

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

NW NW SEC. 16 T5N R61W 6th P.M.

STATE PRONGHORN 11-14-16HNB

JOB #2009-346

08 July, 2014

Survey: FINAL SURVEYS





Project: WELD COUNTY, COLORADO (NAD 83)
Site: NW NW SEC. 16 T5N R61W 6th P.M.
Well: STATE PRONGHORN 11-14-16HNB
Wellbore: JOB #2009-346
Design: FINAL SURVEYS

ANNOTATIONS

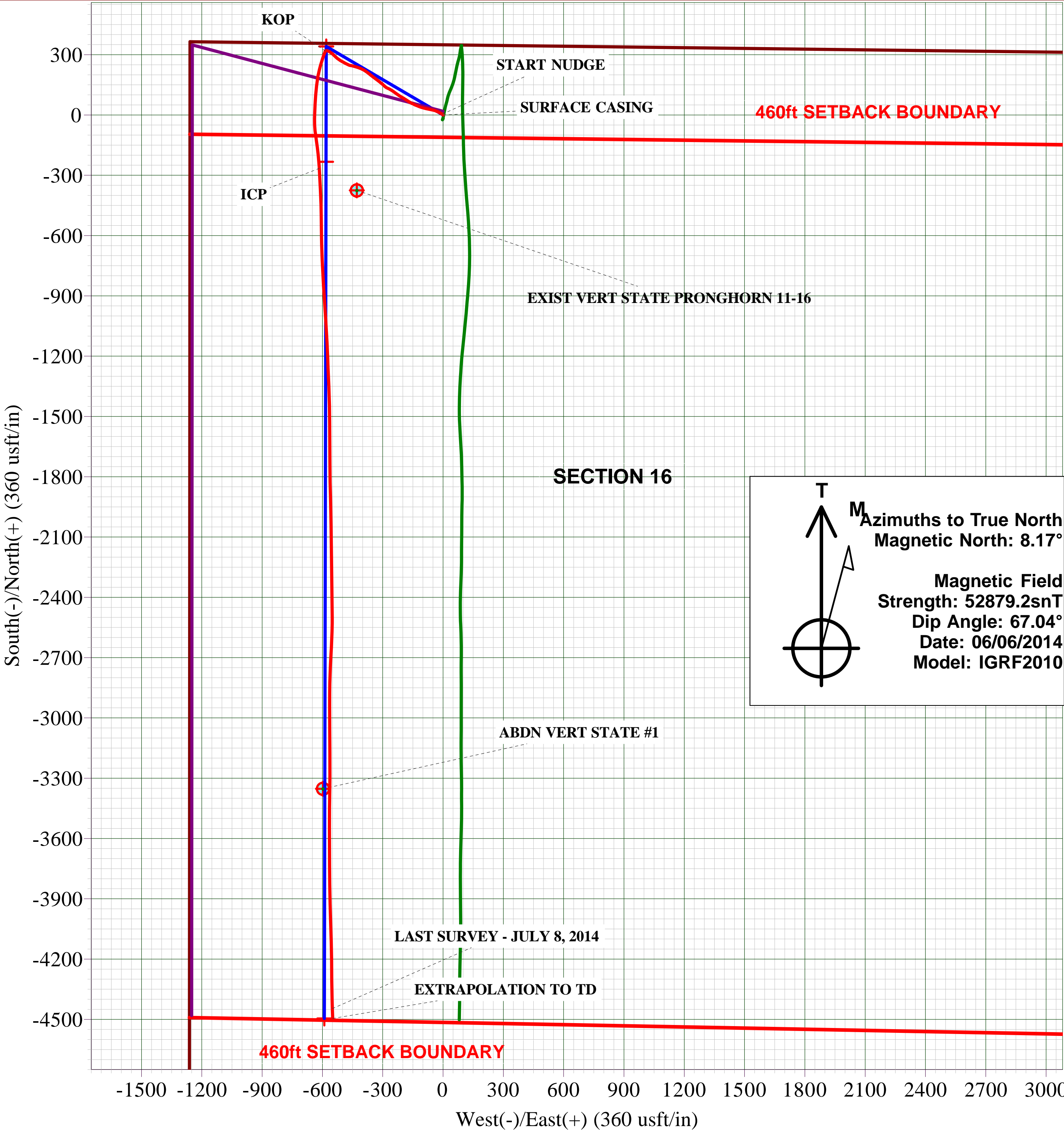
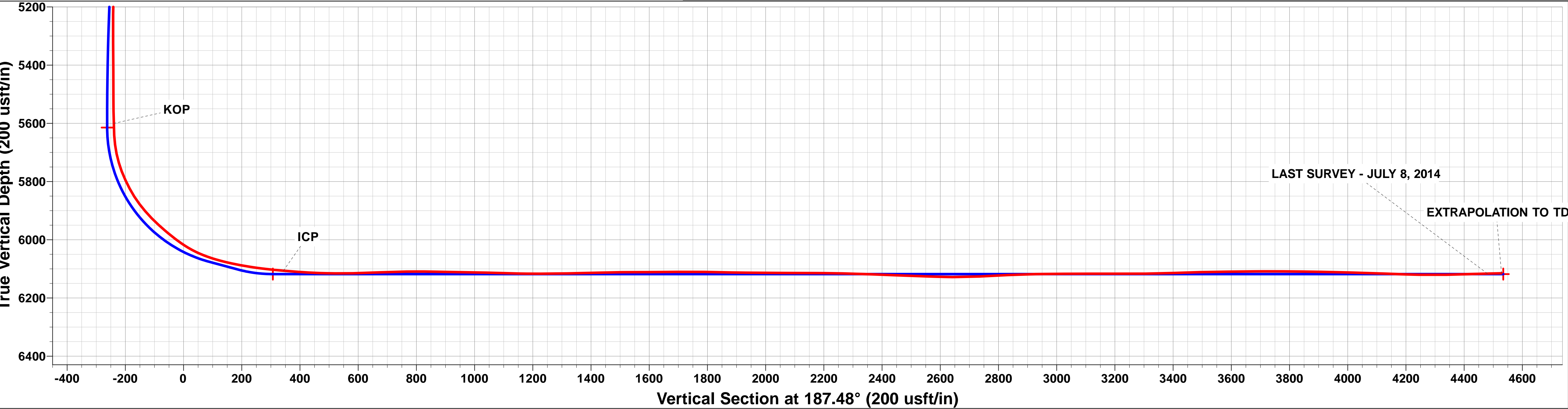
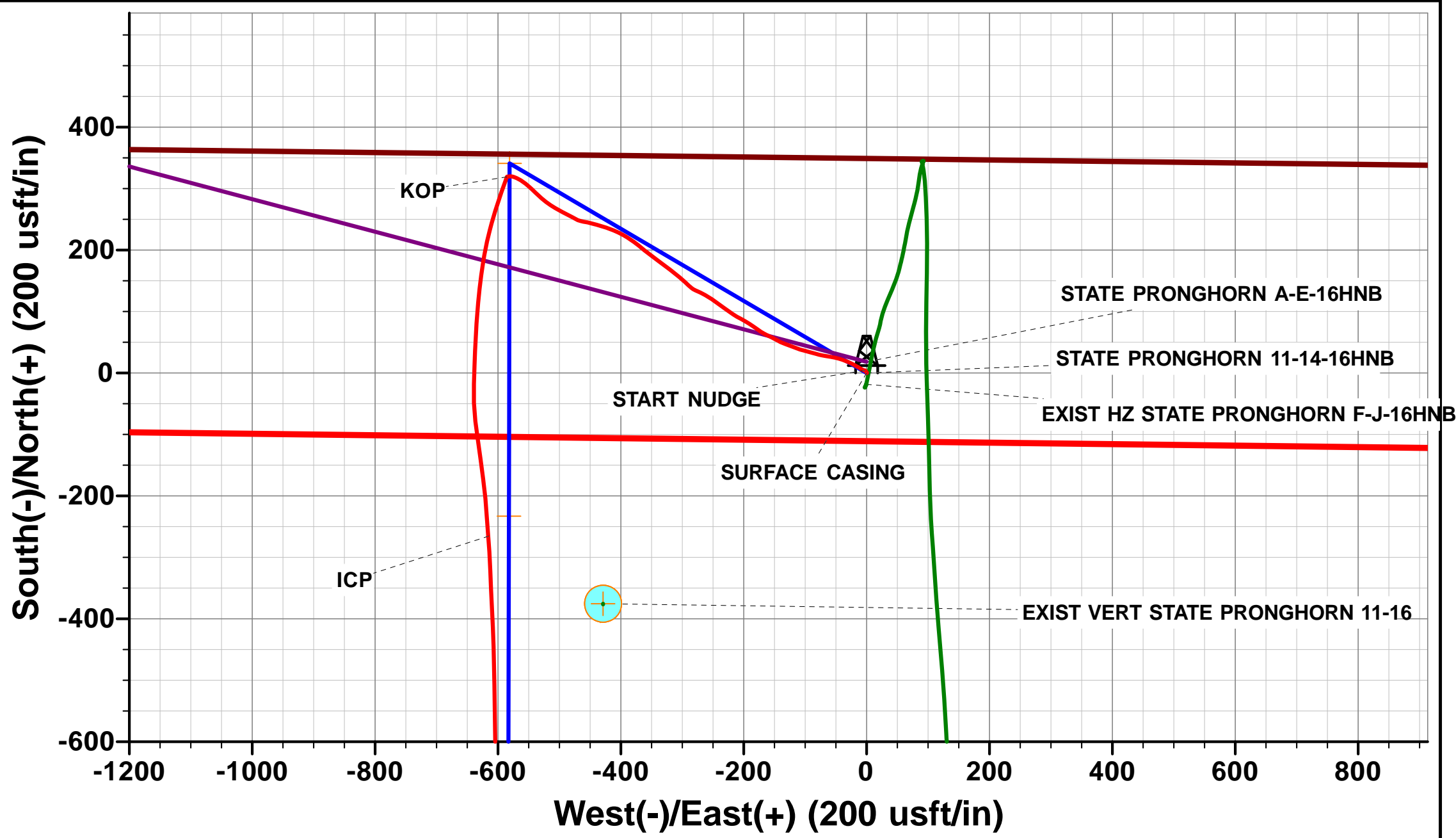
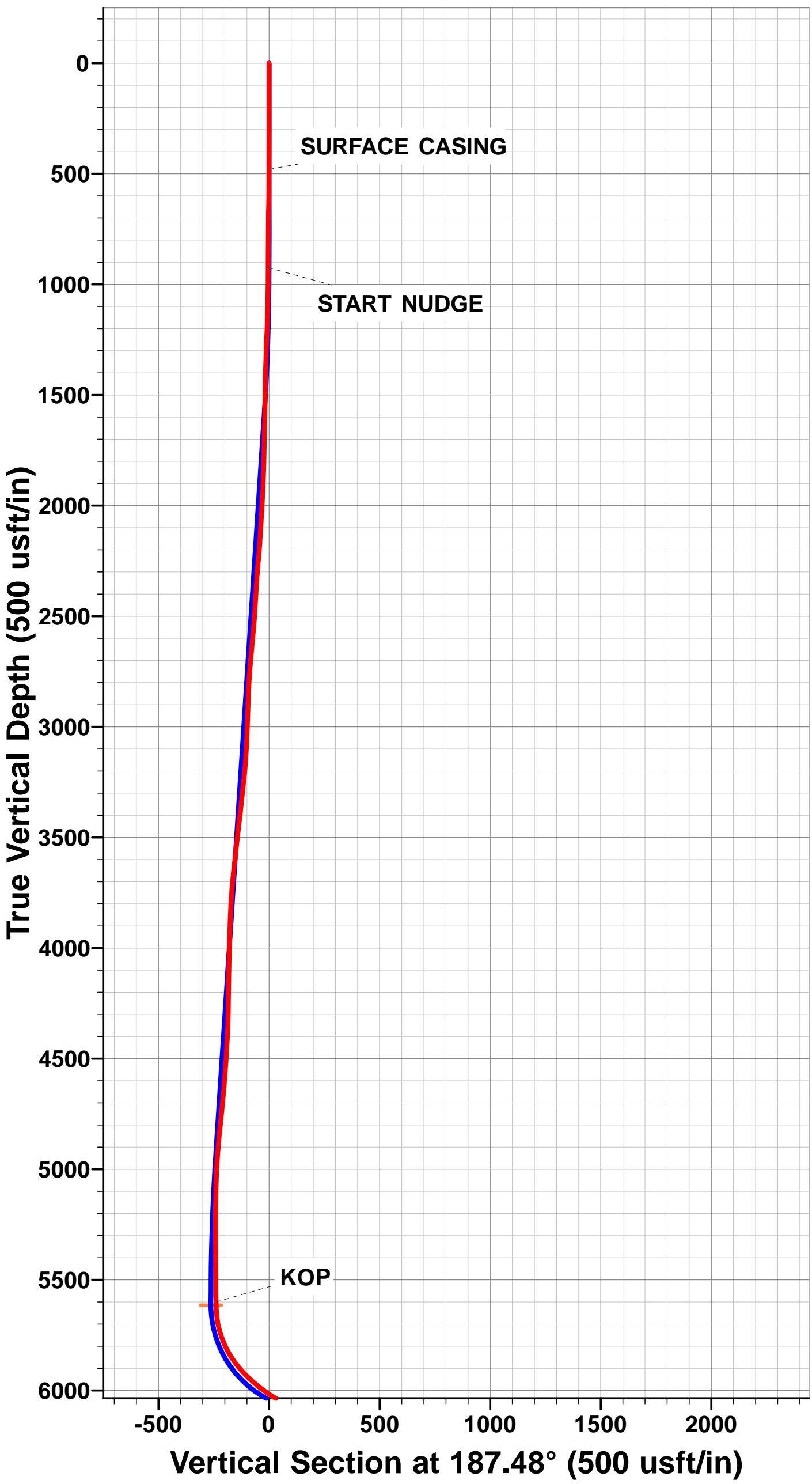
| TVD | MD | Inc | Azi | +N/-S | +E/-W | VSect | Dep | Annotation |
|--------|---------|-------|--------|---------|--------|--------|--------|----------------------------|
| 480.0 | 480.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | SURFACE CASING |
| 924.9 | 925.0 | 0.81 | 251.13 | 4.0 | -3.2 | -3.6 | 8.0 | START NUDGE |
| 5600.4 | 5656.0 | 1.82 | 207.11 | 319.0 | -585.6 | -240.1 | 681.9 | KOP |
| 6106.5 | 6525.0 | 85.07 | 176.53 | -265.3 | -615.1 | 343.1 | 1273.6 | ICP |
| 6116.4 | 10709.0 | 91.50 | 178.10 | -4446.2 | -550.7 | 4480.0 | 5456.2 | LAST SURVEY - JULY 8, 2014 |
| 6115.3 | 10758.0 | 91.10 | 178.10 | -4495.1 | -549.0 | 4528.3 | 5505.2 | EXTRAPOLATION TO TD |

PROPOSED LOCAL COORDINATES:

SHL: 350ft FNL & 1259ft FWL Sec 16
7" ICP *NEW*: 589.1ft FNL & 677ft FWL Sec 16
BHL: 470ft FSL & 670ft FWL Sec 16

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | Shape |
|--|--------|---------|--------|-----------|-------------|-------|
| KOP - STATE PRONGHORN 11-14-16HNB | 5614.7 | 341.1 | -581.0 | 40.408386 | -104.221236 | Point |
| 7" ICP - STATE PRONGHORN 11-14-16HNB *NEW* | 6118.0 | -233.0 | -582.1 | 40.406810 | -104.221240 | Point |
| BHL - STATE PRONGHORN 11-14-16HNB | 6118.0 | -4495.6 | -590.5 | 40.395110 | -104.221270 | Point |



T
M
Azimuths to True North
Magnetic North: 8.17°
Magnetic Field
Strength: 52879.2snT
Dip Angle: 67.04°
Date: 06/06/2014
Model: IGRF2010

Survey Report



| | | | |
|------------------|---------------------------------|-------------------------------------|----------------------------------|
| Company: | BONANZA CREEK ENERGY INC. | Local Co-ordinate Reference: | Well STATE PRONGHORN 11-14-16HNB |
| Project: | WELD COUNTY, COLORADO (NAD 83) | TVD Reference: | KB @ 4670.0usft (CADE 21) |
| Site: | NW NW SEC. 16 T5N R61W 6th P.M. | MD Reference: | KB @ 4670.0usft (CADE 21) |
| Well: | STATE PRONGHORN 11-14-16HNB | North Reference: | True |
| Wellbore: | JOB #2009-346 | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL SURVEYS | Database: | EDM 5000.1 Single User Db |

| | | | |
|--------------------|--------------------------------|----------------------|-----------------------------|
| Project | WELD COUNTY, COLORADO (NAD 83) | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | Using geodetic scale factor |

| Site | NW NW SEC. 16 T5N R61W 6th P.M. | | | | |
|-----------------------|---------------------------------|--------------|-------------------|-------------------|-------------|
| Site Position: | | Northing: | 1,393,850.44 usft | Latitude: | 40.407450 |
| From: | Lat/Long | Easting: | 3,356,678.38 usft | Longitude: | -104.219150 |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 1.10000 ft | Grid Convergence: | 0.83 ° |

| Well | STATE PRONGHORN 11-14-16HNB | | | | | |
|----------------------|-----------------------------|----------|---------------------|-------------------|---------------|--------------|
| Well Position | +N/-S | 0.0 usft | Northing: | 1,393,850.44 usft | Latitude: | 40.407450 |
| | +E/-W | 0.0 usft | Easting: | 3,356,678.38 usft | Longitude: | -104.219150 |
| Position Uncertainty | | 0.0 usft | Wellhead Elevation: | usft | Ground Level: | 4,653.0 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | JOB #2009-346 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 06/06/2014 | 8.17 | 67.04 | 52,879 |

| Design | FINAL SURVEYS | | | | |
|-------------------|----------------------------|--------|-----------------|-----------------|------------------|
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 0.0 | | 0.0 | 0.0 | 187.48 |

| | | | | | |
|-----------------------|------------------|-------------------------------|------------------|--------------------|--|
| Survey Program | Date | 08/07/2014 | | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description | |
| 480.0 | 10,758.0 | FINAL SURVEYS (JOB #2009-346) | MWD | MWD - Standard | |

| | | | | | | | | | | |
|------------------------------|------------------------|--------------------|------------------------------|----------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|
| Survey | | | | | | | | | | |
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | Subsea Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.0 | 0.00 | 0.00 | 0.0 | -4,670.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| SURFACE CASING | | | | | | | | | | |
| 480.0 | 0.00 | 0.00 | 480.0 | -4,190.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 512.0 | 0.40 | 64.20 | 512.0 | -4,158.0 | 0.0 | 0.1 | -0.1 | 1.25 | 1.25 | 0.00 |
| 544.0 | 0.50 | 77.60 | 544.0 | -4,126.0 | 0.1 | 0.3 | -0.2 | 0.45 | 0.31 | 41.87 |
| 607.0 | 0.80 | 334.30 | 607.0 | -4,063.0 | 0.6 | 0.4 | -0.6 | 1.65 | 0.48 | -163.97 |
| 670.0 | 1.50 | 319.00 | 670.0 | -4,000.0 | 1.6 | -0.3 | -1.5 | 1.20 | 1.11 | -24.29 |
| 734.0 | 1.30 | 324.70 | 734.0 | -3,936.0 | 2.8 | -1.3 | -2.6 | 0.38 | -0.31 | 8.91 |
| 797.0 | 1.40 | 325.20 | 796.9 | -3,873.1 | 4.0 | -2.1 | -3.7 | 0.16 | 0.16 | 0.79 |
| 892.0 | 0.80 | 193.00 | 891.9 | -3,778.1 | 4.3 | -2.9 | -3.9 | 2.13 | -0.63 | -139.16 |
| START NUDGE | | | | | | | | | | |
| 925.0 | 0.81 | 251.13 | 924.9 | -3,745.1 | 4.0 | -3.2 | -3.6 | 2.37 | 0.03 | 176.16 |

Survey Report



| | | | |
|------------------|---------------------------------|-------------------------------------|----------------------------------|
| Company: | BONANZA CREEK ENERGY INC. | Local Co-ordinate Reference: | Well STATE PRONGHORN 11-14-16HNB |
| Project: | WELD COUNTY, COLORADO (NAD 83) | TVD Reference: | KB @ 4670.0usft (CADE 21) |
| Site: | NW NW SEC. 16 T5N R61W 6th P.M. | MD Reference: | KB @ 4670.0usft (CADE 21) |
| Well: | STATE PRONGHORN 11-14-16HNB | North Reference: | True |
| Wellbore: | JOB #2009-346 | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL SURVEYS | Database: | EDM 5000.1 Single User Db |

| Survey | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|---------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | Subsea Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 987.0 | 2.00 | 290.80 | 986.9 | -3,683.1 | 4.3 | -4.6 | -3.6 | 2.37 | 1.92 | 63.98 |
| 1,081.0 | 3.40 | 303.60 | 1,080.8 | -3,589.2 | 6.4 | -8.5 | -5.3 | 1.61 | 1.49 | 13.62 |
| 1,173.0 | 4.90 | 299.40 | 1,172.6 | -3,497.4 | 9.9 | -14.2 | -7.9 | 1.66 | 1.63 | -4.57 |
| 1,264.0 | 6.60 | 298.20 | 1,263.1 | -3,406.9 | 14.2 | -22.2 | -11.2 | 1.87 | 1.87 | -1.32 |
| 1,418.0 | 7.30 | 289.70 | 1,416.0 | -3,254.0 | 21.7 | -39.2 | -16.4 | 0.81 | 0.45 | -5.52 |
| 1,511.0 | 8.80 | 282.10 | 1,508.1 | -3,161.9 | 25.2 | -51.7 | -18.2 | 1.97 | 1.61 | -8.17 |
| 1,604.0 | 9.60 | 278.00 | 1,599.9 | -3,070.1 | 27.8 | -66.4 | -18.9 | 1.11 | 0.86 | -4.41 |
| 1,697.0 | 11.70 | 285.90 | 1,691.3 | -2,978.7 | 31.4 | -83.1 | -20.3 | 2.75 | 2.26 | 8.49 |
| 1,789.0 | 10.60 | 284.00 | 1,781.5 | -2,888.5 | 36.0 | -100.3 | -22.7 | 1.26 | -1.20 | -2.07 |
| 1,881.0 | 10.70 | 291.60 | 1,871.9 | -2,798.1 | 41.2 | -116.4 | -25.7 | 1.53 | 0.11 | 8.26 |
| 1,974.0 | 10.10 | 290.00 | 1,963.4 | -2,706.6 | 47.2 | -132.1 | -29.6 | 0.72 | -0.65 | -1.72 |
| 2,067.0 | 11.00 | 298.60 | 2,054.8 | -2,615.2 | 54.2 | -147.6 | -34.5 | 1.95 | 0.97 | 9.25 |
| 2,159.0 | 10.10 | 295.40 | 2,145.3 | -2,524.7 | 61.9 | -162.6 | -40.2 | 1.17 | -0.98 | -3.48 |
| 2,251.0 | 11.10 | 306.90 | 2,235.7 | -2,434.3 | 70.7 | -177.0 | -47.0 | 2.54 | 1.09 | 12.50 |
| 2,344.0 | 10.10 | 302.00 | 2,327.1 | -2,342.9 | 80.4 | -191.0 | -54.8 | 1.45 | -1.08 | -5.27 |
| 2,438.0 | 9.00 | 297.10 | 2,419.8 | -2,250.2 | 88.1 | -204.6 | -60.7 | 1.45 | -1.17 | -5.21 |
| 2,532.0 | 9.40 | 303.20 | 2,512.6 | -2,157.4 | 95.6 | -217.5 | -66.5 | 1.12 | 0.43 | 6.49 |
| 2,624.0 | 11.10 | 307.30 | 2,603.2 | -2,066.8 | 105.1 | -230.9 | -74.2 | 2.01 | 1.85 | 4.46 |
| 2,716.0 | 10.80 | 304.90 | 2,693.5 | -1,976.5 | 115.4 | -245.0 | -82.5 | 0.59 | -0.33 | -2.61 |
| 2,809.0 | 9.30 | 301.60 | 2,785.1 | -1,884.9 | 124.3 | -258.5 | -89.6 | 1.73 | -1.61 | -3.55 |
| 2,901.0 | 6.50 | 295.30 | 2,876.2 | -1,793.8 | 130.5 | -269.6 | -94.2 | 3.18 | -3.04 | -6.85 |
| 2,996.0 | 5.30 | 293.60 | 2,970.7 | -1,699.3 | 134.5 | -278.5 | -97.1 | 1.28 | -1.26 | -1.79 |
| 3,091.0 | 4.80 | 310.70 | 3,065.3 | -1,604.7 | 138.9 | -285.5 | -100.5 | 1.66 | -0.53 | 18.00 |
| 3,187.0 | 8.00 | 314.40 | 3,160.7 | -1,509.3 | 146.2 | -293.3 | -106.7 | 3.36 | 3.33 | 3.85 |
| 3,283.0 | 11.40 | 308.40 | 3,255.3 | -1,414.7 | 156.7 | -305.5 | -115.6 | 3.69 | 3.54 | -6.25 |
| 3,378.0 | 12.30 | 307.60 | 3,348.3 | -1,321.7 | 168.7 | -320.9 | -125.5 | 0.96 | 0.95 | -0.84 |
| 3,474.0 | 13.40 | 306.90 | 3,441.9 | -1,228.1 | 181.7 | -337.9 | -136.1 | 1.16 | 1.15 | -0.73 |
| 3,569.0 | 12.60 | 308.80 | 3,534.5 | -1,135.5 | 194.8 | -354.8 | -146.9 | 0.95 | -0.84 | 2.00 |
| 3,664.0 | 12.00 | 307.50 | 3,627.3 | -1,042.7 | 207.3 | -370.7 | -157.2 | 0.70 | -0.63 | -1.37 |
| 3,760.0 | 11.10 | 303.70 | 3,721.3 | -948.7 | 218.5 | -386.3 | -166.3 | 1.23 | -0.94 | -3.96 |
| 3,855.0 | 9.20 | 297.30 | 3,814.8 | -855.2 | 227.0 | -400.6 | -172.9 | 2.32 | -2.00 | -6.74 |
| 3,949.0 | 6.70 | 290.20 | 3,907.9 | -762.1 | 232.4 | -412.5 | -176.7 | 2.85 | -2.66 | -7.55 |
| 4,042.0 | 7.30 | 290.20 | 4,000.2 | -669.8 | 236.3 | -423.1 | -179.2 | 0.65 | 0.65 | 0.00 |
| 4,138.0 | 8.00 | 285.50 | 4,095.4 | -574.6 | 240.2 | -435.3 | -181.4 | 0.98 | 0.73 | -4.90 |
| 4,234.0 | 7.50 | 284.50 | 4,190.5 | -479.5 | 243.5 | -447.8 | -183.1 | 0.54 | -0.52 | -1.04 |
| 4,329.0 | 8.90 | 279.80 | 4,284.5 | -385.5 | 246.3 | -461.0 | -184.2 | 1.63 | 1.47 | -4.95 |
| 4,423.0 | 8.80 | 299.10 | 4,377.4 | -292.6 | 251.1 | -474.5 | -187.1 | 3.15 | -0.11 | 20.53 |
| 4,518.0 | 9.70 | 298.00 | 4,471.2 | -198.8 | 258.4 | -487.9 | -192.6 | 0.97 | 0.95 | -1.16 |
| 4,614.0 | 10.70 | 297.20 | 4,565.7 | -104.3 | 266.2 | -503.0 | -198.5 | 1.05 | 1.04 | -0.83 |
| 4,710.0 | 11.80 | 307.00 | 4,659.8 | -10.2 | 276.2 | -518.7 | -206.3 | 2.29 | 1.15 | 10.21 |
| 4,806.0 | 10.10 | 312.70 | 4,754.1 | 84.1 | 287.8 | -532.7 | -216.0 | 2.10 | -1.77 | 5.94 |
| 4,900.0 | 9.10 | 313.90 | 4,846.8 | 176.8 | 298.6 | -544.2 | -225.2 | 1.08 | -1.06 | 1.28 |
| 4,995.0 | 8.20 | 308.30 | 4,940.7 | 270.7 | 308.0 | -554.9 | -233.1 | 1.30 | -0.95 | -5.89 |
| 5,091.0 | 5.50 | 300.80 | 5,036.0 | 366.0 | 314.6 | -564.2 | -238.4 | 2.96 | -2.81 | -7.81 |
| 5,186.0 | 3.70 | 290.50 | 5,130.7 | 460.7 | 318.0 | -571.0 | -240.9 | 2.08 | -1.89 | -10.84 |
| 5,282.0 | 2.60 | 284.70 | 5,226.6 | 556.6 | 319.6 | -576.0 | -241.9 | 1.19 | -1.15 | -6.04 |
| 5,379.0 | 2.00 | 270.40 | 5,323.5 | 653.5 | 320.2 | -579.8 | -241.9 | 0.85 | -0.62 | -14.74 |
| 5,474.0 | 1.30 | 258.10 | 5,418.4 | 748.4 | 320.0 | -582.5 | -241.4 | 0.82 | -0.74 | -12.95 |
| 5,570.0 | 0.90 | 264.40 | 5,514.4 | 844.4 | 319.7 | -584.4 | -240.9 | 0.43 | -0.42 | 6.56 |
| 5,614.0 | 0.80 | 269.50 | 5,558.4 | 888.4 | 319.6 | -585.0 | -240.7 | 0.28 | -0.23 | 11.59 |
| KOP | | | | | | | | | | |
| 5,656.0 | 1.82 | 207.11 | 5,600.4 | 930.4 | 319.0 | -585.6 | -240.1 | 3.83 | 2.42 | -148.54 |
| 5,697.0 | 3.30 | 195.00 | 5,641.4 | 971.4 | 317.3 | -586.2 | -238.3 | 3.83 | 3.62 | -29.54 |

Survey Report



| | | | |
|------------------|---------------------------------|-------------------------------------|----------------------------------|
| Company: | BONANZA CREEK ENERGY INC. | Local Co-ordinate Reference: | Well STATE PRONGHORN 11-14-16HNB |
| Project: | WELD COUNTY, COLORADO (NAD 83) | TVD Reference: | KB @ 4670.0usft (CADE 21) |
| Site: | NW NW SEC. 16 T5N R61W 6th P.M. | MD Reference: | KB @ 4670.0usft (CADE 21) |
| Well: | STATE PRONGHORN 11-14-16HNB | North Reference: | True |
| Wellbore: | JOB #2009-346 | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL SURVEYS | Database: | EDM 5000.1 Single User Db |

| Survey | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|---------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | Subsea Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 5,729.0 | 7.30 | 197.40 | 5,673.2 | 1,003.2 | 314.5 | -587.1 | -235.4 | 12.52 | 12.50 | 7.50 |
| 5,761.0 | 12.00 | 199.00 | 5,704.8 | 1,034.8 | 309.4 | -588.7 | -230.1 | 14.71 | 14.69 | 5.00 |
| 5,793.0 | 16.90 | 201.40 | 5,735.7 | 1,065.7 | 301.9 | -591.5 | -222.3 | 15.42 | 15.31 | 7.50 |
| 5,824.0 | 21.20 | 200.00 | 5,765.0 | 1,095.0 | 292.5 | -595.1 | -212.5 | 13.95 | 13.87 | -4.52 |
| 5,857.0 | 25.10 | 197.70 | 5,795.4 | 1,125.4 | 280.2 | -599.3 | -199.8 | 12.13 | 11.82 | -6.97 |
| 5,889.0 | 28.50 | 197.30 | 5,823.9 | 1,153.9 | 266.4 | -603.6 | -185.5 | 10.64 | 10.62 | -1.25 |
| 5,921.0 | 32.80 | 195.90 | 5,851.4 | 1,181.4 | 250.8 | -608.2 | -169.4 | 13.62 | 13.44 | -4.37 |
| 5,953.0 | 37.00 | 194.50 | 5,877.7 | 1,207.7 | 233.1 | -613.0 | -151.3 | 13.36 | 13.12 | -4.37 |
| 5,984.0 | 41.00 | 193.20 | 5,901.8 | 1,231.8 | 214.2 | -617.7 | -131.9 | 13.17 | 12.90 | -4.19 |
| 6,017.0 | 44.30 | 190.00 | 5,926.0 | 1,256.0 | 192.3 | -622.2 | -109.6 | 11.96 | 10.00 | -9.70 |
| 6,049.0 | 47.20 | 187.60 | 5,948.4 | 1,278.4 | 169.6 | -625.7 | -86.7 | 10.53 | 9.06 | -7.50 |
| 6,080.0 | 50.30 | 187.20 | 5,968.8 | 1,298.8 | 146.5 | -628.7 | -63.4 | 10.05 | 10.00 | -1.29 |
| 6,112.0 | 50.90 | 185.90 | 5,989.1 | 1,319.1 | 122.0 | -631.5 | -38.7 | 3.66 | 1.87 | -4.06 |
| 6,143.0 | 54.20 | 184.60 | 6,008.0 | 1,338.0 | 97.5 | -633.7 | -14.1 | 11.15 | 10.65 | -4.19 |
| 6,175.0 | 59.20 | 183.00 | 6,025.5 | 1,355.5 | 70.8 | -635.5 | 12.6 | 16.17 | 15.62 | -5.00 |
| 6,208.0 | 63.70 | 182.50 | 6,041.3 | 1,371.3 | 41.8 | -636.9 | 41.5 | 13.70 | 13.64 | -1.52 |
| 6,239.0 | 68.80 | 182.20 | 6,053.8 | 1,383.8 | 13.5 | -638.0 | 69.7 | 16.48 | 16.45 | -0.97 |
| 6,272.0 | 72.90 | 181.80 | 6,064.6 | 1,394.6 | -17.6 | -639.1 | 100.7 | 12.48 | 12.42 | -1.21 |
| 6,304.0 | 75.40 | 177.90 | 6,073.4 | 1,403.4 | -48.4 | -639.0 | 131.2 | 14.09 | 7.81 | -12.19 |
| 6,335.0 | 77.90 | 173.10 | 6,080.5 | 1,410.5 | -78.5 | -636.7 | 160.7 | 17.09 | 8.06 | -15.48 |
| 6,368.0 | 80.00 | 172.00 | 6,086.8 | 1,416.8 | -110.6 | -632.5 | 192.0 | 7.16 | 6.36 | -3.33 |
| 6,400.0 | 80.80 | 172.10 | 6,092.2 | 1,422.2 | -141.8 | -628.1 | 222.4 | 2.52 | 2.50 | 0.31 |
| 6,431.0 | 82.60 | 173.10 | 6,096.6 | 1,426.6 | -172.3 | -624.1 | 252.1 | 6.63 | 5.81 | 3.23 |
| 6,463.0 | 83.80 | 173.50 | 6,100.4 | 1,430.4 | -203.8 | -620.4 | 282.9 | 3.95 | 3.75 | 1.25 |
| ICP | | | | | | | | | | |
| 6,525.0 | 85.07 | 176.53 | 6,106.5 | 1,436.5 | -265.3 | -615.1 | 343.1 | 5.28 | 2.04 | 4.89 |
| 6,551.0 | 85.60 | 177.80 | 6,108.6 | 1,438.6 | -291.2 | -613.8 | 368.6 | 5.28 | 2.06 | 4.88 |
| 6,582.0 | 85.60 | 177.60 | 6,110.9 | 1,440.9 | -322.0 | -612.6 | 399.1 | 0.64 | 0.00 | -0.65 |
| 6,612.0 | 87.20 | 177.20 | 6,112.8 | 1,442.8 | -352.0 | -611.2 | 428.6 | 5.50 | 5.33 | -1.33 |
| 6,674.0 | 88.70 | 177.50 | 6,115.0 | 1,445.0 | -413.8 | -608.3 | 489.5 | 2.47 | 2.42 | 0.48 |
| 6,706.0 | 89.30 | 178.10 | 6,115.6 | 1,445.6 | -445.8 | -607.1 | 521.1 | 2.65 | 1.87 | 1.87 |
| 6,768.0 | 91.40 | 179.40 | 6,115.2 | 1,445.2 | -507.8 | -605.8 | 582.4 | 3.98 | 3.39 | 2.10 |
| 6,862.0 | 92.50 | 179.10 | 6,112.0 | 1,442.0 | -601.7 | -604.5 | 675.3 | 1.21 | 1.17 | -0.32 |
| 6,954.0 | 90.70 | 177.80 | 6,109.5 | 1,439.5 | -693.7 | -602.0 | 766.2 | 2.41 | -1.96 | -1.41 |
| 7,047.0 | 88.80 | 176.90 | 6,109.9 | 1,439.9 | -786.6 | -597.7 | 857.7 | 2.26 | -2.04 | -0.97 |
| 7,139.0 | 89.20 | 176.90 | 6,111.5 | 1,441.5 | -878.4 | -592.8 | 948.1 | 0.43 | 0.43 | 0.00 |
| 7,231.0 | 88.70 | 176.20 | 6,113.2 | 1,443.2 | -970.2 | -587.2 | 1,038.4 | 0.93 | -0.54 | -0.76 |
| 7,326.0 | 88.30 | 175.80 | 6,115.6 | 1,445.6 | -1,065.0 | -580.6 | 1,131.5 | 0.60 | -0.42 | -0.42 |
| 7,423.0 | 90.30 | 178.10 | 6,116.8 | 1,446.8 | -1,161.8 | -575.4 | 1,226.8 | 3.14 | 2.06 | 2.37 |
| 7,516.0 | 90.80 | 177.80 | 6,115.9 | 1,445.9 | -1,254.7 | -572.1 | 1,318.6 | 0.63 | 0.54 | -0.32 |
| 7,611.0 | 91.80 | 177.30 | 6,113.8 | 1,443.8 | -1,349.6 | -568.1 | 1,412.1 | 1.18 | 1.05 | -0.53 |
| 7,707.0 | 90.60 | 179.00 | 6,111.8 | 1,441.8 | -1,445.5 | -565.0 | 1,506.8 | 2.17 | -1.25 | 1.77 |
| 7,803.0 | 90.00 | 179.90 | 6,111.3 | 1,441.3 | -1,541.5 | -564.0 | 1,601.9 | 1.13 | -0.62 | 0.94 |
| 7,899.0 | 90.80 | 179.00 | 6,110.6 | 1,440.6 | -1,637.5 | -563.1 | 1,696.9 | 1.25 | 0.83 | -0.94 |
| 7,993.0 | 89.00 | 180.20 | 6,110.8 | 1,440.8 | -1,731.5 | -562.5 | 1,790.0 | 2.30 | -1.91 | 1.28 |
| 8,089.0 | 88.80 | 178.90 | 6,112.6 | 1,442.6 | -1,827.5 | -561.7 | 1,885.1 | 1.37 | -0.21 | -1.35 |
| 8,185.0 | 89.90 | 178.20 | 6,113.7 | 1,443.7 | -1,923.5 | -559.3 | 1,979.9 | 1.36 | 1.15 | -0.73 |
| 8,280.0 | 89.40 | 179.50 | 6,114.3 | 1,444.3 | -2,018.4 | -557.4 | 2,073.8 | 1.47 | -0.53 | 1.37 |
| 8,376.0 | 90.00 | 178.40 | 6,114.8 | 1,444.8 | -2,114.4 | -555.6 | 2,168.8 | 1.31 | 0.62 | -1.15 |
| 8,472.0 | 88.60 | 180.20 | 6,116.0 | 1,446.0 | -2,210.4 | -554.4 | 2,263.8 | 2.38 | -1.46 | 1.87 |
| 8,568.0 | 88.00 | 179.30 | 6,118.8 | 1,448.8 | -2,306.4 | -554.0 | 2,358.9 | 1.13 | -0.62 | -0.94 |
| 8,663.0 | 87.80 | 179.00 | 6,122.3 | 1,452.3 | -2,401.3 | -552.6 | 2,452.8 | 0.38 | -0.21 | -0.32 |
| 8,760.0 | 87.90 | 179.60 | 6,125.9 | 1,455.9 | -2,498.2 | -551.4 | 2,548.7 | 0.63 | 0.10 | 0.62 |

Survey Report



| | | | |
|------------------|---------------------------------|-------------------------------------|----------------------------------|
| Company: | BONANZA CREEK ENERGY INC. | Local Co-ordinate Reference: | Well STATE PRONGHORN 11-14-16HNB |
| Project: | WELD COUNTY, COLORADO (NAD 83) | TVD Reference: | KB @ 4670.0usft (CADE 21) |
| Site: | NW NW SEC. 16 T5N R61W 6th P.M. | MD Reference: | KB @ 4670.0usft (CADE 21) |
| Well: | STATE PRONGHORN 11-14-16HNB | North Reference: | True |
| Wellbore: | JOB #2009-346 | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL SURVEYS | Database: | EDM 5000.1 Single User Db |

| Survey | | | | | | | | | | |
|----------------------------|-----------------|-------------|-----------------------|---------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | Subsea Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 8,854.0 | 89.20 | 182.20 | 6,128.3 | 1,458.3 | -2,592.2 | -552.9 | 2,642.1 | 3.09 | 1.38 | 2.77 |
| 8,949.0 | 93.50 | 183.40 | 6,126.1 | 1,456.1 | -2,687.0 | -557.5 | 2,736.7 | 4.70 | 4.53 | 1.26 |
| 9,045.0 | 92.20 | 181.90 | 6,121.3 | 1,451.3 | -2,782.8 | -562.0 | 2,832.3 | 2.07 | -1.35 | -1.56 |
| 9,141.0 | 91.50 | 180.70 | 6,118.2 | 1,448.2 | -2,878.7 | -564.2 | 2,927.6 | 1.45 | -0.73 | -1.25 |
| 9,237.0 | 89.90 | 179.30 | 6,117.0 | 1,447.0 | -2,974.7 | -564.2 | 3,022.8 | 2.21 | -1.67 | -1.46 |
| 9,332.0 | 90.20 | 180.10 | 6,116.9 | 1,446.9 | -3,069.7 | -563.7 | 3,116.9 | 0.90 | 0.32 | 0.84 |
| 9,427.0 | 89.80 | 179.60 | 6,116.9 | 1,446.9 | -3,164.7 | -563.4 | 3,211.1 | 0.67 | -0.42 | -0.53 |
| 9,522.0 | 90.40 | 179.40 | 6,116.8 | 1,446.8 | -3,259.7 | -562.6 | 3,305.2 | 0.67 | 0.63 | -0.21 |
| 9,615.0 | 92.40 | 181.30 | 6,114.5 | 1,444.5 | -3,352.6 | -563.1 | 3,397.4 | 2.97 | 2.15 | 2.04 |
| 9,710.0 | 91.30 | 180.40 | 6,111.4 | 1,441.4 | -3,447.6 | -564.6 | 3,491.7 | 1.50 | -1.16 | -0.95 |
| 9,806.0 | 90.50 | 180.00 | 6,109.9 | 1,439.9 | -3,543.6 | -564.9 | 3,586.9 | 0.93 | -0.83 | -0.42 |
| 9,902.0 | 90.80 | 179.90 | 6,108.8 | 1,438.8 | -3,639.5 | -564.8 | 3,682.1 | 0.33 | 0.31 | -0.10 |
| 9,997.0 | 89.40 | 179.60 | 6,108.7 | 1,438.7 | -3,734.5 | -564.4 | 3,776.2 | 1.51 | -1.47 | -0.32 |
| 10,092.0 | 89.10 | 179.40 | 6,109.9 | 1,439.9 | -3,829.5 | -563.6 | 3,870.3 | 0.38 | -0.32 | -0.21 |
| 10,187.0 | 88.40 | 178.40 | 6,112.0 | 1,442.0 | -3,924.5 | -561.7 | 3,964.2 | 1.28 | -0.74 | -1.05 |
| 10,282.0 | 88.90 | 178.20 | 6,114.2 | 1,444.2 | -4,019.4 | -558.9 | 4,058.0 | 0.57 | 0.53 | -0.21 |
| 10,377.0 | 87.40 | 178.30 | 6,117.3 | 1,447.3 | -4,114.3 | -556.0 | 4,151.7 | 1.58 | -1.58 | 0.11 |
| 10,472.0 | 88.90 | 179.60 | 6,120.4 | 1,450.4 | -4,209.3 | -554.3 | 4,245.6 | 2.09 | 1.58 | 1.37 |
| 10,567.0 | 91.20 | 179.30 | 6,120.3 | 1,450.3 | -4,304.2 | -553.4 | 4,339.7 | 2.44 | 2.42 | -0.32 |
| 10,663.0 | 91.80 | 178.90 | 6,117.8 | 1,447.8 | -4,400.2 | -551.9 | 4,434.6 | 0.75 | 0.62 | -0.42 |
| LAST SURVEY - JULY 8, 2014 | | | | | | | | | | |
| 10,709.0 | 91.50 | 178.10 | 6,116.4 | 1,446.4 | -4,446.2 | -550.7 | 4,480.0 | 1.86 | -0.65 | -1.74 |
| EXTRAPOLATION TO TD | | | | | | | | | | |
| 10,758.0 | 91.10 | 178.10 | 6,115.3 | 1,445.3 | -4,495.1 | -549.0 | 4,528.3 | 0.82 | -0.82 | 0.00 |

Survey Report



| | | | |
|------------------|---------------------------------|-------------------------------------|----------------------------------|
| Company: | BONANZA CREEK ENERGY INC. | Local Co-ordinate Reference: | Well STATE PRONGHORN 11-14-16HNB |
| Project: | WELD COUNTY, COLORADO (NAD 83) | TVD Reference: | KB @ 4670.0usft (CADE 21) |
| Site: | NW NW SEC. 16 T5N R61W 6th P.M. | MD Reference: | KB @ 4670.0usft (CADE 21) |
| Well: | STATE PRONGHORN 11-14-16HNB | North Reference: | True |
| Wellbore: | JOB #2009-346 | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL SURVEYS | Database: | EDM 5000.1 Single User Db |

| Targets | | | | | | | | | |
|---|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|-----------|-------------|
| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| EXIST VERT STATE PR - survey misses target center by 792.5usft at 6671.3usft MD (6115.0 TVD, -411.2 N, -608.5 E) - Circle (radius 30.0) | 0.00 | 0.00 | 6,886.0 | -375.2 | -428.9 | 1,393,469.06 | 3,356,254.98 | 40.406420 | -104.220690 |
| ABDN VERT STATE #1 - survey misses target center by 740.8usft at 9597.2usft MD (6115.2 TVD, -3334.9 N, -562.8 E) - Circle (radius 30.0) | 0.00 | 0.00 | 6,855.0 | -3,352.8 | -597.2 | 1,390,489.54 | 3,356,129.73 | 40.398247 | -104.221294 |
| BHL - STATE PRONGH - survey misses target center by 41.6usft at 10757.0usft MD (6115.3 TVD, -4494.2 N, -549.1 E) - Point | 0.00 | 0.00 | 6,118.0 | -4,495.6 | -590.5 | 1,389,346.97 | 3,356,152.89 | 40.395110 | -104.221270 |
| 7" ICP - STATE PRONG - survey misses target center by 38.0usft at 6497.0usft MD (6103.9 TVD, -237.4 N, -617.1 E) - Point | 0.00 | 0.00 | 6,118.0 | -233.0 | -582.1 | 1,393,609.07 | 3,356,099.73 | 40.406810 | -104.221240 |
| KOP - STATE PRONGH - survey misses target center by 23.0usft at 5669.3usft MD (5613.7 TVD, 318.6 N, -585.8 E) - Point | 0.00 | 0.00 | 5,614.7 | 341.1 | -581.0 | 1,394,183.10 | 3,356,092.54 | 40.408386 | -104.221236 |

| Survey Annotations | | | | |
|-----------------------------|-----------------------------|-------------------|-----------------|----------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
| | | +N/-S (usft) | +E/-W (usft) | |
| 480.0 | 480.0 | 0.0 | 0.0 | SURFACE CASING |
| 925.0 | 924.9 | 4.0 | -3.2 | START NUDGE |
| 5,656.0 | 5,600.4 | 319.0 | -585.6 | KOP |
| 6,525.0 | 6,106.5 | -265.3 | -615.1 | ICP |
| 10,709.0 | 6,116.4 | -4,446.2 | -550.7 | LAST SURVEY - JULY 8, 2014 |
| 10,758.0 | 6,115.3 | -4,495.1 | -549.0 | EXTRAPOLATION TO TD |

Checked By: _____ Approved By: _____ Date: _____