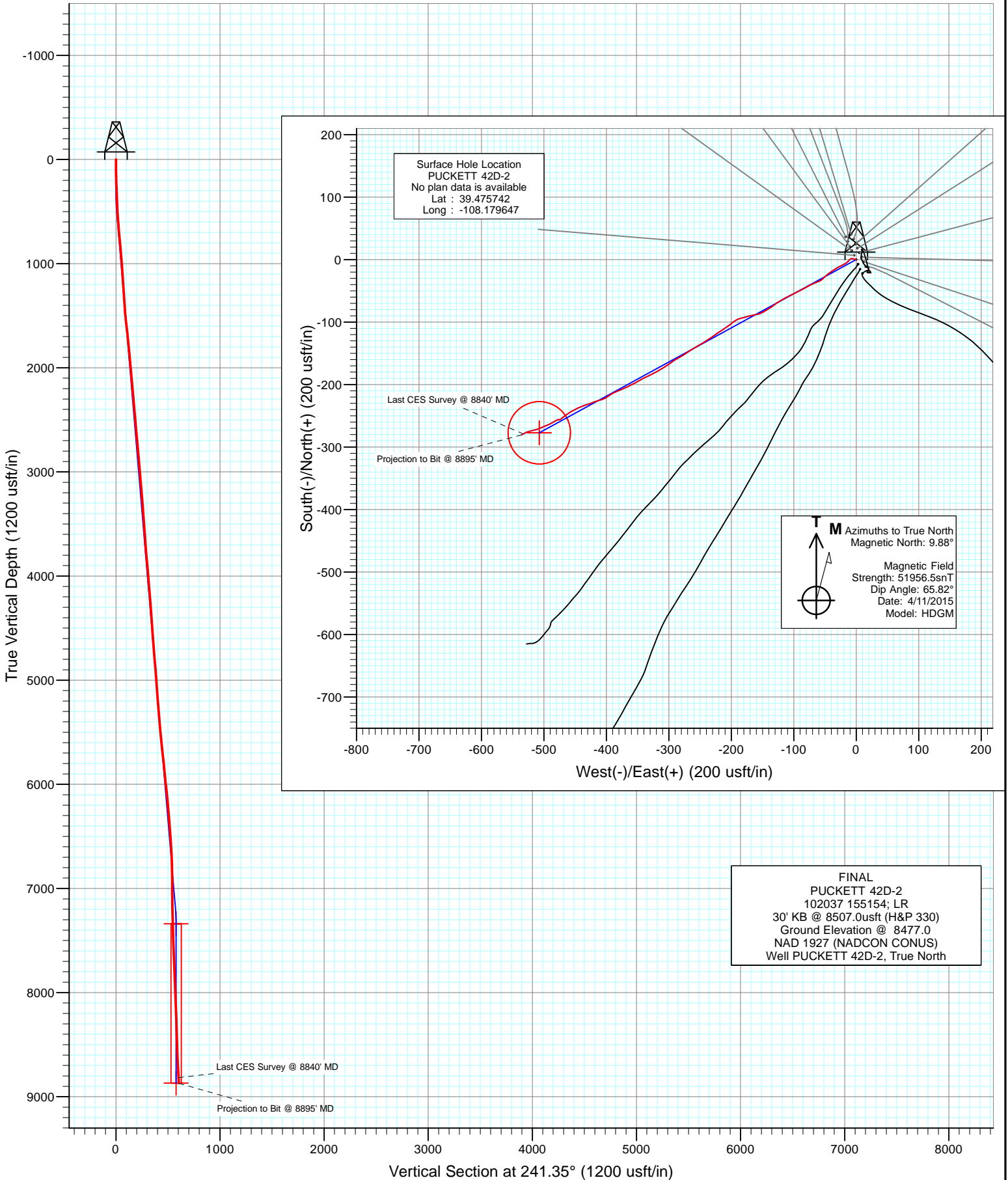




Project: Garfield County, CO  
Site: S2-T7S-R97W (Mesa H2)  
Well: PUCKETT 42D-2  
Wellbore: DD  
Design: FINAL



# Cathedral Energy Services

## Survey Report

|   |  |
|---|--|
| <b>Company:</b> Caerus Oil & Gas (NAD 27) | <b>Local Co-ordinate Reference:</b> Well PUCKETT 42D-2 |
| <b>Project:</b> Garfield County, CO       | <b>TVD Reference:</b> 30' KB @ 8507.0usft (H&P 330)    |
| <b>Site:</b> S2-T7S-R97W (Mesa H2)        | <b>MD Reference:</b> 30' KB @ 8507.0usft (H&P 330)     |
| <b>Well:</b> PUCKETT 42D-2                | <b>North Reference:</b> True                           |
| <b>Wellbore:</b> DD                       | <b>Survey Calculation Method:</b> Minimum Curvature    |
| <b>Design:</b> FINAL                      | <b>Database:</b> USA EDM 5000 Multi Users DB           |

|   |                      |                |
|---|----------------------|----------------|
| <b>Project</b> Garfield County, CO                      |                      |                |
| <b>Map System:</b> US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b> NAD 1927 (NADCON CONUS)               |                      |                |
| <b>Map Zone:</b> Colorado Central 502                   |                      |                |

|                                       |                              |                   |                          |             |
|---------------------------------------|------------------------------|-------------------|--------------------------|-------------|
| <b>Site</b> S2-T7S-R97W (Mesa H2)     |                              |                   |                          |             |
| <b>Site Position:</b>                 | <b>Northing:</b>             | 609,295.74 usft   | <b>Latitude:</b>         | 39.475700   |
| <b>From:</b> Lat/Long                 | <b>Easting:</b>              | 1,243,680.53 usft | <b>Longitude:</b>        | -108.179625 |
| <b>Position Uncertainty:</b> 0.0 usft | <b>Slot Radius:</b> 13-3/16" |                   | <b>Grid Convergence:</b> | -1.69 °     |

|                             |              |          |                            |                   |
|-----------------------------|--------------|----------|----------------------------|-------------------|
| <b>Well</b> PUCKETT 42D-2   |              |          |                            |                   |
| <b>Well Position</b>        | <b>+N/-S</b> | 0.0 usft | <b>Northing:</b>           | 609,311.21 usft   |
|                             | <b>+E/-W</b> | 0.0 usft | <b>Easting:</b>            | 1,243,674.77 usft |
| <b>Position Uncertainty</b> |              | 0.0 usft | <b>Wellhead Elevation:</b> | 0.0 usft          |
|                             |              |          | <b>Ground Level:</b>       | 8,477.0 usft      |

|                    |                   |                    |                        |                      |                            |
|--------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b> DD |                   |                    |                        |                      |                            |
| <b>Magnetics</b>   | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                    | HDGM              | 4/11/2015          | 9.88                   | 65.82                | 51,957                     |

|                          |                                |                      |                     |                      |
|--------------------------|--------------------------------|----------------------|---------------------|----------------------|
| <b>Design</b> FINAL      |                                |                      |                     |                      |
| <b>Audit Notes:</b>      |                                |                      |                     |                      |
| <b>Version:</b> 1.0      | <b>Phase:</b> ACTUAL           | <b>Tie On Depth:</b> | 0.0                 |                      |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b>  | <b>+E/-W (usft)</b> | <b>Direction (°)</b> |
|                          | 0.0                            | 0.0                  | 0.0                 | 241.35               |

|                       |                  |                                   |
|-----------------------|------------------|-----------------------------------|
| <b>Survey Program</b> |                  | <b>Date</b> 4/19/2015             |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b>          |
| 177.0                 | 8,895.0          | Survey #1 (DD)                    |
|                       |                  | <b>Tool Name</b> ISCWSA MWD       |
|                       |                  | <b>Description</b> MWD - Standard |

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usf) | Build Rate (°/100u) | Formations / Comments |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|---------------------|-----------------------|
| 0.0                   | 0.00            | 0.00        | 0.0                   | 0.0          | 0.0          | 0.0                     | 0.00                   | 0.00                |                       |
| 177.0                 | 2.20            | 286.10      | 177.0                 | 0.9          | -3.3         | 2.4                     | 1.24                   | 1.24                |                       |
| 207.0                 | 2.60            | 280.30      | 206.9                 | 1.2          | -4.5         | 3.4                     | 1.56                   | 1.33                |                       |
| 238.0                 | 2.20            | 282.50      | 237.9                 | 1.5          | -5.8         | 4.3                     | 1.32                   | -1.29               |                       |
| 268.0                 | 1.90            | 263.50      | 267.9                 | 1.5          | -6.8         | 5.2                     | 2.46                   | -1.00               |                       |
| 298.0                 | 2.20            | 261.60      | 297.9                 | 1.4          | -7.9         | 6.2                     | 1.03                   | 1.00                |                       |
| 330.0                 | 1.80            | 242.00      | 329.8                 | 1.1          | -8.9         | 7.3                     | 2.46                   | -1.25               |                       |
| 361.0                 | 2.50            | 234.50      | 360.8                 | 0.5          | -9.9         | 8.5                     | 2.43                   | 2.26                |                       |
| 391.0                 | 2.60            | 223.20      | 390.8                 | -0.4         | -10.9        | 9.8                     | 1.71                   | 0.33                |                       |
| 453.0                 | 3.10            | 222.20      | 452.7                 | -2.7         | -13.0        | 12.7                    | 0.81                   | 0.81                |                       |
| 543.0                 | 3.80            | 238.10      | 542.6                 | -6.1         | -17.2        | 18.0                    | 1.31                   | 0.78                |                       |
| 634.0                 | 4.10            | 245.30      | 633.3                 | -9.0         | -22.7        | 24.2                    | 0.64                   | 0.33                |                       |
| 729.0                 | 5.50            | 240.90      | 728.0                 | -12.6        | -29.7        | 32.2                    | 1.52                   | 1.47                |                       |

# Cathedral Energy Services

## Survey Report

|                  |                           |                                     |                               |
|------------------|---------------------------|-------------------------------------|-------------------------------|
| <b>Company:</b>  | Caerus Oil & Gas (NAD 27) | <b>Local Co-ordinate Reference:</b> | Well PUCKETT 42D-2            |
| <b>Project:</b>  | Garfield County, CO       | <b>TVD Reference:</b>               | 30' KB @ 8507.0usft (H&P 330) |
| <b>Site:</b>     | S2-T7S-R97W (Mesa H2)     | <b>MD Reference:</b>                | 30' KB @ 8507.0usft (H&P 330) |
| <b>Well:</b>     | PUCKETT 42D-2             | <b>North Reference:</b>             | True                          |
| <b>Wellbore:</b> | DD                        | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Design:</b>   | FINAL                     | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |

| Survey                |                 |             |                       |              |              |                         |                        |                     |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|---------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usf) | Build Rate (°/100u) | Formations / Comments |
| 823.0                 | 5.50            | 234.90      | 821.6                 | -17.4        | -37.4        | 41.1                    | 0.61                   | 0.00                |                       |
| 918.0                 | 5.30            | 231.30      | 916.2                 | -22.8        | -44.5        | 50.0                    | 0.41                   | -0.21               |                       |
| 1,012.0               | 4.00            | 226.10      | 1,009.8               | -27.8        | -50.3        | 57.4                    | 1.45                   | -1.38               |                       |
| 1,107.0               | 3.90            | 231.90      | 1,104.6               | -32.1        | -55.2        | 63.8                    | 0.43                   | -0.11               |                       |
| 1,201.0               | 3.90            | 248.80      | 1,198.4               | -35.2        | -60.7        | 70.1                    | 1.22                   | 0.00                |                       |
| 1,296.0               | 4.20            | 247.60      | 1,293.2               | -37.7        | -66.9        | 76.8                    | 0.33                   | 0.32                |                       |
| 1,390.0               | 3.80            | 244.30      | 1,386.9               | -40.4        | -72.9        | 83.3                    | 0.49                   | -0.43               |                       |
| 1,485.0               | 4.20            | 239.30      | 1,481.7               | -43.5        | -78.7        | 90.0                    | 0.56                   | 0.42                |                       |
| 1,579.0               | 6.30            | 241.30      | 1,575.3               | -47.7        | -86.2        | 98.6                    | 2.24                   | 2.23                |                       |
| 1,674.0               | 7.10            | 244.20      | 1,669.7               | -52.8        | -96.1        | 109.6                   | 0.91                   | 0.84                |                       |
| 1,768.0               | 5.60            | 245.60      | 1,763.1               | -57.2        | -105.5       | 120.0                   | 1.60                   | -1.60               |                       |
| 1,863.0               | 4.80            | 241.30      | 1,857.7               | -61.0        | -113.2       | 128.6                   | 0.94                   | -0.84               |                       |
| 1,957.0               | 4.80            | 237.70      | 1,951.4               | -65.0        | -120.0       | 136.5                   | 0.32                   | 0.00                |                       |
| 2,052.0               | 5.40            | 236.80      | 2,046.0               | -69.6        | -127.1       | 144.9                   | 0.64                   | 0.63                |                       |
| 2,146.0               | 5.70            | 232.40      | 2,139.5               | -74.9        | -134.5       | 153.9                   | 0.55                   | 0.32                |                       |
| 2,241.0               | 5.50            | 241.10      | 2,234.1               | -79.9        | -142.2       | 163.1                   | 0.92                   | -0.21               |                       |
| 2,335.0               | 5.00            | 239.40      | 2,327.7               | -84.2        | -149.7       | 171.7                   | 0.56                   | -0.53               |                       |
| 2,430.0               | 4.90            | 256.70      | 2,422.3               | -87.3        | -157.2       | 179.8                   | 1.57                   | -0.11               |                       |
| 2,480.0               | 4.80            | 260.10      | 2,472.2               | -88.1        | -161.3       | 183.8                   | 0.61                   | -0.20               |                       |
| 2,593.0               | 4.90            | 254.80      | 2,584.8               | -90.2        | -170.6       | 193.0                   | 0.41                   | 0.09                |                       |
| 2,687.0               | 5.20            | 255.60      | 2,678.4               | -92.3        | -178.6       | 201.0                   | 0.33                   | 0.32                |                       |
| 2,782.0               | 5.60            | 252.80      | 2,773.0               | -94.7        | -187.2       | 209.7                   | 0.50                   | 0.42                |                       |
| 2,876.0               | 5.40            | 233.70      | 2,866.5               | -98.7        | -195.2       | 218.6                   | 1.95                   | -0.21               |                       |
| 2,971.0               | 5.50            | 231.20      | 2,961.1               | -104.2       | -202.3       | 227.5                   | 0.27                   | 0.11                |                       |
| 3,065.0               | 4.70            | 236.20      | 3,054.7               | -109.2       | -209.0       | 235.8                   | 0.97                   | -0.85               |                       |
| 3,159.0               | 4.40            | 238.10      | 3,148.4               | -113.2       | -215.3       | 243.2                   | 0.36                   | -0.32               |                       |
| 3,254.0               | 4.30            | 235.10      | 3,243.2               | -117.2       | -221.3       | 250.4                   | 0.26                   | -0.11               |                       |
| 3,348.0               | 4.30            | 234.40      | 3,336.9               | -121.3       | -227.1       | 257.4                   | 0.06                   | 0.00                |                       |
| 3,443.0               | 4.30            | 237.50      | 3,431.6               | -125.2       | -233.0       | 264.5                   | 0.24                   | 0.00                |                       |
| 3,537.0               | 4.40            | 235.80      | 3,525.4               | -129.2       | -238.9       | 271.6                   | 0.17                   | 0.11                |                       |
| 3,632.0               | 4.20            | 238.80      | 3,620.1               | -133.0       | -244.9       | 278.7                   | 0.32                   | -0.21               |                       |
| 3,726.0               | 4.20            | 239.80      | 3,713.9               | -136.5       | -250.8       | 285.6                   | 0.08                   | 0.00                |                       |
| 3,821.0               | 4.70            | 238.60      | 3,808.6               | -140.3       | -257.2       | 292.9                   | 0.54                   | 0.53                |                       |
| 3,915.0               | 5.50            | 239.10      | 3,902.2               | -144.6       | -264.3       | 301.3                   | 0.85                   | 0.85                |                       |
| 4,010.0               | 4.80            | 234.70      | 3,996.8               | -149.3       | -271.5       | 309.8                   | 0.85                   | -0.74               |                       |
| 4,104.0               | 4.70            | 238.20      | 4,090.5               | -153.6       | -277.9       | 317.5                   | 0.33                   | -0.11               |                       |
| 4,198.0               | 4.60            | 241.90      | 4,184.2               | -157.4       | -284.5       | 325.2                   | 0.34                   | -0.11               |                       |
| 4,293.0               | 4.50            | 237.40      | 4,278.9               | -161.2       | -291.0       | 332.7                   | 0.39                   | -0.11               |                       |
| 4,388.0               | 4.40            | 234.50      | 4,373.6               | -165.3       | -297.1       | 340.0                   | 0.26                   | -0.11               |                       |
| 4,482.0               | 4.20            | 237.30      | 4,467.3               | -169.2       | -303.0       | 347.0                   | 0.31                   | -0.21               |                       |
| 4,576.0               | 3.70            | 232.70      | 4,561.1               | -172.9       | -308.3       | 353.5                   | 0.63                   | -0.53               |                       |
| 4,671.0               | 4.20            | 242.70      | 4,655.9               | -176.4       | -313.8       | 360.0                   | 0.89                   | 0.53                |                       |
| 4,765.0               | 5.20            | 244.00      | 4,749.6               | -179.8       | -320.7       | 367.7                   | 1.07                   | 1.06                |                       |
| 4,860.0               | 5.20            | 241.00      | 4,844.2               | -183.8       | -328.3       | 376.3                   | 0.29                   | 0.00                |                       |
| 4,954.0               | 3.50            | 245.40      | 4,937.9               | -187.1       | -334.7       | 383.4                   | 1.84                   | -1.81               |                       |
| 5,049.0               | 4.50            | 242.70      | 5,032.7               | -190.0       | -340.6       | 390.0                   | 1.07                   | 1.05                |                       |
| 5,143.0               | 4.00            | 239.60      | 5,126.4               | -193.3       | -346.7       | 397.0                   | 0.59                   | -0.53               |                       |
| 5,238.0               | 4.90            | 241.50      | 5,221.1               | -197.0       | -353.2       | 404.3                   | 0.96                   | 0.95                |                       |
| 5,332.0               | 4.70            | 244.80      | 5,314.8               | -200.5       | -360.2       | 412.2                   | 0.36                   | -0.21               |                       |
| 5,427.0               | 4.40            | 242.80      | 5,409.5               | -203.8       | -366.9       | 419.7                   | 0.36                   | -0.32               |                       |
| 5,521.0               | 5.90            | 247.40      | 5,503.1               | -207.3       | -374.6       | 428.1                   | 1.65                   | 1.60                |                       |
| 5,616.0               | 5.90            | 247.50      | 5,597.6               | -211.1       | -383.6       | 437.9                   | 0.01                   | 0.00                |                       |
| 5,710.0               | 6.00            | 237.70      | 5,691.1               | -215.6       | -392.2       | 447.6                   | 1.08                   | 0.11                |                       |

# Cathedral Energy Services

## Survey Report

|   |  |
|---|--|
| <b>Company:</b> Caerus Oil & Gas (NAD 27) | <b>Local Co-ordinate Reference:</b> Well PUCKETT 42D-2 |
| <b>Project:</b> Garfield County, CO       | <b>TVD Reference:</b> 30' KB @ 8507.0usft (H&P 330)    |
| <b>Site:</b> S2-T7S-R97W (Mesa H2)        | <b>MD Reference:</b> 30' KB @ 8507.0usft (H&P 330)     |
| <b>Well:</b> PUCKETT 42D-2                | <b>North Reference:</b> True                           |
| <b>Wellbore:</b> DD                       | <b>Survey Calculation Method:</b> Minimum Curvature    |
| <b>Design:</b> FINAL                      | <b>Database:</b> USA EDM 5000 Multi Users DB           |

| Survey                |                 |             |                       |              |              |                         |                        |                     |                              |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|---------------------|------------------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usf) | Build Rate (°/100u) | Formations / Comments        |
| 5,804.0               | 6.00            | 236.90      | 5,784.6               | -220.9       | -400.5       | 457.4                   | 0.09                   | 0.00                |                              |
| 5,899.0               | 5.80            | 256.80      | 5,879.1               | -224.7       | -409.3       | 466.9                   | 2.15                   | -0.21               |                              |
| 5,994.0               | 5.80            | 249.90      | 5,973.6               | -227.4       | -418.5       | 476.3                   | 0.73                   | 0.00                |                              |
| 6,088.0               | 6.20            | 249.80      | 6,067.1               | -230.8       | -427.7       | 486.0                   | 0.43                   | 0.43                |                              |
| 6,183.0               | 5.80            | 251.70      | 6,161.6               | -234.1       | -437.1       | 495.8                   | 0.47                   | -0.42               |                              |
| 6,277.0               | 4.40            | 241.90      | 6,255.2               | -237.3       | -444.8       | 504.1                   | 1.75                   | -1.49               |                              |
| 6,372.0               | 4.40            | 242.30      | 6,349.9               | -240.7       | -451.2       | 511.4                   | 0.03                   | 0.00                |                              |
| 6,466.0               | 4.40            | 240.70      | 6,443.6               | -244.1       | -457.6       | 518.6                   | 0.13                   | 0.00                |                              |
| 6,561.0               | 4.40            | 236.80      | 6,538.4               | -247.9       | -463.8       | 525.9                   | 0.31                   | 0.00                |                              |
| 6,655.0               | 3.50            | 226.60      | 6,632.1               | -251.8       | -468.9       | 532.2                   | 1.21                   | -0.96               |                              |
| 6,750.0               | 2.20            | 234.20      | 6,727.0               | -254.9       | -472.5       | 536.9                   | 1.42                   | -1.37               |                              |
| 6,845.0               | 0.70            | 256.30      | 6,822.0               | -256.1       | -474.5       | 539.2                   | 1.66                   | -1.58               |                              |
| 6,939.0               | 0.60            | 252.60      | 6,916.0               | -256.4       | -475.6       | 540.3                   | 0.12                   | -0.11               |                              |
| 7,034.0               | 0.80            | 326.80      | 7,011.0               | -256.0       | -476.4       | 540.8                   | 0.90                   | 0.21                |                              |
| 7,128.0               | 1.00            | 231.30      | 7,105.0               | -256.0       | -477.4       | 541.7                   | 1.42                   | 0.21                |                              |
| 7,223.0               | 1.20            | 244.20      | 7,200.0               | -256.9       | -478.9       | 543.5                   | 0.33                   | 0.21                |                              |
| 7,317.0               | 1.30            | 244.40      | 7,293.9               | -257.8       | -480.8       | 545.5                   | 0.11                   | 0.11                |                              |
| 7,507.0               | 1.80            | 237.00      | 7,483.9               | -260.3       | -485.2       | 550.7                   | 0.28                   | 0.26                |                              |
| 7,696.0               | 2.40            | 244.50      | 7,672.7               | -263.7       | -491.3       | 557.6                   | 0.35                   | 0.32                |                              |
| 7,885.0               | 2.40            | 251.50      | 7,861.6               | -266.6       | -498.6       | 565.4                   | 0.15                   | 0.00                |                              |
| 8,074.0               | 1.90            | 239.30      | 8,050.4               | -269.5       | -505.1       | 572.4                   | 0.36                   | -0.26               |                              |
| 8,263.0               | 1.90            | 258.30      | 8,239.3               | -271.7       | -510.8       | 578.6                   | 0.33                   | 0.00                |                              |
| 8,452.0               | 1.90            | 256.20      | 8,428.2               | -273.1       | -516.9       | 584.6                   | 0.04                   | 0.00                |                              |
| 8,641.0               | 2.30            | 255.30      | 8,617.1               | -274.8       | -523.7       | 591.3                   | 0.21                   | 0.21                |                              |
| 8,840.0               | 3.60            | 240.30      | 8,815.8               | -278.9       | -532.9       | 601.4                   | 0.75                   | 0.65                | Last CES Survey @ 8840' MD   |
| 8,895.0               | 3.60            | 240.30      | 8,870.7               | -280.6       | -535.9       | 604.9                   | 0.00                   | 0.00                | Projection to Bit @ 8895' MD |

| Targets  |               |              |            |              |              |                 |                |           |             |
|--|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------|-------------|
| Target Name  | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude  | Longitude   |
| PUCKETT 42D-2 TGT<br>- hit/miss target<br>- Shape  | 0.00          | 0.00         | 7,339.0    | -277.2       | -507.3       | 609,049.13      | 1,243,159.54   | 39.474981 | -108.181444 |
| - survey misses target center by 31.7usft at 7362.9usft MD (7339.9 TVD, -258.3 N, -481.8 E)                      |               |              |            |              |              |                 |                |           |             |
| - Point  |               |              |            |              |              |                 |                |           |             |
| PUCKETT 42D-2 BHL<br>- survey misses target center by 28.7usft at 8891.6usft MD (8867.3 TVD, -280.5 N, -535.8 E) | 0.00          | 0.00         | 8,869.0    | -277.2       | -507.3       | 609,049.13      | 1,243,159.54   | 39.474981 | -108.181444 |
| - Circle (radius 50.0)   |               |              |            |              |              |                 |                |           |             |

| Survey Annotations    |                       |              |              |                              |
|-----------------------|-----------------------|--------------|--------------|------------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Comment                      |
| 8,840.0               | 8,815.8               | -278.9       | -532.9       | Last CES Survey @ 8840' MD   |
| 8,895.0               | 8,870.7               | -280.6       | -535.9       | Projection to Bit @ 8895' MD |

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