

BONANZA CREEK ENERGY OPERATING

Well Name: **State Antelope 24-21-12HNC**

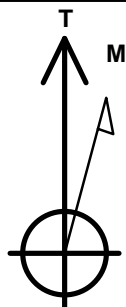
Surface Location: State Antelope J-12 Pad Sec.12-T5N-R62W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4575.0

| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Slot |
|---------------------------------------|-------|------------|------------|-----------|-------------|------|
| 0.0 | 0.0 | 1394206.94 | 3340907.22 | 40.409040 | -104.275760 | |
| RKB - 13' WELL @ 4588.0ft (RKB - 13') | | | | | | |

WELLBORE TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Shape |
|------------------------|--------|--------|-------|-------|
| SHL 350'FSL & 1389'FWL | 1.0 | 0.0 | 0.0 | Point |
| BHL 470'FNL & 1969'FWL | 6179.0 | 4535.7 | 590.3 | Point |
| T1 531'FSL & 1970'FWL | 6179.0 | 204.0 | 582.0 | Point |



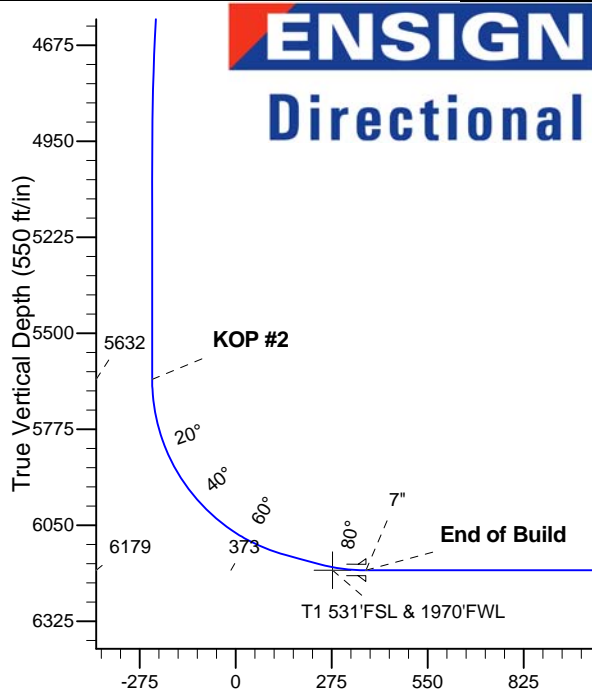
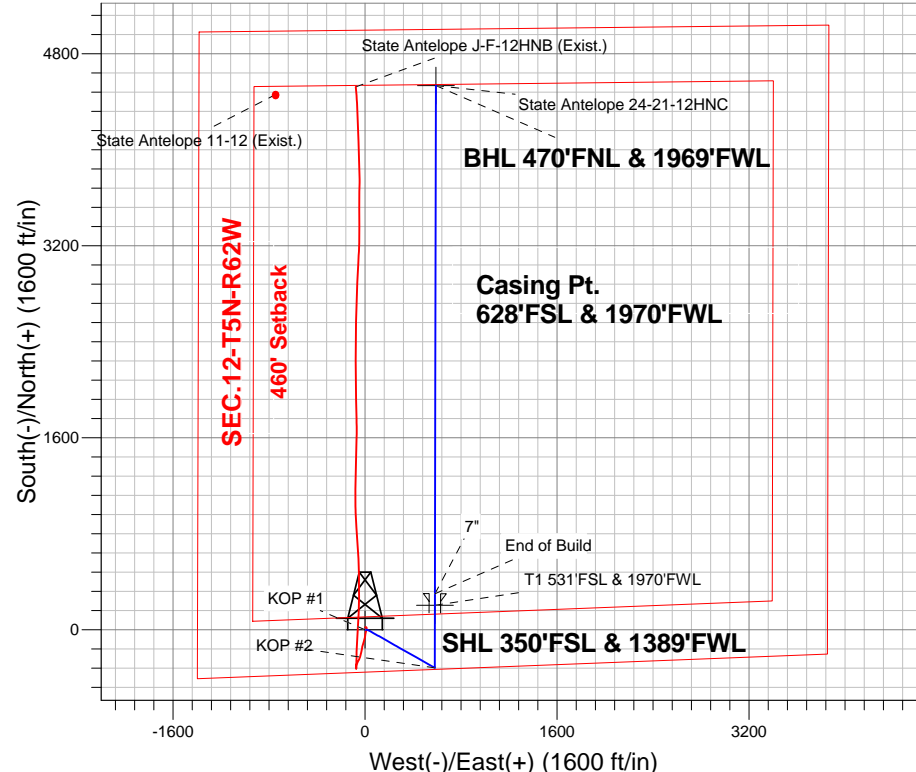
Azimuths to True North
Magnetic North: 8.27°

Magnetic Field
Strength: 52932.7snT
Dip Angle: 67.05°
Date: 11/19/2013
Model: IGRF2010

State Antelope J-12 Pad Sec.12-T5N-R62W
State Antelope 24-21-12HNC
Plan #1 (11-19-13)
10:06, November 22 2013

ANNOTATIONS

| TVD | MD | Annotation |
|--------|--------|--------------|
| 200.0 | 200.0 | KOP #1 |
| 5632.3 | 5680.9 | KOP #2 |
| 6179.0 | 6599.0 | End of Build |



SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | DLeg | TFace | VSec | Target |
|-----|---------|-------|--------|--------|--------|-------|-------|--------|--------|------------------------|
| 1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 2 | 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 450.0 | 5.00 | 90.00 | 449.7 | 0.0 | 10.9 | 2.00 | 90.00 | 1.4 | |
| 4 | 699.1 | 8.68 | 119.55 | 697.0 | -9.3 | 38.1 | 2.00 | 59.02 | -4.3 | |
| 5 | 4614.4 | 8.68 | 119.55 | 4567.4 | -300.8 | 552.4 | 0.00 | 0.00 | -227.0 | |
| 6 | 5048.6 | 0.00 | 0.00 | 5000.0 | -317.0 | 581.0 | 2.00 | 180.00 | -239.4 | |
| 7 | 5680.9 | 0.00 | 0.00 | 5632.2 | -317.0 | 581.0 | 0.00 | 0.00 | -239.4 | |
| 8 | 6362.7 | 75.00 | 0.11 | 6135.4 | 69.1 | 581.7 | 11.00 | 0.11 | 143.6 | |
| 9 | 6462.7 | 75.00 | 0.11 | 6161.3 | 165.7 | 581.9 | 0.00 | 0.00 | 239.4 | |
| 10 | 6599.0 | 90.00 | 0.11 | 6179.0 | 300.5 | 582.2 | 11.00 | 0.00 | 373.1 | |
| 11 | 10834.3 | 90.00 | 0.11 | 6179.0 | 4535.7 | 590.3 | 0.00 | 0.00 | 4574.0 | BHL 470'FNL & 1969'FWL |

Vertical Section at 7.41° (550 ft/in)



BONANZA CREEK ENERGY OPERATING

SEC.12-T5N-R62W

State Antelope J-12 Pad Sec.12-T5N-R62W

State Antelope 24-21-12HNC

Wellbore #1

Plan: Plan #1 (11-19-13)

Standard Planning Report

22 November, 2013

| | | | |
|------------------|---|-------------------------------------|---------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well State Antelope 24-21-12HNC |
| Company: | BONANZA CREEK ENERGY OPERATING | TVD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Project: | SEC.12-T5N-R62W | MD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Site: | State Antelope J-12 Pad Sec.12-T5N-R62W | North Reference: | True |
| Well: | State Antelope 24-21-12HNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (11-19-13) | | |

| | | | |
|--------------------|--|----------------------|-----------------------------|
| Project | SEC.12-T5N-R62W, Weld County, Colorado | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | Using Well Reference Point |
| Map Zone: | Colorado Northern Zone | | Using geodetic scale factor |

| Site | | | | | | State Antelope J-12 Pad Sec.12-T5N-R62W | | | | | | | | | | | |
|------------------------------|--|--|----------|--|--|---|--|--|-----------------|--|--|--------------------------|--|--|-------------|--|--|
| Site Position: | | | | | | Northing: | | | 1,394,225.16 ft | | | Latitude: | | | 40.409090 | | |
| From: | | | Lat/Long | | | Easting: | | | 3,340,906.97 ft | | | Longitude: | | | -104.275760 | | |
| Position Uncertainty: | | | 0.0 ft | | | Slot Radius: | | | " | | | Grid Convergence: | | | 0.79 ° | | |

| Well | State Antelope 24-21-12HNC | | | | | |
|----------------------|----------------------------|----------|---------------------|-----------------|---------------|-------------|
| Well Position | +N/-S | -18.2 ft | Northing: | 1,394,206.94 ft | Latitude: | 40.409040 |
| | +E/-W | 0.0 ft | Easting: | 3,340,907.22 ft | Longitude: | -104.275760 |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 4,575.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 11/19/2013 | 8.27 | 67.05 | 52,933 |

| | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| Design | Plan #1 (11-19-13) | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
| | 0.0 | 0.0 | 0.0 | 7.41 |

| Plan Sections | | | | | | | | | | |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|-------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 450.0 | 5.00 | 90.00 | 449.7 | 0.0 | 10.9 | 2.00 | 2.00 | 0.00 | 90.00 | |
| 699.1 | 8.68 | 119.55 | 697.0 | -9.3 | 38.1 | 2.00 | 1.48 | 11.86 | 59.02 | |
| 4,614.4 | 8.68 | 119.55 | 4,567.4 | -300.8 | 552.4 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5,048.6 | 0.00 | 0.00 | 5,000.0 | -317.0 | 581.0 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 5,680.9 | 0.00 | 0.00 | 5,632.2 | -317.0 | 581.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,362.7 | 75.00 | 0.11 | 6,135.4 | 69.1 | 581.7 | 11.00 | 11.00 | 0.00 | 0.11 | |
| 6,462.7 | 75.00 | 0.11 | 6,161.3 | 165.7 | 581.9 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,599.0 | 90.00 | 0.11 | 6,179.0 | 300.5 | 582.2 | 11.00 | 11.00 | 0.00 | 0.00 | |
| 10,834.3 | 90.00 | 0.11 | 6,179.0 | 4,535.7 | 590.3 | 0.00 | 0.00 | 0.00 | 0.00 | BHL 470'FNL & 196 |

| | | | |
|------------------|---|-------------------------------------|---------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well State Antelope 24-21-12HNC |
| Company: | BONANZA CREEK ENERGY OPERATING | TVD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Project: | SEC.12-T5N-R62W | MD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Site: | State Antelope J-12 Pad Sec.12-T5N-R62W | North Reference: | True |
| Well: | State Antelope 24-21-12HNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (11-19-13) | | |

| Planned Survey | | | | | | | | | |
|-----------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1.0 | 0.00 | 0.00 | 1.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| SHL 350'FSL & 1389'FWL | | | | | | | | | |
| 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 |
| KOP #1 | | | | | | | | | |
| 300.0 | 2.00 | 90.00 | 300.0 | 0.0 | 1.7 | 0.2 | 2.00 | 2.00 | 0.00 |
| 400.0 | 4.00 | 90.00 | 399.8 | 0.0 | 7.0 | 0.9 | 2.00 | 2.00 | 0.00 |
| 450.0 | 5.00 | 90.00 | 449.7 | 0.0 | 10.9 | 1.4 | 2.00 | 2.00 | 0.00 |
| 500.0 | 5.58 | 98.85 | 499.5 | -0.4 | 15.5 | 1.6 | 2.00 | 1.16 | 17.70 |
| 600.0 | 7.03 | 111.51 | 598.9 | -3.4 | 26.0 | 0.0 | 2.00 | 1.45 | 12.66 |
| 699.1 | 8.68 | 119.55 | 697.0 | -9.3 | 38.1 | -4.3 | 2.00 | 1.67 | 8.11 |
| 700.0 | 8.68 | 119.55 | 697.9 | -9.3 | 38.3 | -4.3 | 0.00 | 0.00 | 0.00 |
| 800.0 | 8.68 | 119.55 | 796.8 | -16.8 | 51.4 | -10.0 | 0.00 | 0.00 | 0.00 |
| 900.0 | 8.68 | 119.55 | 895.6 | -24.2 | 64.5 | -15.7 | 0.00 | 0.00 | 0.00 |
| 1,000.0 | 8.68 | 119.55 | 994.5 | -31.7 | 77.7 | -21.4 | 0.00 | 0.00 | 0.00 |
| 1,100.0 | 8.68 | 119.55 | 1,093.3 | -39.1 | 90.8 | -27.1 | 0.00 | 0.00 | 0.00 |
| 1,200.0 | 8.68 | 119.55 | 1,192.2 | -46.6 | 103.9 | -32.8 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 8.68 | 119.55 | 1,291.0 | -54.0 | 117.1 | -38.5 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 8.68 | 119.55 | 1,389.9 | -61.5 | 130.2 | -44.2 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 8.68 | 119.55 | 1,488.8 | -68.9 | 143.3 | -49.8 | 0.00 | 0.00 | 0.00 |
| 1,600.0 | 8.68 | 119.55 | 1,587.6 | -76.4 | 156.5 | -55.5 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 8.68 | 119.55 | 1,686.5 | -83.8 | 169.6 | -61.2 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 8.68 | 119.55 | 1,785.3 | -91.2 | 182.7 | -66.9 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 8.68 | 119.55 | 1,884.2 | -98.7 | 195.9 | -72.6 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 8.68 | 119.55 | 1,983.0 | -106.1 | 209.0 | -78.3 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 8.68 | 119.55 | 2,081.9 | -113.6 | 222.1 | -84.0 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 8.68 | 119.55 | 2,180.7 | -121.0 | 235.3 | -89.7 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 8.68 | 119.55 | 2,279.6 | -128.5 | 248.4 | -95.3 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 8.68 | 119.55 | 2,378.4 | -135.9 | 261.6 | -101.0 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 8.68 | 119.55 | 2,477.3 | -143.4 | 274.7 | -106.7 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 8.68 | 119.55 | 2,576.1 | -150.8 | 287.8 | -112.4 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 8.68 | 119.55 | 2,675.0 | -158.3 | 301.0 | -118.1 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 8.68 | 119.55 | 2,773.9 | -165.7 | 314.1 | -123.8 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 8.68 | 119.55 | 2,872.7 | -173.2 | 327.2 | -129.5 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 8.68 | 119.55 | 2,971.6 | -180.6 | 340.4 | -135.2 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 8.68 | 119.55 | 3,070.4 | -188.0 | 353.5 | -140.9 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 8.68 | 119.55 | 3,169.3 | -195.5 | 366.6 | -146.5 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 8.68 | 119.55 | 3,268.1 | -202.9 | 379.8 | -152.2 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 8.68 | 119.55 | 3,367.0 | -210.4 | 392.9 | -157.9 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 8.68 | 119.55 | 3,465.8 | -217.8 | 406.0 | -163.6 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 8.68 | 119.55 | 3,564.7 | -225.3 | 419.2 | -169.3 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 8.68 | 119.55 | 3,663.5 | -232.7 | 432.3 | -175.0 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 8.68 | 119.55 | 3,762.4 | -240.2 | 445.5 | -180.7 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 8.68 | 119.55 | 3,861.2 | -247.6 | 458.6 | -186.4 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 8.68 | 119.55 | 3,960.1 | -255.1 | 471.7 | -192.0 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 8.68 | 119.55 | 4,058.9 | -262.5 | 484.9 | -197.7 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 8.68 | 119.55 | 4,157.8 | -269.9 | 498.0 | -203.4 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 8.68 | 119.55 | 4,256.7 | -277.4 | 511.1 | -209.1 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 8.68 | 119.55 | 4,355.5 | -284.8 | 524.3 | -214.8 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 8.68 | 119.55 | 4,454.4 | -292.3 | 537.4 | -220.5 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 8.68 | 119.55 | 4,553.2 | -299.7 | 550.5 | -226.2 | 0.00 | 0.00 | 0.00 |
| 4,614.4 | 8.68 | 119.55 | 4,567.4 | -300.8 | 552.4 | -227.0 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 6.97 | 119.55 | 4,652.2 | -306.6 | 562.6 | -231.4 | 2.00 | -2.00 | 0.00 |

| | | | |
|------------------|---|-------------------------------------|---------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well State Antelope 24-21-12HNC |
| Company: | BONANZA CREEK ENERGY OPERATING | TVD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Project: | SEC.12-T5N-R62W | MD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Site: | State Antelope J-12 Pad Sec.12-T5N-R62W | North Reference: | True |
| Well: | State Antelope 24-21-12HNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (11-19-13) | | |

| Planned Survey | | | | | | | | | |
|----------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 4,800.0 | 4.97 | 119.55 | 4,751.7 | -311.7 | 571.6 | -235.3 | 2.00 | -2.00 | 0.00 |
| 4,900.0 | 2.97 | 119.55 | 4,851.5 | -315.1 | 577.6 | -237.9 | 2.00 | -2.00 | 0.00 |
| 5,000.0 | 0.97 | 119.55 | 4,951.4 | -316.8 | 580.6 | -239.2 | 2.00 | -2.00 | 0.00 |
| 5,048.6 | 0.00 | 0.00 | 5,000.0 | -317.0 | 581.0 | -239.4 | 2.00 | -2.00 | 0.00 |
| 5,100.0 | 0.00 | 0.00 | 5,051.4 | -317.0 | 581.0 | -239.4 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 0.00 | 0.00 | 5,151.4 | -317.0 | 581.0 | -239.4 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 0.00 | 0.00 | 5,251.4 | -317.0 | 581.0 | -239.4 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 0.00 | 0.00 | 5,351.4 | -317.0 | 581.0 | -239.4 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 0.00 | 0.00 | 5,451.4 | -317.0 | 581.0 | -239.4 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 0.00 | 0.00 | 5,551.4 | -317.0 | 581.0 | -239.4 | 0.00 | 0.00 | 0.00 |
| 5,680.9 | 0.00 | 0.00 | 5,632.3 | -317.0 | 581.0 | -239.4 | 0.00 | 0.00 | 0.00 |
| KOP #2 | | | | | | | | | |
| 5,700.0 | 2.11 | 0.11 | 5,651.4 | -316.6 | 581.0 | -239.0 | 11.02 | 11.02 | 0.00 |
| 5,800.0 | 13.11 | 0.11 | 5,750.4 | -303.4 | 581.0 | -225.9 | 11.00 | 11.00 | 0.00 |
| 5,900.0 | 24.11 | 0.11 | 5,845.0 | -271.6 | 581.1 | -194.3 | 11.00 | 11.00 | 0.00 |
| 6,000.0 | 35.11 | 0.11 | 5,931.8 | -222.3 | 581.2 | -145.4 | 11.00 | 11.00 | 0.00 |
| 6,100.0 | 46.11 | 0.11 | 6,007.6 | -157.3 | 581.3 | -80.9 | 11.00 | 11.00 | 0.00 |
| 6,200.0 | 57.11 | 0.11 | 6,069.6 | -79.0 | 581.5 | -3.3 | 11.00 | 11.00 | 0.00 |
| 6,300.0 | 68.11 | 0.11 | 6,115.5 | 9.6 | 581.6 | 84.6 | 11.00 | 11.00 | 0.00 |
| 6,362.7 | 75.00 | 0.11 | 6,135.4 | 69.1 | 581.7 | 143.6 | 11.00 | 11.00 | 0.00 |
| 6,400.0 | 75.00 | 0.11 | 6,145.0 | 105.1 | 581.8 | 179.3 | 0.00 | 0.00 | 0.00 |
| 6,462.7 | 75.00 | 0.11 | 6,161.3 | 165.7 | 581.9 | 239.4 | 0.00 | 0.00 | 0.00 |
| 6,500.0 | 79.11 | 0.11 | 6,169.6 | 202.0 | 582.0 | 275.4 | 11.00 | 11.00 | 0.00 |
| 6,502.9 | 79.42 | 0.11 | 6,170.2 | 204.9 | 582.0 | 278.3 | 11.00 | 11.00 | 0.00 |
| T1 531'FSL & 1970'FWL | | | | | | | | | |
| 6,599.0 | 90.00 | 0.11 | 6,179.0 | 300.4 | 582.2 | 373.0 | 11.00 | 11.00 | 0.00 |
| End of Build - 7" | | | | | | | | | |
| 6,600.0 | 90.00 | 0.11 | 6,179.0 | 301.4 | 582.2 | 374.0 | 0.46 | 0.46 | 0.00 |
| 6,700.0 | 90.00 | 0.11 | 6,179.0 | 401.4 | 582.4 | 473.2 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 90.00 | 0.11 | 6,179.0 | 501.4 | 582.6 | 572.4 | 0.00 | 0.00 | 0.00 |
| 6,900.0 | 90.00 | 0.11 | 6,179.0 | 601.4 | 582.8 | 671.6 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 90.00 | 0.11 | 6,179.0 | 701.4 | 582.9 | 770.8 | 0.00 | 0.00 | 0.00 |
| 7,100.0 | 90.00 | 0.11 | 6,179.0 | 801.4 | 583.1 | 870.0 | 0.00 | 0.00 | 0.00 |
| 7,200.0 | 90.00 | 0.11 | 6,179.0 | 901.4 | 583.3 | 969.2 | 0.00 | 0.00 | 0.00 |
| 7,300.0 | 90.00 | 0.11 | 6,179.0 | 1,001.4 | 583.5 | 1,068.4 | 0.00 | 0.00 | 0.00 |
| 7,400.0 | 90.00 | 0.11 | 6,179.0 | 1,101.4 | 583.7 | 1,167.5 | 0.00 | 0.00 | 0.00 |
| 7,500.0 | 90.00 | 0.11 | 6,179.0 | 1,201.4 | 583.9 | 1,266.7 | 0.00 | 0.00 | 0.00 |
| 7,600.0 | 90.00 | 0.11 | 6,179.0 | 1,301.4 | 584.1 | 1,365.9 | 0.00 | 0.00 | 0.00 |
| 7,700.0 | 90.00 | 0.11 | 6,179.0 | 1,401.4 | 584.3 | 1,465.1 | 0.00 | 0.00 | 0.00 |
| 7,800.0 | 90.00 | 0.11 | 6,179.0 | 1,501.4 | 584.5 | 1,564.3 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 90.00 | 0.11 | 6,179.0 | 1,601.4 | 584.7 | 1,663.5 | 0.00 | 0.00 | 0.00 |
| 8,000.0 | 90.00 | 0.11 | 6,179.0 | 1,701.4 | 584.9 | 1,762.7 | 0.00 | 0.00 | 0.00 |
| 8,100.0 | 90.00 | 0.11 | 6,179.0 | 1,801.4 | 585.1 | 1,861.9 | 0.00 | 0.00 | 0.00 |
| 8,200.0 | 90.00 | 0.11 | 6,179.0 | 1,901.4 | 585.2 | 1,961.0 | 0.00 | 0.00 | 0.00 |
| 8,300.0 | 90.00 | 0.11 | 6,179.0 | 2,001.4 | 585.4 | 2,060.2 | 0.00 | 0.00 | 0.00 |
| 8,400.0 | 90.00 | 0.11 | 6,179.0 | 2,101.4 | 585.6 | 2,159.4 | 0.00 | 0.00 | 0.00 |
| 8,500.0 | 90.00 | 0.11 | 6,179.0 | 2,201.4 | 585.8 | 2,258.6 | 0.00 | 0.00 | 0.00 |
| 8,600.0 | 90.00 | 0.11 | 6,179.0 | 2,301.4 | 586.0 | 2,357.8 | 0.00 | 0.00 | 0.00 |
| 8,700.0 | 90.00 | 0.11 | 6,179.0 | 2,401.4 | 586.2 | 2,457.0 | 0.00 | 0.00 | 0.00 |
| 8,800.0 | 90.00 | 0.11 | 6,179.0 | 2,501.4 | 586.4 | 2,556.2 | 0.00 | 0.00 | 0.00 |
| 8,900.0 | 90.00 | 0.11 | 6,179.0 | 2,601.4 | 586.6 | 2,655.4 | 0.00 | 0.00 | 0.00 |
| 9,000.0 | 90.00 | 0.11 | 6,179.0 | 2,701.4 | 586.8 | 2,754.6 | 0.00 | 0.00 | 0.00 |
| 9,100.0 | 90.00 | 0.11 | 6,179.0 | 2,801.4 | 587.0 | 2,853.7 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|---|-------------------------------------|---------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well State Antelope 24-21-12HNC |
| Company: | BONANZA CREEK ENERGY OPERATING | TVD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Project: | SEC.12-T5N-R62W | MD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Site: | State Antelope J-12 Pad Sec.12-T5N-R62W | North Reference: | True |
| Well: | State Antelope 24-21-12HNC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (11-19-13) | | |

| Planned Survey | | | | | | | | | | |
|------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 9,200.0 | 90.00 | 0.11 | 6,179.0 | 2,901.4 | 587.2 | 2,952.9 | 0.00 | 0.00 | 0.00 | |
| 9,300.0 | 90.00 | 0.11 | 6,179.0 | 3,001.4 | 587.3 | 3,052.1 | 0.00 | 0.00 | 0.00 | |
| 9,400.0 | 90.00 | 0.11 | 6,179.0 | 3,101.4 | 587.5 | 3,151.3 | 0.00 | 0.00 | 0.00 | |
| 9,500.0 | 90.00 | 0.11 | 6,179.0 | 3,201.4 | 587.7 | 3,250.5 | 0.00 | 0.00 | 0.00 | |
| 9,600.0 | 90.00 | 0.11 | 6,179.0 | 3,301.4 | 587.9 | 3,349.7 | 0.00 | 0.00 | 0.00 | |
| 9,700.0 | 90.00 | 0.11 | 6,179.0 | 3,401.4 | 588.1 | 3,448.9 | 0.00 | 0.00 | 0.00 | |
| 9,800.0 | 90.00 | 0.11 | 6,179.0 | 3,501.4 | 588.3 | 3,548.1 | 0.00 | 0.00 | 0.00 | |
| 9,900.0 | 90.00 | 0.11 | 6,179.0 | 3,601.4 | 588.5 | 3,647.2 | 0.00 | 0.00 | 0.00 | |
| 10,000.0 | 90.00 | 0.11 | 6,179.0 | 3,701.4 | 588.7 | 3,746.4 | 0.00 | 0.00 | 0.00 | |
| 10,100.0 | 90.00 | 0.11 | 6,179.0 | 3,801.4 | 588.9 | 3,845.6 | 0.00 | 0.00 | 0.00 | |
| 10,200.0 | 90.00 | 0.11 | 6,179.0 | 3,901.4 | 589.1 | 3,944.8 | 0.00 | 0.00 | 0.00 | |
| 10,300.0 | 90.00 | 0.11 | 6,179.0 | 4,001.4 | 589.3 | 4,044.0 | 0.00 | 0.00 | 0.00 | |
| 10,400.0 | 90.00 | 0.11 | 6,179.0 | 4,101.4 | 589.4 | 4,143.2 | 0.00 | 0.00 | 0.00 | |
| 10,500.0 | 90.00 | 0.11 | 6,179.0 | 4,201.4 | 589.6 | 4,242.4 | 0.00 | 0.00 | 0.00 | |
| 10,600.0 | 90.00 | 0.11 | 6,179.0 | 4,301.4 | 589.8 | 4,341.6 | 0.00 | 0.00 | 0.00 | |
| 10,700.0 | 90.00 | 0.11 | 6,179.0 | 4,401.4 | 590.0 | 4,440.8 | 0.00 | 0.00 | 0.00 | |
| 10,800.0 | 90.00 | 0.11 | 6,179.0 | 4,501.4 | 590.2 | 4,539.9 | 0.00 | 0.00 | 0.00 | |
| 10,834.3 | 90.00 | 0.11 | 6,179.0 | 4,535.7 | 590.3 | 4,574.0 | 0.00 | 0.00 | 0.00 | |
| BHL 470'FNL & 1969'FWL | | | | | | | | | | |

| Casing Points | | | | | |
|---------------------|---------------------|------|---------------------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (") | Hole Diameter (") | |
| 6,599.0 | 6,179.0 | 7" | 7 | 7-1/2 | |

| Plan Annotations | | | | | |
|---------------------|---------------------|-------------------|------------|--------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | | |
| | | +N/-S (ft) | +E/-W (ft) | Comment | |
| 200.0 | 200.0 | 0.0 | 0.0 | KOP #1 | |
| 5,680.9 | 5,632.3 | -317.0 | 581.0 | KOP #2 | |
| 6,599.0 | 6,179.0 | 300.4 | 582.2 | End of Build | |



BONANZA CREEK ENERGY OPERATING

SEC.12-T5N-R62W

State Antelope J-12 Pad Sec.12-T5N-R62W

State Antelope 24-21-12HNC

Wellbore #1

Plan #1 (11-19-13)

Anticollision Report

22 November, 2013

| | | | |
|---------------------------|---|-------------------------------------|---------------------------------|
| Company: | BONANZA CREEK ENERGY OPERATING | Local Co-ordinate Reference: | Well State Antelope 24-21-12HNC |
| Project: | SEC.12-T5N-R62W | TVD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Reference Site: | State Antelope J-12 Pad Sec.12-T5N-R62W | MD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | State Antelope 24-21-12HNC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-19-13) | Offset TVD Reference: | Offset Datum |

| | | | | | | | | | | | | | |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|---------------------------|---------|
| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
| State Antelope J-12 Pad Sec.12-T5N-R62W - State Antelope E-12-1MRLNC - Wellbore #1 - Plan #1 (11 | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Survey Program: 0-MWD | | | | | | | | | | | | | |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning |
| 2,000.0 | 1,983.0 | 1,855.8 | 1,804.2 | 6.2 | 8.4 | 148.24 | -110.9 | -358.4 | 594.9 | 585.1 | 9.88 | 60.227 | |
| 2,100.0 | 2,081.9 | 1,946.4 | 1,890.4 | 6.6 | 9.0 | 148.26 | -118.4 | -385.5 | 637.1 | 626.7 | 10.44 | 61.012 | |
| 2,200.0 | 2,180.7 | 2,037.1 | 1,976.6 | 7.0 | 9.6 | 148.29 | -126.0 | -412.6 | 679.3 | 668.3 | 11.01 | 61.706 | |
| 2,300.0 | 2,279.6 | 2,127.8 | 2,062.8 | 7.3 | 10.2 | 148.31 | -133.5 | -439.7 | 721.5 | 709.9 | 11.58 | 62.324 | |
| 2,400.0 | 2,378.4 | 2,218.4 | 2,149.0 | 7.7 | 10.8 | 148.33 | -141.0 | -466.8 | 763.7 | 751.5 | 12.15 | 62.877 | |
| 2,500.0 | 2,477.3 | 2,309.1 | 2,235.2 | 8.1 | 11.4 | 148.34 | -148.5 | -493.9 | 805.8 | 793.1 | 12.72 | 63.375 | |
| 2,600.0 | 2,576.1 | 2,399.8 | 2,321.4 | 8.5 | 12.0 | 148.36 | -156.0 | -521.0 | 848.0 | 834.7 | 13.29 | 63.825 | |
| 2,700.0 | 2,675.0 | 2,490.4 | 2,407.6 | 8.8 | 12.6 | 148.37 | -163.5 | -548.1 | 890.2 | 876.4 | 13.86 | 64.233 | |
| 2,800.0 | 2,773.9 | 2,581.1 | 2,493.8 | 9.2 | 13.2 | 148.38 | -171.0 | -575.2 | 932.4 | 918.0 | 14.43 | 64.606 | |
| 2,900.0 | 2,872.7 | 2,671.8 | 2,580.0 | 9.6 | 13.8 | 148.39 | -178.6 | -602.3 | 974.6 | 959.6 | 15.01 | 64.947 | |

| | | | |
|---------------------------|---|-------------------------------------|---------------------------------|
| Company: | BONANZA CREEK ENERGY OPERATING | Local Co-ordinate Reference: | Well State Antelope 24-21-12HNC |
| Project: | SEC.12-T5N-R62W | TVD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Reference Site: | State Antelope J-12 Pad Sec.12-T5N-R62W | MD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | State Antelope 24-21-12HNC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-19-13) | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|-------------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program: 490-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | | |
| 0.0 | 0.0 | 3.0 | 3.0 | 0.0 | 0.0 | 0.00 | 18.2 | 0.0 | 18.2 | 18.2 | 0.00 | 5,079.295 CC | | |
| 100.0 | 100.0 | 103.0 | 102.9 | 0.1 | 0.1 | 0.70 | 18.3 | 0.2 | 18.3 | 18.1 | 0.23 | 80.186 ES | | |
| 200.0 | 200.0 | 202.9 | 202.9 | 0.3 | 0.2 | 2.68 | 18.7 | 0.9 | 18.8 | 18.2 | 0.57 | 33.123 | | |
| 300.0 | 300.0 | 302.8 | 302.8 | 0.6 | 0.3 | -89.37 | 19.4 | 2.0 | 19.4 | 18.5 | 0.90 | 21.617 | | |
| 400.0 | 399.8 | 402.7 | 402.7 | 0.8 | 0.5 | -99.80 | 20.3 | 3.5 | 20.6 | 19.4 | 1.23 | 16.698 | | |
| 500.0 | 499.5 | 502.5 | 502.4 | 1.0 | 0.6 | -123.55 | 21.5 | 5.4 | 24.1 | 22.5 | 1.61 | 14.971 | | |
| 600.0 | 598.9 | 602.2 | 602.1 | 1.3 | 0.8 | -147.32 | 22.3 | 7.3 | 31.7 | 29.7 | 2.06 | 15.423 | | |
| 700.0 | 697.9 | 701.7 | 701.6 | 1.6 | 1.0 | -162.20 | 22.2 | 9.0 | 43.0 | 40.5 | 2.49 | 17.288 | | |
| 800.0 | 796.8 | 801.0 | 800.9 | 1.9 | 1.2 | -166.99 | 20.8 | 10.2 | 55.8 | 52.9 | 2.90 | 19.210 | | |
| 900.0 | 895.6 | 900.4 | 900.3 | 2.3 | 1.4 | -170.89 | 18.4 | 11.1 | 68.4 | 65.0 | 3.33 | 20.521 | | |
| 1,000.0 | 994.5 | 999.8 | 999.6 | 2.6 | 1.6 | -173.65 | 15.6 | 12.2 | 80.7 | 77.0 | 3.77 | 21.432 | | |
| 1,100.0 | 1,093.3 | 1,098.4 | 1,098.1 | 3.0 | 1.8 | -176.03 | 12.4 | 12.8 | 93.5 | 89.3 | 4.20 | 22.242 | | |
| 1,200.0 | 1,192.2 | 1,197.4 | 1,197.1 | 3.3 | 2.0 | -178.27 | 8.8 | 12.7 | 106.8 | 102.2 | 4.65 | 22.978 | | |
| 1,300.0 | 1,291.0 | 1,296.6 | 1,296.2 | 3.7 | 2.3 | 179.81 | 4.9 | 12.3 | 120.2 | 115.1 | 5.10 | 23.558 | | |
| 1,400.0 | 1,389.9 | 1,395.4 | 1,394.9 | 4.1 | 2.5 | 178.22 | 0.7 | 12.1 | 133.5 | 127.9 | 5.56 | 24.017 | | |
| 1,500.0 | 1,488.8 | 1,493.2 | 1,492.6 | 4.4 | 2.7 | 176.66 | -3.6 | 10.9 | 147.6 | 141.6 | 6.02 | 24.535 | | |
| 1,600.0 | 1,587.6 | 1,592.2 | 1,591.5 | 4.8 | 2.9 | 175.46 | -7.7 | 9.6 | 162.1 | 155.6 | 6.47 | 25.051 | | |
| 1,700.0 | 1,686.5 | 1,691.5 | 1,690.7 | 5.1 | 3.1 | 174.48 | -11.8 | 8.4 | 176.5 | 169.6 | 6.93 | 25.459 | | |
| 1,800.0 | 1,785.3 | 1,791.3 | 1,790.4 | 5.5 | 3.3 | 173.37 | -16.8 | 7.2 | 190.7 | 183.3 | 7.41 | 25.726 | | |
| 1,900.0 | 1,884.2 | 1,890.7 | 1,889.6 | 5.9 | 3.6 | 172.19 | -22.7 | 6.1 | 204.5 | 196.6 | 7.90 | 25.870 | | |
| 2,000.0 | 1,983.0 | 1,989.6 | 1,988.3 | 6.2 | 3.8 | 170.85 | -29.7 | 4.5 | 218.4 | 210.0 | 8.40 | 25.989 | | |
| 2,100.0 | 2,081.9 | 2,090.7 | 2,089.1 | 6.6 | 4.1 | 169.52 | -37.5 | 3.2 | 231.8 | 222.9 | 8.91 | 26.010 | | |
| 2,200.0 | 2,180.7 | 2,190.6 | 2,188.6 | 7.0 | 4.3 | 168.24 | -45.9 | 2.4 | 244.8 | 235.3 | 9.43 | 25.947 | | |
| 2,300.0 | 2,279.6 | 2,288.4 | 2,286.0 | 7.3 | 4.6 | 166.92 | -54.9 | 1.4 | 257.8 | 247.8 | 9.96 | 25.876 | | |
| 2,400.0 | 2,378.4 | 2,385.5 | 2,382.5 | 7.7 | 4.8 | 165.54 | -64.5 | -0.5 | 271.6 | 261.1 | 10.50 | 25.878 | | |
| 2,500.0 | 2,477.3 | 2,483.0 | 2,479.5 | 8.1 | 5.1 | 164.22 | -74.4 | -3.1 | 286.2 | 275.2 | 11.04 | 25.926 | | |
| 2,600.0 | 2,576.1 | 2,581.7 | 2,577.7 | 8.5 | 5.3 | 162.94 | -84.7 | -5.9 | 301.1 | 289.5 | 11.60 | 25.959 | | |
| 2,700.0 | 2,675.0 | 2,677.8 | 2,673.1 | 8.8 | 5.6 | 161.72 | -95.1 | -9.1 | 316.5 | 304.3 | 12.16 | 26.018 | | |
| 2,800.0 | 2,773.9 | 2,777.7 | 2,772.4 | 9.2 | 5.9 | 160.58 | -105.9 | -12.9 | 332.4 | 319.7 | 12.73 | 26.123 | | |
| 2,900.0 | 2,872.7 | 2,879.3 | 2,873.5 | 9.6 | 6.1 | 159.79 | -115.4 | -15.5 | 347.5 | 334.3 | 13.27 | 26.199 | | |
| 3,000.0 | 2,971.6 | 2,978.7 | 2,972.6 | 9.9 | 6.3 | 159.32 | -123.3 | -17.3 | 362.3 | 348.5 | 13.77 | 26.300 | | |
| 3,100.0 | 3,070.4 | 3,075.4 | 3,069.0 | 10.3 | 6.5 | 159.06 | -130.0 | -19.2 | 377.2 | 363.0 | 14.27 | 26.439 | | |
| 3,200.0 | 3,169.3 | 3,175.1 | 3,168.5 | 10.7 | 6.8 | 158.85 | -136.5 | -21.4 | 392.5 | 377.7 | 14.78 | 26.557 | | |
| 3,300.0 | 3,268.1 | 3,274.9 | 3,268.0 | 11.0 | 7.0 | 158.54 | -143.9 | -23.3 | 407.4 | 392.1 | 15.31 | 26.604 | | |
| 3,400.0 | 3,367.0 | 3,374.4 | 3,367.0 | 11.4 | 7.3 | 157.98 | -153.2 | -25.4 | 422.2 | 406.3 | 15.88 | 26.591 | | |
| 3,500.0 | 3,465.8 | 3,474.9 | 3,466.8 | 11.8 | 7.6 | 157.18 | -164.8 | -27.5 | 436.7 | 420.3 | 16.48 | 26.508 | | |
| 3,600.0 | 3,564.7 | 3,574.2 | 3,565.3 | 12.1 | 7.9 | 156.28 | -177.4 | -29.4 | 451.1 | 434.0 | 17.09 | 26.393 | | |
| 3,700.0 | 3,663.5 | 3,669.6 | 3,659.9 | 12.5 | 8.2 | 155.47 | -189.5 | -31.4 | 465.8 | 448.1 | 17.69 | 26.336 | | |
| 3,800.0 | 3,762.4 | 3,764.3 | 3,753.9 | 12.9 | 8.4 | 154.79 | -200.9 | -34.3 | 481.5 | 463.2 | 18.26 | 26.366 | | |
| 3,900.0 | 3,861.2 | 3,861.1 | 3,850.1 | 13.2 | 8.7 | 154.27 | -211.3 | -37.6 | 497.7 | 478.9 | 18.82 | 26.450 | | |
| 4,000.0 | 3,960.1 | 3,966.0 | 3,954.4 | 13.6 | 9.0 | 153.80 | -222.2 | -40.7 | 513.6 | 494.2 | 19.40 | 26.479 | | |
| 4,100.0 | 4,058.9 | 4,060.0 | 4,047.9 | 14.0 | 9.2 | 153.38 | -232.1 | -43.2 | 529.1 | 509.2 | 19.95 | 26.521 | | |
| 4,200.0 | 4,157.8 | 4,153.2 | 4,140.4 | 14.4 | 9.5 | 153.02 | -241.6 | -46.8 | 545.9 | 525.4 | 20.50 | 26.628 | | |
| 4,300.0 | 4,256.7 | 4,248.5 | 4,235.2 | 14.7 | 9.7 | 152.73 | -250.7 | -51.1 | 563.4 | 542.3 | 21.05 | 26.765 | | |
| 4,400.0 | 4,355.5 | 4,345.5 | 4,331.6 | 15.1 | 10.0 | 152.45 | -260.0 | -55.8 | 581.3 | 559.7 | 21.61 | 26.900 | | |
| 4,500.0 | 4,454.4 | 4,442.8 | 4,428.3 | 15.5 | 10.3 | 152.18 | -269.4 | -60.8 | 599.4 | 577.2 | 22.16 | 27.042 | | |
| 4,600.0 | 4,553.2 | 4,546.9 | 4,531.9 | 15.8 | 10.5 | 151.96 | -278.8 | -66.0 | 617.4 | 594.6 | 22.73 | 27.161 | | |
| 4,700.0 | 4,652.2 | 4,655.7 | 4,640.1 | 16.1 | 10.8 | 151.78 | -289.1 | -69.6 | 632.6 | 609.3 | 23.29 | 27.159 | | |
| 4,800.0 | 4,751.7 | 4,759.8 | 4,743.8 | 16.4 | 11.1 | 151.53 | -298.2 | -71.9 | 643.8 | 620.0 | 23.77 | 27.079 | | |
| 4,900.0 | 4,851.5 | 4,867.1 | 4,850.9 | 16.5 | 11.3 | 151.31 | -304.9 | -73.3 | 651.0 | 626.8 | 24.21 | 26.892 | | |
| 5,000.0 | 4,951.4 | 4,968.1 | 4,951.9 | 16.7 | 11.5 | 151.17 | -308.6 | -73.8 | 654.5 | 629.9 | 24.57 | 26.642 | | |
| 5,100.0 | 5,051.4 | 5,070.2 | 5,054.0 | 16.8 | 11.7 | -89.50 | -311.2 | -74.1 | 655.1 | 630.1 | 24.95 | 26.257 | | |

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

| | | | |
|---------------------------|---|-------------------------------------|---------------------------------|
| Company: | BONANZA CREEK ENERGY OPERATING | Local Co-ordinate Reference: | Well State Antelope 24-21-12HNC |
| Project: | SEC.12-T5N-R62W | TVD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Reference Site: | State Antelope J-12 Pad Sec.12-T5N-R62W | MD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | State Antelope 24-21-12HNC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-19-13) | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|-------------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program: 490-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | | |
| 5,200.0 | 5,151.4 | 5,171.0 | 5,154.6 | 16.9 | 11.9 | -89.85 | -315.3 | -74.0 | 655.0 | 629.7 | 25.34 | 25.848 | | |
| 5,211.6 | 5,163.0 | 5,182.4 | 5,166.0 | 17.0 | 12.0 | -89.89 | -315.7 | -74.0 | 655.0 | 629.6 | 25.39 | 25.802 | | |
| 5,300.0 | 5,251.4 | 5,270.1 | 5,253.6 | 17.1 | 12.2 | -90.16 | -318.8 | -74.1 | 655.1 | 629.4 | 25.73 | 25.461 | | |
| 5,400.0 | 5,351.4 | 5,373.5 | 5,357.0 | 17.2 | 12.4 | -90.42 | -321.8 | -73.9 | 655.0 | 628.9 | 26.11 | 25.081 | | |
| 5,500.0 | 5,451.4 | 5,474.6 | 5,458.1 | 17.3 | 12.6 | -90.62 | -324.1 | -73.4 | 654.5 | 628.0 | 26.49 | 24.710 | | |
| 5,600.0 | 5,551.4 | 5,573.7 | 5,557.2 | 17.5 | 12.7 | -90.47 | -322.4 | -72.9 | 653.9 | 627.1 | 26.80 | 24.399 | | |
| 5,625.8 | 5,577.2 | 5,596.9 | 5,580.2 | 17.5 | 12.7 | -90.41 | -320.3 | -72.9 | 653.9 | 627.0 | 26.85 | 24.354 | | |
| 5,700.0 | 5,651.4 | 5,664.5 | 5,646.9 | 17.6 | 12.8 | -89.41 | -309.0 | -73.3 | 654.4 | 627.4 | 26.94 | 24.293 | | |
| 5,800.0 | 5,750.4 | 5,778.0 | 5,754.7 | 17.7 | 12.7 | -87.61 | -273.9 | -72.3 | 654.0 | 627.2 | 26.85 | 24.360 | | |
| 5,892.9 | 5,838.4 | 5,858.1 | 5,825.9 | 17.7 | 12.6 | -86.58 | -237.4 | -71.1 | 653.4 | 626.8 | 26.69 | 24.486 | | |
| 5,900.0 | 5,845.0 | 5,863.9 | 5,830.8 | 17.7 | 12.6 | -86.51 | -234.4 | -71.1 | 653.4 | 626.8 | 26.67 | 24.498 | | |
| 6,000.0 | 5,931.8 | 5,959.5 | 5,907.3 | 17.6 | 12.5 | -85.47 | -177.2 | -70.3 | 653.6 | 627.2 | 26.44 | 24.726 | | |
| 6,100.0 | 6,007.6 | 6,076.0 | 5,984.3 | 17.5 | 12.4 | -84.31 | -90.2 | -66.3 | 651.6 | 625.3 | 26.25 | 24.827 | | |
| 6,200.0 | 6,069.6 | 6,163.4 | 6,027.8 | 17.4 | 12.4 | -83.62 | -14.8 | -60.9 | 647.1 | 620.8 | 26.31 | 24.590 | | |
| 6,300.0 | 6,115.5 | 6,249.0 | 6,059.2 | 17.2 | 12.6 | -83.28 | 64.6 | -55.9 | 642.7 | 616.0 | 26.64 | 24.126 | | |
| 6,400.0 | 6,145.0 | 6,329.3 | 6,083.5 | 17.2 | 12.9 | -83.59 | 141.1 | -53.0 | 639.1 | 611.7 | 27.36 | 23.361 | | |
| 6,500.0 | 6,169.6 | 6,407.7 | 6,096.9 | 17.3 | 13.4 | -83.06 | 218.2 | -51.3 | 638.0 | 609.6 | 28.38 | 22.479 | | |
| 6,508.1 | 6,171.1 | 6,414.2 | 6,097.6 | 17.3 | 13.4 | -83.01 | 224.7 | -51.2 | 638.0 | 609.5 | 28.49 | 22.397 | | |
| 6,600.0 | 6,179.0 | 6,493.2 | 6,101.4 | 17.6 | 14.0 | -82.74 | 303.6 | -50.7 | 638.0 | 608.3 | 29.77 | 21.432 | | |
| 6,607.8 | 6,179.0 | 6,500.0 | 6,101.4 | 17.7 | 14.1 | -82.74 | 310.4 | -50.7 | 638.0 | 608.1 | 29.90 | 21.340 | | |
| 6,700.0 | 6,179.0 | 6,585.8 | 6,100.4 | 18.4 | 14.7 | -82.66 | 396.2 | -50.9 | 638.5 | 607.1 | 31.36 | 20.360 | | |
| 6,800.0 | 6,179.0 | 6,680.7 | 6,098.6 | 19.4 | 15.7 | -82.51 | 491.1 | -51.4 | 639.5 | 606.1 | 33.38 | 19.157 | | |
| 6,900.0 | 6,179.0 | 6,759.4 | 6,097.1 | 20.6 | 16.5 | -82.41 | 569.7 | -54.1 | 643.2 | 607.8 | 35.40 | 18.168 | | |
| 7,000.0 | 6,179.0 | 6,844.4 | 6,097.0 | 21.8 | 17.4 | -82.46 | 654.6 | -58.9 | 649.1 | 611.5 | 37.66 | 17.236 | | |
| 7,100.0 | 6,179.0 | 6,945.8 | 6,098.0 | 23.2 | 18.7 | -82.63 | 755.7 | -65.9 | 656.1 | 615.7 | 40.38 | 16.249 | | |
| 7,200.0 | 6,179.0 | 7,063.3 | 6,097.9 | 24.7 | 20.3 | -82.69 | 873.0 | -72.7 | 662.0 | 618.6 | 43.41 | 15.251 | | |
| 7,300.0 | 6,179.0 | 7,157.4 | 6,099.0 | 26.2 | 21.7 | -82.84 | 967.0 | -77.7 | 667.3 | 620.9 | 46.36 | 14.394 | | |
| 7,400.0 | 6,179.0 | 7,290.2 | 6,098.0 | 27.7 | 23.7 | -82.79 | 1,099.7 | -80.4 | 669.4 | 619.5 | 49.92 | 13.410 | | |
| 7,500.0 | 6,179.0 | 7,397.5 | 6,097.2 | 29.3 | 25.3 | -82.71 | 1,206.9 | -79.1 | 668.4 | 615.3 | 53.15 | 12.576 | | |
| 7,600.0 | 6,179.0 | 7,504.0 | 6,096.5 | 31.0 | 26.9 | -82.64 | 1,313.5 | -77.3 | 667.0 | 610.7 | 56.35 | 11.836 | | |
| 7,700.0 | 6,179.0 | 7,615.4 | 6,096.4 | 32.6 | 28.7 | -82.60 | 1,424.8 | -75.4 | 665.6 | 605.8 | 59.85 | 11.121 | | |
| 7,800.0 | 6,179.0 | 7,716.3 | 6,095.9 | 34.3 | 30.2 | -82.52 | 1,525.7 | -71.5 | 662.0 | 599.0 | 63.08 | 10.495 | | |
| 7,900.0 | 6,179.0 | 7,803.5 | 6,098.3 | 36.1 | 31.6 | -82.71 | 1,612.7 | -69.4 | 659.5 | 593.3 | 66.23 | 9.958 | | |
| 7,948.9 | 6,179.0 | 7,842.3 | 6,099.3 | 36.9 | 32.3 | -82.79 | 1,651.5 | -69.2 | 659.1 | 591.4 | 67.74 | 9.730 | | |
| 8,000.0 | 6,179.0 | 7,885.0 | 6,100.3 | 37.8 | 33.0 | -82.88 | 1,694.3 | -69.5 | 659.5 | 590.1 | 69.36 | 9.509 | | |
| 8,100.0 | 6,179.0 | 7,986.1 | 6,101.2 | 39.5 | 34.7 | -82.98 | 1,795.3 | -71.1 | 661.1 | 588.2 | 72.87 | 9.073 | | |
| 8,200.0 | 6,179.0 | 8,078.1 | 6,098.3 | 41.3 | 36.3 | -82.74 | 1,887.3 | -72.3 | 663.0 | 586.8 | 76.19 | 8.702 | | |
| 8,300.0 | 6,179.0 | 8,170.0 | 6,097.2 | 43.1 | 37.8 | -82.67 | 1,979.1 | -74.4 | 665.7 | 586.2 | 79.47 | 8.377 | | |
| 8,400.0 | 6,179.0 | 8,285.9 | 6,096.6 | 44.9 | 39.8 | -82.67 | 2,095.0 | -77.7 | 668.8 | 585.6 | 83.18 | 8.040 | | |
| 8,500.0 | 6,179.0 | 8,393.0 | 6,097.6 | 46.7 | 41.5 | -82.74 | 2,202.1 | -76.8 | 667.9 | 581.2 | 86.73 | 7.702 | | |
| 8,503.8 | 6,179.0 | 8,398.6 | 6,097.8 | 46.7 | 41.6 | -82.76 | 2,207.6 | -76.8 | 667.9 | 581.0 | 86.89 | 7.687 | | |
| 8,600.0 | 6,179.0 | 8,488.9 | 6,100.4 | 48.5 | 43.2 | -82.99 | 2,297.9 | -77.5 | 668.5 | 578.3 | 90.25 | 7.407 | | |
| 8,700.0 | 6,179.0 | 8,584.5 | 6,101.9 | 50.3 | 44.9 | -83.12 | 2,393.5 | -77.8 | 668.9 | 575.1 | 93.76 | 7.134 | | |
| 8,800.0 | 6,179.0 | 8,711.4 | 6,101.3 | 52.1 | 47.1 | -83.06 | 2,520.4 | -76.5 | 668.0 | 570.2 | 97.77 | 6.833 | | |
| 8,900.0 | 6,179.0 | 8,817.6 | 6,101.4 | 53.9 | 48.8 | -83.03 | 2,626.5 | -72.7 | 664.7 | 563.3 | 101.36 | 6.558 | | |
| 9,000.0 | 6,179.0 | 8,909.7 | 6,099.8 | 55.8 | 50.5 | -82.87 | 2,718.5 | -69.6 | 661.8 | 557.0 | 104.80 | 6.314 | | |
| 9,100.0 | 6,179.0 | 9,017.1 | 6,098.8 | 57.6 | 52.3 | -82.75 | 2,825.9 | -66.5 | 659.2 | 550.8 | 108.42 | 6.080 | | |
| 9,200.0 | 6,179.0 | 9,121.3 | 6,100.4 | 59.5 | 54.1 | -82.84 | 2,929.9 | -62.3 | 655.1 | 543.1 | 112.06 | 5.846 | | |
| 9,300.0 | 6,179.0 | 9,228.5 | 6,098.4 | 61.3 | 55.9 | -82.60 | 3,037.0 | -56.5 | 650.2 | 534.5 | 115.73 | 5.618 | | |
| 9,400.0 | 6,179.0 | 9,312.0 | 6,096.1 | 63.2 | 57.4 | -82.36 | 3,120.4 | -52.7 | 646.2 | 527.3 | 118.96 | 5.432 | | |
| 9,500.0 | 6,179.0 | 9,403.7 | 6,091.3 | 65.0 | 59.0 | -81.90 | 3,211.9 | -50.0 | 644.3 | 522.0 | 122.27 | 5.269 | | |
| 9,600.0 | 6,179.0 | 9,503.0 | 6,088.0 | 66.9 | 60.7 | -81.58 | 3,311.1 | -47.2 | 642.1 | 516.4 | 125.70 | 5.108 | | |

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

| | | | |
|---------------------------|---|-------------------------------------|---------------------------------|
| Company: | BONANZA CREEK ENERGY OPERATING | Local Co-ordinate Reference: | Well State Antelope 24-21-12HNC |
| Project: | SEC.12-T5N-R62W | TVD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Reference Site: | State Antelope J-12 Pad Sec.12-T5N-R62W | MD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | State Antelope 24-21-12HNC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-19-13) | Offset TVD Reference: | Offset Datum |

| Offset Design | | State Antelope J-12 Pad Sec.12-T5N-R62W - State Antelope J-F-12HNB (Exist.) - Wellbore #1 - Wellbo | | | | | | | | | | Offset Site Error: | | 0.0 ft | | |
|-------------------------|------------------------|--|------------------------|-------------------|----------------|--------------------------|---|---------------|-------------------------|--------------------------|----------------------------|--------------------|--|--------------------|--|--------|
| Survey Program: 490-MWD | | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | | | | |
| 9,640.5 | 6,179.0 | 9,535.0 | 6,088.3 | 67.6 | 61.2 | -81.61 | 3,343.1 | -46.9 | 641.8 | 514.8 | 127.00 | 5.053 | | | | |
| 9,700.0 | 6,179.0 | 9,587.2 | 6,089.3 | 68.8 | 62.1 | -81.70 | 3,395.2 | -47.3 | 642.1 | 513.1 | 129.05 | 4.976 | | | | |
| 9,800.0 | 6,179.0 | 9,683.5 | 6,089.7 | 70.6 | 63.9 | -81.76 | 3,491.6 | -48.4 | 643.4 | 510.8 | 132.65 | 4.851 | | | | |
| 9,900.0 | 6,179.0 | 9,812.9 | 6,092.0 | 72.5 | 66.1 | -81.94 | 3,621.0 | -47.3 | 642.5 | 505.7 | 136.78 | 4.697 | | | | |
| 10,000.0 | 6,179.0 | 9,904.9 | 6,093.2 | 74.4 | 67.7 | -82.04 | 3,712.9 | -45.8 | 640.8 | 500.5 | 140.30 | 4.567 | | | | |
| 10,059.8 | 6,179.0 | 9,953.9 | 6,093.4 | 75.5 | 68.6 | -82.04 | 3,761.9 | -45.2 | 640.1 | 497.8 | 142.28 | 4.499 | | | | |
| 10,100.0 | 6,179.0 | 9,986.2 | 6,093.8 | 76.2 | 69.2 | -82.08 | 3,794.2 | -45.4 | 640.4 | 496.8 | 143.60 | 4.460 | | | | |
| 10,200.0 | 6,179.0 | 10,073.8 | 6,096.1 | 78.1 | 70.7 | -82.32 | 3,881.7 | -48.0 | 643.2 | 496.1 | 147.07 | 4.373 | | | | |
| 10,300.0 | 6,179.0 | 10,169.0 | 6,099.4 | 80.0 | 72.4 | -82.66 | 3,976.8 | -52.0 | 647.0 | 496.3 | 150.71 | 4.293 | | | | |
| 10,400.0 | 6,179.0 | 10,273.1 | 6,099.4 | 81.9 | 74.3 | -82.70 | 4,080.8 | -55.7 | 650.7 | 496.3 | 154.48 | 4.212 | | | | |
| 10,500.0 | 6,179.0 | 10,374.4 | 6,097.7 | 83.8 | 76.1 | -82.59 | 4,182.1 | -58.9 | 654.3 | 496.1 | 158.13 | 4.137 | | | | |
| 10,600.0 | 6,179.0 | 10,474.6 | 6,098.2 | 85.7 | 77.8 | -82.67 | 4,282.2 | -61.6 | 657.1 | 495.3 | 161.75 | 4.062 | | | | |
| 10,700.0 | 6,179.0 | 10,560.0 | 6,100.1 | 87.5 | 79.3 | -82.88 | 4,367.4 | -65.5 | 661.5 | 496.3 | 165.21 | 4.004 | | | | |
| 10,800.0 | 6,179.0 | 10,647.8 | 6,102.7 | 89.4 | 80.9 | -83.16 | 4,455.0 | -71.3 | 667.9 | 499.1 | 168.76 | 3.958 | | | | |
| 10,834.3 | 6,179.0 | 10,683.4 | 6,103.4 | 90.0 | 81.6 | -83.25 | 4,490.5 | -73.8 | 670.2 | 500.3 | 169.95 | 3.944 SF | | | | |

Company: BONANZA CREEK ENERGY OPERATING
Project: SEC.12-T5N-R62W
Reference Site: State Antelope J-12 Pad Sec.12-T5N-R62W
Site Error: 0.0ft
Reference Well: State Antelope 24-21-12HNC
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (11-19-13)

Local Co-ordinate Reference: Well State Antelope 24-21-12HNC
TVD Reference: WELL @ 4588.0ft (RKB - 13')
MD Reference: WELL @ 4588.0ft (RKB - 13')
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

Reference Depths are relative to WELL @ 4588.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: State Antelope 24-21-12HNC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.79°



| | | | |
|---------------------------|---|-------------------------------------|---------------------------------|
| Company: | BONANZA CREEK ENERGY OPERATING | Local Co-ordinate Reference: | Well State Antelope 24-21-12HNC |
| Project: | SEC.12-T5N-R62W | TVD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Reference Site: | State Antelope J-12 Pad Sec.12-T5N-R62W | MD Reference: | WELL @ 4588.0ft (RKB - 13') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | State Antelope 24-21-12HNC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-19-13) | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to WELL @ 4588.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: State Antelope 24-21-12HNC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.79°

