

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

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

NORTH PLATTE FEDERAL P31-T34-22HC

ORIGINAL WELLBORE

23 September, 2015

Plan: PROPOSAL #3





Project: WELD COUNTY, COLORADO (NAD 83)
 Site: NW NE SEC. 22 T5N R63W 6th P.M.
 Well: NORTH PLATTE FEDERAL P31-T34-22HC
 Wellbore: ORIGINAL WELLBORE
 Design: PROPOSAL #3

ANNOTATIONS

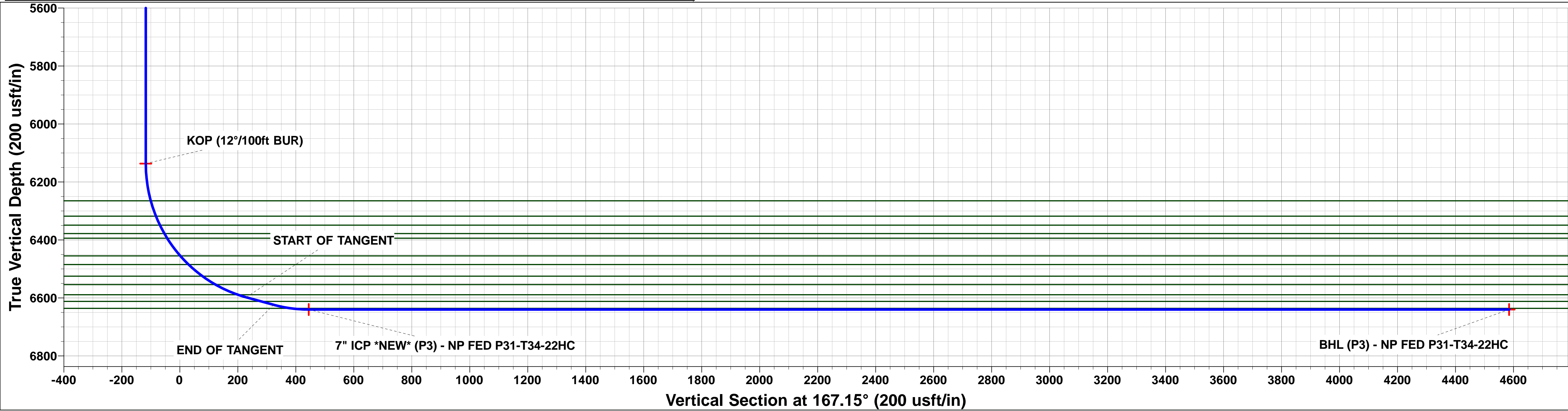
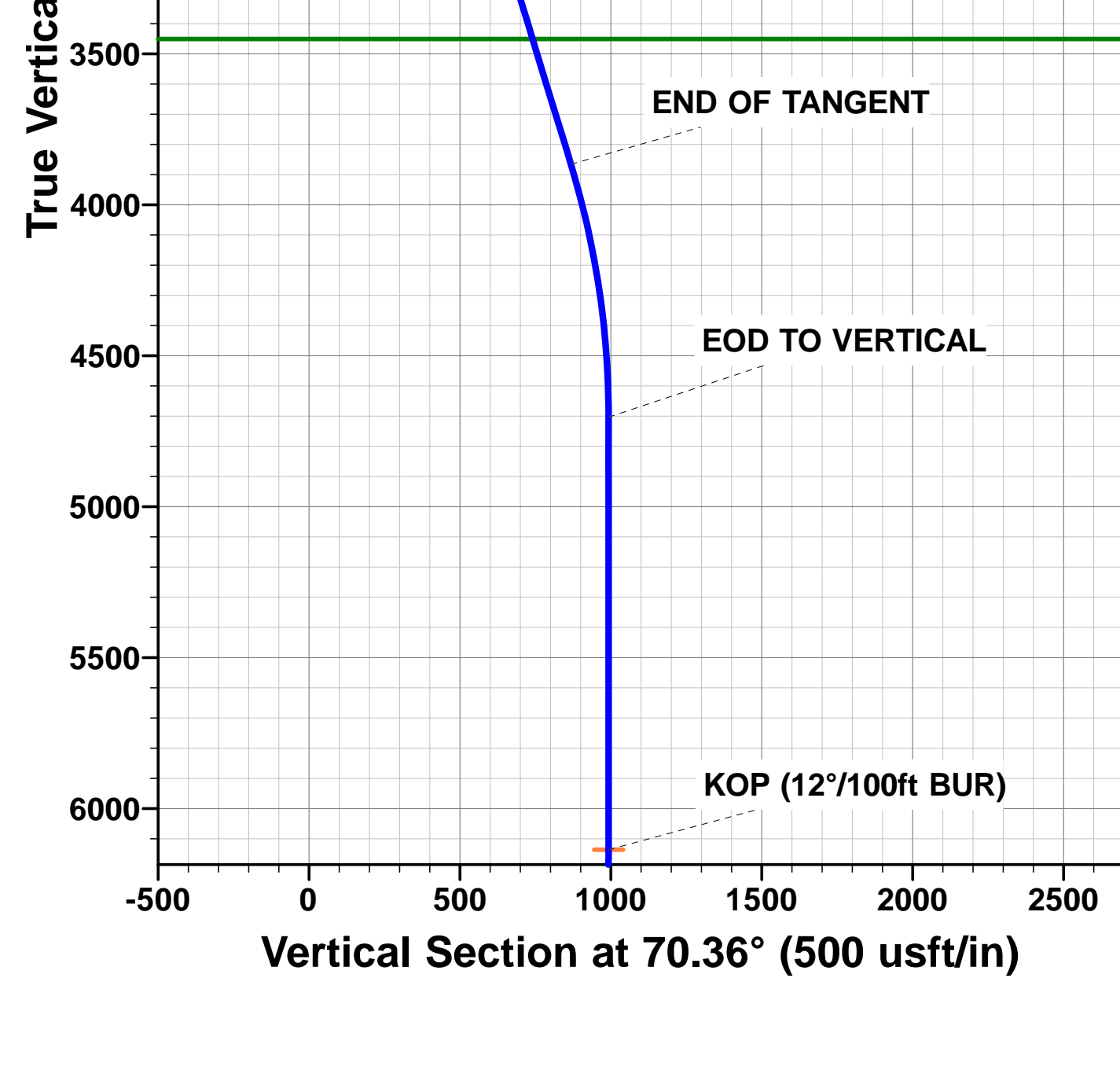
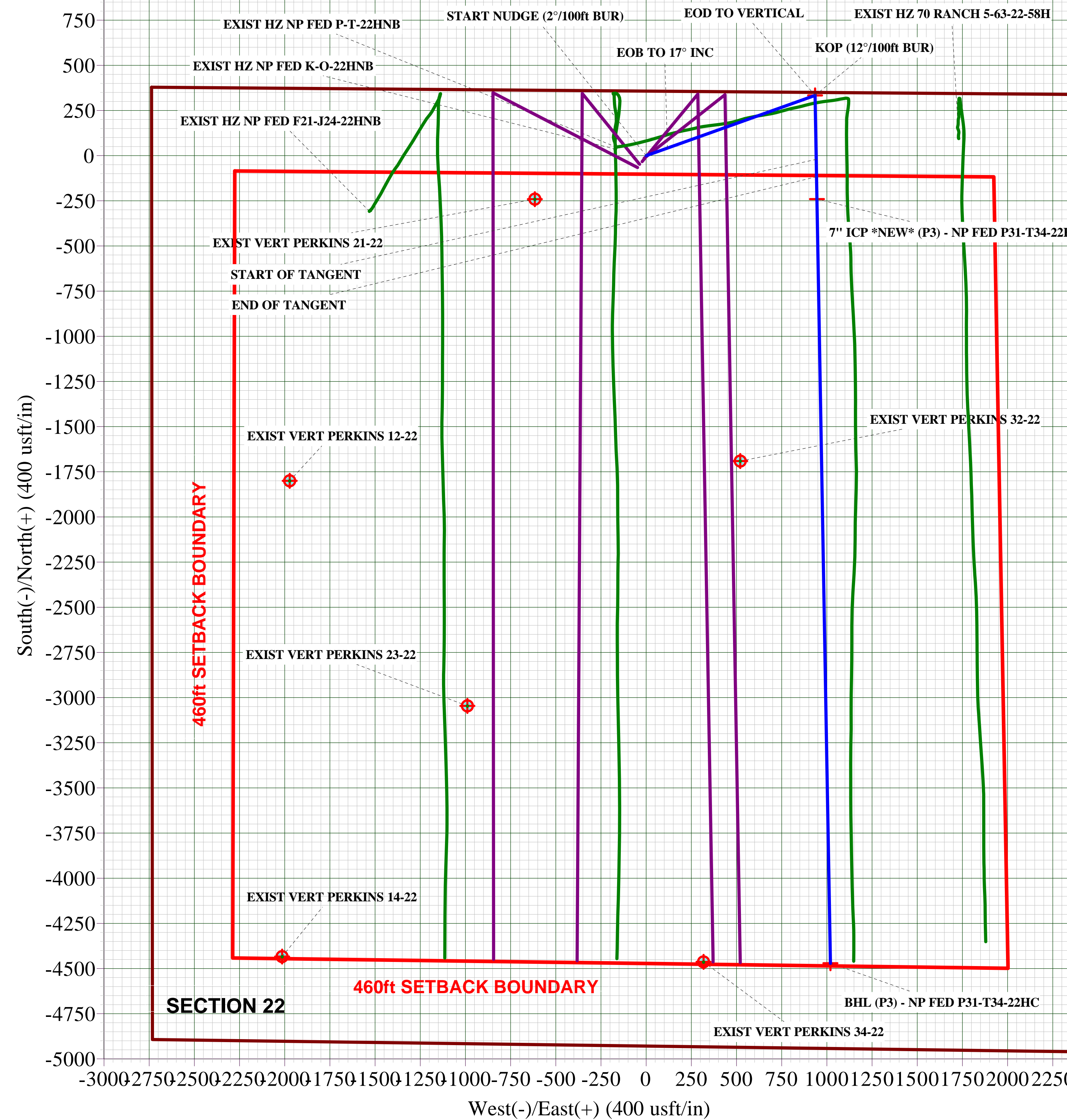
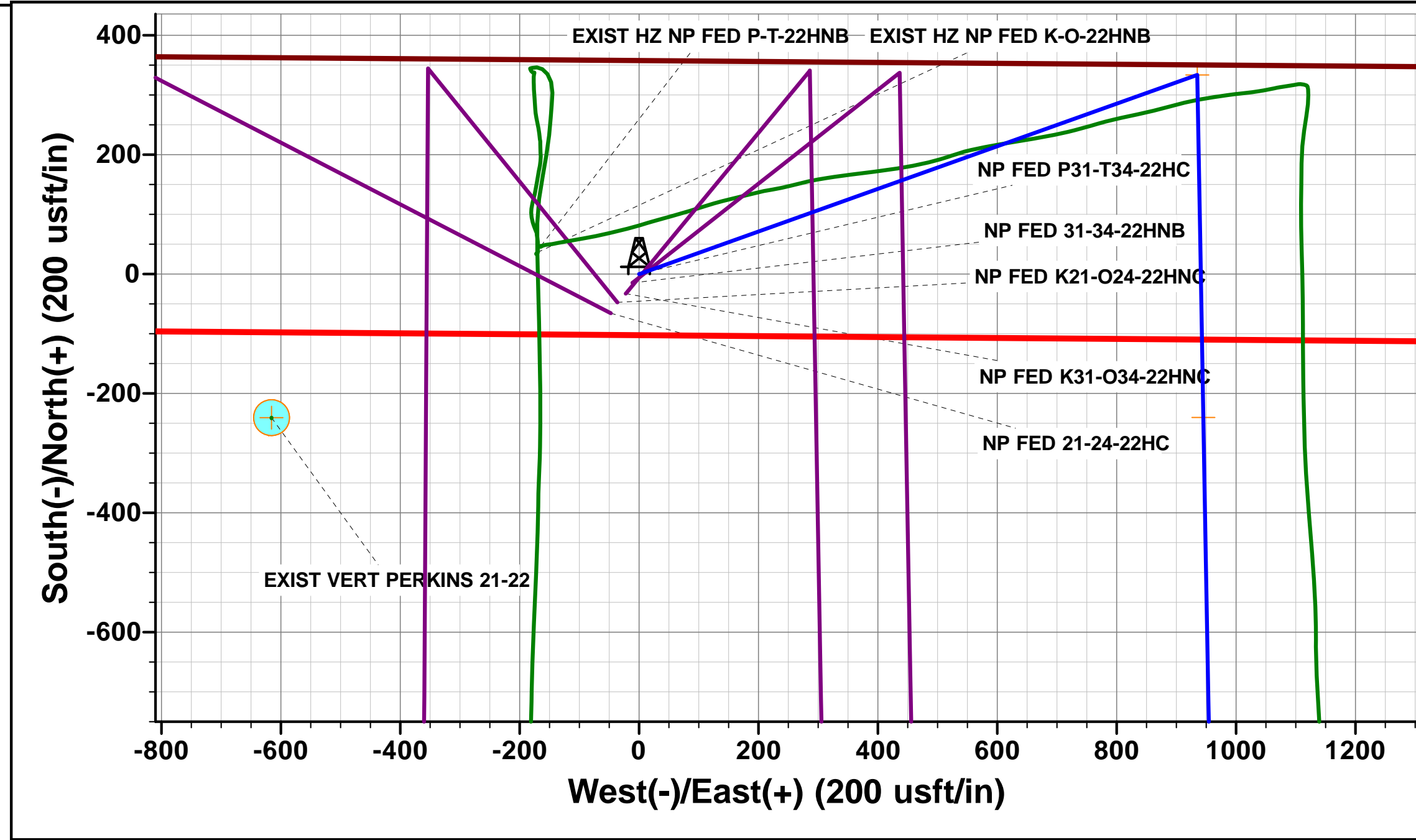
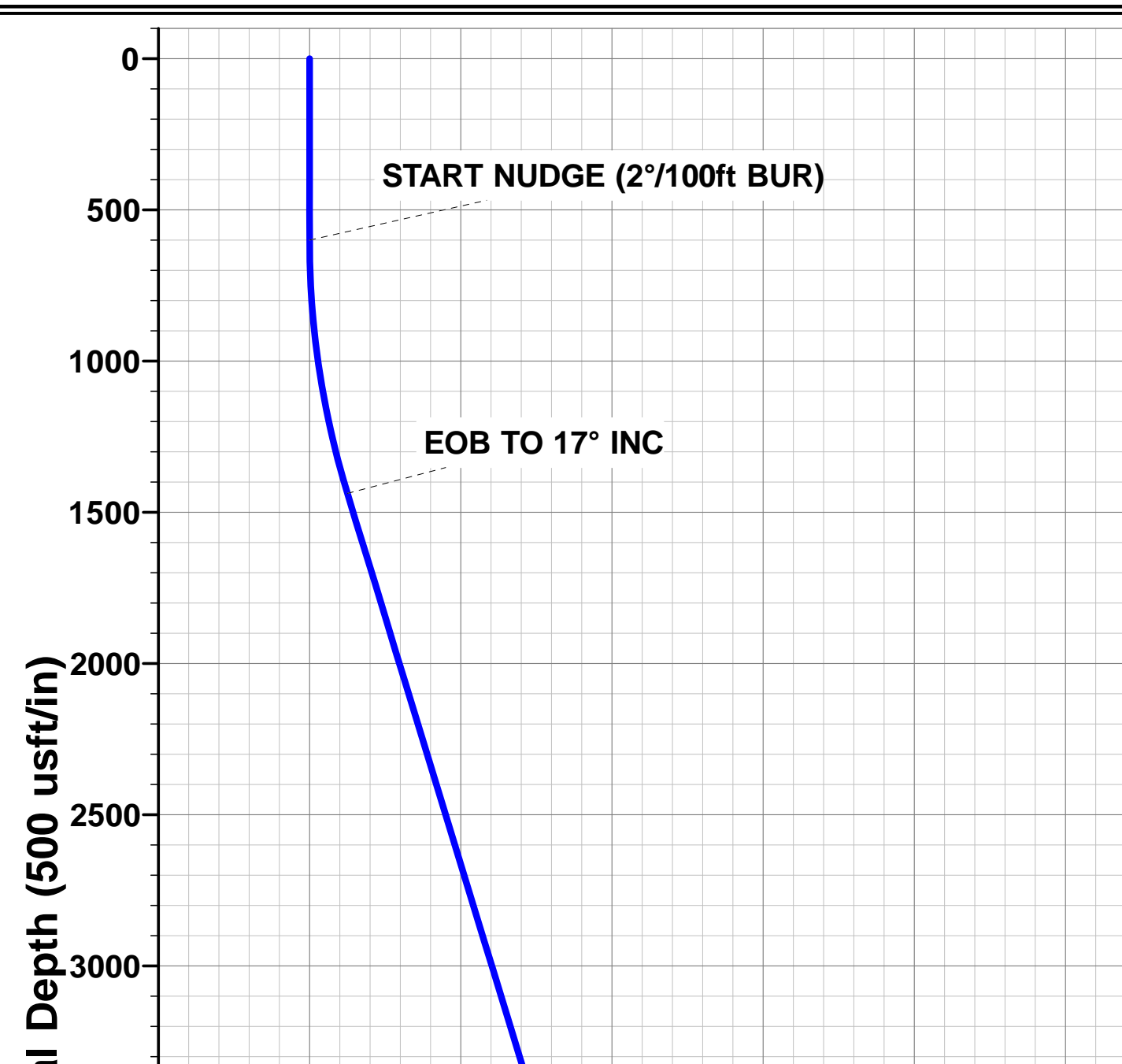
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Dep	Annotation
600.0	600.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1437.6	1450.0	17.00	70.36	42.1	117.9	-14.8	125.2	EOB TO 17° INC
3866.1	3989.5	17.00	70.36	291.7	817.2	-102.6	867.7	END OF TANGENT
4703.7	4839.5	0.00	0.00	333.7	935.1	-117.4	992.9	EOD TO VERTICAL
6136.7	6272.5	0.00	0.00	333.7	935.1	-117.4	992.9	KOP (12°/100ft BUR)
6597.9	6897.5	75.00	178.99	-20.1	941.3	229.0	1346.8	START OF TANGENT
6623.8	6997.5	75.00	178.99	-116.7	943.0	323.5	1443.4	END OF TANGENT
6640.0	7122.5	90.00	178.99	-240.2	945.2	444.4	1566.9	7" ICP *NEW* (P3) - NP FED P31-T34-22HC
6640.0	11353.0	90.00	178.99	-4470.1	1019.7	4584.9	5797.4	BHL (P3) - NP FED P31-T34-22HC

PROPOSED LOCAL COORDINATES:

SHL: 357ft FNL & 2392ft FEL Sec 22
 7" ICP *NEW*: 589.1ft FNL & 1450ft FEL Sec 22
 BHL: 470ft FSL & 1450ft FEL Sec 22

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP (P3) - NP FED P31-T34-22HC	6136.7	333.7	935.1	40.392046	-104.417963
7" ICP *NEW* (P3) - NP FED P31-T34-22HC	6640.0	-240.2	945.2	40.390471	-104.417927
BHL (P3) - NP FED P31-T34-22HC	6640.0	-4470.1	1019.7	40.378860	-104.417660





Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well NORTH PLATTE FEDERAL P31-T34-22HC
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 P31-T34-22HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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 P31-T34-22HC					
Well Position	+N-S	196.6 usft	Northing:	1,387,156.53 usft	Latitude:	40.391130
	+E/-W	-18.3 usft	Easting:	3,300,455.45 usft	Longitude:	-104.421320
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	23/09/2015	8.21	66.95	52,623

Design	PROPOSAL #3			
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	167.15

Plan Sections											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	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	
600.0	0.00	0.00	600.0	-4,064.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,450.0	17.00	70.36	1,437.6	-3,226.4	42.1	117.9	2.00	2.00	0.00	70.36	
3,989.5	17.00	70.36	3,866.1	-797.9	291.7	817.2	0.00	0.00	0.00	0.00	
4,839.5	0.00	0.00	4,703.7	39.7	333.7	935.1	2.00	-2.00	0.00	180.00	
6,272.5	0.00	0.00	6,136.7	1,472.7	333.7	935.1	0.00	0.00	0.00	0.00	KOP (P3) - NP FEC
6,897.5	75.00	178.99	6,597.9	1,933.9	-20.1	941.3	12.00	12.00	0.00	178.99	
6,997.5	75.00	178.99	6,623.8	1,959.8	-116.7	943.0	0.00	0.00	0.00	0.00	
7,122.5	90.00	178.99	6,640.0	1,976.0	-240.2	945.2	12.00	12.00	0.00	0.00	
11,353.0	90.00	178.99	6,640.0	1,976.0	-4,470.1	1,019.7	0.00	0.00	0.00	62.29	BHL (P3) - NP FED



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Site:	NW NE SEC. 22 T5N R63W 6th P.M.	North Reference:	True
Well:	NORTH PLATTE FEDERAL P31-T34-22HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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
START NUDGE (2°/100ft BUR)										
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	2.00	70.36	700.0	3,964.02	0.6	1.6	-0.2	2.00	2.00	0.00
800.0	4.00	70.36	799.8	3,864.16	2.3	6.6	-0.8	2.00	2.00	0.00
900.0	6.00	70.36	899.5	3,764.55	5.3	14.8	-1.9	2.00	2.00	0.00
1,000.0	8.00	70.36	998.7	3,665.30	9.4	26.3	-3.3	2.00	2.00	0.00
1,100.0	10.00	70.36	1,097.5	3,566.53	14.6	41.0	-5.1	2.00	2.00	0.00
1,200.0	12.00	70.36	1,195.6	3,468.38	21.0	59.0	-7.4	2.00	2.00	0.00
1,300.0	14.00	70.36	1,293.1	3,370.94	28.6	80.1	-10.1	2.00	2.00	0.00
1,400.0	16.00	70.36	1,389.6	3,274.36	37.3	104.5	-13.1	2.00	2.00	0.00
EOB TO 17° INC										
1,450.0	17.00	70.36	1,437.6	3,226.37	42.1	117.9	-14.8	2.00	2.00	0.00
1,500.0	17.00	70.36	1,485.4	3,178.60	47.0	131.7	-16.5	0.00	0.00	0.00
1,600.0	17.00	70.36	1,581.0	3,082.97	56.8	159.2	-20.0	0.00	0.00	0.00
1,700.0	17.00	70.36	1,676.7	2,987.34	66.6	186.7	-23.4	0.00	0.00	0.00
1,800.0	17.00	70.36	1,772.3	2,891.71	76.5	214.3	-26.9	0.00	0.00	0.00
1,900.0	17.00	70.36	1,867.9	2,796.08	86.3	241.8	-30.4	0.00	0.00	0.00
2,000.0	17.00	70.36	1,963.5	2,700.45	96.1	269.4	-33.8	0.00	0.00	0.00
2,100.0	17.00	70.36	2,059.2	2,604.82	106.0	296.9	-37.3	0.00	0.00	0.00
2,200.0	17.00	70.36	2,154.8	2,509.19	115.8	324.4	-40.7	0.00	0.00	0.00
2,300.0	17.00	70.36	2,250.4	2,413.56	125.6	352.0	-44.2	0.00	0.00	0.00
2,400.0	17.00	70.36	2,346.1	2,317.93	135.4	379.5	-47.6	0.00	0.00	0.00
2,500.0	17.00	70.36	2,441.7	2,222.30	145.3	407.0	-51.1	0.00	0.00	0.00
2,600.0	17.00	70.36	2,537.3	2,126.67	155.1	434.6	-54.6	0.00	0.00	0.00
2,700.0	17.00	70.36	2,633.0	2,031.04	164.9	462.1	-58.0	0.00	0.00	0.00
2,800.0	17.00	70.36	2,728.6	1,935.41	174.8	489.7	-61.5	0.00	0.00	0.00
2,900.0	17.00	70.36	2,824.2	1,839.78	184.6	517.2	-64.9	0.00	0.00	0.00
3,000.0	17.00	70.36	2,919.8	1,744.15	194.4	544.7	-68.4	0.00	0.00	0.00
3,100.0	17.00	70.36	3,015.5	1,648.52	204.2	572.3	-71.8	0.00	0.00	0.00
3,200.0	17.00	70.36	3,111.1	1,552.89	214.1	599.8	-75.3	0.00	0.00	0.00
3,300.0	17.00	70.36	3,206.7	1,457.26	223.9	627.3	-78.8	0.00	0.00	0.00
3,400.0	17.00	70.36	3,302.4	1,361.63	233.7	654.9	-82.2	0.00	0.00	0.00
3,500.0	17.00	70.36	3,398.0	1,266.00	243.5	682.4	-85.7	0.00	0.00	0.00
PARKMAN										
3,555.4	17.00	70.36	3,451.0	1,213.00	249.0	697.7	-87.6	0.00	0.00	0.00
3,600.0	17.00	70.36	3,493.6	1,170.37	253.4	710.0	-89.1	0.00	0.00	0.00
3,700.0	17.00	70.36	3,589.3	1,074.74	263.2	737.5	-92.6	0.00	0.00	0.00
3,800.0	17.00	70.36	3,684.9	979.11	273.0	765.0	-96.0	0.00	0.00	0.00
3,900.0	17.00	70.36	3,780.5	883.48	282.9	792.6	-99.5	0.00	0.00	0.00
END OF TANGENT										
3,989.5	17.00	70.36	3,866.1	797.93	291.7	817.2	-102.6	0.00	0.00	0.00
4,000.0	16.79	70.36	3,876.2	787.85	292.7	820.1	-103.0	2.00	-2.00	0.00
4,100.0	14.79	70.36	3,972.4	691.62	301.8	845.7	-106.2	2.00	-2.00	0.00
4,200.0	12.79	70.36	4,069.5	594.51	309.8	868.2	-109.0	2.00	-2.00	0.00
4,300.0	10.79	70.36	4,167.4	496.63	316.7	887.4	-111.4	2.00	-2.00	0.00
4,400.0	8.79	70.36	4,265.9	398.09	322.4	903.4	-113.4	2.00	-2.00	0.00
4,500.0	6.79	70.36	4,365.0	299.02	327.0	916.2	-115.0	2.00	-2.00	0.00



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Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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)
4,600.0	4.79	70.36	4,464.5	199.53	330.4	925.7	-116.2	2.00	-2.00	0.00
4,700.0	2.79	70.36	4,564.2	99.76	332.6	931.9	-117.0	2.00	-2.00	0.00
4,800.0	0.79	70.36	4,664.2	-0.19	333.6	934.8	-117.4	2.00	-2.00	0.00
EOD TO VERTICAL										
4,839.5	0.00	0.00	4,703.7	-39.70	333.7	935.1	-117.4	2.00	-2.00	0.00
4,900.0	0.00	0.00	4,764.2	-100.19	333.7	935.1	-117.4	0.00	0.00	0.00
5,000.0	0.00	0.00	4,864.2	-200.19	333.7	935.1	-117.4	0.00	0.00	0.00
5,100.0	0.00	0.00	4,964.2	-300.19	333.7	935.1	-117.4	0.00	0.00	0.00
5,200.0	0.00	0.00	5,064.2	-400.19	333.7	935.1	-117.4	0.00	0.00	0.00
5,300.0	0.00	0.00	5,164.2	-500.19	333.7	935.1	-117.4	0.00	0.00	0.00
5,400.0	0.00	0.00	5,264.2	-600.19	333.7	935.1	-117.4	0.00	0.00	0.00
5,500.0	0.00	0.00	5,364.2	-700.19	333.7	935.1	-117.4	0.00	0.00	0.00
5,600.0	0.00	0.00	5,464.2	-800.19	333.7	935.1	-117.4	0.00	0.00	0.00
5,700.0	0.00	0.00	5,564.2	-900.19	333.7	935.1	-117.4	0.00	0.00	0.00
5,800.0	0.00	0.00	5,664.2	-1,000.19	333.7	935.1	-117.4	0.00	0.00	0.00
5,900.0	0.00	0.00	5,764.2	-1,100.19	333.7	935.1	-117.4	0.00	0.00	0.00
6,000.0	0.00	0.00	5,864.2	-1,200.19	333.7	935.1	-117.4	0.00	0.00	0.00
6,100.0	0.00	0.00	5,964.2	-1,300.19	333.7	935.1	-117.4	0.00	0.00	0.00
6,200.0	0.00	0.00	6,064.2	-1,400.19	333.7	935.1	-117.4	0.00	0.00	0.00
KOP (12°/100ft BUR)										
6,272.5	0.00	0.00	6,136.7	-1,472.70	333.7	935.1	-117.4	0.00	0.00	0.00
6,300.0	3.30	178.99	6,164.2	-1,500.17	332.9	935.1	-116.6	12.00	12.00	0.00
6,400.0	15.30	178.99	6,262.7	-1,598.68	316.8	935.4	-100.8	12.00	12.00	0.00
SHARON SPRINGS										
6,402.4	15.59	178.99	6,265.0	-1,601.00	316.2	935.4	-100.2	12.00	12.00	0.00
SHARON SPRINGS "A"										
6,458.5	22.32	178.99	6,318.0	-1,654.00	298.0	935.7	-82.4	12.00	12.00	0.00
SHARON SPRINGS "B"										
6,492.5	26.40	178.99	6,349.0	-1,685.00	283.9	936.0	-68.7	12.00	12.00	0.00
6,500.0	27.30	178.99	6,355.7	-1,691.68	280.6	936.0	-65.4	12.00	12.00	0.00
NIOBRARA "A" CHALK										
6,525.5	30.36	178.99	6,378.0	-1,714.00	268.3	936.3	-53.3	12.00	12.00	0.00
NIOBRARA "A" MARL										
6,544.2	32.61	178.99	6,394.0	-1,730.00	258.5	936.4	-43.7	12.00	12.00	0.00
6,600.0	39.30	178.99	6,439.1	-1,775.11	225.8	937.0	-11.7	12.00	12.00	0.00
NIOBRARA "B" CHALK										
6,620.9	41.81	178.99	6,455.0	-1,791.00	212.2	937.2	1.6	12.00	12.00	0.00
NIOBRARA "B" MARL										
6,662.9	46.84	178.99	6,485.0	-1,821.00	182.9	937.8	30.3	12.00	12.00	0.00
6,700.0	51.30	178.99	6,509.3	-1,845.32	154.8	938.3	57.7	12.00	12.00	0.00
NIOBRARA "C" CHALK										
6,726.0	54.42	178.99	6,525.0	-1,861.00	134.1	938.6	78.0	12.00	12.00	0.00
NIOBRARA "C" MARL										
6,780.2	60.93	178.99	6,554.0	-1,890.00	88.3	939.4	122.8	12.00	12.00	0.00
6,800.0	63.30	178.99	6,563.2	-1,899.25	70.9	939.7	139.9	12.00	12.00	0.00
BASE "C" MARL										
6,866.8	71.32	178.99	6,589.0	-1,925.00	9.3	940.8	200.2	12.00	12.00	0.00
START OF TANGENT										
6,897.5	75.00	178.99	6,597.9	-1,933.90	-20.1	941.3	229.0	12.00	12.00	0.00
6,900.0	75.00	178.99	6,598.5	-1,934.54	-22.5	941.4	231.3	0.00	0.00	0.00
FT HAYS										



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Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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)
6,952.0	75.00	178.99	6,612.0	-1,948.00	-72.7	942.3	280.5	0.00	0.00	0.00
END OF TANGENT										
6,997.5	75.00	178.99	6,623.8	-1,959.78	-116.7	943.0	323.5	0.00	0.00	0.00
7,000.0	75.30	178.99	6,624.4	-1,960.42	-119.1	943.1	325.8	12.00	12.00	0.00
CODELL										
7,060.3	82.54	178.99	6,636.0	-1,972.00	-178.2	944.1	383.7	12.00	12.00	0.00
7,100.0	87.30	178.99	6,639.5	-1,975.52	-217.7	944.8	422.4	12.00	12.00	0.00
7" ICP *NEW* (P3) - NP FED P31-T34-22HC										
7,122.5	90.00	178.99	6,640.0	-1,976.05	-240.2	945.2	444.4	12.00	12.00	0.00
7,200.0	90.00	178.99	6,640.0	-1,976.05	-317.7	946.6	520.3	0.00	0.00	0.00
7,300.0	90.00	178.99	6,640.0	-1,976.05	-417.7	948.4	618.2	0.00	0.00	0.00
7,400.0	90.00	178.99	6,640.0	-1,976.05	-517.7	950.1	716.0	0.00	0.00	0.00
7,500.0	90.00	178.99	6,640.0	-1,976.05	-617.7	951.9	813.9	0.00	0.00	0.00
7,600.0	90.00	178.99	6,640.0	-1,976.05	-717.6	953.6	911.8	0.00	0.00	0.00
7,700.0	90.00	178.99	6,640.0	-1,976.05	-817.6	955.4	1,009.6	0.00	0.00	0.00
7,800.0	90.00	178.99	6,640.0	-1,976.05	-917.6	957.2	1,107.5	0.00	0.00	0.00
7,900.0	90.00	178.99	6,640.0	-1,976.05	-1,017.6	958.9	1,205.4	0.00	0.00	0.00
8,000.0	90.00	178.99	6,640.0	-1,976.04	-1,117.6	960.7	1,303.3	0.00	0.00	0.00
8,100.0	90.00	178.99	6,640.0	-1,976.04	-1,217.6	962.5	1,401.1	0.00	0.00	0.00
8,200.0	90.00	178.99	6,640.0	-1,976.04	-1,317.6	964.2	1,499.0	0.00	0.00	0.00
8,300.0	90.00	178.99	6,640.0	-1,976.04	-1,417.5	966.0	1,596.9	0.00	0.00	0.00
8,400.0	90.00	178.99	6,640.0	-1,976.04	-1,517.5	967.7	1,694.7	0.00	0.00	0.00
8,500.0	90.00	178.99	6,640.0	-1,976.04	-1,617.5	969.5	1,792.6	0.00	0.00	0.00
8,600.0	90.00	178.99	6,640.0	-1,976.04	-1,717.5	971.3	1,890.5	0.00	0.00	0.00
8,700.0	90.00	178.99	6,640.0	-1,976.04	-1,817.5	973.0	1,988.4	0.00	0.00	0.00
8,800.0	90.00	178.99	6,640.0	-1,976.04	-1,917.5	974.8	2,086.2	0.00	0.00	0.00
8,900.0	90.00	178.99	6,640.0	-1,976.04	-2,017.4	976.5	2,184.1	0.00	0.00	0.00
9,000.0	90.00	178.99	6,640.0	-1,976.04	-2,117.4	978.3	2,282.0	0.00	0.00	0.00
9,100.0	90.00	178.99	6,640.0	-1,976.04	-2,217.4	980.1	2,379.9	0.00	0.00	0.00
9,200.0	90.00	178.99	6,640.0	-1,976.04	-2,317.4	981.8	2,477.7	0.00	0.00	0.00
9,300.0	90.00	178.99	6,640.0	-1,976.03	-2,417.4	983.6	2,575.6	0.00	0.00	0.00
9,400.0	90.00	178.99	6,640.0	-1,976.03	-2,517.4	985.3	2,673.5	0.00	0.00	0.00
9,500.0	90.00	178.99	6,640.0	-1,976.03	-2,617.4	987.1	2,771.3	0.00	0.00	0.00
9,600.0	90.00	178.99	6,640.0	-1,976.03	-2,717.3	988.9	2,869.2	0.00	0.00	0.00
9,700.0	90.00	178.99	6,640.0	-1,976.03	-2,817.3	990.6	2,967.1	0.00	0.00	0.00
9,800.0	90.00	178.99	6,640.0	-1,976.03	-2,917.3	992.4	3,065.0	0.00	0.00	0.00
9,900.0	90.00	178.99	6,640.0	-1,976.03	-3,017.3	994.1	3,162.8	0.00	0.00	0.00
10,000.0	90.00	178.99	6,640.0	-1,976.03	-3,117.3	995.9	3,260.7	0.00	0.00	0.00
10,100.0	90.00	178.99	6,640.0	-1,976.02	-3,217.3	997.7	3,358.6	0.00	0.00	0.00
10,200.0	90.00	178.99	6,640.0	-1,976.02	-3,317.2	999.4	3,456.4	0.00	0.00	0.00
10,300.0	90.00	178.99	6,640.0	-1,976.02	-3,417.2	1,001.2	3,554.3	0.00	0.00	0.00
10,400.0	90.00	178.99	6,640.0	-1,976.02	-3,517.2	1,002.9	3,652.2	0.00	0.00	0.00
10,500.0	90.00	178.99	6,640.0	-1,976.02	-3,617.2	1,004.7	3,750.1	0.00	0.00	0.00
10,600.0	90.00	178.99	6,640.0	-1,976.02	-3,717.2	1,006.5	3,847.9	0.00	0.00	0.00
10,700.0	90.00	178.99	6,640.0	-1,976.01	-3,817.2	1,008.2	3,945.8	0.00	0.00	0.00
10,800.0	90.00	178.99	6,640.0	-1,976.01	-3,917.2	1,010.0	4,043.7	0.00	0.00	0.00
10,900.0	90.00	178.99	6,640.0	-1,976.01	-4,017.1	1,011.7	4,141.5	0.00	0.00	0.00
11,000.0	90.00	178.99	6,640.0	-1,976.01	-4,117.1	1,013.5	4,239.4	0.00	0.00	0.00
11,100.0	90.00	178.99	6,640.0	-1,976.01	-4,217.1	1,015.3	4,337.3	0.00	0.00	0.00
11,200.0	90.00	178.99	6,640.0	-1,976.00	-4,317.1	1,017.0	4,435.2	0.00	0.00	0.00
11,300.0	90.00	178.99	6,640.0	-1,976.00	-4,417.1	1,018.8	4,533.0	0.00	0.00	0.00
BHL (P3) - NP FED P31-T34-22HC										
11,353.0	90.00	178.99	6,640.0	-1,976.00	-4,470.1	1,019.7	4,584.9	0.00	0.00	0.00



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well NORTH PLATTE FEDERAL P31-T34-22HC
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 P31-T34-22HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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)

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,555.4	3,451.0	PARKMAN		0.00		
6,402.4	6,265.0	SHARON SPRINGS		0.00		
6,458.5	6,318.0	SHARON SPRINGS "A"		0.00		
6,492.5	6,349.0	SHARON SPRINGS "B"		0.00		
6,525.5	6,378.0	NIOBRARA "A" CHALK		0.00		
6,544.2	6,394.0	NIOBRARA "A" MARL		0.00		
6,620.9	6,455.0	NIOBRARA "B" CHALK		0.00		
6,662.9	6,485.0	NIOBRARA "B" MARL		0.00		
6,726.0	6,525.0	NIOBRARA "C" CHALK		0.00		
6,780.2	6,554.0	NIOBRARA "C" MARL		0.00		
6,866.8	6,589.0	BASE "C" MARL		0.00		
6,952.0	6,612.0	FT HAYS		0.00		
7,060.3	6,636.0	CODELL		0.00		

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
600.0	600.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,450.0	1,437.6	42.1	117.9	EOB TO 17° INC
3,989.5	3,866.1	291.7	817.2	END OF TANGENT
4,839.5	4,703.7	333.7	935.1	EOD TO VERTICAL
6,272.5	6,136.7	333.7	935.1	KOP (12°/100ft BUR)
6,897.5	6,597.9	-20.1	941.3	START OF TANGENT
6,997.5	6,623.8	-116.7	943.0	END OF TANGENT
7,122.5	6,640.0	-240.2	945.2	7" ICP *NEW* (P3) - NP FED P31-T34-22HC
11,353.0	6,640.0	-4,470.1	1,019.7	BHL (P3) - NP FED P31-T34-22HC