

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

NW NE SEC. 22 T5N R63W 6th P.M.

NORTH PLATTE FEDERAL K31-O34-22HNC

ORIGINAL WELLBORE

06 October, 2016

Plan: PROPOSAL #4





Project: WELD COUNTY, COLORADO (NAD 83)
 Site: NW NE SEC. 22 T5N R63W 6th P.M.
 Well: NORTH PLATTE FEDERAL K31-O34-22HNC
 Wellbore: ORIGINAL WELLBORE
 Design: PROPOSAL #4

ANNOTATIONS

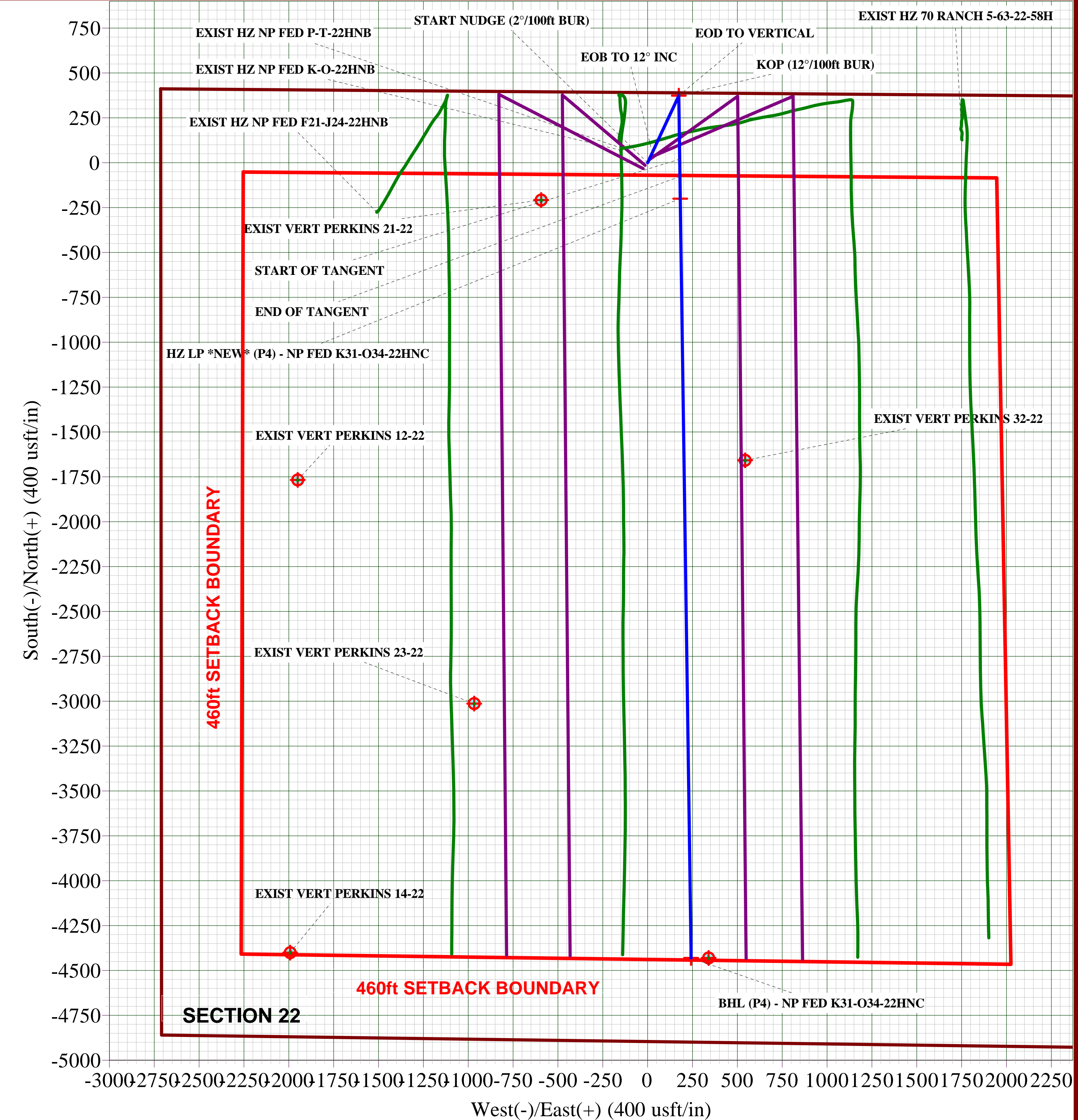
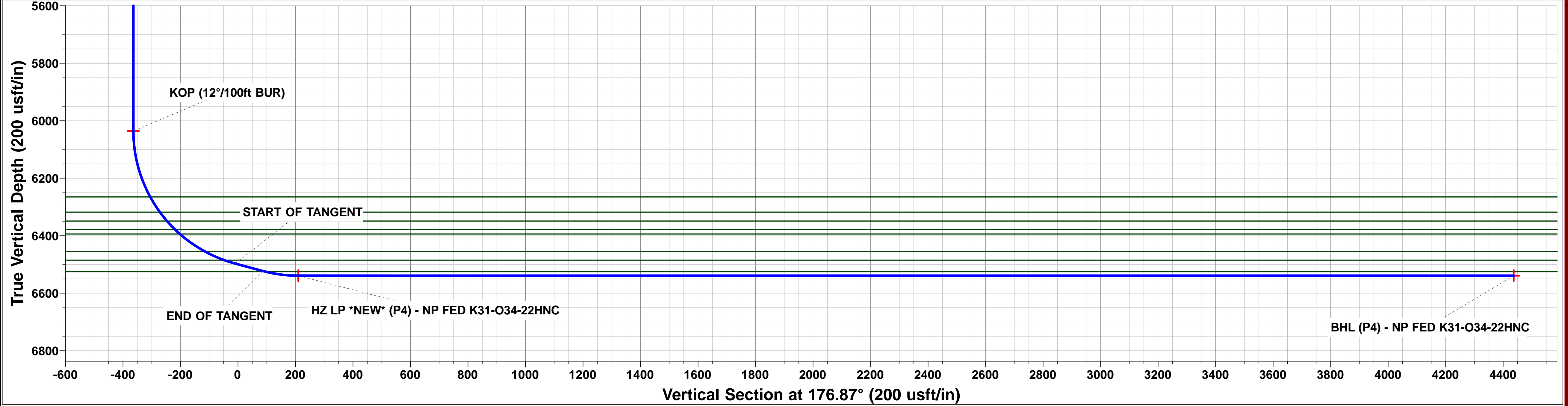
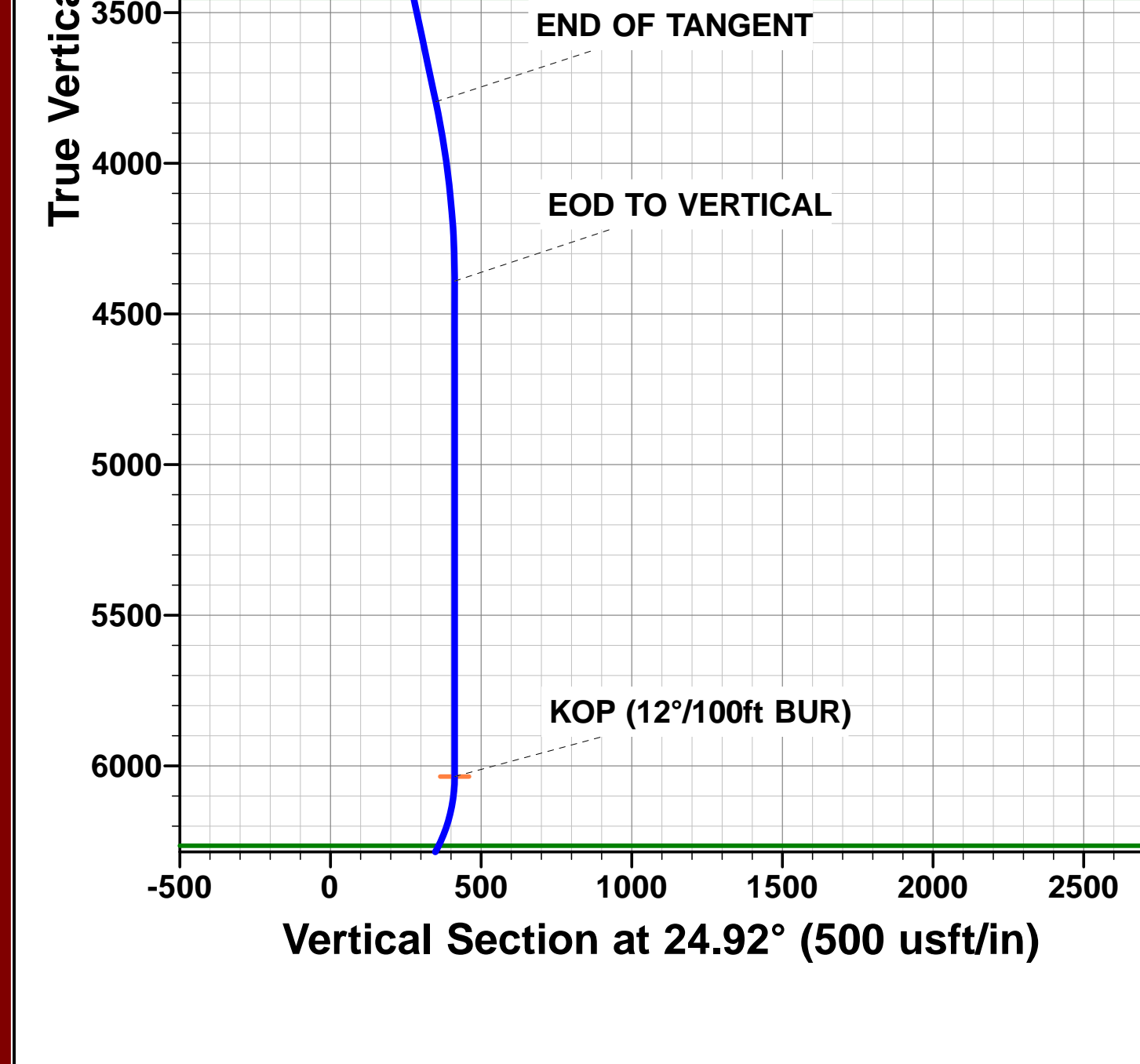
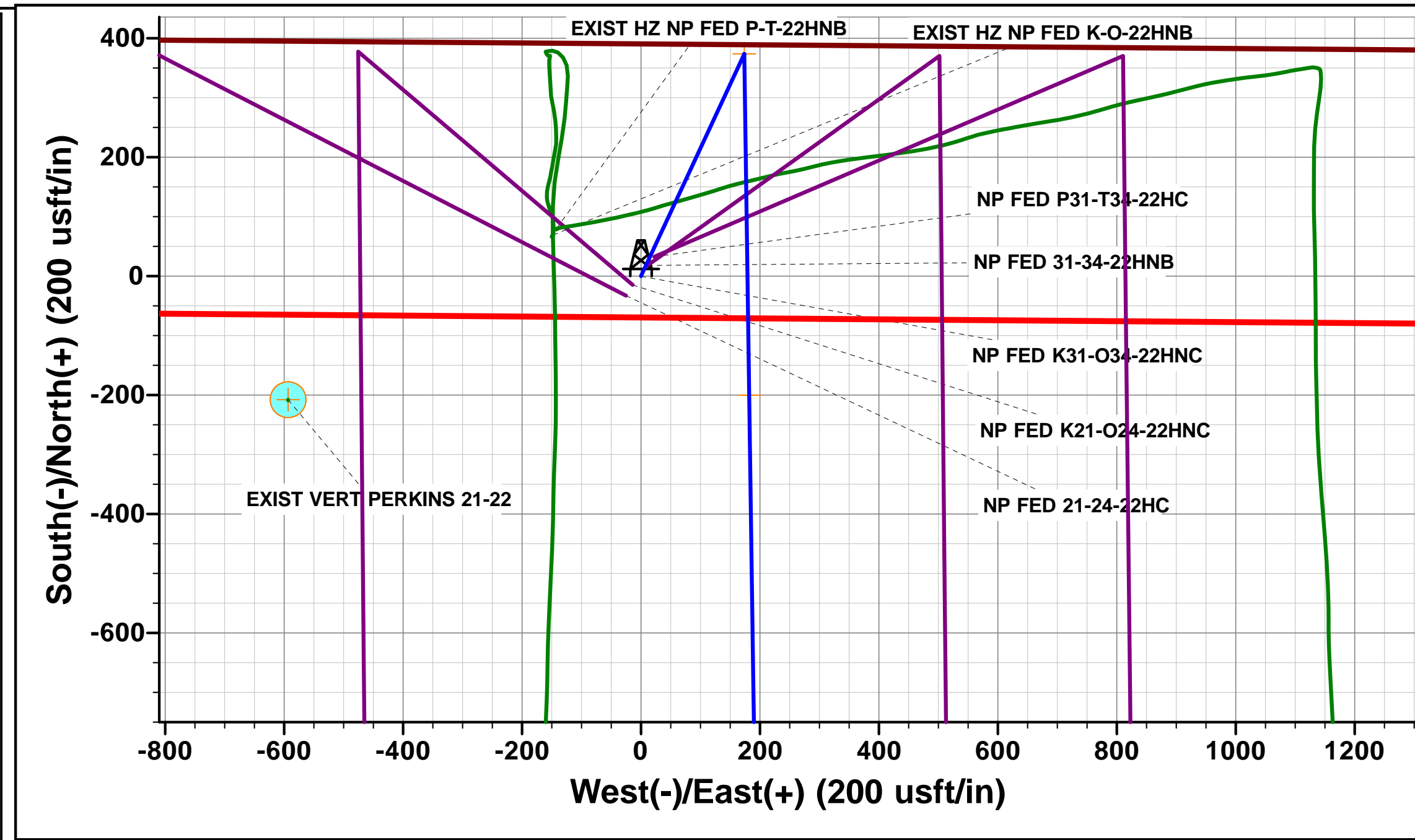
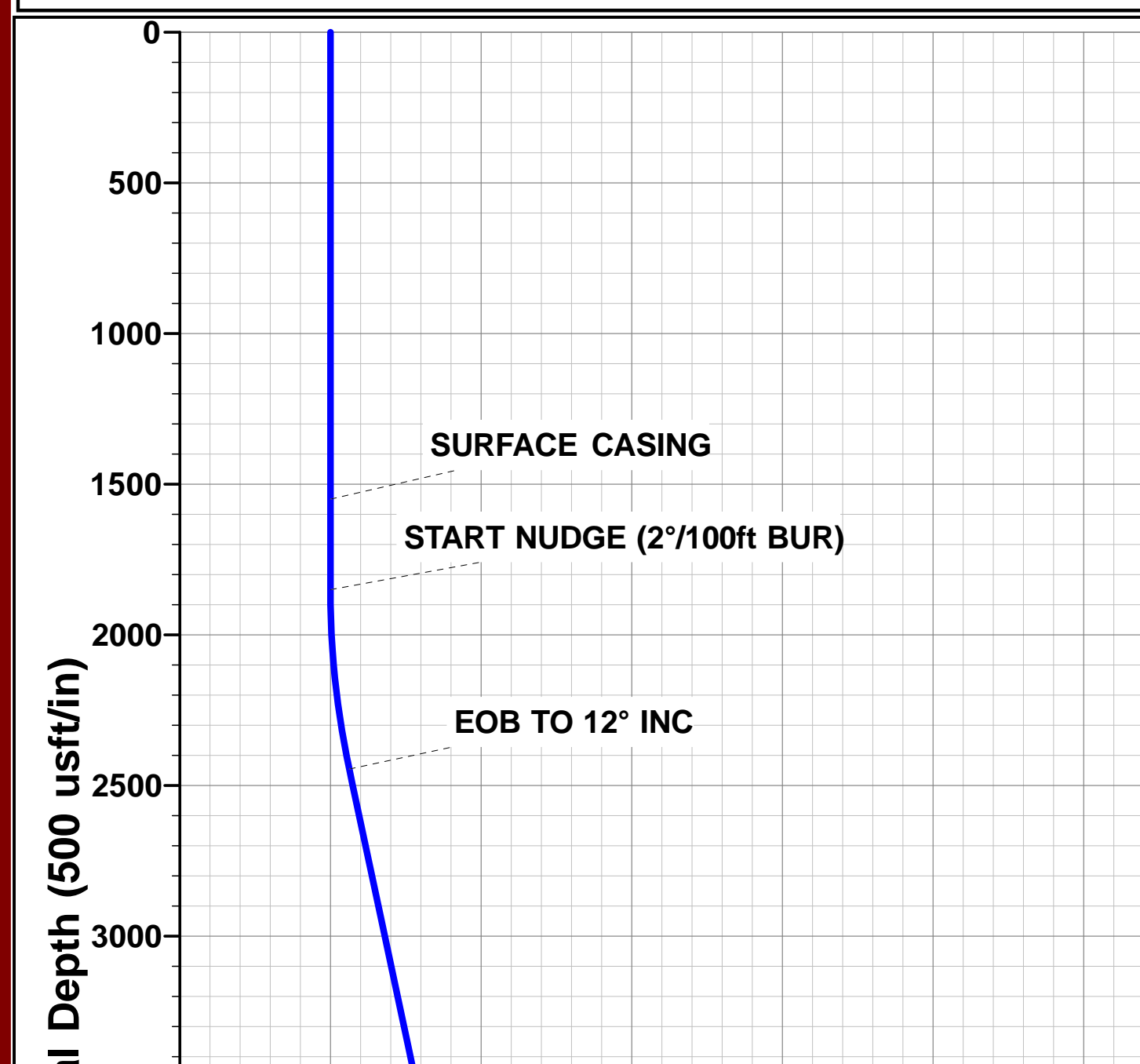
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Dep	Annotation
1550.0	1550.0	0.00	0.00	0.0	0.0	0.0	0.0	SURFACE CASING
1850.0	1850.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2445.5	2449.9	12.00	24.92	56.8	26.4	-55.2	62.6	EOB TO 12° INC
3796.2	3830.7	12.00	24.92	317.1	147.3	-308.5	349.6	END OF TANGENT
4391.7	4430.6	0.00	24.92	373.8	173.7	-363.8	412.2	EOD TO VERTICAL
6035.7	6074.6	0.00	0.00	373.8	173.7	-363.8	412.2	KOP (12°/100ft BUR)
6496.9	6699.6	75.00	179.18	20.0	178.8	-10.2	766.1	START OF TANGENT
6522.8	6799.6	75.00	179.18	-76.6	180.1	86.3	862.7	END OF TANGENT
6539.0	6924.6	90.00	179.18	-200.2	181.9	209.8	986.2	HZ LP *NEW* (P4) - NP FED K31-O34-22HNC
6539.0	11154.9	90.00	179.18	-4430.0	242.4	4436.6	5216.5	BHL (P4) - NP FED K31-O34-22HNC

PROPOSED LOCAL COORDINATES:

SHL: 390ft FNL & 2416ft FEL Sec 22
 HZ LP *NEW*: 589.1ft FNL & 2235ft FEL Sec 22
 BHL: 470ft FSL & 2250ft FEL Sec 22

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP (P4) - NP FED K31-O34-22HNC	6035.7	373.8	173.7	40.392066	-104.420776
BHL (P4) - NP FED K31-O34-22HNC	6539.0	-4430.0	242.4	40.378880	-104.420530
HZ LP *NEW* (P4) - NP FED K31-O34-22HNC	6539.0	-200.2	181.9	40.390490	-104.420747





Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well NORTH PLATTE FEDERAL K31-O34-22HNC
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4664.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4664.0usft (Original Well Elev)
Site:	NW NE SEC. 22 T5N R63W 6th P.M.	North Reference:	True
Well:	NORTH PLATTE FEDERAL K31-O34-22HNC	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #4		

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. 22 T5N R63W 6th P.M.				
Site Position:		Northing:	1,386,960.17 usft	Latitude:	40.390590
From:	Lat/Long	Easting:	3,300,476.11 usft	Longitude:	-104.421254
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft	Grid Convergence:	0.70 °

Well	NORTH PLATTE FEDERAL K31-O34-22HNC					
Well Position	+N/-S	163.8 usft	Northing:	1,387,123.48 usft	Latitude:	40.391040
	+E/-W	-40.6 usft	Easting:	3,300,433.57 usft	Longitude:	-104.421400
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,647.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	07/09/2016	8.11	66.92	52,513

Design	PROPOSAL #4			
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	176.87

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	-4,664.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,850.0	0.00	0.00	1,850.0	-2,814.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,449.9	12.00	24.92	2,445.5	-2,218.5	56.8	26.4	2.00	2.00	0.00	24.92	
3,830.7	12.00	24.92	3,796.2	-867.8	317.1	147.3	0.00	0.00	0.00	0.00	
4,430.6	0.00	0.00	4,391.7	-272.3	373.8	173.7	2.00	-2.00	0.00	180.00	
6,074.6	0.00	0.00	6,035.7	1,371.7	373.8	173.7	0.00	0.00	0.00	0.00	KOP (P4) - NP FEC
6,699.6	75.00	179.18	6,496.9	1,832.9	20.0	178.8	12.00	12.00	0.00	179.18	
6,799.6	75.00	179.18	6,522.8	1,858.8	-76.6	180.1	0.00	0.00	0.00	0.00	
6,924.6	90.00	179.18	6,539.0	1,875.0	-200.2	181.9	12.00	12.00	0.00	0.00	
11,154.9	90.00	179.18	6,539.0	1,875.0	-4,430.0	242.4	0.00	0.00	0.00	55.06	BHL (P4) - NP FED



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Well:	NORTH PLATTE FEDERAL K31-O34-22HNC	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #4		

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	4,664.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,564.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,464.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,364.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,264.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,164.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,064.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,964.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,864.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,764.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,664.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,564.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,464.00	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,364.00	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,264.00	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,164.00	0.0	0.0	0.0	0.00	0.00	0.00
SURFACE CASING										
1,550.0	0.00	0.00	1,550.0	3,114.00	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	3,064.00	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	2,964.00	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	2,864.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDDGE (2°/100ft BUR)										
1,850.0	0.00	0.00	1,850.0	2,814.00	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	1.00	24.92	1,900.0	2,764.00	0.4	0.2	-0.4	2.00	2.00	0.00
2,000.0	3.00	24.92	1,999.9	2,664.07	3.6	1.7	-3.5	2.00	2.00	0.00
2,100.0	5.00	24.92	2,099.7	2,564.32	9.9	4.6	-9.6	2.00	2.00	0.00
2,200.0	7.00	24.92	2,199.1	2,464.87	19.4	9.0	-18.8	2.00	2.00	0.00
2,300.0	9.00	24.92	2,298.2	2,365.85	32.0	14.9	-31.1	2.00	2.00	0.00
2,400.0	11.00	24.92	2,396.6	2,267.37	47.7	22.2	-46.4	2.00	2.00	0.00
EOB TO 12° INC										
2,449.9	12.00	24.92	2,445.5	2,218.47	56.8	26.4	-55.2	2.00	2.00	0.00
2,500.0	12.00	24.92	2,494.5	2,169.47	66.2	30.8	-64.4	0.00	0.00	0.00
2,600.0	12.00	24.92	2,592.3	2,071.65	85.1	39.5	-82.8	0.00	0.00	0.00
2,700.0	12.00	24.92	2,690.2	1,973.84	103.9	48.3	-101.1	0.00	0.00	0.00
2,800.0	12.00	24.92	2,788.0	1,876.02	122.8	57.0	-119.5	0.00	0.00	0.00
2,900.0	12.00	24.92	2,885.8	1,778.21	141.6	65.8	-137.8	0.00	0.00	0.00
3,000.0	12.00	24.92	2,983.6	1,680.39	160.5	74.6	-156.1	0.00	0.00	0.00
3,100.0	12.00	24.92	3,081.4	1,582.58	179.3	83.3	-174.5	0.00	0.00	0.00
3,200.0	12.00	24.92	3,179.2	1,484.76	198.2	92.1	-192.8	0.00	0.00	0.00
3,300.0	12.00	24.92	3,277.1	1,386.94	217.0	100.8	-211.2	0.00	0.00	0.00
3,400.0	12.00	24.92	3,374.9	1,289.13	235.9	109.6	-229.5	0.00	0.00	0.00
PARKMAN										
3,477.8	12.00	24.92	3,451.0	1,213.00	250.5	116.4	-243.8	0.00	0.00	0.00
3,500.0	12.00	24.92	3,472.7	1,191.31	254.7	118.4	-247.9	0.00	0.00	0.00
3,600.0	12.00	24.92	3,570.5	1,093.50	273.6	127.1	-266.2	0.00	0.00	0.00
3,700.0	12.00	24.92	3,668.3	995.68	292.4	135.9	-284.6	0.00	0.00	0.00
3,800.0	12.00	24.92	3,766.1	897.87	311.3	144.6	-302.9	0.00	0.00	0.00
END OF TANGENT										
3,830.7	12.00	24.92	3,796.2	867.84	317.1	147.3	-308.5	0.00	0.00	0.00
3,900.0	10.61	24.92	3,864.1	799.88	329.4	153.1	-320.5	2.00	-2.00	0.00
4,000.0	8.61	24.92	3,962.7	701.29	344.5	160.1	-335.3	2.00	-2.00	0.00
4,100.0	6.61	24.92	4,061.8	602.18	356.5	165.7	-346.9	2.00	-2.00	0.00



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Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #4		

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	4.61	24.92	4,161.3	502.66	365.4	169.8	-355.6	2.00	-2.00	0.00
4,300.0	2.61	24.92	4,261.1	402.87	371.1	172.4	-361.1	2.00	-2.00	0.00
4,400.0	0.61	24.92	4,361.1	302.91	373.7	173.6	-363.6	2.00	-2.00	0.00
EOD TO VERTICAL										
4,430.6	0.00	24.92	4,391.7	272.31	373.8	173.7	-363.8	2.00	-2.00	0.00
4,500.0	0.00	0.00	4,461.1	202.91	373.8	173.7	-363.8	0.00	0.00	0.00
4,600.0	0.00	0.00	4,561.1	102.91	373.8	173.7	-363.8	0.00	0.00	0.00
4,700.0	0.00	0.00	4,661.1	2.91	373.8	173.7	-363.8	0.00	0.00	0.00
4,800.0	0.00	0.00	4,761.1	-97.09	373.8	173.7	-363.8	0.00	0.00	0.00
4,900.0	0.00	0.00	4,861.1	-197.09	373.8	173.7	-363.8	0.00	0.00	0.00
5,000.0	0.00	0.00	4,961.1	-297.09	373.8	173.7	-363.8	0.00	0.00	0.00
5,100.0	0.00	0.00	5,061.1	-397.09	373.8	173.7	-363.8	0.00	0.00	0.00
5,200.0	0.00	0.00	5,161.1	-497.09	373.8	173.7	-363.8	0.00	0.00	0.00
5,300.0	0.00	0.00	5,261.1	-597.09	373.8	173.7	-363.8	0.00	0.00	0.00
5,400.0	0.00	0.00	5,361.1	-697.09	373.8	173.7	-363.8	0.00	0.00	0.00
5,500.0	0.00	0.00	5,461.1	-797.09	373.8	173.7	-363.8	0.00	0.00	0.00
5,600.0	0.00	0.00	5,561.1	-897.09	373.8	173.7	-363.8	0.00	0.00	0.00
5,700.0	0.00	0.00	5,661.1	-997.09	373.8	173.7	-363.8	0.00	0.00	0.00
5,800.0	0.00	0.00	5,761.1	-1,097.09	373.8	173.7	-363.8	0.00	0.00	0.00
5,900.0	0.00	0.00	5,861.1	-1,197.09	373.8	173.7	-363.8	0.00	0.00	0.00
6,000.0	0.00	0.00	5,961.1	-1,297.09	373.8	173.7	-363.8	0.00	0.00	0.00
KOP (12°/100ft BUR)										
6,074.6	0.00	0.00	6,035.7	-1,371.69	373.8	173.7	-363.8	0.00	0.00	0.00
6,100.0	3.05	179.18	6,061.1	-1,397.08	373.1	173.7	-363.1	11.99	11.99	0.00
6,200.0	15.05	179.18	6,159.7	-1,495.65	357.4	173.9	-347.4	12.00	12.00	0.00
6,300.0	27.05	179.18	6,252.8	-1,588.81	321.6	174.4	-311.6	12.00	12.00	0.00
SHARON SPRINGS										
6,313.8	28.70	179.18	6,265.0	-1,601.00	315.2	174.5	-305.2	12.00	12.00	0.00
SHARON SPRINGS "A"										
6,376.7	36.25	179.18	6,318.0	-1,654.00	281.4	175.0	-271.4	12.00	12.00	0.00
6,400.0	39.05	179.18	6,336.5	-1,672.48	267.2	175.2	-257.2	12.00	12.00	0.00
SHARON SPRINGS "B"										
6,416.4	41.01	179.18	6,349.0	-1,685.00	256.7	175.4	-246.7	12.00	12.00	0.00
NIOBRARA "A" CHALK										
6,456.3	45.80	179.18	6,378.0	-1,714.00	229.2	175.8	-219.3	12.00	12.00	0.00
NIOBRARA "A" MARL										
6,479.8	48.63	179.18	6,394.0	-1,730.00	212.0	176.0	-202.0	12.00	12.00	0.00
6,500.0	51.05	179.18	6,407.0	-1,743.00	196.5	176.2	-186.6	12.00	12.00	0.00
NIOBRARA "B" CHALK										
6,586.5	61.42	179.18	6,455.0	-1,791.00	124.8	177.3	-114.9	12.00	12.00	0.00
6,600.0	63.05	179.18	6,461.3	-1,797.30	112.8	177.4	-102.9	12.00	12.00	0.00
NIOBRARA "B" MARL										
6,659.8	70.22	179.18	6,485.0	-1,821.00	57.9	178.2	-48.1	12.00	12.00	0.00
START OF TANGENT										
6,699.6	75.00	179.18	6,496.9	-1,832.89	20.0	178.8	-10.2	12.00	12.00	0.00
6,700.0	75.00	179.18	6,497.0	-1,833.00	19.6	178.8	-9.8	0.38	0.38	0.00
END OF TANGENT										
6,799.6	75.00	179.18	6,522.8	-1,858.77	-76.6	180.1	86.3	0.00	0.00	0.00
6,800.0	75.05	179.18	6,522.9	-1,858.88	-77.0	180.2	86.7	11.62	11.62	0.00
NIOBRARA "C" CHALK										
6,808.5	76.07	179.18	6,525.0	-1,861.00	-85.2	180.3	95.0	12.00	12.00	0.00



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Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #4		

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)
6,900.0	87.05	179.18	6,538.4	-1,874.41	-175.6	181.6	185.2	12.00	12.00	0.00
HZ LP *NEW* (P4) - NP FED K31-O34-22HNC										
6,924.6	90.00	179.18	6,539.0	-1,875.05	-200.2	181.9	209.8	12.00	12.00	0.00
7,000.0	90.00	179.18	6,539.0	-1,875.05	-275.6	183.0	285.1	0.00	0.00	0.00
7,100.0	90.00	179.18	6,539.0	-1,875.05	-375.6	184.4	385.1	0.00	0.00	0.00
7,200.0	90.00	179.18	6,539.0	-1,875.05	-475.5	185.9	485.0	0.00	0.00	0.00
7,300.0	90.00	179.18	6,539.0	-1,875.05	-575.5	187.3	584.9	0.00	0.00	0.00
7,400.0	90.00	179.18	6,539.0	-1,875.05	-675.5	188.7	684.8	0.00	0.00	0.00
7,500.0	90.00	179.18	6,539.0	-1,875.05	-775.5	190.1	784.7	0.00	0.00	0.00
7,600.0	90.00	179.18	6,539.0	-1,875.05	-875.5	191.6	884.7	0.00	0.00	0.00
7,700.0	90.00	179.18	6,539.0	-1,875.05	-975.5	193.0	984.6	0.00	0.00	0.00
7,800.0	90.00	179.18	6,539.0	-1,875.04	-1,075.5	194.4	1,084.5	0.00	0.00	0.00
7,900.0	90.00	179.18	6,539.0	-1,875.04	-1,175.5	195.9	1,184.4	0.00	0.00	0.00
8,000.0	90.00	179.18	6,539.0	-1,875.04	-1,275.5	197.3	1,284.3	0.00	0.00	0.00
8,100.0	90.00	179.18	6,539.0	-1,875.04	-1,375.5	198.7	1,384.3	0.00	0.00	0.00
8,200.0	90.00	179.18	6,539.0	-1,875.04	-1,475.4	200.2	1,484.2	0.00	0.00	0.00
8,300.0	90.00	179.18	6,539.0	-1,875.04	-1,575.4	201.6	1,584.1	0.00	0.00	0.00
8,400.0	90.00	179.18	6,539.0	-1,875.04	-1,675.4	203.0	1,684.0	0.00	0.00	0.00
8,500.0	90.00	179.18	6,539.0	-1,875.04	-1,775.4	204.5	1,783.9	0.00	0.00	0.00
8,600.0	90.00	179.18	6,539.0	-1,875.04	-1,875.4	205.9	1,883.8	0.00	0.00	0.00
8,700.0	90.00	179.18	6,539.0	-1,875.04	-1,975.4	207.3	1,983.8	0.00	0.00	0.00
8,800.0	90.00	179.18	6,539.0	-1,875.04	-2,075.4	208.7	2,083.7	0.00	0.00	0.00
8,900.0	90.00	179.18	6,539.0	-1,875.04	-2,175.4	210.2	2,183.6	0.00	0.00	0.00
9,000.0	90.00	179.18	6,539.0	-1,875.04	-2,275.4	211.6	2,283.5	0.00	0.00	0.00
9,100.0	90.00	179.18	6,539.0	-1,875.03	-2,375.3	213.0	2,383.4	0.00	0.00	0.00
9,200.0	90.00	179.18	6,539.0	-1,875.03	-2,475.3	214.5	2,483.4	0.00	0.00	0.00
9,300.0	90.00	179.18	6,539.0	-1,875.03	-2,575.3	215.9	2,583.3	0.00	0.00	0.00
9,400.0	90.00	179.18	6,539.0	-1,875.03	-2,675.3	217.3	2,683.2	0.00	0.00	0.00
9,500.0	90.00	179.18	6,539.0	-1,875.03	-2,775.3	218.7	2,783.1	0.00	0.00	0.00
9,600.0	90.00	179.18	6,539.0	-1,875.03	-2,875.3	220.2	2,883.0	0.00	0.00	0.00
9,700.0	90.00	179.18	6,539.0	-1,875.03	-2,975.3	221.6	2,983.0	0.00	0.00	0.00
9,800.0	90.00	179.18	6,539.0	-1,875.03	-3,075.3	223.0	3,082.9	0.00	0.00	0.00
9,900.0	90.00	179.18	6,539.0	-1,875.02	-3,175.3	224.5	3,182.8	0.00	0.00	0.00
10,000.0	90.00	179.18	6,539.0	-1,875.02	-3,275.3	225.9	3,282.7	0.00	0.00	0.00
10,100.0	90.00	179.18	6,539.0	-1,875.02	-3,375.2	227.3	3,382.6	0.00	0.00	0.00
10,200.0	90.00	179.18	6,539.0	-1,875.02	-3,475.2	228.8	3,482.5	0.00	0.00	0.00
10,300.0	90.00	179.18	6,539.0	-1,875.02	-3,575.2	230.2	3,582.5	0.00	0.00	0.00
10,400.0	90.00	179.18	6,539.0	-1,875.02	-3,675.2	231.6	3,682.4	0.00	0.00	0.00
10,500.0	90.00	179.18	6,539.0	-1,875.01	-3,775.2	233.0	3,782.3	0.00	0.00	0.00
10,600.0	90.00	179.18	6,539.0	-1,875.01	-3,875.2	234.5	3,882.2	0.00	0.00	0.00
10,700.0	90.00	179.18	6,539.0	-1,875.01	-3,975.2	235.9	3,982.1	0.00	0.00	0.00
10,800.0	90.00	179.18	6,539.0	-1,875.01	-4,075.2	237.3	4,082.1	0.00	0.00	0.00
10,900.0	90.00	179.18	6,539.0	-1,875.01	-4,175.2	238.7	4,182.0	0.00	0.00	0.00
11,000.0	90.00	179.18	6,539.0	-1,875.00	-4,275.2	240.2	4,281.9	0.00	0.00	0.00
11,100.0	90.00	179.18	6,539.0	-1,875.00	-4,375.1	241.6	4,381.8	0.00	0.00	0.00
BHL (P4) - NP FED K31-O34-22HNC										
11,154.9	90.00	179.18	6,539.0	-1,875.00	-4,430.0	242.4	4,436.6	0.00	0.00	0.00



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well NORTH PLATTE FEDERAL K31-O34-22HNC
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4664.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4664.0usft (Original Well Elev)
Site:	NW NE SEC. 22 T5N R63W 6th P.M.	North Reference:	True
Well:	NORTH PLATTE FEDERAL K31-O34-22HNC	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #4		

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,477.8	3,451.0	PARKMAN				
6,313.8	6,265.0	SHARON SPRINGS				
6,376.7	6,318.0	SHARON SPRINGS "A"				
6,416.4	6,349.0	SHARON SPRINGS "B"				
6,456.3	6,378.0	NIOBRARA "A" CHALK				
6,479.8	6,394.0	NIOBRARA "A" MARL				
6,586.5	6,455.0	NIOBRARA "B" CHALK				
6,659.8	6,485.0	NIOBRARA "B" MARL				
6,808.5	6,525.0	NIOBRARA "C" CHALK				

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
1,550.0	1,550.0	0.0	0.0	SURFACE CASING
1,850.0	1,850.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2,449.9	2,445.5	56.8	26.4	EOB TO 12° INC
3,830.7	3,796.2	317.1	147.3	END OF TANGENT
4,430.6	4,391.7	373.8	173.7	EOD TO VERTICAL
6,074.6	6,035.7	373.8	173.7	KOP (12°/100ft BUR)
6,699.6	6,496.9	20.0	178.8	START OF TANGENT
6,799.6	6,522.8	-76.6	180.1	END OF TANGENT
6,924.6	6,539.0	-200.2	181.9	HZ LP *NEW* (P4) - NP FED K31-O34-22HNC
11,154.9	6,539.0	-4,430.0	242.4	BHL (P4) - NP FED K31-O34-22HNC