

# **CRESTONE PEAK RESOURCES**

**ARAPAHOE COUNTY**

**SEC 8-T5S-R64W**

**STATE HARVARD 5-64 8-7-12 2AH**

**OWB**

**Plan: PROPOSAL 1**

## **Standard Planning Report**

**15 May, 2025**

Project: ARAPAHOE COUNTY  
 Site: SEC 8-T5S-R64W  
 Well: STATE HARVARD 5-64 8-7-12 2AH  
 Wellbore: OWB  
 Design: PROPOSAL 1



Azimuths to True North  
 Magnetic North: 7.28°  
 Magnetic Field  
 Strength: 51163.7nT  
 Dip Angle: 65.91°  
 Date: 3/20/2025  
 Model: IGRF2020

WELL DETAILS: STATE HARVARD 5-64 8-7-12 2AH

| +N/-S | +E/-W | Northing   | Easting    | 5924.00<br>Latitude | Longitude    | Slot |
|-------|-------|------------|------------|---------------------|--------------|------|
| 0.00  | 0.00  | 1655824.12 | 3262039.77 | 39.630347°N         | 104.569649°W |      |

SECTION DETAILS

| Sec | MD       | Inc   | Azi    | TVD     | +N/-S   | +E/-W     | Dleg  | TFace   | VSec     | Target                           |
|-----|----------|-------|--------|---------|---------|-----------|-------|---------|----------|----------------------------------|
| 1   | 0.00     | 0.00  | 0.00   | 0.00    | 0.00    | 0.00      | 0.00  | 0.00    | 0.00     |                                  |
| 2   | 300.00   | 0.00  | 0.00   | 300.00  | 0.00    | 0.00      | 0.00  | 0.00    | 0.00     |                                  |
| 3   | 1099.59  | 15.99 | 45.47  | 1089.25 | 77.75   | 79.03     | 2.00  | 45.47   | -72.22   |                                  |
| 4   | 7393.98  | 15.99 | 45.47  | 7140.04 | 1293.94 | 1315.16   | 0.00  | 0.00    | -1201.85 |                                  |
| 5   | 8417.09  | 90.00 | 264.76 | 7824.00 | 1366.37 | 746.38    | 10.00 | -139.60 | -629.00  | LP-ST. HARVARD 5-64 8-7-12 2AH   |
| 6   | 13561.41 | 90.00 | 264.76 | 7824.00 | 896.11  | -4376.40  | 0.00  | 0.00    | 4436.20  | MP-ST. HARVARD 5-64 8-7-12 2AH   |
| 7   | 13877.06 | 90.00 | 271.07 | 7824.00 | 884.61  | -4691.68  | 2.00  | 90.00   | 4749.39  |                                  |
| 8   | 21331.99 | 90.00 | 271.07 | 7824.00 | 1023.56 | -12145.31 | 0.00  | 0.00    | 12188.37 | PBHL-ST. HARVARD 5-64 8-7-12 2AH |

ANNOTATIONS

| MD       | Inc   | Azi    | TVD     | +N/-S   | +E/-W     | VSec     | Departure | Annotation                        |
|----------|-------|--------|---------|---------|-----------|----------|-----------|-----------------------------------|
| 300.00   | 0.00  | 0.00   | 300.00  | 0.00    | 0.00      | 0.00     | 0.00      | Start Build 2.00                  |
| 1099.59  | 15.99 | 45.47  | 1089.25 | 77.75   | 79.03     | -72.22   | 110.87    | Start 6294.38 hold at 1099.59 MD  |
| 7393.98  | 15.99 | 45.47  | 7140.05 | 1293.94 | 1315.16   | -1201.85 | 1844.98   | Start DLS 10.00 TFO -139.60       |
| 8417.09  | 90.00 | 264.76 | 7824.00 | 1366.37 | 746.38    | -629.00  | 2468.94   | Start 5144.32 hold at 8417.09 MD  |
| 13561.41 | 90.00 | 264.76 | 7824.00 | 896.11  | -4376.40  | 4436.20  | 7613.26   | Start DLS 2.00 TFO 90.00          |
| 13877.06 | 90.00 | 271.07 | 7824.00 | 884.61  | -4691.68  | 4749.39  | 7928.91   | Start 7454.93 hold at 13877.06 MD |
| 21331.99 | 90.00 | 271.07 | 7824.00 | 1023.56 | -12145.31 | 12188.37 | 15383.84  | TD at 21331.99                    |

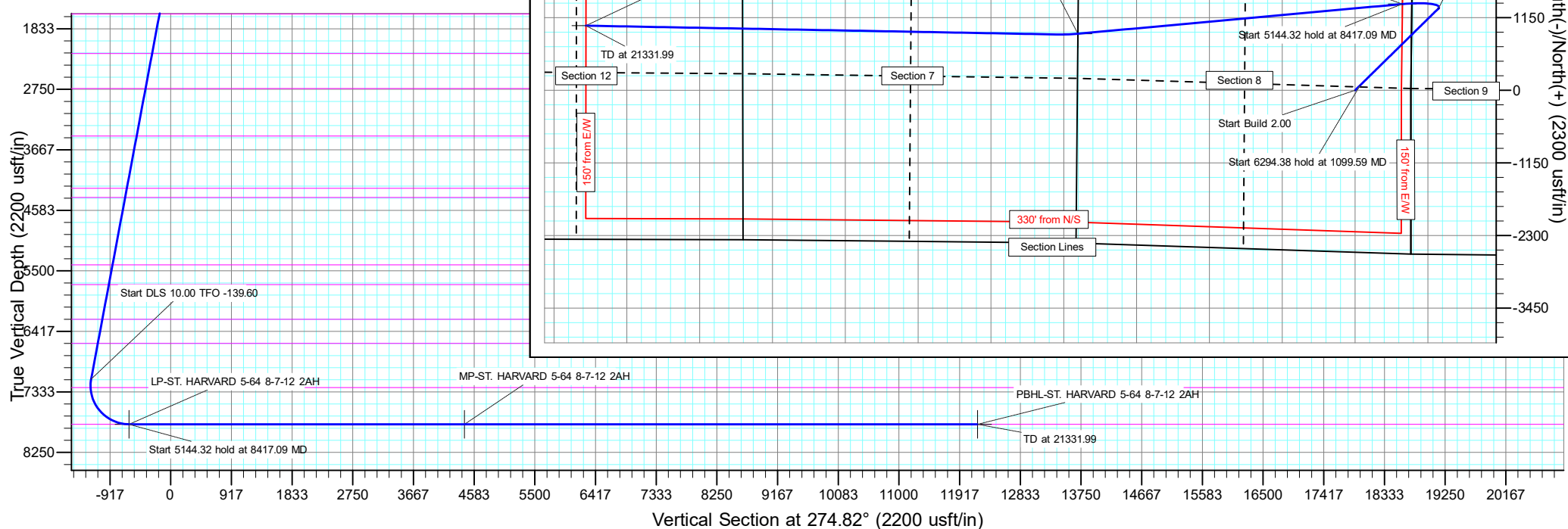
DESIGN TARGET DETAILS

| Name                             | TVD     | +N/-S   | +E/-W     | Northing   | Easting    | Latitude    | Longitude    | Shape |
|----------------------------------|---------|---------|-----------|------------|------------|-------------|--------------|-------|
| LP-ST. HARVARD 5-64 8-7-12 2AH   | 7824.00 | 1366.37 | 746.38    | 1657198.04 | 3262772.10 | 39.634098°N | 104.566999°W | Point |
| - plan hits target center        |         |         |           |            |            |             |              |       |
| MP-ST. HARVARD 5-64 8-7-12 2AH   | 7824.00 | 896.11  | -4376.40  | 1656675.35 | 3257654.51 | 39.632806°N | 104.585187°W | Point |
| - plan hits target center        |         |         |           |            |            |             |              |       |
| PBHL-ST. HARVARD 5-64 8-7-12 2AH | 7824.00 | 1023.56 | -12145.31 | 1656723.23 | 3249884.87 | 39.633149°N | 104.612770°W | Point |
| - plan hits target center        |         |         |           |            |            |             |              |       |

PROJECT DETAILS: ARAPAHOE COUNTY

Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Colorado Central Zone  
 System Datum: Mean Sea Level

SHL:  
 2564' FSL, 882' FEL  
 SEC 8-T5S-R64W  
 LP:  
 1350' FNL, 150' FEL  
 SEC 8-T5S-R64W  
 BHL:  
 1900' FNL, 2474' FEL  
 SEC 12-T5S-R65W



# Civitas Resources

## Planning Report

|                  |                               |                                     |                                    |
|------------------|-------------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | EDM                           | <b>Local Co-ordinate Reference:</b> | Well STATE HARVARD 5-64 8-7-12 2AH |
| <b>Company:</b>  | CRESTONE PEAK RESOURCES       | <b>TVD Reference:</b>               | KBE 25' @ 5949.00usft              |
| <b>Project:</b>  | ARAPAHOE COUNTY               | <b>MD Reference:</b>                | KBE 25' @ 5949.00usft              |
| <b>Site:</b>     | SEC 8-T5S-R64W                | <b>North Reference:</b>             | True                               |
| <b>Well:</b>     | STATE HARVARD 5-64 8-7-12 2AH | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | OWB                           |                                     |                                    |
| <b>Design:</b>   | PROPOSAL 1                    |                                     |                                    |

|                    |                           |                      |                             |
|--------------------|---------------------------|----------------------|-----------------------------|
| <b>Project</b>     | ARAPAHOE COUNTY           |                      |                             |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level              |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                             |
| <b>Map Zone:</b>   | Colorado Central Zone     |                      | Using geodetic scale factor |

|                              |                |                     |                   |                          |              |
|------------------------------|----------------|---------------------|-------------------|--------------------------|--------------|
| <b>Site</b>                  | SEC 8-T5S-R64W |                     |                   |                          |              |
| <b>Site Position:</b>        |                | <b>Northing:</b>    | 1,658,546.66 usft | <b>Latitude:</b>         | 39.637796°N  |
| <b>From:</b>                 | Lat/Long       | <b>Easting:</b>     | 3,262,923.29 usft | <b>Longitude:</b>        | 104.566413°W |
| <b>Position Uncertainty:</b> | 0.00 usft      | <b>Slot Radius:</b> | 13.200 in         | <b>Grid Convergence:</b> | 0.59 °       |

|                             |                               |                |                            |                   |                      |               |
|-----------------------------|-------------------------------|----------------|----------------------------|-------------------|----------------------|---------------|
| <b>Well</b>                 | STATE HARVARD 5-64 8-7-12 2AH |                |                            |                   |                      |               |
| <b>Well Position</b>        | <b>+N/-S</b>                  | -2,713.37 usft | <b>Northing:</b>           | 1,655,824.12 usft | <b>Latitude:</b>     | 39.630347°N   |
|                             | <b>+E/-W</b>                  | -911.48 usft   | <b>Easting:</b>            | 3,262,039.77 usft | <b>Longitude:</b>    | 104.569649°W  |
| <b>Position Uncertainty</b> |                               | 0.00 usft      | <b>Wellhead Elevation:</b> |                   | <b>Ground Level:</b> | 5,924.00 usft |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | OWB               |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2020          | 3/20/2025          | 7.28                   | 65.91                | 51,163.73380227            |

|                          |                                |                     |                      |                      |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| <b>Design</b>            | PROPOSAL 1                     |                     |                      |                      |
| <b>Audit Notes:</b>      |                                |                     |                      |                      |
| <b>Version:</b>          | <b>Phase:</b>                  | PROTOTYPE           | <b>Tie On Depth:</b> | 0.00                 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |
|                          | 0.00                           | 0.00                | 0.00                 | 274.82               |

|                                 |                        |                          |                  |                     |  |
|---------------------------------|------------------------|--------------------------|------------------|---------------------|--|
| <b>Plan Survey Tool Program</b> | <b>Date</b>            | 5/15/2025                |                  |                     |  |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Remarks</b>      |  |
| 1                               | 0.00                   | 21,331.99                | PROPOSAL 1 (OWB) | MWD OWSG            |  |
|                                 |                        |                          |                  | OWSG MWD - Standard |  |

| <b>Plan Sections</b>  |                 |             |                       |              |              |                       |                      |                     |         |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-----------------------|----------------------|---------------------|---------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target                |
| 0.00                  | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                  | 0.00                 | 0.00                | 0.00    |                       |
| 300.00                | 0.00            | 0.00        | 300.00                | 0.00         | 0.00         | 0.00                  | 0.00                 | 0.00                | 0.00    |                       |
| 1,099.59              | 15.99           | 45.47       | 1,089.25              | 77.75        | 79.03        | 2.00                  | 2.00                 | 0.00                | 45.47   |                       |
| 7,393.98              | 15.99           | 45.47       | 7,140.05              | 1,293.94     | 1,315.16     | 0.00                  | 0.00                 | 0.00                | 0.00    |                       |
| 8,417.09              | 90.00           | 264.76      | 7,824.00              | 1,366.37     | 746.38       | 10.00                 | 7.23                 | -13.75              | -139.60 | LP-ST. HARVARD 5-64   |
| 13,561.41             | 90.00           | 264.76      | 7,824.00              | 896.11       | -4,376.40    | 0.00                  | 0.00                 | 0.00                | 0.00    | MP-ST. HARVARD 5-64   |
| 13,877.06             | 90.00           | 271.07      | 7,824.00              | 884.61       | -4,691.68    | 2.00                  | 0.00                 | 2.00                | 90.00   |                       |
| 21,331.99             | 90.00           | 271.07      | 7,824.00              | 1,023.56     | -12,145.32   | 0.00                  | 0.00                 | 0.00                | 0.00    | PBHL-ST. HARVARD 5-64 |

# Civitas Resources

## Planning Report

|                  |                               |                                     |                                    |
|------------------|-------------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | EDM                           | <b>Local Co-ordinate Reference:</b> | Well STATE HARVARD 5-64 8-7-12 2AH |
| <b>Company:</b>  | CRESTONE PEAK RESOURCES       | <b>TVD Reference:</b>               | KBE 25' @ 5949.00usft              |
| <b>Project:</b>  | ARAPAHOE COUNTY               | <b>MD Reference:</b>                | KBE 25' @ 5949.00usft              |
| <b>Site:</b>     | SEC 8-T5S-R64W                | <b>North Reference:</b>             | True                               |
| <b>Well:</b>     | STATE HARVARD 5-64 8-7-12 2AH | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | OWB                           |                                     |                                    |
| <b>Design:</b>   | PROPOSAL 1                    |                                     |                                    |

| Planned Survey                          |                 |             |                       |             |             |                         |                       |                      |                     |
|---|-----------------|-------------|-----------------------|-------------|-------------|-------------------------|-----------------------|----------------------|---------------------|
| Measured Depth (usft)                   | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N-S (usft) | +E-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 0.00                                    | 0.00            | 0.00        | 0.00                  | 0.00        | 0.00        | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 24.00                                   | 0.00            | 0.00        | 24.00                 | 0.00        | 0.00        | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| <b>Denver</b>                           |                 |             |                       |             |             |                         |                       |                      |                     |
| 100.00                                  | 0.00            | 0.00        | 100.00                | 0.00        | 0.00        | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 200.00                                  | 0.00            | 0.00        | 200.00                | 0.00        | 0.00        | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| 300.00                                  | 0.00            | 0.00        | 300.00                | 0.00        | 0.00        | 0.00                    | 0.00                  | 0.00                 | 0.00                |
| <b>Start Build 2.00</b>                 |                 |             |                       |             |             |                         |                       |                      |                     |
| 400.00                                  | 2.00            | 45.47       | 399.98                | 1.22        | 1.24        | -1.14                   | 2.00                  | 2.00                 | 0.00                |
| 500.00                                  | 4.00            | 45.47       | 499.84                | 4.89        | 4.97        | -4.55                   | 2.00                  | 2.00                 | 0.00                |
| 600.00                                  | 6.00            | 45.47       | 599.45                | 11.01       | 11.19       | -10.22                  | 2.00                  | 2.00                 | 0.00                |
| 700.00                                  | 8.00            | 45.47       | 698.70                | 19.55       | 19.87       | -18.16                  | 2.00                  | 2.00                 | 0.00                |
| 800.00                                  | 10.00           | 45.47       | 797.47                | 30.52       | 31.02       | -28.35                  | 2.00                  | 2.00                 | 0.00                |
| 900.00                                  | 12.00           | 45.47       | 895.62                | 43.91       | 44.63       | -40.78                  | 2.00                  | 2.00                 | 0.00                |
| 1,000.00                                | 14.00           | 45.47       | 993.06                | 59.68       | 60.66       | -55.43                  | 2.00                  | 2.00                 | 0.00                |
| 1,099.59                                | 15.99           | 45.47       | 1,089.25              | 77.75       | 79.03       | -72.22                  | 2.00                  | 2.00                 | 0.00                |
| <b>Start 6294.38 hold at 1099.59 MD</b> |                 |             |                       |             |             |                         |                       |                      |                     |
| 1,100.00                                | 15.99           | 45.47       | 1,089.64              | 77.83       | 79.11       | -72.29                  | 0.00                  | 0.00                 | 0.00                |
| 1,120.14                                | 15.99           | 45.47       | 1,109.00              | 81.72       | 83.06       | -75.91                  | 0.00                  | 0.00                 | 0.00                |
| <b>Arapahoe</b>                         |                 |             |                       |             |             |                         |                       |                      |                     |
| 1,200.00                                | 15.99           | 45.47       | 1,185.77              | 97.15       | 98.75       | -90.24                  | 0.00                  | 0.00                 | 0.00                |
| 1,300.00                                | 15.99           | 45.47       | 1,281.90              | 116.48      | 118.39      | -108.19                 | 0.00                  | 0.00                 | 0.00                |
| 1,400.00                                | 15.99           | 45.47       | 1,378.03              | 135.80      | 138.02      | -126.13                 | 0.00                  | 0.00                 | 0.00                |
| 1,500.00                                | 15.99           | 45.47       | 1,474.16              | 155.12      | 157.66      | -144.08                 | 0.00                  | 0.00                 | 0.00                |
| 1,600.00                                | 15.99           | 45.47       | 1,570.29              | 174.44      | 177.30      | -162.03                 | 0.00                  | 0.00                 | 0.00                |
| 1,640.27                                | 15.99           | 45.47       | 1,609.00              | 182.22      | 185.21      | -169.25                 | 0.00                  | 0.00                 | 0.00                |
| <b>Laramie-Fox Hills Formation</b>      |                 |             |                       |             |             |                         |                       |                      |                     |
| 1,700.00                                | 15.99           | 45.47       | 1,666.42              | 193.76      | 196.94      | -179.97                 | 0.00                  | 0.00                 | 0.00                |
| 1,800.00                                | 15.99           | 45.47       | 1,762.55              | 213.08      | 216.58      | -197.92                 | 0.00                  | 0.00                 | 0.00                |
| 1,900.00                                | 15.99           | 45.47       | 1,858.68              | 232.41      | 236.22      | -215.87                 | 0.00                  | 0.00                 | 0.00                |
| 2,000.00                                | 15.99           | 45.47       | 1,954.81              | 251.73      | 255.86      | -233.81                 | 0.00                  | 0.00                 | 0.00                |
| 2,100.00                                | 15.99           | 45.47       | 2,050.94              | 271.05      | 275.50      | -251.76                 | 0.00                  | 0.00                 | 0.00                |
| 2,200.00                                | 15.99           | 45.47       | 2,147.07              | 290.37      | 295.13      | -269.71                 | 0.00                  | 0.00                 | 0.00                |
| 2,264.42                                | 15.99           | 45.47       | 2,209.00              | 302.82      | 307.79      | -281.27                 | 0.00                  | 0.00                 | 0.00                |
| <b>Pierre Formation</b>                 |                 |             |                       |             |             |                         |                       |                      |                     |
| 2,300.00                                | 15.99           | 45.47       | 2,243.20              | 309.69      | 314.77      | -287.65                 | 0.00                  | 0.00                 | 0.00                |
| 2,400.00                                | 15.99           | 45.47       | 2,339.33              | 329.02      | 334.41      | -305.60                 | 0.00                  | 0.00                 | 0.00                |
| 2,500.00                                | 15.99           | 45.47       | 2,435.46              | 348.34      | 354.05      | -323.55                 | 0.00                  | 0.00                 | 0.00                |
| 2,600.00                                | 15.99           | 45.47       | 2,531.59              | 367.66      | 373.69      | -341.49                 | 0.00                  | 0.00                 | 0.00                |
| 2,700.00                                | 15.99           | 45.47       | 2,627.72              | 386.98      | 393.33      | -359.44                 | 0.00                  | 0.00                 | 0.00                |
| 2,800.00                                | 15.99           | 45.47       | 2,723.85              | 406.30      | 412.97      | -377.39                 | 0.00                  | 0.00                 | 0.00                |
| 2,815.76                                | 15.99           | 45.47       | 2,739.00              | 409.35      | 416.06      | -380.21                 | 0.00                  | 0.00                 | 0.00                |
| <b>Upper Pierre aquifer</b>             |                 |             |                       |             |             |                         |                       |                      |                     |
| 2,900.00                                | 15.99           | 45.47       | 2,819.98              | 425.62      | 432.60      | -395.33                 | 0.00                  | 0.00                 | 0.00                |
| 3,000.00                                | 15.99           | 45.47       | 2,916.11              | 444.95      | 452.24      | -413.28                 | 0.00                  | 0.00                 | 0.00                |
| 3,100.00                                | 15.99           | 45.47       | 3,012.24              | 464.27      | 471.88      | -431.23                 | 0.00                  | 0.00                 | 0.00                |
| 3,200.00                                | 15.99           | 45.47       | 3,108.37              | 483.59      | 491.52      | -449.17                 | 0.00                  | 0.00                 | 0.00                |
| 3,300.00                                | 15.99           | 45.47       | 3,204.50              | 502.91      | 511.16      | -467.12                 | 0.00                  | 0.00                 | 0.00                |
| 3,400.00                                | 15.99           | 45.47       | 3,300.63              | 522.23      | 530.80      | -485.07                 | 0.00                  | 0.00                 | 0.00                |
| 3,500.00                                | 15.99           | 45.47       | 3,396.76              | 541.56      | 550.44      | -503.01                 | 0.00                  | 0.00                 | 0.00                |
| 3,564.74                                | 15.99           | 45.47       | 3,459.00              | 554.06      | 563.15      | -514.63                 | 0.00                  | 0.00                 | 0.00                |
| <b>Base of Upper Pierre aquifer</b>     |                 |             |                       |             |             |                         |                       |                      |                     |
| 3,600.00                                | 15.99           | 45.47       | 3,492.89              | 560.88      | 570.08      | -520.96                 | 0.00                  | 0.00                 | 0.00                |
| 3,700.00                                | 15.99           | 45.47       | 3,589.02              | 580.20      | 589.71      | -538.91                 | 0.00                  | 0.00                 | 0.00                |

# Civitas Resources

## Planning Report

|                  |                               |                                     |                                    |
|------------------|-------------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | EDM                           | <b>Local Co-ordinate Reference:</b> | Well STATE HARVARD 5-64 8-7-12 2AH |
| <b>Company:</b>  | CRESTONE PEAK RESOURCES       | <b>TVD Reference:</b>               | KBE 25' @ 5949.00usft              |
| <b>Project:</b>  | ARAPAHOE COUNTY               | <b>MD Reference:</b>                | KBE 25' @ 5949.00usft              |
| <b>Site:</b>     | SEC 8-T5S-R64W                | <b>North Reference:</b>             | True                               |
| <b>Well:</b>     | STATE HARVARD 5-64 8-7-12 2AH | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | OWB                           |                                     |                                    |
| <b>Design:</b>   | PROPOSAL 1                    |                                     |                                    |

| Planned Survey                       |                    |                |                             |                 |                 |                               |                             |                            |                           |  |
|--------------------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-----------------------------|----------------------------|---------------------------|--|
| Measured<br>Depth<br>(usft)          | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |  |
| 3,800.00                             | 15.99              | 45.47          | 3,685.15                    | 599.52          | 609.35          | -556.85                       | 0.00                        | 0.00                       | 0.00                      |  |
| 3,900.00                             | 15.99              | 45.47          | 3,781.28                    | 618.84          | 628.99          | -574.80                       | 0.00                        | 0.00                       | 0.00                      |  |
| 4,000.00                             | 15.99              | 45.47          | 3,877.41                    | 638.16          | 648.63          | -592.75                       | 0.00                        | 0.00                       | 0.00                      |  |
| 4,100.00                             | 15.99              | 45.47          | 3,973.54                    | 657.49          | 668.27          | -610.69                       | 0.00                        | 0.00                       | 0.00                      |  |
| 4,200.00                             | 15.99              | 45.47          | 4,069.67                    | 676.81          | 687.91          | -628.64                       | 0.00                        | 0.00                       | 0.00                      |  |
| 4,300.00                             | 15.99              | 45.47          | 4,165.80                    | 696.13          | 707.55          | -646.59                       | 0.00                        | 0.00                       | 0.00                      |  |
| 4,386.54                             | 15.99              | 45.47          | 4,249.00                    | 712.85          | 724.54          | -662.12                       | 0.00                        | 0.00                       | 0.00                      |  |
| <b>Larimer ("Parkman") sandstone</b> |                    |                |                             |                 |                 |                               |                             |                            |                           |  |
| 4,400.00                             | 15.99              | 45.47          | 4,261.93                    | 715.45          | 727.19          | -664.53                       | 0.00                        | 0.00                       | 0.00                      |  |
| 4,500.00                             | 15.99              | 45.47          | 4,358.07                    | 734.77          | 746.82          | -682.48                       | 0.00                        | 0.00                       | 0.00                      |  |
| 4,532.18                             | 15.99              | 45.47          | 4,389.00                    | 740.99          | 753.14          | -688.26                       | 0.00                        | 0.00                       | 0.00                      |  |
| <b>Pierre Formation</b>              |                    |                |                             |                 |                 |                               |                             |                            |                           |  |
| 4,600.00                             | 15.99              | 45.47          | 4,454.20                    | 754.10          | 766.46          | -700.43                       | 0.00                        | 0.00                       | 0.00                      |  |
| 4,700.00                             | 15.99              | 45.47          | 4,550.33                    | 773.42          | 786.10          | -718.37                       | 0.00                        | 0.00                       | 0.00                      |  |
| 4,800.00                             | 15.99              | 45.47          | 4,646.46                    | 792.74          | 805.74          | -736.32                       | 0.00                        | 0.00                       | 0.00                      |  |
| 4,900.00                             | 15.99              | 45.47          | 4,742.59                    | 812.06          | 825.38          | -754.27                       | 0.00                        | 0.00                       | 0.00                      |  |
| 5,000.00                             | 15.99              | 45.47          | 4,838.72                    | 831.38          | 845.02          | -772.21                       | 0.00                        | 0.00                       | 0.00                      |  |
| 5,100.00                             | 15.99              | 45.47          | 4,934.85                    | 850.70          | 864.66          | -790.16                       | 0.00                        | 0.00                       | 0.00                      |  |
| 5,200.00                             | 15.99              | 45.47          | 5,030.98                    | 870.03          | 884.29          | -808.11                       | 0.00                        | 0.00                       | 0.00                      |  |
| 5,300.00                             | 15.99              | 45.47          | 5,127.11                    | 889.35          | 903.93          | -826.05                       | 0.00                        | 0.00                       | 0.00                      |  |
| 5,400.00                             | 15.99              | 45.47          | 5,223.24                    | 908.67          | 923.57          | -844.00                       | 0.00                        | 0.00                       | 0.00                      |  |
| 5,500.00                             | 15.99              | 45.47          | 5,319.37                    | 927.99          | 943.21          | -861.95                       | 0.00                        | 0.00                       | 0.00                      |  |
| 5,593.24                             | 15.99              | 45.47          | 5,409.00                    | 946.01          | 961.52          | -878.68                       | 0.00                        | 0.00                       | 0.00                      |  |
| <b>Terry ("Sussex") sandstone</b>    |                    |                |                             |                 |                 |                               |                             |                            |                           |  |
| 5,600.00                             | 15.99              | 45.47          | 5,415.50                    | 947.31          | 962.85          | -879.89                       | 0.00                        | 0.00                       | 0.00                      |  |
| 5,700.00                             | 15.99              | 45.47          | 5,511.63                    | 966.64          | 982.49          | -897.84                       | 0.00                        | 0.00                       | 0.00                      |  |
| 5,800.00                             | 15.99              | 45.47          | 5,607.76                    | 985.96          | 1,002.13        | -915.79                       | 0.00                        | 0.00                       | 0.00                      |  |
| 5,900.00                             | 15.99              | 45.47          | 5,703.89                    | 1,005.28        | 1,021.77        | -933.73                       | 0.00                        | 0.00                       | 0.00                      |  |
| 5,905.32                             | 15.99              | 45.47          | 5,709.00                    | 1,006.31        | 1,022.81        | -934.69                       | 0.00                        | 0.00                       | 0.00                      |  |
| <b>Pierre Formation</b>              |                    |                |                             |                 |                 |                               |                             |                            |                           |  |
| 6,000.00                             | 15.99              | 45.47          | 5,800.02                    | 1,024.60        | 1,041.40        | -951.68                       | 0.00                        | 0.00                       | 0.00                      |  |
| 6,100.00                             | 15.99              | 45.47          | 5,896.15                    | 1,043.92        | 1,061.04        | -969.63                       | 0.00                        | 0.00                       | 0.00                      |  |
| 6,200.00                             | 15.99              | 45.47          | 5,992.28                    | 1,063.24        | 1,080.68        | -987.57                       | 0.00                        | 0.00                       | 0.00                      |  |
| 6,300.00                             | 15.99              | 45.47          | 6,088.41                    | 1,082.57        | 1,100.32        | -1,005.52                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,400.00                             | 15.99              | 45.47          | 6,184.54                    | 1,101.89        | 1,119.96        | -1,023.47                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,451.46                             | 15.99              | 45.47          | 6,234.00                    | 1,111.83        | 1,130.06        | -1,032.70                     | 0.00                        | 0.00                       | 0.00                      |  |
| <b>Hygiene ("Shannon") sandstone</b> |                    |                |                             |                 |                 |                               |                             |                            |                           |  |
| 6,500.00                             | 15.99              | 45.47          | 6,280.67                    | 1,121.21        | 1,139.60        | -1,041.41                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,600.00                             | 15.99              | 45.47          | 6,376.80                    | 1,140.53        | 1,159.24        | -1,059.36                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,700.00                             | 15.99              | 45.47          | 6,472.93                    | 1,159.85        | 1,178.88        | -1,077.31                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,800.00                             | 15.99              | 45.47          | 6,569.06                    | 1,179.18        | 1,198.51        | -1,095.26                     | 0.00                        | 0.00                       | 0.00                      |  |
| 6,831.15                             | 15.99              | 45.47          | 6,599.00                    | 1,185.19        | 1,204.63        | -1,100.85                     | 0.00                        | 0.00                       | 0.00                      |  |
| <b>Pierre Formation</b>              |                    |                |                             |                 |                 |                               |                             |                            |                           |  |
| 6,900.00                             | 15.99              | 45.47          | 6,665.19                    | 1,198.50        | 1,218.15        | -1,113.20                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,000.00                             | 15.99              | 45.47          | 6,761.32                    | 1,217.82        | 1,237.79        | -1,131.15                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,100.00                             | 15.99              | 45.47          | 6,857.45                    | 1,237.14        | 1,257.43        | -1,149.10                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,200.00                             | 15.99              | 45.47          | 6,953.58                    | 1,256.46        | 1,277.07        | -1,167.04                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,300.00                             | 15.99              | 45.47          | 7,049.71                    | 1,275.78        | 1,296.71        | -1,184.99                     | 0.00                        | 0.00                       | 0.00                      |  |
| 7,393.98                             | 15.99              | 45.47          | 7,140.05                    | 1,293.94        | 1,315.16        | -1,201.85                     | 0.00                        | 0.00                       | 0.00                      |  |
| <b>Start DLS 10.00 TFO -139.60</b>   |                    |                |                             |                 |                 |                               |                             |                            |                           |  |
| 7,400.00                             | 15.54              | 44.01          | 7,145.84                    | 1,295.10        | 1,316.32        | -1,202.90                     | 10.00                       | -7.54                      | -24.20                    |  |
| 7,500.00                             | 10.43              | 4.24           | 7,243.44                    | 1,313.81        | 1,326.32        | -1,211.30                     | 10.00                       | -5.11                      | -39.77                    |  |
| 7,525.98                             | 10.32              | 349.79         | 7,269.00                    | 1,318.45        | 1,326.08        | -1,210.67                     | 10.00                       | -0.39                      | -55.63                    |  |

# Civitas Resources

## Planning Report

|                  |                               |                                     |                                    |
|------------------|-------------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | EDM                           | <b>Local Co-ordinate Reference:</b> | Well STATE HARVARD 5-64 8-7-12 2AH |
| <b>Company:</b>  | CRESTONE PEAK RESOURCES       | <b>TVD Reference:</b>               | KBE 25' @ 5949.00usft              |
| <b>Project:</b>  | ARAPAHOE COUNTY               | <b>MD Reference:</b>                | KBE 25' @ 5949.00usft              |
| <b>Site:</b>     | SEC 8-T5S-R64W                | <b>North Reference:</b>             | True                               |
| <b>Well:</b>     | STATE HARVARD 5-64 8-7-12 2AH | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | OWB                           |                                     |                                    |
| <b>Design:</b>   | PROPOSAL 1                    |                                     |                                    |

| Planned Survey   |                 |             |                       |              |              |                         |                       |                      |                     |
|--|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| Measured Depth (usft)  | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| <b>Sharon Springs Member</b>                                 |                 |             |                       |              |              |                         |                       |                      |                     |
| 7,600.00   | 13.18           | 315.54      | 7,341.54              | 1,331.01     | 1,318.98     | -1,202.54               | 10.00                 | 3.86                 | -46.27              |
| 7,700.00   | 20.90           | 293.13      | 7,437.18              | 1,346.20     | 1,294.53     | -1,176.90               | 10.00                 | 7.71                 | -22.40              |
| 7,800.00   | 29.96           | 283.11      | 7,527.44              | 1,358.90     | 1,253.71     | -1,135.16               | 10.00                 | 9.06                 | -10.02              |
| 7,900.00   | 39.44           | 277.50      | 7,609.58              | 1,368.73     | 1,197.75     | -1,078.58               | 10.00                 | 9.49                 | -5.61               |
| 8,000.00   | 49.11           | 273.80      | 7,681.11              | 1,375.40     | 1,128.37     | -1,008.88               | 10.00                 | 9.66                 | -3.70               |
| 8,100.00   | 58.86           | 271.05      | 7,739.85              | 1,378.70     | 1,047.66     | -928.18                 | 10.00                 | 9.75                 | -2.75               |
| 8,200.00   | 68.66           | 268.82      | 7,784.02              | 1,378.52     | 958.09       | -838.94                 | 10.00                 | 9.80                 | -2.23               |
| 8,300.00   | 78.48           | 266.87      | 7,812.27              | 1,374.88     | 862.36       | -743.86                 | 10.00                 | 9.82                 | -1.95               |
| 8,400.00   | 88.32           | 265.06      | 7,823.75              | 1,367.89     | 763.40       | -645.83                 | 10.00                 | 9.84                 | -1.81               |
| 8,417.09   | 90.00           | 264.76      | 7,824.00              | 1,366.37     | 746.38       | -629.00                 | 10.00                 | 9.84                 | -1.79               |
| <b>Start 5144.32 hold at 8417.09 MD - Niobrara Formation</b> |                 |             |                       |              |              |                         |                       |                      |                     |
| 8,500.00   | 90.00           | 264.76      | 7,824.00              | 1,358.80     | 663.82       | -547.36                 | 0.00                  | 0.00                 | 0.00                |
| 8,600.00   | 90.00           | 264.76      | 7,824.00              | 1,349.65     | 564.23       | -448.90                 | 0.00                  | 0.00                 | 0.00                |
| 8,700.00   | 90.00           | 264.76      | 7,824.00              | 1,340.51     | 464.65       | -350.44                 | 0.00                  | 0.00                 | 0.00                |
| 8,800.00   | 90.00           | 264.76      | 7,824.00              | 1,331.37     | 365.07       | -251.98                 | 0.00                  | 0.00                 | 0.00                |
| 8,900.00   | 90.00           | 264.76      | 7,824.00              | 1,322.23     | 265.49       | -153.51                 | 0.00                  | 0.00                 | 0.00                |
| 9,000.00   | 90.00           | 264.76      | 7,824.00              | 1,313.09     | 165.91       | -55.05                  | 0.00                  | 0.00                 | 0.00                |
| 9,100.00   | 90.00           | 264.76      | 7,824.00              | 1,303.95     | 66.33        | 43.41                   | 0.00                  | 0.00                 | 0.00                |
| 9,200.00   | 90.00           | 264.76      | 7,824.00              | 1,294.81     | -33.25       | 141.87                  | 0.00                  | 0.00                 | 0.00                |
| 9,300.00   | 90.00           | 264.76      | 7,824.00              | 1,285.66     | -132.83      | 240.33                  | 0.00                  | 0.00                 | 0.00                |
| 9,400.00   | 90.00           | 264.76      | 7,824.00              | 1,276.52     | -232.42      | 338.80                  | 0.00                  | 0.00                 | 0.00                |
| 9,500.00   | 90.00           | 264.76      | 7,824.00              | 1,267.38     | -332.00      | 437.26                  | 0.00                  | 0.00                 | 0.00                |
| 9,600.00   | 90.00           | 264.76      | 7,824.00              | 1,258.24     | -431.58      | 535.72                  | 0.00                  | 0.00                 | 0.00                |
| 9,700.00   | 90.00           | 264.76      | 7,824.00              | 1,249.10     | -531.16      | 634.18                  | 0.00                  | 0.00                 | 0.00                |
| 9,800.00   | 90.00           | 264.76      | 7,824.00              | 1,239.96     | -630.74      | 732.64                  | 0.00                  | 0.00                 | 0.00                |
| 9,900.00   | 90.00           | 264.76      | 7,824.00              | 1,230.82     | -730.32      | 831.10                  | 0.00                  | 0.00                 | 0.00                |
| 10,000.00  | 90.00           | 264.76      | 7,824.00              | 1,221.67     | -829.90      | 929.57                  | 0.00                  | 0.00                 | 0.00                |
| 10,100.00  | 90.00           | 264.76      | 7,824.00              | 1,212.53     | -929.48      | 1,028.03                | 0.00                  | 0.00                 | 0.00                |
| 10,200.00  | 90.00           | 264.76      | 7,824.00              | 1,203.39     | -1,029.07    | 1,126.49                | 0.00                  | 0.00                 | 0.00                |
| 10,300.00  | 90.00           | 264.76      | 7,824.00              | 1,194.25     | -1,128.65    | 1,224.95                | 0.00                  | 0.00                 | 0.00                |
| 10,400.00  | 90.00           | 264.76      | 7,824.00              | 1,185.11     | -1,228.23    | 1,323.41                | 0.00                  | 0.00                 | 0.00                |
| 10,500.00  | 90.00           | 264.76      | 7,824.00              | 1,175.97     | -1,327.81    | 1,421.88                | 0.00                  | 0.00                 | 0.00                |
| 10,600.00  | 90.00           | 264.76      | 7,824.00              | 1,166.83     | -1,427.39    | 1,520.34                | 0.00                  | 0.00                 | 0.00                |
| 10,700.00  | 90.00           | 264.76      | 7,824.00              | 1,157.68     | -1,526.97    | 1,618.80                | 0.00                  | 0.00                 | 0.00                |
| 10,800.00  | 90.00           | 264.76      | 7,824.00              | 1,148.54     | -1,626.55    | 1,717.26                | 0.00                  | 0.00                 | 0.00                |
| 10,900.00  | 90.00           | 264.76      | 7,824.00              | 1,139.40     | -1,726.14    | 1,815.72                | 0.00                  | 0.00                 | 0.00                |
| 11,000.00  | 90.00           | 264.76      | 7,824.00              | 1,130.26     | -1,825.72    | 1,914.18                | 0.00                  | 0.00                 | 0.00                |
| 11,100.00  | 90.00           | 264.76      | 7,824.00              | 1,121.12     | -1,925.30    | 2,012.65                | 0.00                  | 0.00                 | 0.00                |
| 11,200.00  | 90.00           | 264.76      | 7,824.00              | 1,111.98     | -2,024.88    | 2,111.11                | 0.00                  | 0.00                 | 0.00                |
| 11,300.00  | 90.00           | 264.76      | 7,824.00              | 1,102.84     | -2,124.46    | 2,209.57                | 0.00                  | 0.00                 | 0.00                |
| 11,400.00  | 90.00           | 264.76      | 7,824.00              | 1,093.69     | -2,224.04    | 2,308.03                | 0.00                  | 0.00                 | 0.00                |
| 11,500.00  | 90.00           | 264.76      | 7,824.00              | 1,084.55     | -2,323.62    | 2,406.49                | 0.00                  | 0.00                 | 0.00                |
| 11,600.00  | 90.00           | 264.76      | 7,824.00              | 1,075.41     | -2,423.20    | 2,504.96                | 0.00                  | 0.00                 | 0.00                |
| 11,700.00  | 90.00           | 264.76      | 7,824.00              | 1,066.27     | -2,522.79    | 2,603.42                | 0.00                  | 0.00                 | 0.00                |
| 11,800.00  | 90.00           | 264.76      | 7,824.00              | 1,057.13     | -2,622.37    | 2,701.88                | 0.00                  | 0.00                 | 0.00                |
| 11,900.00  | 90.00           | 264.76      | 7,824.00              | 1,047.99     | -2,721.95    | 2,800.34                | 0.00                  | 0.00                 | 0.00                |
| 12,000.00  | 90.00           | 264.76      | 7,824.00              | 1,038.85     | -2,821.53    | 2,898.80                | 0.00                  | 0.00                 | 0.00                |
| 12,100.00  | 90.00           | 264.76      | 7,824.00              | 1,029.70     | -2,921.11    | 2,997.27                | 0.00                  | 0.00                 | 0.00                |
| 12,200.00  | 90.00           | 264.76      | 7,824.00              | 1,020.56     | -3,020.69    | 3,095.73                | 0.00                  | 0.00                 | 0.00                |
| 12,300.00  | 90.00           | 264.76      | 7,824.00              | 1,011.42     | -3,120.27    | 3,194.19                | 0.00                  | 0.00                 | 0.00                |
| 12,400.00  | 90.00           | 264.76      | 7,824.00              | 1,002.28     | -3,219.85    | 3,292.65                | 0.00                  | 0.00                 | 0.00                |
| 12,500.00  | 90.00           | 264.76      | 7,824.00              | 993.14       | -3,319.44    | 3,391.11                | 0.00                  | 0.00                 | 0.00                |
| 12,600.00  | 90.00           | 264.76      | 7,824.00              | 984.00       | -3,419.02    | 3,489.57                | 0.00                  | 0.00                 | 0.00                |

# Civitas Resources

## Planning Report

|                  |                               |                                     |                                    |
|------------------|-------------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | EDM                           | <b>Local Co-ordinate Reference:</b> | Well STATE HARVARD 5-64 8-7-12 2AH |
| <b>Company:</b>  | CRESTONE PEAK RESOURCES       | <b>TVD Reference:</b>               | KBE 25' @ 5949.00usft              |
| <b>Project:</b>  | ARAPAHOE COUNTY               | <b>MD Reference:</b>                | KBE 25' @ 5949.00usft              |
| <b>Site:</b>     | SEC 8-T5S-R64W                | <b>North Reference:</b>             | True                               |
| <b>Well:</b>     | STATE HARVARD 5-64 8-7-12 2AH | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | OWB                           |                                     |                                    |
| <b>Design:</b>   | PROPOSAL 1                    |                                     |                                    |

| Planned Survey                           |                 |             |                       |              |              |                         |                       |                      |                     |  |
|--|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (usft)                    | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |  |
| 12,700.00                                | 90.00           | 264.76      | 7,824.00              | 974.86       | -3,518.60    | 3,588.04                | 0.00                  | 0.00                 | 0.00                |  |
| 12,800.00                                | 90.00           | 264.76      | 7,824.00              | 965.71       | -3,618.18    | 3,686.50                | 0.00                  | 0.00                 | 0.00                |  |
| 12,900.00                                | 90.00           | 264.76      | 7,824.00              | 956.57       | -3,717.76    | 3,784.96                | 0.00                  | 0.00                 | 0.00                |  |
| 13,000.00                                | 90.00           | 264.76      | 7,824.00              | 947.43       | -3,817.34    | 3,883.42                | 0.00                  | 0.00                 | 0.00                |  |
| 13,100.00                                | 90.00           | 264.76      | 7,824.00              | 938.29       | -3,916.92    | 3,981.88                | 0.00                  | 0.00                 | 0.00                |  |
| 13,200.00                                | 90.00           | 264.76      | 7,824.00              | 929.15       | -4,016.51    | 4,080.35                | 0.00                  | 0.00                 | 0.00                |  |
| 13,300.00                                | 90.00           | 264.76      | 7,824.00              | 920.01       | -4,116.09    | 4,178.81                | 0.00                  | 0.00                 | 0.00                |  |
| 13,400.00                                | 90.00           | 264.76      | 7,824.00              | 910.87       | -4,215.67    | 4,277.27                | 0.00                  | 0.00                 | 0.00                |  |
| 13,500.00                                | 90.00           | 264.76      | 7,824.00              | 901.72       | -4,315.25    | 4,375.73                | 0.00                  | 0.00                 | 0.00                |  |
| 13,561.41                                | 90.00           | 264.76      | 7,824.00              | 896.11       | -4,376.40    | 4,436.20                | 0.00                  | 0.00                 | 0.00                |  |
| <b>Start DLS 2.00 TFO 90.00</b>          |                 |             |                       |              |              |                         |                       |                      |                     |  |
| 13,600.00                                | 90.00           | 265.53      | 7,824.00              | 892.84       | -4,414.85    | 4,474.24                | 2.00                  | 0.00                 | 2.00                |  |
| 13,700.00                                | 90.00           | 267.53      | 7,824.00              | 886.78       | -4,514.66    | 4,573.19                | 2.00                  | 0.00                 | 2.00                |  |
| 13,800.00                                | 90.00           | 269.53      | 7,824.00              | 884.21       | -4,614.63    | 4,672.58                | 2.00                  | 0.00                 | 2.00                |  |
| 13,877.06                                | 90.00           | 271.07      | 7,824.00              | 884.61       | -4,691.68    | 4,749.39                | 2.00                  | 0.00                 | 2.00                |  |
| <b>Start 7454.93 hold at 13877.06 MD</b> |                 |             |                       |              |              |                         |                       |                      |                     |  |
| 13,900.00                                | 90.00           | 271.07      | 7,824.00              | 885.04       | -4,714.62    | 4,772.29                | 0.00                  | 0.00                 | 0.00                |  |
| 14,000.00                                | 90.00           | 271.07      | 7,824.00              | 886.90       | -4,814.60    | 4,872.07                | 0.00                  | 0.00                 | 0.00                |  |
| 14,100.00                                | 90.00           | 271.07      | 7,824.00              | 888.77       | -4,914.58    | 4,971.86                | 0.00                  | 0.00                 | 0.00                |  |
| 14,200.00                                | 90.00           | 271.07      | 7,824.00              | 890.63       | -5,014.57    | 5,071.65                | 0.00                  | 0.00                 | 0.00                |  |
| 14,300.00                                | 90.00           | 271.07      | 7,824.00              | 892.50       | -5,114.55    | 5,171.43                | 0.00                  | 0.00                 | 0.00                |  |
| 14,400.00                                | 90.00           | 271.07      | 7,824.00              | 894.36       | -5,214.53    | 5,271.22                | 0.00                  | 0.00                 | 0.00                |  |
| 14,500.00                                | 90.00           | 271.07      | 7,824.00              | 896.22       | -5,314.51    | 5,371.00                | 0.00                  | 0.00                 | 0.00                |  |
| 14,600.00                                | 90.00           | 271.07      | 7,824.00              | 898.09       | -5,414.50    | 5,470.79                | 0.00                  | 0.00                 | 0.00                |  |
| 14,700.00                                | 90.00           | 271.07      | 7,824.00              | 899.95       | -5,514.48    | 5,570.58                | 0.00                  | 0.00                 | 0.00                |  |
| 14,800.00                                | 90.00           | 271.07      | 7,824.00              | 901.81       | -5,614.46    | 5,670.36                | 0.00                  | 0.00                 | 0.00                |  |
| 14,900.00                                | 90.00           | 271.07      | 7,824.00              | 903.68       | -5,714.45    | 5,770.15                | 0.00                  | 0.00                 | 0.00                |  |
| 15,000.00                                | 90.00           | 271.07      | 7,824.00              | 905.54       | -5,814.43    | 5,869.93                | 0.00                  | 0.00                 | 0.00                |  |
| 15,100.00                                | 90.00           | 271.07      | 7,824.00              | 907.41       | -5,914.41    | 5,969.72                | 0.00                  | 0.00                 | 0.00                |  |
| 15,200.00                                | 90.00           | 271.07      | 7,824.00              | 909.27       | -6,014.39    | 6,069.51                | 0.00                  | 0.00                 | 0.00                |  |
| 15,300.00                                | 90.00           | 271.07      | 7,824.00              | 911.13       | -6,114.38    | 6,169.29                | 0.00                  | 0.00                 | 0.00                |  |
| 15,400.00                                | 90.00           | 271.07      | 7,824.00              | 913.00       | -6,214.36    | 6,269.08                | 0.00                  | 0.00                 | 0.00                |  |
| 15,500.00                                | 90.00           | 271.07      | 7,824.00              | 914.86       | -6,314.34    | 6,368.86                | 0.00                  | 0.00                 | 0.00                |  |
| 15,600.00                                | 90.00           | 271.07      | 7,824.00              | 916.73       | -6,414.32    | 6,468.65                | 0.00                  | 0.00                 | 0.00                |  |
| 15,700.00                                | 90.00           | 271.07      | 7,824.00              | 918.59       | -6,514.31    | 6,568.44                | 0.00                  | 0.00                 | 0.00                |  |
| 15,800.00                                | 90.00           | 271.07      | 7,824.00              | 920.45       | -6,614.29    | 6,668.22                | 0.00                  | 0.00                 | 0.00                |  |
| 15,900.00                                | 90.00           | 271.07      | 7,824.00              | 922.32       | -6,714.27    | 6,768.01                | 0.00                  | 0.00                 | 0.00                |  |
| 16,000.00                                | 90.00           | 271.07      | 7,824.00              | 924.18       | -6,814.25    | 6,867.79                | 0.00                  | 0.00                 | 0.00                |  |
| 16,100.00                                | 90.00           | 271.07      | 7,824.00              | 926.04       | -6,914.24    | 6,967.58                | 0.00                  | 0.00                 | 0.00                |  |
| 16,200.00                                | 90.00           | 271.07      | 7,824.00              | 927.91       | -7,014.22    | 7,067.37                | 0.00                  | 0.00                 | 0.00                |  |
| 16,300.00                                | 90.00           | 271.07      | 7,824.00              | 929.77       | -7,114.20    | 7,167.15                | 0.00                  | 0.00                 | 0.00                |  |
| 16,400.00                                | 90.00           | 271.07      | 7,824.00              | 931.64       | -7,214.18    | 7,266.94                | 0.00                  | 0.00                 | 0.00                |  |
| 16,500.00                                | 90.00           | 271.07      | 7,824.00              | 933.50       | -7,314.17    | 7,366.72                | 0.00                  | 0.00                 | 0.00                |  |
| 16,600.00                                | 90.00           | 271.07      | 7,824.00              | 935.36       | -7,414.15    | 7,466.51                | 0.00                  | 0.00                 | 0.00                |  |
| 16,700.00                                | 90.00           | 271.07      | 7,824.00              | 937.23       | -7,514.13    | 7,566.30                | 0.00                  | 0.00                 | 0.00                |  |
| 16,800.00                                | 90.00           | 271.07      | 7,824.00              | 939.09       | -7,614.12    | 7,666.08                | 0.00                  | 0.00                 | 0.00                |  |
| 16,900.00                                | 90.00           | 271.07      | 7,824.00              | 940.96       | -7,714.10    | 7,765.87                | 0.00                  | 0.00                 | 0.00                |  |
| 17,000.00                                | 90.00           | 271.07      | 7,824.00              | 942.82       | -7,814.08    | 7,865.65                | 0.00                  | 0.00                 | 0.00                |  |
| 17,100.00                                | 90.00           | 271.07      | 7,824.00              | 944.68       | -7,914.06    | 7,965.44                | 0.00                  | 0.00                 | 0.00                |  |
| 17,200.00                                | 90.00           | 271.07      | 7,824.00              | 946.55       | -8,014.05    | 8,065.23                | 0.00                  | 0.00                 | 0.00                |  |
| 17,300.00                                | 90.00           | 271.07      | 7,824.00              | 948.41       | -8,114.03    | 8,165.01                | 0.00                  | 0.00                 | 0.00                |  |
| 17,400.00                                | 90.00           | 271.07      | 7,824.00              | 950.27       | -8,214.01    | 8,264.80                | 0.00                  | 0.00                 | 0.00                |  |
| 17,500.00                                | 90.00           | 271.07      | 7,824.00              | 952.14       | -8,313.99    | 8,364.58                | 0.00                  | 0.00                 | 0.00                |  |
| 17,600.00                                | 90.00           | 271.07      | 7,824.00              | 954.00       | -8,413.98    | 8,464.37                | 0.00                  | 0.00                 | 0.00                |  |

# Civitas Resources

## Planning Report

|                  |                               |                                     |                                    |
|------------------|-------------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | EDM                           | <b>Local Co-ordinate Reference:</b> | Well STATE HARVARD 5-64 8-7-12 2AH |
| <b>Company:</b>  | CRESTONE PEAK RESOURCES       | <b>TVD Reference:</b>               | KBE 25' @ 5949.00usft              |
| <b>Project:</b>  | ARAPAHOE COUNTY               | <b>MD Reference:</b>                | KBE 25' @ 5949.00usft              |
| <b>Site:</b>     | SEC 8-T5S-R64W                | <b>North Reference:</b>             | True                               |
| <b>Well:</b>     | STATE HARVARD 5-64 8-7-12 2AH | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | OWB                           |                                     |                                    |
| <b>Design:</b>   | PROPOSAL 1                    |                                     |                                    |

| Planned Survey        |                 |             |                       |              |              |                         |                       |                      |                     |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 17,700.00             | 90.00           | 271.07      | 7,824.00              | 955.87       | -8,513.96    | 8,564.16                | 0.00                  | 0.00                 | 0.00                |
| 17,800.00             | 90.00           | 271.07      | 7,824.00              | 957.73       | -8,613.94    | 8,663.94                | 0.00                  | 0.00                 | 0.00                |
| 17,900.00             | 90.00           | 271.07      | 7,824.00              | 959.59       | -8,713.92    | 8,763.73                | 0.00                  | 0.00                 | 0.00                |
| 18,000.00             | 90.00           | 271.07      | 7,824.00              | 961.46       | -8,813.91    | 8,863.51                | 0.00                  | 0.00                 | 0.00                |
| 18,100.00             | 90.00           | 271.07      | 7,824.00              | 963.32       | -8,913.89    | 8,963.30                | 0.00                  | 0.00                 | 0.00                |
| 18,200.00             | 90.00           | 271.07      | 7,824.00              | 965.19       | -9,013.87    | 9,063.09                | 0.00                  | 0.00                 | 0.00                |
| 18,300.00             | 90.00           | 271.07      | 7,824.00              | 967.05       | -9,113.85    | 9,162.87                | 0.00                  | 0.00                 | 0.00                |
| 18,400.00             | 90.00           | 271.07      | 7,824.00              | 968.91       | -9,213.84    | 9,262.66                | 0.00                  | 0.00                 | 0.00                |
| 18,500.00             | 90.00           | 271.07      | 7,824.00              | 970.78       | -9,313.82    | 9,362.44                | 0.00                  | 0.00                 | 0.00                |
| 18,600.00             | 90.00           | 271.07      | 7,824.00              | 972.64       | -9,413.80    | 9,462.23                | 0.00                  | 0.00                 | 0.00                |
| 18,700.00             | 90.00           | 271.07      | 7,824.00              | 974.50       | -9,513.79    | 9,562.02                | 0.00                  | 0.00                 | 0.00                |
| 18,800.00             | 90.00           | 271.07      | 7,824.00              | 976.37       | -9,613.77    | 9,661.80                | 0.00                  | 0.00                 | 0.00                |
| 18,900.00             | 90.00           | 271.07      | 7,824.00              | 978.23       | -9,713.75    | 9,761.59                | 0.00                  | 0.00                 | 0.00                |
| 19,000.00             | 90.00           | 271.07      | 7,824.00              | 980.10       | -9,813.73    | 9,861.37                | 0.00                  | 0.00                 | 0.00                |
| 19,100.00             | 90.00           | 271.07      | 7,824.00              | 981.96       | -9,913.72    | 9,961.16                | 0.00                  | 0.00                 | 0.00                |
| 19,200.00             | 90.00           | 271.07      | 7,824.00              | 983.82       | -10,013.70   | 10,060.95               | 0.00                  | 0.00                 | 0.00                |
| 19,300.00             | 90.00           | 271.07      | 7,824.00              | 985.69       | -10,113.68   | 10,160.73               | 0.00                  | 0.00                 | 0.00                |
| 19,400.00             | 90.00           | 271.07      | 7,824.00              | 987.55       | -10,213.66   | 10,260.52               | 0.00                  | 0.00                 | 0.00                |
| 19,500.00             | 90.00           | 271.07      | 7,824.00              | 989.42       | -10,313.65   | 10,360.30               | 0.00                  | 0.00                 | 0.00                |
| 19,600.00             | 90.00           | 271.07      | 7,824.00              | 991.28       | -10,413.63   | 10,460.09               | 0.00                  | 0.00                 | 0.00                |
| 19,700.00             | 90.00           | 271.07      | 7,824.00              | 993.14       | -10,513.61   | 10,559.88               | 0.00                  | 0.00                 | 0.00                |
| 19,800.00             | 90.00           | 271.07      | 7,824.00              | 995.01       | -10,613.59   | 10,659.66               | 0.00                  | 0.00                 | 0.00                |
| 19,900.00             | 90.00           | 271.07      | 7,824.00              | 996.87       | -10,713.58   | 10,759.45               | 0.00                  | 0.00                 | 0.00                |
| 20,000.00             | 90.00           | 271.07      | 7,824.00              | 998.73       | -10,813.56   | 10,859.23               | 0.00                  | 0.00                 | 0.00                |
| 20,100.00             | 90.00           | 271.07      | 7,824.00              | 1,000.60     | -10,913.54   | 10,959.02               | 0.00                  | 0.00                 | 0.00                |
| 20,200.00             | 90.00           | 271.07      | 7,824.00              | 1,002.46     | -11,013.52   | 11,058.81               | 0.00                  | 0.00                 | 0.00                |
| 20,300.00             | 90.00           | 271.07      | 7,824.00              | 1,004.33     | -11,113.51   | 11,158.59               | 0.00                  | 0.00                 | 0.00                |
| 20,400.00             | 90.00           | 271.07      | 7,824.00              | 1,006.19     | -11,213.49   | 11,258.38               | 0.00                  | 0.00                 | 0.00                |
| 20,500.00             | 90.00           | 271.07      | 7,824.00              | 1,008.05     | -11,313.47   | 11,358.16               | 0.00                  | 0.00                 | 0.00                |
| 20,600.00             | 90.00           | 271.07      | 7,824.00              | 1,009.92     | -11,413.46   | 11,457.95               | 0.00                  | 0.00                 | 0.00                |
| 20,700.00             | 90.00           | 271.07      | 7,824.00              | 1,011.78     | -11,513.44   | 11,557.74               | 0.00                  | 0.00                 | 0.00                |
| 20,800.00             | 90.00           | 271.07      | 7,824.00              | 1,013.65     | -11,613.42   | 11,657.52               | 0.00                  | 0.00                 | 0.00                |
| 20,900.00             | 90.00           | 271.07      | 7,824.00              | 1,015.51     | -11,713.40   | 11,757.31               | 0.00                  | 0.00                 | 0.00                |
| 21,000.00             | 90.00           | 271.07      | 7,824.00              | 1,017.37     | -11,813.39   | 11,857.09               | 0.00                  | 0.00                 | 0.00                |
| 21,100.00             | 90.00           | 271.07      | 7,824.00              | 1,019.24     | -11,913.37   | 11,956.88               | 0.00                  | 0.00                 | 0.00                |
| 21,200.00             | 90.00           | 271.07      | 7,824.00              | 1,021.10     | -12,013.35   | 12,056.66               | 0.00                  | 0.00                 | 0.00                |
| 21,300.00             | 90.00           | 271.07      | 7,824.00              | 1,022.96     | -12,113.33   | 12,156.45               | 0.00                  | 0.00                 | 0.00                |
| 21,331.99             | 90.00           | 271.07      | 7,824.00              | 1,023.56     | -12,145.32   | 12,188.37               | 0.00                  | 0.00                 | 0.00                |
| <b>TD at 21331.99</b> |                 |             |                       |              |              |                         |                       |                      |                     |

# Civitas Resources

## Planning Report

|                  |                               |                                     |                                    |
|------------------|-------------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | EDM                           | <b>Local Co-ordinate Reference:</b> | Well STATE HARVARD 5-64 8-7-12 2AH |
| <b>Company:</b>  | CRESTONE PEAK RESOURCES       | <b>TVD Reference:</b>               | KBE 25' @ 5949.00usft              |
| <b>Project:</b>  | ARAPAHOE COUNTY               | <b>MD Reference:</b>                | KBE 25' @ 5949.00usft              |
| <b>Site:</b>     | SEC 8-T5S-R64W                | <b>North Reference:</b>             | True                               |
| <b>Well:</b>     | STATE HARVARD 5-64 8-7-12 2AH | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | OWB                           |                                     |                                    |
| <b>Design:</b>   | PROPOSAL 1                    |                                     |                                    |

| Design Targets  |           |          |          |          |            |              |              |             |              |
|---|-----------|----------|----------|----------|------------|--------------|--------------|-------------|--------------|
| Target Name   | Dip Angle | Dip Dir. | TVD      | +N/-S    | +E/-W      | Northing     | Easting      | Latitude    | Longitude    |
| - hit/miss target<br>- Shape                                | (°)       | (°)      | (usft)   | (usft)   | (usft)     | (usft)       | (usft)       |             |              |
| LP-ST. HARVARD 5-64<br>- plan hits target center<br>- Point | 0.00      | 0.00     | 7,824.00 | 1,366.37 | 746.38     | 1,657,198.03 | 3,262,772.10 | 39.634098°N | 104.566999°W |
| PBHL-ST. HARVARD 5-<br>- plan hits target center<br>- Point | 0.00      | 0.00     | 7,824.00 | 1,023.56 | -12,145.32 | 1,656,723.23 | 3,249,884.87 | 39.633149°N | 104.612770°W |
| MP-ST. HARVARD 5-64<br>- plan hits target center<br>- Point | 0.00      | 0.00     | 7,824.00 | 896.11   | -4,376.40  | 1,656,675.34 | 3,257,654.51 | 39.632806°N | 104.585187°W |

| Formations     |                |                               |           |     |               |
|----------------|----------------|-------------------------------|-----------|-----|---------------|
| Measured Depth | Vertical Depth | Name                          | Lithology | Dip | Dip Direction |
| (usft)         | (usft)         |                               |           | (°) | (°)           |
| 24.00          | 24.00          | Denver                        |           |     |               |
| 1,120.14       | 1,109.00       | Arapahoe                      |           |     |               |
| 1,640.27       | 1,609.00       | Laramie-Fox Hills Formation   |           |     |               |
| 2,264.42       | 2,209.00       | Pierre Formation              |           |     |               |
| 2,815.76       | 2,739.00       | Upper Pierre aquifer          |           |     |               |
| 3,564.74       | 3,459.00       | Base of Upper Pierre aquifer  |           |     |               |
| 4,386.54       | 4,249.00       | Larimer ("Parkman") sandstone |           |     |               |
| 4,532.18       | 4,389.00       | Pierre Formation              |           |     |               |
| 5,593.24       | 5,409.00       | Terry ("Sussex") sandstone    |           |     |               |
| 5,905.32       | 5,709.00       | Pierre Formation              |           |     |               |
| 6,451.46       | 6,234.00       | Hygiene ("Shannon") sandstone |           |     |               |
| 6,831.15       | 6,599.00       | Pierre Formation              |           |     |               |
| 7,525.98       | 7,269.00       | Sharon Springs Member         |           |     |               |
| 8,417.09       | 7,824.00       | Niobrara Formation            |           |     |               |

| Plan Annotations |                |                   |              |                                   |
|------------------|----------------|-------------------|--------------|-----------------------------------|
| Measured Depth   | Vertical Depth | Local Coordinates |              | Comment                           |
| (usft)           | (usft)         | +N/-S (usft)      | +E/-W (usft) |                                   |
| 300.00           | 300.00         | 0.00              | 0.00         | Start Build 2.00                  |
| 1,099.59         | 1,089.25       | 77.75             | 79.03        | Start 6294.38 hold at 1099.59 MD  |
| 7,393.98         | 7,140.05       | 1,293.94          | 1,315.16     | Start DLS 10.00 TFO -139.60       |
| 8,417.09         | 7,824.00       | 1,366.37          | 746.38       | Start 5144.32 hold at 8417.09 MD  |
| 13,561.41        | 7,824.00       | 896.11            | -4,376.40    | Start DLS 2.00 TFO 90.00          |
| 13,877.06        | 7,824.00       | 884.61            | -4,691.68    | Start 7454.93 hold at 13877.06 MD |
| 21,331.99        | 7,824.00       | 1,023.56          | -12,145.32   | TD at 21331.99                    |