

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

NW NW SEC. 28 T5N R61W 6th P.M.

STATE PRONGHORN V-29-30XRLNB

ORIGINAL WELLBORE

18 May, 2016

Plan: PROPOSAL #1

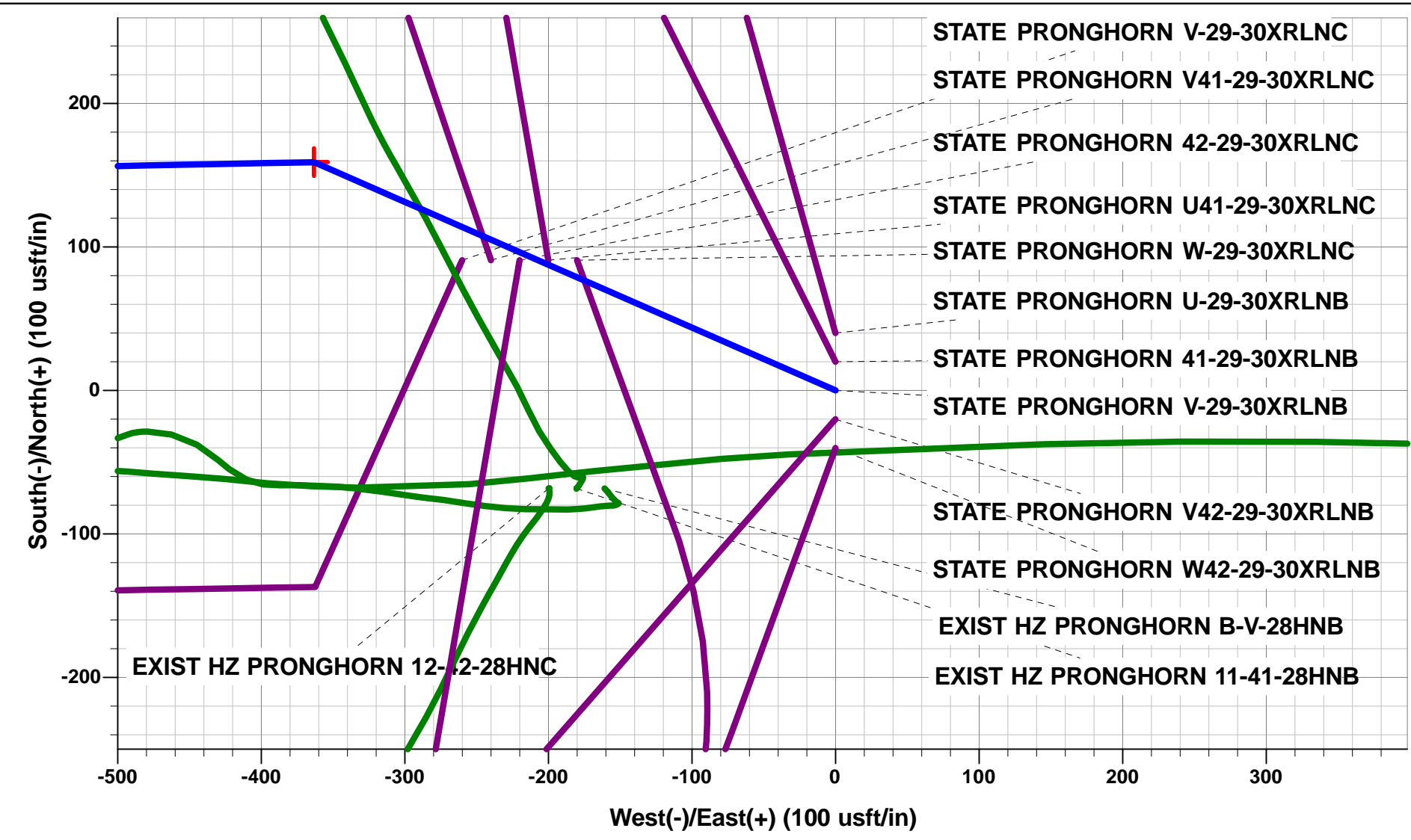




Project: WELD COUNTY, COLORADO (NAD 83)
Site: NW NW SEC. 28 T5N R61W 6th P.M.
Well: STATE PRONGHORN V-29-30XRLNB
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

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: 1338ft FNL & 548ft FWL of Sec 28	
1600.0	1600.0	0.00	0.00	0.0	0.0	0.0	0.0	SURFACE CASING	
1900.0	1900.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)	
2495.5	2499.9	12.00	293.66	25.1	-57.3	57.6	62.6	EOB TO 12° INC	
3772.4	3805.3	12.00	293.66	134.0	-305.9	307.2	333.9	END OF TANGENT	
4367.9	4405.2	0.00	0.00	159.1	-363.2	364.8	396.5	EOD TO VERTICAL	
5348.9	5386.2	0.00	0.00	159.1	-363.2	364.8	396.5	KOP (8°/100ft BUR)	
6065.1	6511.2	90.00	268.87	145.0	-1079.3	1080.7	1112.8	HZ LANDING PNT: 1188ft FNL & 531ft FEL of Sec 29	
6065.1	11288.9	90.00	268.87	50.8	-5856.0	5856.2	5890.4	MID-LAT TGT:1134ft FNL & 0ft FWL of Sec 29	
6065.1	11348.6	90.00	270.66	50.6	-5915.8	5916.0	5950.2	EOT TO 270.66° AZ	
6065.1	16108.8	90.00	270.66	105.3	-10675.7	10676.2	10710.4	BHL: 1170ft FNL & 470ft FWL of Sec 30	

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - STATE PRONGHORN V-29-30XRLNB	5348.9	159.1	-363.2	40.375904	-104.222956
HZ LANDING PNT - STATE PRONGHORN V-29-30XRLNB	6065.1	145.0	-1079.3	40.375865	-104.225526
MID-LAT TGT - STATE PRONGHORN V-29-30XRLNB	6065.1	50.8	-5856.0	40.375605	-104.242670
BHL - STATE PRONGHORN V-29-30XRLNB	6065.1	105.3	-10675.7	40.375750	-104.259969



PROPOSED LOCAL COORDINATES:

SHL: 1338ft FNL & 548ft FWL of Sec 28

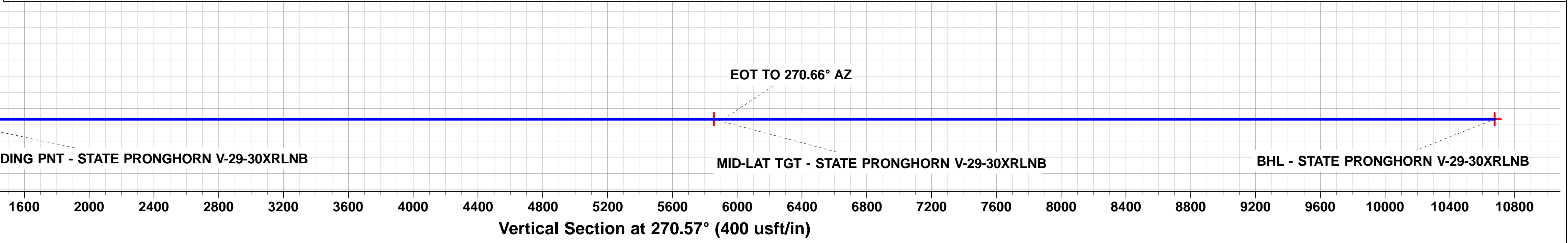
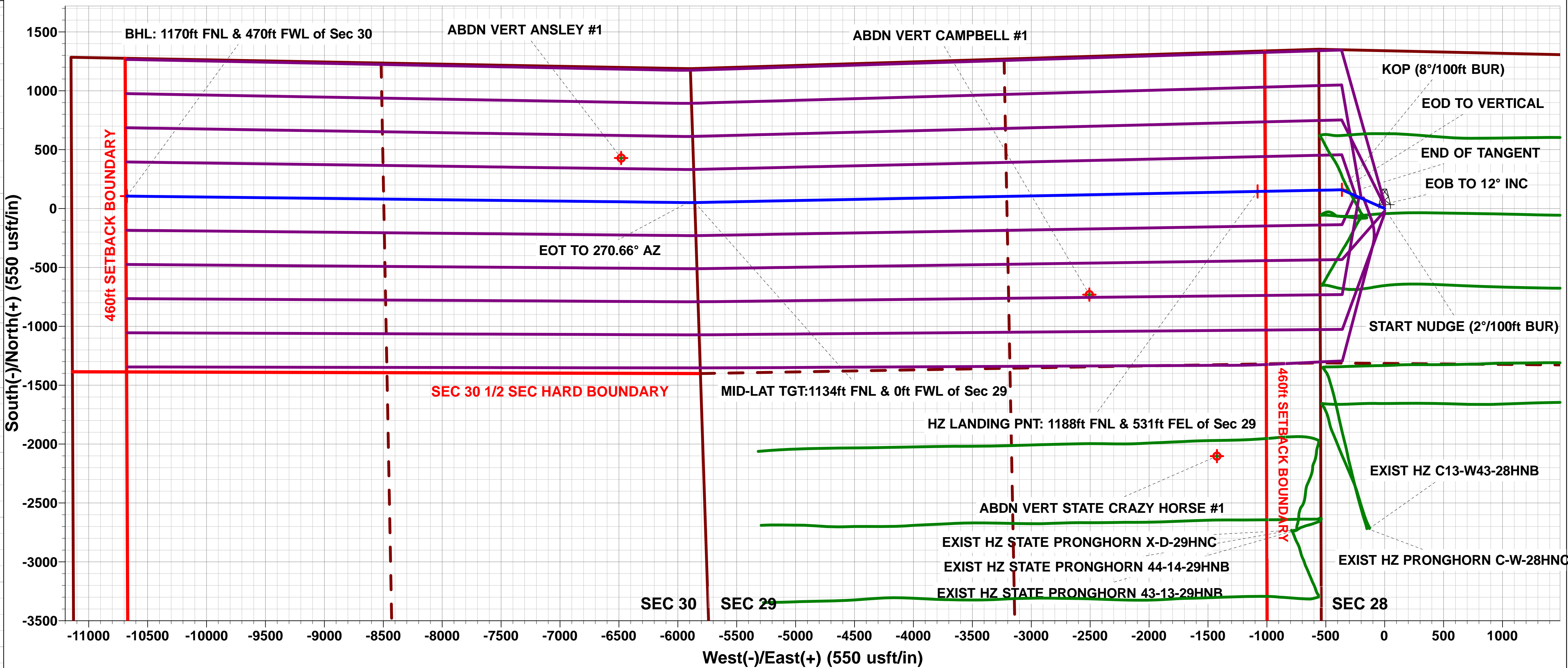
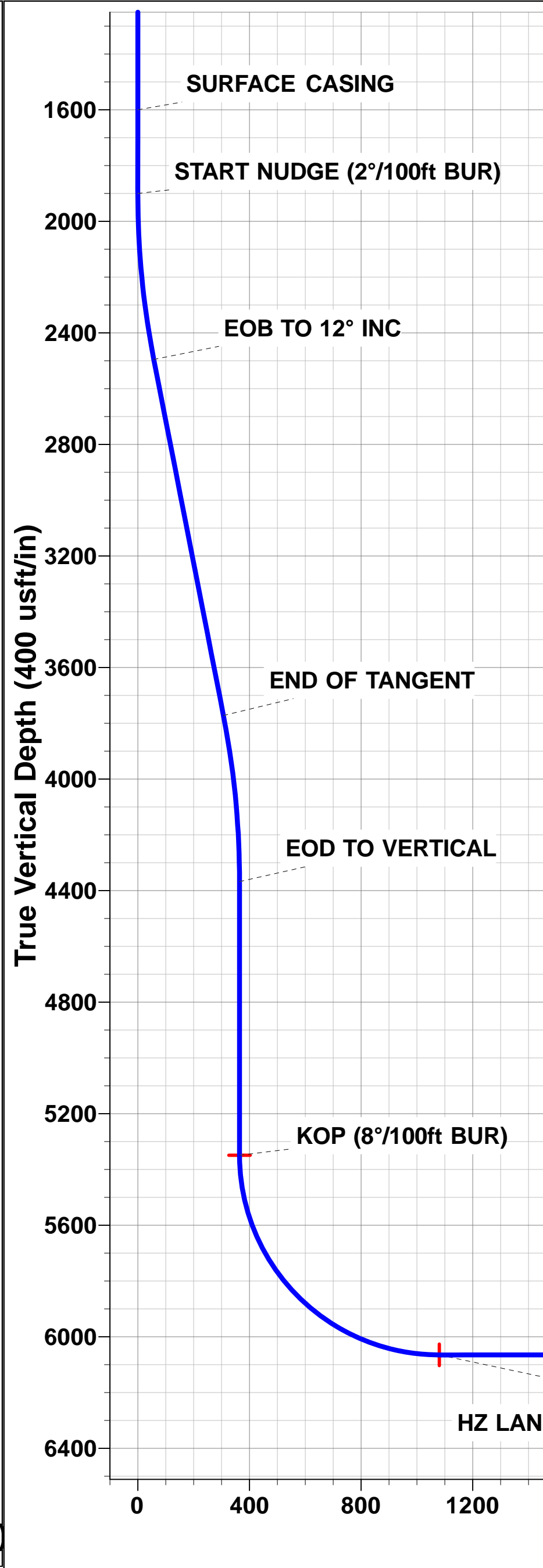
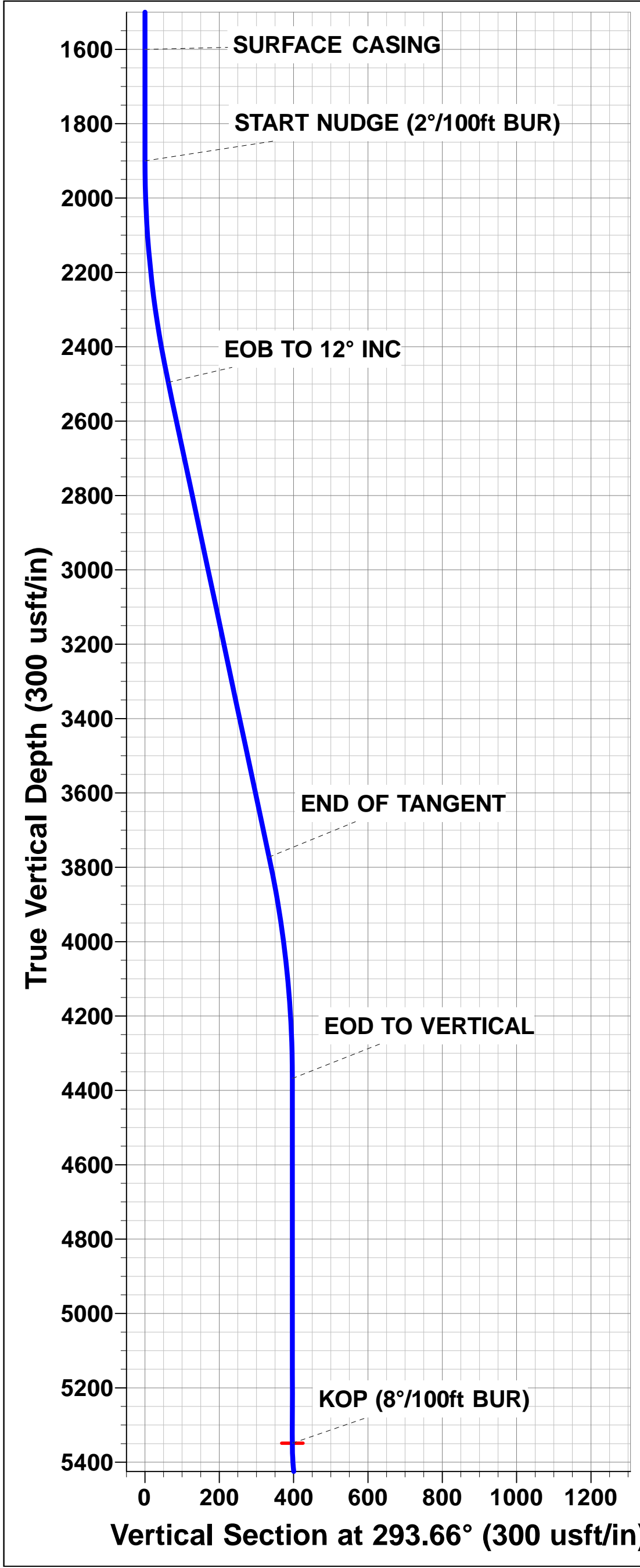
HZ LP: 1188ft FNL & 531ft FEL of Sec 29

MID-LAT TGT: 1134ft FNL & 0ft FWL of Sec 29

BHL: 1170ft FNL & 470ft FWL of Sec 30

Azimuths to True North
Magnetic North: 8.03°

Magnetic Field
Strength: 52560.9snT
Dip Angle: 66.95°
Date: 18/05/2016
Model: IGRF2015



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE PRONGHORN V-29-30XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4635.1usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4635.1usft (Original Well Elev)
Site:	NW NW SEC. 28 T5N R61W 6th P.M.	North Reference:	True
Well:	STATE PRONGHORN V-29-30XRLNB	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 NW SEC. 28 T5N R61W 6th P.M.		
Site Position:		Northing:	1,382,277.48 usft
From:	Lat/Long	Easting:	3,355,888.18 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.375717
		Longitude:	-104.222586
		Grid Convergence:	0.83 °

Well	STATE PRONGHORN V-29-30XRLNB		
Well Position	+N-S	-90.8 usft	Northing: 1,382,190.49 usft
	+E-W	260.0 usft	Easting: 3,356,149.49 usft
Position Uncertainty		0.0 usft	Wellhead Elevation: usft
			Latitude: 40.375467
			Longitude: -104.221653
			Ground Level: 4,618.1 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	18/05/2016	8.03	66.95	52,561

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 (°)
	6,065.1	0.0	0.0	270.57

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	-4,635.1	0.0	0.0	0.00	0.00	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	-2,735.1	0.0	0.0	0.00	0.00	0.00	0.00	
2,499.9	12.00	293.66	2,495.5	-2,139.6	25.1	-57.3	2.00	2.00	0.00	293.66	
3,805.3	12.00	293.66	3,772.4	-862.7	134.0	-305.9	0.00	0.00	0.00	0.00	
4,405.2	0.00	0.00	4,367.9	-267.2	159.1	-363.2	2.00	-2.00	0.00	180.00	
5,386.2	0.00	0.00	5,348.9	713.8	159.1	-363.2	0.00	0.00	0.00	0.00	KOP - STATE PRO
6,511.2	90.00	268.87	6,065.1	1,430.0	145.0	-1,079.3	8.00	8.00	-8.10	268.87	HZ LANDING PNT
11,288.9	90.00	268.87	6,065.1	1,430.0	50.8	-5,856.0	0.00	0.00	0.00	-123.50	MID-LAT TGT - ST/
11,348.6	90.00	270.66	6,065.1	1,430.0	50.6	-5,915.8	3.00	0.00	3.00	89.92	
16,108.8	90.00	270.66	6,065.1	1,430.0	105.3	-10,675.7	0.00	0.00	0.00	0.00	BHL - STATE PROI

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Site:	NW NW SEC. 28 T5N R61W 6th P.M.	North Reference:	True
Well:	STATE PRONGHORN V-29-30XRLNB	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: 1338ft FNL & 548ft FWL of Sec 28										
0.0	0.00	0.00	0.0	4,635.10	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,535.10	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,435.10	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,335.10	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,235.10	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,135.10	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,035.10	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,935.10	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,835.10	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,735.10	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,635.10	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,535.10	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,435.10	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,335.10	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,235.10	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,135.10	0.0	0.0	0.0	0.00	0.00	0.00
SURFACE CASING										
1,600.0	0.00	0.00	1,600.0	3,035.10	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	2,935.10	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	2,835.10	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
1,900.0	0.00	0.00	1,900.0	2,735.10	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	2.00	293.66	2,000.0	2,635.12	0.7	-1.6	1.6	2.00	2.00	0.00
2,100.0	4.00	293.66	2,099.8	2,535.26	2.8	-6.4	6.4	2.00	2.00	0.00
2,200.0	6.00	293.66	2,199.5	2,435.65	6.3	-14.4	14.4	2.00	2.00	0.00
2,300.0	8.00	293.66	2,298.7	2,336.40	11.2	-25.5	25.6	2.00	2.00	0.00
2,400.0	10.00	293.66	2,397.5	2,237.63	17.5	-39.9	40.0	2.00	2.00	0.00
EOB TO 12° INC										
2,499.9	12.00	293.66	2,495.5	2,139.58	25.1	-57.3	57.6	2.00	2.00	0.00
2,500.0	12.00	293.66	2,495.6	2,139.48	25.1	-57.3	57.6	0.00	0.00	0.00
2,600.0	12.00	293.66	2,593.4	2,041.66	33.5	-76.4	76.7	0.00	0.00	0.00
2,700.0	12.00	293.66	2,691.3	1,943.85	41.8	-95.4	95.8	0.00	0.00	0.00
2,800.0	12.00	293.66	2,789.1	1,846.03	50.1	-114.5	115.0	0.00	0.00	0.00
2,900.0	12.00	293.66	2,886.9	1,748.21	58.5	-133.5	134.1	0.00	0.00	0.00
3,000.0	12.00	293.66	2,984.7	1,650.40	66.8	-152.5	153.2	0.00	0.00	0.00
3,100.0	12.00	293.66	3,082.5	1,552.58	75.2	-171.6	172.3	0.00	0.00	0.00
3,200.0	12.00	293.66	3,180.3	1,454.77	83.5	-190.6	191.4	0.00	0.00	0.00
3,300.0	12.00	293.66	3,278.1	1,356.95	91.8	-209.7	210.6	0.00	0.00	0.00
3,400.0	12.00	293.66	3,376.0	1,259.14	100.2	-228.7	229.7	0.00	0.00	0.00
3,500.0	12.00	293.66	3,473.8	1,161.32	108.5	-247.8	248.8	0.00	0.00	0.00
3,600.0	12.00	293.66	3,571.6	1,063.51	116.9	-266.8	267.9	0.00	0.00	0.00
3,700.0	12.00	293.66	3,669.4	965.69	125.2	-285.8	287.1	0.00	0.00	0.00
3,800.0	12.00	293.66	3,767.2	867.88	133.6	-304.9	306.2	0.00	0.00	0.00
END OF TANGENT										
3,805.3	12.00	293.66	3,772.4	862.72	134.0	-305.9	307.2	0.00	0.00	0.00
3,900.0	10.10	293.66	3,865.3	769.75	141.3	-322.5	323.9	2.00	-2.00	0.00
4,000.0	8.10	293.66	3,964.1	671.02	147.6	-337.0	338.4	2.00	-2.00	0.00
4,100.0	6.10	293.66	4,063.3	571.79	152.6	-348.3	349.8	2.00	-2.00	0.00
4,200.0	4.10	293.66	4,162.9	472.19	156.2	-356.5	358.0	2.00	-2.00	0.00
4,300.0	2.10	293.66	4,262.8	372.34	158.3	-361.4	363.0	2.00	-2.00	0.00
4,400.0	0.10	293.66	4,362.7	272.37	159.1	-363.2	364.7	2.00	-2.00	0.00
EOD TO VERTICAL										

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Well:	STATE PRONGHORN V-29-30XRLNB	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)
4,405.2	0.00	0.00	4,367.9	267.20	159.1	-363.2	364.8	2.00	-2.00	0.00
4,500.0	0.00	0.00	4,462.7	172.37	159.1	-363.2	364.8	0.00	0.00	0.00
4,600.0	0.00	0.00	4,562.7	72.37	159.1	-363.2	364.8	0.00	0.00	0.00
4,700.0	0.00	0.00	4,662.7	-27.63	159.1	-363.2	364.8	0.00	0.00	0.00
4,800.0	0.00	0.00	4,762.7	-127.63	159.1	-363.2	364.8	0.00	0.00	0.00
4,900.0	0.00	0.00	4,862.7	-227.63	159.1	-363.2	364.8	0.00	0.00	0.00
5,000.0	0.00	0.00	4,962.7	-327.63	159.1	-363.2	364.8	0.00	0.00	0.00
5,100.0	0.00	0.00	5,062.7	-427.63	159.1	-363.2	364.8	0.00	0.00	0.00
5,200.0	0.00	0.00	5,162.7	-527.63	159.1	-363.2	364.8	0.00	0.00	0.00
5,300.0	0.00	0.00	5,262.7	-627.63	159.1	-363.2	364.8	0.00	0.00	0.00
KOP (8°/100ft BUR)										
5,386.2	0.00	0.00	5,348.9	-713.80	159.1	-363.2	364.8	0.00	0.00	0.00
5,400.0	1.11	268.87	5,362.7	-727.63	159.1	-363.3	364.9	8.00	8.00	0.00
5,500.0	9.11	268.87	5,462.3	-827.16	158.9	-372.2	373.8	8.00	8.00	0.00
5,600.0	17.11	268.87	5,559.6	-924.47	158.5	-394.9	396.4	8.00	8.00	0.00
5,700.0	25.11	268.87	5,652.8	-1,017.69	157.8	-430.9	432.4	8.00	8.00	0.00
5,800.0	33.11	268.87	5,740.1	-1,104.99	156.8	-479.4	481.0	8.00	8.00	0.00
5,900.0	41.11	268.87	5,819.8	-1,184.67	155.6	-539.7	541.2	8.00	8.00	0.00
6,000.0	49.11	268.87	5,890.3	-1,255.20	154.2	-610.5	612.0	8.00	8.00	0.00
6,100.0	57.11	268.87	5,950.3	-1,315.18	152.7	-690.4	691.9	8.00	8.00	0.00
6,200.0	65.11	268.87	5,998.6	-1,363.46	151.0	-777.8	779.3	8.00	8.00	0.00
6,300.0	73.11	268.87	6,034.2	-1,399.09	149.1	-871.2	872.6	8.00	8.00	0.00
6,400.0	81.11	268.87	6,056.5	-1,421.39	147.2	-968.6	970.0	8.00	8.00	0.00
6,500.0	89.11	268.87	6,065.0	-1,429.91	145.2	-1,068.1	1,069.5	8.00	8.00	0.00
HZ LANDING PNT: 1188ft FNL & 531ft FEL of Sec 29										
6,511.2	90.00	268.87	6,065.1	-1,430.00	145.0	-1,079.3	1,080.7	8.00	8.00	0.00
6,600.0	90.00	268.87	6,065.1	-1,430.00	143.3	-1,168.1	1,169.4	0.00	0.00	0.00
6,700.0	90.00	268.87	6,065.1	-1,429.99	141.3	-1,268.1	1,269.4	0.00	0.00	0.00
6,800.0	90.00	268.87	6,065.1	-1,429.99	139.4	-1,368.0	1,369.3	0.00	0.00	0.00
6,900.0	90.00	268.87	6,065.1	-1,429.98	137.4	-1,468.0	1,469.3	0.00	0.00	0.00
7,000.0	90.00	268.87	6,065.1	-1,429.98	135.4	-1,568.0	1,569.3	0.00	0.00	0.00
7,100.0	90.00	268.87	6,065.1	-1,429.98	133.5	-1,668.0	1,669.2	0.00	0.00	0.00
7,200.0	90.00	268.87	6,065.1	-1,429.97	131.5	-1,768.0	1,769.2	0.00	0.00	0.00
7,300.0	90.00	268.87	6,065.1	-1,429.97	129.5	-1,867.9	1,869.1	0.00	0.00	0.00
7,400.0	90.00	268.87	6,065.1	-1,429.97	127.6	-1,967.9	1,969.1	0.00	0.00	0.00
7,500.0	90.00	268.87	6,065.1	-1,429.97	125.6	-2,067.9	2,069.0	0.00	0.00	0.00
7,600.0	90.00	268.87	6,065.1	-1,429.96	123.6	-2,167.9	2,169.0	0.00	0.00	0.00
7,700.0	90.00	268.87	6,065.1	-1,429.96	121.6	-2,267.9	2,269.0	0.00	0.00	0.00
7,800.0	90.00	268.87	6,065.1	-1,429.96	119.7	-2,367.8	2,368.9	0.00	0.00	0.00
7,900.0	90.00	268.87	6,065.1	-1,429.96	117.7	-2,467.8	2,468.9	0.00	0.00	0.00
8,000.0	90.00	268.87	6,065.1	-1,429.95	115.7	-2,567.8	2,568.8	0.00	0.00	0.00
8,100.0	90.00	268.87	6,065.1	-1,429.95	113.8	-2,667.8	2,668.8	0.00	0.00	0.00
8,200.0	90.00	268.87	6,065.1	-1,429.95	111.8	-2,767.8	2,768.7	0.00	0.00	0.00
8,300.0	90.00	268.87	6,065.1	-1,429.95	109.8	-2,867.7	2,868.7	0.00	0.00	0.00
8,400.0	90.00	268.87	6,065.0	-1,429.95	107.9	-2,967.7	2,968.6	0.00	0.00	0.00
8,500.0	90.00	268.87	6,065.0	-1,429.95	105.9	-3,067.7	3,068.6	0.00	0.00	0.00
8,600.0	90.00	268.87	6,065.0	-1,429.95	103.9	-3,167.7	3,168.6	0.00	0.00	0.00
8,700.0	90.00	268.87	6,065.0	-1,429.95	102.0	-3,267.7	3,268.5	0.00	0.00	0.00
8,800.0	90.00	268.87	6,065.0	-1,429.95	100.0	-3,367.6	3,368.5	0.00	0.00	0.00
8,900.0	90.00	268.87	6,065.0	-1,429.95	98.0	-3,467.6	3,468.4	0.00	0.00	0.00
9,000.0	90.00	268.87	6,065.0	-1,429.95	96.0	-3,567.6	3,568.4	0.00	0.00	0.00
9,100.0	90.00	268.87	6,065.0	-1,429.95	94.1	-3,667.6	3,668.3	0.00	0.00	0.00
9,200.0	90.00	268.87	6,065.0	-1,429.95	92.1	-3,767.6	3,768.3	0.00	0.00	0.00
9,300.0	90.00	268.87	6,065.0	-1,429.95	90.1	-3,867.6	3,868.3	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE PRONGHORN V-29-30XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4635.1usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4635.1usft (Original Well Elev)
Site:	NW NW SEC. 28 T5N R61W 6th P.M.	North Reference:	True
Well:	STATE PRONGHORN V-29-30XRLNB	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)
9,400.0	90.00	268.87	6,065.0	-1,429.95	88.1	-3,967.5	3,968.2	0.00	0.00	0.00
9,500.0	90.00	268.87	6,065.1	-1,429.95	86.2	-4,067.5	4,068.2	0.00	0.00	0.00
9,600.0	90.00	268.87	6,065.1	-1,429.95	84.2	-4,167.5	4,168.1	0.00	0.00	0.00
9,700.0	90.00	268.87	6,065.1	-1,429.95	82.2	-4,267.5	4,268.1	0.00	0.00	0.00
9,800.0	90.00	268.87	6,065.1	-1,429.95	80.3	-4,367.5	4,368.0	0.00	0.00	0.00
9,900.0	90.00	268.87	6,065.1	-1,429.96	78.3	-4,467.4	4,468.0	0.00	0.00	0.00
10,000.0	90.00	268.87	6,065.1	-1,429.96	76.3	-4,567.4	4,567.9	0.00	0.00	0.00
10,100.0	90.00	268.87	6,065.1	-1,429.96	74.3	-4,667.4	4,667.9	0.00	0.00	0.00
10,200.0	90.00	268.87	6,065.1	-1,429.96	72.4	-4,767.4	4,767.9	0.00	0.00	0.00
10,300.0	90.00	268.87	6,065.1	-1,429.97	70.4	-4,867.4	4,867.8	0.00	0.00	0.00
10,400.0	90.00	268.87	6,065.1	-1,429.97	68.4	-4,967.3	4,967.8	0.00	0.00	0.00
10,500.0	90.00	268.87	6,065.1	-1,429.97	66.4	-5,067.3	5,067.7	0.00	0.00	0.00
10,600.0	90.00	268.87	6,065.1	-1,429.97	64.5	-5,167.3	5,167.7	0.00	0.00	0.00
10,700.0	90.00	268.87	6,065.1	-1,429.98	62.5	-5,267.3	5,267.6	0.00	0.00	0.00
10,800.0	90.00	268.87	6,065.1	-1,429.98	60.5	-5,367.3	5,367.6	0.00	0.00	0.00
10,900.0	90.00	268.87	6,065.1	-1,429.98	58.5	-5,467.2	5,467.6	0.00	0.00	0.00
11,000.0	90.00	268.87	6,065.1	-1,429.99	56.5	-5,567.2	5,567.5	0.00	0.00	0.00
11,100.0	90.00	268.87	6,065.1	-1,429.99	54.6	-5,667.2	5,667.5	0.00	0.00	0.00
11,200.0	90.00	268.87	6,065.1	-1,430.00	52.6	-5,767.2	5,767.4	0.00	0.00	0.00
MID-LAT TGT:1134ft FNL & 0ft FWL of Sec 29										
11,288.9	90.00	268.87	6,065.1	-1,430.00	50.8	-5,856.0	5,856.2	0.00	0.00	0.00
11,300.0	90.00	269.20	6,065.1	-1,430.00	50.6	-5,867.2	5,867.4	3.00	0.00	3.00
EOT TO 270.66° AZ										
11,348.6	90.00	270.66	6,065.1	-1,430.00	50.6	-5,915.8	5,916.0	3.00	0.00	3.00
11,400.0	90.00	270.66	6,065.1	-1,430.00	51.2	-5,967.2	5,967.4	0.00	0.00	0.00
11,500.0	90.00	270.66	6,065.1	-1,430.00	52.3	-6,067.2	6,067.4	0.00	0.00	0.00
11,600.0	90.00	270.66	6,065.1	-1,430.00	53.5	-6,167.1	6,167.4	0.00	0.00	0.00
11,700.0	90.00	270.66	6,065.1	-1,430.00	54.6	-6,267.1	6,267.4	0.00	0.00	0.00
11,800.0	90.00	270.66	6,065.1	-1,430.00	55.8	-6,367.1	6,367.4	0.00	0.00	0.00
11,900.0	90.00	270.66	6,065.1	-1,430.00	56.9	-6,467.1	6,467.4	0.00	0.00	0.00
12,000.0	90.00	270.66	6,065.1	-1,430.00	58.1	-6,567.1	6,567.4	0.00	0.00	0.00
12,100.0	90.00	270.66	6,065.1	-1,430.00	59.2	-6,667.1	6,667.4	0.00	0.00	0.00
12,200.0	90.00	270.66	6,065.1	-1,430.00	60.4	-6,767.1	6,767.4	0.00	0.00	0.00
12,300.0	90.00	270.66	6,065.1	-1,430.00	61.5	-6,867.1	6,867.4	0.00	0.00	0.00
12,400.0	90.00	270.66	6,065.1	-1,430.00	62.7	-6,967.1	6,967.4	0.00	0.00	0.00
12,500.0	90.00	270.66	6,065.1	-1,430.00	63.8	-7,067.1	7,067.4	0.00	0.00	0.00
12,600.0	90.00	270.66	6,065.1	-1,430.00	65.0	-7,167.1	7,167.4	0.00	0.00	0.00
12,700.0	90.00	270.66	6,065.1	-1,430.00	66.1	-7,267.1	7,267.4	0.00	0.00	0.00
12,800.0	90.00	270.66	6,065.1	-1,430.00	67.3	-7,367.1	7,367.4	0.00	0.00	0.00
12,900.0	90.00	270.66	6,065.1	-1,430.00	68.4	-7,467.1	7,467.4	0.00	0.00	0.00
13,000.0	90.00	270.66	6,065.1	-1,430.00	69.6	-7,567.1	7,567.4	0.00	0.00	0.00
13,100.0	90.00	270.66	6,065.1	-1,430.00	70.7	-7,667.0	7,667.4	0.00	0.00	0.00
13,200.0	90.00	270.66	6,065.1	-1,430.00	71.9	-7,767.0	7,767.4	0.00	0.00	0.00
13,300.0	90.00	270.66	6,065.1	-1,430.00	73.0	-7,867.0	7,867.4	0.00	0.00	0.00
13,400.0	90.00	270.66	6,065.1	-1,430.00	74.2	-7,967.0	7,967.4	0.00	0.00	0.00
13,500.0	90.00	270.66	6,065.1	-1,430.00	75.3	-8,067.0	8,067.4	0.00	0.00	0.00
13,600.0	90.00	270.66	6,065.1	-1,430.00	76.5	-8,167.0	8,167.4	0.00	0.00	0.00
13,700.0	90.00	270.66	6,065.1	-1,430.00	77.6	-8,267.0	8,267.4	0.00	0.00	0.00
13,800.0	90.00	270.66	6,065.1	-1,430.00	78.8	-8,367.0	8,367.4	0.00	0.00	0.00
13,900.0	90.00	270.66	6,065.1	-1,430.00	79.9	-8,467.0	8,467.4	0.00	0.00	0.00
14,000.0	90.00	270.66	6,065.1	-1,430.00	81.1	-8,567.0	8,567.4	0.00	0.00	0.00
14,100.0	90.00	270.66	6,065.1	-1,430.00	82.2	-8,667.0	8,667.4	0.00	0.00	0.00
14,200.0	90.00	270.66	6,065.1	-1,430.00	83.4	-8,767.0	8,767.4	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE PRONGHORN V-29-30XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4635.1usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4635.1usft (Original Well Elev)
Site:	NW NW SEC. 28 T5N R61W 6th P.M.	North Reference:	True
Well:	STATE PRONGHORN V-29-30XRLNB	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)
14,300.0	90.00	270.66	6,065.1	-1,430.00	84.5	-8,867.0	8,867.4	0.00	0.00	0.00
14,400.0	90.00	270.66	6,065.1	-1,430.00	85.7	-8,967.0	8,967.4	0.00	0.00	0.00
14,500.0	90.00	270.66	6,065.1	-1,430.00	86.8	-9,067.0	9,067.4	0.00	0.00	0.00
14,600.0	90.00	270.66	6,065.1	-1,430.00	88.0	-9,166.9	9,167.4	0.00	0.00	0.00
14,700.0	90.00	270.66	6,065.1	-1,430.00	89.1	-9,266.9	9,267.4	0.00	0.00	0.00
14,800.0	90.00	270.66	6,065.1	-1,430.00	90.3	-9,366.9	9,367.4	0.00	0.00	0.00
14,900.0	90.00	270.66	6,065.1	-1,430.00	91.4	-9,466.9	9,467.4	0.00	0.00	0.00
15,000.0	90.00	270.66	6,065.1	-1,430.00	92.6	-9,566.9	9,567.4	0.00	0.00	0.00
15,100.0	90.00	270.66	6,065.1	-1,430.00	93.7	-9,666.9	9,667.4	0.00	0.00	0.00
15,200.0	90.00	270.66	6,065.1	-1,430.00	94.9	-9,766.9	9,767.4	0.00	0.00	0.00
15,300.0	90.00	270.66	6,065.1	-1,430.00	96.0	-9,866.9	9,867.4	0.00	0.00	0.00
15,400.0	90.00	270.66	6,065.1	-1,430.00	97.2	-9,966.9	9,967.4	0.00	0.00	0.00
15,500.0	90.00	270.66	6,065.1	-1,430.00	98.3	-10,066.9	10,067.4	0.00	0.00	0.00
15,600.0	90.00	270.66	6,065.1	-1,430.00	99.5	-10,166.9	10,167.4	0.00	0.00	0.00
15,700.0	90.00	270.66	6,065.1	-1,430.00	100.6	-10,266.9	10,267.4	0.00	0.00	0.00
15,800.0	90.00	270.66	6,065.1	-1,430.00	101.8	-10,366.9	10,367.4	0.00	0.00	0.00
15,900.0	90.00	270.66	6,065.1	-1,430.00	102.9	-10,466.9	10,467.4	0.00	0.00	0.00
16,000.0	90.00	270.66	6,065.1	-1,430.00	104.1	-10,566.9	10,567.4	0.00	0.00	0.00
16,100.0	90.00	270.66	6,065.1	-1,430.00	105.2	-10,666.8	10,667.4	0.00	0.00	0.00
BHL: 1170ft FNL & 470ft FWL of Sec 30										
16,108.8	90.00	270.66	6,065.1	-1,430.00	105.3	-10,675.7	10,676.2	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: 1338ft FNL & 548ft FWL of Sec 28
1,600.0	1,600.0	0.0	0.0	SURFACE CASING
1,900.0	1,900.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2,499.9	2,495.5	25.1	-57.3	EOB TO 12° INC
3,805.3	3,772.4	134.0	-305.9	END OF TANGENT
4,405.2	4,367.9	159.1	-363.2	EOD TO VERTICAL
5,386.2	5,348.9	159.1	-363.2	KOP (8°/100ft BUR)
6,511.2	6,065.1	145.0	-1,079.3	HZ LANDING PNT: 1188ft FNL & 531ft FEL of Sec 29
11,288.9	6,065.1	50.8	-5,856.0	MID-LAT TGT: 1134ft FNL & 0ft FWL of Sec 29
11,348.6	6,065.1	50.6	-5,915.8	EOT TO 270.66° AZ
16,108.8	6,065.1	105.3	-10,675.7	BHL: 1170ft FNL & 470ft FWL of Sec 30