

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

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

STATE ANTELOPE P31-11-14XRLNB

ORIGINAL WELLBORE

27 August, 2016

Plan: PROPOSAL #1





Project: WELD COUNTY, COLORADO (NAD 83)
Site: NW NE SEC. 11 T5N R62W 6th P.M.
Well: STATE ANTELOPE P31-11-14XRLNB
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: 238ft FNL & 2387ft FEL of Sec 11		
1550.0	1550.0	0.00	0.00	0.0	0.0	0.0	0.0	SURFACE CASING		
2650.0	2650.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2.5°/100ft BUR)		
3661.8	3697.9	26.20	71.25	75.7	222.9	-57.8	235.4	EOB TO 26.2° INC		
4366.9	4483.8	26.20	71.25	187.1	551.5	-142.9	582.4	END OF TANGENT		
5378.7	5531.7	0.00	0.00	262.8	774.4	-200.6	817.8	EOD TO VERTICAL		
5408.7	5561.7	0.00	0.00	262.8	774.4	-200.6	817.8	KOP (8°/100ft BUR)		
6100.5	6499.2	75.00	180.06	-268.0	773.8	328.5	1348.6	START OF TANGENT		
6126.4	6599.2	75.00	180.06	-364.6	773.7	424.8	1445.2	END OF TANGENT		
6150.8	6786.7	90.00	180.06	-550.0	773.5	609.5	1630.6	HZ LP *NEW*: 827.8ft FNL & 1613ft FEL of Sec 11		
6150.8	11331.5	90.00	180.05	-5094.8	769.2	5139.7	6175.4	MID-LAT TGT: 0ft FNL & 1607ft FEL of Sec 14		
6150.8	11343.1	90.00	179.70	-5106.4	769.2	5151.3	6187.0	EOT TO 179.7° AZ		
6150.8	16235.2	90.00	179.70	-9998.4	794.4	10029.9	11079.1	BHL: 470ft FSL & 1571ft FEL of Sec 14		

PROPOSED LOCAL COORDINATES:

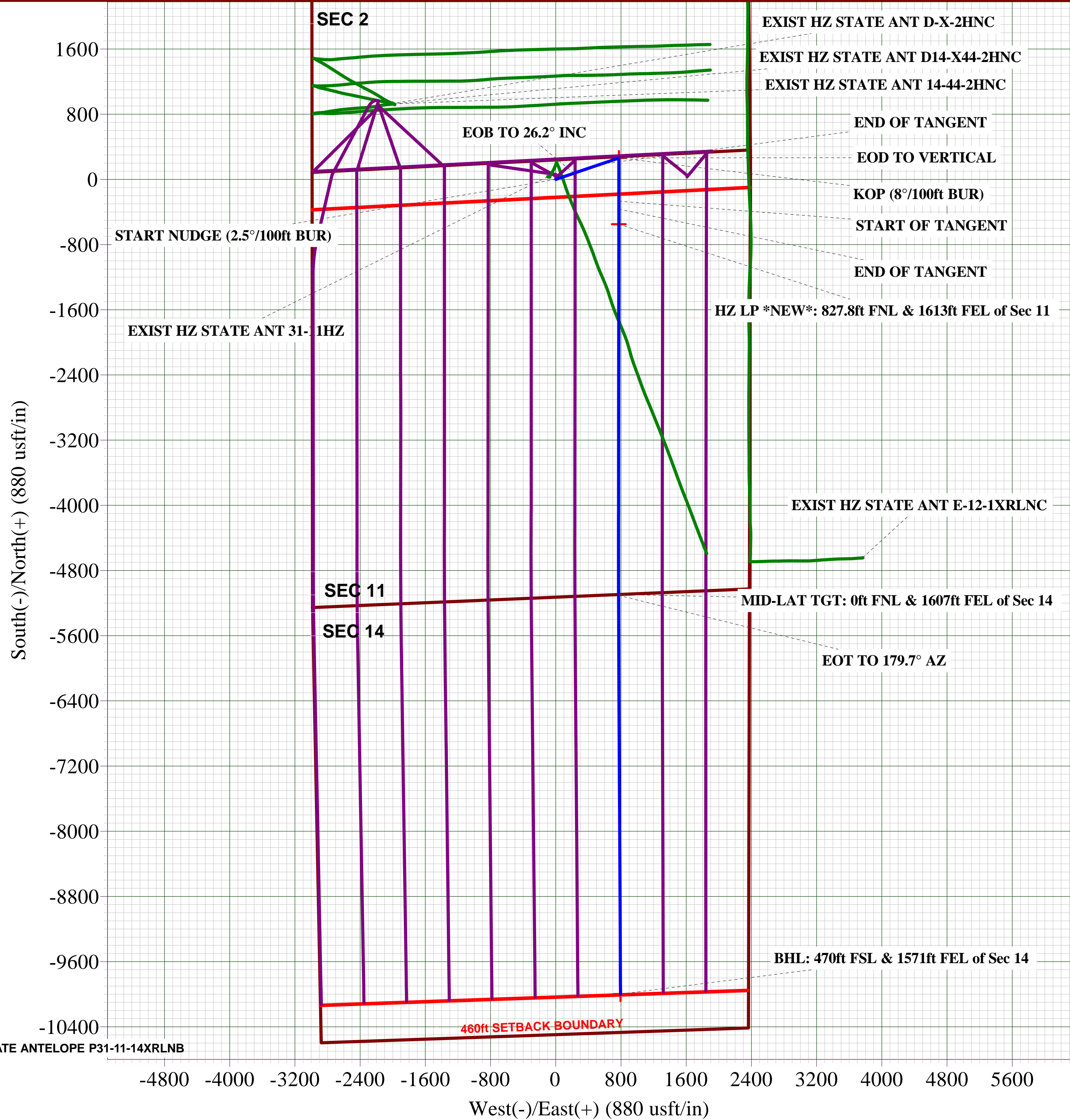
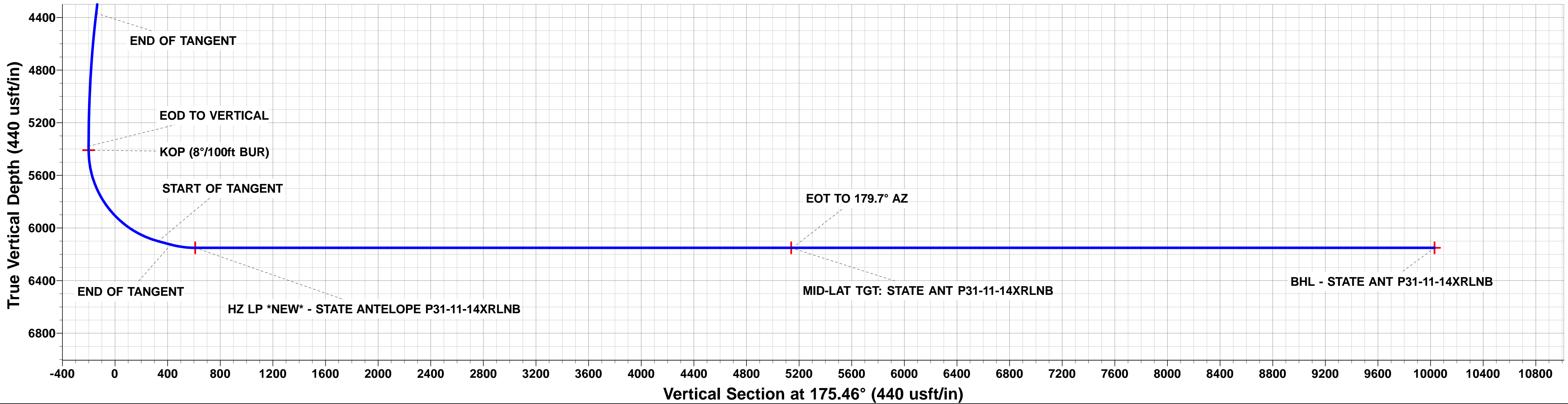
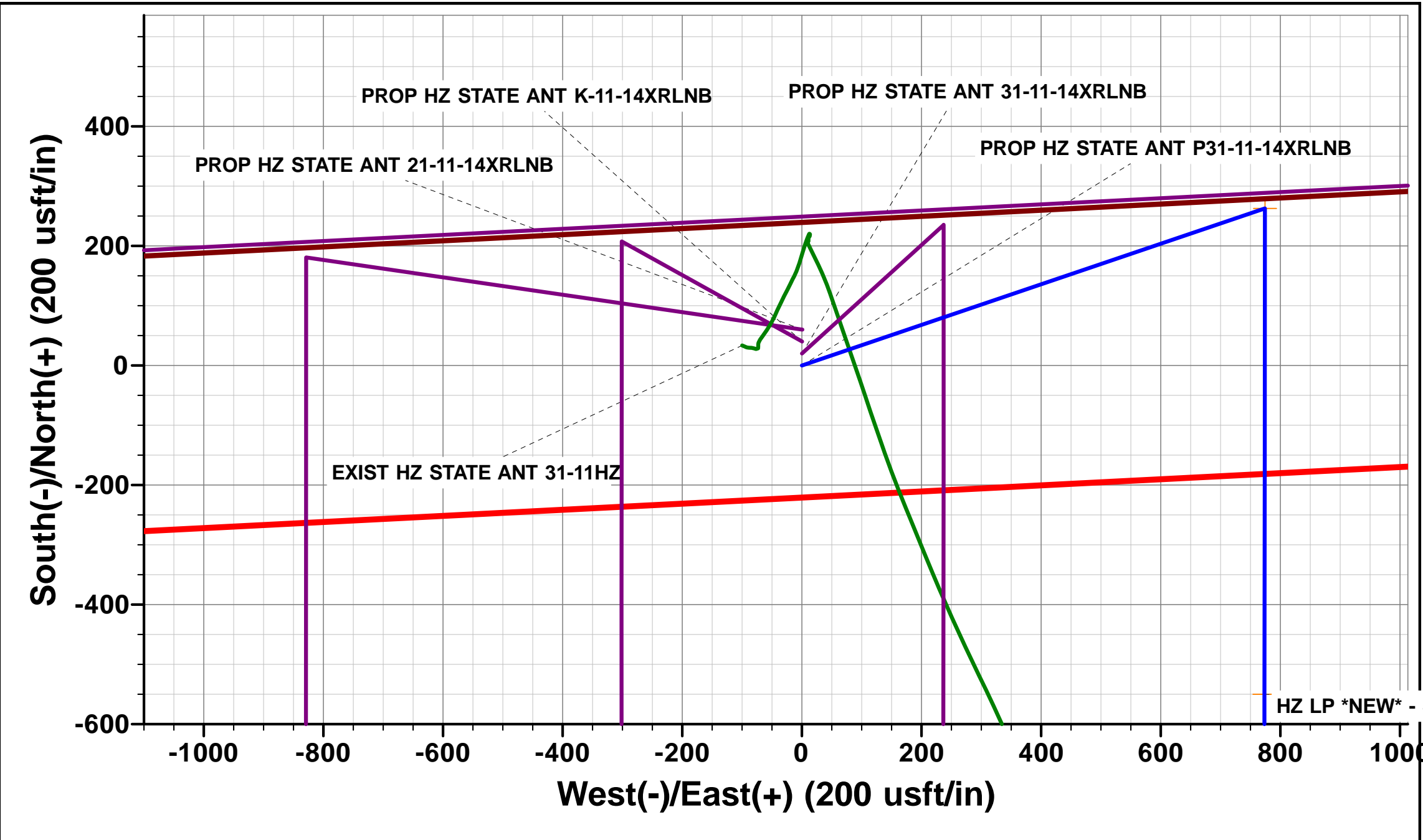
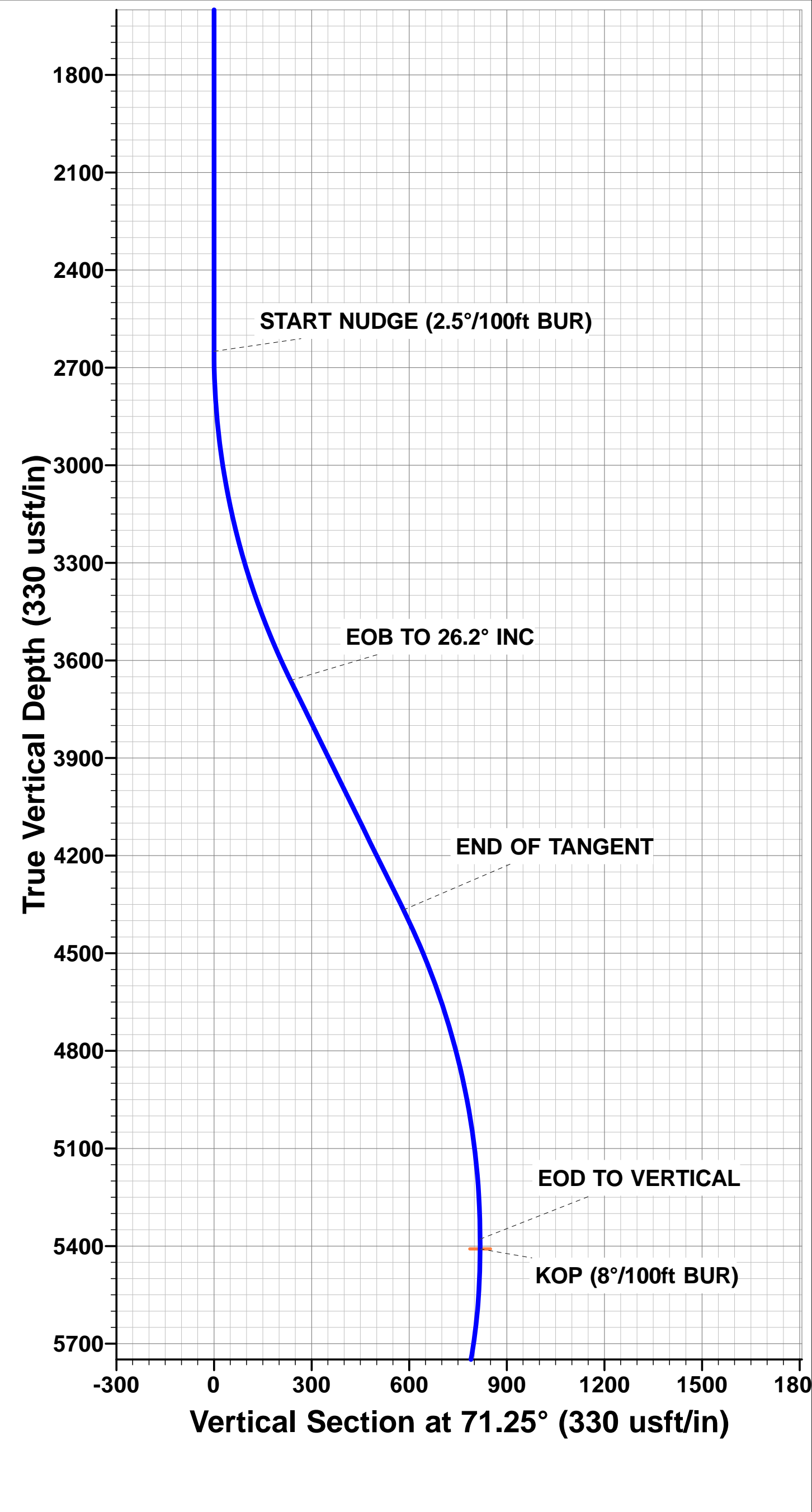
SHL: 238ft FNL & 2387ft FEL Sec 11

HZ LP: 827.8ft FNL & 1613ft FEL Sec 11

MID-LAT: 0ft FNL & 1607ft FEL Sec 14

BHL: 470ft FSL & 1571ft FEL Sec 14

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - STATE ANT P31-11-14XRLNB	5408.7	262.8	774.4	40.422445	-104.286500
BHL - STATE ANT P31-11-14XRLNB	6150.8	-9998.4	794.4	40.394279	-104.286429
HZ LP *NEW* - STATE ANTELOPE P31-11-14XRLNB	6150.8	-550.0	773.5	40.420214	-104.286503
MID-LAT TGT: STATE ANT P31-11-14XRLNB	6150.8	-5094.8	769.2	40.407739	-104.286519



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE ANTELOPE P31-11-14XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4620.8usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4620.8usft (Original Well Elev)
Site:	NW NE SEC. 11 T5N R62W 6th P.M.	North Reference:	True
Well:	STATE ANTELOPE P31-11-14XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

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 NE SEC. 11 T5N R62W 6th P.M.		
Site Position:		Northing:	1,398,835.52 usft
From:	Lat/Long	Easting:	3,337,079.30 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.421889
		Longitude:	-104.289278
		Grid Convergence:	0.78 °

Well	STATE ANTELOPE P31-11-14XRLNB		
Well Position	+N/-S	-60.0 usft	Northing:
	+E/-W	-0.8 usft	Easting:
Position Uncertainty		0.0 usft	Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	27/08/2016	8.04	66.97	52,547

Design	PROPOSAL #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	175.46

Plan Sections											
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	-4,620.8	0.0	0.0	0.00	0.00	0.00	0.00	
2,650.0	0.00	0.00	2,650.0	-1,970.8	0.0	0.0	0.00	0.00	0.00	0.00	
3,697.9	26.20	71.25	3,661.7	-959.1	75.6	222.9	2.50	2.50	0.00	71.25	
4,483.8	26.20	71.25	4,367.0	-253.8	187.2	551.5	0.00	0.00	0.00	0.00	
5,531.7	0.00	0.00	5,378.7	757.9	262.8	774.4	2.50	-2.50	0.00	180.00	
5,561.7	0.00	0.00	5,408.7	787.9	262.8	774.4	0.00	0.00	0.00	0.00	KOP - STATE ANT
6,499.2	75.00	180.06	6,100.5	1,479.7	-268.0	773.8	8.00	8.00	0.00	180.06	
6,599.2	75.00	180.06	6,126.4	1,505.6	-364.6	773.7	0.00	0.00	0.00	0.00	
6,786.7	90.00	180.06	6,150.8	1,530.0	-550.0	773.5	8.00	8.00	0.00	0.00	
11,331.5	90.00	180.05	6,150.8	1,530.0	-5,094.8	769.2	0.00	0.00	0.00	-93.22	MID-LAT TGT: STA
11,343.1	90.00	179.70	6,150.8	1,530.0	-5,106.3	769.2	3.00	0.00	-3.00	-89.91	
16,235.2	90.00	179.70	6,150.8	1,530.0	-9,998.4	794.4	0.00	0.00	0.00	0.00	BHL - STATE ANT

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE ANTELOPE P31-11-14XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4620.8usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4620.8usft (Original Well Elev)
Site:	NW NE SEC. 11 T5N R62W 6th P.M.	North Reference:	True
Well:	STATE ANTELOPE P31-11-14XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)
SHL: 238ft FNL & 2387ft FEL of Sec 11										
0.0	0.00	0.00	0.0	4,620.80	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,520.80	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,420.80	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,320.80	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,220.80	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,120.80	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,020.80	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,920.80	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,820.80	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,720.80	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,620.80	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,520.80	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,420.80	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,320.80	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,220.80	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,120.80	0.0	0.0	0.0	0.00	0.00	0.00
SURFACE CASING										
1,550.0	0.00	0.00	1,550.0	3,070.80	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	3,020.80	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	2,920.80	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	2,820.80	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	2,720.80	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	2,620.80	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	2,520.80	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	2,420.80	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	2,320.80	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	2,220.80	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	2,120.80	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	2,020.80	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2.5°/100ft BUR)										
2,650.0	0.00	0.00	2,650.0	1,970.80	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	1.25	71.25	2,700.0	1,920.80	0.2	0.5	-0.1	2.50	2.50	0.00
2,800.0	3.75	71.25	2,799.9	1,820.91	1.6	4.6	-1.2	2.50	2.50	0.00
2,900.0	6.25	71.25	2,899.5	1,721.30	4.4	12.9	-3.3	2.50	2.50	0.00
3,000.0	8.75	71.25	2,998.6	1,622.16	8.6	25.3	-6.5	2.50	2.50	0.00
3,100.0	11.25	71.25	3,097.1	1,523.69	14.2	41.7	-10.8	2.50	2.50	0.00
3,200.0	13.75	71.25	3,194.7	1,426.06	21.1	62.2	-16.1	2.50	2.50	0.00
3,300.0	16.25	71.25	3,291.3	1,329.48	29.4	86.7	-22.5	2.50	2.50	0.00
3,400.0	18.75	71.25	3,386.7	1,234.12	39.1	115.2	-29.8	2.50	2.50	0.00
3,500.0	21.25	71.25	3,480.6	1,140.15	50.1	147.6	-38.2	2.50	2.50	0.00
3,600.0	23.75	71.25	3,573.0	1,047.77	62.4	183.8	-47.6	2.50	2.50	0.00
EOB TO 26.2° INC										
3,697.9	26.20	71.25	3,661.8	959.03	75.7	222.9	-57.8	2.50	2.50	0.00
3,700.0	26.20	71.25	3,663.7	957.15	76.0	223.8	-58.0	0.00	0.00	0.00
3,800.0	26.20	71.25	3,753.4	867.42	90.1	265.6	-68.8	0.00	0.00	0.00
3,900.0	26.20	71.25	3,843.1	777.69	104.3	307.4	-79.6	0.00	0.00	0.00
4,000.0	26.20	71.25	3,932.8	687.96	118.5	349.2	-90.5	0.00	0.00	0.00
4,100.0	26.20	71.25	4,022.6	598.23	132.7	391.0	-101.3	0.00	0.00	0.00
4,200.0	26.20	71.25	4,112.3	508.51	146.9	432.8	-112.1	0.00	0.00	0.00
4,300.0	26.20	71.25	4,202.0	418.78	161.1	474.6	-123.0	0.00	0.00	0.00
4,400.0	26.20	71.25	4,291.8	329.05	175.3	516.4	-133.8	0.00	0.00	0.00
END OF TANGENT										
4,483.8	26.20	71.25	4,366.9	253.86	187.1	551.5	-142.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE ANTELOPE P31-11-14XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4620.8usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4620.8usft (Original Well Elev)
Site:	NW NE SEC. 11 T5N R62W 6th P.M.	North Reference:	True
Well:	STATE ANTELOPE P31-11-14XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)
4,500.0	25.79	71.25	4,381.5	239.30	189.4	558.2	-144.6	2.50	-2.50	0.00
4,600.0	23.29	71.25	4,472.5	148.34	202.8	597.5	-154.8	2.50	-2.50	0.00
4,700.0	20.79	71.25	4,565.1	55.65	214.8	633.1	-164.0	2.50	-2.50	0.00
4,800.0	18.29	71.25	4,659.4	-38.58	225.6	664.7	-172.2	2.50	-2.50	0.00
4,900.0	15.79	71.25	4,755.0	-134.18	235.0	692.5	-179.4	2.50	-2.50	0.00
5,000.0	13.29	71.25	4,851.8	-230.97	243.1	716.3	-185.6	2.50	-2.50	0.00
5,100.0	10.79	71.25	4,949.6	-328.76	249.8	736.0	-190.7	2.50	-2.50	0.00
5,200.0	8.29	71.25	5,048.2	-427.37	255.1	751.7	-194.8	2.50	-2.50	0.00
5,300.0	5.79	71.25	5,147.4	-526.61	259.0	763.3	-197.8	2.50	-2.50	0.00
5,400.0	3.29	71.25	5,247.1	-626.28	261.6	770.8	-199.7	2.50	-2.50	0.00
5,500.0	0.79	71.25	5,347.0	-726.21	262.7	774.2	-200.6	2.50	-2.50	0.00
EOD TO VERTICAL										
5,531.7	0.00	0.00	5,378.7	-757.91	262.8	774.4	-200.6	2.50	-2.50	0.00
KOP (8°/100ft BUR)										
5,561.7	0.00	0.00	5,408.7	-787.91	262.8	774.4	-200.6	0.00	0.00	0.00
5,600.0	3.06	180.06	5,447.0	-826.19	261.8	774.4	-199.6	8.00	8.00	0.00
5,700.0	11.06	180.06	5,546.2	-925.35	249.5	774.4	-187.4	8.00	8.00	0.00
5,800.0	19.06	180.06	5,642.6	-1,021.84	223.5	774.4	-161.5	8.00	8.00	0.00
5,900.0	27.06	180.06	5,734.6	-1,113.77	184.4	774.3	-122.5	8.00	8.00	0.00
6,000.0	35.06	180.06	5,820.2	-1,199.36	132.8	774.3	-71.1	8.00	8.00	0.00
6,100.0	43.06	180.06	5,897.7	-1,276.94	69.8	774.2	-8.3	8.00	8.00	0.00
6,200.0	51.06	180.06	5,965.8	-1,345.00	-3.3	774.1	64.6	8.00	8.00	0.00
6,300.0	59.06	180.06	6,023.0	-1,402.22	-85.2	774.0	146.3	8.00	8.00	0.00
6,400.0	67.06	180.06	6,068.3	-1,447.48	-174.3	773.9	235.1	8.00	8.00	0.00
START OF TANGENT										
6,499.2	75.00	180.06	6,100.5	-1,479.70	-268.0	773.8	328.5	8.00	8.00	0.00
6,500.0	75.00	180.06	6,100.7	-1,479.90	-268.8	773.8	329.3	0.00	0.00	0.00
END OF TANGENT										
6,599.2	75.00	180.06	6,126.4	-1,505.58	-364.6	773.7	424.8	0.00	0.00	0.00
6,600.0	75.06	180.06	6,126.6	-1,505.78	-365.4	773.7	425.5	8.12	8.12	0.00
6,700.0	83.06	180.06	6,145.5	-1,524.74	-463.5	773.6	523.3	8.00	8.00	0.00
HZ LP *NEW*: 827.8ft FNL & 1613ft FEL of Sec 11										
6,786.7	90.00	180.06	6,150.8	-1,529.98	-550.0	773.5	609.5	8.00	8.00	0.00
6,800.0	90.00	180.06	6,150.8	-1,529.98	-563.3	773.5	622.8	0.00	0.00	0.00
6,900.0	90.00	180.06	6,150.8	-1,529.98	-663.3	773.4	722.5	0.00	0.00	0.00
7,000.0	90.00	180.06	6,150.8	-1,529.98	-763.3	773.3	822.2	0.00	0.00	0.00
7,100.0	90.00	180.06	6,150.8	-1,529.98	-863.3	773.2	921.8	0.00	0.00	0.00
7,200.0	90.00	180.06	6,150.8	-1,529.98	-963.3	773.1	1,021.5	0.00	0.00	0.00
7,300.0	90.00	180.06	6,150.8	-1,529.98	-1,063.3	773.0	1,121.2	0.00	0.00	0.00
7,400.0	90.00	180.06	6,150.8	-1,529.98	-1,163.3	772.9	1,220.9	0.00	0.00	0.00
7,500.0	90.00	180.06	6,150.8	-1,529.98	-1,263.3	772.8	1,320.5	0.00	0.00	0.00
7,600.0	90.00	180.06	6,150.8	-1,529.98	-1,363.3	772.7	1,420.2	0.00	0.00	0.00
7,700.0	90.00	180.06	6,150.8	-1,529.98	-1,463.3	772.6	1,519.9	0.00	0.00	0.00
7,800.0	90.00	180.06	6,150.8	-1,529.98	-1,563.3	772.5	1,619.6	0.00	0.00	0.00
7,900.0	90.00	180.06	6,150.8	-1,529.98	-1,663.3	772.4	1,719.3	0.00	0.00	0.00
8,000.0	90.00	180.06	6,150.8	-1,529.98	-1,763.3	772.3	1,818.9	0.00	0.00	0.00
8,100.0	90.00	180.06	6,150.8	-1,529.98	-1,863.3	772.2	1,918.6	0.00	0.00	0.00
8,200.0	90.00	180.06	6,150.8	-1,529.98	-1,963.3	772.1	2,018.3	0.00	0.00	0.00
8,300.0	90.00	180.06	6,150.8	-1,529.98	-2,063.3	772.0	2,118.0	0.00	0.00	0.00
8,400.0	90.00	180.06	6,150.8	-1,529.98	-2,163.3	771.9	2,217.6	0.00	0.00	0.00
8,500.0	90.00	180.06	6,150.8	-1,529.98	-2,263.3	771.8	2,317.3	0.00	0.00	0.00
8,600.0	90.00	180.06	6,150.8	-1,529.98	-2,363.3	771.7	2,417.0	0.00	0.00	0.00
8,700.0	90.00	180.06	6,150.8	-1,529.98	-2,463.3	771.6	2,516.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE ANTELOPE P31-11-14XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4620.8usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4620.8usft (Original Well Elev)
Site:	NW NE SEC. 11 T5N R62W 6th P.M.	North Reference:	True
Well:	STATE ANTELOPE P31-11-14XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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	180.06	6,150.8	-1,529.98	-2,563.3	771.5	2,616.4	0.00	0.00	0.00
8,900.0	90.00	180.06	6,150.8	-1,529.98	-2,663.3	771.4	2,716.0	0.00	0.00	0.00
9,000.0	90.00	180.06	6,150.8	-1,529.98	-2,763.3	771.3	2,815.7	0.00	0.00	0.00
9,100.0	90.00	180.06	6,150.8	-1,529.98	-2,863.3	771.2	2,915.4	0.00	0.00	0.00
9,200.0	90.00	180.06	6,150.8	-1,529.99	-2,963.3	771.1	3,015.1	0.00	0.00	0.00
9,300.0	90.00	180.05	6,150.8	-1,529.99	-3,063.3	771.0	3,114.7	0.00	0.00	0.00
9,400.0	90.00	180.05	6,150.8	-1,529.99	-3,163.3	770.9	3,214.4	0.00	0.00	0.00
9,500.0	90.00	180.05	6,150.8	-1,529.99	-3,263.3	770.8	3,314.1	0.00	0.00	0.00
9,600.0	90.00	180.05	6,150.8	-1,529.99	-3,363.3	770.7	3,413.8	0.00	0.00	0.00
9,700.0	90.00	180.05	6,150.8	-1,529.99	-3,463.3	770.7	3,513.5	0.00	0.00	0.00
9,800.0	90.00	180.05	6,150.8	-1,529.99	-3,563.3	770.6	3,613.1	0.00	0.00	0.00
9,900.0	90.00	180.05	6,150.8	-1,529.99	-3,663.3	770.5	3,712.8	0.00	0.00	0.00
10,000.0	90.00	180.05	6,150.8	-1,529.99	-3,763.3	770.4	3,812.5	0.00	0.00	0.00
10,100.0	90.00	180.05	6,150.8	-1,529.99	-3,863.3	770.3	3,912.2	0.00	0.00	0.00
10,200.0	90.00	180.05	6,150.8	-1,529.99	-3,963.3	770.2	4,011.8	0.00	0.00	0.00
10,300.0	90.00	180.05	6,150.8	-1,529.99	-4,063.3	770.1	4,111.5	0.00	0.00	0.00
10,400.0	90.00	180.05	6,150.8	-1,529.99	-4,163.3	770.0	4,211.2	0.00	0.00	0.00
10,500.0	90.00	180.05	6,150.8	-1,529.99	-4,263.3	769.9	4,310.9	0.00	0.00	0.00
10,600.0	90.00	180.05	6,150.8	-1,529.99	-4,363.3	769.8	4,410.6	0.00	0.00	0.00
10,700.0	90.00	180.05	6,150.8	-1,529.99	-4,463.3	769.7	4,510.2	0.00	0.00	0.00
10,800.0	90.00	180.05	6,150.8	-1,530.00	-4,563.3	769.6	4,609.9	0.00	0.00	0.00
10,900.0	90.00	180.05	6,150.8	-1,530.00	-4,663.3	769.5	4,709.6	0.00	0.00	0.00
11,000.0	90.00	180.05	6,150.8	-1,530.00	-4,763.3	769.5	4,809.3	0.00	0.00	0.00
11,100.0	90.00	180.05	6,150.8	-1,530.00	-4,863.3	769.4	4,909.0	0.00	0.00	0.00
11,200.0	90.00	180.05	6,150.8	-1,530.00	-4,963.3	769.3	5,008.6	0.00	0.00	0.00
11,300.0	90.00	180.05	6,150.8	-1,530.00	-5,063.3	769.2	5,108.3	0.00	0.00	0.00
MID-LAT TGT: 0ft FNL & 1607ft FEL of Sec 14										
11,331.5	90.00	180.05	6,150.8	-1,530.00	-5,094.8	769.2	5,139.7	0.00	0.00	0.00
EOT TO 179.7° AZ										
11,343.1	90.00	179.70	6,150.8	-1,530.00	-5,106.4	769.2	5,151.3	2.98	0.00	-2.98
11,400.0	90.00	179.70	6,150.8	-1,530.00	-5,163.3	769.5	5,208.0	0.00	0.00	0.00
11,500.0	90.00	179.70	6,150.8	-1,530.00	-5,263.3	770.0	5,307.7	0.00	0.00	0.00
11,600.0	90.00	179.70	6,150.8	-1,530.00	-5,363.3	770.5	5,407.5	0.00	0.00	0.00
11,700.0	90.00	179.70	6,150.8	-1,530.00	-5,463.3	771.0	5,507.2	0.00	0.00	0.00
11,800.0	90.00	179.70	6,150.8	-1,530.00	-5,563.3	771.5	5,606.9	0.00	0.00	0.00
11,900.0	90.00	179.70	6,150.8	-1,530.00	-5,663.3	772.1	5,706.6	0.00	0.00	0.00
12,000.0	90.00	179.70	6,150.8	-1,530.00	-5,763.3	772.6	5,806.4	0.00	0.00	0.00
12,100.0	90.00	179.70	6,150.8	-1,530.00	-5,863.3	773.1	5,906.1	0.00	0.00	0.00
12,200.0	90.00	179.70	6,150.8	-1,530.00	-5,963.3	773.6	6,005.8	0.00	0.00	0.00
12,300.0	90.00	179.70	6,150.8	-1,530.00	-6,063.3	774.1	6,105.6	0.00	0.00	0.00
12,400.0	90.00	179.70	6,150.8	-1,530.00	-6,163.3	774.6	6,205.3	0.00	0.00	0.00
12,500.0	90.00	179.70	6,150.8	-1,530.00	-6,263.3	775.1	6,305.0	0.00	0.00	0.00
12,600.0	90.00	179.70	6,150.8	-1,530.00	-6,363.3	775.7	6,404.7	0.00	0.00	0.00
12,700.0	90.00	179.70	6,150.8	-1,530.00	-6,463.3	776.2	6,504.5	0.00	0.00	0.00
12,800.0	90.00	179.70	6,150.8	-1,530.00	-6,563.3	776.7	6,604.2	0.00	0.00	0.00
12,900.0	90.00	179.70	6,150.8	-1,530.00	-6,663.3	777.2	6,703.9	0.00	0.00	0.00
13,000.0	90.00	179.70	6,150.8	-1,530.00	-6,763.3	777.7	6,803.6	0.00	0.00	0.00
13,100.0	90.00	179.70	6,150.8	-1,530.00	-6,863.3	778.2	6,903.4	0.00	0.00	0.00
13,200.0	90.00	179.70	6,150.8	-1,530.00	-6,963.3	778.8	7,003.1	0.00	0.00	0.00
13,300.0	90.00	179.70	6,150.8	-1,530.00	-7,063.3	779.3	7,102.8	0.00	0.00	0.00
13,400.0	90.00	179.70	6,150.8	-1,530.00	-7,163.3	779.8	7,202.5	0.00	0.00	0.00
13,500.0	90.00	179.70	6,150.8	-1,530.00	-7,263.3	780.3	7,302.3	0.00	0.00	0.00
13,600.0	90.00	179.70	6,150.8	-1,530.00	-7,363.3	780.8	7,402.0	0.00	0.00	0.00
13,700.0	90.00	179.70	6,150.8	-1,530.00	-7,463.3	781.3	7,501.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE ANTELOPE P31-11-14XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4620.8usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4620.8usft (Original Well Elev)
Site:	NW NE SEC. 11 T5N R62W 6th P.M.	North Reference:	True
Well:	STATE ANTELOPE P31-11-14XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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	179.70	6,150.8	-1,530.00	-7,563.3	781.9	7,601.4	0.00	0.00	0.00
13,900.0	90.00	179.70	6,150.8	-1,530.00	-7,663.3	782.4	7,701.2	0.00	0.00	0.00
14,000.0	90.00	179.70	6,150.8	-1,530.00	-7,763.3	782.9	7,800.9	0.00	0.00	0.00
14,100.0	90.00	179.70	6,150.8	-1,530.00	-7,863.3	783.4	7,900.6	0.00	0.00	0.00
14,200.0	90.00	179.70	6,150.8	-1,530.00	-7,963.3	783.9	8,000.3	0.00	0.00	0.00
14,300.0	90.00	179.70	6,150.8	-1,530.00	-8,063.3	784.4	8,100.1	0.00	0.00	0.00
14,400.0	90.00	179.70	6,150.8	-1,530.00	-8,163.3	784.9	8,199.8	0.00	0.00	0.00
14,500.0	90.00	179.70	6,150.8	-1,530.00	-8,263.3	785.5	8,299.5	0.00	0.00	0.00
14,600.0	90.00	179.70	6,150.8	-1,530.00	-8,363.3	786.0	8,399.2	0.00	0.00	0.00
14,700.0	90.00	179.70	6,150.8	-1,530.00	-8,463.3	786.5	8,499.0	0.00	0.00	0.00
14,800.0	90.00	179.70	6,150.8	-1,530.00	-8,563.3	787.0	8,598.7	0.00	0.00	0.00
14,900.0	90.00	179.70	6,150.8	-1,530.00	-8,663.3	787.5	8,698.4	0.00	0.00	0.00
15,000.0	90.00	179.70	6,150.8	-1,530.00	-8,763.3	788.0	8,798.1	0.00	0.00	0.00
15,100.0	90.00	179.70	6,150.8	-1,530.00	-8,863.2	788.6	8,897.9	0.00	0.00	0.00
15,200.0	90.00	179.70	6,150.8	-1,530.00	-8,963.2	789.1	8,997.6	0.00	0.00	0.00
15,300.0	90.00	179.70	6,150.8	-1,530.00	-9,063.2	789.6	9,097.3	0.00	0.00	0.00
15,400.0	90.00	179.70	6,150.8	-1,530.00	-9,163.2	790.1	9,197.0	0.00	0.00	0.00
15,500.0	90.00	179.70	6,150.8	-1,530.00	-9,263.2	790.6	9,296.8	0.00	0.00	0.00
15,600.0	90.00	179.70	6,150.8	-1,530.00	-9,363.2	791.1	9,396.5	0.00	0.00	0.00
15,700.0	90.00	179.70	6,150.8	-1,530.00	-9,463.2	791.6	9,496.2	0.00	0.00	0.00
15,800.0	90.00	179.70	6,150.8	-1,530.00	-9,563.2	792.2	9,595.9	0.00	0.00	0.00
15,900.0	90.00	179.70	6,150.8	-1,530.00	-9,663.2	792.7	9,695.7	0.00	0.00	0.00
16,000.0	90.00	179.70	6,150.8	-1,530.00	-9,763.2	793.2	9,795.4	0.00	0.00	0.00
16,100.0	90.00	179.70	6,150.8	-1,530.00	-9,863.2	793.7	9,895.1	0.00	0.00	0.00
16,200.0	90.00	179.70	6,150.8	-1,530.00	-9,963.2	794.2	9,994.8	0.00	0.00	0.00
BHL: 470ft FSL & 1571ft FEL of Sec 14										
16,235.2	90.00	179.70	6,150.8	-1,530.00	-9,998.4	794.4	10,029.9	0.00	0.00	0.00

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.0	0.0	0.0	0.0	SHL: 238ft FNL & 2387ft FEL of Sec 11
1,550.0	1,550.0	0.0	0.0	SURFACE CASING
2,650.0	2,650.0	0.0	0.0	START NUDGE (2.5°/100ft BUR)
3,697.9	3,661.8	75.7	222.9	EOB TO 26.2° INC
4,483.8	4,366.9	187.1	551.5	END OF TANGENT
5,531.7	5,378.7	262.8	774.4	EOD TO VERTICAL
5,561.7	5,408.7	262.8	774.4	KOP (8°/100ft BUR)
6,499.2	6,100.5	-268.0	773.8	START OF TANGENT
6,599.2	6,126.4	-364.6	773.7	END OF TANGENT
6,786.7	6,150.8	-550.0	773.5	HZ LP *NEW*: 827.8ft FNL & 1613ft FEL of Sec 11
11,331.5	6,150.8	-5,094.8	769.2	MID-LAT TGT: 0ft FNL & 1607ft FEL of Sec 14
11,343.1	6,150.8	-5,106.4	769.2	EOT TO 179.7° AZ
16,235.2	6,150.8	-9,998.4	794.4	BHL: 470ft FSL & 1571ft FEL of Sec 14