

# **BONANZA CREEK ENERGY INC.**

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

**SE SE SEC.32 T5N R61W 6th P.M.**

**STATE PRONGHORN X43-32-31MRLNC**

**ORIGINAL WELLBORE**

**18 December, 2014**

**Plan: PROPOSAL #1**

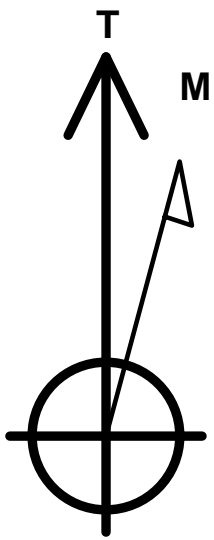
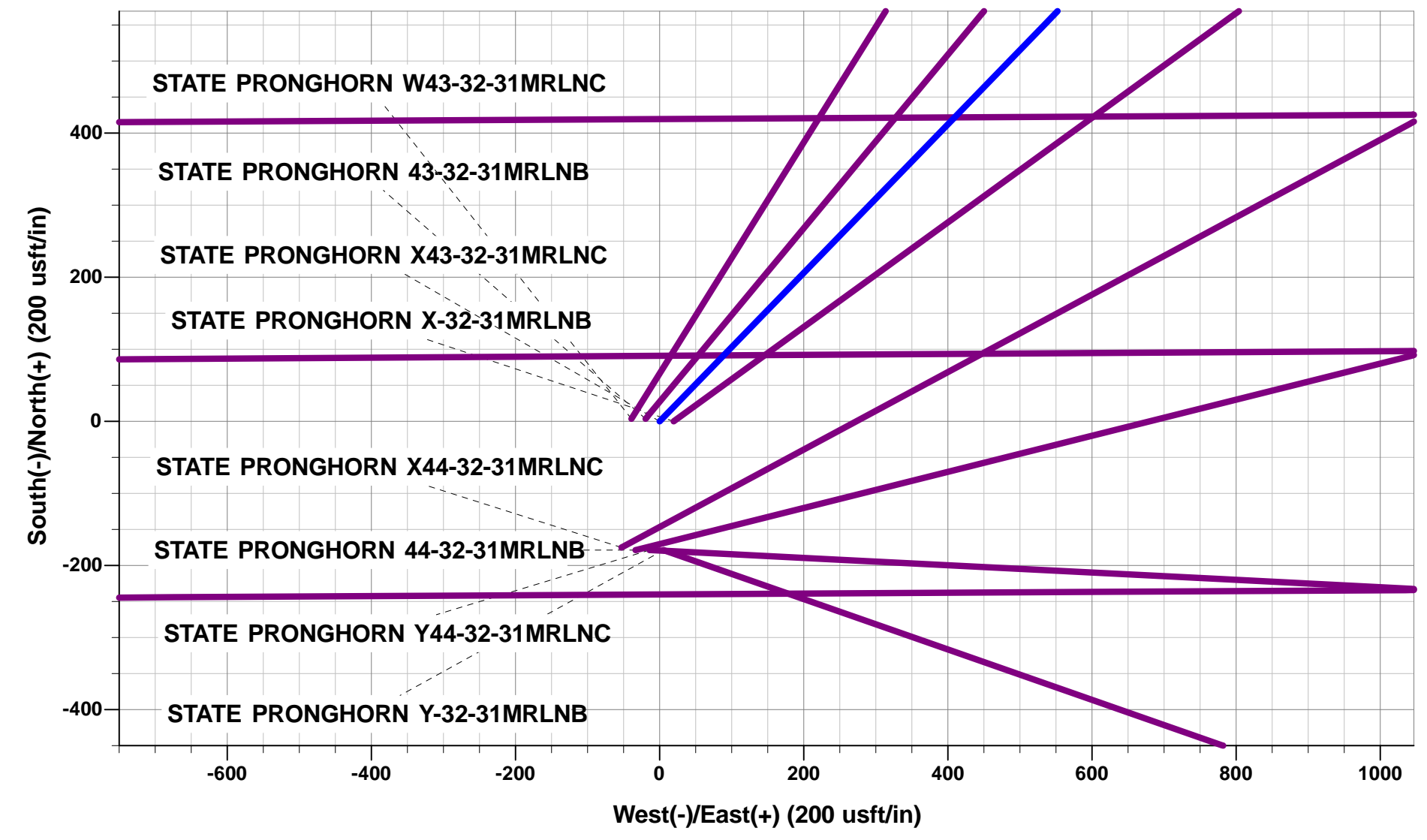




Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SE SE SEC.32 T5N R61W 6th P.M.  
Well: STATE PRONGHORN X43-32-31MRLNC  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

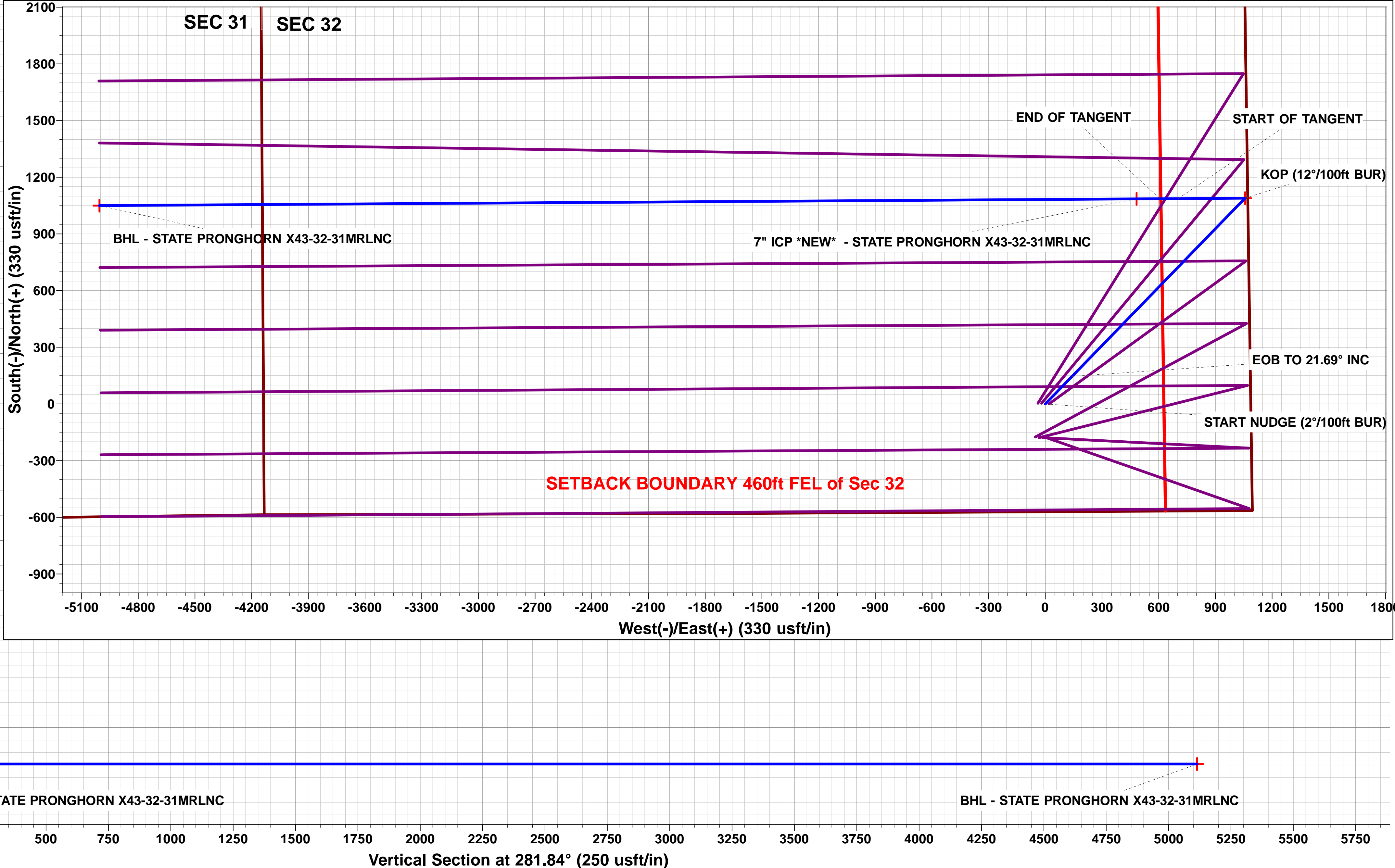
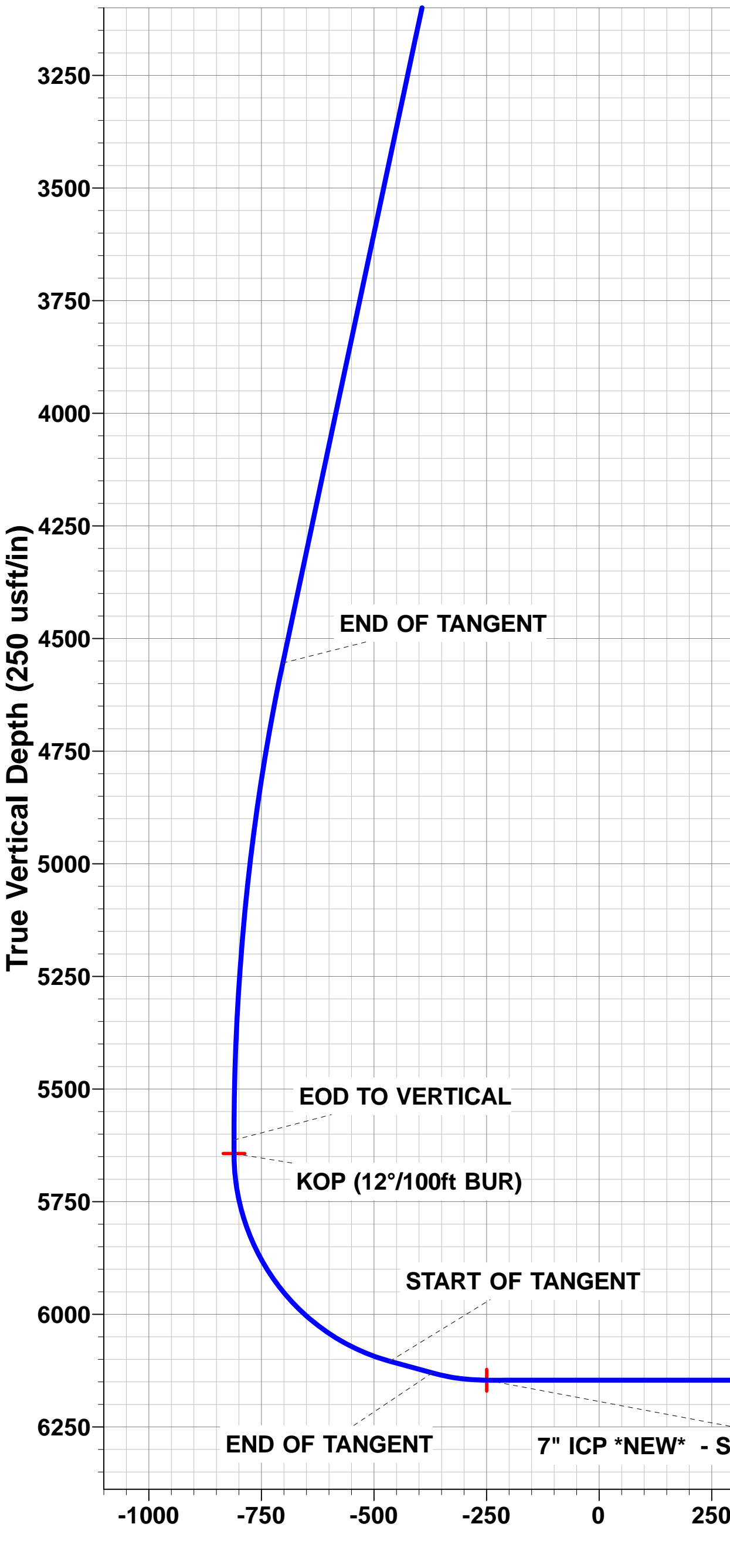
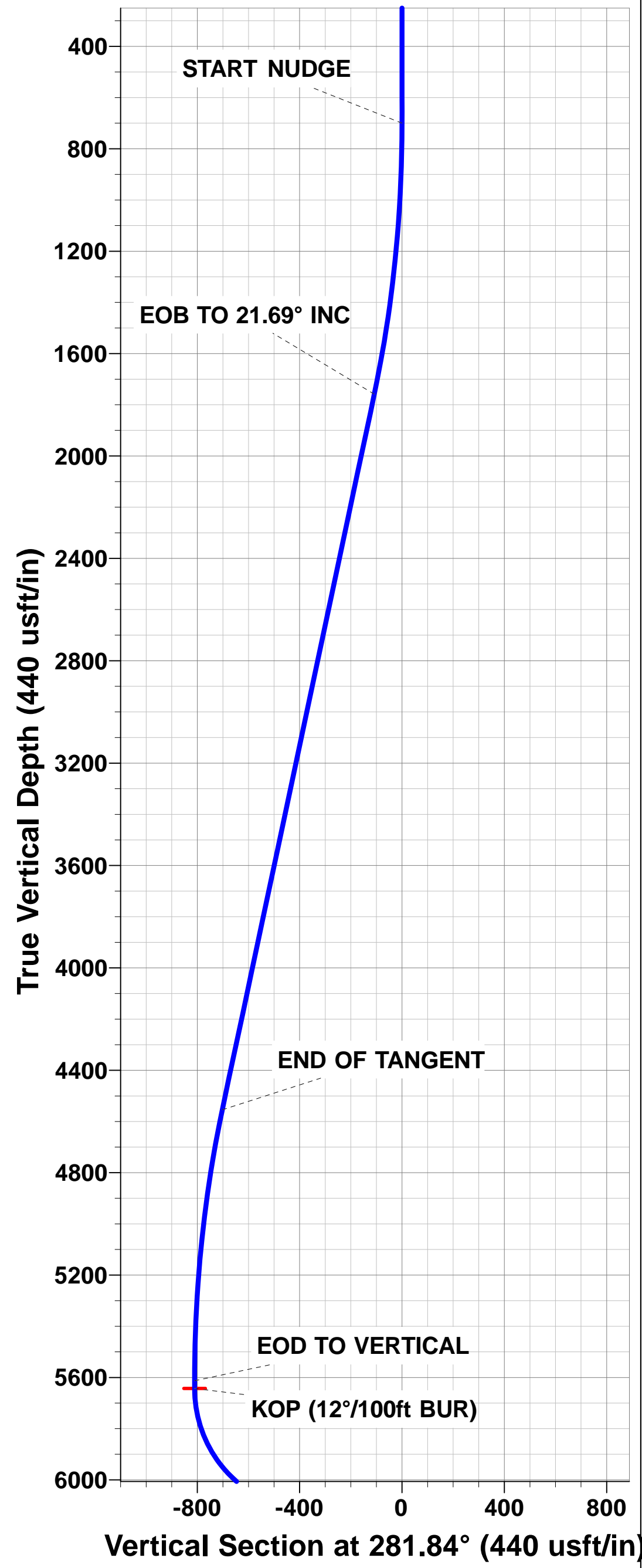
ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation	
700.0	700.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)	
1758.7	1784.4	21.69	44.14	145.5	141.2	-108.3	202.8	EOB TO 21.69° INC	
4554.3	4793.0	21.69	44.14	943.5	915.5	-702.3	1314.6	END OF TANGENT	
5613.0	5877.4	0.00	0.00	1089.0	1056.7	-810.7	1517.4	EOD TO VERTICAL	
5643.0	5907.4	0.00	0.00	1089.0	1056.7	-810.7	1517.4	KOP (12°/100ft BUR)	
6104.2	6532.4	75.00	269.63	1086.7	702.8	-464.8	1871.3	START OF TANGENT	
6130.1	6632.4	75.00	269.63	1086.1	606.2	-370.4	1967.9	END OF TANGENT	
6146.3	6757.4	90.00	269.63	1085.3	482.6	-249.6	2091.5	7" ICP *NEW* - STATE PRONGHORN X43-32-31MRLNC	
6146.3	12245.8	90.00	269.63	1049.7	-5005.6	5114.5	7579.9	BHL - STATE PRONGHORN X43-32-31MRLNC	

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - STATE PRONGHORN X43-32-31MRLNC	5643.0	1089.0	1056.7	40.354519	-104.223449
BHL - STATE PRONGHORN X43-32-31MRLNC	6146.3	1049.7	-5005.6	40.354410	-104.245200
7" ICP *NEW* - STATE PRONGHORN X43-32-31MRLNC	6146.3	1085.3	482.7	40.354509	-104.225508



Azimuths to True North  
Magnetic North: 8.10°  
  
Magnetic Field  
Strength: 52798.3snT  
Dip Angle: 66.98°  
Date: 02/12/2014  
Model: IGRF2010

PROPOSED LOCAL COORDINATES  
  
SHL: 570ft FSL & 1087ft FWL of Sec 32  
  
7" ICP \*NEW\*: 1650ft FSL & 589ft FWL of Sec 32  
  
BHL: 1650ft FSL & 860ft FEL of Sec 31



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE PRONGHORN X43-32-31MRLNC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4546.3usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4546.3usft (Original Well Elev)
<b>Site:</b>	SE SE SEC.32 T5N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE PRONGHORN X43-32-31MRLNC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

<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

Site	SE SE SEC.32 T5N R61W 6th P.M.				
Site Position:		Northing:	1,373,448.99 usft	Latitude:	40.351530
From:	Lat/Long	Easting:	3,354,737.61 usft	Longitude:	-104.227170
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft	Grid Convergence:	0.82 °

Well	STATE PRONGHORN X43-32-31MRLNC					
Well Position	+N/-S	0.0 usft	Northing:	1,373,448.70 usft	Latitude:	40.351530
	+E/-W	-19.5 usft	Easting:	3,354,718.10 usft	Longitude:	-104.227240
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,529.3 usft

<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>
	IGRF2010	02/12/2014	8.10	66.98	52,798

<b>Design</b>	PROPOSAL #1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0	
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	281.84	

<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	-4,546.3	0.0	0.0	0.00	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	-3,846.3	0.0	0.0	0.00	0.00	0.00	0.00	
1,784.4	21.69	44.14	1,758.7	-2,787.6	145.5	141.2	2.00	2.00	0.00	44.14	
4,793.0	21.69	44.14	4,554.3	8.0	943.5	915.5	0.00	0.00	0.00	0.00	
5,877.4	0.00	0.00	5,613.0	1,066.7	1,089.0	1,056.7	2.00	-2.00	0.00	180.00	
5,907.4	0.00	0.00	5,643.0	1,096.7	1,089.0	1,056.7	0.00	0.00	0.00	0.00	KOP - STATE PRO
6,532.4	75.00	269.63	6,104.2	1,557.9	1,086.7	702.8	12.00	12.00	0.00	269.63	
6,632.4	75.00	269.63	6,130.1	1,583.8	1,086.1	606.2	0.00	0.00	0.00	0.00	
6,757.4	90.00	269.63	6,146.3	1,600.0	1,085.3	482.7	12.00	12.00	0.00	0.00	
12,245.8	90.00	269.63	6,146.3	1,600.0	1,049.7	-5,005.6	0.00	0.00	0.00	-69.85	BHL - STATE PROI

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE PRONGHORN X43-32-31MRLNC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4546.3usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4546.3usft (Original Well Elev)
<b>Site:</b>	SE SE SEC.32 T5N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE PRONGHORN X43-32-31MRLNC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

## 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)
0.0	0.00	0.00	0.0	4,546.30	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,446.30	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,346.30	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,246.30	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,146.30	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,046.30	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	3,946.30	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
<b>700.0</b>	<b>0.00</b>	<b>0.00</b>	<b>700.0</b>	<b>3,846.30</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
800.0	2.00	44.14	800.0	3,746.32	1.3	1.2	-0.9	2.00	2.00	0.00
900.0	4.00	44.14	899.8	3,646.46	5.0	4.9	-3.7	2.00	2.00	0.00
1,000.0	6.00	44.14	999.5	3,546.85	11.3	10.9	-8.4	2.00	2.00	0.00
1,100.0	8.00	44.14	1,098.7	3,447.60	20.0	19.4	-14.9	2.00	2.00	0.00
1,200.0	10.00	44.14	1,197.5	3,348.83	31.2	30.3	-23.3	2.00	2.00	0.00
1,300.0	12.00	44.14	1,295.6	3,250.68	44.9	43.6	-33.4	2.00	2.00	0.00
1,400.0	14.00	44.14	1,393.1	3,153.24	61.1	59.3	-45.5	2.00	2.00	0.00
1,500.0	16.00	44.14	1,489.6	3,056.66	79.6	77.3	-59.3	2.00	2.00	0.00
1,600.0	18.00	44.14	1,585.3	2,961.03	100.6	97.6	-74.9	2.00	2.00	0.00
1,700.0	20.00	44.14	1,679.8	2,866.48	124.0	120.3	-92.3	2.00	2.00	0.00
<b>EOB TO 21.69° INC</b>										
<b>1,784.4</b>	<b>21.69</b>	<b>44.14</b>	<b>1,758.7</b>	<b>2,787.61</b>	<b>145.5</b>	<b>141.2</b>	<b>-108.3</b>	<b>2.00</b>	<b>2.00</b>	<b>0.00</b>
1,800.0	21.69	44.14	1,773.2	2,773.12	149.7	145.2	-111.4	0.00	0.00	0.00
1,900.0	21.69	44.14	1,866.1	2,680.19	176.2	171.0	-131.2	0.00	0.00	0.00
2,000.0	21.69	44.14	1,959.0	2,587.27	202.7	196.7	-150.9	0.00	0.00	0.00
2,100.0	21.69	44.14	2,051.9	2,494.35	229.2	222.4	-170.7	0.00	0.00	0.00
2,200.0	21.69	44.14	2,144.9	2,401.43	255.8	248.2	-190.4	0.00	0.00	0.00
2,300.0	21.69	44.14	2,237.8	2,308.51	282.3	273.9	-210.1	0.00	0.00	0.00
2,400.0	21.69	44.14	2,330.7	2,215.59	308.8	299.6	-229.9	0.00	0.00	0.00
2,500.0	21.69	44.14	2,423.6	2,122.67	335.3	325.4	-249.6	0.00	0.00	0.00
2,600.0	21.69	44.14	2,516.6	2,029.75	361.8	351.1	-269.4	0.00	0.00	0.00
2,700.0	21.69	44.14	2,609.5	1,936.82	388.4	376.9	-289.1	0.00	0.00	0.00
2,800.0	21.69	44.14	2,702.4	1,843.90	414.9	402.6	-308.9	0.00	0.00	0.00
2,900.0	21.69	44.14	2,795.3	1,750.98	441.4	428.3	-328.6	0.00	0.00	0.00
3,000.0	21.69	44.14	2,888.2	1,658.06	467.9	454.1	-348.3	0.00	0.00	0.00
3,100.0	21.69	44.14	2,981.2	1,565.14	494.5	479.8	-368.1	0.00	0.00	0.00
3,200.0	21.69	44.14	3,074.1	1,472.22	521.0	505.5	-387.8	0.00	0.00	0.00
3,300.0	21.69	44.14	3,167.0	1,379.30	547.5	531.3	-407.6	0.00	0.00	0.00
3,400.0	21.69	44.14	3,259.9	1,286.38	574.0	557.0	-427.3	0.00	0.00	0.00
3,500.0	21.69	44.14	3,352.8	1,193.45	600.5	582.7	-447.1	0.00	0.00	0.00
3,600.0	21.69	44.14	3,445.8	1,100.53	627.1	608.5	-466.8	0.00	0.00	0.00
3,700.0	21.69	44.14	3,538.7	1,007.61	653.6	634.2	-486.6	0.00	0.00	0.00
3,800.0	21.69	44.14	3,631.6	914.69	680.1	659.9	-506.3	0.00	0.00	0.00
3,900.0	21.69	44.14	3,724.5	821.77	706.6	685.7	-526.0	0.00	0.00	0.00
4,000.0	21.69	44.14	3,817.5	728.85	733.1	711.4	-545.8	0.00	0.00	0.00
4,100.0	21.69	44.14	3,910.4	635.93	759.7	737.1	-565.5	0.00	0.00	0.00
4,200.0	21.69	44.14	4,003.3	543.01	786.2	762.9	-585.3	0.00	0.00	0.00
4,300.0	21.69	44.14	4,096.2	450.08	812.7	788.6	-605.0	0.00	0.00	0.00
4,400.0	21.69	44.14	4,189.1	357.16	839.2	814.3	-624.8	0.00	0.00	0.00
4,500.0	21.69	44.14	4,282.1	264.24	865.8	840.1	-644.5	0.00	0.00	0.00
4,600.0	21.69	44.14	4,375.0	171.32	892.3	865.8	-664.2	0.00	0.00	0.00
4,700.0	21.69	44.14	4,467.9	78.40	918.8	891.5	-684.0	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>4,793.0</b>	<b>21.69</b>	<b>44.14</b>	<b>4,554.3</b>	<b>-8.02</b>	<b>943.5</b>	<b>915.5</b>	<b>-702.3</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE PRONGHORN X43-32-31MRLNC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4546.3usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4546.3usft (Original Well Elev)
<b>Site:</b>	SE SE SEC.32 T5N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE PRONGHORN X43-32-31MRLNC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

## 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)
4,800.0	21.55	44.14	4,560.8	-14.52	945.3	917.3	-703.7	2.00	-2.00	0.00
4,900.0	19.55	44.14	4,654.5	-108.16	970.5	941.7	-722.5	2.00	-2.00	0.00
5,000.0	17.55	44.14	4,749.3	-202.96	993.3	963.9	-739.5	2.00	-2.00	0.00
5,100.0	15.55	44.14	4,845.1	-298.81	1,013.8	983.7	-754.7	2.00	-2.00	0.00
5,200.0	13.55	44.14	4,941.9	-395.60	1,031.8	1,001.2	-768.1	2.00	-2.00	0.00
5,300.0	11.55	44.14	5,039.5	-493.21	1,047.4	1,016.3	-779.7	2.00	-2.00	0.00
5,400.0	9.55	44.14	5,137.8	-591.51	1,060.5	1,029.1	-789.5	2.00	-2.00	0.00
5,500.0	7.55	44.14	5,236.7	-690.40	1,071.2	1,039.4	-797.4	2.00	-2.00	0.00
5,600.0	5.55	44.14	5,336.0	-789.74	1,079.4	1,047.4	-803.5	2.00	-2.00	0.00
5,700.0	3.55	44.14	5,435.7	-889.42	1,085.1	1,052.9	-807.8	2.00	-2.00	0.00
5,800.0	1.55	44.14	5,535.6	-989.32	1,088.2	1,056.0	-810.1	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
<b>5,877.4</b>	<b>0.00</b>	<b>0.00</b>	<b>5,613.0</b>	<b>-1,066.71</b>	<b>1,089.0</b>	<b>1,056.7</b>	<b>-810.7</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
5,900.0	0.00	0.00	5,635.6	-1,089.31	1,089.0	1,056.7	-810.7	0.00	0.00	0.00
<b>KOP (12°/100ft BUR)</b>										
<b>5,907.4</b>	<b>0.00</b>	<b>0.00</b>	<b>5,643.0</b>	<b>-1,096.71</b>	<b>1,089.0</b>	<b>1,056.7</b>	<b>-810.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,000.0	11.11	269.63	5,735.0	-1,188.73	1,088.9	1,047.7	-801.9	12.00	12.00	0.00
6,100.0	23.11	269.63	5,830.4	-1,284.13	1,088.8	1,018.4	-773.2	12.00	12.00	0.00
6,200.0	35.11	269.63	5,917.6	-1,371.33	1,088.4	969.8	-725.8	12.00	12.00	0.00
6,300.0	47.11	269.63	5,992.8	-1,446.54	1,088.0	904.2	-661.6	12.00	12.00	0.00
6,400.0	59.11	269.63	6,052.8	-1,506.45	1,087.5	824.3	-583.6	12.00	12.00	0.00
6,500.0	71.11	269.63	6,094.8	-1,548.46	1,086.9	733.8	-495.1	12.00	12.00	0.00
<b>START OF TANGENT</b>										
<b>6,532.4</b>	<b>75.00</b>	<b>269.63</b>	<b>6,104.2</b>	<b>-1,557.90</b>	<b>1,086.7</b>	<b>702.8</b>	<b>-464.8</b>	<b>12.00</b>	<b>12.00</b>	<b>0.00</b>
6,600.0	75.00	269.63	6,121.7	-1,575.39	1,086.3	637.5	-401.0	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>6,632.4</b>	<b>75.00</b>	<b>269.63</b>	<b>6,130.1</b>	<b>-1,583.78</b>	<b>1,086.1</b>	<b>606.2</b>	<b>-370.4</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,700.0	83.11	269.63	6,142.9	-1,596.60	1,085.7	539.9	-305.6	12.00	12.00	0.00
<b>7" ICP *NEW* - STATE PRONGHORN X43-32-31MRLNC</b>										
<b>6,757.4</b>	<b>90.00</b>	<b>269.63</b>	<b>6,146.3</b>	<b>-1,600.05</b>	<b>1,085.3</b>	<b>482.6</b>	<b>-249.6</b>	<b>12.00</b>	<b>12.00</b>	<b>0.00</b>
6,800.0	90.00	269.63	6,146.3	-1,600.05	1,085.0	440.0	-208.0	0.00	0.00	0.00
6,900.0	90.00	269.63	6,146.3	-1,600.05	1,084.4	340.1	-110.3	0.00	0.00	0.00
7,000.0	90.00	269.63	6,146.3	-1,600.05	1,083.7	240.1	-12.5	0.00	0.00	0.00
7,100.0	90.00	269.63	6,146.3	-1,600.05	1,083.1	140.1	85.2	0.00	0.00	0.00
7,200.0	90.00	269.63	6,146.3	-1,600.05	1,082.4	40.1	183.0	0.00	0.00	0.00
7,300.0	90.00	269.63	6,146.3	-1,600.05	1,081.8	-59.9	280.7	0.00	0.00	0.00
7,400.0	90.00	269.63	6,146.3	-1,600.05	1,081.1	-159.9	378.4	0.00	0.00	0.00
7,500.0	90.00	269.63	6,146.3	-1,600.05	1,080.5	-259.9	476.2	0.00	0.00	0.00
7,600.0	90.00	269.63	6,146.3	-1,600.05	1,079.8	-359.9	573.9	0.00	0.00	0.00
7,700.0	90.00	269.63	6,146.3	-1,600.05	1,079.2	-459.9	671.6	0.00	0.00	0.00
7,800.0	90.00	269.63	6,146.3	-1,600.05	1,078.6	-559.9	769.4	0.00	0.00	0.00
7,900.0	90.00	269.63	6,146.3	-1,600.04	1,077.9	-659.9	867.1	0.00	0.00	0.00
8,000.0	90.00	269.63	6,146.3	-1,600.04	1,077.3	-759.9	964.9	0.00	0.00	0.00
8,100.0	90.00	269.63	6,146.3	-1,600.04	1,076.6	-859.9	1,062.6	0.00	0.00	0.00
8,200.0	90.00	269.63	6,146.3	-1,600.04	1,076.0	-959.9	1,160.3	0.00	0.00	0.00
8,300.0	90.00	269.63	6,146.3	-1,600.04	1,075.3	-1,059.9	1,258.1	0.00	0.00	0.00
8,400.0	90.00	269.63	6,146.3	-1,600.04	1,074.7	-1,159.9	1,355.8	0.00	0.00	0.00
8,500.0	90.00	269.63	6,146.3	-1,600.04	1,074.0	-1,259.9	1,453.5	0.00	0.00	0.00
8,600.0	90.00	269.63	6,146.3	-1,600.04	1,073.4	-1,359.9	1,551.3	0.00	0.00	0.00
8,700.0	90.00	269.63	6,146.3	-1,600.04	1,072.7	-1,459.9	1,649.0	0.00	0.00	0.00
8,800.0	90.00	269.63	6,146.3	-1,600.04	1,072.1	-1,559.9	1,746.7	0.00	0.00	0.00
8,900.0	90.00	269.63	6,146.3	-1,600.04	1,071.4	-1,659.9	1,844.5	0.00	0.00	0.00



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE PRONGHORN X43-32-31MRLNC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4546.3usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4546.3usft (Original Well Elev)
<b>Site:</b>	SE SE SEC.32 T5N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE PRONGHORN X43-32-31MRLNC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

## 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)
9,000.0	90.00	269.63	6,146.3	-1,600.04	1,070.8	-1,759.9	1,942.2	0.00	0.00	0.00
9,100.0	90.00	269.63	6,146.3	-1,600.04	1,070.1	-1,859.9	2,039.9	0.00	0.00	0.00
9,200.0	90.00	269.63	6,146.3	-1,600.04	1,069.5	-1,959.9	2,137.7	0.00	0.00	0.00
9,300.0	90.00	269.63	6,146.3	-1,600.04	1,068.8	-2,059.9	2,235.4	0.00	0.00	0.00
9,400.0	90.00	269.63	6,146.3	-1,600.04	1,068.2	-2,159.9	2,333.2	0.00	0.00	0.00
9,500.0	90.00	269.63	6,146.3	-1,600.04	1,067.6	-2,259.9	2,430.9	0.00	0.00	0.00
9,600.0	90.00	269.63	6,146.3	-1,600.03	1,066.9	-2,359.9	2,528.6	0.00	0.00	0.00
9,700.0	90.00	269.63	6,146.3	-1,600.03	1,066.3	-2,459.9	2,626.4	0.00	0.00	0.00
9,800.0	90.00	269.63	6,146.3	-1,600.03	1,065.6	-2,559.9	2,724.1	0.00	0.00	0.00
9,900.0	90.00	269.63	6,146.3	-1,600.03	1,065.0	-2,659.9	2,821.8	0.00	0.00	0.00
10,000.0	90.00	269.63	6,146.3	-1,600.03	1,064.3	-2,759.9	2,919.6	0.00	0.00	0.00
10,100.0	90.00	269.63	6,146.3	-1,600.03	1,063.7	-2,859.9	3,017.3	0.00	0.00	0.00
10,200.0	90.00	269.63	6,146.3	-1,600.03	1,063.0	-2,959.9	3,115.0	0.00	0.00	0.00
10,300.0	90.00	269.63	6,146.3	-1,600.03	1,062.4	-3,059.9	3,212.8	0.00	0.00	0.00
10,400.0	90.00	269.63	6,146.3	-1,600.03	1,061.7	-3,159.9	3,310.5	0.00	0.00	0.00
10,500.0	90.00	269.63	6,146.3	-1,600.03	1,061.1	-3,259.9	3,408.3	0.00	0.00	0.00
10,600.0	90.00	269.63	6,146.3	-1,600.02	1,060.4	-3,359.9	3,506.0	0.00	0.00	0.00
10,700.0	90.00	269.63	6,146.3	-1,600.02	1,059.8	-3,459.9	3,603.7	0.00	0.00	0.00
10,800.0	90.00	269.63	6,146.3	-1,600.02	1,059.1	-3,559.9	3,701.5	0.00	0.00	0.00
10,900.0	90.00	269.63	6,146.3	-1,600.02	1,058.5	-3,659.9	3,799.2	0.00	0.00	0.00
11,000.0	90.00	269.63	6,146.3	-1,600.02	1,057.8	-3,759.9	3,896.9	0.00	0.00	0.00
11,100.0	90.00	269.63	6,146.3	-1,600.02	1,057.2	-3,859.9	3,994.7	0.00	0.00	0.00
11,200.0	90.00	269.63	6,146.3	-1,600.02	1,056.5	-3,959.9	4,092.4	0.00	0.00	0.00
11,300.0	90.00	269.63	6,146.3	-1,600.01	1,055.9	-4,059.9	4,190.1	0.00	0.00	0.00
11,400.0	90.00	269.63	6,146.3	-1,600.01	1,055.2	-4,159.9	4,287.9	0.00	0.00	0.00
11,500.0	90.00	269.63	6,146.3	-1,600.01	1,054.6	-4,259.9	4,385.6	0.00	0.00	0.00
11,600.0	90.00	269.63	6,146.3	-1,600.01	1,053.9	-4,359.9	4,483.3	0.00	0.00	0.00
11,700.0	90.00	269.63	6,146.3	-1,600.01	1,053.3	-4,459.8	4,581.1	0.00	0.00	0.00
11,800.0	90.00	269.63	6,146.3	-1,600.01	1,052.6	-4,559.8	4,678.8	0.00	0.00	0.00
11,900.0	90.00	269.63	6,146.3	-1,600.01	1,052.0	-4,659.8	4,776.6	0.00	0.00	0.00
12,000.0	90.00	269.63	6,146.3	-1,600.00	1,051.3	-4,759.8	4,874.3	0.00	0.00	0.00
12,100.0	90.00	269.63	6,146.3	-1,600.00	1,050.7	-4,859.8	4,972.0	0.00	0.00	0.00
12,200.0	90.00	269.63	6,146.3	-1,600.00	1,050.0	-4,959.8	5,069.8	0.00	0.00	0.00
<b>BHL - STATE PRONGHORN X43-32-31MRLNC</b>										
<b>12,245.8</b>	<b>90.00</b>	<b>269.63</b>	<b>6,146.3</b>	<b>-1,600.00</b>	<b>1,049.7</b>	<b>-5,005.6</b>	<b>5,114.5</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)	
700.0	700.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,784.4	1,758.7	145.5	141.2	EOB TO 21.69° INC
4,793.0	4,554.3	943.5	915.5	END OF TANGENT
5,877.4	5,613.0	1,089.0	1,056.7	EOD TO VERTICAL
5,907.4	5,643.0	1,089.0	1,056.7	KOP (12°/100ft BUR)
6,532.4	6,104.2	1,086.7	702.8	START OF TANGENT
6,632.4	6,130.1	1,086.1	606.2	END OF TANGENT
6,757.4	6,146.3	1,085.3	482.6	7" ICP *NEW* - STATE PRONGHORN X43-32-31MRLNC
12,245.8	6,146.3	1,049.7	-5,005.6	BHL - STATE PRONGHORN X43-32-31MRLNC