

# **BONANZA CREEK ENERGY INC.**

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

**NE NE SEC. 11 T5N R62W 6th P.M.**

**STATE ANTELOPE P41-11-14XRLNB**

**ORIGINAL WELLBORE**

**27 August, 2016**

**Plan: PROPOSAL #1**





Project: WELD COUNTY, COLORADO (NAD 83)  
Site: NE NE SEC. 11 T5N R62W 6th P.M.  
Well: STATE ANTELOPE P41-11-14XRLNB  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

ANNOTATIONS										
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation		
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 270ft FNL & 779ft FEL of Sec 11		
1550.0	1550.0	0.00	0.00	0.0	0.0	0.0	0.0	SURFACE CASING		
1650.0	1650.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)		
2245.7	2250.1	12.00	308.95	39.4	-48.7	-37.9	62.6	EOB TO 12° INC		
3448.0	3479.2	12.00	308.95	200.0	-247.5	-192.8	318.2	END OF TANGENT		
4043.7	4079.3	0.00	308.95	239.4	-296.2	-230.7	380.8	EOD TO VERTICAL		
5430.7	5466.3	0.00	0.00	239.4	-296.2	-230.7	380.9	KOP (8°/100ft BUR)		
6122.5	6403.8	75.00	180.08	-291.4	-296.9	299.9	911.7	START OF TANGENT		
6148.4	6503.8	75.00	180.08	-388.0	-297.1	396.4	1008.2	END OF TANGENT		
6172.8	6691.3	90.00	180.08	-573.4	-297.3	581.7	1193.6	HZ LP *NEW*: 827.8ft FNL & 1075ft FEL of Sec 11		
6173.2	11240.9	89.99	180.09	-5123.0	-304.0	5129.6	5743.2	MID-LAT TGT: 0ft FNL & 1071ft FEL of Sec 14		
6173.2	11248.9	90.00	179.85	-5131.0	-304.0	5137.6	5751.2	EOT TO 179.85° AZ		
6173.2	16149.1	90.00	179.85	-10031.1	-291.1	10035.4	10651.4	BHL: 470ft FSL & 1047ft FEL of Sec 14		

PROPOSED LOCAL COORDINATES:

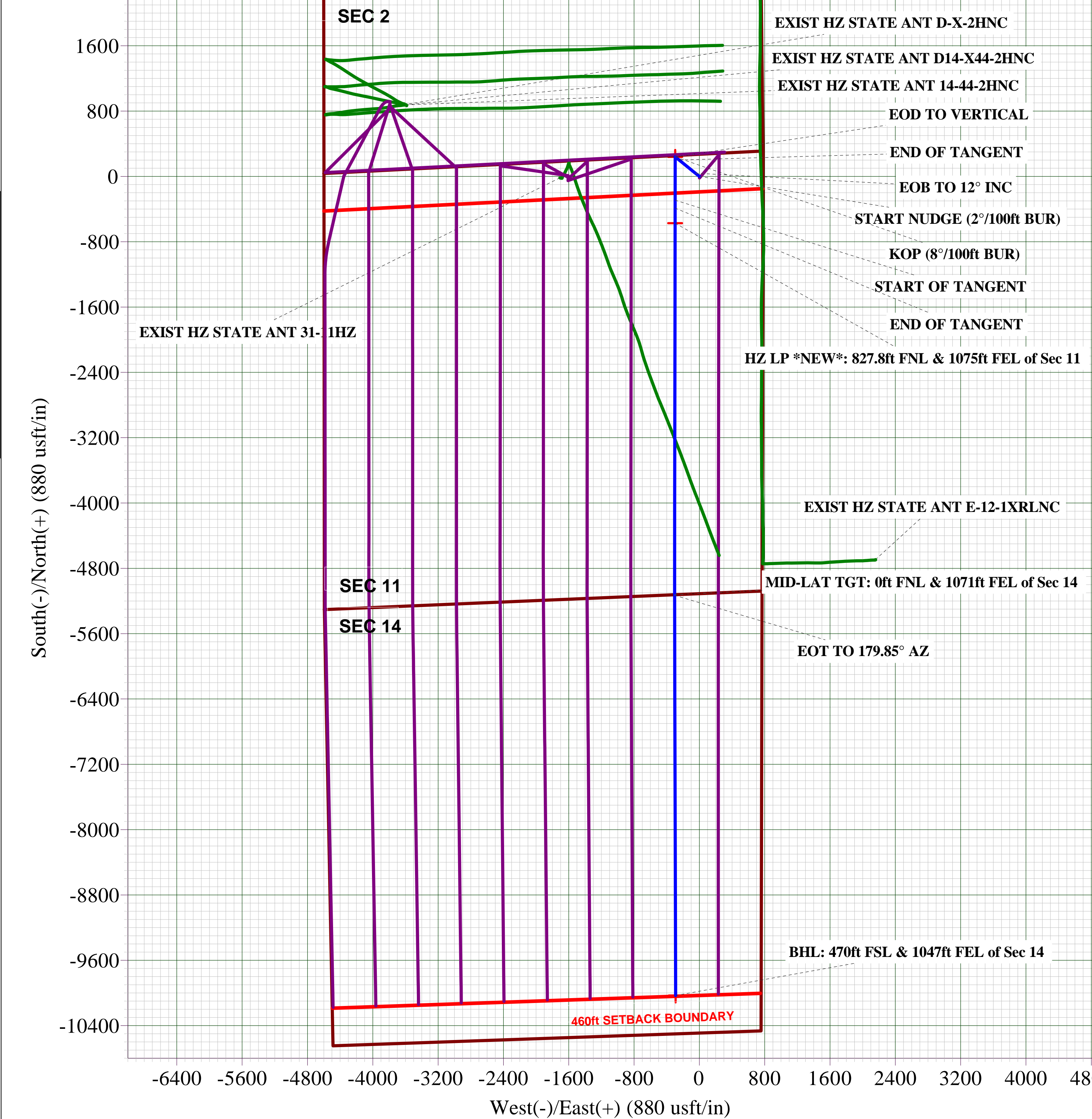
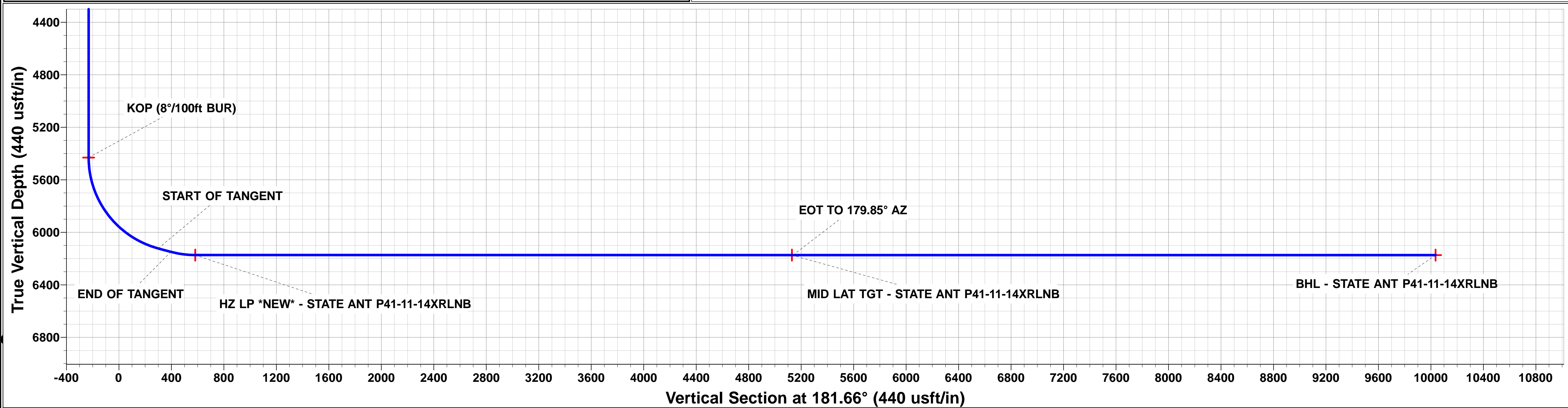
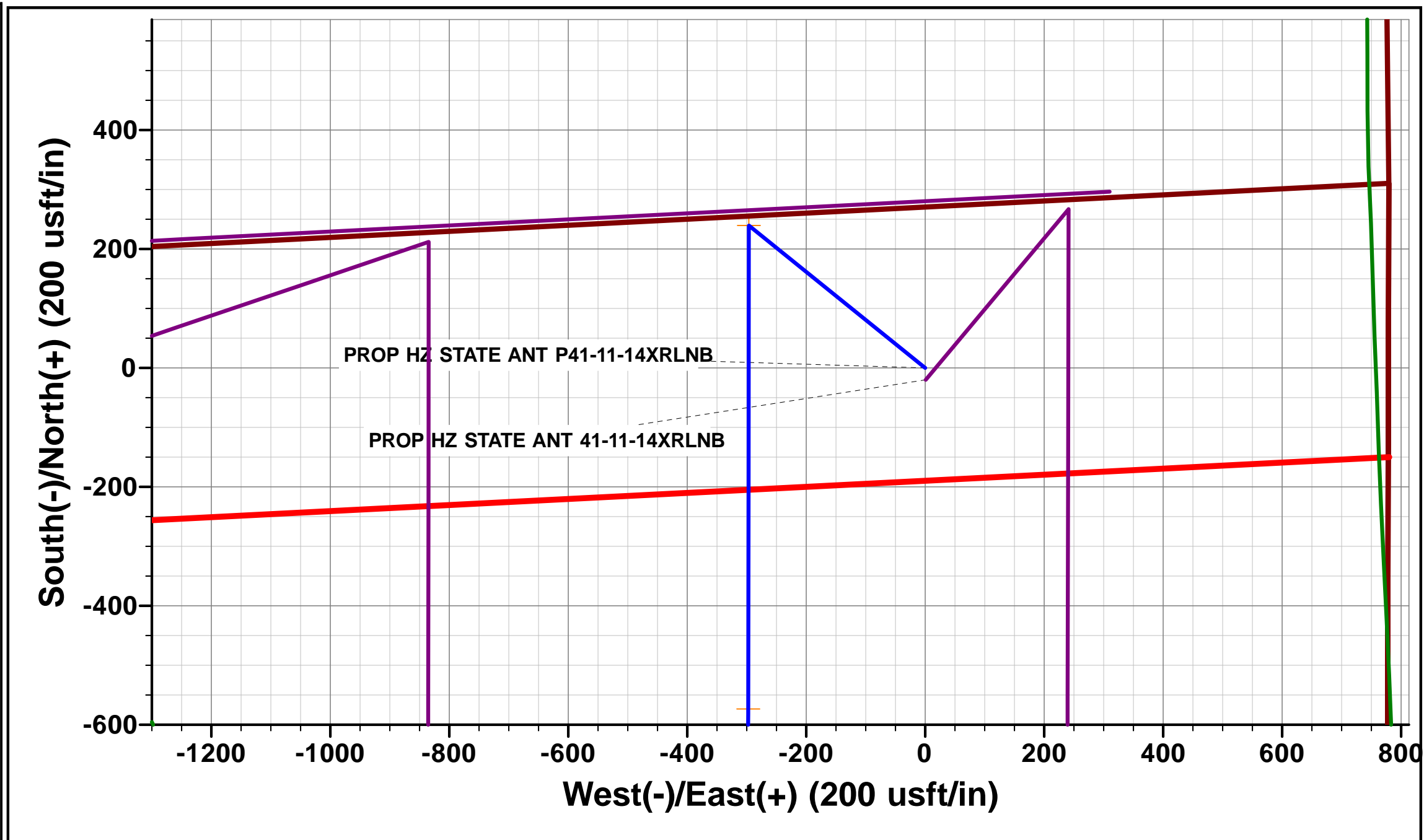
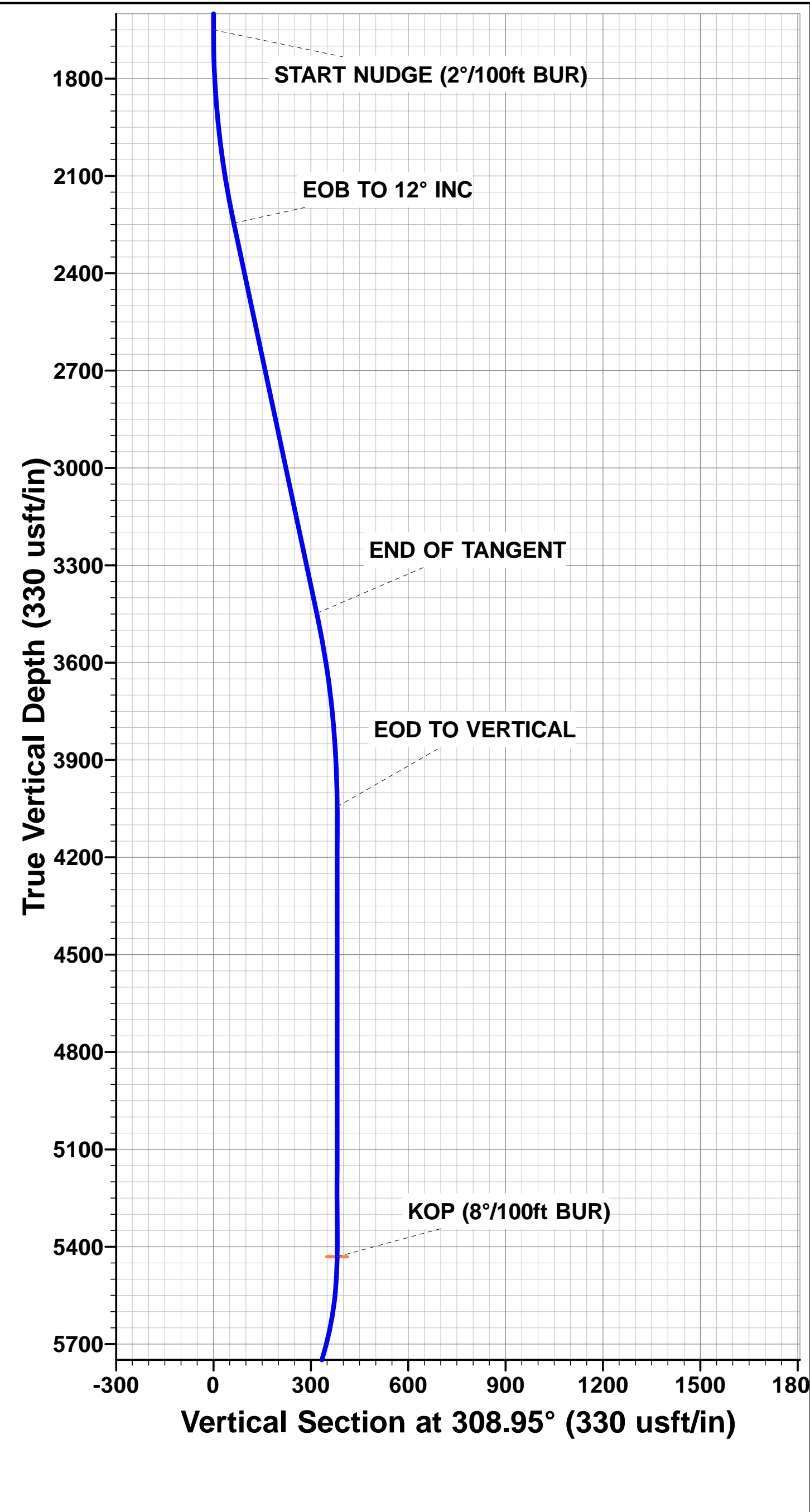
SHL: 270ft FNL & 779ft FEL Sec 11

HZ LP: 827.8ft FNL & 1075ft FEL Sec 11

MID-LAT: 0ft FNL & 1071ft FEL Sec 14

BHL: 470ft FSL & 1047ft FEL Sec 14

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - STATE ANT P41-11-14XRLNB	5430.7	239.4	-296.2	40.422521	-104.284566
BHL - STATE ANT P41-11-14XRLNB	6173.2	-10031.2	-291.1	40.394329	-104.284548
HZ LP *NEW* - STATE ANT P41-11-14XRLNB	6173.2	-573.4	-297.3	40.420290	-104.284570
MID LAT TGT - STATE ANT P41-11-14XRLNB	6173.2	-5123.0	-304.0	40.407801	-104.284594



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE P41-11-14XRLNB
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4653.2usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4653.2usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 11 T5N R62W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE P41-11-14XRLNB	<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	NE NE SEC. 11 T5N R62W 6th P.M.				
Site Position:		Northing:	1,398,828.47 usft	Latitude:	40.421809
From:	Lat/Long	Easting:	3,338,688.48 usft	Longitude:	-104.283499
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000 ft	Grid Convergence:	0.79 °

Well	STATE ANTELOPE P41-11-14XRLNB					
Well Position	+N/-S	20.0 usft	Northing:	1,398,848.44 usft	Latitude:	40.421864
	+E/-W	-1.0 usft	Easting:	3,338,687.23 usft	Longitude:	-104.283503
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,636.2 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>
	IGRF2015	27/08/2016	8.04	66.97	52,547

<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	181.66

<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	-4,653.2	0.0	0.0	0.00	0.00	0.00	0.00	
1,650.0	0.00	0.00	1,650.0	-3,003.2	0.0	0.0	0.00	0.00	0.00	0.00	
2,250.1	12.00	308.95	2,245.7	-2,407.5	39.4	-48.7	2.00	2.00	0.00	308.95	
3,479.2	12.00	308.95	3,448.0	-1,205.2	200.0	-247.5	0.00	0.00	0.00	0.00	
4,079.3	0.00	0.00	4,043.7	-609.5	239.4	-296.2	2.00	-2.00	0.00	180.00	
5,466.3	0.00	0.00	5,430.7	777.5	239.4	-296.2	0.00	0.00	0.00	0.00	KOP - STATE ANT
6,403.8	75.00	180.08	6,122.5	1,469.3	-291.4	-296.9	8.00	8.00	0.00	180.08	
6,503.8	75.00	180.08	6,148.4	1,495.2	-388.0	-297.1	0.00	0.00	0.00	0.00	
6,691.3	90.00	180.08	6,172.8	1,519.6	-573.4	-297.3	8.00	8.00	0.00	0.00	
11,240.9	89.99	180.09	6,173.2	1,520.0	-5,123.0	-304.0	0.00	0.00	0.00	146.03	MID LAT TGT - ST/
11,248.9	90.00	179.85	6,173.2	1,520.0	-5,130.9	-304.0	3.00	0.13	-3.00	-87.45	
16,149.1	90.00	179.85	6,173.2	1,520.0	-10,031.2	-291.1	0.00	0.00	0.00	0.00	BHL - STATE ANT

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<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4653.2usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 11 T5N R62W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE P41-11-14XRLNB	<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)
<b>SHL: 270ft FNL &amp; 779ft FEL of Sec 11</b>										
0.0	0.00	0.00	0.0	4,653.20	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,553.20	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,453.20	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,353.20	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,253.20	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,153.20	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,053.20	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,953.20	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,853.20	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,753.20	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,653.20	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,553.20	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,453.20	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,353.20	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,253.20	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,153.20	0.0	0.0	0.0	0.00	0.00	0.00
<b>SURFACE CASING</b>										
1,550.0	0.00	0.00	1,550.0	3,103.20	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	3,053.20	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
1,650.0	0.00	0.00	1,650.0	3,003.20	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	1.00	308.95	1,700.0	2,953.20	0.3	-0.3	-0.3	2.00	2.00	0.00
1,800.0	3.00	308.95	1,799.9	2,853.27	2.5	-3.1	-2.4	2.00	2.00	0.00
1,900.0	5.00	308.95	1,899.7	2,753.52	6.9	-8.5	-6.6	2.00	2.00	0.00
2,000.0	7.00	308.95	1,999.1	2,654.07	13.4	-16.6	-12.9	2.00	2.00	0.00
2,100.0	9.00	308.95	2,098.2	2,555.05	22.2	-27.4	-21.4	2.00	2.00	0.00
2,200.0	11.00	308.95	2,196.6	2,456.57	33.1	-40.9	-31.9	2.00	2.00	0.00
<b>EOB TO 12° INC</b>										
2,250.1	12.00	308.95	2,245.7	2,407.48	39.4	-48.7	-37.9	2.00	2.00	0.00
2,300.0	12.00	308.95	2,294.5	2,358.67	45.9	-56.8	-44.2	0.00	0.00	0.00
2,400.0	12.00	308.95	2,392.3	2,260.86	59.0	-72.9	-56.8	0.00	0.00	0.00
2,500.0	12.00	308.95	2,490.2	2,163.04	72.0	-89.1	-69.4	0.00	0.00	0.00
2,600.0	12.00	308.95	2,588.0	2,065.23	85.1	-105.3	-82.0	0.00	0.00	0.00
2,700.0	12.00	308.95	2,685.8	1,967.41	98.2	-121.5	-94.6	0.00	0.00	0.00
2,800.0	12.00	308.95	2,783.6	1,869.60	111.2	-137.6	-107.2	0.00	0.00	0.00
2,900.0	12.00	308.95	2,881.4	1,771.79	124.3	-153.8	-119.8	0.00	0.00	0.00
3,000.0	12.00	308.95	2,979.2	1,673.97	137.4	-170.0	-132.4	0.00	0.00	0.00
3,100.0	12.00	308.95	3,077.0	1,576.16	150.5	-186.2	-145.0	0.00	0.00	0.00
3,200.0	12.00	308.95	3,174.9	1,478.35	163.5	-202.3	-157.6	0.00	0.00	0.00
3,300.0	12.00	308.95	3,272.7	1,380.53	176.6	-218.5	-170.2	0.00	0.00	0.00
3,400.0	12.00	308.95	3,370.5	1,282.72	189.7	-234.7	-182.8	0.00	0.00	0.00
<b>END OF TANGENT</b>										
3,479.2	12.00	308.95	3,448.0	1,205.25	200.0	-247.5	-192.8	0.00	0.00	0.00
3,500.0	11.59	308.95	3,468.3	1,184.89	202.7	-250.8	-195.3	2.00	-2.00	0.00
3,600.0	9.59	308.95	3,566.6	1,086.60	214.3	-265.1	-206.5	2.00	-2.00	0.00
3,700.0	7.59	308.95	3,665.5	987.72	223.6	-276.7	-215.5	2.00	-2.00	0.00
3,800.0	5.59	308.95	3,764.8	888.39	230.8	-285.6	-222.5	2.00	-2.00	0.00
3,900.0	3.59	308.95	3,864.5	788.71	235.9	-291.8	-227.3	2.00	-2.00	0.00
4,000.0	1.59	308.95	3,964.4	688.82	238.7	-295.3	-230.0	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
4,079.3	0.00	308.95	4,043.7	609.53	239.4	-296.2	-230.7	2.00	-2.00	0.00
4,100.0	0.00	0.00	4,064.4	588.83	239.4	-296.2	-230.7	0.00	0.00	0.00



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<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4653.2usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 11 T5N R62W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE P41-11-14XRLNB	<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)
4,200.0	0.00	0.00	4,164.4	488.83	239.4	-296.2	-230.7	0.00	0.00	0.00
4,300.0	0.00	0.00	4,264.4	388.83	239.4	-296.2	-230.7	0.00	0.00	0.00
4,400.0	0.00	0.00	4,364.4	288.83	239.4	-296.2	-230.7	0.00	0.00	0.00
4,500.0	0.00	0.00	4,464.4	188.83	239.4	-296.2	-230.7	0.00	0.00	0.00
4,600.0	0.00	0.00	4,564.4	88.83	239.4	-296.2	-230.7	0.00	0.00	0.00
4,700.0	0.00	0.00	4,664.4	-11.17	239.4	-296.2	-230.7	0.00	0.00	0.00
4,800.0	0.00	0.00	4,764.4	-111.17	239.4	-296.2	-230.7	0.00	0.00	0.00
4,900.0	0.00	0.00	4,864.4	-211.17	239.4	-296.2	-230.7	0.00	0.00	0.00
5,000.0	0.00	0.00	4,964.4	-311.17	239.4	-296.2	-230.7	0.00	0.00	0.00
5,100.0	0.00	0.00	5,064.4	-411.17	239.4	-296.2	-230.7	0.00	0.00	0.00
5,200.0	0.00	0.00	5,164.4	-511.17	239.4	-296.2	-230.7	0.00	0.00	0.00
5,300.0	0.00	0.00	5,264.4	-611.17	239.4	-296.2	-230.7	0.00	0.00	0.00
5,400.0	0.00	0.00	5,364.4	-711.17	239.4	-296.2	-230.7	0.00	0.00	0.00
<b>KOP (8°/100ft BUR)</b>										
5,466.3	0.00	0.00	5,430.7	-777.47	239.4	-296.2	-230.7	0.00	0.00	0.00
5,500.0	2.69	180.08	5,464.4	-811.16	238.6	-296.2	-229.9	7.99	7.99	0.00
5,600.0	10.69	180.08	5,563.6	-910.40	227.0	-296.2	-218.3	8.00	8.00	0.00
5,700.0	18.69	180.08	5,660.2	-1,007.05	201.6	-296.3	-192.9	8.00	8.00	0.00
5,800.0	26.69	180.08	5,752.4	-1,099.23	163.1	-296.3	-154.4	8.00	8.00	0.00
5,900.0	34.69	180.08	5,838.4	-1,185.15	112.1	-296.4	-103.4	8.00	8.00	0.00
6,000.0	42.69	180.08	5,916.3	-1,263.14	49.6	-296.5	-41.0	8.00	8.00	0.00
6,100.0	50.69	180.08	5,984.9	-1,331.67	-23.1	-296.6	31.7	8.00	8.00	0.00
6,200.0	58.69	180.08	6,042.6	-1,389.42	-104.7	-296.7	113.2	8.00	8.00	0.00
6,300.0	66.69	180.08	6,088.5	-1,435.26	-193.4	-296.8	202.0	8.00	8.00	0.00
6,400.0	74.69	180.08	6,121.5	-1,468.29	-287.7	-296.9	296.2	8.00	8.00	0.00
<b>START OF TANGENT</b>										
6,403.8	75.00	180.08	6,122.5	-1,469.29	-291.4	-296.9	299.9	8.00	8.00	0.00
6,500.0	75.00	180.08	6,147.4	-1,494.18	-384.3	-297.1	392.8	0.00	0.00	0.00
<b>END OF TANGENT</b>										
6,503.8	75.00	180.08	6,148.4	-1,495.17	-388.0	-297.1	396.4	0.00	0.00	0.00
6,600.0	82.69	180.08	6,167.0	-1,513.76	-482.3	-297.2	490.7	8.00	8.00	0.00
<b>HZ LP *NEW*: 827.8ft FNL &amp; 1075ft FEL of Sec 11</b>										
6,691.3	90.00	180.08	6,172.8	-1,519.58	-573.4	-297.3	581.7	8.00	8.00	0.00
6,700.0	90.00	180.08	6,172.8	-1,519.58	-582.1	-297.3	590.4	0.03	0.03	0.00
6,800.0	90.00	180.08	6,172.8	-1,519.58	-682.1	-297.5	690.4	0.00	0.00	0.00
6,900.0	90.00	180.08	6,172.8	-1,519.58	-782.1	-297.6	790.4	0.00	0.00	0.00
7,000.0	90.00	180.08	6,172.8	-1,519.58	-882.1	-297.8	890.3	0.00	0.00	0.00
7,100.0	90.00	180.08	6,172.8	-1,519.58	-982.1	-297.9	990.3	0.00	0.00	0.00
7,200.0	90.00	180.08	6,172.8	-1,519.58	-1,082.1	-298.0	1,090.2	0.00	0.00	0.00
7,300.0	90.00	180.08	6,172.8	-1,519.59	-1,182.1	-298.2	1,190.2	0.00	0.00	0.00
7,400.0	90.00	180.08	6,172.8	-1,519.59	-1,282.1	-298.3	1,290.2	0.00	0.00	0.00
7,500.0	90.00	180.08	6,172.8	-1,519.59	-1,382.1	-298.5	1,390.1	0.00	0.00	0.00
7,600.0	90.00	180.08	6,172.8	-1,519.60	-1,482.1	-298.6	1,490.1	0.00	0.00	0.00
7,700.0	90.00	180.08	6,172.8	-1,519.60	-1,582.1	-298.8	1,590.1	0.00	0.00	0.00
7,800.0	90.00	180.08	6,172.8	-1,519.60	-1,682.1	-298.9	1,690.0	0.00	0.00	0.00
7,900.0	90.00	180.08	6,172.8	-1,519.61	-1,782.1	-299.0	1,790.0	0.00	0.00	0.00
8,000.0	90.00	180.08	6,172.8	-1,519.61	-1,882.1	-299.2	1,889.9	0.00	0.00	0.00
8,100.0	90.00	180.08	6,172.8	-1,519.62	-1,982.1	-299.3	1,989.9	0.00	0.00	0.00
8,200.0	90.00	180.08	6,172.8	-1,519.63	-2,082.1	-299.5	2,089.9	0.00	0.00	0.00
8,300.0	90.00	180.08	6,172.8	-1,519.63	-2,182.1	-299.6	2,189.8	0.00	0.00	0.00
8,400.0	90.00	180.08	6,172.8	-1,519.64	-2,282.1	-299.8	2,289.8	0.00	0.00	0.00
8,500.0	90.00	180.08	6,172.8	-1,519.65	-2,382.1	-299.9	2,389.8	0.00	0.00	0.00
8,600.0	90.00	180.08	6,172.9	-1,519.65	-2,482.1	-300.0	2,489.7	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE P41-11-14XRLNB
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4653.2usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4653.2usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 11 T5N R62W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE P41-11-14XRLNB	<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)
8,700.0	90.00	180.08	6,172.9	-1,519.66	-2,582.1	-300.2	2,589.7	0.00	0.00	0.00
8,800.0	90.00	180.08	6,172.9	-1,519.67	-2,682.1	-300.3	2,689.6	0.00	0.00	0.00
8,900.0	89.99	180.08	6,172.9	-1,519.68	-2,782.1	-300.5	2,789.6	0.00	0.00	0.00
9,000.0	89.99	180.08	6,172.9	-1,519.69	-2,882.1	-300.6	2,889.6	0.00	0.00	0.00
9,100.0	89.99	180.08	6,172.9	-1,519.70	-2,982.1	-300.8	2,989.5	0.00	0.00	0.00
9,200.0	89.99	180.08	6,172.9	-1,519.71	-3,082.1	-300.9	3,089.5	0.00	0.00	0.00
9,300.0	89.99	180.08	6,172.9	-1,519.72	-3,182.1	-301.1	3,189.5	0.00	0.00	0.00
9,400.0	89.99	180.08	6,172.9	-1,519.73	-3,282.1	-301.2	3,289.4	0.00	0.00	0.00
9,500.0	89.99	180.08	6,172.9	-1,519.74	-3,382.1	-301.4	3,389.4	0.00	0.00	0.00
9,600.0	89.99	180.08	6,173.0	-1,519.75	-3,482.1	-301.5	3,489.3	0.00	0.00	0.00
9,700.0	89.99	180.08	6,173.0	-1,519.76	-3,582.1	-301.7	3,589.3	0.00	0.00	0.00
9,800.0	89.99	180.08	6,173.0	-1,519.78	-3,682.1	-301.8	3,689.3	0.00	0.00	0.00
9,900.0	89.99	180.09	6,173.0	-1,519.79	-3,782.1	-302.0	3,789.2	0.00	0.00	0.00
10,000.0	89.99	180.09	6,173.0	-1,519.80	-3,882.1	-302.1	3,889.2	0.00	0.00	0.00
10,100.0	89.99	180.09	6,173.0	-1,519.82	-3,982.1	-302.3	3,989.1	0.00	0.00	0.00
10,200.0	89.99	180.09	6,173.0	-1,519.83	-4,082.1	-302.4	4,089.1	0.00	0.00	0.00
10,300.0	89.99	180.09	6,173.0	-1,519.84	-4,182.1	-302.6	4,189.1	0.00	0.00	0.00
10,400.0	89.99	180.09	6,173.1	-1,519.86	-4,282.1	-302.7	4,289.0	0.00	0.00	0.00
10,500.0	89.99	180.09	6,173.1	-1,519.87	-4,382.1	-302.9	4,389.0	0.00	0.00	0.00
10,600.0	89.99	180.09	6,173.1	-1,519.89	-4,482.1	-303.0	4,489.0	0.00	0.00	0.00
10,700.0	89.99	180.09	6,173.1	-1,519.91	-4,582.1	-303.2	4,588.9	0.00	0.00	0.00
10,800.0	89.99	180.09	6,173.1	-1,519.92	-4,682.1	-303.3	4,688.9	0.00	0.00	0.00
10,900.0	89.99	180.09	6,173.1	-1,519.94	-4,782.1	-303.5	4,788.8	0.00	0.00	0.00
11,000.0	89.99	180.09	6,173.2	-1,519.96	-4,882.1	-303.6	4,888.8	0.00	0.00	0.00
11,100.0	89.99	180.09	6,173.2	-1,519.97	-4,982.1	-303.8	4,988.8	0.00	0.00	0.00
11,200.0	89.99	180.09	6,173.2	-1,519.99	-5,082.1	-303.9	5,088.7	0.00	0.00	0.00
<b>MID-LAT TGT: 0ft FNL &amp; 1071ft FEL of Sec 14</b>										
<b>11,240.9</b>	<b>89.99</b>	<b>180.09</b>	<b>6,173.2</b>	<b>-1,520.00</b>	<b>-5,123.0</b>	<b>-304.0</b>	<b>5,129.6</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>EOT TO 179.85° AZ</b>										
<b>11,248.9</b>	<b>90.00</b>	<b>179.85</b>	<b>6,173.2</b>	<b>-1,520.00</b>	<b>-5,131.0</b>	<b>-304.0</b>	<b>5,137.6</b>	<b>2.98</b>	<b>0.13</b>	<b>-2.98</b>
11,300.0	90.00	179.85	6,173.2	-1,520.00	-5,182.1	-303.8	5,188.7	0.00	0.00	0.00
11,400.0	90.00	179.85	6,173.2	-1,520.00	-5,282.1	-303.6	5,288.6	0.00	0.00	0.00
11,500.0	90.00	179.85	6,173.2	-1,520.00	-5,382.1	-303.3	5,388.6	0.00	0.00	0.00
11,600.0	90.00	179.85	6,173.2	-1,520.00	-5,482.1	-303.0	5,488.5	0.00	0.00	0.00
11,700.0	90.00	179.85	6,173.2	-1,520.00	-5,582.1	-302.8	5,588.5	0.00	0.00	0.00
11,800.0	90.00	179.85	6,173.2	-1,520.00	-5,682.1	-302.5	5,688.4	0.00	0.00	0.00
11,900.0	90.00	179.85	6,173.2	-1,520.00	-5,782.1	-302.3	5,788.4	0.00	0.00	0.00
12,000.0	90.00	179.85	6,173.2	-1,520.00	-5,882.1	-302.0	5,888.3	0.00	0.00	0.00
12,100.0	90.00	179.85	6,173.2	-1,520.00	-5,982.1	-301.7	5,988.3	0.00	0.00	0.00
12,200.0	90.00	179.85	6,173.2	-1,520.00	-6,082.1	-301.5	6,088.2	0.00	0.00	0.00
12,300.0	90.00	179.85	6,173.2	-1,520.00	-6,182.1	-301.2	6,188.2	0.00	0.00	0.00
12,400.0	90.00	179.85	6,173.2	-1,520.00	-6,282.1	-300.9	6,288.1	0.00	0.00	0.00
12,500.0	90.00	179.85	6,173.2	-1,520.00	-6,382.1	-300.7	6,388.1	0.00	0.00	0.00
12,600.0	90.00	179.85	6,173.2	-1,520.00	-6,482.1	-300.4	6,488.0	0.00	0.00	0.00
12,700.0	90.00	179.85	6,173.2	-1,520.00	-6,582.1	-300.1	6,588.0	0.00	0.00	0.00
12,800.0	90.00	179.85	6,173.2	-1,520.00	-6,682.0	-299.9	6,687.9	0.00	0.00	0.00
12,900.0	90.00	179.85	6,173.2	-1,520.00	-6,782.0	-299.6	6,787.9	0.00	0.00	0.00
13,000.0	90.00	179.85	6,173.2	-1,520.00	-6,882.0	-299.4	6,887.8	0.00	0.00	0.00
13,100.0	90.00	179.85	6,173.2	-1,520.00	-6,982.0	-299.1	6,987.8	0.00	0.00	0.00
13,200.0	90.00	179.85	6,173.2	-1,520.00	-7,082.0	-298.8	7,087.7	0.00	0.00	0.00
13,300.0	90.00	179.85	6,173.2	-1,520.00	-7,182.0	-298.6	7,187.7	0.00	0.00	0.00
13,400.0	90.00	179.85	6,173.2	-1,520.00	-7,282.0	-298.3	7,287.6	0.00	0.00	0.00
13,500.0	90.00	179.85	6,173.2	-1,520.00	-7,382.0	-298.0	7,387.6	0.00	0.00	0.00
13,600.0	90.00	179.85	6,173.2	-1,520.00	-7,482.0	-297.8	7,487.5	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE P41-11-14XRLNB
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4653.2usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4653.2usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 11 T5N R62W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE P41-11-14XRLNB	<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)
13,700.0	90.00	179.85	6,173.2	-1,520.00	-7,582.0	-297.5	7,587.5	0.00	0.00	0.00
13,800.0	90.00	179.85	6,173.2	-1,520.00	-7,682.0	-297.2	7,687.4	0.00	0.00	0.00
13,900.0	90.00	179.85	6,173.2	-1,520.00	-7,782.0	-297.0	7,787.4	0.00	0.00	0.00
14,000.0	90.00	179.85	6,173.2	-1,520.00	-7,882.0	-296.7	7,887.3	0.00	0.00	0.00
14,100.0	90.00	179.85	6,173.2	-1,520.00	-7,982.0	-296.5	7,987.3	0.00	0.00	0.00
14,200.0	90.00	179.85	6,173.2	-1,520.00	-8,082.0	-296.2	8,087.2	0.00	0.00	0.00
14,300.0	90.00	179.85	6,173.2	-1,520.00	-8,182.0	-295.9	8,187.2	0.00	0.00	0.00
14,400.0	90.00	179.85	6,173.2	-1,520.00	-8,282.0	-295.7	8,287.1	0.00	0.00	0.00
14,500.0	90.00	179.85	6,173.2	-1,520.00	-8,382.0	-295.4	8,387.1	0.00	0.00	0.00
14,600.0	90.00	179.85	6,173.2	-1,520.00	-8,482.0	-295.1	8,487.0	0.00	0.00	0.00
14,700.0	90.00	179.85	6,173.2	-1,520.00	-8,582.0	-294.9	8,587.0	0.00	0.00	0.00
14,800.0	90.00	179.85	6,173.2	-1,520.00	-8,682.0	-294.6	8,686.9	0.00	0.00	0.00
14,900.0	90.00	179.85	6,173.2	-1,520.00	-8,782.0	-294.3	8,786.9	0.00	0.00	0.00
15,000.0	90.00	179.85	6,173.2	-1,520.00	-8,882.0	-294.1	8,886.8	0.00	0.00	0.00
15,100.0	90.00	179.85	6,173.2	-1,520.00	-8,982.0	-293.8	8,986.8	0.00	0.00	0.00
15,200.0	90.00	179.85	6,173.2	-1,520.00	-9,082.0	-293.6	9,086.7	0.00	0.00	0.00
15,300.0	90.00	179.85	6,173.2	-1,520.00	-9,182.0	-293.3	9,186.7	0.00	0.00	0.00
15,400.0	90.00	179.85	6,173.2	-1,520.00	-9,282.0	-293.0	9,286.6	0.00	0.00	0.00
15,500.0	90.00	179.85	6,173.2	-1,520.00	-9,382.0	-292.8	9,386.6	0.00	0.00	0.00
15,600.0	90.00	179.85	6,173.2	-1,520.00	-9,482.0	-292.5	9,486.5	0.00	0.00	0.00
15,700.0	90.00	179.85	6,173.2	-1,520.00	-9,582.0	-292.2	9,586.5	0.00	0.00	0.00
15,800.0	90.00	179.85	6,173.2	-1,520.00	-9,682.0	-292.0	9,686.4	0.00	0.00	0.00
15,900.0	90.00	179.85	6,173.2	-1,520.00	-9,782.0	-291.7	9,786.4	0.00	0.00	0.00
16,000.0	90.00	179.85	6,173.2	-1,520.00	-9,882.0	-291.4	9,886.3	0.00	0.00	0.00
16,100.0	90.00	179.85	6,173.2	-1,520.00	-9,982.0	-291.2	9,986.3	0.00	0.00	0.00
<b>BHL: 470ft FSL &amp; 1047ft FEL of Sec 14</b>										
<b>16,149.1</b>	<b>90.00</b>	<b>179.85</b>	<b>6,173.2</b>	<b>-1,520.00</b>	<b>-10,031.1</b>	<b>-291.1</b>	<b>10,035.4</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: 270ft FNL & 779ft FEL of Sec 11
1,550.0	1,550.0	0.0	0.0	SURFACE CASING
1,650.0	1,650.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2,250.1	2,245.7	39.4	-48.7	EOB TO 12° INC
3,479.2	3,448.0	200.0	-247.5	END OF TANGENT
4,079.3	4,043.7	239.4	-296.2	EOD TO VERTICAL
5,466.3	5,430.7	239.4	-296.2	KOP (8°/100ft BUR)
6,403.8	6,122.5	-291.4	-296.9	START OF TANGENT
6,503.8	6,148.4	-388.0	-297.1	END OF TANGENT
6,691.3	6,172.8	-573.4	-297.3	HZ LP *NEW*: 827.8ft FNL & 1075ft FEL of Sec 11
11,240.9	6,173.2	-5,123.0	-304.0	MID-LAT TGT: 0ft FNL & 1071ft FEL of Sec 14
11,248.9	6,173.2	-5,131.0	-304.0	EOT TO 179.85° AZ
16,149.1	6,173.2	-10,031.1	-291.1	BHL: 470ft FSL & 1047ft FEL of Sec 14