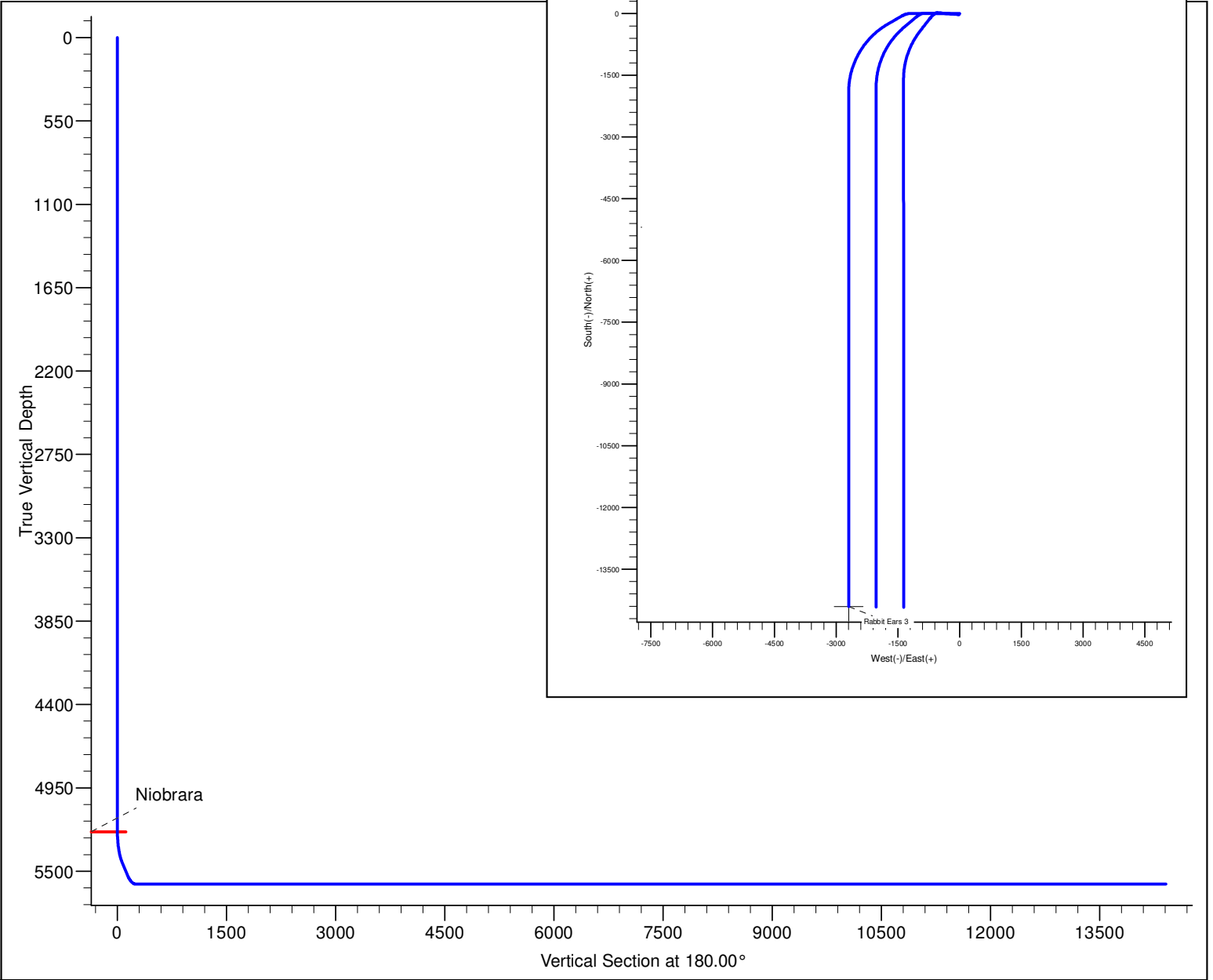


|   |        |         |        |           |     |          |      |        |  |  |  |
|---|--------|---------|--------|-----------|-----|----------|------|--------|--|--|--|
| PROJECT DETAILS: North Park Basin   |        |         |        |           |     |          |      |        |  | <div><div><div><div></div><div>G</div></div><div><div></div><div>T</div></div><div><div></div><div>M</div></div></div><div><div></div></div></div> <div><div>Azimuths to Grid North<br/>True North: 0.62°<br/>Magnetic North: 10.52°<br/><br/>Magnetic Field<br/>Strength: 53125.3snT<br/>Dip Angle: 66.88°<br/>Date: 12/31/2009<br/>Model: IGRF200510</div></div> |  |
| Geodetic System: US State Plane 1983<br>Datum: North American Datum 1983<br>Ellipsoid: GRS 1980<br>Zone: Colorado Northern Zone<br><br>System Datum: Mean Sea Level |        |         |        |           |     |          |      |        |  |  |  |
| FORMATION TOP DETAILS   |        |         |        |           |     |          |      |        |  | CASING DETAILS   |  |
| TVDPath   |        | MDPath  |        | Formation |     | DipAngle |      | DipDir |  | No casing data is available  |  |
| 5240.0  |        | 5529.3  |        | Niobrara  |     | 0.00     |      |        |  |  |  |
| DESIGN DETAILS: Design #1   |        |         |        |           |     |          |      |        |  | Project: North Park Basin<br>Site: T6N-R81W-S23<br>Well: REU 0681 3-23H35<br>Wellbore: Wellbore #1<br>Design: Design #1  |  |
| 0' Vertical Section coordinates   |        |         |        |           |     |          |      |        |  |  |  |
| Type  | Target | Azimuth | Origin | Type      | N/S | E/W      | From | TVD    |  |  |  |
| User  |        | 180.00  | Slot   |           | 0.0 | 0.0      |      | 0.0    |  |  |  |



|                 |         |       |        |        |          |         |       |        |         |               |  |
|-----------------|---------|-------|--------|--------|----------|---------|-------|--------|---------|---------------|--|
| SECTION DETAILS |         |       |        |        |          |         |       |        |         |               |  |
| Sec             | MD      | Inc   | Azi    | TVD    | +N/-S    | +E/-W   | Dleg  | TFace  | VSect   | Target        |  |
| 1               | 0.0     | 0.00  | 0.00   | 0.0    | 0.0      | 0.0     | 0.00  | 0.00   | 0.0     |               |  |
| 2               | 2300.0  | 0.00  | 0.00   | 2300.0 | 0.0      | 0.0     | 0.00  | 0.00   | 0.0     |               |  |
| 3               | 3766.7  | 29.33 | 270.00 | 3703.5 | 0.0      | -367.3  | 2.00  | 270.00 | 0.0     |               |  |
| 4               | 5517.4  | 29.33 | 270.00 | 5229.7 | 0.0      | -1225.0 | 0.00  | 0.00   | 0.0     |               |  |
| 5               | 5822.0  | 60.00 | 240.00 | 5446.0 | -68.3    | -1420.5 | 12.00 | -46.64 | 68.3    |               |  |
| 6               | 5972.0  | 60.00 | 240.00 | 5521.0 | -133.2   | -1533.0 | 0.00  | 0.00   | 133.2   |               |  |
| 7               | 6222.0  | 90.00 | 240.00 | 5585.0 | -252.6   | -1739.8 | 12.00 | 0.00   | 252.6   |               |  |
| 8               | 8222.2  | 90.00 | 180.00 | 5585.0 | -1906.7  | -2694.7 | 3.00  | -90.00 | 1906.7  | Rabbit Ears 3 |  |
| 9               | 20725.0 | 90.00 | 180.00 | 5585.0 | -14409.6 | -2693.7 | 0.00  | 0.00   | 14409.6 | Rabbit Ears 3 |  |

# **SandRidge Energy**

**North Park Basin  
T6N-R81W-S23  
REU 0681 3-23H35**

**Wellbore #1**

**Plan: Design #1**

## **Standard Survey Report**

**22 March, 2017**

# SandRidge Energy, Inc.

## Survey Report

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMProd               |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | North Park Basin          |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | Colorado Northern Zone    |                      |                |

|                       |          |              |                   |                   |                   |
|-----------------------|----------|--------------|-------------------|-------------------|-------------------|
| Site                  |          | T6N-R81W-S23 |                   |                   |                   |
| Site Position:        |          | Northing:    | 1,418,032.39 usft | Latitude:         | 40° 28' 37.133 N  |
| From:                 | Map      | Easting:     | 2,734,606.19 usft | Longitude:        | 106° 27' 14.423 W |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 13-3/16 "         | Grid Convergence: | -0.62 °           |

|                      |                  |          |                     |                   |               |                   |
|----------------------|------------------|----------|---------------------|-------------------|---------------|-------------------|
| Well                 | REU 0681 3-23H35 |          |                     |                   |               |                   |
| Well Position        | +N/-S            | 0.0 usft | Northing:           | 1,418,096.82 usft | Latitude:     | 40° 28' 37.762 N  |
|                      | +E/-W            | 0.0 usft | Easting:            | 2,734,528.26 usft | Longitude:    | 106° 27' 15.440 W |
| Position Uncertainty |                  | 0.0 usft | Wellhead Elevation: | 0.0 usft          | Ground Level: | 8,308.0 usft      |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <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> |
|                  | IGRF200510        | 12/31/2009         | 9.91                   | 66.88                | 53,125                     |

|                          |                                |                     |                      |                      |  |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|--|
| <b>Design</b>            | Design #1                      |                     |                      |                      |  |
| <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) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |  |
|                          | 0.0                            | 0.0                 | 0.0                  | 180.00               |  |

|                            |                  |                          |                  |                               |  |
|----------------------------|------------------|--------------------------|------------------|-------------------------------|--|
| <b>Survey Tool Program</b> | <b>Date</b>      | 3/21/2017                |                  |                               |  |
| <b>From (usft)</b>         | <b>To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b>            |  |
| 0.0                        | 20,725.0         | Design #1 (Wellbore #1)  | Sperry MWD       | Fixed:v2:standard declination |  |

|                              |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|--|
| <b>Planned Survey</b>        |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
| <b>Measured Depth (usft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Vertical Section (usft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> |  |
| 0.0                          | 0.00                   | 0.00               | 0.0                          | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |  |
| 100.0                        | 0.00                   | 0.00               | 100.0                        | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |  |
| 200.0                        | 0.00                   | 0.00               | 200.0                        | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |  |
| 300.0                        | 0.00                   | 0.00               | 300.0                        | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |  |
| 400.0                        | 0.00                   | 0.00               | 400.0                        | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |  |
| 500.0                        | 0.00                   | 0.00               | 500.0                        | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |  |
| 600.0                        | 0.00                   | 0.00               | 600.0                        | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |  |
| 700.0                        | 0.00                   | 0.00               | 700.0                        | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |  |
| 800.0                        | 0.00                   | 0.00               | 800.0                        | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |  |
| 900.0                        | 0.00                   | 0.00               | 900.0                        | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |  |

# SandRidge Energy, Inc.

## Survey Report

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMPProd              |

### Planned Survey

| Measured Depth (usft)                 | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 1,000.0                               | 0.00            | 0.00        | 1,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,100.0                               | 0.00            | 0.00        | 1,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,200.0                               | 0.00            | 0.00        | 1,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,300.0                               | 0.00            | 0.00        | 1,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,400.0                               | 0.00            | 0.00        | 1,400.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,500.0                               | 0.00            | 0.00        | 1,500.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,600.0                               | 0.00            | 0.00        | 1,600.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,700.0                               | 0.00            | 0.00        | 1,700.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,800.0                               | 0.00            | 0.00        | 1,800.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 1,900.0                               | 0.00            | 0.00        | 1,900.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,000.0                               | 0.00            | 0.00        | 2,000.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,100.0                               | 0.00            | 0.00        | 2,100.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,200.0                               | 0.00            | 0.00        | 2,200.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 2,300.0                               | 0.00            | 0.00        | 2,300.0               | 0.0          | 0.0          | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| <b>Start Build 2.00</b>               |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,400.0                               | 2.00            | 270.00      | 2,400.0               | 0.0          | -1.7         | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 2,500.0                               | 4.00            | 270.00      | 2,499.8               | 0.0          | -7.0         | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 2,600.0                               | 6.00            | 270.00      | 2,599.5               | 0.0          | -15.7        | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 2,700.0                               | 8.00            | 270.00      | 2,698.7               | 0.0          | -27.9        | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 2,800.0                               | 10.00           | 270.00      | 2,797.5               | 0.0          | -43.5        | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 2,900.0                               | 12.00           | 270.00      | 2,895.6               | 0.0          | -62.6        | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 3,000.0                               | 14.00           | 270.00      | 2,993.1               | 0.0          | -85.1        | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 3,100.0                               | 16.00           | 270.00      | 3,089.6               | 0.0          | -111.0       | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 3,200.0                               | 18.00           | 270.00      | 3,185.3               | 0.0          | -140.2       | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 3,300.0                               | 20.00           | 270.00      | 3,279.8               | 0.0          | -172.8       | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 3,400.0                               | 22.00           | 270.00      | 3,373.2               | 0.0          | -208.6       | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 3,500.0                               | 24.00           | 270.00      | 3,465.2               | 0.0          | -247.7       | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 3,600.0                               | 26.00           | 270.00      | 3,555.8               | 0.0          | -289.9       | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 3,700.0                               | 28.00           | 270.00      | 3,644.9               | 0.0          | -335.3       | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| 3,766.7                               | 29.33           | 270.00      | 3,703.5               | 0.0          | -367.3       | 0.0                     | 2.00                    | 2.00                   | 0.00                  |
| <b>Start 1750.7 hold at 3766.7 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,800.0                               | 29.33           | 270.00      | 3,732.5               | 0.0          | -383.6       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 3,900.0                               | 29.33           | 270.00      | 3,819.7               | 0.0          | -432.6       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,000.0                               | 29.33           | 270.00      | 3,906.8               | 0.0          | -481.6       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,100.0                               | 29.33           | 270.00      | 3,994.0               | 0.0          | -530.6       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,200.0                               | 29.33           | 270.00      | 4,081.2               | 0.0          | -579.6       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,300.0                               | 29.33           | 270.00      | 4,168.4               | 0.0          | -628.6       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,400.0                               | 29.33           | 270.00      | 4,255.6               | 0.0          | -677.6       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,500.0                               | 29.33           | 270.00      | 4,342.7               | 0.0          | -726.6       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,600.0                               | 29.33           | 270.00      | 4,429.9               | 0.0          | -775.6       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,700.0                               | 29.33           | 270.00      | 4,517.1               | 0.0          | -824.5       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,800.0                               | 29.33           | 270.00      | 4,604.3               | 0.0          | -873.5       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 4,900.0                               | 29.33           | 270.00      | 4,691.4               | 0.0          | -922.5       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,000.0                               | 29.33           | 270.00      | 4,778.6               | 0.0          | -971.5       | 0.0                     | 0.00                    | 0.00                   | 0.00                  |

# SandRidge Energy, Inc.

## Survey Report

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMProd               |

### Planned Survey

| Measured Depth (usft)                | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|--------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 5,100.0                              | 29.33           | 270.00      | 4,865.8               | 0.0          | -1,020.5     | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,200.0                              | 29.33           | 270.00      | 4,953.0               | 0.0          | -1,069.5     | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,300.0                              | 29.33           | 270.00      | 5,040.2               | 0.0          | -1,118.5     | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,400.0                              | 29.33           | 270.00      | 5,127.3               | 0.0          | -1,167.5     | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,500.0                              | 29.33           | 270.00      | 5,214.5               | 0.0          | -1,216.5     | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| 5,517.4                              | 29.33           | 270.00      | 5,229.7               | 0.0          | -1,225.0     | 0.0                     | 0.00                    | 0.00                   | 0.00                  |
| <b>Start DLS 12.00 TFO -46.64</b>    |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,525.0                              | 29.97           | 268.68      | 5,236.3               | 0.0          | -1,228.8     | 0.0                     | 12.00                   | 8.33                   | -17.47                |
| 5,529.3                              | 30.33           | 267.95      | 5,240.0               | -0.1         | -1,230.9     | 0.1                     | 12.00                   | 8.46                   | -16.95                |
| <b>Niobrara</b>                      |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,550.0                              | 32.13           | 264.65      | 5,257.7               | -0.8         | -1,241.6     | 0.8                     | 12.00                   | 8.71                   | -15.92                |
| 5,575.0                              | 34.41           | 261.10      | 5,278.6               | -2.5         | -1,255.2     | 2.5                     | 12.00                   | 9.12                   | -14.22                |
| 5,600.0                              | 36.79           | 257.94      | 5,298.9               | -5.2         | -1,269.5     | 5.2                     | 12.00                   | 9.49                   | -12.63                |
| 5,625.0                              | 39.23           | 255.12      | 5,318.6               | -8.8         | -1,284.5     | 8.8                     | 12.00                   | 9.79                   | -11.29                |
| 5,650.0                              | 41.74           | 252.58      | 5,337.7               | -13.3        | -1,300.1     | 13.3                    | 12.00                   | 10.03                  | -10.15                |
| 5,675.0                              | 44.30           | 250.28      | 5,355.9               | -18.7        | -1,316.2     | 18.7                    | 12.00                   | 10.23                  | -9.19                 |
| 5,700.0                              | 46.90           | 248.19      | 5,373.4               | -25.1        | -1,332.9     | 25.1                    | 12.00                   | 10.40                  | -8.38                 |
| 5,725.0                              | 49.53           | 246.26      | 5,390.1               | -32.3        | -1,350.1     | 32.3                    | 12.00                   | 10.54                  | -7.69                 |
| 5,750.0                              | 52.20           | 244.49      | 5,405.9               | -40.4        | -1,367.7     | 40.4                    | 12.00                   | 10.66                  | -7.11                 |
| 5,775.0                              | 54.89           | 242.83      | 5,420.7               | -49.3        | -1,385.7     | 49.3                    | 12.00                   | 10.76                  | -6.61                 |
| 5,800.0                              | 57.60           | 241.29      | 5,434.6               | -59.0        | -1,404.1     | 59.0                    | 12.00                   | 10.84                  | -6.19                 |
| 5,822.0                              | 60.00           | 240.00      | 5,446.0               | -68.3        | -1,420.5     | 68.3                    | 12.00                   | 10.91                  | -5.84                 |
| <b>Start 150.0 hold at 5822.0 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,900.0                              | 60.00           | 240.00      | 5,485.0               | -102.0       | -1,479.0     | 102.0                   | 0.00                    | 0.00                   | 0.00                  |
| 5,972.0                              | 60.00           | 240.00      | 5,521.0               | -133.2       | -1,533.0     | 133.2                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Start DLS 12.00 TFO 0.00</b>      |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,975.0                              | 60.36           | 240.00      | 5,522.5               | -134.5       | -1,535.3     | 134.5                   | 12.00                   | 12.00                  | 0.00                  |
| 6,000.0                              | 63.36           | 240.00      | 5,534.3               | -145.5       | -1,554.3     | 145.5                   | 12.00                   | 12.00                  | 0.00                  |
| 6,025.0                              | 66.36           | 240.00      | 5,544.9               | -156.9       | -1,573.9     | 156.9                   | 12.00                   | 12.00                  | 0.00                  |
| 6,050.0                              | 69.36           | 240.00      | 5,554.3               | -168.4       | -1,594.0     | 168.4                   | 12.00                   | 12.00                  | 0.00                  |
| 6,075.0                              | 72.36           | 240.00      | 5,562.5               | -180.2       | -1,614.4     | 180.2                   | 12.00                   | 12.00                  | 0.00                  |
| 6,100.0                              | 75.36           | 240.00      | 5,569.5               | -192.2       | -1,635.2     | 192.2                   | 12.00                   | 12.00                  | 0.00                  |
| 6,125.0                              | 78.36           | 240.00      | 5,575.2               | -204.4       | -1,656.3     | 204.4                   | 12.00                   | 12.00                  | 0.00                  |
| 6,150.0                              | 81.36           | 240.00      | 5,579.6               | -216.7       | -1,677.6     | 216.7                   | 12.00                   | 12.00                  | 0.00                  |
| 6,175.0                              | 84.36           | 240.00      | 5,582.7               | -229.1       | -1,699.1     | 229.1                   | 12.00                   | 12.00                  | 0.00                  |
| 6,200.0                              | 87.36           | 240.00      | 5,584.5               | -241.6       | -1,720.7     | 241.6                   | 12.00                   | 12.00                  | 0.00                  |
| 6,222.0                              | 90.00           | 240.00      | 5,585.0               | -252.6       | -1,739.8     | 252.6                   | 12.00                   | 12.00                  | 0.00                  |
| <b>Start DLS 3.00 TFO -90.00</b>     |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,300.0                              | 90.00           | 237.66      | 5,585.0               | -293.0       | -1,806.5     | 293.0                   | 3.00                    | 0.00                   | -3.00                 |
| 6,400.0                              | 90.00           | 234.66      | 5,585.0               | -348.6       | -1,889.5     | 348.6                   | 3.00                    | 0.00                   | -3.00                 |
| 6,500.0                              | 90.00           | 231.66      | 5,585.0               | -408.6       | -1,969.6     | 408.6                   | 3.00                    | 0.00                   | -3.00                 |
| 6,600.0                              | 90.00           | 228.66      | 5,585.0               | -472.6       | -2,046.3     | 472.6                   | 3.00                    | 0.00                   | -3.00                 |
| 6,700.0                              | 90.00           | 225.66      | 5,585.0               | -540.6       | -2,119.6     | 540.6                   | 3.00                    | 0.00                   | -3.00                 |
| 6,800.0                              | 90.00           | 222.66      | 5,585.0               | -612.4       | -2,189.3     | 612.4                   | 3.00                    | 0.00                   | -3.00                 |

# SandRidge Energy, Inc.

## Survey Report

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMPProd              |

### Planned Survey

| Measured Depth (usft)                  | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|--|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 6,900.0                                | 90.00           | 219.66      | 5,585.0               | -687.6       | -2,255.1     | 687.6                   | 3.00                    | 0.00                   | -3.00                 |
| 7,000.0                                | 90.00           | 216.66      | 5,585.0               | -766.3       | -2,316.9     | 766.3                   | 3.00                    | 0.00                   | -3.00                 |
| 7,100.0                                | 90.00           | 213.66      | 5,585.0               | -848.0       | -2,374.5     | 848.0                   | 3.00                    | 0.00                   | -3.00                 |
| 7,200.0                                | 90.00           | 210.66      | 5,585.0               | -932.6       | -2,427.7     | 932.6                   | 3.00                    | 0.00                   | -3.00                 |
| 7,300.0                                | 90.00           | 207.66      | 5,585.0               | -1,020.0     | -2,476.4     | 1,020.0                 | 3.00                    | 0.00                   | -3.00                 |
| 7,400.0                                | 90.00           | 204.66      | 5,585.0               | -1,109.7     | -2,520.5     | 1,109.7                 | 3.00                    | 0.00                   | -3.00                 |
| 7,500.0                                | 90.00           | 201.66      | 5,585.0               | -1,201.6     | -2,559.8     | 1,201.6                 | 3.00                    | 0.00                   | -3.00                 |
| 7,600.0                                | 90.00           | 198.66      | 5,585.0               | -1,295.5     | -2,594.3     | 1,295.5                 | 3.00                    | 0.00                   | -3.00                 |
| 7,700.0                                | 90.00           | 195.66      | 5,585.0               | -1,391.0     | -2,623.8     | 1,391.0                 | 3.00                    | 0.00                   | -3.00                 |
| 7,800.0                                | 90.00           | 192.66      | 5,585.0               | -1,488.0     | -2,648.3     | 1,488.0                 | 3.00                    | 0.00                   | -3.00                 |
| 7,900.0                                | 90.00           | 189.66      | 5,585.0               | -1,586.1     | -2,667.6     | 1,586.1                 | 3.00                    | 0.00                   | -3.00                 |
| 8,000.0                                | 90.00           | 186.66      | 5,585.0               | -1,685.1     | -2,681.8     | 1,685.1                 | 3.00                    | 0.00                   | -3.00                 |
| 8,100.0                                | 90.00           | 183.66      | 5,585.0               | -1,784.6     | -2,690.8     | 1,784.6                 | 3.00                    | 0.00                   | -3.00                 |
| 8,200.0                                | 90.00           | 180.66      | 5,585.0               | -1,884.6     | -2,694.6     | 1,884.6                 | 3.00                    | 0.00                   | -3.00                 |
| 8,222.2                                | 90.00           | 180.00      | 5,585.0               | -1,906.7     | -2,694.7     | 1,906.7                 | 3.00                    | 0.00                   | -3.00                 |
| <b>Start 12502.8 hold at 8222.2 MD</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,300.0                                | 90.00           | 180.00      | 5,585.0               | -1,984.6     | -2,694.7     | 1,984.6                 | 0.00                    | 0.00                   | 0.00                  |
| 8,400.0                                | 90.00           | 180.00      | 5,585.0               | -2,084.6     | -2,694.7     | 2,084.6                 | 0.00                    | 0.00                   | 0.00                  |
| 8,500.0                                | 90.00           | 180.00      | 5,585.0               | -2,184.6     | -2,694.7     | 2,184.6                 | 0.00                    | 0.00                   | 0.00                  |
| 8,600.0                                | 90.00           | 180.00      | 5,585.0               | -2,284.6     | -2,694.7     | 2,284.6                 | 0.00                    | 0.00                   | 0.00                  |
| 8,700.0                                | 90.00           | 180.00      | 5,585.0               | -2,384.6     | -2,694.7     | 2,384.6                 | 0.00                    | 0.00                   | 0.00                  |
| 8,800.0                                | 90.00           | 180.00      | 5,585.0               | -2,484.6     | -2,694.6     | 2,484.6                 | 0.00                    | 0.00                   | 0.00                  |
| 8,900.0                                | 90.00           | 180.00      | 5,585.0               | -2,584.6     | -2,694.6     | 2,584.6                 | 0.00                    | 0.00                   | 0.00                  |
| 9,000.0                                | 90.00           | 180.00      | 5,585.0               | -2,684.6     | -2,694.6     | 2,684.6                 | 0.00                    | 0.00                   | 0.00                  |
| 9,100.0                                | 90.00           | 180.00      | 5,585.0               | -2,784.6     | -2,694.6     | 2,784.6                 | 0.00                    | 0.00                   | 0.00                  |
| 9,200.0                                | 90.00           | 180.00      | 5,585.0               | -2,884.6     | -2,694.6     | 2,884.6                 | 0.00                    | 0.00                   | 0.00                  |
| 9,300.0                                | 90.00           | 180.00      | 5,585.0               | -2,984.6     | -2,694.6     | 2,984.6                 | 0.00                    | 0.00                   | 0.00                  |
| 9,400.0                                | 90.00           | 180.00      | 5,585.0               | -3,084.6     | -2,694.6     | 3,084.6                 | 0.00                    | 0.00                   | 0.00                  |
| 9,500.0                                | 90.00           | 180.00      | 5,585.0               | -3,184.6     | -2,694.6     | 3,184.6                 | 0.00                    | 0.00                   | 0.00                  |
| 9,600.0                                | 90.00           | 180.00      | 5,585.0               | -3,284.6     | -2,694.6     | 3,284.6                 | 0.00                    | 0.00                   | 0.00                  |
| 9,700.0                                | 90.00           | 180.00      | 5,585.0               | -3,384.6     | -2,694.6     | 3,384.6                 | 0.00                    | 0.00                   | 0.00                  |
| 9,800.0                                | 90.00           | 180.00      | 5,585.0               | -3,484.6     | -2,694.6     | 3,484.6                 | 0.00                    | 0.00                   | 0.00                  |
| 9,900.0                                | 90.00           | 180.00      | 5,585.0               | -3,584.6     | -2,694.6     | 3,584.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,000.0                               | 90.00           | 180.00      | 5,585.0               | -3,684.6     | -2,694.5     | 3,684.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,100.0                               | 90.00           | 180.00      | 5,585.0               | -3,784.6     | -2,694.5     | 3,784.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,200.0                               | 90.00           | 180.00      | 5,585.0               | -3,884.6     | -2,694.5     | 3,884.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,300.0                               | 90.00           | 180.00      | 5,585.0               | -3,984.6     | -2,694.5     | 3,984.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,400.0                               | 90.00           | 180.00      | 5,585.0               | -4,084.6     | -2,694.5     | 4,084.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,500.0                               | 90.00           | 180.00      | 5,585.0               | -4,184.6     | -2,694.5     | 4,184.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,600.0                               | 90.00           | 180.00      | 5,585.0               | -4,284.6     | -2,694.5     | 4,284.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,700.0                               | 90.00           | 180.00      | 5,585.0               | -4,384.6     | -2,694.5     | 4,384.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,800.0                               | 90.00           | 180.00      | 5,585.0               | -4,484.6     | -2,694.5     | 4,484.6                 | 0.00                    | 0.00                   | 0.00                  |
| 10,900.0                               | 90.00           | 180.00      | 5,585.0               | -4,584.6     | -2,694.5     | 4,584.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,000.0                               | 90.00           | 180.00      | 5,585.0               | -4,684.6     | -2,694.5     | 4,684.6                 | 0.00                    | 0.00                   | 0.00                  |

# SandRidge Energy, Inc.

## Survey Report

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMProd               |

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 11,100.0              | 90.00           | 180.00      | 5,585.0               | -4,784.6     | -2,694.5     | 4,784.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,200.0              | 90.00           | 180.00      | 5,585.0               | -4,884.6     | -2,694.4     | 4,884.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,300.0              | 90.00           | 180.00      | 5,585.0               | -4,984.6     | -2,694.4     | 4,984.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,400.0              | 90.00           | 180.00      | 5,585.0               | -5,084.6     | -2,694.4     | 5,084.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,500.0              | 90.00           | 180.00      | 5,585.0               | -5,184.6     | -2,694.4     | 5,184.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,600.0              | 90.00           | 180.00      | 5,585.0               | -5,284.6     | -2,694.4     | 5,284.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,700.0              | 90.00           | 180.00      | 5,585.0               | -5,384.6     | -2,694.4     | 5,384.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,800.0              | 90.00           | 180.00      | 5,585.0               | -5,484.6     | -2,694.4     | 5,484.6                 | 0.00                    | 0.00                   | 0.00                  |
| 11,900.0              | 90.00           | 180.00      | 5,585.0               | -5,584.6     | -2,694.4     | 5,584.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,000.0              | 90.00           | 180.00      | 5,585.0               | -5,684.6     | -2,694.4     | 5,684.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,100.0              | 90.00           | 180.00      | 5,585.0               | -5,784.6     | -2,694.4     | 5,784.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,200.0              | 90.00           | 180.00      | 5,585.0               | -5,884.6     | -2,694.4     | 5,884.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,300.0              | 90.00           | 180.00      | 5,585.0               | -5,984.6     | -2,694.4     | 5,984.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,400.0              | 90.00           | 180.00      | 5,585.0               | -6,084.6     | -2,694.3     | 6,084.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,500.0              | 90.00           | 180.00      | 5,585.0               | -6,184.6     | -2,694.3     | 6,184.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,600.0              | 90.00           | 180.00      | 5,585.0               | -6,284.6     | -2,694.3     | 6,284.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,700.0              | 90.00           | 180.00      | 5,585.0               | -6,384.6     | -2,694.3     | 6,384.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,800.0              | 90.00           | 180.00      | 5,585.0               | -6,484.6     | -2,694.3     | 6,484.6                 | 0.00                    | 0.00                   | 0.00                  |
| 12,900.0              | 90.00           | 180.00      | 5,585.0               | -6,584.6     | -2,694.3     | 6,584.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,000.0              | 90.00           | 180.00      | 5,585.0               | -6,684.6     | -2,694.3     | 6,684.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,100.0              | 90.00           | 180.00      | 5,585.0               | -6,784.6     | -2,694.3     | 6,784.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,200.0              | 90.00           | 180.00      | 5,585.0               | -6,884.6     | -2,694.3     | 6,884.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,300.0              | 90.00           | 180.00      | 5,585.0               | -6,984.6     | -2,694.3     | 6,984.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,400.0              | 90.00           | 180.00      | 5,585.0               | -7,084.6     | -2,694.3     | 7,084.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,500.0              | 90.00           | 180.00      | 5,585.0               | -7,184.6     | -2,694.3     | 7,184.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,600.0              | 90.00           | 180.00      | 5,585.0               | -7,284.6     | -2,694.2     | 7,284.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,700.0              | 90.00           | 180.00      | 5,585.0               | -7,384.6     | -2,694.2     | 7,384.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,800.0              | 90.00           | 180.00      | 5,585.0               | -7,484.6     | -2,694.2     | 7,484.6                 | 0.00                    | 0.00                   | 0.00                  |
| 13,900.0              | 90.00           | 180.00      | 5,585.0               | -7,584.6     | -2,694.2     | 7,584.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,000.0              | 90.00           | 180.00      | 5,585.0               | -7,684.6     | -2,694.2     | 7,684.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,100.0              | 90.00           | 180.00      | 5,585.0               | -7,784.6     | -2,694.2     | 7,784.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,200.0              | 90.00           | 180.00      | 5,585.0               | -7,884.6     | -2,694.2     | 7,884.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,300.0              | 90.00           | 180.00      | 5,585.0               | -7,984.6     | -2,694.2     | 7,984.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,400.0              | 90.00           | 180.00      | 5,585.0               | -8,084.6     | -2,694.2     | 8,084.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,500.0              | 90.00           | 180.00      | 5,585.0               | -8,184.6     | -2,694.2     | 8,184.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,600.0              | 90.00           | 180.00      | 5,585.0               | -8,284.6     | -2,694.2     | 8,284.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,700.0              | 90.00           | 180.00      | 5,585.0               | -8,384.6     | -2,694.2     | 8,384.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,800.0              | 90.00           | 180.00      | 5,585.0               | -8,484.6     | -2,694.1     | 8,484.6                 | 0.00                    | 0.00                   | 0.00                  |
| 14,900.0              | 90.00           | 180.00      | 5,585.0               | -8,584.6     | -2,694.1     | 8,584.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,000.0              | 90.00           | 180.00      | 5,585.0               | -8,684.6     | -2,694.1     | 8,684.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,100.0              | 90.00           | 180.00      | 5,585.0               | -8,784.6     | -2,694.1     | 8,784.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,200.0              | 90.00           | 180.00      | 5,585.0               | -8,884.6     | -2,694.1     | 8,884.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,300.0              | 90.00           | 180.00      | 5,585.0               | -8,984.6     | -2,694.1     | 8,984.6                 | 0.00                    | 0.00                   | 0.00                  |

# SandRidge Energy, Inc.

## Survey Report

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMPProd              |

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 15,400.0              | 90.00           | 180.00      | 5,585.0               | -9,084.6     | -2,694.1     | 9,084.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,500.0              | 90.00           | 180.00      | 5,585.0               | -9,184.6     | -2,694.1     | 9,184.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,600.0              | 90.00           | 180.00      | 5,585.0               | -9,284.6     | -2,694.1     | 9,284.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,700.0              | 90.00           | 180.00      | 5,585.0               | -9,384.6     | -2,694.1     | 9,384.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,800.0              | 90.00           | 180.00      | 5,585.0               | -9,484.6     | -2,694.1     | 9,484.6                 | 0.00                    | 0.00                   | 0.00                  |
| 15,900.0              | 90.00           | 180.00      | 5,585.0               | -9,584.6     | -2,694.1     | 9,584.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,000.0              | 90.00           | 180.00      | 5,585.0               | -9,684.6     | -2,694.0     | 9,684.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,100.0              | 90.00           | 180.00      | 5,585.0               | -9,784.6     | -2,694.0     | 9,784.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,200.0              | 90.00           | 180.00      | 5,585.0               | -9,884.6     | -2,694.0     | 9,884.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,300.0              | 90.00           | 180.00      | 5,585.0               | -9,984.6     | -2,694.0     | 9,984.6                 | 0.00                    | 0.00                   | 0.00                  |
| 16,400.0              | 90.00           | 180.00      | 5,585.0               | -10,084.6    | -2,694.0     | 10,084.6                | 0.00                    | 0.00                   | 0.00                  |
| 16,500.0              | 90.00           | 180.00      | 5,585.0               | -10,184.6    | -2,694.0     | 10,184.6                | 0.00                    | 0.00                   | 0.00                  |
| 16,600.0              | 90.00           | 180.00      | 5,585.0               | -10,284.6    | -2,694.0     | 10,284.6                | 0.00                    | 0.00                   | 0.00                  |
| 16,700.0              | 90.00           | 180.00      | 5,585.0               | -10,384.6    | -2,694.0     | 10,384.6                | 0.00                    | 0.00                   | 0.00                  |
| 16,800.0              | 90.00           | 180.00      | 5,585.0               | -10,484.6    | -2,694.0     | 10,484.6                | 0.00                    | 0.00                   | 0.00                  |
| 16,900.0              | 90.00           | 180.00      | 5,585.0               | -10,584.6    | -2,694.0     | 10,584.6                | 0.00                    | 0.00                   | 0.00                  |
| 17,000.0              | 90.00           | 180.00      | 5,585.0               | -10,684.6    | -2,694.0     | 10,684.6                | 0.00                    | 0.00                   | 0.00                  |
| 17,100.0              | 90.00           | 180.00      | 5,585.0               | -10,784.6    | -2,694.0     | 10,784.6                | 0.00                    | 0.00                   | 0.00                  |
| 17,200.0              | 90.00           | 180.00      | 5,585.0               | -10,884.6    | -2,693.9     | 10,884.6                | 0.00                    | 0.00                   | 0.00                  |
| 17,300.0              | 90.00           | 180.00      | 5,585.0               | -10,984.6    | -2,693.9     | 10,984.6                | 0.00                    | 0.00                   | 0.00                  |
| 17,400.0              | 90.00           | 180.00      | 5,585.0               | -11,084.6    | -2,693.9     | 11,084.6                | 0.00                    | 0.00                   | 0.00                  |
| 17,500.0              | 90.00           | 180.00      | 5,585.0               | -11,184.6    | -2,693.9     | 11,184.6                | 0.00                    | 0.00                   | 0.00                  |
| 17,600.0              | 90.00           | 180.00      | 5,585.0               | -11,284.6    | -2,693.9     | 11,284.6                | 0.00                    | 0.00                   | 0.00                  |
| 17,700.0              | 90.00           | 180.00      | 5,585.0               | -11,384.6    | -2,693.9     | 11,384.6                | 0.00                    | 0.00                   | 0.00                  |
| 17,800.0              | 90.00           | 180.00      | 5,585.0               | -11,484.6    | -2,693.9     | 11,484.6                | 0.00                    | 0.00                   | 0.00                  |
| 17,900.0              | 90.00           | 180.00      | 5,585.0               | -11,584.6    | -2,693.9     | 11,584.6                | 0.00                    | 0.00                   | 0.00                  |
| 18,000.0              | 90.00           | 180.00      | 5,585.0               | -11,684.6    | -2,693.9     | 11,684.6                | 0.00                    | 0.00                   | 0.00                  |
| 18,100.0              | 90.00           | 180.00      | 5,585.0               | -11,784.6    | -2,693.9     | 11,784.6                | 0.00                    | 0.00                   | 0.00                  |
| 18,200.0              | 90.00           | 180.00      | 5,585.0               | -11,884.6    | -2,693.9     | 11,884.6                | 0.00                    | 0.00                   | 0.00                  |
| 18,300.0              | 90.00           | 180.00      | 5,585.0               | -11,984.6    | -2,693.9     | 11,984.6                | 0.00                    | 0.00                   | 0.00                  |
| 18,400.0              | 90.00           | 180.00      | 5,585.0               | -12,084.6    | -2,693.8     | 12,084.6                | 0.00                    | 0.00                   | 0.00                  |
| 18,500.0              | 90.00           | 180.00      | 5,585.0               | -12,184.6    | -2,693.8     | 12,184.6                | 0.00                    | 0.00                   | 0.00                  |
| 18,600.0              | 90.00           | 180.00      | 5,585.0               | -12,284.6    | -2,693.8     | 12,284.6                | 0.00                    | 0.00                   | 0.00                  |
| 18,700.0              | 90.00           | 180.00      | 5,585.0               | -12,384.6    | -2,693.8     | 12,384.6                | 0.00                    | 0.00                   | 0.00                  |
| 18,800.0              | 90.00           | 180.00      | 5,585.0               | -12,484.6    | -2,693.8     | 12,484.6                | 0.00                    | 0.00                   | 0.00                  |
| 18,900.0              | 90.00           | 180.00      | 5,585.0               | -12,584.6    | -2,693.8     | 12,584.6                | 0.00                    | 0.00                   | 0.00                  |
| 19,000.0              | 90.00           | 180.00      | 5,585.0               | -12,684.6    | -2,693.8     | 12,684.6                | 0.00                    | 0.00                   | 0.00                  |
| 19,100.0              | 90.00           | 180.00      | 5,585.0               | -12,784.6    | -2,693.8     | 12,784.6                | 0.00                    | 0.00                   | 0.00                  |
| 19,200.0              | 90.00           | 180.00      | 5,585.0               | -12,884.6    | -2,693.8     | 12,884.6                | 0.00                    | 0.00                   | 0.00                  |
| 19,300.0              | 90.00           | 180.00      | 5,585.0               | -12,984.6    | -2,693.8     | 12,984.6                | 0.00                    | 0.00                   | 0.00                  |
| 19,400.0              | 90.00           | 180.00      | 5,585.0               | -13,084.6    | -2,693.8     | 13,084.6                | 0.00                    | 0.00                   | 0.00                  |
| 19,500.0              | 90.00           | 180.00      | 5,585.0               | -13,184.6    | -2,693.8     | 13,184.6                | 0.00                    | 0.00                   | 0.00                  |
| 19,600.0              | 90.00           | 180.00      | 5,585.0               | -13,284.6    | -2,693.7     | 13,284.6                | 0.00                    | 0.00                   | 0.00                  |



# SandRidge Energy, Inc.

## Survey Report

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMPProd              |

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 19,700.0              | 90.00           | 180.00      | 5,585.0               | -13,384.6    | -2,693.7     | 13,384.6                | 0.00                    | 0.00                   | 0.00                  |
| 19,800.0              | 90.00           | 180.00      | 5,585.0               | -13,484.6    | -2,693.7     | 13,484.6                | 0.00                    | 0.00                   | 0.00                  |
| 19,900.0              | 90.00           | 180.00      | 5,585.0               | -13,584.6    | -2,693.7     | 13,584.6                | 0.00                    | 0.00                   | 0.00                  |
| 20,000.0              | 90.00           | 180.00      | 5,585.0               | -13,684.6    | -2,693.7     | 13,684.6                | 0.00                    | 0.00                   | 0.00                  |
| 20,100.0              | 90.00           | 180.00      | 5,585.0               | -13,784.6    | -2,693.7     | 13,784.6                | 0.00                    | 0.00                   | 0.00                  |
| 20,200.0              | 90.00           | 180.00      | 5,585.0               | -13,884.6    | -2,693.7     | 13,884.6                | 0.00                    | 0.00                   | 0.00                  |
| 20,300.0              | 90.00           | 180.00      | 5,585.0               | -13,984.6    | -2,693.7     | 13,984.6                | 0.00                    | 0.00                   | 0.00                  |
| 20,400.0              | 90.00           | 180.00      | 5,585.0               | -14,084.6    | -2,693.7     | 14,084.6                | 0.00                    | 0.00                   | 0.00                  |
| 20,500.0              | 90.00           | 180.00      | 5,585.0               | -14,184.6    | -2,693.7     | 14,184.6                | 0.00                    | 0.00                   | 0.00                  |
| 20,600.0              | 90.00           | 180.00      | 5,585.0               | -14,284.6    | -2,693.7     | 14,284.6                | 0.00                    | 0.00                   | 0.00                  |
| 20,700.0              | 90.00           | 180.00      | 5,585.0               | -14,384.6    | -2,693.7     | 14,384.6                | 0.00                    | 0.00                   | 0.00                  |
| 20,725.0              | 90.00           | 180.00      | 5,585.0               | -14,409.6    | -2,693.6     | 14,409.6                | 0.00                    | 0.00                   | 0.00                  |
| TD at 20725.0         |                 |             |                       |              |              |                         |                         |                        |                       |

### Design Targets

| Target Name               | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude         | Longitude         |
|---------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------------|-------------------|
| - hit/miss target         |               |              |            |              |              |                 |                |                  |                   |
| - Shape                   |               |              |            |              |              |                 |                |                  |                   |
| Rabbit Ears 3             | 0.00          | 0.00         | 5,585.0    | -14,409.6    | -2,693.6     | 1,403,687.26    | 2,731,834.61   | 40° 26' 15.088 N | 106° 27' 48.270 W |
| - plan hits target center |               |              |            |              |              |                 |                |                  |                   |
| - Point                   |               |              |            |              |              |                 |                |                  |                   |

### Formations

| Measured Depth (usft) | Vertical Depth (usft) | Name     | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------|-----------------------|----------|-----------|---------|-------------------|
| 5,529.3               | 5,240.0               | Niobrara |           | 0.00    |                   |

### Plan Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                         |
|-----------------------|-----------------------|-------------------|--------------|---------------------------------|
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                                 |
| 2300                  | 2300                  | 0                 | 0            | Start Build 2.00                |
| 3767                  | 3703                  | 0                 | -367         | Start 1750.7 hold at 3766.7 MD  |
| 5517                  | 5230                  | 0                 | -1225        | Start DLS 12.00 TFO -46.64      |
| 5822                  | 5446                  | -68               | -1421        | Start 150.0 hold at 5822.0 MD   |
| 5972                  | 5521                  | -133              | -1533        | Start DLS 12.00 TFO 0.00        |
| 6222                  | 5585                  | -253              | -1740        | Start DLS 3.00 TFO -90.00       |
| 8222                  | 5585                  | -1907             | -2695        | Start 12502.8 hold at 8222.2 MD |
| 20,725                | 5585                  | -14,410           | -2694        | TD at 20725.0                   |

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

# **SandRidge Energy**

**North Park Basin  
T6N-R81W-S23  
REU 0681 3-23H35**

**Wellbore #1**

**Plan: Design #1**

## **Survey Report - Geographic**

**22 March, 2017**

# SandRidge Energy, Inc.

## Survey Report - Geographic

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMPProd              |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | North Park Basin          |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | Colorado Northern Zone    |                      |                |

|                       |              |           |                   |            |                   |         |
|-----------------------|--------------|-----------|-------------------|------------|-------------------|---------|
| Site                  | T6N-R81W-S23 |           |                   |            |                   |         |
| Site Position:        |              | Northing: | 1,418,032.39 usft | Latitude:  | 40° 28' 37.133 N  |         |
| From:                 | Map          | Easting:  | 2,734,606.19 usft | Longitude: | 106° 27' 14.423 W |         |
| Position Uncertainty: |              | 0.0 usft  | Slot Radius:      | 13-3/16 "  | Grid Convergence: | -0.62 ° |

|                      |                  |          |                     |                   |               |                   |
|----------------------|------------------|----------|---------------------|-------------------|---------------|-------------------|
| Well                 | REU 0681 3-23H35 |          |                     |                   |               |                   |
| Well Position        | +N/-S            | 0.0 usft | Northing:           | 1,418,096.82 usft | Latitude:     | 40° 28' 37.762 N  |
|                      | +E/-W            | 0.0 usft | Easting:            | 2,734,528.26 usft | Longitude:    | 106° 27' 15.440 W |
| Position Uncertainty |                  | 0.0 usft | Wellhead Elevation: | 0.0 usft          | Ground Level: | 8,308.0 usft      |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <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> |
|                  | IGRF200510        | 12/31/2009         | 9.91                   | 66.88                | 53,125                     |

|                          |                                |                     |                      |                      |  |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|--|
| <b>Design</b>            | Design #1                      |                     |                      |                      |  |
| <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) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |  |
|                          | 0.0                            | 0.0                 | 0.0                  | 180.00               |  |

|                            |                  |                          |                  |                               |  |
|----------------------------|------------------|--------------------------|------------------|-------------------------------|--|
| <b>Survey Tool Program</b> | <b>Date</b>      | 3/21/2017                |                  |                               |  |
| <b>From (usft)</b>         | <b>To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b>            |  |
| 0.0                        | 20,725.0         | Design #1 (Wellbore #1)  | Sperry MWD       | Fixed:v2:standard declination |  |

|                              |                        |                    |                              |                     |                     |                            |                           |                  |                   |  |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|----------------------------|---------------------------|------------------|-------------------|--|
| <b>Planned Survey</b>        |                        |                    |                              |                     |                     |                            |                           |                  |                   |  |
| <b>Measured Depth (usft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Map Northing (usft)</b> | <b>Map Easting (usft)</b> | <b>Latitude</b>  | <b>Longitude</b>  |  |
| 0.0                          | 0.00                   | 0.00               | 0.0                          | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |
| 100.0                        | 0.00                   | 0.00               | 100.0                        | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |
| 200.0                        | 0.00                   | 0.00               | 200.0                        | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |
| 300.0                        | 0.00                   | 0.00               | 300.0                        | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |
| 400.0                        | 0.00                   | 0.00               | 400.0                        | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |
| 500.0                        | 0.00                   | 0.00               | 500.0                        | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |
| 600.0                        | 0.00                   | 0.00               | 600.0                        | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |
| 700.0                        | 0.00                   | 0.00               | 700.0                        | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |
| 800.0                        | 0.00                   | 0.00               | 800.0                        | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |
| 900.0                        | 0.00                   | 0.00               | 900.0                        | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |
| 1,000.0                      | 0.00                   | 0.00               | 1,000.0                      | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |
| 1,100.0                      | 0.00                   | 0.00               | 1,100.0                      | 0.0                 | 0.0                 | 1,418,096.82               | 2,734,528.26              | 40° 28' 37.762 N | 106° 27' 15.440 W |  |

# SandRidge Energy, Inc.

## Survey Report - Geographic

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMProd               |

### Planned Survey

| Measured Depth (usft)                 | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude         | Longitude         |
|---------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------------|-------------------|
| 1,200.0                               | 0.00            | 0.00        | 1,200.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| 1,300.0                               | 0.00            | 0.00        | 1,300.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| 1,400.0                               | 0.00            | 0.00        | 1,400.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| 1,500.0                               | 0.00            | 0.00        | 1,500.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| 1,600.0                               | 0.00            | 0.00        | 1,600.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| 1,700.0                               | 0.00            | 0.00        | 1,700.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| 1,800.0                               | 0.00            | 0.00        | 1,800.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| 1,900.0                               | 0.00            | 0.00        | 1,900.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| 2,000.0                               | 0.00            | 0.00        | 2,000.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| 2,100.0                               | 0.00            | 0.00        | 2,100.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| 2,200.0                               | 0.00            | 0.00        | 2,200.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| 2,300.0                               | 0.00            | 0.00        | 2,300.0               | 0.0          | 0.0          | 1,418,096.82        | 2,734,528.26       | 40° 28' 37.762 N | 106° 27' 15.440 W |
| <b>Start Build 2.00</b>               |                 |             |                       |              |              |                     |                    |                  |                   |
| 2,400.0                               | 2.00            | 270.00      | 2,400.0               | 0.0          | -1.7         | 1,418,096.82        | 2,734,526.52       | 40° 28' 37.762 N | 106° 27' 15.463 W |
| 2,500.0                               | 4.00            | 270.00      | 2,499.8               | 0.0          | -7.0         | 1,418,096.82        | 2,734,521.28       | 40° 28' 37.761 N | 106° 27' 15.530 W |
| 2,600.0                               | 6.00            | 270.00      | 2,599.5               | 0.0          | -15.7        | 1,418,096.82        | 2,734,512.57       | 40° 28' 37.760 N | 106° 27' 15.643 W |
| 2,700.0                               | 8.00            | 270.00      | 2,698.7               | 0.0          | -27.9        | 1,418,096.82        | 2,734,500.38       | 40° 28' 37.759 N | 106° 27' 15.801 W |
| 2,800.0                               | 10.00           | 270.00      | 2,797.5               | 0.0          | -43.5        | 1,418,096.82        | 2,734,484.74       | 40° 28' 37.757 N | 106° 27' 16.003 W |
| 2,900.0                               | 12.00           | 270.00      | 2,895.6               | 0.0          | -62.6        | 1,418,096.82        | 2,734,465.66       | 40° 28' 37.755 N | 106° 27' 16.250 W |
| 3,000.0                               | 14.00           | 270.00      | 2,993.1               | 0.0          | -85.1        | 1,418,096.82        | 2,734,443.16       | 40° 28' 37.753 N | 106° 27' 16.541 W |
| 3,100.0                               | 16.00           | 270.00      | 3,089.6               | 0.0          | -111.0       | 1,418,096.82        | 2,734,417.28       | 40° 28' 37.750 N | 106° 27' 16.876 W |
| 3,200.0                               | 18.00           | 270.00      | 3,185.3               | 0.0          | -140.2       | 1,418,096.82        | 2,734,388.05       | 40° 28' 37.747 N | 106° 27' 17.255 W |
| 3,300.0                               | 20.00           | 270.00      | 3,279.8               | 0.0          | -172.8       | 1,418,096.82        | 2,734,355.49       | 40° 28' 37.743 N | 106° 27' 17.676 W |
| 3,400.0                               | 22.00           | 270.00      | 3,373.2               | 0.0          | -208.6       | 1,418,096.82        | 2,734,319.66       | 40° 28' 37.740 N | 106° 27' 18.139 W |
| 3,500.0                               | 24.00           | 270.00      | 3,465.2               | 0.0          | -247.7       | 1,418,096.82        | 2,734,280.59       | 40° 28' 37.735 N | 106° 27' 18.645 W |
| 3,600.0                               | 26.00           | 270.00      | 3,555.8               | 0.0          | -289.9       | 1,418,096.82        | 2,734,238.33       | 40° 28' 37.731 N | 106° 27' 19.192 W |
| 3,700.0                               | 28.00           | 270.00      | 3,644.9               | 0.0          | -335.3       | 1,418,096.82        | 2,734,192.93       | 40° 28' 37.726 N | 106° 27' 19.779 W |
| 3,766.7                               | 29.33           | 270.00      | 3,703.5               | 0.0          | -367.3       | 1,418,096.82        | 2,734,160.94       | 40° 28' 37.723 N | 106° 27' 20.193 W |
| <b>Start 1750.7 hold at 3766.7 MD</b> |                 |             |                       |              |              |                     |                    |                  |                   |
| 3,800.0                               | 29.33           | 270.00      | 3,732.5               | 0.0          | -383.6       | 1,418,096.82        | 2,734,144.62       | 40° 28' 37.721 N | 106° 27' 20.404 W |
| 3,900.0                               | 29.33           | 270.00      | 3,819.7               | 0.0          | -432.6       | 1,418,096.82        | 2,734,095.63       | 40° 28' 37.716 N | 106° 27' 21.038 W |
| 4,000.0                               | 29.33           | 270.00      | 3,906.8               | 0.0          | -481.6       | 1,418,096.82        | 2,734,046.64       | 40° 28' 37.710 N | 106° 27' 21.672 W |
| 4,100.0                               | 29.33           | 270.00      | 3,994.0               | 0.0          | -530.6       | 1,418,096.82        | 2,733,997.65       | 40° 28' 37.705 N | 106° 27' 22.306 W |
| 4,200.0                               | 29.33           | 270.00      | 4,081.2               | 0.0          | -579.6       | 1,418,096.82        | 2,733,948.66       | 40° 28' 37.700 N | 106° 27' 22.940 W |
| 4,300.0                               | 29.33           | 270.00      | 4,168.4               | 0.0          | -628.6       | 1,418,096.82        | 2,733,899.67       | 40° 28' 37.695 N | 106° 27' 23.574 W |
| 4,400.0                               | 29.33           | 270.00      | 4,255.6               | 0.0          | -677.6       | 1,418,096.82        | 2,733,850.68       | 40° 28' 37.690 N | 106° 27' 24.208 W |
| 4,500.0                               | 29.33           | 270.00      | 4,342.7               | 0.0          | -726.6       | 1,418,096.82        | 2,733,801.69       | 40° 28' 37.684 N | 106° 27' 24.842 W |
| 4,600.0                               | 29.33           | 270.00      | 4,429.9               | 0.0          | -775.6       | 1,418,096.82        | 2,733,752.70       | 40° 28' 37.679 N | 106° 27' 25.476 W |
| 4,700.0                               | 29.33           | 270.00      | 4,517.1               | 0.0          | -824.5       | 1,418,096.82        | 2,733,703.71       | 40° 28' 37.674 N | 106° 27' 26.110 W |
| 4,800.0                               | 29.33           | 270.00      | 4,604.3               | 0.0          | -873.5       | 1,418,096.82        | 2,733,654.72       | 40° 28' 37.669 N | 106° 27' 26.744 W |
| 4,900.0                               | 29.33           | 270.00      | 4,691.4               | 0.0          | -922.5       | 1,418,096.82        | 2,733,605.73       | 40° 28' 37.663 N | 106° 27' 27.378 W |
| 5,000.0                               | 29.33           | 270.00      | 4,778.6               | 0.0          | -971.5       | 1,418,096.82        | 2,733,556.74       | 40° 28' 37.658 N | 106° 27' 28.012 W |
| 5,100.0                               | 29.33           | 270.00      | 4,865.8               | 0.0          | -1,020.5     | 1,418,096.82        | 2,733,507.75       | 40° 28' 37.653 N | 106° 27' 28.645 W |
| 5,200.0                               | 29.33           | 270.00      | 4,953.0               | 0.0          | -1,069.5     | 1,418,096.82        | 2,733,458.76       | 40° 28' 37.648 N | 106° 27' 29.279 W |
| 5,300.0                               | 29.33           | 270.00      | 5,040.2               | 0.0          | -1,118.5     | 1,418,096.82        | 2,733,409.77       | 40° 28' 37.643 N | 106° 27' 29.913 W |
| 5,400.0                               | 29.33           | 270.00      | 5,127.3               | 0.0          | -1,167.5     | 1,418,096.82        | 2,733,360.78       | 40° 28' 37.637 N | 106° 27' 30.547 W |
| 5,500.0                               | 29.33           | 270.00      | 5,214.5               | 0.0          | -1,216.5     | 1,418,096.82        | 2,733,311.79       | 40° 28' 37.632 N | 106° 27' 31.181 W |
| 5,517.4                               | 29.33           | 270.00      | 5,229.7               | 0.0          | -1,225.0     | 1,418,096.82        | 2,733,303.26       | 40° 28' 37.631 N | 106° 27' 31.292 W |
| <b>Start DLS 12.00 TFO -46.64</b>     |                 |             |                       |              |              |                     |                    |                  |                   |
| 5,525.0                               | 29.97           | 268.68      | 5,236.3               | 0.0          | -1,228.8     | 1,418,096.78        | 2,733,299.51       | 40° 28' 37.630 N | 106° 27' 31.340 W |
| 5,529.3                               | 30.33           | 267.95      | 5,240.0               | -0.1         | -1,230.9     | 1,418,096.71        | 2,733,297.36       | 40° 28' 37.629 N | 106° 27' 31.368 W |
| <b>Niobrara</b>                       |                 |             |                       |              |              |                     |                    |                  |                   |
| 5,550.0                               | 32.13           | 264.65      | 5,257.7               | -0.8         | -1,241.6     | 1,418,096.01        | 2,733,286.65       | 40° 28' 37.621 N | 106° 27' 31.506 W |
| 5,575.0                               | 34.41           | 261.10      | 5,278.6               | -2.5         | -1,255.2     | 1,418,094.30        | 2,733,273.04       | 40° 28' 37.603 N | 106° 27' 31.682 W |

# SandRidge Energy, Inc.

## Survey Report - Geographic

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMProd               |

### Planned Survey

| Measured Depth (usft)                  | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude         | Longitude         |
|--|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------------|-------------------|
| 5,600.0                                | 36.79           | 257.94      | 5,298.9               | -5.2         | -1,269.5     | 1,418,091.64        | 2,733,258.74       | 40° 28' 37.575 N | 106° 27' 31.867 W |
| 5,625.0                                | 39.23           | 255.12      | 5,318.6               | -8.8         | -1,284.5     | 1,418,088.05        | 2,733,243.78       | 40° 28' 37.538 N | 106° 27' 32.060 W |
| 5,650.0                                | 41.74           | 252.58      | 5,337.7               | -13.3        | -1,300.1     | 1,418,083.52        | 2,733,228.19       | 40° 28' 37.492 N | 106° 27' 32.261 W |
| 5,675.0                                | 44.30           | 250.28      | 5,355.9               | -18.7        | -1,316.2     | 1,418,078.09        | 2,733,212.03       | 40° 28' 37.436 N | 106° 27' 32.469 W |
| 5,700.0                                | 46.90           | 248.19      | 5,373.4               | -25.1        | -1,332.9     | 1,418,071.75        | 2,733,195.34       | 40° 28' 37.372 N | 106° 27' 32.685 W |
| 5,725.0                                | 49.53           | 246.26      | 5,390.1               | -32.3        | -1,350.1     | 1,418,064.53        | 2,733,178.16       | 40° 28' 37.299 N | 106° 27' 32.906 W |
| 5,750.0                                | 52.20           | 244.49      | 5,405.9               | -40.4        | -1,367.7     | 1,418,056.44        | 2,733,160.53       | 40° 28' 37.217 N | 106° 27' 33.133 W |
| 5,775.0                                | 54.89           | 242.83      | 5,420.7               | -49.3        | -1,385.7     | 1,418,047.52        | 2,733,142.52       | 40° 28' 37.127 N | 106° 27' 33.365 W |
| 5,800.0                                | 57.60           | 241.29      | 5,434.6               | -59.0        | -1,404.1     | 1,418,037.78        | 2,733,124.16       | 40° 28' 37.029 N | 106° 27' 33.601 W |
| 5,822.0                                | 60.00           | 240.00      | 5,446.0               | -68.3        | -1,420.5     | 1,418,028.54        | 2,733,107.75       | 40° 28' 36.936 N | 106° 27' 33.812 W |
| <b>Start 150.0 hold at 5822.0 MD</b>   |                 |             |                       |              |              |                     |                    |                  |                   |
| 5,900.0                                | 60.00           | 240.00      | 5,485.0               | -102.0       | -1,479.0     | 1,417,994.78        | 2,733,049.26       | 40° 28' 36.596 N | 106° 27' 34.564 W |
| 5,972.0                                | 60.00           | 240.00      | 5,521.0               | -133.2       | -1,533.0     | 1,417,963.59        | 2,732,995.25       | 40° 28' 36.282 N | 106° 27' 35.259 W |
| <b>Start DLS 12.00 TFO 0.00</b>        |                 |             |                       |              |              |                     |                    |                  |                   |
| 5,975.0                                | 60.36           | 240.00      | 5,522.5               | -134.5       | -1,535.3     | 1,417,962.30        | 2,732,993.01       | 40° 28' 36.269 N | 106° 27' 35.287 W |
| 6,000.0                                | 63.36           | 240.00      | 5,534.3               | -145.5       | -1,554.3     | 1,417,951.28        | 2,732,973.92       | 40° 28' 36.158 N | 106° 27' 35.533 W |
| 6,025.0                                | 66.36           | 240.00      | 5,544.9               | -156.9       | -1,573.9     | 1,417,939.96        | 2,732,954.32       | 40° 28' 36.044 N | 106° 27' 35.785 W |
| 6,050.0                                | 69.36           | 240.00      | 5,554.3               | -168.4       | -1,594.0     | 1,417,928.39        | 2,732,934.27       | 40° 28' 35.927 N | 106° 27' 36.043 W |
| 6,075.0                                | 72.36           | 240.00      | 5,562.5               | -180.2       | -1,614.4     | 1,417,916.58        | 2,732,913.82       | 40° 28' 35.808 N | 106° 27' 36.306 W |
| 6,100.0                                | 75.36           | 240.00      | 5,569.5               | -192.2       | -1,635.2     | 1,417,904.57        | 2,732,893.02       | 40° 28' 35.688 N | 106° 27' 36.573 W |
| 6,125.0                                | 78.36           | 240.00      | 5,575.2               | -204.4       | -1,656.3     | 1,417,892.40        | 2,732,871.94       | 40° 28' 35.565 N | 106° 27' 36.844 W |
| 6,150.0                                | 81.36           | 240.00      | 5,579.6               | -216.7       | -1,677.6     | 1,417,880.10        | 2,732,850.63       | 40° 28' 35.441 N | 106° 27' 37.118 W |
| 6,175.0                                | 84.36           | 240.00      | 5,582.7               | -229.1       | -1,699.1     | 1,417,867.70        | 2,732,829.15       | 40° 28' 35.316 N | 106° 27' 37.394 W |
| 6,200.0                                | 87.36           | 240.00      | 5,584.5               | -241.6       | -1,720.7     | 1,417,855.23        | 2,732,807.56       | 40° 28' 35.191 N | 106° 27' 37.672 W |
| 6,222.0                                | 90.00           | 240.00      | 5,585.0               | -252.6       | -1,739.8     | 1,417,844.22        | 2,732,788.50       | 40° 28' 35.080 N | 106° 27' 37.917 W |
| <b>Start DLS 3.00 TFO -90.00</b>       |                 |             |                       |              |              |                     |                    |                  |                   |
| 6,300.0                                | 90.00           | 237.66      | 5,585.0               | -293.0       | -1,806.5     | 1,417,803.87        | 2,732,721.78       | 40° 28' 34.674 N | 106° 27' 38.775 W |
| 6,400.0                                | 90.00           | 234.66      | 5,585.0               | -348.6       | -1,889.5     | 1,417,748.19        | 2,732,638.73       | 40° 28' 34.115 N | 106° 27' 39.842 W |
| 6,500.0                                | 90.00           | 231.66      | 5,585.0               | -408.6       | -1,969.6     | 1,417,688.24        | 2,732,558.71       | 40° 28' 33.514 N | 106° 27' 40.869 W |
| 6,600.0                                | 90.00           | 228.66      | 5,585.0               | -472.6       | -2,046.3     | 1,417,624.18        | 2,732,481.93       | 40° 28' 32.873 N | 106° 27' 41.853 W |
| 6,700.0                                | 90.00           | 225.66      | 5,585.0               | -540.6       | -2,119.6     | 1,417,556.19        | 2,732,408.61       | 40° 28' 32.193 N | 106° 27' 42.792 W |
| 6,800.0                                | 90.00           | 222.66      | 5,585.0               | -612.4       | -2,189.3     | 1,417,484.46        | 2,732,338.95       | 40° 28' 31.477 N | 106° 27' 43.684 W |
| 6,900.0                                | 90.00           | 219.66      | 5,585.0               | -687.6       | -2,255.1     | 1,417,409.18        | 2,732,273.14       | 40° 28' 30.726 N | 106° 27' 44.525 W |
| 7,000.0                                | 90.00           | 216.66      | 5,585.0               | -766.3       | -2,316.9     | 1,417,330.56        | 2,732,211.36       | 40° 28' 29.943 N | 106° 27' 45.313 W |
| 7,100.0                                | 90.00           | 213.66      | 5,585.0               | -848.0       | -2,374.5     | 1,417,248.82        | 2,732,153.78       | 40° 28' 29.129 N | 106° 27' 46.046 W |
| 7,200.0                                | 90.00           | 210.66      | 5,585.0               | -932.6       | -2,427.7     | 1,417,164.17        | 2,732,100.56       | 40° 28' 28.287 N | 106° 27' 46.723 W |
| 7,300.0                                | 90.00           | 207.66      | 5,585.0               | -1,020.0     | -2,476.4     | 1,417,076.86        | 2,732,051.84       | 40° 28' 27.419 N | 106° 27' 47.341 W |
| 7,400.0                                | 90.00           | 204.66      | 5,585.0               | -1,109.7     | -2,520.5     | 1,416,987.11        | 2,732,007.76       | 40° 28' 26.527 N | 106° 27' 47.899 W |
| 7,500.0                                | 90.00           | 201.66      | 5,585.0               | -1,201.6     | -2,559.8     | 1,416,895.18        | 2,731,968.43       | 40° 28' 25.614 N | 106° 27' 48.395 W |
| 7,600.0                                | 90.00           | 198.66      | 5,585.0               | -1,295.5     | -2,594.3     | 1,416,801.32        | 2,731,933.97       | 40° 28' 24.683 N | 106° 27' 48.828 W |
| 7,700.0                                | 90.00           | 195.66      | 5,585.0               | -1,391.0     | -2,623.8     | 1,416,705.78        | 2,731,904.47       | 40° 28' 23.736 N | 106° 27' 49.196 W |
| 7,800.0                                | 90.00           | 192.66      | 5,585.0               | -1,488.0     | -2,648.3     | 1,416,608.83        | 2,731,880.01       | 40° 28' 22.775 N | 106° 27' 49.499 W |
| 7,900.0                                | 90.00           | 189.66      | 5,585.0               | -1,586.1     | -2,667.6     | 1,416,510.73        | 2,731,860.65       | 40° 28' 21.804 N | 106° 27' 49.736 W |
| 8,000.0                                | 90.00           | 186.66      | 5,585.0               | -1,685.1     | -2,681.8     | 1,416,411.76        | 2,731,846.46       | 40° 28' 20.824 N | 106° 27' 49.905 W |
| 8,100.0                                | 90.00           | 183.66      | 5,585.0               | -1,784.6     | -2,690.8     | 1,416,312.17        | 2,731,837.47       | 40° 28' 19.840 N | 106° 27' 50.008 W |
| 8,200.0                                | 90.00           | 180.66      | 5,585.0               | -1,884.6     | -2,694.6     | 1,416,212.26        | 2,731,833.70       | 40° 28' 18.852 N | 106° 27' 50.042 W |
| 8,222.2                                | 90.00           | 180.00      | 5,585.0               | -1,906.7     | -2,694.7     | 1,416,190.08        | 2,731,833.57       | 40° 28' 18.633 N | 106° 27' 50.041 W |
| <b>Start 12502.8 hold at 8222.2 MD</b> |                 |             |                       |              |              |                     |                    |                  |                   |
| 8,300.0                                | 90.00           | 180.00      | 5,585.0               | -1,984.6     | -2,694.7     | 1,416,112.26        | 2,731,833.57       | 40° 28' 17.864 N | 106° 27' 50.030 W |
| 8,400.0                                | 90.00           | 180.00      | 5,585.0               | -2,084.6     | -2,694.7     | 1,416,012.26        | 2,731,833.58       | 40° 28' 16.876 N | 106° 27' 50.016 W |
| 8,500.0                                | 90.00           | 180.00      | 5,585.0               | -2,184.6     | -2,694.7     | 1,415,912.26        | 2,731,833.59       | 40° 28' 15.887 N | 106° 27' 50.002 W |
| 8,600.0                                | 90.00           | 180.00      | 5,585.0               | -2,284.6     | -2,694.7     | 1,415,812.26        | 2,731,833.60       | 40° 28' 14.899 N | 106° 27' 49.987 W |
| 8,700.0                                | 90.00           | 180.00      | 5,585.0               | -2,384.6     | -2,694.7     | 1,415,712.26        | 2,731,833.61       | 40° 28' 13.911 N | 106° 27' 49.973 W |
| 8,800.0                                | 90.00           | 180.00      | 5,585.0               | -2,484.6     | -2,694.6     | 1,415,612.26        | 2,731,833.62       | 40° 28' 12.923 N | 106° 27' 49.959 W |

# SandRidge Energy, Inc.

## Survey Report - Geographic

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMProd               |

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude         | Longitude         |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------------|-------------------|
| 8,900.0               | 90.00           | 180.00      | 5,585.0               | -2,584.6     | -2,694.6     | 1,415,512.26        | 2,731,833.63       | 40° 28' 11.935 N | 106° 27' 49.945 W |
| 9,000.0               | 90.00           | 180.00      | 5,585.0               | -2,684.6     | -2,694.6     | 1,415,412.26        | 2,731,833.63       | 40° 28' 10.947 N | 106° 27' 49.931 W |
| 9,100.0               | 90.00           | 180.00      | 5,585.0               | -2,784.6     | -2,694.6     | 1,415,312.26        | 2,731,833.64       | 40° 28' 9.959 N  | 106° 27' 49.917 W |
| 9,200.0               | 90.00           | 180.00      | 5,585.0               | -2,884.6     | -2,694.6     | 1,415,212.26        | 2,731,833.65       | 40° 28' 8.970 N  | 106° 27' 49.902 W |
| 9,300.0               | 90.00           | 180.00      | 5,585.0               | -2,984.6     | -2,694.6     | 1,415,112.26        | 2,731,833.66       | 40° 28' 7.982 N  | 106° 27' 49.888 W |
| 9,400.0               | 90.00           | 180.00      | 5,585.0               | -3,084.6     | -2,694.6     | 1,415,012.26        | 2,731,833.67       | 40° 28' 6.994 N  | 106° 27' 49.874 W |
| 9,500.0               | 90.00           | 180.00      | 5,585.0               | -3,184.6     | -2,694.6     | 1,414,912.26        | 2,731,833.68       | 40° 28' 6.006 N  | 106° 27' 49.860 W |
| 9,600.0               | 90.00           | 180.00      | 5,585.0               | -3,284.6     | -2,694.6     | 1,414,812.26        | 2,731,833.68       | 40° 28' 5.018 N  | 106° 27' 49.846 W |
| 9,700.0               | 90.00           | 180.00      | 5,585.0               | -3,384.6     | -2,694.6     | 1,414,712.26        | 2,731,833.69       | 40° 28' 4.030 N  | 106° 27' 49.832 W |
| 9,800.0               | 90.00           | 180.00      | 5,585.0               | -3,484.6     | -2,694.6     | 1,414,612.26        | 2,731,833.70       | 40° 28' 3.042 N  | 106° 27' 49.817 W |
| 9,900.0               | 90.00           | 180.00      | 5,585.0               | -3,584.6     | -2,694.6     | 1,414,512.26        | 2,731,833.71       | 40° 28' 2.054 N  | 106° 27' 49.803 W |
| 10,000.0              | 90.00           | 180.00      | 5,585.0               | -3,684.6     | -2,694.5     | 1,414,412.26        | 2,731,833.72       | 40° 28' 1.065 N  | 106° 27' 49.789 W |
| 10,100.0              | 90.00           | 180.00      | 5,585.0               | -3,784.6     | -2,694.5     | 1,414,312.26        | 2,731,833.73       | 40° 28' 0.077 N  | 106° 27' 49.775 W |
| 10,200.0              | 90.00           | 180.00      | 5,585.0               | -3,884.6     | -2,694.5     | 1,414,212.26        | 2,731,833.73       | 40° 27' 59.089 N | 106° 27' 49.761 W |
| 10,300.0              | 90.00           | 180.00      | 5,585.0               | -3,984.6     | -2,694.5     | 1,414,112.26        | 2,731,833.74       | 40° 27' 58.101 N | 106° 27' 49.747 W |
| 10,400.0              | 90.00           | 180.00      | 5,585.0               | -4,084.6     | -2,694.5     | 1,414,012.26        | 2,731,833.75       | 40° 27' 57.113 N | 106° 27' 49.732 W |
| 10,500.0              | 90.00           | 180.00      | 5,585.0               | -4,184.6     | -2,694.5     | 1,413,912.26        | 2,731,833.76       | 40° 27' 56.125 N | 106° 27' 49.718 W |
| 10,600.0              | 90.00           | 180.00      | 5,585.0               | -4,284.6     | -2,694.5     | 1,413,812.26        | 2,731,833.77       | 40° 27' 55.137 N | 106° 27' 49.704 W |
| 10,700.0              | 90.00           | 180.00      | 5,585.0               | -4,384.6     | -2,694.5     | 1,413,712.26        | 2,731,833.78       | 40° 27' 54.149 N | 106° 27' 49.690 W |
| 10,800.0              | 90.00           | 180.00      | 5,585.0               | -4,484.6     | -2,694.5     | 1,413,612.26        | 2,731,833.78       | 40° 27' 53.160 N | 106° 27' 49.676 W |
| 10,900.0              | 90.00           | 180.00      | 5,585.0               | -4,584.6     | -2,694.5     | 1,413,512.26        | 2,731,833.79       | 40° 27' 52.172 N | 106° 27' 49.661 W |
| 11,000.0              | 90.00           | 180.00      | 5,585.0               | -4,684.6     | -2,694.5     | 1,413,412.26        | 2,731,833.80       | 40° 27' 51.184 N | 106° 27' 49.647 W |
| 11,100.0              | 90.00           | 180.00      | 5,585.0               | -4,784.6     | -2,694.5     | 1,413,312.26        | 2,731,833.81       | 40° 27' 50.196 N | 106° 27' 49.633 W |
| 11,200.0              | 90.00           | 180.00      | 5,585.0               | -4,884.6     | -2,694.4     | 1,413,212.26        | 2,731,833.82       | 40° 27' 49.208 N | 106° 27' 49.619 W |
| 11,300.0              | 90.00           | 180.00      | 5,585.0               | -4,984.6     | -2,694.4     | 1,413,112.26        | 2,731,833.83       | 40° 27' 48.220 N | 106° 27' 49.605 W |
| 11,400.0              | 90.00           | 180.00      | 5,585.0               | -5,084.6     | -2,694.4     | 1,413,012.26        | 2,731,833.83       | 40° 27' 47.232 N | 106° 27' 49.591 W |
| 11,500.0              | 90.00           | 180.00      | 5,585.0               | -5,184.6     | -2,694.4     | 1,412,912.26        | 2,731,833.84       | 40° 27' 46.243 N | 106° 27' 49.576 W |
| 11,600.0              | 90.00           | 180.00      | 5,585.0               | -5,284.6     | -2,694.4     | 1,412,812.26        | 2,731,833.85       | 40° 27' 45.255 N | 106° 27' 49.562 W |
| 11,700.0              | 90.00           | 180.00      | 5,585.0               | -5,384.6     | -2,694.4     | 1,412,712.26        | 2,731,833.86       | 40° 27' 44.267 N | 106° 27' 49.548 W |
| 11,800.0              | 90.00           | 180.00      | 5,585.0               | -5,484.6     | -2,694.4     | 1,412,612.26        | 2,731,833.87       | 40° 27' 43.279 N | 106° 27' 49.534 W |
| 11,900.0              | 90.00           | 180.00      | 5,585.0               | -5,584.6     | -2,694.4     | 1,412,512.26        | 2,731,833.88       | 40° 27' 42.291 N | 106° 27' 49.520 W |
| 12,000.0              | 90.00           | 180.00      | 5,585.0               | -5,684.6     | -2,694.4     | 1,412,412.26        | 2,731,833.88       | 40° 27' 41.303 N | 106° 27' 49.506 W |
| 12,100.0              | 90.00           | 180.00      | 5,585.0               | -5,784.6     | -2,694.4     | 1,412,312.26        | 2,731,833.89       | 40° 27' 40.315 N | 106° 27' 49.491 W |
| 12,200.0              | 90.00           | 180.00      | 5,585.0               | -5,884.6     | -2,694.4     | 1,412,212.26        | 2,731,833.90       | 40° 27' 39.327 N | 106° 27' 49.477 W |
| 12,300.0              | 90.00           | 180.00      | 5,585.0               | -5,984.6     | -2,694.4     | 1,412,112.26        | 2,731,833.91       | 40° 27' 38.338 N | 106° 27' 49.463 W |
| 12,400.0              | 90.00           | 180.00      | 5,585.0               | -6,084.6     | -2,694.3     | 1,412,012.26        | 2,731,833.92       | 40° 27' 37.350 N | 106° 27' 49.449 W |
| 12,500.0              | 90.00           | 180.00      | 5,585.0               | -6,184.6     | -2,694.3     | 1,411,912.26        | 2,731,833.93       | 40° 27' 36.362 N | 106° 27' 49.435 W |
| 12,600.0              | 90.00           | 180.00      | 5,585.0               | -6,284.6     | -2,694.3     | 1,411,812.26        | 2,731,833.93       | 40° 27' 35.374 N | 106° 27' 49.421 W |
| 12,700.0              | 90.00           | 180.00      | 5,585.0               | -6,384.6     | -2,694.3     | 1,411,712.26        | 2,731,833.94       | 40° 27' 34.386 N | 106° 27' 49.406 W |
| 12,800.0              | 90.00           | 180.00      | 5,585.0               | -6,484.6     | -2,694.3     | 1,411,612.26        | 2,731,833.95       | 40° 27' 33.398 N | 106° 27' 49.392 W |
| 12,900.0              | 90.00           | 180.00      | 5,585.0               | -6,584.6     | -2,694.3     | 1,411,512.26        | 2,731,833.96       | 40° 27' 32.410 N | 106° 27' 49.378 W |
| 13,000.0              | 90.00           | 180.00      | 5,585.0               | -6,684.6     | -2,694.3     | 1,411,412.26        | 2,731,833.97       | 40° 27' 31.422 N | 106° 27' 49.364 W |
| 13,100.0              | 90.00           | 180.00      | 5,585.0               | -6,784.6     | -2,694.3     | 1,411,312.26        | 2,731,833.98       | 40° 27' 30.433 N | 106° 27' 49.350 W |
| 13,200.0              | 90.00           | 180.00      | 5,585.0               | -6,884.6     | -2,694.3     | 1,411,212.26        | 2,731,833.98       | 40° 27' 29.445 N | 106° 27' 49.336 W |
| 13,300.0              | 90.00           | 180.00      | 5,585.0               | -6,984.6     | -2,694.3     | 1,411,112.26        | 2,731,833.99       | 40° 27' 28.457 N | 106° 27' 49.321 W |
| 13,400.0              | 90.00           | 180.00      | 5,585.0               | -7,084.6     | -2,694.3     | 1,411,012.26        | 2,731,834.00       | 40° 27' 27.469 N | 106° 27' 49.307 W |
| 13,500.0              | 90.00           | 180.00      | 5,585.0               | -7,184.6     | -2,694.3     | 1,410,912.26        | 2,731,834.01       | 40° 27' 26.481 N | 106° 27' 49.293 W |
| 13,600.0              | 90.00           | 180.00      | 5,585.0               | -7,284.6     | -2,694.2     | 1,410,812.26        | 2,731,834.02       | 40° 27' 25.493 N | 106° 27' 49.279 W |
| 13,700.0              | 90.00           | 180.00      | 5,585.0               | -7,384.6     | -2,694.2     | 1,410,712.26        | 2,731,834.03       | 40° 27' 24.505 N | 106° 27' 49.265 W |
| 13,800.0              | 90.00           | 180.00      | 5,585.0               | -7,484.6     | -2,694.2     | 1,410,612.26        | 2,731,834.03       | 40° 27' 23.516 N | 106° 27' 49.251 W |
| 13,900.0              | 90.00           | 180.00      | 5,585.0               | -7,584.6     | -2,694.2     | 1,410,512.26        | 2,731,834.04       | 40° 27' 22.528 N | 106° 27' 49.236 W |
| 14,000.0              | 90.00           | 180.00      | 5,585.0               | -7,684.6     | -2,694.2     | 1,410,412.26        | 2,731,834.05       | 40° 27' 21.540 N | 106° 27' 49.222 W |
| 14,100.0              | 90.00           | 180.00      | 5,585.0               | -7,784.6     | -2,694.2     | 1,410,312.26        | 2,731,834.06       | 40° 27' 20.552 N | 106° 27' 49.208 W |
| 14,200.0              | 90.00           | 180.00      | 5,585.0               | -7,884.6     | -2,694.2     | 1,410,212.26        | 2,731,834.07       | 40° 27' 19.564 N | 106° 27' 49.194 W |
| 14,300.0              | 90.00           | 180.00      | 5,585.0               | -7,984.6     | -2,694.2     | 1,410,112.26        | 2,731,834.08       | 40° 27' 18.576 N | 106° 27' 49.180 W |

# SandRidge Energy, Inc.

## Survey Report - Geographic

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMProd               |

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude         | Longitude         |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------------|-------------------|
| 14,400.0              | 90.00           | 180.00      | 5,585.0               | -8,084.6     | -2,694.2     | 1,410,012.26        | 2,731,834.08       | 40° 27' 17.588 N | 106° 27' 49.166 W |
| 14,500.0              | 90.00           | 180.00      | 5,585.0               | -8,184.6     | -2,694.2     | 1,409,912.26        | 2,731,834.09       | 40° 27' 16.600 N | 106° 27' 49.151 W |
| 14,600.0              | 90.00           | 180.00      | 5,585.0               | -8,284.6     | -2,694.2     | 1,409,812.26        | 2,731,834.10       | 40° 27' 15.611 N | 106° 27' 49.137 W |
| 14,700.0              | 90.00           | 180.00      | 5,585.0               | -8,384.6     | -2,694.2     | 1,409,712.26        | 2,731,834.11       | 40° 27' 14.623 N | 106° 27' 49.123 W |
| 14,800.0              | 90.00           | 180.00      | 5,585.0               | -8,484.6     | -2,694.1     | 1,409,612.26        | 2,731,834.12       | 40° 27' 13.635 N | 106° 27' 49.109 W |
| 14,900.0              | 90.00           | 180.00      | 5,585.0               | -8,584.6     | -2,694.1     | 1,409,512.26        | 2,731,834.13       | 40° 27' 12.647 N | 106° 27' 49.095 W |
| 15,000.0              | 90.00           | 180.00      | 5,585.0               | -8,684.6     | -2,694.1     | 1,409,412.26        | 2,731,834.13       | 40° 27' 11.659 N | 106° 27' 49.081 W |
| 15,100.0              | 90.00           | 180.00      | 5,585.0               | -8,784.6     | -2,694.1     | 1,409,312.26        | 2,731,834.14       | 40° 27' 10.671 N | 106° 27' 49.066 W |
| 15,200.0              | 90.00           | 180.00      | 5,585.0               | -8,884.6     | -2,694.1     | 1,409,212.26        | 2,731,834.15       | 40° 27' 9.683 N  | 106° 27' 49.052 W |
| 15,300.0              | 90.00           | 180.00      | 5,585.0               | -8,984.6     | -2,694.1     | 1,409,112.26        | 2,731,834.16       | 40° 27' 8.694 N  | 106° 27' 49.038 W |
| 15,400.0              | 90.00           | 180.00      | 5,585.0               | -9,084.6     | -2,694.1     | 1,409,012.26        | 2,731,834.17       | 40° 27' 7.706 N  | 106° 27' 49.024 W |
| 15,500.0              | 90.00           | 180.00      | 5,585.0               | -9,184.6     | -2,694.1     | 1,408,912.26        | 2,731,834.18       | 40° 27' 6.718 N  | 106° 27' 49.010 W |
| 15,600.0              | 90.00           | 180.00      | 5,585.0               | -9,284.6     | -2,694.1     | 1,408,812.26        | 2,731,834.18       | 40° 27' 5.730 N  | 106° 27' 48.996 W |
| 15,700.0              | 90.00           | 180.00      | 5,585.0               | -9,384.6     | -2,694.1     | 1,408,712.26        | 2,731,834.19       | 40° 27' 4.742 N  | 106° 27' 48.981 W |
| 15,800.0              | 90.00           | 180.00      | 5,585.0               | -9,484.6     | -2,694.1     | 1,408,612.26        | 2,731,834.20       | 40° 27' 3.754 N  | 106° 27' 48.967 W |
| 15,900.0              | 90.00           | 180.00      | 5,585.0               | -9,584.6     | -2,694.1     | 1,408,512.26        | 2,731,834.21       | 40° 27' 2.766 N  | 106° 27' 48.953 W |
| 16,000.0              | 90.00           | 180.00      | 5,585.0               | -9,684.6     | -2,694.0     | 1,408,412.26        | 2,731,834.22       | 40° 27' 1.778 N  | 106° 27' 48.939 W |
| 16,100.0              | 90.00           | 180.00      | 5,585.0               | -9,784.6     | -2,694.0     | 1,408,312.26        | 2,731,834.23       | 40° 27' 0.789 N  | 106° 27' 48.925 W |
| 16,200.0              | 90.00           | 180.00      | 5,585.0               | -9,884.6     | -2,694.0     | 1,408,212.26        | 2,731,834.23       | 40° 26' 59.801 N | 106° 27' 48.911 W |
| 16,300.0              | 90.00           | 180.00      | 5,585.0               | -9,984.6     | -2,694.0     | 1,408,112.26        | 2,731,834.24       | 40° 26' 58.813 N | 106° 27' 48.896 W |
| 16,400.0              | 90.00           | 180.00      | 5,585.0               | -10,084.6    | -2,694.0     | 1,408,012.26        | 2,731,834.25       | 40° 26' 57.825 N | 106° 27' 48.882 W |
| 16,500.0              | 90.00           | 180.00      | 5,585.0               | -10,184.6    | -2,694.0     | 1,407,912.26        | 2,731,834.26       | 40° 26' 56.837 N | 106° 27' 48.868 W |
| 16,600.0              | 90.00           | 180.00      | 5,585.0               | -10,284.6    | -2,694.0     | 1,407,812.26        | 2,731,834.27       | 40° 26' 55.849 N | 106° 27' 48.854 W |
| 16,700.0              | 90.00           | 180.00      | 5,585.0               | -10,384.6    | -2,694.0     | 1,407,712.26        | 2,731,834.28       | 40° 26' 54.861 N | 106° 27' 48.840 W |
| 16,800.0              | 90.00           | 180.00      | 5,585.0               | -10,484.6    | -2,694.0     | 1,407,612.26        | 2,731,834.28       | 40° 26' 53.872 N | 106° 27' 48.826 W |
| 16,900.0              | 90.00           | 180.00      | 5,585.0               | -10,584.6    | -2,694.0     | 1,407,512.26        | 2,731,834.29       | 40° 26' 52.884 N | 106° 27' 48.811 W |
| 17,000.0              | 90.00           | 180.00      | 5,585.0               | -10,684.6    | -2,694.0     | 1,407,412.26        | 2,731,834.30       | 40° 26' 51.896 N | 106° 27' 48.797 W |
| 17,100.0              | 90.00           | 180.00      | 5,585.0               | -10,784.6    | -2,694.0     | 1,407,312.26        | 2,731,834.31       | 40° 26' 50.908 N | 106° 27' 48.783 W |
| 17,200.0              | 90.00           | 180.00      | 5,585.0               | -10,884.6    | -2,693.9     | 1,407,212.26        | 2,731,834.32       | 40° 26' 49.920 N | 106° 27' 48.769 W |
| 17,300.0              | 90.00           | 180.00      | 5,585.0               | -10,984.6    | -2,693.9     | 1,407,112.26        | 2,731,834.33       | 40° 26' 48.932 N | 106° 27' 48.755 W |
| 17,400.0              | 90.00           | 180.00      | 5,585.0               | -11,084.6    | -2,693.9     | 1,407,012.26        | 2,731,834.33       | 40° 26' 47.944 N | 106° 27' 48.741 W |
| 17,500.0              | 90.00           | 180.00      | 5,585.0               | -11,184.6    | -2,693.9     | 1,406,912.26        | 2,731,834.34       | 40° 26' 46.955 N | 106° 27' 48.727 W |
| 17,600.0              | 90.00           | 180.00      | 5,585.0               | -11,284.6    | -2,693.9     | 1,406,812.26        | 2,731,834.35       | 40° 26' 45.967 N | 106° 27' 48.712 W |
| 17,700.0              | 90.00           | 180.00      | 5,585.0               | -11,384.6    | -2,693.9     | 1,406,712.26        | 2,731,834.36       | 40° 26' 44.979 N | 106° 27' 48.698 W |
| 17,800.0              | 90.00           | 180.00      | 5,585.0               | -11,484.6    | -2,693.9     | 1,406,612.26        | 2,731,834.37       | 40° 26' 43.991 N | 106° 27' 48.684 W |
| 17,900.0              | 90.00           | 180.00      | 5,585.0               | -11,584.6    | -2,693.9     | 1,406,512.26        | 2,731,834.38       | 40° 26' 43.003 N | 106° 27' 48.670 W |
| 18,000.0              | 90.00           | 180.00      | 5,585.0               | -11,684.6    | -2,693.9     | 1,406,412.26        | 2,731,834.38       | 40° 26' 42.015 N | 106° 27' 48.656 W |
| 18,100.0              | 90.00           | 180.00      | 5,585.0               | -11,784.6    | -2,693.9     | 1,406,312.26        | 2,731,834.39       | 40° 26' 41.027 N | 106° 27' 48.642 W |
| 18,200.0              | 90.00           | 180.00      | 5,585.0               | -11,884.6    | -2,693.9     | 1,406,212.26        | 2,731,834.40       | 40° 26' 40.039 N | 106° 27' 48.627 W |
| 18,300.0              | 90.00           | 180.00      | 5,585.0               | -11,984.6    | -2,693.9     | 1,406,112.26        | 2,731,834.41       | 40° 26' 39.050 N | 106° 27' 48.613 W |
| 18,400.0              | 90.00           | 180.00      | 5,585.0               | -12,084.6    | -2,693.8     | 1,406,012.26        | 2,731,834.42       | 40° 26' 38.062 N | 106° 27' 48.599 W |
| 18,500.0              | 90.00           | 180.00      | 5,585.0               | -12,184.6    | -2,693.8     | 1,405,912.26        | 2,731,834.43       | 40° 26' 37.074 N | 106° 27' 48.585 W |
| 18,600.0              | 90.00           | 180.00      | 5,585.0               | -12,284.6    | -2,693.8     | 1,405,812.26        | 2,731,834.43       | 40° 26' 36.086 N | 106° 27' 48.571 W |
| 18,700.0              | 90.00           | 180.00      | 5,585.0               | -12,384.6    | -2,693.8     | 1,405,712.26        | 2,731,834.44       | 40° 26' 35.098 N | 106° 27' 48.557 W |
| 18,800.0              | 90.00           | 180.00      | 5,585.0               | -12,484.6    | -2,693.8     | 1,405,612.26        | 2,731,834.45       | 40° 26' 34.110 N | 106° 27' 48.542 W |
| 18,900.0              | 90.00           | 180.00      | 5,585.0               | -12,584.6    | -2,693.8     | 1,405,512.26        | 2,731,834.46       | 40° 26' 33.122 N | 106° 27' 48.528 W |
| 19,000.0              | 90.00           | 180.00      | 5,585.0               | -12,684.6    | -2,693.8     | 1,405,412.26        | 2,731,834.47       | 40° 26' 32.133 N | 106° 27' 48.514 W |
| 19,100.0              | 90.00           | 180.00      | 5,585.0               | -12,784.6    | -2,693.8     | 1,405,312.26        | 2,731,834.48       | 40° 26' 31.145 N | 106° 27' 48.500 W |
| 19,200.0              | 90.00           | 180.00      | 5,585.0               | -12,884.6    | -2,693.8     | 1,405,212.26        | 2,731,834.48       | 40° 26' 30.157 N | 106° 27' 48.486 W |
| 19,300.0              | 90.00           | 180.00      | 5,585.0               | -12,984.6    | -2,693.8     | 1,405,112.26        | 2,731,834.49       | 40° 26' 29.169 N | 106° 27' 48.472 W |
| 19,400.0              | 90.00           | 180.00      | 5,585.0               | -13,084.6    | -2,693.8     | 1,405,012.26        | 2,731,834.50       | 40° 26' 28.181 N | 106° 27' 48.457 W |
| 19,500.0              | 90.00           | 180.00      | 5,585.0               | -13,184.6    | -2,693.8     | 1,404,912.26        | 2,731,834.51       | 40° 26' 27.193 N | 106° 27' 48.443 W |
| 19,600.0              | 90.00           | 180.00      | 5,585.0               | -13,284.6    | -2,693.7     | 1,404,812.26        | 2,731,834.52       | 40° 26' 26.205 N | 106° 27' 48.429 W |
| 19,700.0              | 90.00           | 180.00      | 5,585.0               | -13,384.6    | -2,693.7     | 1,404,712.26        | 2,731,834.53       | 40° 26' 25.216 N | 106° 27' 48.415 W |
| 19,800.0              | 90.00           | 180.00      | 5,585.0               | -13,484.6    | -2,693.7     | 1,404,612.26        | 2,731,834.53       | 40° 26' 24.228 N | 106° 27' 48.401 W |



# SandRidge Energy, Inc.

## Survey Report - Geographic

|                  |                  |                                     |                       |
|------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>  | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>  | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Site:</b>     | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Well:</b>     | REU 0681 3-23H35 | <b>North Reference:</b>             | Grid                  |
| <b>Wellbore:</b> | Wellbore #1      | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Design:</b>   | Design #1        | <b>Database:</b>                    | EDMProd               |

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude         | Longitude         |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------------|-------------------|
| 19,900.0              | 90.00           | 180.00      | 5,585.0               | -13,584.6    | -2,693.7     | 1,404,512.26        | 2,731,834.54       | 40° 26' 23.240 N | 106° 27' 48.387 W |
| 20,000.0              | 90.00           | 180.00      | 5,585.0               | -13,684.6    | -2,693.7     | 1,404,412.26        | 2,731,834.55       | 40° 26' 22.252 N | 106° 27' 48.372 W |
| 20,100.0              | 90.00           | 180.00      | 5,585.0               | -13,784.6    | -2,693.7     | 1,404,312.26        | 2,731,834.56       | 40° 26' 21.264 N | 106° 27' 48.358 W |
| 20,200.0              | 90.00           | 180.00      | 5,585.0               | -13,884.6    | -2,693.7     | 1,404,212.26        | 2,731,834.57       | 40° 26' 20.276 N | 106° 27' 48.344 W |
| 20,300.0              | 90.00           | 180.00      | 5,585.0               | -13,984.6    | -2,693.7     | 1,404,112.26        | 2,731,834.58       | 40° 26' 19.288 N | 106° 27' 48.330 W |
| 20,400.0              | 90.00           | 180.00      | 5,585.0               | -14,084.6    | -2,693.7     | 1,404,012.26        | 2,731,834.58       | 40° 26' 18.300 N | 106° 27' 48.316 W |
| 20,500.0              | 90.00           | 180.00      | 5,585.0               | -14,184.6    | -2,693.7     | 1,403,912.26        | 2,731,834.59       | 40° 26' 17.311 N | 106° 27' 48.302 W |
| 20,600.0              | 90.00           | 180.00      | 5,585.0               | -14,284.6    | -2,693.7     | 1,403,812.26        | 2,731,834.60       | 40° 26' 16.323 N | 106° 27' 48.288 W |
| 20,700.0              | 90.00           | 180.00      | 5,585.0               | -14,384.6    | -2,693.7     | 1,403,712.26        | 2,731,834.61       | 40° 26' 15.335 N | 106° 27' 48.273 W |
| 20,725.0              | 90.00           | 180.00      | 5,585.0               | -14,409.6    | -2,693.6     | 1,403,687.26        | 2,731,834.61       | 40° 26' 15.088 N | 106° 27' 48.270 W |

TD at 20725.0

### Design Targets

| Target Name<br>- hit/miss target<br>- Shape           | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude         | Longitude         |
|---|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------------|-------------------|
| Rabbit Ears 3<br>- plan hits target center<br>- Point | 0.00          | 0.00         | 5,585.0    | -14,409.6    | -2,693.6     | 1,403,687.26    | 2,731,834.61   | 40° 26' 15.088 N | 106° 27' 48.270 W |

### Formations

| Measured Depth (usft) | Vertical Depth (usft) | Name     | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------|-----------------------|----------|-----------|---------|-------------------|
| 5,529.3               | 5,240.0               | Niobrara |           | 0.00    |                   |

### Plan Annotations

| Measured Depth (usft) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Comment                         |
|-----------------------|-----------------------|--------------|--------------|---------------------------------|
| 2300                  | 2300                  | 0            | 0            | Start Build 2.00                |
| 3767                  | 3703                  | 0            | -367         | Start 1750.7 hold at 3766.7 MD  |
| 5517                  | 5230                  | 0            | -1225        | Start DLS 12.00 TFO -46.64      |
| 5822                  | 5446                  | -68          | -1421        | Start 150.0 hold at 5822.0 MD   |
| 5972                  | 5521                  | -133         | -1533        | Start DLS 12.00 TFO 0.00        |
| 6222                  | 5585                  | -253         | -1740        | Start DLS 3.00 TFO -90.00       |
| 8222                  | 5585                  | -1907        | -2695        | Start 12502.8 hold at 8222.2 MD |
| 20,725                | 5585                  | -14,410      | -2694        | TD at 20725.0                   |

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



# **SandRidge Energy**

**North Park Basin**

**T6N-R81W-S23**

**REU 0681 3-23H35**

**Wellbore #1**

**Design #1**

## **Anticollision Summary Report**

**22 March, 2017**

**SandRidge Energy, Inc.**  
Anticollision Summary Report

|                           |                  |                                     |                       |
|---------------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>           | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>           | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Reference Site:</b>    | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Site Error:</b>        | 0.0 usft         | <b>North Reference:</b>             | Grid                  |
| <b>Reference Well:</b>    | REU 0681 3-23H35 | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Well Error:</b>        | 0.0 usft         | <b>Output errors are at</b>         | 2.00 sigma            |
| <b>Reference Wellbore</b> | Wellbore #1      | <b>Database:</b>                    | EDMProd               |
| <b>Reference Design:</b>  | Design #1        | <b>Offset TVD Reference:</b>        | Offset Datum          |

|                                     |   |                       |   |
|-------------------------------------|---|-----------------------|---|
| <b>Reference</b>                    | Design #1   |                       |   |
| <b>Filter type:</b>                 | NO GLOBAL FILTER: Using user defined selection & filtering criteria |                       | WARNING: There is hidden tight data in this project |
| <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 10,000.0 usft                     |                       | <b>Error Surface:</b> Elliptical Conic              |
| <b>Warning Levels Evaluated at:</b> | 2.00 Sigma  | <b>Casing Method:</b> | Not applied   |

|                            |                  |                          |                  |                               |
|----------------------------|------------------|--------------------------|------------------|-------------------------------|
| <b>Survey Tool Program</b> | <b>Date</b>      | 3/21/2017                |                  |                               |
| <b>From (usft)</b>         | <b>To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b>            |
| 0.0                        | 20,725.0         | Design #1 (Wellbore #1)  | Sperry MWD       | Fixed:v2:standard declination |

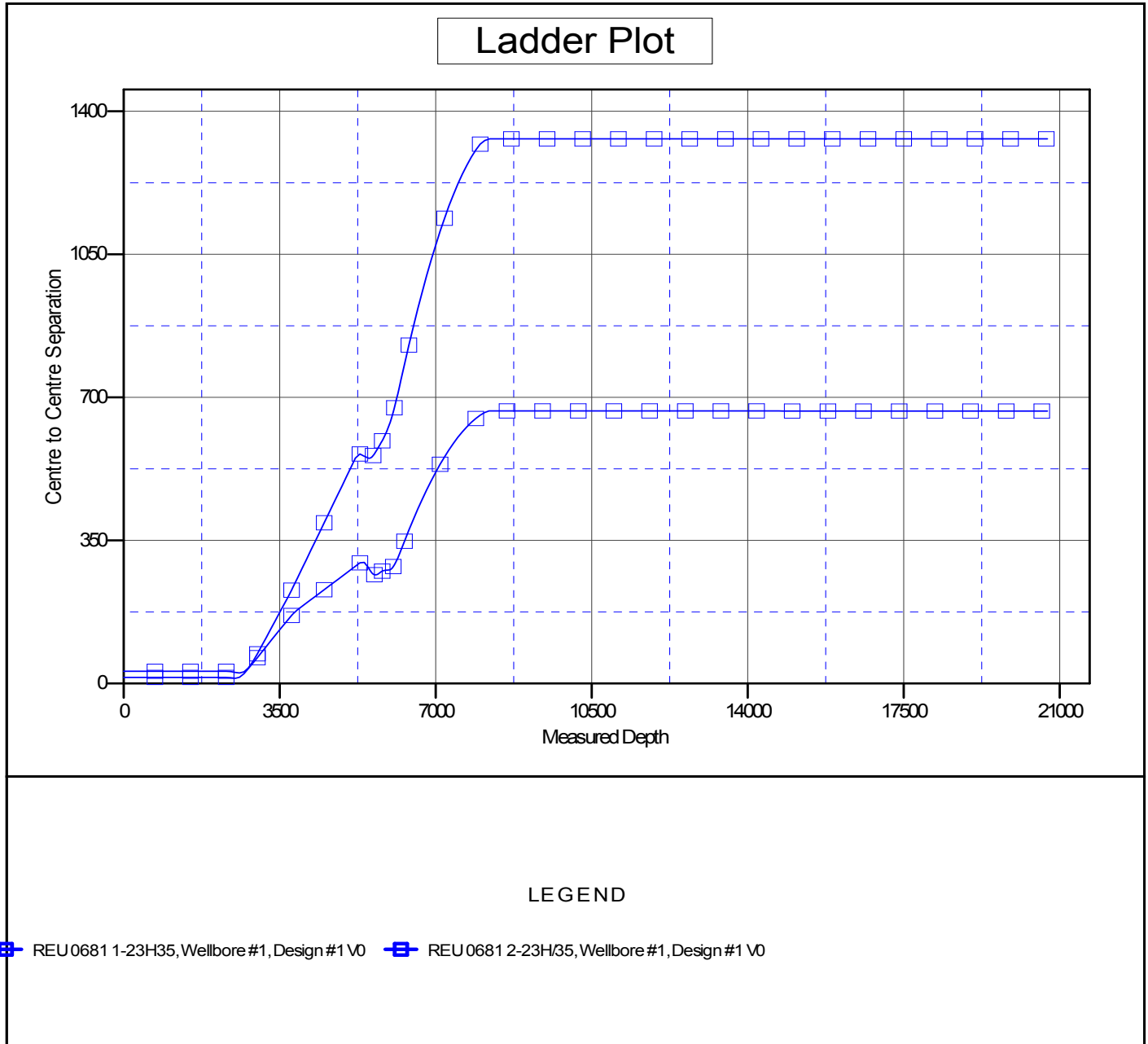
|   |  |                                     |  |   |                          |                     |
|---|--|-------------------------------------|--|---|--------------------------|---------------------|
| <b>Summary</b>                              |  |                                     |  |   |                          |                     |
| <b>Site Name</b>                            | <b>Reference Measured Depth (usft)</b> | <b>Offset Measured Depth (usft)</b> | <b>Distance Between Centres (usft)</b> | <b>Distance Between Ellipses (usft)</b> | <b>Separation Factor</b> | <b>Warning</b>      |
| <b>Offset Well - Wellbore - Design</b>      |  |                                     |  |   |                          |                     |
| T6N-R81W-S23                                |  |                                     |  |   |                          |                     |
| REU 0681 1-23H35 - Wellbore #1 - Design #1  | 2,597.9                                | 2,597.4                             | 25.7                                   | 14.3                                    | 2.261                    | CC                  |
| REU 0681 1-23H35 - Wellbore #1 - Design #1  | 2,600.0                                | 2,599.5                             | 25.7                                   | 14.3                                    | 2.259                    | ES, SF              |
| REU 0681 2-23H/35 - Wellbore #1 - Design #1 | 2,510.6                                | 2,510.4                             | 12.8                                   | 1.9                                     | 1.170                    | Level 2, CC, ES, SF |

**SandRidge Energy, Inc.**  
Anticollision Summary Report

|                           |                  |                                     |                       |
|---------------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>           | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>           | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Reference Site:</b>    | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Site Error:</b>        | 0.0 usft         | <b>North Reference:</b>             | Grid                  |
| <b>Reference Well:</b>    | REU 0681 3-23H35 | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Well Error:</b>        | 0.0 usft         | <b>Output errors are at</b>         | 2.00 sigma            |
| <b>Reference Wellbore</b> | Wellbore #1      | <b>Database:</b>                    | EDMProd               |
| <b>Reference Design:</b>  | Design #1        | <b>Offset TVD Reference:</b>        | Offset Datum          |

Reference Depths are relative to KB @ 8324.0usft  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: REU 0681 3-23H35  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: -0.62°



**SandRidge Energy, Inc.**  
Anticollision Summary Report

|                           |                  |                                     |                       |
|---------------------------|------------------|-------------------------------------|-----------------------|
| <b>Company:</b>           | SandRidge Energy | <b>Local Co-ordinate Reference:</b> | Well REU 0681 3-23H35 |
| <b>Project:</b>           | North Park Basin | <b>TVD Reference:</b>               | KB @ 8324.0usft       |
| <b>Reference Site:</b>    | T6N-R81W-S23     | <b>MD Reference:</b>                | KB @ 8324.0usft       |
| <b>Site Error:</b>        | 0.0 usft         | <b>North Reference:</b>             | Grid                  |
| <b>Reference Well:</b>    | REU 0681 3-23H35 | <b>Survey Calculation Method:</b>   | Minimum Curvature     |
| <b>Well Error:</b>        | 0.0 usft         | <b>Output errors are at</b>         | 2.00 sigma            |
| <b>Reference Wellbore</b> | Wellbore #1      | <b>Database:</b>                    | EDMProd               |
| <b>Reference Design:</b>  | Design #1        | <b>Offset TVD Reference:</b>        | Offset Datum          |

Reference Depths are relative to KB @ 8324.0usft  
Offset Depths are relative to Offset Datum  
Central Meridian is 105° 30' 0.000 W

Coordinates are relative to: REU 0681 3-23H35  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: -0.62°

