

# **BONANZA CREEK ENERGY INC.**

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

**SW SW SEC. 2 T5N R62W 6th P.M.**

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

**ORIGINAL WELLBORE**

**29 August, 2016**

**Plan: PROPOSAL #1**





Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SW SW SEC. 2 T5N R62W 6th P.M.  
Well: STATE ANTELOPE 11-11-14XRLNB  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

ANNOTATIONS

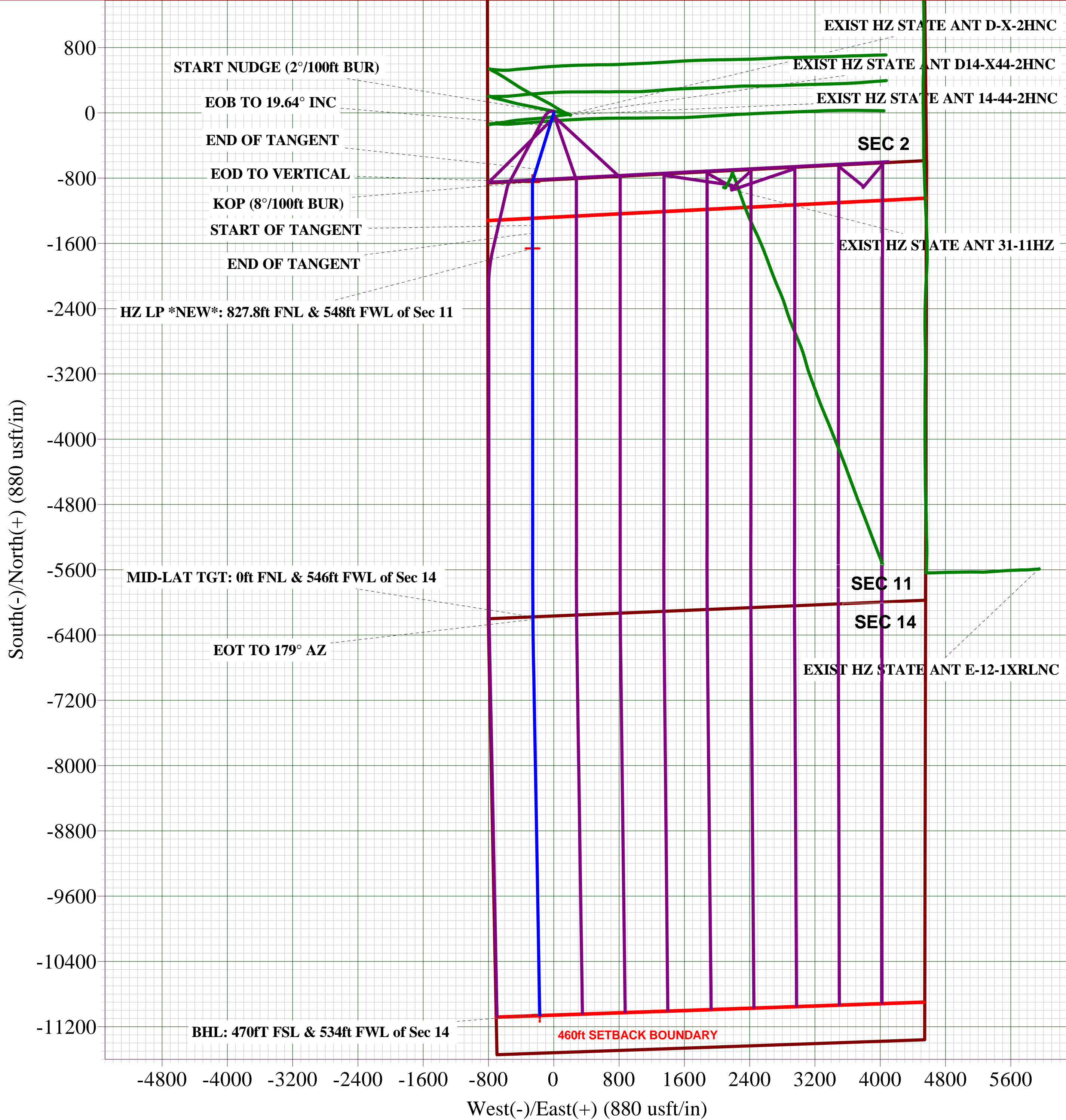
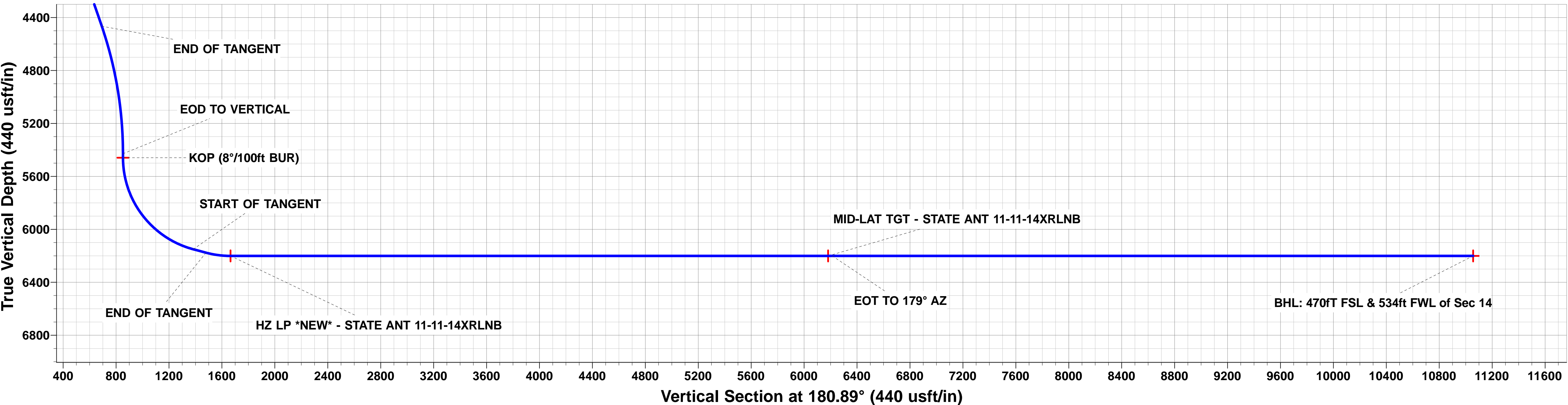
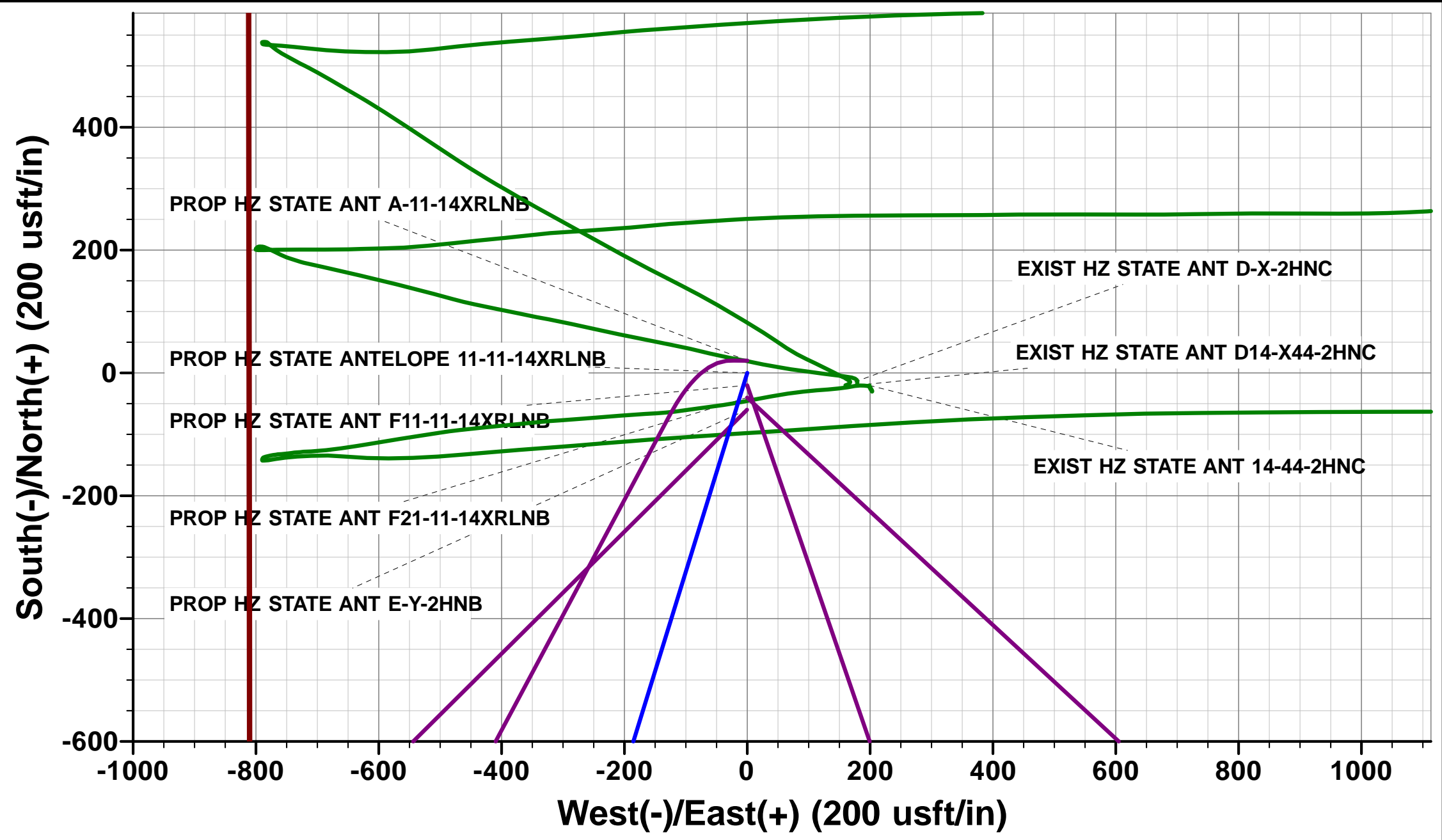
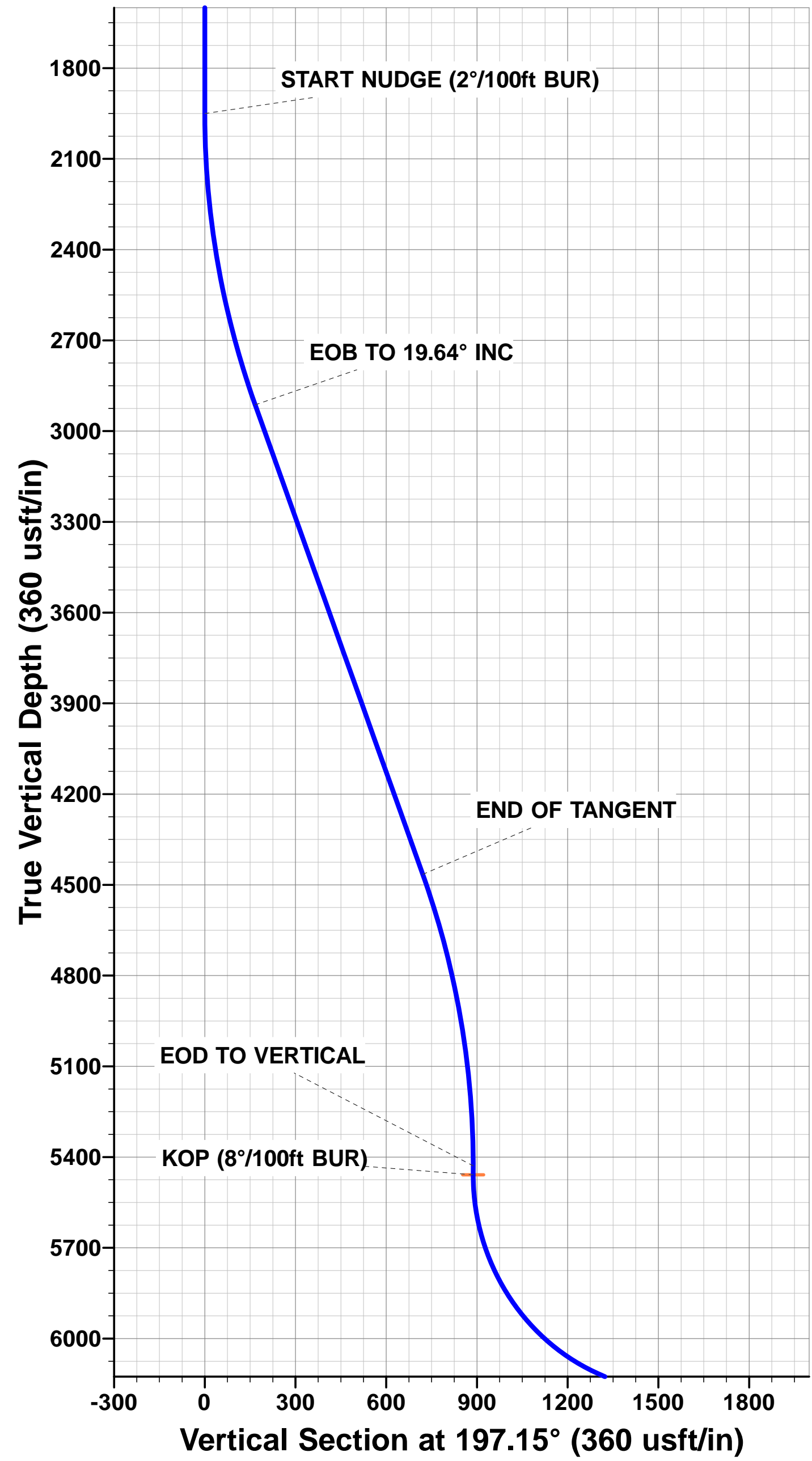
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 818ft FSL & 811ft FWL of Sec 2
1550.0	1550.0	0.00	0.00	0.0	0.0	0.0	0.0	SURFACE CASING
1950.0	1950.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2913.0	2932.2	19.64	197.15	-159.3	-49.2	160.0	166.7	EOB TO 19.64° INC
4465.6	4580.6	19.64	197.15	-688.8	-212.6	692.0	720.9	END OF TANGENT
5428.6	5562.8	0.00	0.00	-848.1	-261.8	852.1	887.6	EOD TO VERTICAL
5458.6	5592.8	0.00	0.00	-848.1	-261.8	852.1	887.6	KOP (8°/100ft BUR)
6150.4	6530.3	75.00	179.95	-1378.9	-261.3	1382.8	1418.4	START OF TANGENT
6176.3	6630.3	75.00	179.95	-1475.5	-261.3	1479.4	1515.0	END OF TANGENT
6200.7	6817.8	90.00	179.95	-1660.9	-261.1	1664.8	1700.4	HZ LP *NEW*: 827.8ft FNL & 548ft FWL of Sec 11
6200.7	11334.7	90.00	179.96	-6177.8	-257.4	6181.1	6217.3	MID-LAT TGT: 0ft FNL & 546ft FWL of Sec 14
6200.7	11366.6	90.00	179.00	-6209.7	-257.1	6213.0	6249.2	EOT TO 179° AZ
6200.7	16212.2	90.00	179.00	-11054.5	-172.4	11055.9	11094.8	BHL: 470ft FSL & 534ft FWL of Sec 14

PROPOSED LOCAL COORDINATES:

SHL: 818ft FSL & 811ft FWL Sec 2  
HZ LP: 827.8ft FNL & 548ft FWL Sec 11  
MID-LAT: 0ft FNL & 546ft FWL Sec 14  
BHL: 470ft FSL & 534ft FWL Sec 14

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - STATE ANT 11-11-14XRLNB	5458.6	-848.1	-261.8	40.421994	-104.298050
BHL - STATE ANT 11-11-14XRLNB	6200.7	-11054.5	-172.4	40.393978	-104.297728
HZ LP *NEW* - STATE ANT 11-11-14XRLNB	6200.7	-1660.9	-261.1	40.419763	-104.298047
MID-LAT TGT - STATE ANT 11-11-14XRLNB	6200.7	-6177.8	-257.4	40.407364	-104.298033



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE 11-11-14XRLNB
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4640.7usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4640.7usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 2 T5N R62W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE 11-11-14XRLNB	<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

<b>Site</b>	SW SW SEC. 2 T5N R62W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,399,632.25 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,334,887.62 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.424157
		<b>Longitude:</b>	-104.297110
		<b>Grid Convergence:</b>	0.78 °

<b>Well</b>	STATE ANTELOPE 11-11-14XRLNB		
<b>Well Position</b>	<b>+N/-S</b>	60.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	0.3 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	29/08/2016	8.05	66.97	52,546

<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>
	6,200.7	0.0	0.0	180.89

<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	-4,640.7	0.0	0.0	0.00	0.00	0.00	0.00	
1,950.0	0.00	0.00	1,950.0	-2,690.7	0.0	0.0	0.00	0.00	0.00	0.00	
2,932.2	19.64	197.15	2,913.0	-1,727.7	-159.3	-49.2	2.00	2.00	0.00	197.15	
4,580.6	19.64	197.15	4,465.6	-175.1	-688.8	-212.6	0.00	0.00	0.00	0.00	
5,562.8	0.00	0.00	5,428.6	787.9	-848.1	-261.8	2.00	-2.00	0.00	180.00	
5,592.8	0.00	0.00	5,458.6	817.9	-848.1	-261.8	0.00	0.00	0.00	0.00	KOP - STATE ANT
6,530.3	75.00	179.95	6,150.4	1,509.7	-1,378.9	-261.3	8.00	8.00	0.00	179.95	
6,630.3	75.00	179.95	6,176.3	1,535.6	-1,475.5	-261.3	0.00	0.00	0.00	0.00	
6,817.8	90.00	179.95	6,200.7	1,560.0	-1,660.9	-261.1	8.00	8.00	0.00	0.00	
11,334.7	90.00	179.96	6,200.7	1,560.0	-6,177.8	-257.4	0.00	0.00	0.00	95.82	MID-LAT TGT - ST/
11,366.6	90.00	179.00	6,200.7	1,560.0	-6,209.7	-257.1	3.00	0.00	-3.00	-89.97	
16,212.2	90.00	179.00	6,200.7	1,560.0	-11,054.5	-172.4	0.00	0.00	0.00	0.00	BHL - STATE ANT

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE 11-11-14XRLNB
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<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4640.7usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 2 T5N R62W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE 11-11-14XRLNB	<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: 818ft FSL &amp; 811ft FWL of Sec 2</b>										
0.0	0.00	0.00	0.0	4,640.70	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,540.70	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,440.70	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,340.70	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,240.70	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,140.70	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,040.70	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,940.70	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,840.70	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,740.70	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,640.70	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,540.70	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,440.70	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,340.70	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,240.70	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,140.70	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	3,090.70	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	3,040.70	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	2,940.70	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	2,840.70	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	2,740.70	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
1,950.0	0.00	0.00	1,950.0	2,690.70	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	1.00	197.15	2,000.0	2,640.70	-0.4	-0.1	0.4	2.00	2.00	0.00
2,100.0	3.00	197.15	2,099.9	2,540.77	-3.8	-1.2	3.8	2.00	2.00	0.00
2,200.0	5.00	197.15	2,199.7	2,441.02	-10.4	-3.2	10.5	2.00	2.00	0.00
2,300.0	7.00	197.15	2,299.1	2,341.57	-20.4	-6.3	20.5	2.00	2.00	0.00
2,400.0	9.00	197.15	2,398.2	2,242.55	-33.7	-10.4	33.9	2.00	2.00	0.00
2,500.0	11.00	197.15	2,496.6	2,144.07	-50.3	-15.5	50.5	2.00	2.00	0.00
2,600.0	13.00	197.15	2,594.4	2,046.26	-70.2	-21.7	70.5	2.00	2.00	0.00
2,700.0	15.00	197.15	2,691.5	1,949.24	-93.3	-28.8	93.7	2.00	2.00	0.00
2,800.0	17.00	197.15	2,787.6	1,853.12	-119.6	-36.9	120.2	2.00	2.00	0.00
2,900.0	19.00	197.15	2,882.7	1,758.02	-149.1	-46.0	149.8	2.00	2.00	0.00
<b>EOB TO 19.64° INC</b>										
2,932.2	19.64	197.15	2,913.0	1,727.67	-159.3	-49.2	160.0	2.00	2.00	0.00
3,000.0	19.64	197.15	2,976.9	1,663.78	-181.1	-55.9	181.9	0.00	0.00	0.00
3,100.0	19.64	197.15	3,071.1	1,569.60	-213.2	-65.8	214.2	0.00	0.00	0.00
3,200.0	19.64	197.15	3,165.3	1,475.41	-245.3	-75.7	246.5	0.00	0.00	0.00
3,300.0	19.64	197.15	3,259.5	1,381.23	-277.5	-85.6	278.8	0.00	0.00	0.00
3,400.0	19.64	197.15	3,353.6	1,287.05	-309.6	-95.6	311.0	0.00	0.00	0.00
3,500.0	19.64	197.15	3,447.8	1,192.87	-341.7	-105.5	343.3	0.00	0.00	0.00
3,600.0	19.64	197.15	3,542.0	1,098.69	-373.8	-115.4	375.6	0.00	0.00	0.00
3,700.0	19.64	197.15	3,636.2	1,004.51	-405.9	-125.3	407.8	0.00	0.00	0.00
3,800.0	19.64	197.15	3,730.4	910.33	-438.1	-135.2	440.1	0.00	0.00	0.00
3,900.0	19.64	197.15	3,824.5	816.15	-470.2	-145.1	472.4	0.00	0.00	0.00
4,000.0	19.64	197.15	3,918.7	721.97	-502.3	-155.1	504.7	0.00	0.00	0.00
4,100.0	19.64	197.15	4,012.9	627.79	-534.4	-165.0	536.9	0.00	0.00	0.00
4,200.0	19.64	197.15	4,107.1	533.61	-566.5	-174.9	569.2	0.00	0.00	0.00
4,300.0	19.64	197.15	4,201.3	439.43	-598.7	-184.8	601.5	0.00	0.00	0.00
4,400.0	19.64	197.15	4,295.5	345.25	-630.8	-194.7	633.7	0.00	0.00	0.00
4,500.0	19.64	197.15	4,389.6	251.07	-662.9	-204.6	666.0	0.00	0.00	0.00
<b>END OF TANGENT</b>										



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<b>Well:</b>	STATE ANTELOPE 11-11-14XRLNB	<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>4,580.6</b>	<b>19.64</b>	<b>197.15</b>	<b>4,465.6</b>	<b>175.13</b>	<b>-688.8</b>	<b>-212.6</b>	<b>692.0</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,600.0	19.26	197.15	4,483.8	156.87	-695.0	-214.5	698.2	2.00	-2.00	0.00
4,700.0	17.26	197.15	4,578.8	61.90	-724.9	-223.8	728.3	2.00	-2.00	0.00
4,800.0	15.26	197.15	4,674.8	-34.09	-751.6	-232.0	755.2	2.00	-2.00	0.00
4,900.0	13.26	197.15	4,771.7	-131.01	-775.2	-239.3	778.8	2.00	-2.00	0.00
5,000.0	11.26	197.15	4,869.4	-228.72	-795.4	-245.5	799.2	2.00	-2.00	0.00
5,100.0	9.26	197.15	4,967.8	-327.12	-812.5	-250.8	816.3	2.00	-2.00	0.00
5,200.0	7.26	197.15	5,066.8	-426.08	-826.2	-255.0	830.1	2.00	-2.00	0.00
5,300.0	5.26	197.15	5,166.2	-525.48	-836.6	-258.2	840.5	2.00	-2.00	0.00
5,400.0	3.26	197.15	5,265.9	-625.20	-843.7	-260.4	847.6	2.00	-2.00	0.00
5,500.0	1.26	197.15	5,365.8	-725.12	-847.4	-261.6	851.4	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
<b>5,562.8</b>	<b>0.00</b>	<b>0.00</b>	<b>5,428.6</b>	<b>-787.90</b>	<b>-848.1</b>	<b>-261.8</b>	<b>852.1</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
<b>KOP (8°/100ft BUR)</b>										
<b>5,592.8</b>	<b>0.00</b>	<b>0.00</b>	<b>5,458.6</b>	<b>-817.90</b>	<b>-848.1</b>	<b>-261.8</b>	<b>852.1</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,600.0	0.58	179.95	5,465.8	-825.11	-848.1	-261.8	852.1	8.00	8.00	0.00
5,700.0	8.58	179.95	5,565.4	-924.71	-856.1	-261.8	860.1	8.00	8.00	0.00
5,800.0	16.58	179.95	5,662.9	-1,022.23	-877.9	-261.8	881.8	8.00	8.00	0.00
5,900.0	24.58	179.95	5,756.5	-1,115.78	-913.0	-261.7	917.0	8.00	8.00	0.00
6,000.0	32.58	179.95	5,844.2	-1,203.52	-960.8	-261.7	964.7	8.00	8.00	0.00
6,100.0	40.58	179.95	5,924.5	-1,283.76	-1,020.3	-261.6	1,024.3	8.00	8.00	0.00
6,200.0	48.58	179.95	5,995.6	-1,354.94	-1,090.5	-261.6	1,094.4	8.00	8.00	0.00
6,300.0	56.58	179.95	6,056.4	-1,415.66	-1,169.8	-261.5	1,173.7	8.00	8.00	0.00
6,400.0	64.58	179.95	6,105.4	-1,464.74	-1,256.8	-261.4	1,260.8	8.00	8.00	0.00
6,500.0	72.58	179.95	6,141.9	-1,501.24	-1,349.8	-261.4	1,353.8	8.00	8.00	0.00
<b>START OF TANGENT</b>										
<b>6,530.3</b>	<b>75.00</b>	<b>179.95</b>	<b>6,150.4</b>	<b>-1,509.69</b>	<b>-1,378.9</b>	<b>-261.3</b>	<b>1,382.8</b>	<b>8.00</b>	<b>8.00</b>	<b>0.00</b>
6,600.0	75.00	179.95	6,168.4	-1,527.74	-1,446.3	-261.3	1,450.2	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>6,630.3</b>	<b>75.00</b>	<b>179.95</b>	<b>6,176.3</b>	<b>-1,535.58</b>	<b>-1,475.5</b>	<b>-261.3</b>	<b>1,479.4</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,700.0	80.58	179.95	6,191.0	-1,550.31	-1,543.6	-261.2	1,547.5	8.00	8.00	0.00
6,800.0	88.58	179.95	6,200.5	-1,559.76	-1,643.1	-261.1	1,647.0	8.00	8.00	0.00
<b>HZ LP *NEW*: 827.8ft FNL &amp; 548ft FWL of Sec 11</b>										
<b>6,817.8</b>	<b>90.00</b>	<b>179.95</b>	<b>6,200.7</b>	<b>-1,559.98</b>	<b>-1,660.9</b>	<b>-261.1</b>	<b>1,664.8</b>	<b>8.00</b>	<b>8.00</b>	<b>0.00</b>
6,900.0	90.00	179.95	6,200.7	-1,559.98	-1,743.1	-261.0	1,747.0	0.00	0.00	0.00
7,000.0	90.00	179.95	6,200.7	-1,559.98	-1,843.1	-260.9	1,846.9	0.00	0.00	0.00
7,100.0	90.00	179.95	6,200.7	-1,559.98	-1,943.1	-260.8	1,946.9	0.00	0.00	0.00
7,200.0	90.00	179.95	6,200.7	-1,559.98	-2,043.1	-260.8	2,046.9	0.00	0.00	0.00
7,300.0	90.00	179.95	6,200.7	-1,559.98	-2,143.1	-260.7	2,146.9	0.00	0.00	0.00
7,400.0	90.00	179.95	6,200.7	-1,559.98	-2,243.1	-260.6	2,246.9	0.00	0.00	0.00
7,500.0	90.00	179.95	6,200.7	-1,559.98	-2,343.1	-260.5	2,346.9	0.00	0.00	0.00
7,600.0	90.00	179.95	6,200.7	-1,559.98	-2,443.1	-260.4	2,446.9	0.00	0.00	0.00
7,700.0	90.00	179.95	6,200.7	-1,559.98	-2,543.1	-260.3	2,546.9	0.00	0.00	0.00
7,800.0	90.00	179.95	6,200.7	-1,559.98	-2,643.1	-260.2	2,646.8	0.00	0.00	0.00
7,900.0	90.00	179.95	6,200.7	-1,559.98	-2,743.1	-260.2	2,746.8	0.00	0.00	0.00
8,000.0	90.00	179.95	6,200.7	-1,559.98	-2,843.1	-260.1	2,846.8	0.00	0.00	0.00
8,100.0	90.00	179.95	6,200.7	-1,559.98	-2,943.1	-260.0	2,946.8	0.00	0.00	0.00
8,200.0	90.00	179.95	6,200.7	-1,559.98	-3,043.1	-259.9	3,046.8	0.00	0.00	0.00
8,300.0	90.00	179.95	6,200.7	-1,559.98	-3,143.1	-259.8	3,146.8	0.00	0.00	0.00
8,400.0	90.00	179.95	6,200.7	-1,559.98	-3,243.1	-259.7	3,246.8	0.00	0.00	0.00
8,500.0	90.00	179.95	6,200.7	-1,559.98	-3,343.1	-259.7	3,346.7	0.00	0.00	0.00
8,600.0	90.00	179.95	6,200.7	-1,559.98	-3,443.1	-259.6	3,446.7	0.00	0.00	0.00
8,700.0	90.00	179.95	6,200.7	-1,559.98	-3,543.1	-259.5	3,546.7	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE 11-11-14XRLNB
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4640.7usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4640.7usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 2 T5N R62W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE 11-11-14XRLNB	<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)
8,800.0	90.00	179.95	6,200.7	-1,559.98	-3,643.1	-259.4	3,646.7	0.00	0.00	0.00
8,900.0	90.00	179.95	6,200.7	-1,559.98	-3,743.1	-259.3	3,746.7	0.00	0.00	0.00
9,000.0	90.00	179.95	6,200.7	-1,559.98	-3,843.1	-259.2	3,846.7	0.00	0.00	0.00
9,100.0	90.00	179.95	6,200.7	-1,559.98	-3,943.1	-259.2	3,946.7	0.00	0.00	0.00
9,200.0	90.00	179.95	6,200.7	-1,559.98	-4,043.1	-259.1	4,046.6	0.00	0.00	0.00
9,300.0	90.00	179.95	6,200.7	-1,559.99	-4,143.1	-259.0	4,146.6	0.00	0.00	0.00
9,400.0	90.00	179.95	6,200.7	-1,559.99	-4,243.1	-258.9	4,246.6	0.00	0.00	0.00
9,500.0	90.00	179.95	6,200.7	-1,559.99	-4,343.1	-258.8	4,346.6	0.00	0.00	0.00
9,600.0	90.00	179.95	6,200.7	-1,559.99	-4,443.1	-258.7	4,446.6	0.00	0.00	0.00
9,700.0	90.00	179.95	6,200.7	-1,559.99	-4,543.1	-258.7	4,546.6	0.00	0.00	0.00
9,800.0	90.00	179.95	6,200.7	-1,559.99	-4,643.1	-258.6	4,646.6	0.00	0.00	0.00
9,900.0	90.00	179.95	6,200.7	-1,559.99	-4,743.1	-258.5	4,746.6	0.00	0.00	0.00
10,000.0	90.00	179.95	6,200.7	-1,559.99	-4,843.1	-258.4	4,846.5	0.00	0.00	0.00
10,100.0	90.00	179.95	6,200.7	-1,559.99	-4,943.1	-258.3	4,946.5	0.00	0.00	0.00
10,200.0	90.00	179.95	6,200.7	-1,559.99	-5,043.1	-258.3	5,046.5	0.00	0.00	0.00
10,300.0	90.00	179.95	6,200.7	-1,559.99	-5,143.1	-258.2	5,146.5	0.00	0.00	0.00
10,400.0	90.00	179.95	6,200.7	-1,559.99	-5,243.1	-258.1	5,246.5	0.00	0.00	0.00
10,500.0	90.00	179.95	6,200.7	-1,559.99	-5,343.1	-258.0	5,346.5	0.00	0.00	0.00
10,600.0	90.00	179.95	6,200.7	-1,559.99	-5,443.1	-257.9	5,446.5	0.00	0.00	0.00
10,700.0	90.00	179.95	6,200.7	-1,559.99	-5,543.1	-257.9	5,546.4	0.00	0.00	0.00
10,800.0	90.00	179.95	6,200.7	-1,560.00	-5,643.1	-257.8	5,646.4	0.00	0.00	0.00
10,900.0	90.00	179.95	6,200.7	-1,560.00	-5,743.1	-257.7	5,746.4	0.00	0.00	0.00
11,000.0	90.00	179.95	6,200.7	-1,560.00	-5,843.1	-257.6	5,846.4	0.00	0.00	0.00
11,100.0	90.00	179.95	6,200.7	-1,560.00	-5,943.1	-257.5	5,946.4	0.00	0.00	0.00
11,200.0	90.00	179.96	6,200.7	-1,560.00	-6,043.1	-257.5	6,046.4	0.00	0.00	0.00
11,300.0	90.00	179.96	6,200.7	-1,560.00	-6,143.1	-257.4	6,146.4	0.00	0.00	0.00
<b>MID-LAT TGT: 0ft FNL &amp; 546ft FWL of Sec 14</b>										
<b>11,334.7</b>	<b>90.00</b>	<b>179.96</b>	<b>6,200.7</b>	<b>-1,560.00</b>	<b>-6,177.8</b>	<b>-257.4</b>	<b>6,181.1</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>EOT TO 179° AZ</b>										
<b>11,366.6</b>	<b>90.00</b>	<b>179.00</b>	<b>6,200.7</b>	<b>-1,560.00</b>	<b>-6,209.7</b>	<b>-257.1</b>	<b>6,213.0</b>	<b>3.00</b>	<b>0.00</b>	<b>-3.00</b>
11,400.0	90.00	179.00	6,200.7	-1,560.00	-6,243.1	-256.5	6,246.3	0.00	0.00	0.00
11,500.0	90.00	179.00	6,200.7	-1,560.00	-6,343.1	-254.7	6,346.3	0.00	0.00	0.00
11,600.0	90.00	179.00	6,200.7	-1,560.00	-6,443.1	-253.0	6,446.2	0.00	0.00	0.00
11,700.0	90.00	179.00	6,200.7	-1,560.00	-6,543.0	-251.2	6,546.2	0.00	0.00	0.00
11,800.0	90.00	179.00	6,200.7	-1,560.00	-6,643.0	-249.5	6,646.1	0.00	0.00	0.00
11,900.0	90.00	179.00	6,200.7	-1,560.00	-6,743.0	-247.7	6,746.1	0.00	0.00	0.00
12,000.0	90.00	179.00	6,200.7	-1,560.00	-6,843.0	-246.0	6,846.0	0.00	0.00	0.00
12,100.0	90.00	179.00	6,200.7	-1,560.00	-6,943.0	-244.2	6,945.9	0.00	0.00	0.00
12,200.0	90.00	179.00	6,200.7	-1,560.00	-7,043.0	-242.5	7,045.9	0.00	0.00	0.00
12,300.0	90.00	179.00	6,200.7	-1,560.00	-7,143.0	-240.7	7,145.8	0.00	0.00	0.00
12,400.0	90.00	179.00	6,200.7	-1,560.00	-7,242.9	-239.0	7,245.8	0.00	0.00	0.00
12,500.0	90.00	179.00	6,200.7	-1,560.00	-7,342.9	-237.3	7,345.7	0.00	0.00	0.00
12,600.0	90.00	179.00	6,200.7	-1,560.00	-7,442.9	-235.5	7,445.7	0.00	0.00	0.00
12,700.0	90.00	179.00	6,200.7	-1,560.00	-7,542.9	-233.8	7,545.6	0.00	0.00	0.00
12,800.0	90.00	179.00	6,200.7	-1,560.00	-7,642.9	-232.0	7,645.6	0.00	0.00	0.00
12,900.0	90.00	179.00	6,200.7	-1,560.00	-7,742.9	-230.3	7,745.5	0.00	0.00	0.00
13,000.0	90.00	179.00	6,200.7	-1,560.00	-7,842.8	-228.5	7,845.5	0.00	0.00	0.00
13,100.0	90.00	179.00	6,200.7	-1,560.00	-7,942.8	-226.8	7,945.4	0.00	0.00	0.00
13,200.0	90.00	179.00	6,200.7	-1,560.00	-8,042.8	-225.0	8,045.3	0.00	0.00	0.00
13,300.0	90.00	179.00	6,200.7	-1,560.00	-8,142.8	-223.3	8,145.3	0.00	0.00	0.00
13,400.0	90.00	179.00	6,200.7	-1,560.00	-8,242.8	-221.5	8,245.2	0.00	0.00	0.00
13,500.0	90.00	179.00	6,200.7	-1,560.00	-8,342.8	-219.8	8,345.2	0.00	0.00	0.00
13,600.0	90.00	179.00	6,200.7	-1,560.00	-8,442.8	-218.0	8,445.1	0.00	0.00	0.00
13,700.0	90.00	179.00	6,200.7	-1,560.00	-8,542.7	-216.3	8,545.1	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STATE ANTELOPE 11-11-14XRLNB
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4640.7usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4640.7usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 2 T5N R62W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STATE ANTELOPE 11-11-14XRLNB	<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)
13,800.0	90.00	179.00	6,200.7	-1,560.00	-8,642.7	-214.5	8,645.0	0.00	0.00	0.00
13,900.0	90.00	179.00	6,200.7	-1,560.00	-8,742.7	-212.8	8,745.0	0.00	0.00	0.00
14,000.0	90.00	179.00	6,200.7	-1,560.00	-8,842.7	-211.0	8,844.9	0.00	0.00	0.00
14,100.0	90.00	179.00	6,200.7	-1,560.00	-8,942.7	-209.3	8,944.9	0.00	0.00	0.00
14,200.0	90.00	179.00	6,200.7	-1,560.00	-9,042.7	-207.5	9,044.8	0.00	0.00	0.00
14,300.0	90.00	179.00	6,200.7	-1,560.00	-9,142.6	-205.8	9,144.7	0.00	0.00	0.00
14,400.0	90.00	179.00	6,200.7	-1,560.00	-9,242.6	-204.0	9,244.7	0.00	0.00	0.00
14,500.0	90.00	179.00	6,200.7	-1,560.00	-9,342.6	-202.3	9,344.6	0.00	0.00	0.00
14,600.0	90.00	179.00	6,200.7	-1,560.00	-9,442.6	-200.5	9,444.6	0.00	0.00	0.00
14,700.0	90.00	179.00	6,200.7	-1,560.00	-9,542.6	-198.8	9,544.5	0.00	0.00	0.00
14,800.0	90.00	179.00	6,200.7	-1,560.00	-9,642.6	-197.0	9,644.5	0.00	0.00	0.00
14,900.0	90.00	179.00	6,200.7	-1,560.00	-9,742.6	-195.3	9,744.4	0.00	0.00	0.00
15,000.0	90.00	179.00	6,200.7	-1,560.00	-9,842.5	-193.6	9,844.4	0.00	0.00	0.00
15,100.0	90.00	179.00	6,200.7	-1,560.00	-9,942.5	-191.8	9,944.3	0.00	0.00	0.00
15,200.0	90.00	179.00	6,200.7	-1,560.00	-10,042.5	-190.1	10,044.3	0.00	0.00	0.00
15,300.0	90.00	179.00	6,200.7	-1,560.00	-10,142.5	-188.3	10,144.2	0.00	0.00	0.00
15,400.0	90.00	179.00	6,200.7	-1,560.00	-10,242.5	-186.6	10,244.1	0.00	0.00	0.00
15,500.0	90.00	179.00	6,200.7	-1,560.00	-10,342.5	-184.8	10,344.1	0.00	0.00	0.00
15,600.0	90.00	179.00	6,200.7	-1,560.00	-10,442.5	-183.1	10,444.0	0.00	0.00	0.00
15,700.0	90.00	179.00	6,200.7	-1,560.00	-10,542.4	-181.3	10,544.0	0.00	0.00	0.00
15,800.0	90.00	179.00	6,200.7	-1,560.00	-10,642.4	-179.6	10,643.9	0.00	0.00	0.00
15,900.0	90.00	179.00	6,200.7	-1,560.00	-10,742.4	-177.8	10,743.9	0.00	0.00	0.00
16,000.0	90.00	179.00	6,200.7	-1,560.00	-10,842.4	-176.1	10,843.8	0.00	0.00	0.00
16,100.0	90.00	179.00	6,200.7	-1,560.00	-10,942.4	-174.3	10,943.8	0.00	0.00	0.00
16,200.0	90.00	179.00	6,200.7	-1,560.00	-11,042.4	-172.6	11,043.7	0.00	0.00	0.00
<b>BHL: 470ft FSL &amp; 534ft FWL of Sec 14</b>										
<b>16,212.2</b>	<b>90.00</b>	<b>179.00</b>	<b>6,200.7</b>	<b>-1,560.00</b>	<b>-11,054.5</b>	<b>-172.4</b>	<b>11,055.9</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: 818ft FSL & 811ft FWL of Sec 2
1,550.0	1,550.0	0.0	0.0	SURFACE CASING
1,950.0	1,950.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2,932.2	2,913.0	-159.3	-49.2	EOB TO 19.64° INC
4,580.6	4,465.6	-688.8	-212.6	END OF TANGENT
5,562.8	5,428.6	-848.1	-261.8	EOD TO VERTICAL
5,592.8	5,458.6	-848.1	-261.8	KOP (8°/100ft BUR)
6,530.3	6,150.4	-1,378.9	-261.3	START OF TANGENT
6,630.3	6,176.3	-1,475.5	-261.3	END OF TANGENT
6,817.8	6,200.7	-1,660.9	-261.1	HZ LP *NEW*: 827.8ft FNL & 548ft FWL of Sec 11
11,334.7	6,200.7	-6,177.8	-257.4	MID-LAT TGT: 0ft FNL & 546ft FWL of Sec 14
11,366.6	6,200.7	-6,209.7	-257.1	EOT TO 179° AZ
16,212.2	6,200.7	-11,054.5	-172.4	BHL: 470ft FSL & 534ft FWL of Sec 14