

# **BONANZA CREEK ENERGY INC.**

**WELD COUNTY, COLORADO (NAD 83)**

**NW NW SEC. 36 T5N R63W 6th P.M.**

**STATE NORTH PLATTE 11-36-1XRLC**

**ORIGINAL WELLBORE**

**11 January, 2017**

**Plan: PROPOSAL #2**





Project: WELD COUNTY, COLORADO (NAD 83)  
Site: NW NW SEC. 36 T5N R63W 6th P.M.  
Well: STATE NORTH PLATTE 11-36-1XRLC  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2

ANNOTATIONS

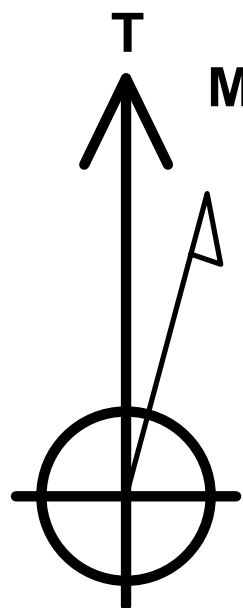
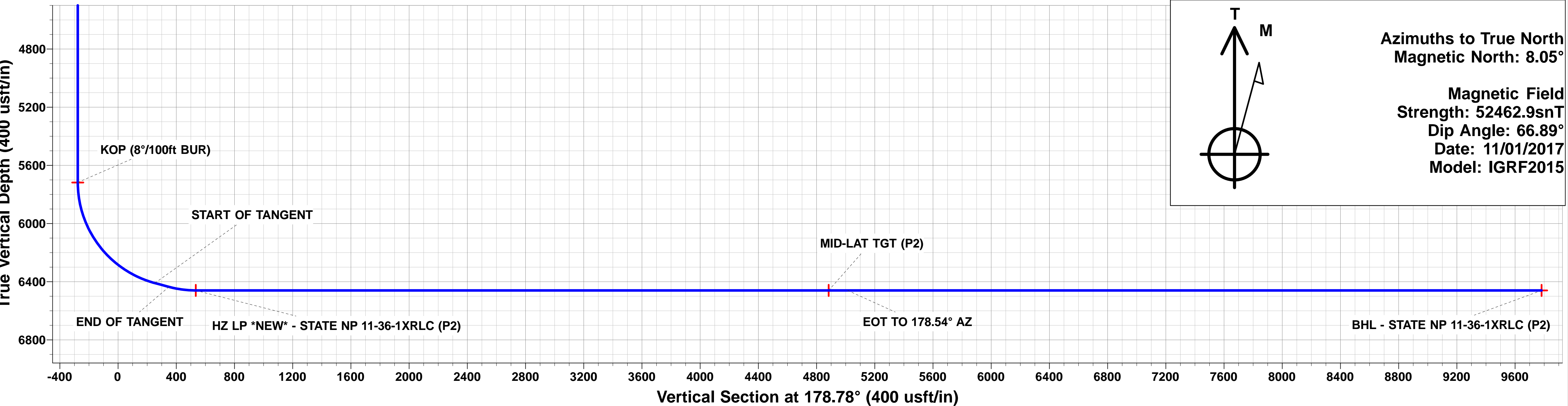
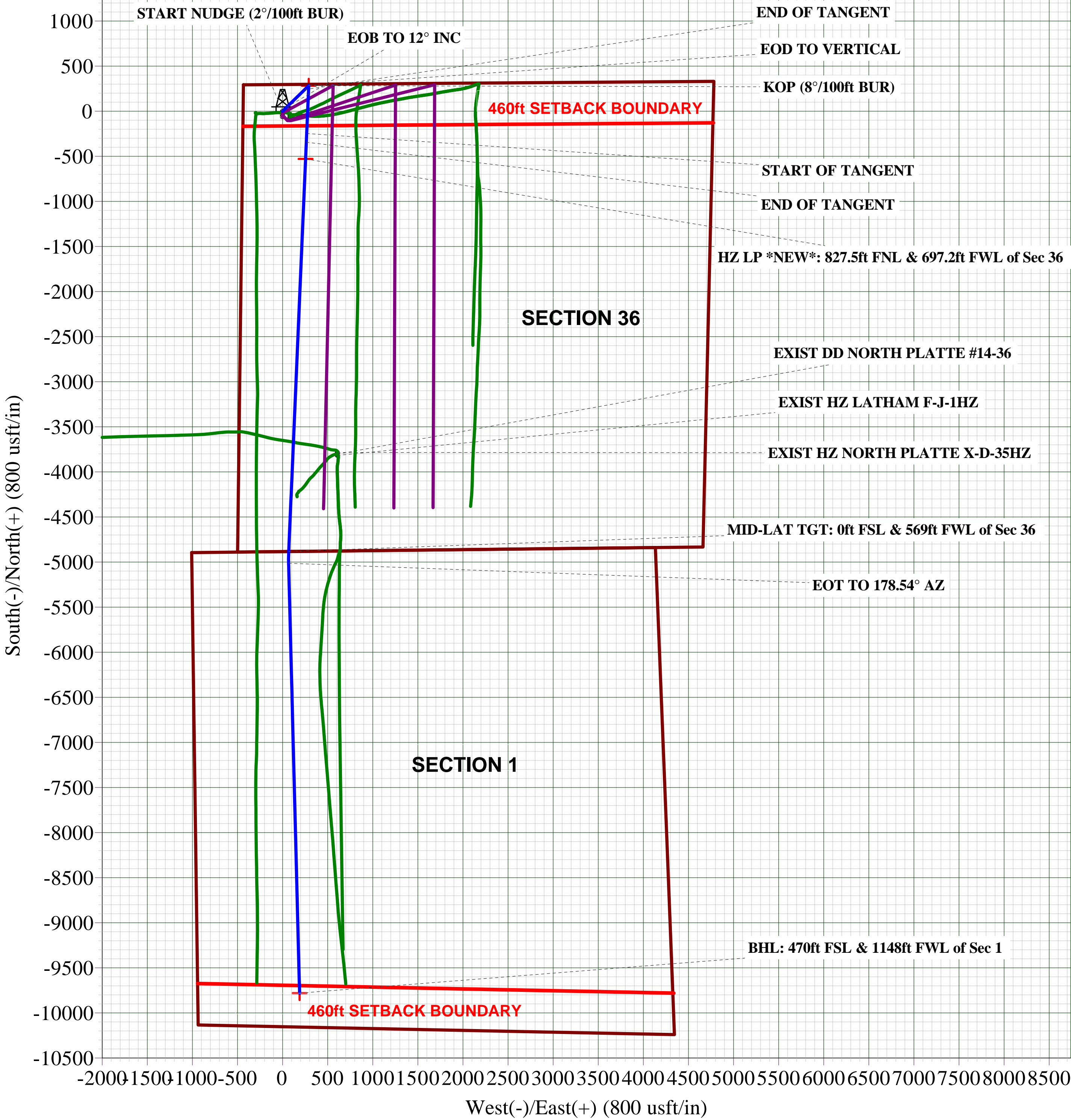
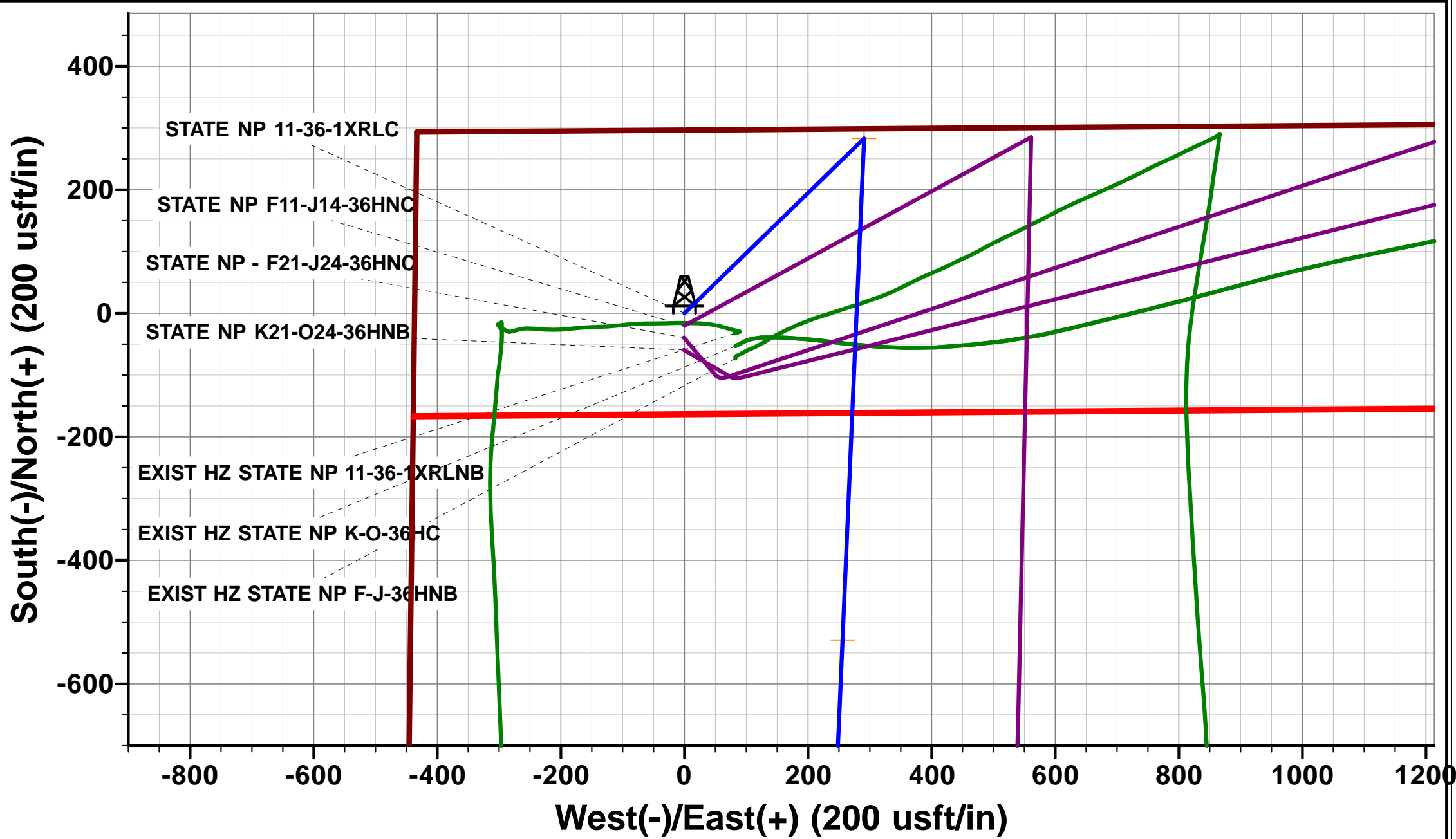
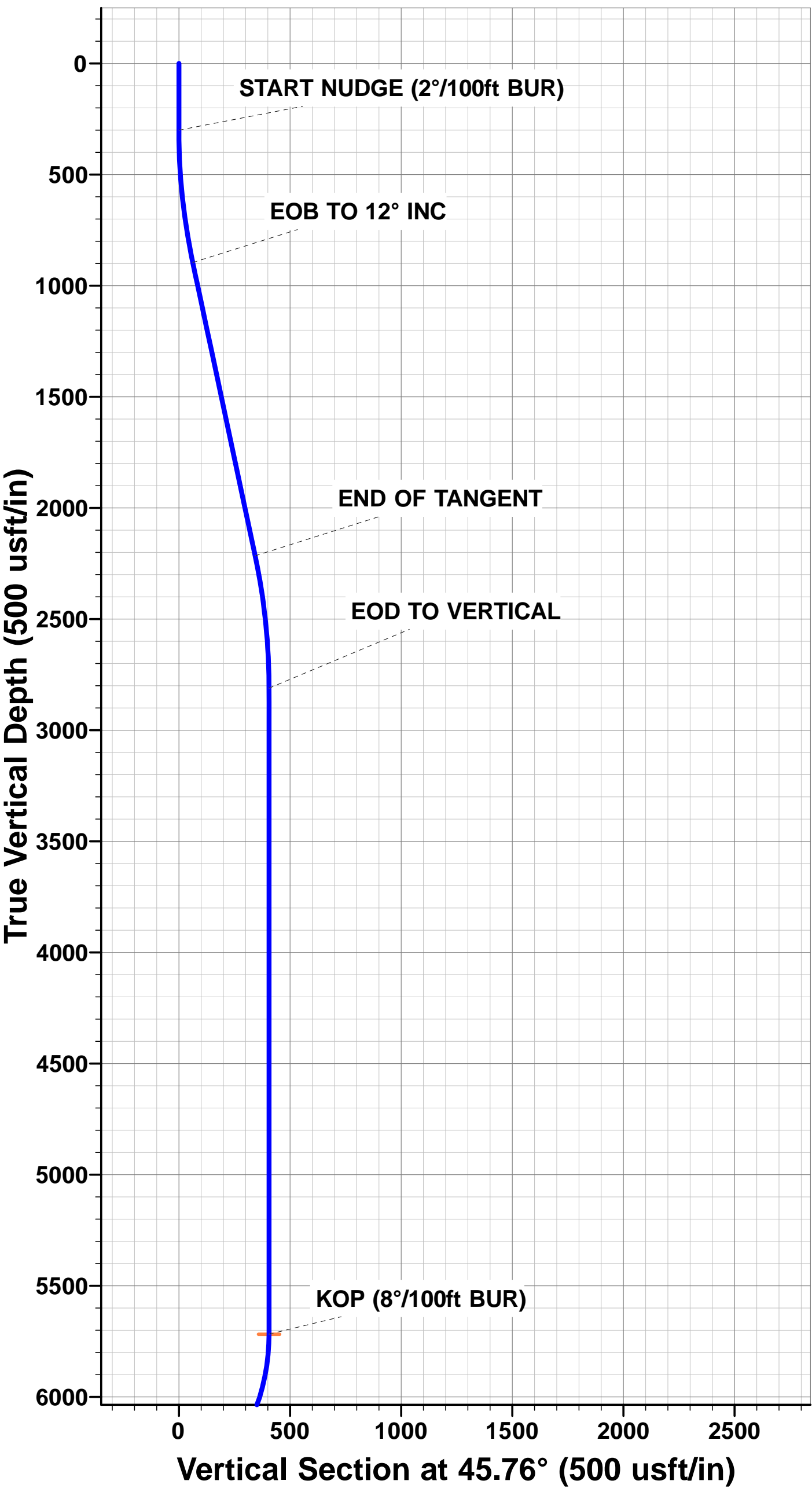
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 296ft FNL & 439ft FWL of Sec 36
300.0	300.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
895.6	900.0	12.00	45.76	43.7	44.8	-42.7	62.6	EOB TO 12° INC
2215.7	2249.6	12.00	45.76	239.4	245.9	-234.1	343.2	END OF TANGENT
2811.3	2849.5	0.00	45.76	283.1	290.7	-276.9	405.8	EOD TO VERTICAL
5718.0	5756.2	0.00	0.00	283.1	290.7	-276.9	405.8	KOP (8°/100ft BUR)
6409.8	6693.7	75.00	182.46	-247.2	267.9	252.8	936.6	START OF TANGENT
6435.7	6793.7	75.00	182.46	-343.7	263.8	349.2	1033.2	END OF TANGENT
6460.1	6981.2	90.00	182.46	-528.9	255.8	534.2	1218.5	HZ LP *NEW*: 827.5ft FNL & 697.2ft FWL of Sec 36
6460.1	11338.8	90.00	182.46	-4882.5	68.8	4882.8	5576.1	MID-LAT TGT: 0ft FSL & 569ft FWL of Sec 36
6460.1	11469.3	90.00	178.54	-5013.0	67.7	5013.3	5706.6	EOT TO 178.54° AZ
6460.1	16238.5	90.00	178.54	-9780.6	189.0	9782.4	10475.8	BHL: 470ft FSL & 1148ft FWL of Sec 1

PROPOSED LOCAL COORDINATES:

SHL: 296ft FNL & 439ft FWL Sec 36  
HZ LP \*NEW\*: 827.5ft FNL & 697.2ft FWL Sec 36  
BHL: 470ft FSL & 1148ft FWL Sec 1

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - STATE NP11-36-1XRLC (P2)	5718.0	283.1	290.7	40.363146	-104.391329
BHL - STATE NP 11-36-1XRLC (P2)	6460.1	-9780.6	189.0	40.335522	-104.391694
HZ LP *NEW* - STATE NP 11-36-1XRLC (P2)	6460.1	-528.9	255.8	40.360917	-104.391454
MID-LAT TGT (P2)	6460.1	-4882.5	68.8	40.348967	-104.392125



Azimuths to True North  
Magnetic North: 8.05°

Magnetic Field  
Strength: 52462.9snT  
Dip Angle: 66.89°  
Date: 11/01/2017  
Model: IGRF2015

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE NORTH PLATTE 11-36-1XRLC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4560.1usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4560.1usft
<b>Site:</b>	NW NW SEC. 36 T5N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE NORTH PLATTE 11-36-1XRLC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

<b>Project</b>	WELD COUNTY, COLORADO (NAD 83)		
<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		Using geodetic scale factor

<b>Site</b>	NW NW SEC. 36 T5N R63W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,376,747.52 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,308,732.52 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.362279
		<b>Longitude:</b>	-104.392074
		<b>Grid Convergence:</b>	0.72 °

<b>Well</b>	STATE NORTH PLATTE 11-36-1XRLC		
<b>Well Position</b>	<b>+N/-S</b>	32.8 usft	<b>Northing:</b>
	<b>+E/-W</b>	-83.0 usft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>

<b>Wellbore</b>	ORIGINAL WELLBORE				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	11/01/2017	8.05	66.89	52,463

<b>Design</b>	PROPOSAL #2			
<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	178.78

<b>Plan Sections</b>											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100usf)	Turn Rate (°/100usf)	TFO (°)	Target
0.0	0.00	0.00	0.0	-4,560.1	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	-4,260.1	0.0	0.0	0.00	0.00	0.00	0.00	
900.0	12.00	45.76	895.6	-3,664.5	43.7	44.8	2.00	2.00	0.00	45.76	
2,249.6	12.00	45.76	2,215.7	-2,344.4	239.4	245.9	0.00	0.00	0.00	0.00	
2,849.5	0.00	0.00	2,811.3	-1,748.8	283.1	290.7	2.00	-2.00	0.00	180.00	
5,756.2	0.00	0.00	5,718.0	1,157.9	283.1	290.7	0.00	0.00	0.00	0.00	KOP - STATE NP1
6,693.7	75.00	182.46	6,409.8	1,849.7	-247.2	267.9	8.00	8.00	0.00	182.46	
6,793.7	75.00	182.46	6,435.7	1,875.6	-343.7	263.8	0.00	0.00	0.00	0.00	
6,981.2	90.00	182.46	6,460.1	1,900.0	-528.9	255.8	8.00	8.00	0.00	0.00	
11,338.8	90.00	182.46	6,460.1	1,900.0	-4,882.5	68.8	0.00	0.00	0.00	-107.39	MID-LAT TGT (P2)
11,469.3	90.00	178.54	6,460.1	1,900.0	-5,012.9	67.7	3.00	0.00	-3.00	-89.99	
16,238.5	90.00	178.54	6,460.1	1,900.0	-9,780.6	189.0	0.00	0.00	0.00	0.00	BHL - STATE NP 1

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE NORTH PLATTE 11-36-1XRLC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4560.1usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4560.1usft
<b>Site:</b>	NW NW SEC. 36 T5N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE NORTH PLATTE 11-36-1XRLC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>SHL: 296ft FNL &amp; 439ft FWL of Sec 36</b>										
0.0	0.00	0.00	0.0	4,560.10	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,460.10	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,360.10	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
300.0	0.00	0.00	300.0	4,260.10	0.0	0.0	0.0	0.00	0.00	0.00
400.0	2.00	45.76	400.0	4,160.12	1.2	1.3	-1.2	2.00	2.00	0.00
500.0	4.00	45.76	499.8	4,060.26	4.9	5.0	-4.8	2.00	2.00	0.00
600.0	6.00	45.76	599.5	3,960.65	10.9	11.2	-10.7	2.00	2.00	0.00
700.0	8.00	45.76	698.7	3,861.40	19.5	20.0	-19.0	2.00	2.00	0.00
800.0	10.00	45.76	797.5	3,762.63	30.4	31.2	-29.7	2.00	2.00	0.00
<b>EOB TO 12° INC</b>										
900.0	12.00	45.76	895.6	3,664.48	43.7	44.8	-42.7	2.00	2.00	0.00
1,000.0	12.00	45.76	993.4	3,566.66	58.2	59.7	-56.9	0.00	0.00	0.00
1,100.0	12.00	45.76	1,091.3	3,468.85	72.7	74.6	-71.1	0.00	0.00	0.00
1,200.0	12.00	45.76	1,189.1	3,371.03	87.2	89.5	-85.3	0.00	0.00	0.00
1,300.0	12.00	45.76	1,286.9	3,273.22	101.7	104.4	-99.5	0.00	0.00	0.00
1,400.0	12.00	45.76	1,384.7	3,175.40	116.2	119.3	-113.6	0.00	0.00	0.00
1,500.0	12.00	45.76	1,482.5	3,077.59	130.7	134.2	-127.8	0.00	0.00	0.00
1,600.0	12.00	45.76	1,580.3	2,979.77	145.2	149.1	-142.0	0.00	0.00	0.00
1,700.0	12.00	45.76	1,678.1	2,881.96	159.7	164.0	-156.2	0.00	0.00	0.00
1,800.0	12.00	45.76	1,776.0	2,784.14	174.2	178.9	-170.4	0.00	0.00	0.00
1,900.0	12.00	45.76	1,873.8	2,686.33	188.7	193.8	-184.6	0.00	0.00	0.00
2,000.0	12.00	45.76	1,971.6	2,588.51	203.2	208.7	-198.7	0.00	0.00	0.00
2,100.0	12.00	45.76	2,069.4	2,490.70	217.7	223.6	-212.9	0.00	0.00	0.00
2,200.0	12.00	45.76	2,167.2	2,392.88	232.2	238.5	-227.1	0.00	0.00	0.00
<b>END OF TANGENT</b>										
2,249.6	12.00	45.76	2,215.7	2,344.37	239.4	245.9	-234.1	0.00	0.00	0.00
2,300.0	10.99	45.76	2,265.1	2,294.98	246.4	253.1	-241.0	2.00	-2.00	0.00
2,400.0	8.99	45.76	2,363.6	2,196.50	258.5	265.5	-252.8	2.00	-2.00	0.00
2,500.0	6.99	45.76	2,462.6	2,097.47	268.2	275.4	-262.3	2.00	-2.00	0.00
2,600.0	4.99	45.76	2,562.1	1,998.03	275.5	282.9	-269.4	2.00	-2.00	0.00
2,700.0	2.99	45.76	2,661.8	1,898.27	280.4	287.9	-274.2	2.00	-2.00	0.00
2,800.0	0.99	45.76	2,761.8	1,798.34	282.8	290.4	-276.6	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
2,849.5	0.00	45.76	2,811.3	1,748.84	283.1	290.7	-276.9	2.00	-2.00	0.00
2,900.0	0.00	0.00	2,861.8	1,698.34	283.1	290.7	-276.9	0.00	0.00	0.00
3,000.0	0.00	0.00	2,961.8	1,598.34	283.1	290.7	-276.9	0.00	0.00	0.00
3,100.0	0.00	0.00	3,061.8	1,498.34	283.1	290.7	-276.9	0.00	0.00	0.00
3,200.0	0.00	0.00	3,161.8	1,398.34	283.1	290.7	-276.9	0.00	0.00	0.00
3,300.0	0.00	0.00	3,261.8	1,298.34	283.1	290.7	-276.9	0.00	0.00	0.00
3,400.0	0.00	0.00	3,361.8	1,198.34	283.1	290.7	-276.9	0.00	0.00	0.00
3,500.0	0.00	0.00	3,461.8	1,098.34	283.1	290.7	-276.9	0.00	0.00	0.00
3,600.0	0.00	0.00	3,561.8	998.34	283.1	290.7	-276.9	0.00	0.00	0.00
3,700.0	0.00	0.00	3,661.8	898.34	283.1	290.7	-276.9	0.00	0.00	0.00
3,800.0	0.00	0.00	3,761.8	798.34	283.1	290.7	-276.9	0.00	0.00	0.00
3,900.0	0.00	0.00	3,861.8	698.34	283.1	290.7	-276.9	0.00	0.00	0.00
4,000.0	0.00	0.00	3,961.8	598.34	283.1	290.7	-276.9	0.00	0.00	0.00
4,100.0	0.00	0.00	4,061.8	498.34	283.1	290.7	-276.9	0.00	0.00	0.00
4,200.0	0.00	0.00	4,161.8	398.34	283.1	290.7	-276.9	0.00	0.00	0.00
4,300.0	0.00	0.00	4,261.8	298.34	283.1	290.7	-276.9	0.00	0.00	0.00
4,400.0	0.00	0.00	4,361.8	198.34	283.1	290.7	-276.9	0.00	0.00	0.00
4,500.0	0.00	0.00	4,461.8	98.34	283.1	290.7	-276.9	0.00	0.00	0.00
4,600.0	0.00	0.00	4,561.8	-1.66	283.1	290.7	-276.9	0.00	0.00	0.00



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<b>Site:</b>	NW NW SEC. 36 T5N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE NORTH PLATTE 11-36-1XRLC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,700.0	0.00	0.00	4,661.8	-101.66	283.1	290.7	-276.9	0.00	0.00	0.00
4,800.0	0.00	0.00	4,761.8	-201.66	283.1	290.7	-276.9	0.00	0.00	0.00
4,900.0	0.00	0.00	4,861.8	-301.66	283.1	290.7	-276.9	0.00	0.00	0.00
5,000.0	0.00	0.00	4,961.8	-401.66	283.1	290.7	-276.9	0.00	0.00	0.00
5,100.0	0.00	0.00	5,061.8	-501.66	283.1	290.7	-276.9	0.00	0.00	0.00
5,200.0	0.00	0.00	5,161.8	-601.66	283.1	290.7	-276.9	0.00	0.00	0.00
5,300.0	0.00	0.00	5,261.8	-701.66	283.1	290.7	-276.9	0.00	0.00	0.00
5,400.0	0.00	0.00	5,361.8	-801.66	283.1	290.7	-276.9	0.00	0.00	0.00
5,500.0	0.00	0.00	5,461.8	-901.66	283.1	290.7	-276.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,561.8	-1,001.66	283.1	290.7	-276.9	0.00	0.00	0.00
5,700.0	0.00	0.00	5,661.8	-1,101.66	283.1	290.7	-276.9	0.00	0.00	0.00
<b>KOP (8°/100ft BUR)</b>										
5,756.2	0.00	0.00	5,718.0	-1,157.86	283.1	290.7	-276.9	0.00	0.00	0.00
5,800.0	3.50	182.46	5,761.7	-1,201.63	281.8	290.6	-275.5	7.99	7.99	0.00
5,900.0	11.50	182.46	5,860.8	-1,300.70	268.7	290.1	-262.5	8.00	8.00	0.00
6,000.0	19.50	182.46	5,957.1	-1,396.98	242.1	288.9	-235.9	8.00	8.00	0.00
6,100.0	27.50	182.46	6,048.7	-1,488.61	202.3	287.2	-196.1	8.00	8.00	0.00
6,200.0	35.50	182.46	6,133.9	-1,573.80	150.1	285.0	-144.0	8.00	8.00	0.00
6,300.0	43.50	182.46	6,211.0	-1,650.90	86.6	282.3	-80.6	8.00	8.00	0.00
6,400.0	51.50	182.46	6,278.5	-1,718.41	13.0	279.1	-7.0	8.00	8.00	0.00
6,500.0	59.50	182.46	6,335.1	-1,775.00	-69.3	275.6	75.1	8.00	8.00	0.00
6,600.0	67.50	182.46	6,379.7	-1,819.58	-158.6	271.7	164.4	8.00	8.00	0.00
<b>START OF TANGENT</b>										
6,693.7	75.00	182.46	6,409.8	-1,849.68	-247.2	267.9	252.8	8.00	8.00	0.00
6,700.0	75.00	182.46	6,411.4	-1,851.31	-253.3	267.7	258.9	0.05	0.05	0.00
<b>END OF TANGENT</b>										
6,793.7	75.00	182.46	6,435.7	-1,875.56	-343.7	263.8	349.2	0.00	0.00	0.00
6,800.0	75.50	182.46	6,437.3	-1,877.17	-349.8	263.5	355.3	7.95	7.95	0.00
6,900.0	83.50	182.46	6,455.5	-1,895.38	-447.9	259.3	453.4	8.00	8.00	0.00
<b>HZ LP *NEW*: 827.5ft FNL &amp; 697.2ft FWL of Sec 36</b>										
6,981.2	90.00	182.46	6,460.1	-1,899.98	-528.9	255.8	534.2	8.00	8.00	0.00
7,000.0	90.00	182.46	6,460.1	-1,899.98	-547.7	255.0	553.0	0.02	0.02	0.00
7,100.0	90.00	182.46	6,460.1	-1,899.98	-647.6	250.7	652.8	0.00	0.00	0.00
7,200.0	90.00	182.46	6,460.1	-1,899.98	-747.5	246.4	752.6	0.00	0.00	0.00
7,300.0	90.00	182.46	6,460.1	-1,899.98	-847.4	242.1	852.4	0.00	0.00	0.00
7,400.0	90.00	182.46	6,460.1	-1,899.98	-947.3	237.8	952.2	0.00	0.00	0.00
7,500.0	90.00	182.46	6,460.1	-1,899.98	-1,047.2	233.5	1,052.0	0.00	0.00	0.00
7,600.0	90.00	182.46	6,460.1	-1,899.98	-1,147.1	229.3	1,151.7	0.00	0.00	0.00
7,700.0	90.00	182.46	6,460.1	-1,899.98	-1,247.0	225.0	1,251.5	0.00	0.00	0.00
7,800.0	90.00	182.46	6,460.1	-1,899.98	-1,346.9	220.7	1,351.3	0.00	0.00	0.00
7,900.0	90.00	182.46	6,460.1	-1,899.98	-1,446.8	216.4	1,451.1	0.00	0.00	0.00
8,000.0	90.00	182.46	6,460.1	-1,899.98	-1,546.8	212.1	1,550.9	0.00	0.00	0.00
8,100.0	90.00	182.46	6,460.1	-1,899.98	-1,646.7	207.8	1,650.7	0.00	0.00	0.00
8,200.0	90.00	182.46	6,460.1	-1,899.98	-1,746.6	203.5	1,750.5	0.00	0.00	0.00
8,300.0	90.00	182.46	6,460.1	-1,899.98	-1,846.5	199.2	1,850.3	0.00	0.00	0.00
8,400.0	90.00	182.46	6,460.1	-1,899.98	-1,946.4	194.9	1,950.1	0.00	0.00	0.00
8,500.0	90.00	182.46	6,460.1	-1,899.98	-2,046.3	190.6	2,049.9	0.00	0.00	0.00
8,600.0	90.00	182.46	6,460.1	-1,899.98	-2,146.2	186.3	2,149.7	0.00	0.00	0.00
8,700.0	90.00	182.46	6,460.1	-1,899.98	-2,246.1	182.1	2,249.5	0.00	0.00	0.00
8,800.0	90.00	182.46	6,460.1	-1,899.98	-2,346.0	177.8	2,349.3	0.00	0.00	0.00
8,900.0	90.00	182.46	6,460.1	-1,899.98	-2,445.9	173.5	2,449.1	0.00	0.00	0.00
9,000.0	90.00	182.46	6,460.1	-1,899.98	-2,545.8	169.2	2,548.9	0.00	0.00	0.00
9,100.0	90.00	182.46	6,460.1	-1,899.98	-2,645.7	164.9	2,648.7	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE NORTH PLATTE 11-36-1XRLC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4560.1usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4560.1usft
<b>Site:</b>	NW NW SEC. 36 T5N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE NORTH PLATTE 11-36-1XRLC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,200.0	90.00	182.46	6,460.1	-1,899.98	-2,745.7	160.6	2,748.4	0.00	0.00	0.00
9,300.0	90.00	182.46	6,460.1	-1,899.99	-2,845.6	156.3	2,848.2	0.00	0.00	0.00
9,400.0	90.00	182.46	6,460.1	-1,899.99	-2,945.5	152.0	2,948.0	0.00	0.00	0.00
9,500.0	90.00	182.46	6,460.1	-1,899.99	-3,045.4	147.7	3,047.8	0.00	0.00	0.00
9,600.0	90.00	182.46	6,460.1	-1,899.99	-3,145.3	143.4	3,147.6	0.00	0.00	0.00
9,700.0	90.00	182.46	6,460.1	-1,899.99	-3,245.2	139.1	3,247.4	0.00	0.00	0.00
9,800.0	90.00	182.46	6,460.1	-1,899.99	-3,345.1	134.9	3,347.2	0.00	0.00	0.00
9,900.0	90.00	182.46	6,460.1	-1,899.99	-3,445.0	130.6	3,447.0	0.00	0.00	0.00
10,000.0	90.00	182.46	6,460.1	-1,899.99	-3,544.9	126.3	3,546.8	0.00	0.00	0.00
10,100.0	90.00	182.46	6,460.1	-1,899.99	-3,644.8	122.0	3,646.6	0.00	0.00	0.00
10,200.0	90.00	182.46	6,460.1	-1,899.99	-3,744.7	117.7	3,746.4	0.00	0.00	0.00
10,300.0	90.00	182.46	6,460.1	-1,899.99	-3,844.6	113.4	3,846.2	0.00	0.00	0.00
10,400.0	90.00	182.46	6,460.1	-1,899.99	-3,944.5	109.1	3,946.0	0.00	0.00	0.00
10,500.0	90.00	182.46	6,460.1	-1,899.99	-4,044.5	104.8	4,045.8	0.00	0.00	0.00
10,600.0	90.00	182.46	6,460.1	-1,899.99	-4,144.4	100.5	4,145.6	0.00	0.00	0.00
10,700.0	90.00	182.46	6,460.1	-1,899.99	-4,244.3	96.2	4,245.4	0.00	0.00	0.00
10,800.0	90.00	182.46	6,460.1	-1,900.00	-4,344.2	92.0	4,345.2	0.00	0.00	0.00
10,900.0	90.00	182.46	6,460.1	-1,900.00	-4,444.1	87.7	4,444.9	0.00	0.00	0.00
11,000.0	90.00	182.46	6,460.1	-1,900.00	-4,544.0	83.4	4,544.7	0.00	0.00	0.00
11,100.0	90.00	182.46	6,460.1	-1,900.00	-4,643.9	79.1	4,644.5	0.00	0.00	0.00
11,200.0	90.00	182.46	6,460.1	-1,900.00	-4,743.8	74.8	4,744.3	0.00	0.00	0.00
11,300.0	90.00	182.46	6,460.1	-1,900.00	-4,843.7	70.5	4,844.1	0.00	0.00	0.00
<b>MID-LAT TGT: 0ft FSL &amp; 569ft FWL of Sec 36</b>										
<b>11,338.8</b>	<b>90.00</b>	<b>182.46</b>	<b>6,460.1</b>	<b>-1,900.00</b>	<b>-4,882.5</b>	<b>68.8</b>	<b>4,882.8</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
11,400.0	90.00	180.62	6,460.1	-1,900.00	-4,943.7	67.2	4,944.0	3.00	0.00	-3.00
<b>EOT TO 178.54° AZ</b>										
<b>11,469.3</b>	<b>90.00</b>	<b>178.54</b>	<b>6,460.1</b>	<b>-1,900.00</b>	<b>-5,013.0</b>	<b>67.7</b>	<b>5,013.3</b>	<b>3.00</b>	<b>0.00</b>	<b>-3.00</b>
11,500.0	90.00	178.54	6,460.1	-1,900.00	-5,043.6	68.5	5,044.0	0.00	0.00	0.00
11,600.0	90.00	178.54	6,460.1	-1,900.00	-5,143.6	71.0	5,144.0	0.00	0.00	0.00
11,700.0	90.00	178.54	6,460.1	-1,900.00	-5,243.6	73.6	5,244.0	0.00	0.00	0.00
11,800.0	90.00	178.54	6,460.1	-1,900.00	-5,343.5	76.1	5,344.0	0.00	0.00	0.00
11,900.0	90.00	178.54	6,460.1	-1,900.00	-5,443.5	78.7	5,444.0	0.00	0.00	0.00
12,000.0	90.00	178.54	6,460.1	-1,900.00	-5,543.5	81.2	5,544.0	0.00	0.00	0.00
12,100.0	90.00	178.54	6,460.1	-1,900.00	-5,643.4	83.7	5,644.0	0.00	0.00	0.00
12,200.0	90.00	178.54	6,460.1	-1,900.00	-5,743.4	86.3	5,744.0	0.00	0.00	0.00
12,300.0	90.00	178.54	6,460.1	-1,900.00	-5,843.4	88.8	5,844.0	0.00	0.00	0.00
12,400.0	90.00	178.54	6,460.1	-1,900.00	-5,943.4	91.4	5,943.9	0.00	0.00	0.00
12,500.0	90.00	178.54	6,460.1	-1,900.00	-6,043.3	93.9	6,043.9	0.00	0.00	0.00
12,600.0	90.00	178.54	6,460.1	-1,900.00	-6,143.3	96.5	6,143.9	0.00	0.00	0.00
12,700.0	90.00	178.54	6,460.1	-1,900.00	-6,243.3	99.0	6,243.9	0.00	0.00	0.00
12,800.0	90.00	178.54	6,460.1	-1,900.00	-6,343.2	101.6	6,343.9	0.00	0.00	0.00
12,900.0	90.00	178.54	6,460.1	-1,900.00	-6,443.2	104.1	6,443.9	0.00	0.00	0.00
13,000.0	90.00	178.54	6,460.1	-1,900.00	-6,543.2	106.6	6,543.9	0.00	0.00	0.00
13,100.0	90.00	178.54	6,460.1	-1,900.00	-6,643.1	109.2	6,643.9	0.00	0.00	0.00
13,200.0	90.00	178.54	6,460.1	-1,900.00	-6,743.1	111.7	6,743.9	0.00	0.00	0.00
13,300.0	90.00	178.54	6,460.1	-1,900.00	-6,843.1	114.3	6,843.9	0.00	0.00	0.00
13,400.0	90.00	178.54	6,460.1	-1,900.00	-6,943.0	116.8	6,943.9	0.00	0.00	0.00
13,500.0	90.00	178.54	6,460.1	-1,900.00	-7,043.0	119.4	7,043.9	0.00	0.00	0.00
13,600.0	90.00	178.54	6,460.1	-1,900.00	-7,143.0	121.9	7,143.9	0.00	0.00	0.00
13,700.0	90.00	178.54	6,460.1	-1,900.00	-7,242.9	124.4	7,243.9	0.00	0.00	0.00
13,800.0	90.00	178.54	6,460.1	-1,900.00	-7,342.9	127.0	7,343.9	0.00	0.00	0.00
13,900.0	90.00	178.54	6,460.1	-1,900.00	-7,442.9	129.5	7,443.9	0.00	0.00	0.00
14,000.0	90.00	178.54	6,460.1	-1,900.00	-7,542.8	132.1	7,543.9	0.00	0.00	0.00
14,100.0	90.00	178.54	6,460.1	-1,900.00	-7,642.8	134.6	7,643.9	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE NORTH PLATTE 11-36-1XRLC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4560.1usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4560.1usft
<b>Site:</b>	NW NW SEC. 36 T5N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE NORTH PLATTE 11-36-1XRLC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,200.0	90.00	178.54	6,460.1	-1,900.00	-7,742.8	137.2	7,743.9	0.00	0.00	0.00
14,300.0	90.00	178.54	6,460.1	-1,900.00	-7,842.7	139.7	7,843.9	0.00	0.00	0.00
14,400.0	90.00	178.54	6,460.1	-1,900.00	-7,942.7	142.3	7,943.9	0.00	0.00	0.00
14,500.0	90.00	178.54	6,460.1	-1,900.00	-8,042.7	144.8	8,043.9	0.00	0.00	0.00
14,600.0	90.00	178.54	6,460.1	-1,900.00	-8,142.6	147.3	8,143.9	0.00	0.00	0.00
14,700.0	90.00	178.54	6,460.1	-1,900.00	-8,242.6	149.9	8,243.9	0.00	0.00	0.00
14,800.0	90.00	178.54	6,460.1	-1,900.00	-8,342.6	152.4	8,343.9	0.00	0.00	0.00
14,900.0	90.00	178.54	6,460.1	-1,900.00	-8,442.5	155.0	8,443.9	0.00	0.00	0.00
15,000.0	90.00	178.54	6,460.1	-1,900.00	-8,542.5	157.5	8,543.9	0.00	0.00	0.00
15,100.0	90.00	178.54	6,460.1	-1,900.00	-8,642.5	160.1	8,643.9	0.00	0.00	0.00
15,200.0	90.00	178.54	6,460.1	-1,900.00	-8,742.4	162.6	8,743.9	0.00	0.00	0.00
15,300.0	90.00	178.54	6,460.1	-1,900.00	-8,842.4	165.1	8,843.9	0.00	0.00	0.00
15,400.0	90.00	178.54	6,460.1	-1,900.00	-8,942.4	167.7	8,943.9	0.00	0.00	0.00
15,500.0	90.00	178.54	6,460.1	-1,900.00	-9,042.3	170.2	9,043.9	0.00	0.00	0.00
15,600.0	90.00	178.54	6,460.1	-1,900.00	-9,142.3	172.8	9,143.9	0.00	0.00	0.00
15,700.0	90.00	178.54	6,460.1	-1,900.00	-9,242.3	175.3	9,243.9	0.00	0.00	0.00
15,800.0	90.00	178.54	6,460.1	-1,900.00	-9,342.3	177.9	9,343.9	0.00	0.00	0.00
15,900.0	90.00	178.54	6,460.1	-1,900.00	-9,442.2	180.4	9,443.9	0.00	0.00	0.00
16,000.0	90.00	178.54	6,460.1	-1,900.00	-9,542.2	183.0	9,543.9	0.00	0.00	0.00
16,100.0	90.00	178.54	6,460.1	-1,900.00	-9,642.2	185.5	9,643.9	0.00	0.00	0.00
16,200.0	90.00	178.54	6,460.1	-1,900.00	-9,742.1	188.0	9,743.9	0.00	0.00	0.00
<b>BHL: 470ft FSL &amp; 1148ft FWL of Sec 1</b>										
<b>16,238.5</b>	<b>90.00</b>	<b>178.54</b>	<b>6,460.1</b>	<b>-1,900.00</b>	<b>-9,780.6</b>	<b>189.0</b>	<b>9,782.4</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.0	0.0	0.0	0.0	SHL: 296ft FNL & 439ft FWL of Sec 36
300.0	300.0	0.0	0.0	START NUDGE (2°/100ft BUR)
900.0	895.6	43.7	44.8	EOB TO 12° INC
2,249.6	2,215.7	239.4	245.9	END OF TANGENT
2,849.5	2,811.3	283.1	290.7	EOD TO VERTICAL
5,756.2	5,718.0	283.1	290.7	KOP (8°/100ft BUR)
6,693.7	6,409.8	-247.2	267.9	START OF TANGENT
6,793.7	6,435.7	-343.7	263.8	END OF TANGENT
6,981.2	6,460.1	-528.9	255.8	HZ LP *NEW*: 827.5ft FNL & 697.2ft FWL of Sec 36
11,338.8	6,460.1	-4,882.5	68.8	MID-LAT TGT: 0ft FSL & 569ft FWL of Sec 36
11,469.3	6,460.1	-5,013.0	67.7	EOT TO 178.54° AZ
16,238.5	6,460.1	-9,780.6	189.0	BHL: 470ft FSL & 1148ft FWL of Sec 1