

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

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

NORTH PLATTE FEDERAL K21-O24-22HNC

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 K21-O24-22HNC
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #4

ANNOTATIONS

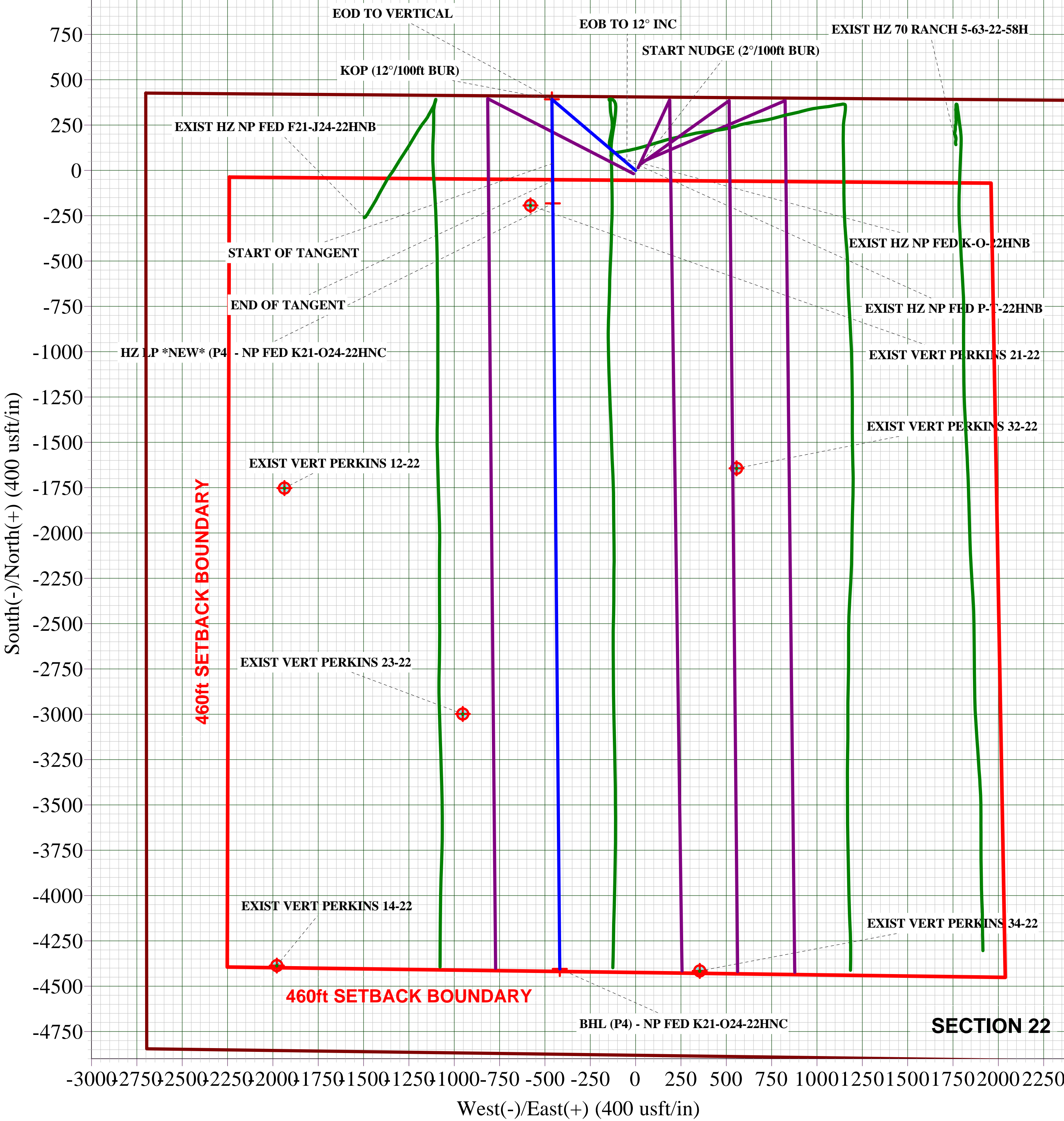
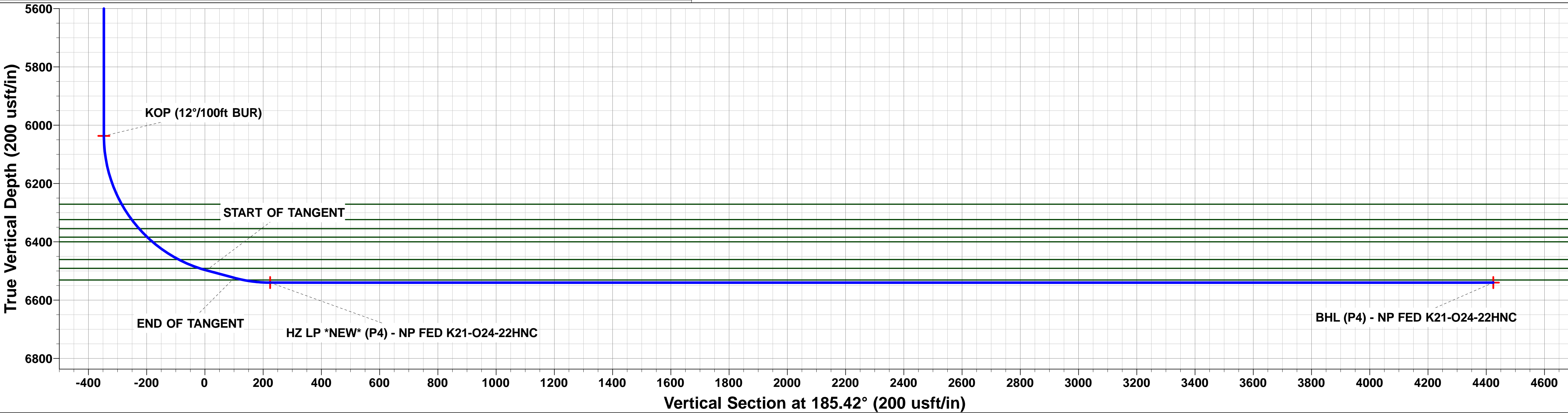
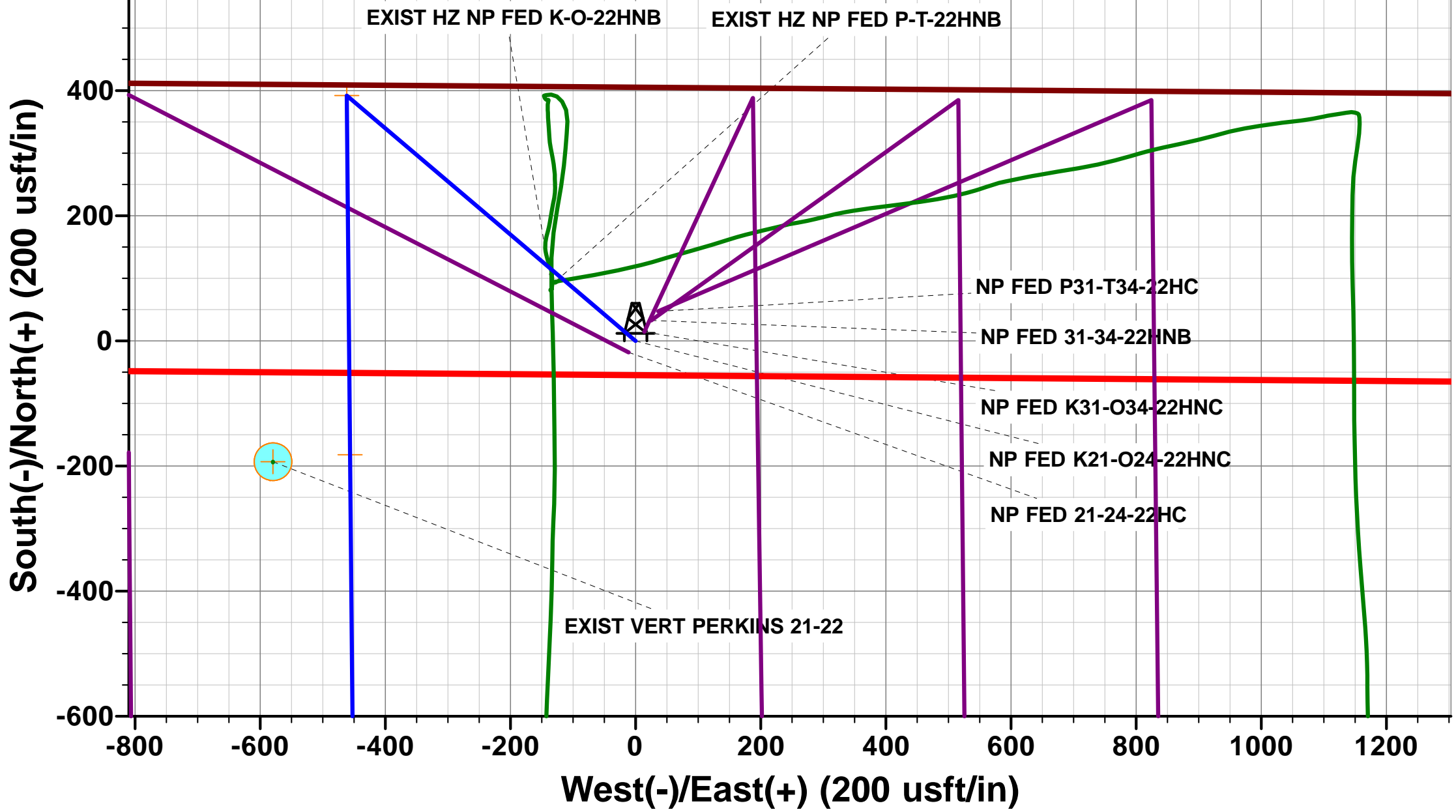
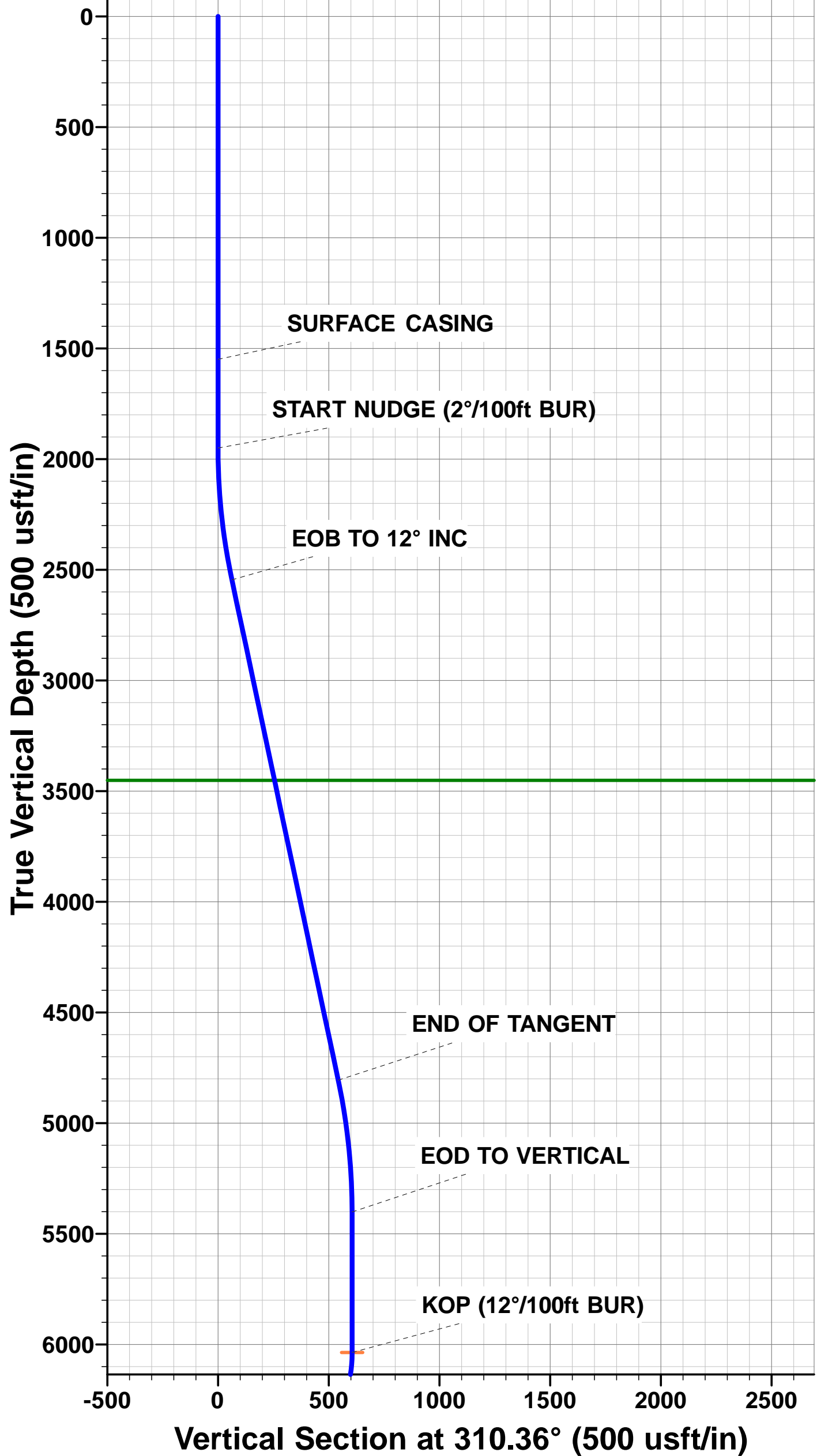
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
1550.0	1550.0	0.00	0.00	0.0	0.0	0.0	0.0	SURFACE CASING
1950.0	1950.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2545.6	2550.0	12.00	310.36	40.5	-47.7	-35.9	62.6	EOB TO 12° INC
4806.1	4861.0	12.00	310.36	351.7	-413.8	-311.0	543.1	END OF TANGENT
5401.7	5460.9	0.00	310.36	392.2	-461.5	-346.9	605.6	EOD TO VERTICAL
6036.7	6095.9	0.00	0.00	392.2	-461.5	-346.9	605.6	KOP (12°/100ft BUR)
6497.9	6720.9	74.99	179.48	38.4	-458.3	5.1	959.5	START OF TANGENT
6523.8	6820.9	75.00	179.48	-58.2	-457.4	101.2	1056.1	END OF TANGENT
6540.0	6945.9	89.99	179.48	-181.8	-456.3	224.1	1179.7	HZ LP *NEW* (P4) - NP FED K21-O24-22HNC
6540.0	11168.8	90.00	179.48	-4404.5	-417.9	4424.3	5402.5	BHL (P4) - NP FED K21-O24-22HNC

PROPOSED LOCAL COORDINATES:

SHL: 406ft FNL & 2428ft FEL Sec 22
HZ LP *NEW: 589ft FNL & 2246ft FWL Sec 22
BHL: 470ft FSL & 2280ft FWL Sec 22

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP (P4) - NP FED K21-O24-22HNC	6036.7	392.2	-461.5	40.392076	-104.423107
BHL (P4) - NP FED K21-O24-22HNC	6540.0	-4404.5	-417.9	40.378910	-104.422950
HZ LP *NEW* (P4) - NP FED K21-O24-22HNC	6540.0	-181.8	-456.3	40.390501	-104.423088



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well NORTH PLATTE FEDERAL K21-O24-22HNC
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4665.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4665.0usft
Site:	NW NE SEC. 22 T5N R63W 6th P.M.	North Reference:	True
Well:	NORTH PLATTE FEDERAL K21-O24-22HNC	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 K21-O24-22HNC					
Well Position	+N-S	149.2 usft	Northing:	1,387,108.73 usft	Latitude:	40.391000
	+E-W	-54.5 usft	Easting:	3,300,419.82 usft	Longitude:	-104.421450
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,648.0 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	185.42	

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	-4,665.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,950.0	0.00	0.00	1,950.0	-2,715.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,550.0	12.00	310.36	2,545.6	-2,119.4	40.5	-47.7	2.00	2.00	0.00	310.36	
4,861.0	12.00	310.36	4,806.1	141.1	351.7	-413.8	0.00	0.00	0.00	0.00	
5,460.9	0.00	0.00	5,401.7	736.7	392.2	-461.5	2.00	-2.00	0.00	180.00	
6,095.9	0.00	0.00	6,036.7	1,371.7	392.2	-461.5	0.00	0.00	0.00	0.00	KOP (P4) - NP FEC
6,720.9	75.00	179.48	6,497.9	1,832.9	38.3	-458.3	12.00	12.00	0.00	179.48	
6,820.9	75.00	179.48	6,523.8	1,858.8	-58.3	-457.4	0.00	0.00	0.00	0.00	
6,945.9	90.00	179.48	6,540.0	1,875.0	-181.8	-456.3	12.00	12.00	0.00	0.00	
11,168.8	90.00	179.48	6,540.0	1,875.0	-4,404.5	-417.9	0.00	0.00	0.00	-48.47	BHL (P4) - NP FED

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Site:	NW NE SEC. 22 T5N R63W 6th P.M.	North Reference:	True
Well:	NORTH PLATTE FEDERAL K21-O24-22HNC	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	4,665.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,565.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,465.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,365.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,265.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,165.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,065.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,965.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,865.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,765.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,665.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,565.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,465.00	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,365.00	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,265.00	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,165.00	0.0	0.0	0.0	0.00	0.00	0.00
SURFACE CASING										
1,550.0	0.00	0.00	1,550.0	3,115.00	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	3,065.00	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	2,965.00	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	2,865.00	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	2,765.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
1,950.0	0.00	0.00	1,950.0	2,715.00	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	1.00	310.36	2,000.0	2,665.00	0.3	-0.3	-0.2	2.00	2.00	0.00
2,100.0	3.00	310.36	2,099.9	2,565.07	2.5	-3.0	-2.2	2.00	2.00	0.00
2,200.0	5.00	310.36	2,199.7	2,465.32	7.1	-8.3	-6.2	2.00	2.00	0.00
2,300.0	7.00	310.36	2,299.1	2,365.87	13.8	-16.3	-12.2	2.00	2.00	0.00
2,400.0	9.00	310.36	2,398.2	2,266.85	22.8	-26.9	-20.2	2.00	2.00	0.00
2,500.0	11.00	310.36	2,496.6	2,168.37	34.1	-40.1	-30.1	2.00	2.00	0.00
EOB TO 12° INC										
2,550.0	12.00	310.36	2,545.6	2,119.38	40.5	-47.7	-35.9	2.00	2.00	0.00
2,600.0	12.00	310.36	2,594.5	2,070.47	47.3	-55.6	-41.8	0.00	0.00	0.00
2,700.0	12.00	310.36	2,692.3	1,972.65	60.7	-71.5	-53.7	0.00	0.00	0.00
2,800.0	12.00	310.36	2,790.2	1,874.84	74.2	-87.3	-65.6	0.00	0.00	0.00
2,900.0	12.00	310.36	2,888.0	1,777.02	87.7	-103.1	-77.5	0.00	0.00	0.00
3,000.0	12.00	310.36	2,985.8	1,679.21	101.1	-119.0	-89.4	0.00	0.00	0.00
3,100.0	12.00	310.36	3,083.6	1,581.39	114.6	-134.8	-101.3	0.00	0.00	0.00
3,200.0	12.00	310.36	3,181.4	1,483.58	128.0	-150.7	-113.2	0.00	0.00	0.00
3,300.0	12.00	310.36	3,279.2	1,385.76	141.5	-166.5	-125.1	0.00	0.00	0.00
3,400.0	12.00	310.36	3,377.1	1,287.95	155.0	-182.4	-137.1	0.00	0.00	0.00
PARKMAN										
3,476.6	12.00	310.36	3,452.0	1,213.00	165.3	-194.5	-146.2	0.00	0.00	0.00
3,500.0	12.00	310.36	3,474.9	1,190.13	168.4	-198.2	-149.0	0.00	0.00	0.00
3,600.0	12.00	310.36	3,572.7	1,092.32	181.9	-214.0	-160.9	0.00	0.00	0.00
3,700.0	12.00	310.36	3,670.5	994.50	195.4	-229.9	-172.8	0.00	0.00	0.00
3,800.0	12.00	310.36	3,768.3	896.69	208.8	-245.7	-184.7	0.00	0.00	0.00
3,900.0	12.00	310.36	3,866.1	798.87	222.3	-261.6	-196.6	0.00	0.00	0.00
4,000.0	12.00	310.36	3,963.9	701.06	235.8	-277.4	-208.5	0.00	0.00	0.00
4,100.0	12.00	310.36	4,061.8	603.24	249.2	-293.2	-220.4	0.00	0.00	0.00
4,200.0	12.00	310.36	4,159.6	505.43	262.7	-309.1	-232.3	0.00	0.00	0.00
4,300.0	12.00	310.36	4,257.4	407.61	276.1	-324.9	-244.2	0.00	0.00	0.00
4,400.0	12.00	310.36	4,355.2	309.80	289.6	-340.8	-256.1	0.00	0.00	0.00

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Well:	NORTH PLATTE FEDERAL K21-O24-22HNC	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)
4,500.0	12.00	310.36	4,453.0	211.98	303.1	-356.6	-268.0	0.00	0.00	0.00
4,600.0	12.00	310.36	4,550.8	114.17	316.5	-372.5	-279.9	0.00	0.00	0.00
4,700.0	12.00	310.36	4,648.6	16.35	330.0	-388.3	-291.8	0.00	0.00	0.00
4,800.0	12.00	310.36	4,746.5	-81.46	343.5	-404.1	-303.7	0.00	0.00	0.00
END OF TANGENT										
4,861.0	12.00	310.36	4,806.1	-141.13	351.7	-413.8	-311.0	0.00	0.00	0.00
4,900.0	11.22	310.36	4,844.3	-179.33	356.7	-419.8	-315.5	2.00	-2.00	0.00
5,000.0	9.22	310.36	4,942.7	-277.74	368.2	-433.3	-325.7	2.00	-2.00	0.00
5,100.0	7.22	310.36	5,041.7	-376.71	377.5	-444.2	-333.8	2.00	-2.00	0.00
5,200.0	5.22	310.36	5,141.1	-476.11	384.5	-452.5	-340.1	2.00	-2.00	0.00
5,300.0	3.22	310.36	5,240.8	-575.84	389.3	-458.1	-344.3	2.00	-2.00	0.00
5,400.0	1.22	310.36	5,340.8	-675.76	391.8	-461.0	-346.5	2.00	-2.00	0.00
EOD TO VERTICAL										
5,460.9	0.00	310.36	5,401.7	-736.65	392.2	-461.5	-346.9	2.00	-2.00	0.00
5,500.0	0.00	0.00	5,440.8	-775.75	392.2	-461.5	-346.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,540.8	-875.75	392.2	-461.5	-346.9	0.00	0.00	0.00
5,700.0	0.00	0.00	5,640.8	-975.75	392.2	-461.5	-346.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,740.8	-1,075.75	392.2	-461.5	-346.9	0.00	0.00	0.00
5,900.0	0.00	0.00	5,840.8	-1,175.75	392.2	-461.5	-346.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,940.8	-1,275.75	392.2	-461.5	-346.9	0.00	0.00	0.00
KOP (12°/100ft BUR)										
6,095.9	0.00	0.00	6,036.7	-1,371.65	392.2	-461.5	-346.9	0.00	0.00	0.00
6,100.0	0.49	179.48	6,040.8	-1,375.75	392.2	-461.5	-346.8	11.87	11.87	0.00
6,200.0	12.49	179.48	6,139.9	-1,474.93	380.9	-461.4	-335.6	12.00	12.00	0.00
6,300.0	24.49	179.48	6,234.6	-1,569.60	349.3	-461.1	-304.1	12.00	12.00	0.00
SHARON SPRINGS										
6,340.8	29.39	179.48	6,271.0	-1,606.00	330.8	-460.9	-285.7	12.00	12.00	0.00
6,400.0	36.49	179.48	6,320.6	-1,655.62	298.6	-460.7	-253.8	12.00	12.00	0.00
SHARON SPRINGS "A"										
6,404.2	36.99	179.48	6,324.0	-1,659.00	296.1	-460.6	-251.3	12.00	12.00	0.00
SHARON SPRINGS "B"										
6,444.4	41.81	179.48	6,355.0	-1,690.00	270.6	-460.4	-225.9	12.00	12.00	0.00
NIORARA "A" CHALK										
6,484.8	46.67	179.48	6,384.0	-1,719.00	242.4	-460.1	-197.8	12.00	12.00	0.00
6,500.0	48.49	179.48	6,394.2	-1,729.23	231.2	-460.0	-186.7	12.00	12.00	0.00
NIORARA "A" MARL										
6,508.8	49.54	179.48	6,400.0	-1,735.00	224.6	-460.0	-180.1	12.00	12.00	0.00
6,600.0	60.49	179.48	6,452.2	-1,787.21	150.0	-459.3	-105.9	12.00	12.00	0.00
NIORARA "B" CHALK										
6,618.5	62.70	179.48	6,461.0	-1,796.00	133.7	-459.2	-89.7	12.00	12.00	0.00
NIORARA "B" MARL										
6,696.6	72.08	179.48	6,491.0	-1,826.00	61.7	-458.5	-18.1	12.00	12.00	0.00
6,700.0	72.49	179.48	6,492.0	-1,827.03	58.4	-458.5	-14.9	12.00	12.00	0.00
START OF TANGENT										
6,720.9	74.99	179.48	6,497.9	-1,832.88	38.4	-458.3	5.1	12.00	12.00	0.00
6,800.0	75.00	179.48	6,518.4	-1,853.36	-38.0	-457.6	81.1	0.01	0.01	0.00
END OF TANGENT										
6,820.9	75.00	179.48	6,523.8	-1,858.77	-58.2	-457.4	101.2	0.00	0.00	0.00
NIORARA "C" CHALK										
6,852.9	78.83	179.48	6,531.0	-1,866.00	-89.3	-457.1	132.1	11.98	11.98	0.00
6,900.0	84.49	179.48	6,537.8	-1,872.84	-136.0	-456.7	178.5	12.00	12.00	0.00

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Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4665.0usft
Site:	NW NE SEC. 22 T5N R63W 6th P.M.	North Reference:	True
Well:	NORTH PLATTE FEDERAL K21-O24-22HNC	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)
HZ LP *NEW* (P4) - NP FED K21-O24-22HNC										
6,945.9	89.99	179.48	6,540.0	-1,875.05	-181.8	-456.3	224.1	12.00	12.00	0.00
7,000.0	90.00	179.48	6,540.0	-1,875.05	-235.9	-455.8	277.9	0.01	0.01	0.00
7,100.0	90.00	179.48	6,540.0	-1,875.05	-335.9	-454.9	377.3	0.00	0.00	0.00
7,200.0	90.00	179.48	6,540.0	-1,875.05	-435.9	-454.0	476.8	0.00	0.00	0.00
7,300.0	90.00	179.48	6,540.0	-1,875.05	-535.9	-453.1	576.3	0.00	0.00	0.00
7,400.0	90.00	179.48	6,540.0	-1,875.05	-635.9	-452.2	675.7	0.00	0.00	0.00
7,500.0	90.00	179.48	6,540.0	-1,875.05	-735.9	-451.3	775.2	0.00	0.00	0.00
7,600.0	90.00	179.48	6,540.0	-1,875.05	-835.9	-450.4	874.7	0.00	0.00	0.00
7,700.0	90.00	179.48	6,540.0	-1,875.05	-935.9	-449.4	974.1	0.00	0.00	0.00
7,800.0	90.00	179.48	6,540.0	-1,875.04	-1,035.9	-448.5	1,073.6	0.00	0.00	0.00
7,900.0	90.00	179.48	6,540.0	-1,875.04	-1,135.8	-447.6	1,173.1	0.00	0.00	0.00
8,000.0	90.00	179.48	6,540.0	-1,875.04	-1,235.8	-446.7	1,272.5	0.00	0.00	0.00
8,100.0	90.00	179.48	6,540.0	-1,875.04	-1,335.8	-445.8	1,372.0	0.00	0.00	0.00
8,200.0	90.00	179.48	6,540.0	-1,875.04	-1,435.8	-444.9	1,471.4	0.00	0.00	0.00
8,300.0	90.00	179.48	6,540.0	-1,875.04	-1,535.8	-444.0	1,570.9	0.00	0.00	0.00
8,400.0	90.00	179.48	6,540.0	-1,875.04	-1,635.8	-443.1	1,670.4	0.00	0.00	0.00
8,500.0	90.00	179.48	6,540.0	-1,875.04	-1,735.8	-442.2	1,769.8	0.00	0.00	0.00
8,600.0	90.00	179.48	6,540.0	-1,875.04	-1,835.8	-441.3	1,869.3	0.00	0.00	0.00
8,700.0	90.00	179.48	6,540.0	-1,875.04	-1,935.8	-440.4	1,968.8	0.00	0.00	0.00
8,800.0	90.00	179.48	6,540.0	-1,875.04	-2,035.8	-439.5	2,068.2	0.00	0.00	0.00
8,900.0	90.00	179.48	6,540.0	-1,875.04	-2,135.8	-438.5	2,167.7	0.00	0.00	0.00
9,000.0	90.00	179.48	6,540.0	-1,875.04	-2,235.8	-437.6	2,267.1	0.00	0.00	0.00
9,100.0	90.00	179.48	6,540.0	-1,875.03	-2,335.8	-436.7	2,366.6	0.00	0.00	0.00
9,200.0	90.00	179.48	6,540.0	-1,875.03	-2,435.8	-435.8	2,466.1	0.00	0.00	0.00
9,300.0	90.00	179.48	6,540.0	-1,875.03	-2,535.8	-434.9	2,565.5	0.00	0.00	0.00
9,400.0	90.00	179.48	6,540.0	-1,875.03	-2,635.8	-434.0	2,665.0	0.00	0.00	0.00
9,500.0	90.00	179.48	6,540.0	-1,875.03	-2,735.8	-433.1	2,764.5	0.00	0.00	0.00
9,600.0	90.00	179.48	6,540.0	-1,875.03	-2,835.8	-432.2	2,863.9	0.00	0.00	0.00
9,700.0	90.00	179.48	6,540.0	-1,875.03	-2,935.8	-431.3	2,963.4	0.00	0.00	0.00
9,800.0	90.00	179.48	6,540.0	-1,875.03	-3,035.8	-430.4	3,062.8	0.00	0.00	0.00
9,900.0	90.00	179.48	6,540.0	-1,875.02	-3,135.8	-429.5	3,162.3	0.00	0.00	0.00
10,000.0	90.00	179.48	6,540.0	-1,875.02	-3,235.8	-428.5	3,261.8	0.00	0.00	0.00
10,100.0	90.00	179.48	6,540.0	-1,875.02	-3,335.8	-427.6	3,361.2	0.00	0.00	0.00
10,200.0	90.00	179.48	6,540.0	-1,875.02	-3,435.8	-426.7	3,460.7	0.00	0.00	0.00
10,300.0	90.00	179.48	6,540.0	-1,875.02	-3,535.7	-425.8	3,560.2	0.00	0.00	0.00
10,400.0	90.00	179.48	6,540.0	-1,875.02	-3,635.7	-424.9	3,659.6	0.00	0.00	0.00
10,500.0	90.00	179.48	6,540.0	-1,875.01	-3,735.7	-424.0	3,759.1	0.00	0.00	0.00
10,600.0	90.00	179.48	6,540.0	-1,875.01	-3,835.7	-423.1	3,858.6	0.00	0.00	0.00
10,700.0	90.00	179.48	6,540.0	-1,875.01	-3,935.7	-422.2	3,958.0	0.00	0.00	0.00
10,800.0	90.00	179.48	6,540.0	-1,875.01	-4,035.7	-421.3	4,057.5	0.00	0.00	0.00
10,900.0	90.00	179.48	6,540.0	-1,875.01	-4,135.7	-420.4	4,156.9	0.00	0.00	0.00
11,000.0	90.00	179.48	6,540.0	-1,875.00	-4,235.7	-419.4	4,256.4	0.00	0.00	0.00
11,100.0	90.00	179.48	6,540.0	-1,875.00	-4,335.7	-418.5	4,355.9	0.00	0.00	0.00
BHL (P4) - NP FED K21-O24-22HNC										
11,168.8	90.00	179.48	6,540.0	-1,875.00	-4,404.5	-417.9	4,424.3	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well NORTH PLATTE FEDERAL K21-O24-22HNC
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4665.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4665.0usft
Site:	NW NE SEC. 22 T5N R63W 6th P.M.	North Reference:	True
Well:	NORTH PLATTE FEDERAL K21-O24-22HNC	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #4		

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,476.6	3,452.0	PARKMAN			
6,340.8	6,271.0	SHARON SPRINGS			
6,404.2	6,324.0	SHARON SPRINGS "A"			
6,444.4	6,355.0	SHARON SPRINGS "B"			
6,484.8	6,384.0	NIOBRARA "A" CHALK			
6,508.8	6,400.0	NIOBRARA "A" MARL			
6,618.5	6,461.0	NIOBRARA "B" CHALK			
6,696.6	6,491.0	NIOBRARA "B" MARL			
6,852.9	6,531.0	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
1,950.0	1,950.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2,550.0	2,545.6	40.5	-47.7	EOB TO 12° INC
4,861.0	4,806.1	351.7	-413.8	END OF TANGENT
5,460.9	5,401.7	392.2	-461.5	EOD TO VERTICAL
6,095.9	6,036.7	392.2	-461.5	KOP (12°/100ft BUR)
6,720.9	6,497.9	38.4	-458.3	START OF TANGENT
6,820.9	6,523.8	-58.2	-457.4	END OF TANGENT
6,945.9	6,540.0	-181.8	-456.3	HZ LP *NEW* (P4) - NP FED K21-O24-22HNC
11,168.8	6,540.0	-4,404.5	-417.9	BHL (P4) - NP FED K21-O24-22HNC