7,741.62                 | 195.70        | 329.74        | 329.16        | 1.39                    | -1.35                   | -9.90                  |
| 7,853.00                         | 0.80          | 38.30         | 7,837.60                 | 196.76        | 331.01        | 330.42        | 0.54                    | -0.42                   | -20.21                 |
| 7,948.00                         | 1.20          | 40.00         | 7,932.59                 | 198.04        | 332.06        | 331.47        | 0.42                    | 0.42                    | 1.79                   |
| 8,044.00                         | 2.00          | 50.90         | 8,028.55                 | 199.87        | 334.01        | 333.41        | 0.89                    | 0.83                    | 11.35                  |
| 8,100.00                         | 1.90          | 43.40         | 8,084.52                 | 201.16        | 335.40        | 334.80        | 0.49                    | -0.18                   | -13.39                 |
| 8,167.00                         | 2.88          | 66.95         | 8,151.46                 | 202.62        | 337.71        | 337.11        | 2.04                    | 1.46                    | 35.15                  |
| 8,215.00                         | 7.11          | 80.47         | 8,199.27                 | 203.59        | 341.76        | 341.15        | 9.09                    | 8.81                    | 28.17                  |
| 8,262.00                         | 9.76          | 86.54         | 8,245.75                 | 204.31        | 348.60        | 347.99        | 5.94                    | 5.64                    | 12.91                  |

# LEAM Drilling Systems LLC

## Survey Report

|           |                          |                             |                                     |
|-----------|--------------------------|-----------------------------|-------------------------------------|
| Company:  | Devon Energy             | Local Coordinate Reference: | Well 9H                             |
| Project:  | Eddy County, NM (NAD-83) | True Bearing:               | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Site:     | Agate PWU 21-22          | North Arrow:                | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Well:     | 9H                       | Grid:                       | Grid                                |
| Wellbore: | OH                       | Minimum Curvature           | Minimum Curvature                   |
| Design:   | OH                       | EDM 5000.1 Multi User Db    | EDM 5000.1 Multi User Db            |

| Measured Depth (usft)            | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | True North (usft) | True East (usft) | True Vertical (usft) | True Horizontal (usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|----------------------------------|-----------------|-------------|-----------------------|-------------------|------------------|----------------------|------------------------|------------------------|-----------------------|
| 8,310.00                         | 13.80           | 87.86       | 8,292.73              | 204.77            | 358.39           | 357.78               | 8.43                   | 8.42                   | 2.75                  |
| 8,358.00                         | 17.14           | 89.41       | 8,338.99              | 205.06            | 371.19           | 370.58               | 7.01                   | 6.96                   | 3.23                  |
| 8,406.00                         | 20.35           | 94.18       | 8,384.44              | 204.52            | 386.59           | 385.98               | 7.41                   | 6.69                   | 9.94                  |
| 8,454.00                         | 24.15           | 92.98       | 8,428.86              | 203.40            | 404.72           | 404.12               | 7.97                   | 7.92                   | -2.50                 |
| 8,502.00                         | 26.39           | 92.43       | 8,472.26              | 202.44            | 425.19           | 424.59               | 4.69                   | 4.67                   | -1.15                 |
| 8,549.00                         | 29.97           | 91.70       | 8,513.68              | 201.65            | 447.37           | 446.77               | 7.65                   | 7.62                   | -1.55                 |
| 8,581.00                         | 31.48           | 91.90       | 8,541.19              | 201.13            | 463.71           | 463.11               | 4.73                   | 4.72                   | 0.63                  |
| 8,613.00                         | 33.81           | 92.93       | 8,568.13              | 200.40            | 480.95           | 480.36               | 7.49                   | 7.28                   | 3.22                  |
| 8,644.00                         | 34.51           | 94.00       | 8,593.79              | 199.35            | 498.33           | 497.73               | 2.98                   | 2.26                   | 3.45                  |
| 8,679.00                         | 38.05           | 92.96       | 8,622.00              | 198.10            | 519.00           | 518.41               | 10.27                  | 10.11                  | -2.97                 |
| 8,711.00                         | 40.87           | 93.33       | 8,646.70              | 196.98            | 539.30           | 538.71               | 8.84                   | 8.81                   | 1.16                  |
| 8,742.00                         | 44.20           | 92.88       | 8,669.54              | 195.85            | 560.22           | 559.64               | 10.79                  | 10.74                  | -1.45                 |
| 8,748.60                         | 44.96           | 92.84       | 8,674.24              | 195.62            | 564.85           | 564.27               | 11.57                  | 11.56                  | -0.62                 |
| <b>HL Crossing - 8748.60' MD</b> |                 |             |                       |                   |                  |                      |                        |                        |                       |
| 8,774.00                         | 47.90           | 92.69       | 8,691.75              | 194.73            | 583.23           | 582.65               | 11.57                  | 11.56                  | -0.59                 |
| 8,838.00                         | 54.90           | 90.16       | 8,731.65              | 193.54            | 633.20           | 632.62               | 11.36                  | 10.94                  | -3.95                 |
| 8,870.00                         | 57.08           | 90.29       | 8,749.55              | 193.44            | 659.72           | 659.14               | 6.82                   | 6.81                   | 0.41                  |
| 8,934.00                         | 65.13           | 90.41       | 8,780.45              | 193.09            | 715.70           | 715.13               | 12.58                  | 12.58                  | 0.19                  |
| 8,965.00                         | 69.52           | 90.40       | 8,792.40              | 192.89            | 744.30           | 743.73               | 14.16                  | 14.16                  | -0.03                 |
| 8,997.00                         | 73.64           | 90.56       | 8,802.51              | 192.64            | 774.65           | 774.08               | 12.88                  | 12.88                  | 0.50                  |
| 9,016.00                         | 75.71           | 89.59       | 8,807.53              | 192.61            | 792.98           | 792.40               | 11.96                  | 10.89                  | -5.11                 |
| 9,047.00                         | 80.15           | 90.09       | 8,814.01              | 192.70            | 823.28           | 822.71               | 14.41                  | 14.32                  | 1.61                  |
| 9,079.00                         | 81.18           | 90.87       | 8,819.20              | 192.43            | 854.86           | 854.28               | 4.02                   | 3.22                   | 2.44                  |
| 9,111.00                         | 83.47           | 91.01       | 8,823.47              | 191.91            | 886.57           | 885.99               | 7.17                   | 7.16                   | 0.44                  |
| 9,143.00                         | 85.10           | 91.17       | 8,826.66              | 191.31            | 918.40           | 917.83               | 5.12                   | 5.09                   | 0.50                  |
| 9,175.00                         | 85.70           | 90.94       | 8,829.23              | 190.72            | 950.29           | 949.72               | 2.01                   | 1.88                   | -0.72                 |
| 9,223.00                         | 85.72           | 90.47       | 8,832.82              | 190.13            | 998.15           | 997.58               | 0.98                   | 0.04                   | -0.98                 |
| 9,270.00                         | 85.57           | 90.61       | 8,836.39              | 189.69            | 1,045.01         | 1,044.45             | 0.44                   | -0.32                  | 0.30                  |
| 9,366.00                         | 85.60           | 91.35       | 8,843.78              | 188.05            | 1,140.72         | 1,140.15             | 0.77                   | 0.03                   | 0.77                  |
| 9,462.00                         | 87.05           | 91.95       | 8,849.93              | 185.29            | 1,236.47         | 1,235.92             | 1.63                   | 1.51                   | 0.63                  |
| 9,557.00                         | 87.46           | 91.95       | 8,854.48              | 182.06            | 1,331.31         | 1,330.76             | 0.43                   | 0.43                   | 0.00                  |
| 9,653.00                         | 88.87           | 91.33       | 8,857.55              | 179.32            | 1,427.22         | 1,426.68             | 1.60                   | 1.47                   | -0.65                 |
| 9,748.00                         | 89.00           | 90.84       | 8,859.32              | 177.52            | 1,522.19         | 1,521.65             | 0.53                   | 0.14                   | -0.52                 |
| 9,844.00                         | 89.07           | 90.74       | 8,860.94              | 176.20            | 1,618.16         | 1,617.63             | 0.13                   | 0.07                   | -0.10                 |
| 9,939.00                         | 89.71           | 90.23       | 8,861.95              | 175.39            | 1,713.15         | 1,712.63             | 0.86                   | 0.67                   | -0.54                 |
| 10,035.00                        | 89.57           | 89.60       | 8,862.55              | 175.53            | 1,809.15         | 1,808.62             | 0.67                   | -0.15                  | -0.66                 |
| 10,130.00                        | 89.67           | 89.42       | 8,863.18              | 176.35            | 1,904.15         | 1,903.61             | 0.22                   | 0.11                   | -0.19                 |
| 10,226.00                        | 89.20           | 89.49       | 8,864.13              | 177.26            | 2,000.14         | 1,999.60             | 0.49                   | -0.49                  | 0.07                  |
| 10,322.00                        | 89.74           | 89.58       | 8,865.01              | 178.04            | 2,096.13         | 2,095.59             | 0.57                   | 0.56                   | 0.09                  |
| 10,417.00                        | 90.51           | 89.06       | 8,864.81              | 179.17            | 2,191.12         | 2,190.58             | 0.98                   | 0.81                   | -0.55                 |
| 10,509.00                        | 90.24           | 89.61       | 8,864.21              | 180.23            | 2,283.11         | 2,282.57             | 0.67                   | -0.29                  | 0.60                  |
| 10,600.00                        | 90.61           | 88.83       | 8,863.53              | 181.47            | 2,374.10         | 2,373.55             | 0.95                   | 0.41                   | -0.86                 |
| 10,692.00                        | 89.97           | 89.36       | 8,863.06              | 182.92            | 2,466.09         | 2,465.53             | 0.90                   | -0.70                  | 0.58                  |

# LEAM Drilling Systems LLC

## Survey Report

|           |                          |                                    |       |                                     |
|-----------|--------------------------|------------------------------------|-------|-------------------------------------|
| Company:  | Devon Energy             | Location: Eddy County, NM (NAD-83) | Well: | Well 9H                             |
| Project:  | Eddy County, NM (NAD-83) | Location: Agate PWU 21-22          | Grid: | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Site:     | Agate PWU 21-22          | Location: 9H                       | Grid: | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Well:     | 9H                       | Location: OH                       | Grid: | Minimum Curvature                   |
| Wellbore: | OH                       | Location: OH                       | Grid: | EDM 5000.1 Multi User Db            |
| Design:   | OH                       | Location: OH                       | Grid: |                                     |

| Station                           | Depth (ft) | Interval (ft) | Altitude (ft) | Width (ft) | Height (ft) | Area (sq ft) | Volume (cu ft) | Weight (lb) | Turn (deg) |
|-----------------------------------|------------|---------------|---------------|------------|-------------|--------------|----------------|-------------|------------|
| 10,783.00                         | 90.75      | 88.93         | 8,862.49      | 184.28     | 2,557.07    | 2,556.52     | 0.98           | 0.86        | -0.47      |
| 10,875.00                         | 90.72      | 89.20         | 8,861.31      | 185.78     | 2,649.05    | 2,648.49     | 0.30           | -0.03       | 0.29       |
| 10,966.00                         | 90.88      | 89.38         | 8,860.04      | 186.91     | 2,740.04    | 2,739.47     | 0.26           | 0.18        | 0.20       |
| 11,058.00                         | 91.02      | 89.21         | 8,858.52      | 188.04     | 2,832.02    | 2,831.45     | 0.24           | 0.15        | -0.18      |
| 11,150.00                         | 91.05      | 89.30         | 8,856.85      | 189.24     | 2,924.00    | 2,923.42     | 0.10           | 0.03        | 0.10       |
| 11,243.00                         | 88.97      | 89.42         | 8,856.84      | 190.28     | 3,016.98    | 3,016.41     | 2.24           | -2.24       | 0.13       |
| 11,333.00                         | 88.67      | 89.02         | 8,858.69      | 191.50     | 3,106.96    | 3,106.37     | 0.56           | -0.33       | -0.44      |
| 11,424.00                         | 88.49      | 89.61         | 8,860.95      | 192.59     | 3,197.92    | 3,197.34     | 0.68           | -0.20       | 0.65       |
| 11,516.00                         | 88.70      | 90.07         | 8,863.20      | 192.85     | 3,289.89    | 3,289.31     | 0.55           | 0.23        | 0.50       |
| 11,546.00                         | 88.09      | 90.84         | 8,864.04      | 192.61     | 3,319.88    | 3,319.29     | 3.27           | -2.03       | 2.57       |
| 11,608.00                         | 88.06      | 90.74         | 8,866.13      | 191.75     | 3,381.84    | 3,381.26     | 0.17           | -0.05       | -0.16      |
| 11,700.00                         | 87.86      | 90.76         | 8,869.40      | 190.55     | 3,473.77    | 3,473.19     | 0.22           | -0.22       | 0.02       |
| 11,792.00                         | 87.96      | 90.40         | 8,872.76      | 189.62     | 3,565.71    | 3,565.13     | 0.41           | 0.11        | -0.39      |
| 11,887.00                         | 88.30      | 91.51         | 8,875.86      | 188.04     | 3,660.64    | 3,660.07     | 1.22           | 0.36        | 1.17       |
| 11,983.00                         | 89.87      | 92.98         | 8,877.39      | 184.28     | 3,756.55    | 3,755.99     | 2.24           | 1.64        | 1.53       |
| 12,078.00                         | 89.71      | 91.85         | 8,877.74      | 180.28     | 3,851.46    | 3,850.91     | 1.20           | -0.17       | -1.19      |
| 12,174.00                         | 90.18      | 91.35         | 8,877.83      | 177.59     | 3,947.43    | 3,946.88     | 0.71           | 0.49        | -0.52      |
| 12,269.00                         | 90.14      | 91.45         | 8,877.56      | 175.27     | 4,042.40    | 4,041.86     | 0.11           | -0.04       | 0.11       |
| 12,365.00                         | 89.77      | 92.24         | 8,877.64      | 172.18     | 4,138.35    | 4,137.82     | 0.91           | -0.39       | 0.82       |
| 12,461.00                         | 90.18      | 92.49         | 8,877.68      | 168.22     | 4,234.26    | 4,233.75     | 0.50           | 0.43        | 0.26       |
| 12,556.00                         | 90.85      | 91.53         | 8,876.83      | 164.89     | 4,329.20    | 4,328.69     | 1.23           | 0.71        | -1.01      |
| 12,652.00                         | 91.60      | 90.60         | 8,874.78      | 163.11     | 4,425.16    | 4,424.66     | 1.24           | 0.78        | -0.97      |
| 12,747.00                         | 91.05      | 91.53         | 8,872.58      | 161.34     | 4,520.12    | 4,519.62     | 1.14           | -0.58       | 0.98       |
| 12,843.00                         | 91.32      | 90.95         | 8,870.59      | 159.26     | 4,616.07    | 4,615.58     | 0.67           | 0.28        | -0.60      |
| 12,938.00                         | 90.01      | 89.50         | 8,869.49      | 158.89     | 4,711.06    | 4,710.57     | 2.06           | -1.38       | -1.53      |
| 13,034.00                         | 89.14      | 88.46         | 8,870.20      | 160.60     | 4,807.04    | 4,806.54     | 1.41           | -0.91       | -1.08      |
| 13,129.00                         | 88.97      | 87.14         | 8,871.77      | 164.25     | 4,901.96    | 4,901.45     | 1.40           | -0.18       | -1.39      |
| 13,225.00                         | 88.60      | 87.60         | 8,873.81      | 168.65     | 4,997.83    | 4,997.31     | 0.61           | -0.39       | 0.48       |
| 13,321.00                         | 88.13      | 86.92         | 8,876.54      | 173.24     | 5,093.68    | 5,093.15     | 0.86           | -0.49       | -0.71      |
| 13,416.00                         | 87.93      | 86.12         | 8,879.81      | 179.00     | 5,188.45    | 5,187.90     | 0.87           | -0.21       | -0.84      |
| 13,512.00                         | 88.16      | 84.61         | 8,883.09      | 186.75     | 5,284.08    | 5,283.50     | 1.59           | 0.24        | -1.57      |
| 13,608.00                         | 88.23      | 84.55         | 8,886.11      | 195.82     | 5,379.60    | 5,379.00     | 0.10           | 0.07        | -0.06      |
| 13,703.00                         | 87.75      | 85.86         | 8,889.44      | 203.75     | 5,474.21    | 5,473.58     | 1.47           | -0.51       | 1.38       |
| 13,746.92                         | 87.83      | 86.56         | 8,891.13      | 206.65     | 5,518.00    | 5,517.36     | 1.59           | 0.19        | 1.58       |
| <b>SL Crossing - 13746.92' MD</b> |            |               |               |            |             |              |                |             |            |
| 13,799.00                         | 87.93      | 87.38         | 8,893.06      | 209.41     | 5,569.97    | 5,569.33     | 1.59           | 0.19        | 1.58       |
| 13,895.00                         | 89.00      | 88.34         | 8,895.63      | 212.99     | 5,665.87    | 5,665.21     | 1.50           | 1.11        | 1.00       |
| 13,991.00                         | 89.50      | 87.68         | 8,896.89      | 216.32     | 5,761.80    | 5,761.13     | 0.86           | 0.52        | -0.69      |
| 14,086.00                         | 89.81      | 87.32         | 8,897.46      | 220.47     | 5,856.71    | 5,856.03     | 0.50           | 0.33        | -0.38      |
| 14,182.00                         | 89.57      | 87.62         | 8,897.98      | 224.71     | 5,952.61    | 5,951.92     | 0.40           | -0.25       | 0.31       |
| 14,277.00                         | 89.40      | 89.23         | 8,898.83      | 227.32     | 6,047.57    | 6,046.87     | 1.70           | -0.18       | 1.69       |
| 14,373.00                         | 90.28      | 91.24         | 8,899.10      | 226.92     | 6,143.56    | 6,142.86     | 2.29           | 0.92        | 2.09       |
| 14,468.00                         | 90.55      | 91.55         | 8,898.41      | 224.61     | 6,238.53    | 6,237.84     | 0.43           | 0.28        | 0.33       |
| 14,564.00                         | 89.66      | 91.64         | 8,898.24      | 221.94     | 6,334.49    | 6,333.81     | 0.93           | -0.93       | 0.09       |

# LEAM Drilling Systems LLC

## Survey Report

|           |                          |                             |                                     |
|-----------|--------------------------|-----------------------------|-------------------------------------|
| Company:  | Devon Energy             | Local Coordinate Reference: | Well 9H                             |
| Project:  | Eddy County, NM (NAD-83) | TVD Reference:              | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Site:     | Agate PWU 21-22          | MD Reference:               | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Well:     | 9H                       | North Arrow:                | Grid                                |
| Wellbore: | OH                       | Survey Stationing Method:   | Minimum Curvature                   |
| Design:   | OH                       | Wellbore:                   | EDM 5000.1 Multi User Db            |

| Depth (usft)  | Inclination (°) | Azimuth (°) | True North (usft) | North (usft) | East (usft) | True Vertical (usft) | Depth (usft) | Build Rate (usft/100usft) | Turn Rate (usft/100usft) |
|---------------|-----------------|-------------|-------------------|--------------|-------------|----------------------|--------------|---------------------------|--------------------------|
| 14,659.00     | 89.61           | 93.13       | 8,898.84          | 217.98       | 6,429.41    | 6,428.73             | 1.57         | -0.05                     | 1.57                     |
| 14,755.00     | 90.08           | 92.57       | 8,899.10          | 213.21       | 6,525.29    | 6,524.63             | 0.76         | 0.49                      | -0.58                    |
| 14,849.00     | 90.58           | 90.17       | 8,898.56          | 210.96       | 6,619.25    | 6,618.60             | 2.61         | 0.53                      | -2.55                    |
| 14,945.00     | 90.00           | 88.56       | 8,898.07          | 212.03       | 6,715.24    | 6,714.58             | 1.78         | -0.60                     | -1.68                    |
| 15,040.00     | 89.64           | 90.28       | 8,898.37          | 212.99       | 6,810.23    | 6,809.57             | 1.85         | -0.38                     | 1.81                     |
| 15,136.00     | 89.90           | 89.81       | 8,898.76          | 212.91       | 6,906.23    | 6,905.57             | 0.56         | 0.27                      | -0.49                    |
| 15,231.00     | 89.77           | 89.48       | 8,899.03          | 213.50       | 7,001.23    | 7,000.56             | 0.37         | -0.14                     | -0.35                    |
| 15,327.00     | 90.21           | 88.88       | 8,899.05          | 214.88       | 7,097.22    | 7,096.55             | 0.78         | 0.46                      | -0.63                    |
| 15,423.00     | 90.71           | 88.18       | 8,898.28          | 217.34       | 7,193.18    | 7,192.51             | 0.90         | 0.52                      | -0.73                    |
| 15,518.00     | 90.61           | 88.28       | 8,897.18          | 220.27       | 7,288.13    | 7,287.45             | 0.15         | -0.11                     | 0.11                     |
| 15,614.00     | 89.57           | 88.71       | 8,897.03          | 222.80       | 7,384.10    | 7,383.40             | 1.17         | -1.08                     | 0.45                     |
| 15,709.00     | 89.77           | 88.43       | 8,897.58          | 225.17       | 7,479.06    | 7,478.36             | 0.36         | 0.21                      | -0.29                    |
| 15,730.41     | 89.42           | 88.60       | 8,897.73          | 225.72       | 7,500.46    | 7,499.76             | 1.80         | -1.61                     | 0.79                     |
| MP (Agate 9H) |                 |             |                   |              |             |                      |              |                           |                          |
| 15,805.00     | 88.22           | 89.19       | 8,899.26          | 227.16       | 7,575.03    | 7,574.32             | 1.80         | -1.61                     | 0.79                     |
| 15,900.00     | 87.89           | 90.37       | 8,902.49          | 227.52       | 7,669.97    | 7,669.26             | 1.29         | -0.35                     | 1.24                     |
| 15,996.00     | 87.78           | 89.00       | 8,906.12          | 228.05       | 7,765.90    | 7,765.19             | 1.43         | -0.11                     | -1.43                    |
| 16,092.00     | 87.38           | 90.84       | 8,910.17          | 228.19       | 7,861.81    | 7,861.09             | 1.96         | -0.42                     | 1.92                     |
| 16,187.00     | 87.52           | 90.66       | 8,914.40          | 226.94       | 7,956.70    | 7,956.00             | 0.24         | 0.15                      | -0.19                    |
| 16,283.00     | 87.65           | 90.26       | 8,918.44          | 226.17       | 8,052.62    | 8,051.91             | 0.44         | 0.14                      | -0.42                    |
| 16,378.00     | 88.02           | 89.74       | 8,922.03          | 226.17       | 8,147.55    | 8,146.84             | 0.67         | 0.39                      | -0.55                    |
| 16,474.00     | 89.12           | 88.72       | 8,924.43          | 227.46       | 8,243.51    | 8,242.79             | 1.56         | 1.15                      | -1.06                    |
| 16,570.00     | 89.07           | 91.40       | 8,925.94          | 227.36       | 8,339.48    | 8,338.77             | 2.79         | -0.05                     | 2.79                     |
| 16,665.00     | 89.50           | 90.46       | 8,927.13          | 225.82       | 8,434.46    | 8,433.76             | 1.09         | 0.45                      | -0.99                    |
| 16,760.00     | 89.54           | 90.68       | 8,927.92          | 224.88       | 8,529.46    | 8,528.75             | 0.24         | 0.04                      | 0.23                     |
| 16,856.00     | 90.26           | 90.06       | 8,928.09          | 224.26       | 8,625.45    | 8,624.75             | 0.99         | 0.75                      | -0.65                    |
| 16,951.00     | 90.98           | 89.76       | 8,927.06          | 224.41       | 8,720.45    | 8,719.74             | 0.82         | 0.76                      | -0.32                    |
| 17,047.00     | 90.88           | 90.17       | 8,925.51          | 224.46       | 8,816.43    | 8,815.73             | 0.44         | -0.10                     | 0.43                     |
| 17,142.00     | 89.30           | 91.41       | 8,925.36          | 223.15       | 8,911.42    | 8,910.72             | 2.11         | -1.66                     | 1.31                     |
| 17,238.00     | 89.34           | 91.53       | 8,926.50          | 220.69       | 9,007.38    | 9,006.69             | 0.13         | 0.04                      | 0.13                     |
| 17,334.00     | 89.74           | 91.56       | 8,927.27          | 218.10       | 9,103.34    | 9,102.66             | 0.42         | 0.42                      | 0.03                     |
| 17,429.00     | 89.27           | 90.70       | 8,928.09          | 216.23       | 9,198.32    | 9,197.64             | 1.03         | -0.49                     | -0.91                    |
| 17,525.00     | 88.39           | 90.81       | 8,930.05          | 214.96       | 9,294.29    | 9,293.61             | 0.92         | -0.92                     | 0.11                     |
| 17,620.00     | 88.18           | 90.91       | 8,932.89          | 213.54       | 9,389.24    | 9,388.56             | 0.24         | -0.22                     | 0.11                     |
| 17,716.00     | 89.00           | 90.34       | 8,935.25          | 212.49       | 9,485.20    | 9,484.53             | 1.04         | 0.85                      | -0.59                    |
| 17,812.00     | 88.82           | 89.91       | 8,937.08          | 212.28       | 9,581.18    | 9,580.51             | 0.49         | -0.19                     | -0.45                    |
| 17,907.00     | 89.19           | 91.25       | 8,938.73          | 211.32       | 9,676.16    | 9,675.49             | 1.46         | 0.39                      | 1.41                     |
| 18,003.00     | 89.54           | 91.81       | 8,939.79          | 208.76       | 9,772.12    | 9,771.46             | 0.69         | 0.36                      | 0.58                     |
| 18,098.00     | 90.24           | 91.49       | 8,939.97          | 206.02       | 9,867.08    | 9,866.43             | 0.81         | 0.74                      | -0.34                    |
| 18,194.00     | 90.24           | 91.72       | 8,939.57          | 203.33       | 9,963.04    | 9,962.39             | 0.24         | 0.00                      | 0.24                     |
| 18,290.00     | 91.22           | 90.94       | 8,938.35          | 201.11       | 10,059.01   | 10,058.37            | 1.30         | 1.02                      | -0.81                    |
| 18,387.00     | 91.91           | 90.84       | 8,935.70          | 199.60       | 10,155.96   | 10,155.32            | 0.72         | 0.71                      | -0.10                    |
| 18,485.00     | 92.43           | 90.41       | 8,931.99          | 198.53       | 10,253.88   | 10,253.25            | 0.69         | 0.53                      | -0.44                    |

# LEAM Drilling Systems LLC

## Survey Report

|           |                          |                              |                                     |
|-----------|--------------------------|------------------------------|-------------------------------------|
| Company:  | Devon Energy             | Local Co-ordinate Reference: | Well 9H                             |
| Project:  | Eddy County, NM (NAD-83) | TVD Reference:               | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Site:     | Agate PWU 21-22          | MD Reference:                | 3334.2' GE + 23.5' KB @ 3357.70usft |
| Well:     | 9H                       | North Reference:             | Grid                                |
| Wellbore: | OH                       | Survey Package:              | Minimum Curvature                   |
| Design:   | OH                       | Database:                    | EDM 5000.1 Multi User Db            |

| Measured Depth (usft)                               | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | True N (usft) | True E (usft) | Vertical Section (usft) | Depth Rate (ft/100usft) | Build Rate (ft/100usft) | Turn Rate (ft/100usft) |
|-----------------------------------------------------|-----------------|-------------|-----------------------|---------------|---------------|-------------------------|-------------------------|-------------------------|------------------------|
| 18,583.00                                           | 92.93           | 90.25       | 8,927.41              | 197.97        | 10,351.77     | 10,351.14               | 0.54                    | 0.51                    | -0.16                  |
| 18,681.00                                           | 92.99           | 90.14       | 8,922.35              | 197.64        | 10,449.64     | 10,449.01               | 0.13                    | 0.06                    | -0.11                  |
| <b>PBHL (Agate 9H) - HL Crossing - 18698.23' MD</b> |                 |             |                       |               |               |                         |                         |                         |                        |
| 18,780.00                                           | 92.99           | 90.14       | 8,917.18              | 197.39        | 10,548.51     | 10,547.87               | 0.00                    | 0.00                    | 0.00                   |
| <b>Projection - BHL (Agate 9H)</b>                  |                 |             |                       |               |               |                         |                         |                         |                        |

| Target Name                                                                                                | Hit/Miss | Shape | Sl. Angle (°) | Depth (usft) | True N (usft) | True E (usft) | Vertical Section (usft) | Depth Rate (ft/100usft) | Latitude         | Longitude         |
|------------------------------------------------------------------------------------------------------------|----------|-------|---------------|--------------|---------------|---------------|-------------------------|-------------------------|------------------|-------------------|
| SHL (Agate 9H)                                                                                             | 0.00     |       | 0.00          | 0.00         | 0.00          | 0.00          | 601,009.77              | 616,495.30              | 32° 39' 7.1485 N | 104° 5' 20.8896 W |
| - actual wellpath hits target center                                                                       |          |       |               |              |               |               |                         |                         |                  |                   |
| - Point                                                                                                    |          |       |               |              |               |               |                         |                         |                  |                   |
| SL Crossing - 6189.69' M                                                                                   | 0.00     |       | 0.00          | 6,177.98     | 153.76        | 235.00        | 601,163.53              | 616,730.30              | 32° 39' 8.6647 N | 104° 5' 18.1367 W |
| - actual wellpath hits target center                                                                       |          |       |               |              |               |               |                         |                         |                  |                   |
| - Point                                                                                                    |          |       |               |              |               |               |                         |                         |                  |                   |
| HL Crossing - 8748.60' M                                                                                   | 0.00     |       | 0.00          | 8,674.24     | 195.62        | 564.85        | 601,205.39              | 617,060.15              | 32° 39' 9.0713 N | 104° 5' 14.2774 W |
| - actual wellpath hits target center                                                                       |          |       |               |              |               |               |                         |                         |                  |                   |
| - Point                                                                                                    |          |       |               |              |               |               |                         |                         |                  |                   |
| SL Crossing - 13746.92'                                                                                    | 0.00     |       | 0.00          | 8,891.13     | 206.65        | 5,518.00      | 601,216.42              | 622,013.30              | 32° 39' 9.0632 N | 104° 4' 16.3409 W |
| - actual wellpath misses target center by 0.01usft at 13746.92usft MD (8891.13 TVD, 206.65 N, 5518.00 E)   |          |       |               |              |               |               |                         |                         |                  |                   |
| - Point                                                                                                    |          |       |               |              |               |               |                         |                         |                  |                   |
| BHL (Agate 9H)                                                                                             | 0.00     |       | 0.00          | 8,917.18     | 197.39        | 10,548.51     | 601,207.16              | 627,043.81              | 32° 39' 8.8449 N | 104° 3' 17.5003 W |
| - actual wellpath misses target center by 0.01usft at 18780.00usft MD (8917.18 TVD, 197.39 N, 10548.51 E)  |          |       |               |              |               |               |                         |                         |                  |                   |
| - Point                                                                                                    |          |       |               |              |               |               |                         |                         |                  |                   |
| HL Crossing - 18698.23'                                                                                    | 0.00     |       | 0.00          | 8,921.45     | 197.59        | 10,466.85     | 601,207.36              | 626,962.15              | 32° 39' 8.8490 N | 104° 3' 18.4554 W |
| - actual wellpath misses target center by 17.23usft at 18681.00usft MD (8922.35 TVD, 197.64 N, 10449.64 E) |          |       |               |              |               |               |                         |                         |                  |                   |
| - Point                                                                                                    |          |       |               |              |               |               |                         |                         |                  |                   |

| Measured Depth (usft) | Vertical Depth (usft) | True N (usft) | True E (usft) | Comments   |
|-----------------------|-----------------------|---------------|---------------|------------|
| 18,780.00             | 8,917.18              | 197.39        | 10,548.51     | Projection |

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