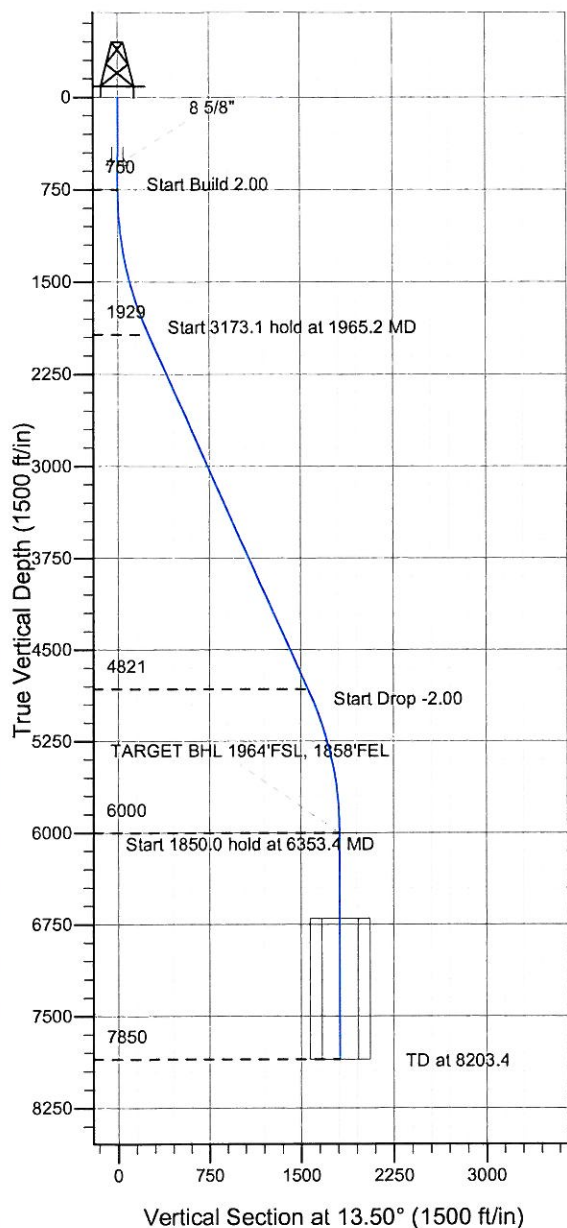
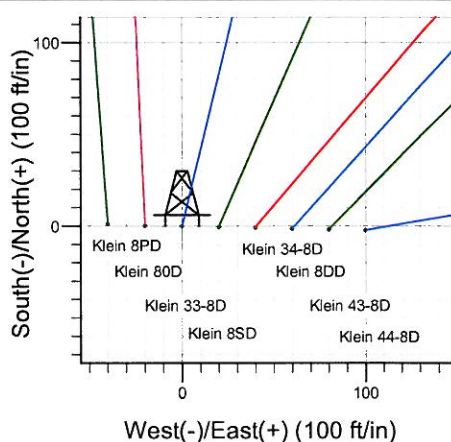
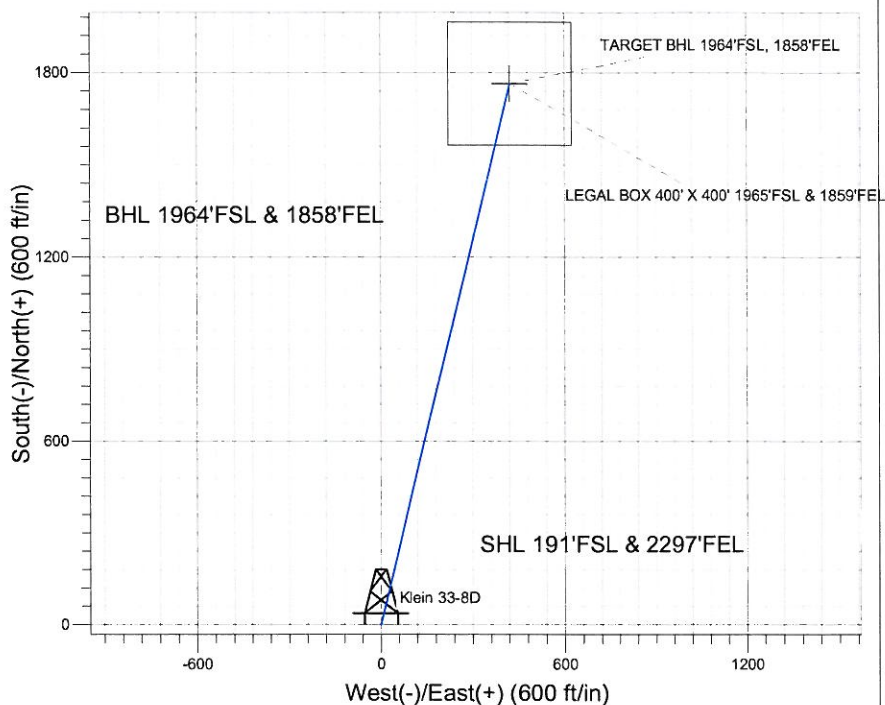


## Well Name: Klein 33-8D

Surface Location: Klein 44-8D Pad Sec.8-T4N-R67W  
 North American Datum 1983      US State Plane 1983      Colorado Northern Zone  
 Ground Elevation: 4794.0  
 S +E/-W      Northing      Easting      Latitude      Longitude  
 0.0 1360244.15 3163334.11      40.32070N      -104.914224  
 Original Well Elev      WELL @ 4807.0ft (Original Well Elev)



## Synergy Resources



Klein 44-8D Pad Sec.8-T4N-R67W  
Klein 33-8D  
Plan #1 (5-03-11)  
12:53, May 11 2011



Azimuths to True North  
Magnetic North:  $8.95^\circ$

Magnetic Field  
Strength: 53083.9snT  
Dip Angle: 66.96°  
Date: 5/11/2011  
Model: IGRF2010

## WELLBORE TARGET DETAILS (LAT/LONG)

| Name                                      | TVD    | +N/-S  | +E/-W | Latitude  | Longitude   | Shape                            |
|---|--------|--------|-------|-----------|-------------|----------------------------------|
| TARGET BHL 1964'FSL, 1858'FEL             | 6000.0 | 1763.6 | 423.3 | 40.325631 | -104.912706 | Point                            |
| LEGAL BOX 400' X 400' 1965'FSL & 1859'FEL | 6700.0 | 1764.6 | 422.3 | 40.325634 | -104.912709 | Rectangle (Sides: L400.0 W400.0) |

## SECTION DETAILS

| Sec | MD     | Inc   | Azi   | TVD    | +N/-S  | +E/-W | DLeg | TFace  | VSec   | Target                        |
|-----|--------|-------|-------|--------|--------|-------|------|--------|--------|-------------------------------|
| 1   | 0.0    | 0.00  | 0.00  | 0.0    | 0.0    | 0.0   | 0.00 | 0.00   | 0.0    |                               |
| 2   | 750.0  | 0.00  | 0.00  | 750.0  | 0.0    | 0.0   | 0.00 | 0.00   | 0.0    |                               |
| 3   | 1965.2 | 24.30 | 13.50 | 1929.1 | 246.9  | 59.2  | 2.00 | 13.50  | 253.9  |                               |
| 4   | 5138.3 | 24.30 | 13.50 | 4820.9 | 1516.8 | 364.0 | 0.00 | 0.00   | 1559.8 |                               |
| 5   | 6353.4 | 0.00  | 0.00  | 6000.0 | 1763.6 | 423.3 | 2.00 | 180.00 | 1813.7 | TARGET BHL 1964'FSL, 1858'FEL |
| 6   | 8203.4 | 0.00  | 0.00  | 7850.0 | 1763.6 | 423.3 | 0.00 | 0.00   | 1813.7 |                               |



## **Directional**

### **Synergy Resources**

**SEC.8-T4N-R67W**

**Klein 44-8D Pad Sec.8-T4N-R67W**

**Klein 33-8D**

**Wellbore #1**

**Plan: Plan #1 (5-03-11)**

### **Standard Planning Report**

**11 May, 2011**

|                  |                                |                                     |                                      |
|------------------|--------------------------------|-------------------------------------|--------------------------------------|
| <b>Database:</b> | Landmark                       | <b>Local Co-ordinate Reference:</b> | Well Klein 33-8D                     |
| <b>Company:</b>  | Synergy Resources              | <b>TVD Reference:</b>               | WELL @ 4807.0ft (Original Well Elev) |
| <b>Project:</b>  | SEC.8-T4N-R67W                 | <b>MD Reference:</b>                | WELL @ 4807.0ft (Original Well Elev) |
| <b>Site:</b>     | Klein 44-8D Pad Sec.8-T4N-R67W | <b>North Reference:</b>             | True                                 |
| <b>Well:</b>     | Klein 33-8D                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                    |
| <b>Wellbore:</b> | Wellbore #1                    |                                     |                                      |
| <b>Design:</b>   | Plan #1 (5-03-11)              |                                     |                                      |

|                    |                                       |                      |                             |
|--------------------|---------------------------------------|----------------------|-----------------------------|
| <b>Project</b>     | SEC.8-T4N-R67W, Weld County, Colorado |                      |                             |
| <b>Map System:</b> | US State Plane 1983                   | <b>System Datum:</b> | Mean Sea Level              |
| <b>Geo Datum:</b>  | North American Datum 1983             |                      | Using Well Reference Point  |
| <b>Map Zone:</b>   | Colorado Northern Zone                |                      | Using geodetic scale factor |

|                       |          |                                |                 |            |                   |        |
|-----------------------|----------|--------------------------------|-----------------|------------|-------------------|--------|
| Site                  |          | Klein 44-8D Pad Sec.8-T4N-R67W |                 |            |                   |        |
| Site Position:        |          | Northing:                      | 1,360,242.64 ft | Latitude:  | 40.320784         |        |
| From:                 | Lat/Long | Easting:                       | 3,163,433.95 ft | Longitude: | -104.913866       |        |
| Position Uncertainty: |          | 0.0 ft                         | Slot Radius:    | "          | Grid Convergence: | 0.38 ° |

|                      |             |          |                     |                 |               |             |
|----------------------|-------------|----------|---------------------|-----------------|---------------|-------------|
| Well                 | Klein 33-8D |          |                     |                 |               |             |
| Well Position        | +N/-S       | 2.2 ft   | Northing:           | 1,360,244.15 ft | Latitude:     | 40.320790   |
|                      | +E/-W       | -99.8 ft | Easting:            | 3,163,334.11 ft | Longitude:    | -104.914224 |
| Position Uncertainty |             | 0.0 ft   | Wellhead Elevation: | ft              | Ground Level: | 4,794.0 ft  |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Wellbore #1       |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2010          | 5/11/2011          | 8.95                   | 66.97                | 53,084                     |

|                          |                         |                   |                      |                      |
|--------------------------|-------------------------|-------------------|----------------------|----------------------|
| <b>Design</b>            | Plan #1 (5-03-11)       |                   |                      |                      |
| <b>Audit Notes:</b>      |                         |                   |                      |                      |
| <b>Version:</b>          | <b>Phase:</b>           | PROTOTYPE         | <b>Tie On Depth:</b> | 0.0                  |
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b>    | <b>Direction (°)</b> |
|                          | 0.0                     | 0.0               | 0.0                  | 13.50                |

| <b>Plan Sections</b> |                 |             |                     |            |            |                       |                      |                     |         |                 |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|-----------------|
| Measured Depth (ft)  | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target          |
| 0.0                  | 0.00            | 0.00        | 0.0                 | 0.0        | 0.0        | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 750.0                | 0.00            | 0.00        | 750.0               | 0.0        | 0.0        | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 1,965.2              | 24.30           | 13.50       | 1,929.1             | 246.9      | 59.2       | 2.00                  | 2.00                 | 0.00                | 13.50   |                 |
| 5,138.3              | 24.30           | 13.50       | 4,820.9             | 1,516.8    | 364.0      | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |
| 6,353.4              | 0.00            | 0.00        | 6,000.0             | 1,763.6    | 423.3      | 2.00                  | -2.00                | 0.00                | 180.00  | TARGET BHL 1964 |
| 8,203.4              | 0.00            | 0.00        | 7,850.0             | 1,763.6    | 423.3      | 0.00                  | 0.00                 | 0.00                | 0.00    |                 |



**Database:** Landmark  
**Company:** Synergy Resources  
**Project:** SEC.8-T4N-R67W  
**Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Well:** Klein 33-8D  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (5-03-11)

**Local Co-ordinate Reference:** Well Klein 33-8D  
**TVD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

## Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 0.0                 | 0.00            | 0.00        | 0.0                 | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 40.0                | 0.00            | 0.00        | 40.0                | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 80.0                | 0.00            | 0.00        | 80.0                | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 120.0               | 0.00            | 0.00        | 120.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 160.0               | 0.00            | 0.00        | 160.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 200.0               | 0.00            | 0.00        | 200.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 240.0               | 0.00            | 0.00        | 240.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 280.0               | 0.00            | 0.00        | 280.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 320.0               | 0.00            | 0.00        | 320.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 360.0               | 0.00            | 0.00        | 360.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 400.0               | 0.00            | 0.00        | 400.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 440.0               | 0.00            | 0.00        | 440.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 480.0               | 0.00            | 0.00        | 480.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 520.0               | 0.00            | 0.00        | 520.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 550.0               | 0.00            | 0.00        | 550.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 8 5/8"              |                 |             |                     |            |            |                       |                       |                      |                     |
| 560.0               | 0.00            | 0.00        | 560.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 600.0               | 0.00            | 0.00        | 600.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 640.0               | 0.00            | 0.00        | 640.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 680.0               | 0.00            | 0.00        | 680.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 720.0               | 0.00            | 0.00        | 720.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 750.0               | 0.00            | 0.00        | 750.0               | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 | 0.00                |
| 760.0               | 0.20            | 13.50       | 760.0               | 0.0        | 0.0        | 0.0                   | 2.00                  | 2.00                 | 0.00                |
| 800.0               | 1.00            | 13.50       | 800.0               | 0.4        | 0.1        | 0.4                   | 2.00                  | 2.00                 | 0.00                |
| 840.0               | 1.80            | 13.50       | 840.0               | 1.4        | 0.3        | 1.4                   | 2.00                  | 2.00                 | 0.00                |
| 880.0               | 2.60            | 13.50       | 880.0               | 2.9        | 0.7        | 2.9                   | 2.00                  | 2.00                 | 0.00                |
| 920.0               | 3.40            | 13.50       | 919.9               | 4.9        | 1.2        | 5.0                   | 2.00                  | 2.00                 | 0.00                |
| 960.0               | 4.20            | 13.50       | 959.8               | 7.5        | 1.8        | 7.7                   | 2.00                  | 2.00                 | 0.00                |
| 1,000.0             | 5.00            | 13.50       | 999.7               | 10.6       | 2.5        | 10.9                  | 2.00                  | 2.00                 | 0.00                |
| 1,040.0             | 5.80            | 13.50       | 1,039.5             | 14.3       | 3.4        | 14.7                  | 2.00                  | 2.00                 | 0.00                |
| 1,080.0             | 6.60            | 13.50       | 1,079.3             | 18.5       | 4.4        | 19.0                  | 2.00                  | 2.00                 | 0.00                |
| 1,120.0             | 7.40            | 13.50       | 1,119.0             | 23.2       | 5.6        | 23.9                  | 2.00                  | 2.00                 | 0.00                |
| 1,160.0             | 8.20            | 13.50       | 1,158.6             | 28.5       | 6.8        | 29.3                  | 2.00                  | 2.00                 | 0.00                |
| 1,200.0             | 9.00            | 13.50       | 1,198.2             | 34.3       | 8.2        | 35.3                  | 2.00                  | 2.00                 | 0.00                |
| 1,240.0             | 9.80            | 13.50       | 1,237.6             | 40.6       | 9.8        | 41.8                  | 2.00                  | 2.00                 | 0.00                |
| 1,280.0             | 10.60           | 13.50       | 1,277.0             | 47.5       | 11.4       | 48.9                  | 2.00                  | 2.00                 | 0.00                |
| 1,320.0             | 11.40           | 13.50       | 1,316.2             | 55.0       | 13.2       | 56.5                  | 2.00                  | 2.00                 | 0.00                |
| 1,360.0             | 12.20           | 13.50       | 1,355.4             | 62.9       | 15.1       | 64.7                  | 2.00                  | 2.00                 | 0.00                |
| 1,400.0             | 13.00           | 13.50       | 1,394.4             | 71.4       | 17.1       | 73.4                  | 2.00                  | 2.00                 | 0.00                |
| 1,440.0             | 13.80           | 13.50       | 1,433.3             | 80.4       | 19.3       | 82.7                  | 2.00                  | 2.00                 | 0.00                |
| 1,480.0             | 14.60           | 13.50       | 1,472.1             | 90.0       | 21.6       | 92.5                  | 2.00                  | 2.00                 | 0.00                |
| 1,520.0             | 15.40           | 13.50       | 1,510.8             | 100.0      | 24.0       | 102.9                 | 2.00                  | 2.00                 | 0.00                |
| 1,560.0             | 16.20           | 13.50       | 1,549.3             | 110.6      | 26.5       | 113.7                 | 2.00                  | 2.00                 | 0.00                |
| 1,600.0             | 17.00           | 13.50       | 1,587.6             | 121.7      | 29.2       | 125.2                 | 2.00                  | 2.00                 | 0.00                |
| 1,640.0             | 17.80           | 13.50       | 1,625.8             | 133.4      | 32.0       | 137.1                 | 2.00                  | 2.00                 | 0.00                |
| 1,680.0             | 18.60           | 13.50       | 1,663.8             | 145.5      | 34.9       | 149.6                 | 2.00                  | 2.00                 | 0.00                |
| 1,720.0             | 19.40           | 13.50       | 1,701.6             | 158.2      | 38.0       | 162.7                 | 2.00                  | 2.00                 | 0.00                |
| 1,760.0             | 20.20           | 13.50       | 1,739.2             | 171.3      | 41.1       | 176.2                 | 2.00                  | 2.00                 | 0.00                |
| 1,800.0             | 21.00           | 13.50       | 1,776.6             | 185.0      | 44.4       | 190.3                 | 2.00                  | 2.00                 | 0.00                |
| 1,840.0             | 21.80           | 13.50       | 1,813.9             | 199.2      | 47.8       | 204.9                 | 2.00                  | 2.00                 | 0.00                |
| 1,880.0             | 22.60           | 13.50       | 1,850.9             | 213.9      | 51.3       | 220.0                 | 2.00                  | 2.00                 | 0.00                |
| 1,920.0             | 23.40           | 13.50       | 1,887.7             | 229.1      | 55.0       | 235.6                 | 2.00                  | 2.00                 | 0.00                |
| 1,960.0             | 24.20           | 13.50       | 1,924.3             | 244.8      | 58.8       | 251.8                 | 2.00                  | 2.00                 | 0.00                |
| 1,965.2             | 24.30           | 13.50       | 1,929.1             | 246.9      | 59.2       | 253.9                 | 2.00                  | 2.00                 | 0.00                |

**Database:** Landmark  
**Company:** Synergy Resources  
**Project:** SEC.8-T4N-R67W  
**Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Well:** Klein 33-8D  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (5-03-11)

**Local Co-ordinate Reference:** Well Klein 33-8D  
**TVD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

## Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 2,000.0             | 24.30           | 13.50       | 1,960.8             | 260.8      | 62.6       | 268.2                 | 0.00                  | 0.00                 | 0.00                |
| 2,040.0             | 24.30           | 13.50       | 1,997.3             | 276.8      | 66.4       | 284.7                 | 0.00                  | 0.00                 | 0.00                |
| 2,080.0             | 24.30           | 13.50       | 2,033.7             | 292.8      | 70.3       | 301.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,120.0             | 24.30           | 13.50       | 2,070.2             | 308.8      | 74.1       | 317.6                 | 0.00                  | 0.00                 | 0.00                |
| 2,160.0             | 24.30           | 13.50       | 2,106.6             | 324.8      | 78.0       | 334.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,200.0             | 24.30           | 13.50       | 2,143.1             | 340.9      | 81.8       | 350.5                 | 0.00                  | 0.00                 | 0.00                |
| 2,240.0             | 24.30           | 13.50       | 2,179.5             | 356.9      | 85.6       | 367.0                 | 0.00                  | 0.00                 | 0.00                |
| 2,280.0             | 24.30           | 13.50       | 2,216.0             | 372.9      | 89.5       | 383.5                 | 0.00                  | 0.00                 | 0.00                |
| 2,320.0             | 24.30           | 13.50       | 2,252.4             | 388.9      | 93.3       | 399.9                 | 0.00                  | 0.00                 | 0.00                |
| 2,360.0             | 24.30           | 13.50       | 2,288.9             | 404.9      | 97.2       | 416.4                 | 0.00                  | 0.00                 | 0.00                |
| 2,400.0             | 24.30           | 13.50       | 2,325.4             | 420.9      | 101.0      | 432.8                 | 0.00                  | 0.00                 | 0.00                |
| 2,440.0             | 24.30           | 13.50       | 2,361.8             | 436.9      | 104.9      | 449.3                 | 0.00                  | 0.00                 | 0.00                |
| 2,480.0             | 24.30           | 13.50       | 2,398.3             | 452.9      | 108.7      | 465.8                 | 0.00                  | 0.00                 | 0.00                |
| 2,520.0             | 24.30           | 13.50       | 2,434.7             | 468.9      | 112.5      | 482.2                 | 0.00                  | 0.00                 | 0.00                |
| 2,560.0             | 24.30           | 13.50       | 2,471.2             | 484.9      | 116.4      | 498.7                 | 0.00                  | 0.00                 | 0.00                |
| 2,600.0             | 24.30           | 13.50       | 2,507.6             | 500.9      | 120.2      | 515.2                 | 0.00                  | 0.00                 | 0.00                |
| 2,640.0             | 24.30           | 13.50       | 2,544.1             | 516.9      | 124.1      | 531.6                 | 0.00                  | 0.00                 | 0.00                |
| 2,680.0             | 24.30           | 13.50       | 2,580.5             | 532.9      | 127.9      | 548.1                 | 0.00                  | 0.00                 | 0.00                |
| 2,720.0             | 24.30           | 13.50       | 2,617.0             | 549.0      | 131.7      | 564.5                 | 0.00                  | 0.00                 | 0.00                |
| 2,760.0             | 24.30           | 13.50       | 2,653.4             | 565.0      | 135.6      | 581.0                 | 0.00                  | 0.00                 | 0.00                |
| 2,800.0             | 24.30           | 13.50       | 2,689.9             | 581.0      | 139.4      | 597.5                 | 0.00                  | 0.00                 | 0.00                |
| 2,840.0             | 24.30           | 13.50       | 2,726.4             | 597.0      | 143.3      | 613.9                 | 0.00                  | 0.00                 | 0.00                |
| 2,880.0             | 24.30           | 13.50       | 2,762.8             | 613.0      | 147.1      | 630.4                 | 0.00                  | 0.00                 | 0.00                |
| 2,920.0             | 24.30           | 13.50       | 2,799.3             | 629.0      | 151.0      | 646.9                 | 0.00                  | 0.00                 | 0.00                |
| 2,960.0             | 24.30           | 13.50       | 2,835.7             | 645.0      | 154.8      | 663.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,000.0             | 24.30           | 13.50       | 2,872.2             | 661.0      | 158.6      | 679.8                 | 0.00                  | 0.00                 | 0.00                |
| 3,040.0             | 24.30           | 13.50       | 2,908.6             | 677.0      | 162.5      | 696.2                 | 0.00                  | 0.00                 | 0.00                |
| 3,080.0             | 24.30           | 13.50       | 2,945.1             | 693.0      | 166.3      | 712.7                 | 0.00                  | 0.00                 | 0.00                |
| 3,120.0             | 24.30           | 13.50       | 2,981.5             | 709.0      | 170.2      | 729.2                 | 0.00                  | 0.00                 | 0.00                |
| 3,160.0             | 24.30           | 13.50       | 3,018.0             | 725.0      | 174.0      | 745.6                 | 0.00                  | 0.00                 | 0.00                |
| 3,200.0             | 24.30           | 13.50       | 3,054.5             | 741.1      | 177.8      | 762.1                 | 0.00                  | 0.00                 | 0.00                |
| 3,240.0             | 24.30           | 13.50       | 3,090.9             | 757.1      | 181.7      | 778.6                 | 0.00                  | 0.00                 | 0.00                |
| 3,280.0             | 24.30           | 13.50       | 3,127.4             | 773.1      | 185.5      | 795.0                 | 0.00                  | 0.00                 | 0.00                |
| 3,320.0             | 24.30           | 13.50       | 3,163.8             | 789.1      | 189.4      | 811.5                 | 0.00                  | 0.00                 | 0.00                |
| 3,360.0             | 24.30           | 13.50       | 3,200.3             | 805.1      | 193.2      | 827.9                 | 0.00                  | 0.00                 | 0.00                |
| 3,400.0             | 24.30           | 13.50       | 3,236.7             | 821.1      | 197.1      | 844.4                 | 0.00                  | 0.00                 | 0.00                |
| 3,440.0             | 24.30           | 13.50       | 3,273.2             | 837.1      | 200.9      | 860.9                 | 0.00                  | 0.00                 | 0.00                |
| 3,480.0             | 24.30           | 13.50       | 3,309.6             | 853.1      | 204.7      | 877.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,520.0             | 24.30           | 13.50       | 3,346.1             | 869.1      | 208.6      | 893.8                 | 0.00                  | 0.00                 | 0.00                |
| 3,560.0             | 24.30           | 13.50       | 3,382.6             | 885.1      | 212.4      | 910.3                 | 0.00                  | 0.00                 | 0.00                |
| 3,600.0             | 24.30           | 13.50       | 3,419.0             | 901.1      | 216.3      | 926.7                 | 0.00                  | 0.00                 | 0.00                |
| 3,640.0             | 24.30           | 13.50       | 3,455.5             | 917.1      | 220.1      | 943.2                 | 0.00                  | 0.00                 | 0.00                |
| 3,680.0             | 24.30           | 13.50       | 3,491.9             | 933.2      | 224.0      | 959.7                 | 0.00                  | 0.00                 | 0.00                |
| 3,720.0             | 24.30           | 13.50       | 3,528.4             | 949.2      | 227.8      | 976.1                 | 0.00                  | 0.00                 | 0.00                |
| 3,760.0             | 24.30           | 13.50       | 3,564.8             | 965.2      | 231.6      | 992.6                 | 0.00                  | 0.00                 | 0.00                |
| 3,800.0             | 24.30           | 13.50       | 3,601.3             | 981.2      | 235.5      | 1,009.0               | 0.00                  | 0.00                 | 0.00                |
| 3,840.0             | 24.30           | 13.50       | 3,637.7             | 997.2      | 239.3      | 1,025.5               | 0.00                  | 0.00                 | 0.00                |
| 3,880.0             | 24.30           | 13.50       | 3,674.2             | 1,013.2    | 243.2      | 1,042.0               | 0.00                  | 0.00                 | 0.00                |
| 3,920.0             | 24.30           | 13.50       | 3,710.6             | 1,029.2    | 247.0      | 1,058.4               | 0.00                  | 0.00                 | 0.00                |
| 3,960.0             | 24.30           | 13.50       | 3,747.1             | 1,045.2    | 250.8      | 1,074.9               | 0.00                  | 0.00                 | 0.00                |
| 4,000.0             | 24.30           | 13.50       | 3,783.6             | 1,061.2    | 254.7      | 1,091.4               | 0.00                  | 0.00                 | 0.00                |
| 4,040.0             | 24.30           | 13.50       | 3,820.0             | 1,077.2    | 258.5      | 1,107.8               | 0.00                  | 0.00                 | 0.00                |
| 4,080.0             | 24.30           | 13.50       | 3,856.5             | 1,093.2    | 262.4      | 1,124.3               | 0.00                  | 0.00                 | 0.00                |
| 4,120.0             | 24.30           | 13.50       | 3,892.9             | 1,109.2    | 266.2      | 1,140.7               | 0.00                  | 0.00                 | 0.00                |



**Database:** Landmark  
**Company:** Synergy Resources  
**Project:** SEC.8-T4N-R67W  
**Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Well:** Klein 33-8D  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (5-03-11)

**Local Co-ordinate Reference:** Well Klein 33-8D  
**TVD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 4,160.0             | 24.30           | 13.50       | 3,929.4             | 1,125.3    | 270.1      | 1,157.2               | 0.00                  | 0.00                 | 0.00                |
| 4,200.0             | 24.30           | 13.50       | 3,965.8             | 1,141.3    | 273.9      | 1,173.7               | 0.00                  | 0.00                 | 0.00                |
| 4,240.0             | 24.30           | 13.50       | 4,002.3             | 1,157.3    | 277.7      | 1,190.1               | 0.00                  | 0.00                 | 0.00                |
| 4,280.0             | 24.30           | 13.50       | 4,038.7             | 1,173.3    | 281.6      | 1,206.6               | 0.00                  | 0.00                 | 0.00                |
| 4,320.0             | 24.30           | 13.50       | 4,075.2             | 1,189.3    | 285.4      | 1,223.1               | 0.00                  | 0.00                 | 0.00                |
| 4,360.0             | 24.30           | 13.50       | 4,111.7             | 1,205.3    | 289.3      | 1,239.5               | 0.00                  | 0.00                 | 0.00                |
| 4,400.0             | 24.30           | 13.50       | 4,148.1             | 1,221.3    | 293.1      | 1,256.0               | 0.00                  | 0.00                 | 0.00                |
| 4,440.0             | 24.30           | 13.50       | 4,184.6             | 1,237.3    | 296.9      | 1,272.4               | 0.00                  | 0.00                 | 0.00                |
| 4,480.0             | 24.30           | 13.50       | 4,221.0             | 1,253.3    | 300.8      | 1,288.9               | 0.00                  | 0.00                 | 0.00                |
| 4,520.0             | 24.30           | 13.50       | 4,257.5             | 1,269.3    | 304.6      | 1,305.4               | 0.00                  | 0.00                 | 0.00                |
| 4,560.0             | 24.30           | 13.50       | 4,293.9             | 1,285.3    | 308.5      | 1,321.8               | 0.00                  | 0.00                 | 0.00                |
| 4,600.0             | 24.30           | 13.50       | 4,330.4             | 1,301.3    | 312.3      | 1,338.3               | 0.00                  | 0.00                 | 0.00                |
| 4,640.0             | 24.30           | 13.50       | 4,366.8             | 1,317.4    | 316.2      | 1,354.8               | 0.00                  | 0.00                 | 0.00                |
| 4,680.0             | 24.30           | 13.50       | 4,403.3             | 1,333.4    | 320.0      | 1,371.2               | 0.00                  | 0.00                 | 0.00                |
| 4,720.0             | 24.30           | 13.50       | 4,439.7             | 1,349.4    | 323.8      | 1,387.7               | 0.00                  | 0.00                 | 0.00                |
| 4,760.0             | 24.30           | 13.50       | 4,476.2             | 1,365.4    | 327.7      | 1,404.1               | 0.00                  | 0.00                 | 0.00                |
| 4,800.0             | 24.30           | 13.50       | 4,512.7             | 1,381.4    | 331.5      | 1,420.6               | 0.00                  | 0.00                 | 0.00                |
| 4,840.0             | 24.30           | 13.50       | 4,549.1             | 1,397.4    | 335.4      | 1,437.1               | 0.00                  | 0.00                 | 0.00                |
| 4,880.0             | 24.30           | 13.50       | 4,585.6             | 1,413.4    | 339.2      | 1,453.5               | 0.00                  | 0.00                 | 0.00                |
| 4,920.0             | 24.30           | 13.50       | 4,622.0             | 1,429.4    | 343.1      | 1,470.0               | 0.00                  | 0.00                 | 0.00                |
| 4,960.0             | 24.30           | 13.50       | 4,658.5             | 1,445.4    | 346.9      | 1,486.5               | 0.00                  | 0.00                 | 0.00                |
| 5,000.0             | 24.30           | 13.50       | 4,694.9             | 1,461.4    | 350.7      | 1,502.9               | 0.00                  | 0.00                 | 0.00                |
| 5,040.0             | 24.30           | 13.50       | 4,731.4             | 1,477.4    | 354.6      | 1,519.4               | 0.00                  | 0.00                 | 0.00                |
| 5,080.0             | 24.30           | 13.50       | 4,767.8             | 1,493.4    | 358.4      | 1,535.8               | 0.00                  | 0.00                 | 0.00                |
| 5,120.0             | 24.30           | 13.50       | 4,804.3             | 1,509.4    | 362.3      | 1,552.3               | 0.00                  | 0.00                 | 0.00                |
| 5,138.3             | 24.30           | 13.50       | 4,820.9             | 1,516.8    | 364.0      | 1,559.8               | 0.00                  | 0.00                 | 0.00                |
| 5,160.0             | 23.87           | 13.50       | 4,840.8             | 1,525.4    | 366.1      | 1,568.7               | 2.00                  | -2.00                | 0.00                |
| 5,200.0             | 23.07           | 13.50       | 4,877.5             | 1,540.9    | 369.8      | 1,584.6               | 2.00                  | -2.00                | 0.00                |
| 5,240.0             | 22.27           | 13.50       | 4,914.4             | 1,555.9    | 373.4      | 1,600.0               | 2.00                  | -2.00                | 0.00                |
| 5,280.0             | 21.47           | 13.50       | 4,951.5             | 1,570.4    | 376.9      | 1,614.9               | 2.00                  | -2.00                | 0.00                |
| 5,320.0             | 20.67           | 13.50       | 4,988.8             | 1,584.3    | 380.2      | 1,629.3               | 2.00                  | -2.00                | 0.00                |
| 5,360.0             | 19.87           | 13.50       | 5,026.4             | 1,597.8    | 383.5      | 1,643.2               | 2.00                  | -2.00                | 0.00                |
| 5,400.0             | 19.07           | 13.50       | 5,064.1             | 1,610.8    | 386.6      | 1,656.5               | 2.00                  | -2.00                | 0.00                |
| 5,440.0             | 18.27           | 13.50       | 5,102.0             | 1,623.2    | 389.6      | 1,669.3               | 2.00                  | -2.00                | 0.00                |
| 5,480.0             | 17.47           | 13.50       | 5,140.0             | 1,635.2    | 392.4      | 1,681.6               | 2.00                  | -2.00                | 0.00                |
| 5,520.0             | 16.67           | 13.50       | 5,178.3             | 1,646.6    | 395.2      | 1,693.3               | 2.00                  | -2.00                | 0.00                |
| 5,560.0             | 15.87           | 13.50       | 5,216.7             | 1,657.5    | 397.8      | 1,704.5               | 2.00                  | -2.00                | 0.00                |
| 5,600.0             | 15.07           | 13.50       | 5,255.2             | 1,667.8    | 400.3      | 1,715.2               | 2.00                  | -2.00                | 0.00                |
| 5,640.0             | 14.27           | 13.50       | 5,293.9             | 1,677.7    | 402.6      | 1,725.3               | 2.00                  | -2.00                | 0.00                |
| 5,680.0             | 13.47           | 13.50       | 5,332.8             | 1,687.0    | 404.9      | 1,734.9               | 2.00                  | -2.00                | 0.00                |
| 5,720.0             | 12.67           | 13.50       | 5,371.7             | 1,695.8    | 407.0      | 1,744.0               | 2.00                  | -2.00                | 0.00                |
| 5,760.0             | 11.87           | 13.50       | 5,410.8             | 1,704.1    | 409.0      | 1,752.5               | 2.00                  | -2.00                | 0.00                |
| 5,800.0             | 11.07           | 13.50       | 5,450.0             | 1,711.8    | 410.8      | 1,760.4               | 2.00                  | -2.00                | 0.00                |
| 5,840.0             | 10.27           | 13.50       | 5,489.3             | 1,719.0    | 412.6      | 1,767.8               | 2.00                  | -2.00                | 0.00                |
| 5,880.0             | 9.47            | 13.50       | 5,528.7             | 1,725.7    | 414.2      | 1,774.7               | 2.00                  | -2.00                | 0.00                |
| 5,920.0             | 8.67            | 13.50       | 5,568.2             | 1,731.8    | 415.6      | 1,781.0               | 2.00                  | -2.00                | 0.00                |
| 5,960.0             | 7.87            | 13.50       | 5,607.8             | 1,737.4    | 417.0      | 1,786.7               | 2.00                  | -2.00                | 0.00                |
| 6,000.0             | 7.07            | 13.50       | 5,647.5             | 1,742.5    | 418.2      | 1,791.9               | 2.00                  | -2.00                | 0.00                |
| 6,040.0             | 6.27            | 13.50       | 5,687.2             | 1,747.0    | 419.3      | 1,796.6               | 2.00                  | -2.00                | 0.00                |
| 6,080.0             | 5.47            | 13.50       | 5,727.0             | 1,750.9    | 420.2      | 1,800.7               | 2.00                  | -2.00                | 0.00                |
| 6,120.0             | 4.67            | 13.50       | 5,766.8             | 1,754.4    | 421.0      | 1,804.2               | 2.00                  | -2.00                | 0.00                |
| 6,160.0             | 3.87            | 13.50       | 5,806.7             | 1,757.3    | 421.7      | 1,807.2               | 2.00                  | -2.00                | 0.00                |
| 6,200.0             | 3.07            | 13.50       | 5,846.6             | 1,759.6    | 422.3      | 1,809.6               | 2.00                  | -2.00                | 0.00                |
| 6,240.0             | 2.27            | 13.50       | 5,886.6             | 1,761.4    | 422.7      | 1,811.5               | 2.00                  | -2.00                | 0.00                |

**Database:** Landmark  
**Company:** Synergy Resources  
**Project:** SEC.8-T4N-R67W  
**Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Well:** Klein 33-8D  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (5-03-11)

**Local Co-ordinate Reference:** Well Klein 33-8D  
**TVD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

| Measured Depth (ft)                                  | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|--|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 6,280.0  | 1.47            | 13.50       | 5,926.6             | 1,762.7    | 423.0      | 1,812.8               | 2.00                  | -2.00                | 0.00                |
| 6,320.0  | 0.67            | 13.50       | 5,966.6             | 1,763.4    | 423.2      | 1,813.5               | 2.00                  | -2.00                | 0.00                |
| 6,353.4  | 0.00            | 0.00        | 6,000.0             | 1,763.6    | 423.3      | 1,813.7               | 2.00                  | -2.00                | 0.00                |
| <b>TARGET BHL 1964'FSL, 1858'FEL</b>                 |                 |             |                     |            |            |                       |                       |                      |                     |
| 6,360.0  | 0.00            | 0.00        | 6,006.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,400.0  | 0.00            | 0.00        | 6,046.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,440.0  | 0.00            | 0.00        | 6,086.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,480.0  | 0.00            | 0.00        | 6,126.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,520.0  | 0.00            | 0.00        | 6,166.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,560.0  | 0.00            | 0.00        | 6,206.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,600.0  | 0.00            | 0.00        | 6,246.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,640.0  | 0.00            | 0.00        | 6,286.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,680.0  | 0.00            | 0.00        | 6,326.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,720.0  | 0.00            | 0.00        | 6,366.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,760.0  | 0.00            | 0.00        | 6,406.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,800.0  | 0.00            | 0.00        | 6,446.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,840.0  | 0.00            | 0.00        | 6,486.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,880.0  | 0.00            | 0.00        | 6,526.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,920.0  | 0.00            | 0.00        | 6,566.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 6,960.0  | 0.00            | 0.00        | 6,606.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,000.0  | 0.00            | 0.00        | 6,646.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,040.0  | 0.00            | 0.00        | 6,686.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,053.4  | 0.00            | 0.00        | 6,700.0             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| <b>LEGAL BOX 400' X 400' 1965'FSL &amp; 1859'FEL</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 7,080.0  | 0.00            | 0.00        | 6,726.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,120.0  | 0.00            | 0.00        | 6,766.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,160.0  | 0.00            | 0.00        | 6,806.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,200.0  | 0.00            | 0.00        | 6,846.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,240.0  | 0.00            | 0.00        | 6,886.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,280.0  | 0.00            | 0.00        | 6,926.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,320.0  | 0.00            | 0.00        | 6,966.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,360.0  | 0.00            | 0.00        | 7,006.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,400.0  | 0.00            | 0.00        | 7,046.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,440.0  | 0.00            | 0.00        | 7,086.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,480.0  | 0.00            | 0.00        | 7,126.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,520.0  | 0.00            | 0.00        | 7,166.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,560.0  | 0.00            | 0.00        | 7,206.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,600.0  | 0.00            | 0.00        | 7,246.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,640.0  | 0.00            | 0.00        | 7,286.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,680.0  | 0.00            | 0.00        | 7,326.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,720.0  | 0.00            | 0.00        | 7,366.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,760.0  | 0.00            | 0.00        | 7,406.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,800.0  | 0.00            | 0.00        | 7,446.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,840.0  | 0.00            | 0.00        | 7,486.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,880.0  | 0.00            | 0.00        | 7,526.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,920.0  | 0.00            | 0.00        | 7,566.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 7,960.0  | 0.00            | 0.00        | 7,606.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 8,000.0  | 0.00            | 0.00        | 7,646.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 8,040.0  | 0.00            | 0.00        | 7,686.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 8,080.0  | 0.00            | 0.00        | 7,726.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 8,120.0  | 0.00            | 0.00        | 7,766.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 8,160.0  | 0.00            | 0.00        | 7,806.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 8,200.0  | 0.00            | 0.00        | 7,846.6             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |
| 8,203.4  | 0.00            | 0.00        | 7,850.0             | 1,763.6    | 423.3      | 1,813.7               | 0.00                  | 0.00                 | 0.00                |



**Database:** Landmark  
**Company:** Synergy Resources  
**Project:** SEC.8-T4N-R67W  
**Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Well:** Klein 33-8D  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (5-03-11)

**Local Co-ordinate Reference:** Well Klein 33-8D  
**TVD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|

**Targets**

| Target Name   | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude  | Longitude   |
|---|---------------|--------------|----------|------------|------------|---------------|--------------|-----------|-------------|
| - hit/miss target   |               |              |          |            |            |               |              |           |             |
| - Shape   |               |              |          |            |            |               |              |           |             |
| TARGET BHL 1964'F   | 0.00          | 0.00         | 6,000.0  | 1,763.6    | 423.3      | 1,362,010.46  | 3,163,745.70 | 40.325631 | -104.912706 |
| - plan hits target center   |               |              |          |            |            |               |              |           |             |
| - Point   |               |              |          |            |            |               |              |           |             |
| LEGAL BOX 400' X 400'   | 0.00          | 0.00         | 6,700.0  | 1,764.6    | 422.3      | 1,362,011.43  | 3,163,744.73 | 40.325634 | -104.912709 |
| - plan misses target center by 1.4ft at 7053.4ft MD (6700.0 TVD, 1763.6 N, 423.3 E) |               |              |          |            |            |               |              |           |             |
| - Rectangle (sides W400.0 H400.0 D1,150.0)  |               |              |          |            |            |               |              |           |             |

**Casing Points**

| Measured Depth (ft) | Vertical Depth (ft) | Name   | Casing Diameter (") | Hole Diameter (") |
|---------------------|---------------------|--------|---------------------|-------------------|
| 550.0               | 550.0               | 8 5/8" | 8-5/8               | 12-1/4            |





## **Directional**

### **Synergy Resources**

**SEC.8-T4N-R67W**

**Klein 44-8D Pad Sec.8-T4N-R67W**

**Klein 33-8D**

**Wellbore #1**

**Plan #1 (5-03-11)**

## **Anticollision Report**

**12 May, 2011**

**Company:** Synergy Resources  
**Project:** SEC.8-T4N-R67W  
**Reference Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Site Error:** 0.0ft  
**Reference Well:** Klein 33-8D  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (5-03-11)

**Local Co-ordinate Reference:** Well Klein 33-8D  
**TVD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

|                                     |   |                       |                     |
|-------------------------------------|---|-----------------------|---------------------|
| <b>Reference</b>                    | Plan #1 (5-03-11)   |                       |                     |
| <b>Filter type:</b>                 | NO GLOBAL FILTER: Using user defined selection & filtering criteria |                       |                     |
| <b>Interpolation Method:</b>        | Stations  | <b>Error Model:</b>   | ISCWSA              |
| <b>Depth Range:</b>                 | Unlimited   | <b>Scan Method:</b>   | Closest Approach 3D |
| <b>Results Limited by:</b>          | Maximum center-center distance of 10,000.0ft                        | <b>Error Surface:</b> | Elliptical Conic    |
| <b>Warning Levels Evaluated at:</b> | 2.00 Sigma  |                       |                     |

|                            |                       |                                 |                  |                    |
|----------------------------|-----------------------|---------------------------------|------------------|--------------------|
| <b>Survey Tool Program</b> | <b>Date</b> 5/12/2011 |                                 |                  |                    |
| <b>From (ft)</b>           | <b>To (ft)</b>        | <b>Survey (Wellbore)</b>        | <b>Tool Name</b> | <b>Description</b> |
| 0.0                        | 8,203.4               | Plan #1 (5-03-11) (Wellbore #1) | MWD              | MWD - Standard     |

|   |                                      |                                   |                                      |                                       |                          |                |
|---|--------------------------------------|-----------------------------------|--------------------------------------|---------------------------------------|--------------------------|----------------|
| <b>Summary</b>                              |                                      |                                   |                                      |                                       |                          |                |
| <b>Site Name</b>                            | <b>Reference Measured Depth (ft)</b> | <b>Offset Measured Depth (ft)</b> | <b>Distance Between Centres (ft)</b> | <b>Distance Between Ellipses (ft)</b> | <b>Separation Factor</b> | <b>Warning</b> |
| <b>Offset Well - Wellbore - Design</b>      |                                      |                                   |                                      |                                       |                          |                |
| Klein 44-8D Pad Sec.8-T4N-R67W              |                                      |                                   |                                      |                                       |                          |                |
| Klein 80D - Wellbore #1 - Plan #1 (5-03-11) | 300.0                                | 300.0                             | 20.1                                 | 19.0                                  | 17.868                   | CC             |
| Klein 80D - Wellbore #1 - Plan #1 (5-03-11) | 400.0                                | 399.9                             | 20.3                                 | 18.7                                  | 12.885                   | ES             |
| Klein 80D - Wellbore #1 - Plan #1 (5-03-11) | 600.0                                | 598.8                             | 26.2                                 | 23.7                                  | 10.518                   | SF             |
| Klein 8SD - Wellbore #1 - Plan #1 (5-03-11) | 300.0                                | 300.0                             | 19.8                                 | 18.7                                  | 17.620                   | CC, ES         |
| Klein 8SD - Wellbore #1 - Plan #1 (5-03-11) | 500.0                                | 499.1                             | 23.4                                 | 21.3                                  | 11.536                   | SF             |

| Offset Design Klein 44-8D Pad Sec.8-T4N-R67W - Klein 80D - Wellbore #1 - Plan #1 (5-03-11) |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                         | Offset Site Error: 0.0 ft |                   |  |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|---------------------------|-------------------|--|
| Survey Program: 0-MWD  |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                         | Offset Well Error: 0.0 ft |                   |  |
| Reference  |                     | Offset              |                     | Semi Major Axis |             |                       | Distance                          |            |                      |                       |                         | Warning                   |                   |  |
| Measured Depth (ft)  | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft)  | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) |                           | Separation Factor |  |
| 0.0  | 0.0                 | 0.0                 | 0.0                 | 0.0             | 0.0         | -88.96                | 0.4                               | -20.1      | 20.1                 |                       |                         |                           |                   |  |
| 100.0  | 100.0               | 100.0               | 100.0               | 0.1             | 0.1         | -88.96                | 0.4                               | -20.1      | 20.1                 | 19.9                  | 0.22                    | 89.339                    |                   |  |
| 200.0  | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -88.96                | 0.4                               | -20.1      | 20.1                 | 19.4                  | 0.67                    | 29.780                    |                   |  |
| 300.0  | 300.0               | 300.0               | 300.0               | 0.6             | 0.6         | -88.96                | 0.4                               | -20.1      | 20.1                 | 19.0                  | 1.12                    | 17.868                    | CC                |  |
| 400.0  | 400.0               | 399.9               | 399.9               | 0.8             | 0.8         | -84.04                | 2.1                               | -20.2      | 20.3                 | 18.7                  | 1.57                    | 12.885                    | ES                |  |
| 500.0  | 500.0               | 499.6               | 499.4               | 1.0             | 1.0         | -70.27                | 7.3                               | -20.4      | 21.7                 | 19.6                  | 2.03                    | 10.693                    |                   |  |
| 600.0  | 600.0               | 598.8               | 598.2               | 1.2             | 1.3         | -52.52                | 15.9                              | -20.8      | 26.2                 | 23.7                  | 2.49                    | 10.518                    | SF                |  |
| 700.0  | 700.0               | 697.3               | 696.0               | 1.5             | 1.5         | -37.39                | 27.8                              | -21.3      | 35.3                 | 32.3                  | 2.97                    | 11.868                    |                   |  |
| 750.0  | 750.0               | 746.2               | 744.4               | 1.6             | 1.7         | -31.66                | 35.0                              | -21.6      | 41.5                 | 38.3                  | 3.22                    | 12.909                    |                   |  |
| 800.0  | 800.0               | 794.9               | 792.4               | 1.7             | 1.8         | -40.78                | 43.0                              | -21.9      | 48.5                 | 45.1                  | 3.43                    | 14.129                    |                   |  |
| 900.0  | 899.9               | 891.9               | 887.7               | 1.9             | 2.2         | -35.57                | 61.2                              | -22.7      | 63.3                 | 59.4                  | 3.90                    | 16.235                    |                   |  |
| 1,000.0  | 999.7               | 988.4               | 981.8               | 2.1             | 2.6         | -32.96                | 82.6                              | -23.7      | 78.7                 | 74.3                  | 4.37                    | 17.993                    |                   |  |
| 1,100.0  | 1,099.1             | 1,084.3             | 1,074.6             | 2.4             | 3.0         | -31.71                | 107.0                             | -24.7      | 94.4                 | 89.6                  | 4.86                    | 19.421                    |                   |  |
| 1,200.0  | 1,198.2             | 1,179.8             | 1,166.0             | 2.6             | 3.5         | -31.25                | 134.3                             | -25.9      | 110.4                | 105.1                 | 5.37                    | 20.556                    |                   |  |
| 1,300.0  | 1,296.6             | 1,274.7             | 1,256.0             | 2.9             | 4.1         | -31.27                | 164.4                             | -27.2      | 126.6                | 120.7                 | 5.91                    | 21.427                    |                   |  |
| 1,400.0  | 1,394.4             | 1,369.0             | 1,344.4             | 3.3             | 4.7         | -31.60                | 197.3                             | -28.7      | 143.0                | 136.6                 | 6.49                    | 22.054                    |                   |  |
| 1,500.0  | 1,491.5             | 1,462.9             | 1,431.2             | 3.7             | 5.3         | -32.14                | 232.9                             | -30.2      | 159.7                | 152.6                 | 7.10                    | 22.482                    |                   |  |
| 1,600.0  | 1,587.6             | 1,556.2             | 1,516.3             | 4.1             | 6.0         | -32.83                | 271.1                             | -31.9      | 176.5                | 168.7                 | 7.78                    | 22.691                    |                   |  |
| 1,700.0  | 1,682.7             | 1,649.0             | 1,599.7             | 4.6             | 6.8         | -33.61                | 311.9                             | -33.7      | 193.5                | 184.9                 | 8.52                    | 22.720                    |                   |  |
| 1,800.0  | 1,776.6             | 1,742.4             | 1,682.2             | 5.2             | 7.6         | -34.48                | 355.5                             | -35.6      | 210.6                | 201.3                 | 9.33                    | 22.574                    |                   |  |
| 1,900.0  | 1,869.4             | 1,841.0             | 1,768.9             | 5.8             | 8.4         | -35.67                | 402.5                             | -37.6      | 226.1                | 215.8                 | 10.26                   | 22.028                    |                   |  |
| 1,965.2  | 1,929.1             | 1,905.5             | 1,825.6             | 6.3             | 9.0         | -36.64                | 433.3                             | -39.0      | 234.7                | 223.8                 | 10.94                   | 21.466                    |                   |  |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



**Company:** Synergy Resources  
**Project:** SEC.8-T4N-R67W  
**Reference Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Site Error:** 0.0ft  
**Reference Well:** Klein 33-8D  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (5-03-11)

**Local Co-ordinate Reference:** Well Klein 33-8D  
**TVD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

| Offset Design Klein 44-8D Pad Sec.8-T4N-R67W - Klein 80D - Wellbore #1 - Plan #1 (5-03-11) |                     |                     |                     |                |             |                       |                                   |            |                      |                       |                         |                   | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD  |                     |                     |                     |                |             |                       |                                   |            |                      |                       |                         |                   | Offset Well Error: | 0.0 ft |
| Reference  | Offset              | Semi Major Axis     |                     |                | Distance    |                       |                                   |            |                      |                       |                         |                   | Warning            |        |
| Measured Depth (ft)  | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |                    |        |
| 2,000.0  | 1,960.8             | 1,940.0             | 1,855.8             | 6.5            | 9.3         | -37.24                | 449.7                             | -39.7      | 239.1                | 227.8                 | 11.33                   | 21.110            |                    |        |
| 2,100.0  | 2,051.9             | 2,038.9             | 1,942.8             | 7.3            | 10.2        | -38.84                | 496.9                             | -41.7      | 251.7                | 239.2                 | 12.48                   | 20.163            |                    |        |
| 2,200.0  | 2,143.1             | 2,137.9             | 2,029.8             | 8.0            | 11.1        | -40.29                | 544.1                             | -43.8      | 264.4                | 250.8                 | 13.69                   | 19.321            |                    |        |
| 2,300.0  | 2,234.2             | 2,236.9             | 2,116.7             | 8.7            | 12.0        | -41.60                | 591.3                             | -45.9      | 277.4                | 262.4                 | 14.93                   | 18.575            |                    |        |
| 2,400.0  | 2,325.4             | 2,335.8             | 2,203.7             | 9.5            | 12.9        | -42.80                | 638.5                             | -47.9      | 290.4                | 274.2                 | 16.21                   | 17.914            |                    |        |
| 2,500.0  | 2,416.5             | 2,434.8             | 2,290.7             | 10.3           | 13.8        | -43.89                | 685.7                             | -50.0      | 303.6                | 286.1                 | 17.52                   | 17.329            |                    |        |
| 2,600.0  | 2,507.6             | 2,533.8             | 2,377.6             | 11.0           | 14.7        | -44.90                | 732.9                             | -52.0      | 316.8                | 298.0                 | 18.85                   | 16.809            |                    |        |
| 2,700.0  | 2,598.8             | 2,632.7             | 2,464.6             | 11.8           | 15.6        | -45.82                | 780.1                             | -54.1      | 330.2                | 310.0                 | 20.20                   | 16.345            |                    |        |
| 2,800.0  | 2,689.9             | 2,731.7             | 2,551.6             | 12.6           | 16.5        | -46.67                | 827.3                             | -56.2      | 343.6                | 322.1                 | 21.57                   | 15.930            |                    |        |
| 2,900.0  | 2,781.0             | 2,830.7             | 2,638.5             | 13.4           | 17.4        | -47.46                | 874.5                             | -58.2      | 357.1                | 334.2                 | 22.95                   | 15.558            |                    |        |
| 3,000.0  | 2,872.2             | 2,929.7             | 2,725.5             | 14.1           | 18.3        | -48.19                | 921.7                             | -60.3      | 370.7                | 346.3                 | 24.35                   | 15.223            |                    |        |
| 3,100.0  | 2,963.3             | 3,028.6             | 2,812.5             | 14.9           | 19.3        | -48.86                | 968.9                             | -62.3      | 384.3                | 358.6                 | 25.76                   | 14.920            |                    |        |
| 3,200.0  | 3,054.5             | 3,127.6             | 2,899.4             | 15.7           | 20.2        | -49.50                | 1,016.1                           | -64.4      | 398.0                | 370.8                 | 27.17                   | 14.645            |                    |        |
| 3,300.0  | 3,145.6             | 3,226.6             | 2,986.4             | 16.5           | 21.1        | -50.09                | 1,063.3                           | -66.5      | 411.7                | 383.1                 | 28.60                   | 14.395            |                    |        |
| 3,400.0  | 3,236.7             | 3,325.5             | 3,073.3             | 17.3           | 22.0        | -50.64                | 1,110.5                           | -68.5      | 425.4                | 395.4                 | 30.03                   | 14.166            |                    |        |
| 3,500.0  | 3,327.9             | 3,424.5             | 3,160.3             | 18.1           | 22.9        | -51.15                | 1,157.7                           | -70.6      | 439.2                | 407.8                 | 31.47                   | 13.957            |                    |        |
| 3,600.0  | 3,419.0             | 3,523.5             | 3,247.3             | 18.9           | 23.8        | -51.64                | 1,204.9                           | -72.6      | 453.0                | 420.1                 | 32.91                   | 13.764            |                    |        |
| 3,700.0  | 3,510.1             | 3,622.4             | 3,334.2             | 19.6           | 24.7        | -52.10                | 1,252.1                           | -74.7      | 466.9                | 432.5                 | 34.36                   | 13.587            |                    |        |
| 3,800.0  | 3,601.3             | 3,721.4             | 3,421.2             | 20.4           | 25.6        | -52.53                | 1,299.3                           | -76.8      | 480.8                | 445.0                 | 35.82                   | 13.423            |                    |        |
| 3,900.0  | 3,692.4             | 3,820.4             | 3,508.2             | 21.2           | 26.5        | -52.93                | 1,346.5                           | -78.8      | 494.7                | 457.4                 | 37.28                   | 13.271            |                    |        |
| 4,000.0  | 3,783.6             | 3,919.4             | 3,595.1             | 22.0           | 27.4        | -53.32                | 1,393.7                           | -80.9      | 508.6                | 469.9                 | 38.74                   | 13.130            |                    |        |
| 4,100.0  | 3,874.7             | 4,018.3             | 3,682.1             | 22.8           | 28.4        | -53.68                | 1,440.9                           | -82.9      | 522.5                | 482.3                 | 40.20                   | 12.998            |                    |        |
| 4,200.0  | 3,965.8             | 4,117.3             | 3,769.1             | 23.6           | 29.3        | -54.03                | 1,488.1                           | -85.0      | 536.5                | 494.8                 | 41.67                   | 12.876            |                    |        |
| 4,300.0  | 4,057.0             | 4,216.3             | 3,856.0             | 24.4           | 30.2        | -54.35                | 1,535.3                           | -87.1      | 550.5                | 507.4                 | 43.14                   | 12.761            |                    |        |
| 4,400.0  | 4,148.1             | 4,315.2             | 3,943.0             | 25.2           | 31.1        | -54.67                | 1,582.5                           | -89.1      | 564.5                | 519.9                 | 44.61                   | 12.654            |                    |        |
| 4,500.0  | 4,239.2             | 4,414.2             | 4,030.0             | 26.0           | 32.0        | -54.96                | 1,629.7                           | -91.2      | 578.5                | 532.4                 | 46.08                   | 12.553            |                    |        |
| 4,600.0  | 4,330.4             | 4,513.2             | 4,116.9             | 26.8           | 32.9        | -55.24                | 1,676.9                           | -93.2      | 592.5                | 545.0                 | 47.56                   | 12.459            |                    |        |
| 4,700.0  | 4,421.5             | 4,612.1             | 4,203.9             | 27.6           | 33.8        | -55.51                | 1,724.1                           | -95.3      | 606.6                | 557.6                 | 49.04                   | 12.370            |                    |        |
| 4,800.0  | 4,512.7             | 4,711.1             | 4,290.9             | 28.4           | 34.7        | -55.77                | 1,771.3                           | -97.4      | 620.6                | 570.1                 | 50.52                   | 12.286            |                    |        |
| 4,900.0  | 4,603.8             | 4,810.1             | 4,377.8             | 29.2           | 35.7        | -56.02                | 1,818.5                           | -99.4      | 634.7                | 582.7                 | 52.00                   | 12.206            |                    |        |
| 5,000.0  | 4,694.9             | 4,909.0             | 4,464.8             | 30.0           | 36.6        | -56.25                | 1,865.7                           | -101.5     | 648.8                | 595.3                 | 53.48                   | 12.131            |                    |        |
| 5,100.0  | 4,786.1             | 5,008.0             | 4,551.7             | 30.8           | 37.5        | -56.47                | 1,912.9                           | -103.5     | 662.9                | 607.9                 | 54.96                   | 12.060            |                    |        |
| 5,138.3  | 4,820.9             | 5,045.9             | 4,585.0             | 31.1           | 37.8        | -56.56                | 1,931.0                           | -104.3     | 668.3                | 612.7                 | 55.53                   | 12.034            |                    |        |
| 5,200.0  | 4,877.5             | 5,106.9             | 4,638.7             | 31.5           | 38.4        | -56.80                | 1,960.1                           | -105.6     | 677.3                | 620.9                 | 56.41                   | 12.008            |                    |        |
| 5,300.0  | 4,970.2             | 5,205.6             | 4,725.4             | 32.0           | 39.3        | -57.01                | 2,007.2                           | -107.6     | 693.6                | 635.9                 | 57.63                   | 12.036            |                    |        |
| 5,400.0  | 5,064.1             | 5,324.3             | 4,830.6             | 32.6           | 40.2        | -57.04                | 2,061.9                           | -110.0     | 710.4                | 651.6                 | 58.73                   | 12.095            |                    |        |
| 5,500.0  | 5,159.1             | 5,445.6             | 4,940.5             | 33.1           | 41.0        | -57.06                | 2,113.3                           | -112.3     | 726.0                | 666.3                 | 59.69                   | 12.162            |                    |        |
| 5,600.0  | 5,255.2             | 5,567.8             | 5,053.3             | 33.5           | 41.7        | -57.04                | 2,160.3                           | -114.3     | 740.3                | 679.8                 | 60.56                   | 12.225            |                    |        |
| 5,700.0  | 5,352.2             | 5,690.9             | 5,168.8             | 33.9           | 42.4        | -57.01                | 2,202.8                           | -116.2     | 753.4                | 692.1                 | 61.33                   | 12.285            |                    |        |
| 5,800.0  | 5,450.0             | 5,814.8             | 5,286.8             | 34.3           | 43.0        | -56.95                | 2,240.5                           | -117.8     | 765.2                | 703.2                 | 62.00                   | 12.342            |                    |        |
| 5,900.0  | 5,548.5             | 5,939.5             | 5,407.1             | 34.6           | 43.5        | -56.87                | 2,273.2                           | -119.3     | 775.7                | 713.1                 | 62.56                   | 12.399            |                    |        |
| 6,000.0  | 5,647.5             | 6,064.8             | 5,529.3             | 34.9           | 44.0        | -56.76                | 2,300.8                           | -120.5     | 784.8                | 721.8                 | 63.01                   | 12.454            |                    |        |
| 6,100.0  | 5,746.9             | 6,190.7             | 5,653.2             | 35.1           | 44.4        | -56.63                | 2,323.1                           | -121.4     | 792.5                | 729.1                 | 63.36                   | 12.508            |                    |        |
| 6,200.0  | 5,846.6             | 6,317.1             | 5,778.5             | 35.2           | 44.7        | -56.48                | 2,340.1                           | -122.2     | 798.8                | 735.2                 | 63.58                   | 12.563            |                    |        |
| 6,300.0  | 5,946.6             | 6,444.0             | 5,904.8             | 35.4           | 44.9        | -56.30                | 2,351.5                           | -122.7     | 803.7                | 740.0                 | 63.69                   | 12.618            |                    |        |
| 6,353.4  | 6,000.0             | 6,511.9             | 5,972.6             | 35.4           | 45.0        | -42.70                | 2,355.3                           | -122.8     | 805.7                | 742.0                 | 63.70                   | 12.647            |                    |        |
| 6,400.0  | 6,046.6             | 6,571.2             | 6,031.9             | 35.5           | 45.1        | -42.61                | 2,357.4                           | -122.9     | 806.9                | 743.1                 | 63.74                   | 12.659            |                    |        |
| 6,500.0  | 6,146.6             | 6,685.9             | 6,146.6             | 35.5           | 45.2        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 743.5                 | 63.90                   | 12.634            |                    |        |
| 6,600.0  | 6,246.6             | 6,785.9             | 6,246.6             | 35.6           | 45.2        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 743.3                 | 64.07                   | 12.601            |                    |        |
| 6,700.0  | 6,346.6             | 6,885.9             | 6,346.6             | 35.7           | 45.3        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 743.1                 | 64.25                   | 12.567            |                    |        |
| 6,800.0  | 6,446.6             | 6,985.9             | 6,446.6             | 35.8           | 45.4        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 743.0                 | 64.42                   | 12.533            |                    |        |
| 6,900.0  | 6,546.6             | 7,085.9             | 6,546.6             | 35.8           | 45.4        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 742.8                 | 64.60                   | 12.498            |                    |        |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

**Company:** Synergy Resources  
**Project:** SEC.8-T4N-R67W  
**Reference Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Site Error:** 0.0ft  
**Reference Well:** Klein 33-8D  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (5-03-11)

**Local Co-ordinate Reference:** Well Klein 33-8D  
**TVD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

| Offset Design Klein 44-8D Pad Sec.8-T4N-R67W - Klein 80D - Wellbore #1 - Plan #1 (5-03-11) |                     |                     |                     |                |             |                       |                                   |            |                      |                       |                         |                   | Offset Site Error: | 0.0 ft  |
|--|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program: 0-MWD  |                     |                     |                     |                |             |                       |                                   |            |                      |                       |                         |                   | Offset Well Error: | 0.0 ft  |
| Reference  | Offset              | Semi Major Axis     |                     | Distance       |             |                       |                                   |            |                      |                       |                         |                   |                    | Warning |
| Measured Depth (ft)  | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |                    |         |
| 7,000.0  | 6,646.6             | 7,185.9             | 6,646.6             | 35.9           | 45.5        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 742.6                 | 64.78                   | 12.463            |                    |         |
| 7,100.0  | 6,746.6             | 7,285.9             | 6,746.6             | 36.0           | 45.5        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 742.4                 | 64.96                   | 12.428            |                    |         |
| 7,200.0  | 6,846.6             | 7,385.9             | 6,846.6             | 36.1           | 45.6        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 742.2                 | 65.15                   | 12.393            |                    |         |
| 7,300.0  | 6,946.6             | 7,485.9             | 6,946.6             | 36.2           | 45.7        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 742.0                 | 65.34                   | 12.357            |                    |         |
| 7,400.0  | 7,046.6             | 7,585.9             | 7,046.6             | 36.3           | 45.7        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 741.8                 | 65.53                   | 12.321            |                    |         |
| 7,500.0  | 7,146.6             | 7,685.9             | 7,146.6             | 36.4           | 45.8        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 741.7                 | 65.72                   | 12.285            |                    |         |
| 7,600.0  | 7,246.6             | 7,785.9             | 7,246.6             | 36.4           | 45.9        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 741.5                 | 65.92                   | 12.248            |                    |         |
| 7,700.0  | 7,346.6             | 7,885.9             | 7,346.6             | 36.5           | 46.0        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 741.3                 | 66.12                   | 12.211            |                    |         |
| 7,800.0  | 7,446.6             | 7,985.9             | 7,446.6             | 36.6           | 46.0        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 741.1                 | 66.32                   | 12.174            |                    |         |
| 7,900.0  | 7,546.6             | 8,085.9             | 7,546.6             | 36.7           | 46.1        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 740.9                 | 66.52                   | 12.137            |                    |         |
| 8,000.0  | 7,646.6             | 8,185.9             | 7,646.6             | 36.8           | 46.2        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 740.6                 | 66.73                   | 12.100            |                    |         |
| 8,100.0  | 7,746.6             | 8,285.9             | 7,746.6             | 36.9           | 46.2        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 740.4                 | 66.94                   | 12.062            |                    |         |
| 8,203.4  | 7,850.0             | 8,389.3             | 7,850.0             | 37.0           | 46.3        | -42.57                | 2,358.2                           | -123.0     | 807.4                | 740.2                 | 67.15                   | 12.023            |                    |         |



**Company:** Synergy Resources  
**Project:** SEC.8-T4N-R67W  
**Reference Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Site Error:** 0.0ft  
**Reference Well:** Klein 33-8D  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (5-03-11)

**Local Co-ordinate Reference:** Well Klein 33-8D  
**TVD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

| Offset Design Klein 44-8D Pad Sec.8-T4N-R67W - Klein 8SD - Wellbore #1 - Plan #1 (5-03-11) |                     |                     |                     |                |             |                       |                                   |            |                      |                       |                         |                   | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD  |                     |                     |                     |                |             |                       |                                   |            |                      |                       |                         |                   | Offset Well Error: | 0.0 ft |
| Reference  | Offset              | Semi Major Axis     |                     | Distance       |             | Minimum               |                                   | Separation |                      | Warning               |                         |                   |                    |        |
| Measured Depth (ft)  | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |                    |        |
| 0.0  | 0.0                 | 0.0                 | 0.0                 | 0.0            | 0.0         | 91.05                 | -0.4                              | 19.8       | 19.8                 | 19.8                  | 0.00                    | N/A               |                    |        |
| 100.0  | 100.0               | 100.0               | 100.0               | 0.1            | 0.1         | 91.05                 | -0.4                              | 19.8       | 19.8                 | 19.6                  | 0.22                    | 88.099            |                    |        |
| 200.0  | 200.0               | 200.0               | 200.0               | 0.3            | 0.3         | 91.05                 | -0.4                              | 19.8       | 19.8                 | 19.1                  | 0.67                    | 29.366            |                    |        |
| 300.0  | 300.0               | 300.0               | 300.0               | 0.6            | 0.6         | 91.05                 | -0.4                              | 19.8       | 19.8                 | 18.7                  | 1.12                    | 17.620 CC, ES     |                    |        |
| 400.0  | 400.0               | 399.7               | 399.7               | 0.8            | 0.8         | 86.58                 | 1.2                               | 20.5       | 20.5                 | 19.0                  | 1.57                    | 13.062            |                    |        |
| 500.0  | 500.0               | 499.1               | 499.0               | 1.0            | 1.0         | 75.18                 | 6.0                               | 22.6       | 23.4                 | 21.3                  | 2.03                    | 11.536 SF         |                    |        |
| 600.0  | 600.0               | 598.1               | 597.6               | 1.2            | 1.3         | 62.00                 | 13.8                              | 26.0       | 29.6                 | 27.1                  | 2.49                    | 11.884            |                    |        |
| 700.0  | 700.0               | 696.4               | 695.1               | 1.5            | 1.5         | 51.23                 | 24.7                              | 30.8       | 39.8                 | 36.8                  | 2.95                    | 13.476            |                    |        |
| 750.0  | 750.0               | 745.2               | 743.4               | 1.6            | 1.7         | 47.10                 | 31.3                              | 33.6       | 46.4                 | 43.2                  | 3.19                    | 14.566            |                    |        |
| 800.0  | 800.0               | 793.8               | 791.4               | 1.7            | 1.8         | 30.37                 | 38.5                              | 36.8       | 53.6                 | 50.2                  | 3.42                    | 15.682            |                    |        |
| 900.0  | 899.9               | 890.6               | 886.5               | 1.9            | 2.2         | 26.33                 | 55.2                              | 44.1       | 68.5                 | 64.6                  | 3.88                    | 17.648            |                    |        |
| 1,000.0  | 999.7               | 987.0               | 980.4               | 2.1            | 2.6         | 24.12                 | 74.7                              | 52.7       | 83.6                 | 79.3                  | 4.35                    | 19.232            |                    |        |
| 1,100.0  | 1,099.1             | 1,082.8             | 1,073.1             | 2.4            | 3.0         | 22.91                 | 97.0                              | 62.4       | 98.9                 | 94.1                  | 4.83                    | 20.489            |                    |        |
| 1,200.0  | 1,198.2             | 1,178.2             | 1,164.5             | 2.6            | 3.5         | 22.31                 | 122.0                             | 73.4       | 114.3                | 109.0                 | 5.32                    | 21.470            |                    |        |
| 1,300.0  | 1,296.6             | 1,273.0             | 1,254.4             | 2.9            | 4.1         | 22.09                 | 149.6                             | 85.4       | 129.7                | 123.8                 | 5.84                    | 22.211            |                    |        |
| 1,400.0  | 1,394.4             | 1,367.4             | 1,342.9             | 3.3            | 4.7         | 22.13                 | 179.7                             | 98.6       | 145.0                | 138.6                 | 6.38                    | 22.738            |                    |        |
| 1,500.0  | 1,491.5             | 1,461.3             | 1,429.8             | 3.7            | 5.3         | 22.35                 | 212.3                             | 112.9      | 160.4                | 153.4                 | 6.94                    | 23.107            |                    |        |
| 1,600.0  | 1,587.6             | 1,554.8             | 1,515.1             | 4.1            | 6.0         | 22.70                 | 247.4                             | 128.3      | 175.7                | 168.1                 | 7.55                    | 23.277            |                    |        |
| 1,700.0  | 1,682.7             | 1,647.8             | 1,598.7             | 4.6            | 6.8         | 23.15                 | 284.8                             | 144.6      | 190.9                | 182.7                 | 8.19                    | 23.303            |                    |        |
| 1,800.0  | 1,776.6             | 1,740.4             | 1,680.5             | 5.2            | 7.6         | 23.67                 | 324.4                             | 162.0      | 206.2                | 197.3                 | 8.89                    | 23.196            |                    |        |
| 1,900.0  | 1,869.4             | 1,836.9             | 1,764.5             | 5.8            | 8.4         | 24.33                 | 367.8                             | 181.0      | 220.8                | 211.1                 | 9.66                    | 22.858            |                    |        |
| 1,965.2  | 1,929.1             | 1,901.5             | 1,820.8             | 6.3            | 9.0         | 24.92                 | 396.9                             | 193.7      | 228.7                | 218.5                 | 10.20                   | 22.416            |                    |        |
| 2,000.0  | 1,960.8             | 1,936.1             | 1,850.9             | 6.5            | 9.4         | 25.29                 | 412.5                             | 200.6      | 232.7                | 222.1                 | 10.53                   | 22.103            |                    |        |
| 2,100.0  | 2,051.9             | 2,035.3             | 1,937.3             | 7.3            | 10.3        | 26.29                 | 457.3                             | 220.2      | 244.0                | 232.5                 | 11.48                   | 21.260            |                    |        |
| 2,200.0  | 2,143.1             | 2,134.6             | 2,023.7             | 8.0            | 11.2        | 27.21                 | 502.1                             | 239.8      | 255.3                | 242.9                 | 12.46                   | 20.493            |                    |        |
| 2,300.0  | 2,234.2             | 2,233.9             | 2,110.1             | 8.7            | 12.1        | 28.05                 | 546.8                             | 259.4      | 266.8                | 253.3                 | 13.47                   | 19.798            |                    |        |
| 2,400.0  | 2,325.4             | 2,333.2             | 2,196.5             | 9.5            | 13.1        | 28.81                 | 591.6                             | 279.0      | 278.2                | 263.7                 | 14.52                   | 19.169            |                    |        |
| 2,500.0  | 2,416.5             | 2,432.4             | 2,282.9             | 10.3           | 14.0        | 29.52                 | 636.4                             | 298.6      | 289.8                | 274.2                 | 15.58                   | 18.600            |                    |        |
| 2,600.0  | 2,507.6             | 2,531.7             | 2,369.3             | 11.0           | 15.0        | 30.18                 | 681.2                             | 318.2      | 301.3                | 284.7                 | 16.66                   | 18.084            |                    |        |
| 2,700.0  | 2,598.8             | 2,631.0             | 2,455.7             | 11.8           | 15.9        | 30.78                 | 725.9                             | 337.8      | 312.9                | 295.2                 | 17.76                   | 17.616            |                    |        |
| 2,800.0  | 2,689.9             | 2,730.3             | 2,542.1             | 12.6           | 16.8        | 31.34                 | 770.7                             | 357.4      | 324.6                | 305.7                 | 18.88                   | 17.190            |                    |        |
| 2,900.0  | 2,781.0             | 2,829.5             | 2,628.5             | 13.4           | 17.8        | 31.86                 | 815.5                             | 377.0      | 336.2                | 316.2                 | 20.01                   | 16.802            |                    |        |
| 3,000.0  | 2,872.2             | 2,928.8             | 2,714.9             | 14.1           | 18.7        | 32.35                 | 860.3                             | 396.6      | 347.9                | 326.8                 | 21.15                   | 16.447            |                    |        |
| 3,100.0  | 2,963.3             | 3,028.1             | 2,801.3             | 14.9           | 19.7        | 32.81                 | 905.0                             | 416.2      | 359.6                | 337.3                 | 22.31                   | 16.122            |                    |        |
| 3,200.0  | 3,054.5             | 3,127.3             | 2,887.8             | 15.7           | 20.6        | 33.23                 | 949.8                             | 435.8      | 371.4                | 347.9                 | 23.47                   | 15.823            |                    |        |
| 3,300.0  | 3,145.6             | 3,226.6             | 2,974.2             | 16.5           | 21.5        | 33.64                 | 994.6                             | 455.4      | 383.1                | 358.5                 | 24.64                   | 15.548            |                    |        |
| 3,400.0  | 3,236.7             | 3,325.9             | 3,060.6             | 17.3           | 22.5        | 34.01                 | 1,039.4                           | 475.0      | 394.9                | 369.1                 | 25.82                   | 15.294            |                    |        |
| 3,500.0  | 3,327.9             | 3,425.2             | 3,147.0             | 18.1           | 23.4        | 34.37                 | 1,084.1                           | 494.6      | 406.7                | 379.7                 | 27.01                   | 15.059            |                    |        |
| 3,600.0  | 3,419.0             | 3,524.4             | 3,233.4             | 18.9           | 24.4        | 34.70                 | 1,128.9                           | 514.2      | 418.5                | 390.3                 | 28.20                   | 14.840            |                    |        |
| 3,700.0  | 3,510.1             | 3,623.7             | 3,319.8             | 19.6           | 25.3        | 35.02                 | 1,173.7                           | 533.8      | 430.3                | 400.9                 | 29.40                   | 14.637            |                    |        |
| 3,800.0  | 3,601.3             | 3,723.0             | 3,406.2             | 20.4           | 26.3        | 35.32                 | 1,218.5                           | 553.4      | 442.1                | 411.5                 | 30.60                   | 14.448            |                    |        |
| 3,900.0  | 3,692.4             | 3,822.3             | 3,492.6             | 21.2           | 27.2        | 35.60                 | 1,263.2                           | 573.0      | 453.9                | 422.1                 | 31.81                   | 14.272            |                    |        |
| 4,000.0  | 3,783.6             | 3,921.5             | 3,579.0             | 22.0           | 28.2        | 35.87                 | 1,308.0                           | 592.6      | 465.8                | 432.8                 | 33.02                   | 14.107            |                    |        |
| 4,100.0  | 3,874.7             | 4,020.8             | 3,665.4             | 22.8           | 29.1        | 36.13                 | 1,352.8                           | 612.2      | 477.7                | 443.4                 | 34.24                   | 13.952            |                    |        |
| 4,200.0  | 3,965.8             | 4,120.1             | 3,751.8             | 23.6           | 30.1        | 36.37                 | 1,397.6                           | 631.9      | 489.5                | 454.1                 | 35.46                   | 13.807            |                    |        |
| 4,300.0  | 4,057.0             | 4,219.3             | 3,838.2             | 24.4           | 31.0        | 36.61                 | 1,442.3                           | 651.5      | 501.4                | 464.7                 | 36.68                   | 13.670            |                    |        |
| 4,400.0  | 4,148.1             | 4,318.6             | 3,924.6             | 25.2           | 32.0        | 36.83                 | 1,487.1                           | 671.1      | 513.3                | 475.4                 | 37.91                   | 13.541            |                    |        |
| 4,500.0  | 4,239.2             | 4,417.9             | 4,011.0             | 26.0           | 32.9        | 37.04                 | 1,531.9                           | 690.7      | 525.2                | 486.0                 | 39.13                   | 13.420            |                    |        |
| 4,600.0  | 4,330.4             | 4,517.2             | 4,097.4             | 26.8           | 33.8        | 37.24                 | 1,576.7                           | 710.3      | 537.1                | 496.7                 | 40.37                   | 13.305            |                    |        |
| 4,700.0  | 4,421.5             | 4,616.4             | 4,183.8             | 27.6           | 34.8        | 37.44                 | 1,621.4                           | 729.9      | 549.0                | 507.4                 | 41.60                   | 13.196            |                    |        |
| 4,800.0  | 4,512.7             | 4,715.7             | 4,270.2             | 28.4           | 35.7        | 37.62                 | 1,666.2                           | 749.5      | 560.9                | 518.0                 | 42.84                   | 13.093            |                    |        |
| 4,900.0  | 4,603.8             | 4,815.0             | 4,356.6             | 29.2           | 36.7        | 37.80                 | 1,711.0                           | 769.1      | 572.8                | 528.7                 | 44.08                   | 12.996            |                    |        |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

**Company:** Synergy Resources  
**Project:** SEC.8-T4N-R67W  
**Reference Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Site Error:** 0.0ft  
**Reference Well:** Klein 33-8D  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (5-03-11)

**Local Co-ordinate Reference:** Well Klein 33-8D  
**TVD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

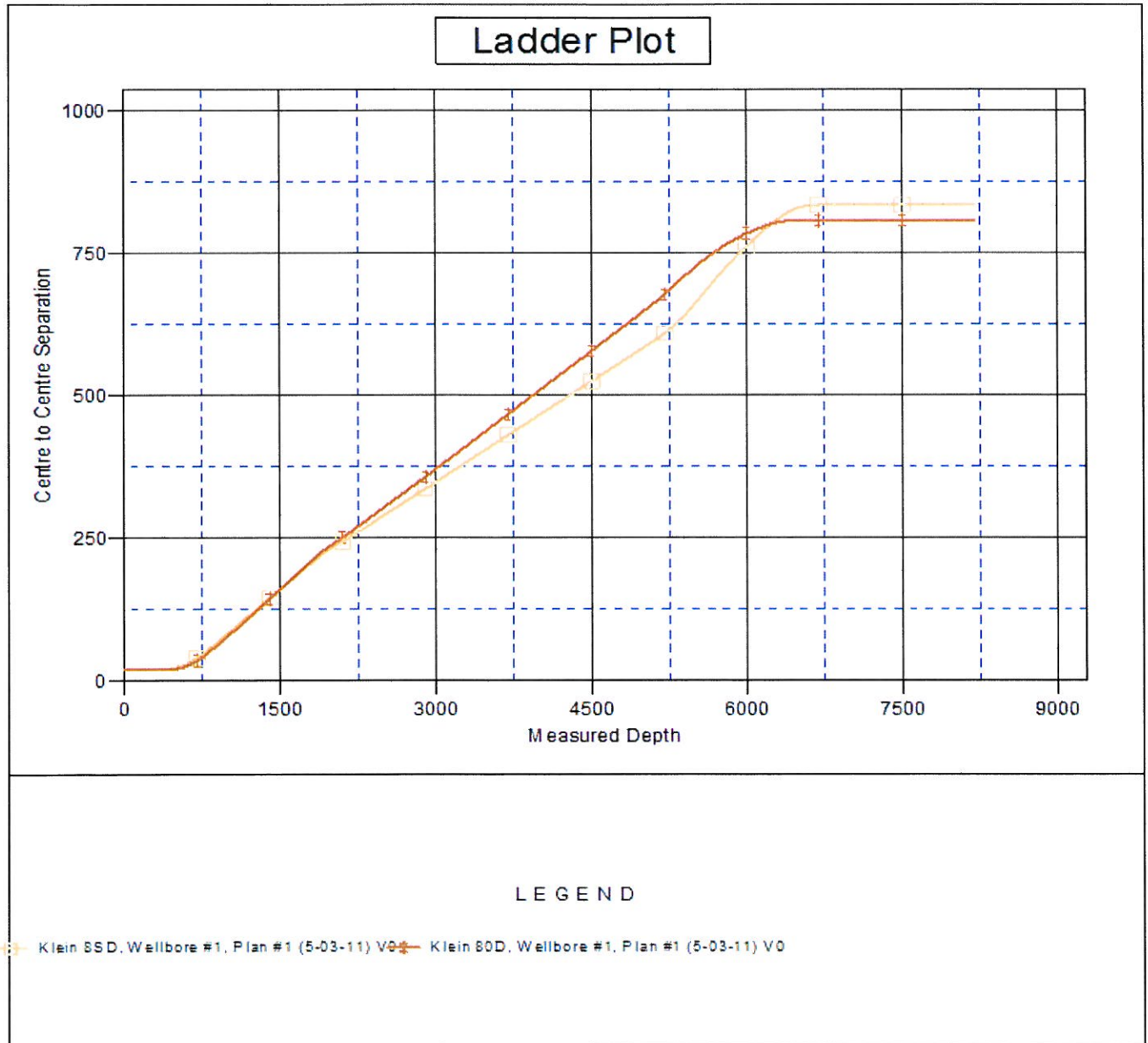
| Offset Design Klein 44-8D Pad Sec.8-T4N-R67W - Klein 8SD - Wellbore #1 - Plan #1 (5-03-11) |                     |                     |                     |                |             |                       |                                   |            |                      |                       |                         |                   | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD  |                     |                     |                     |                |             |                       |                                   |            |                      |                       |                         |                   | Offset Well Error: | 0.0 ft |
| Reference  | Offset              | Semi Major Axis     |                     | Distance       |             | Minimum               |                                   | Separation |                      | Warning               |                         |                   |                    |        |
| Measured Depth (ft)  | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |                    |        |
| 5,000.0  | 4,694.9             | 4,914.2             | 4,443.1             | 30.0           | 37.6        | 37.97                 | 1,755.8                           | 788.7      | 584.7                | 539.4                 | 45.32                   | 12.903            |                    |        |
| 5,100.0  | 4,786.1             | 5,013.5             | 4,529.5             | 30.8           | 38.6        | 38.13                 | 1,800.5                           | 808.3      | 596.6                | 550.1                 | 46.56                   | 12.814            |                    |        |
| 5,138.3  | 4,820.9             | 5,051.5             | 4,562.5             | 31.1           | 38.9        | 38.19                 | 1,817.7                           | 815.8      | 601.2                | 554.2                 | 47.03                   | 12.782            |                    |        |
| 5,200.0  | 4,877.5             | 5,112.7             | 4,615.8             | 31.5           | 39.5        | 38.35                 | 1,845.3                           | 827.9      | 609.1                | 561.3                 | 47.76                   | 12.752            |                    |        |
| 5,300.0  | 4,970.2             | 5,211.6             | 4,701.9             | 32.0           | 40.5        | 38.46                 | 1,889.9                           | 847.4      | 624.0                | 575.3                 | 48.77                   | 12.796            |                    |        |
| 5,400.0  | 5,064.1             | 5,310.0             | 4,787.5             | 32.6           | 41.4        | 38.42                 | 1,934.2                           | 866.8      | 641.7                | 592.1                 | 49.62                   | 12.931            |                    |        |
| 5,500.0  | 5,159.1             | 5,407.8             | 4,872.6             | 33.1           | 42.3        | 38.24                 | 1,978.3                           | 886.1      | 662.1                | 611.7                 | 50.34                   | 13.153            |                    |        |
| 5,600.0  | 5,255.2             | 5,525.6             | 4,976.0             | 33.5           | 43.3        | 37.86                 | 2,030.1                           | 908.8      | 684.0                | 633.1                 | 50.90                   | 13.438            |                    |        |
| 5,700.0  | 5,352.2             | 5,649.8             | 5,087.3             | 33.9           | 44.1        | 37.46                 | 2,080.5                           | 930.9      | 705.0                | 653.7                 | 51.34                   | 13.733            |                    |        |
| 5,800.0  | 5,450.0             | 5,775.5             | 5,202.4             | 34.3           | 44.9        | 37.06                 | 2,127.0                           | 951.2      | 725.1                | 673.4                 | 51.70                   | 14.025            |                    |        |
| 5,900.0  | 5,548.5             | 5,902.6             | 5,320.8             | 34.6           | 45.6        | 36.67                 | 2,169.2                           | 969.7      | 744.0                | 692.0                 | 51.97                   | 14.317            |                    |        |
| 6,000.0  | 5,647.5             | 6,031.1             | 5,442.5             | 34.9           | 46.3        | 36.27                 | 2,206.9                           | 986.2      | 761.8                | 709.7                 | 52.14                   | 14.611            |                    |        |
| 6,100.0  | 5,746.9             | 6,161.0             | 5,567.3             | 35.1           | 46.9        | 35.88                 | 2,239.9                           | 1,000.7    | 778.5                | 726.3                 | 52.22                   | 14.907            |                    |        |
| 6,200.0  | 5,846.6             | 6,292.2             | 5,694.8             | 35.2           | 47.4        | 35.48                 | 2,268.0                           | 1,013.0    | 794.0                | 741.8                 | 52.21                   | 15.208            |                    |        |
| 6,300.0  | 5,946.6             | 6,424.5             | 5,824.8             | 35.4           | 47.8        | 35.07                 | 2,290.9                           | 1,023.0    | 808.2                | 756.1                 | 52.09                   | 15.515            |                    |        |
| 6,353.4  | 6,000.0             | 6,495.8             | 5,895.2             | 35.4           | 48.0        | 48.35                 | 2,300.9                           | 1,027.4    | 815.2                | 763.2                 | 51.99                   | 15.681            |                    |        |
| 6,400.0  | 6,046.6             | 6,558.2             | 5,957.0             | 35.5           | 48.2        | 48.11                 | 2,308.4                           | 1,030.6    | 820.8                | 768.8                 | 51.97                   | 15.794            |                    |        |
| 6,500.0  | 6,146.6             | 6,693.2             | 6,091.4             | 35.5           | 48.4        | 47.74                 | 2,320.3                           | 1,035.8    | 829.5                | 777.5                 | 52.01                   | 15.950            |                    |        |
| 6,600.0  | 6,246.6             | 6,829.1             | 6,227.2             | 35.6           | 48.6        | 47.55                 | 2,326.4                           | 1,038.5    | 834.0                | 781.9                 | 52.15                   | 15.994            |                    |        |
| 6,700.0  | 6,346.6             | 6,948.5             | 6,346.6             | 35.7           | 48.7        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 782.3                 | 52.36                   | 15.942            |                    |        |
| 6,800.0  | 6,446.6             | 7,048.5             | 6,446.6             | 35.8           | 48.8        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 782.1                 | 52.57                   | 15.878            |                    |        |
| 6,900.0  | 6,546.6             | 7,148.5             | 6,546.6             | 35.8           | 48.8        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 781.9                 | 52.78                   | 15.814            |                    |        |
| 7,000.0  | 6,646.6             | 7,248.5             | 6,646.6             | 35.9           | 48.9        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 781.7                 | 53.00                   | 15.749            |                    |        |
| 7,100.0  | 6,746.6             | 7,348.5             | 6,746.6             | 36.0           | 48.9        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 781.4                 | 53.22                   | 15.684            |                    |        |
| 7,200.0  | 6,846.6             | 7,448.5             | 6,846.6             | 36.1           | 49.0        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 781.2                 | 53.44                   | 15.618            |                    |        |
| 7,300.0  | 6,946.6             | 7,548.5             | 6,946.6             | 36.2           | 49.1        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 781.0                 | 53.67                   | 15.552            |                    |        |
| 7,400.0  | 7,046.6             | 7,648.5             | 7,046.6             | 36.3           | 49.1        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 780.8                 | 53.90                   | 15.486            |                    |        |
| 7,500.0  | 7,146.6             | 7,748.5             | 7,146.6             | 36.4           | 49.2        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 780.5                 | 54.13                   | 15.420            |                    |        |
| 7,600.0  | 7,246.6             | 7,848.5             | 7,246.6             | 36.4           | 49.2        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 780.3                 | 54.36                   | 15.353            |                    |        |
| 7,700.0  | 7,346.6             | 7,948.5             | 7,346.6             | 36.5           | 49.3        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 780.1                 | 54.60                   | 15.287            |                    |        |
| 7,800.0  | 7,446.6             | 8,048.5             | 7,446.6             | 36.6           | 49.4        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 779.8                 | 54.84                   | 15.220            |                    |        |
| 7,900.0  | 7,546.6             | 8,148.5             | 7,546.6             | 36.7           | 49.4        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 779.6                 | 55.08                   | 15.153            |                    |        |
| 8,000.0  | 7,646.6             | 8,248.5             | 7,646.6             | 36.8           | 49.5        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 779.3                 | 55.33                   | 15.086            |                    |        |
| 8,100.0  | 7,746.6             | 8,348.5             | 7,746.6             | 36.9           | 49.6        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 779.1                 | 55.58                   | 15.018            |                    |        |
| 8,203.4  | 7,850.0             | 8,452.0             | 7,850.0             | 37.0           | 49.6        | 47.53                 | 2,327.2                           | 1,038.9    | 834.7                | 778.8                 | 55.83                   | 14.949            |                    |        |



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**Reference Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Site Error:** 0.0ft  
**Reference Well:** Klein 33-8D  
**Well Error:** 0.0ft  
**Reference Wellbore** Wellbore #1  
**Reference Design:** Plan #1 (5-03-11)

**Local Co-ordinate Reference:** Well Klein 33-8D  
**TVD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4807.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

Reference Depths are relative to WELL @ 4807.0ft (Original Well Elev) Coordinates are relative to: Klein 33-8D  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.38°



**Company:** Synergy Resources  
**Project:** SEC.8-T4N-R67W  
**Reference Site:** Klein 44-8D Pad Sec.8-T4N-R67W  
**Site Error:** 0.0ft  
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**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
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Reference Depths are relative to WELL @ 4807.0ft (Original Well Elev) Coordinates are relative to: Klein 33-8D

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Coordinate System is US State Plane 1983, Colorado Northern Zone

Central Meridian is -105.500000 °

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