

# **BONANZA CREEK ENERGY INC.**

**WELD COUNTY, COLORADO (NAD 83)**

**SE SE SEC. 22 T4N R63W 6th P.M.**

**MUSTANG X44-D14-22HNB**

**ORIGINAL WELLBORE**

**30 November, 2016**

**Plan: PROPOSAL #2**

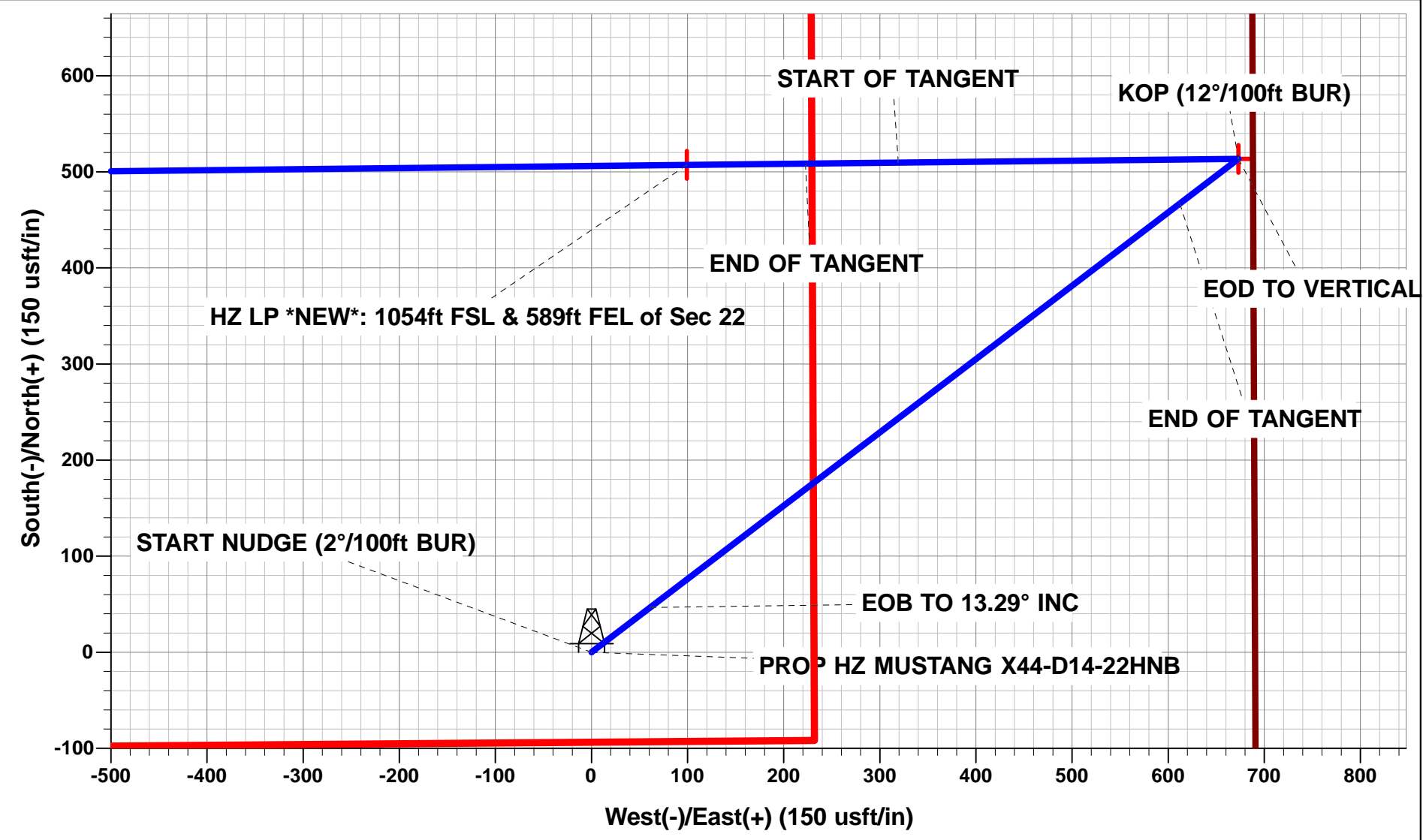




Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SE SE SEC. 22 T4N R63W 6th P.M.  
Well: MUSTANG X44-D14-22HNB  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2

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: 548ft FSL & 690ft FEL of Sec 22
1700.0	1700.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2358.8	2364.7	13.29	52.66	46.6	61.0	-55.5	76.8	EOB TO 13.29° INC
5291.9	5378.6	13.29	52.66	466.9	612.1	-556.4	769.8	END OF TANGENT
5950.7	6043.4	0.00	0.00	513.5	673.1	-611.9	846.6	EOD TO VERTICAL
5980.7	6073.4	0.00	0.00	513.5	673.1	-611.9	846.6	KOP (12°/100ft BUR)
6441.9	6698.4	75.00	269.37	509.6	319.2	-260.6	1200.5	START OF TANGENT
6467.8	6798.4	75.00	269.37	508.5	222.6	-164.7	1297.1	END OF TANGENT
6484.0	6923.4	90.00	269.37	507.2	99.0	-42.1	1420.7	HZ LP *NEW*: 1054ft FSL & 589ft FEL of Sec 22
6484.0	11144.3	90.00	269.37	460.8	-4121.6	4147.3	5641.6	BHL: 1042ft FSL & 470ft FWL of Sec 22

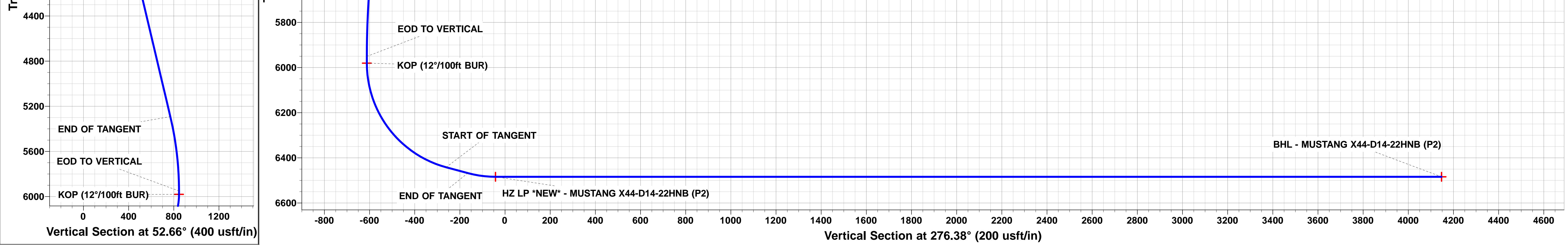
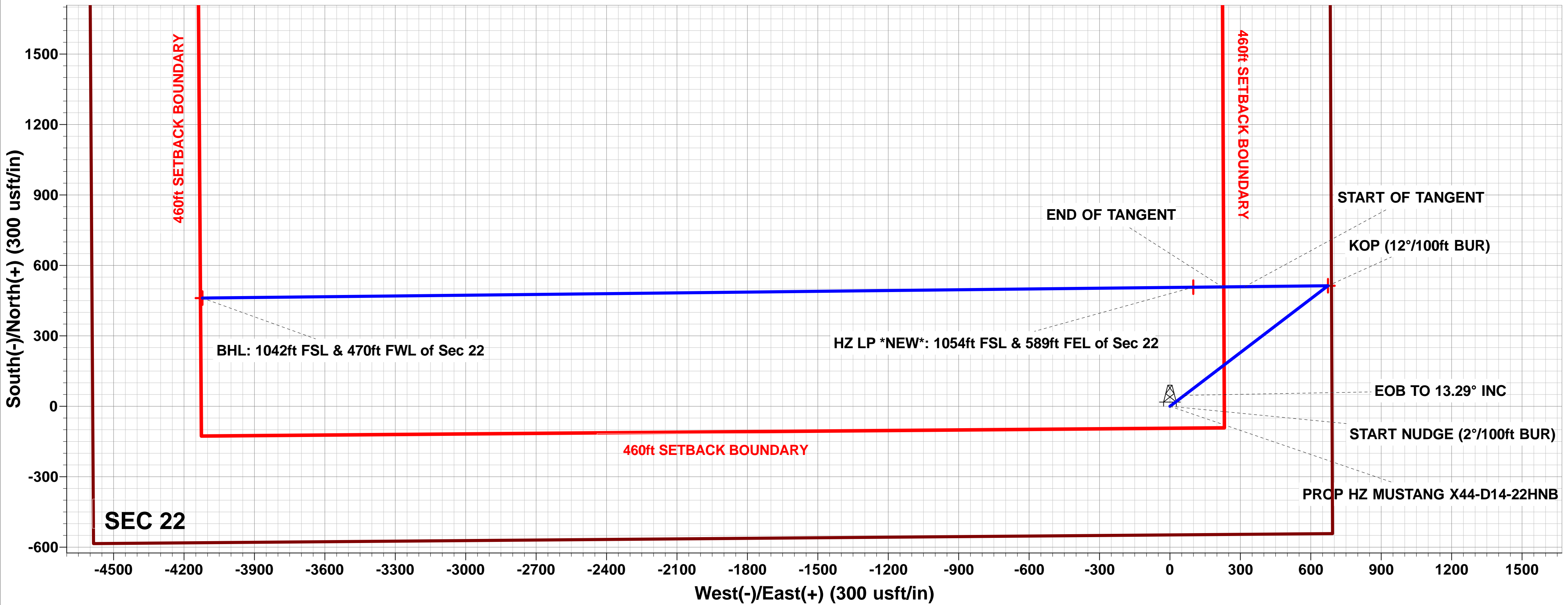
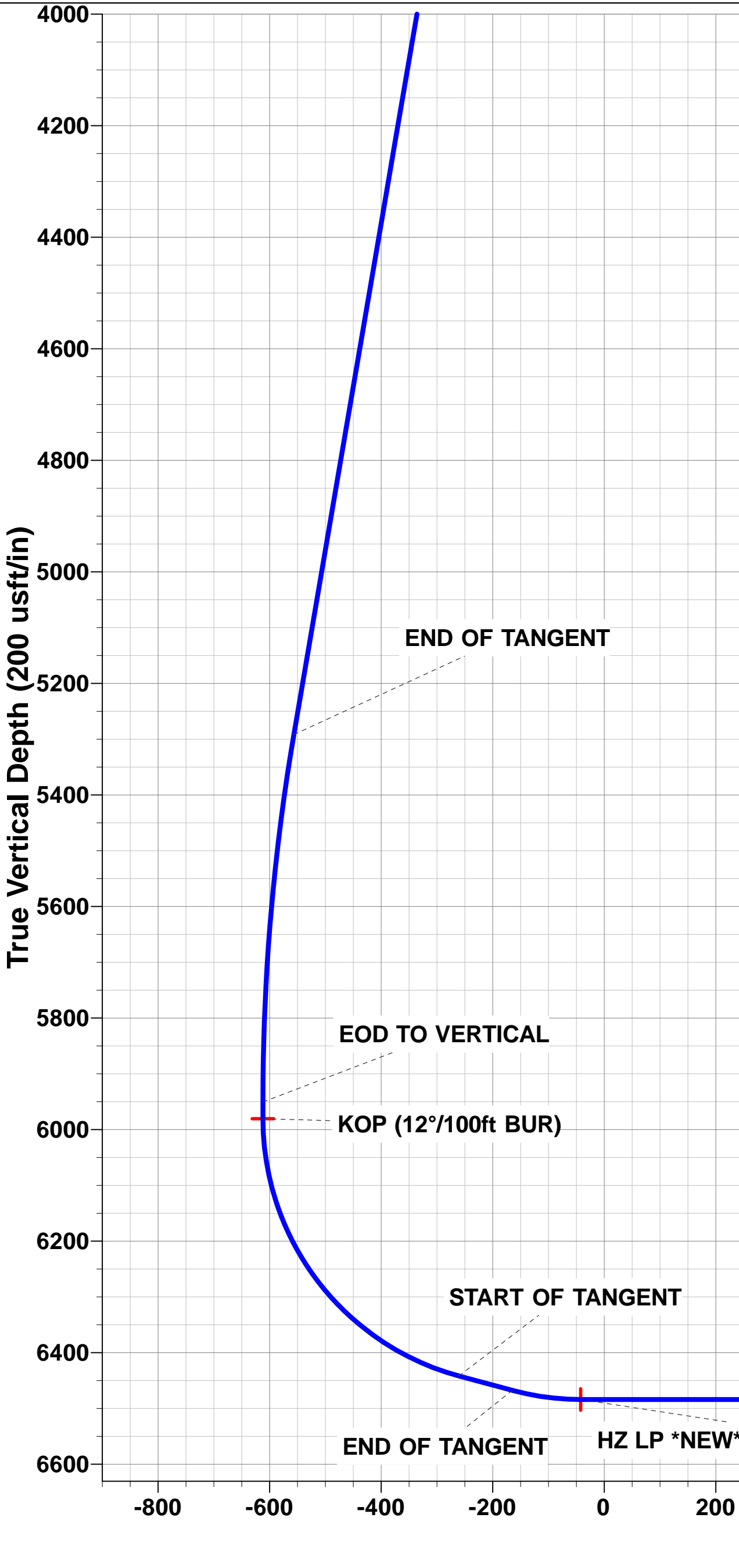
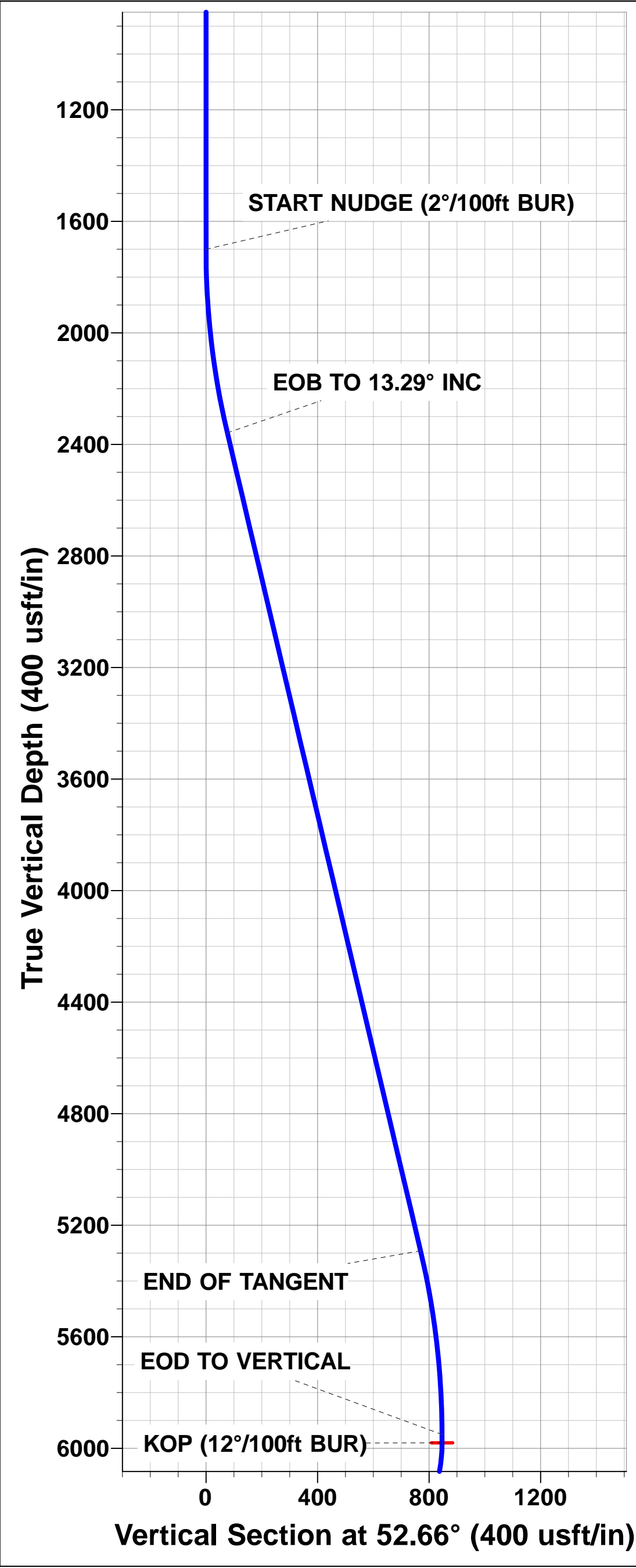
WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - MUSTANG X44-D14-22HNB (P2)	5980.7	513.5	673.1	40.293651	-104.414631
BHL - MUSTANG X44-D14-22HNB (P2)	6484.0	460.8	-4121.6	40.293506	-104.431819
HZ LP *NEW* - MUSTANG X44-D14-22HNB (P2)	6484.0	507.2	99.1	40.293634	-104.416689



PROPOSED LOCAL COORDINATES:  
SHL: 5488ft FSL & 690ft FEL of Sec 22  
HZ LP \*NEW\*: 1054ft FSL & 589ft FEL of Sec 26  
BHL: 1042ft FSL & 470ft FWL of Sec 22

Azimuths to True North  
Magnetic North: 8.08°

Magnetic Field  
Strength: 52443.8snT  
Dip Angle: 66.84°  
Date: 02/11/2016  
Model: IGRF2015



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MUSTANG X44-D14-22HNB
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB @ 4804.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB @ 4804.0usft
<b>Site:</b>	SE SE SEC. 22 T4N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	MUSTANG X44-D14-22HNB	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

<b>Project</b>	WELD COUNTY, COLORADO (NAD 83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

<b>Site</b>	SE SE SEC. 22 T4N R63W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,351,101.64 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,302,157.25 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.292108
		<b>Longitude:</b>	-104.416792
		<b>Grid Convergence:</b>	0.70 °

<b>Well</b>	MUSTANG X44-D14-22HNB		
<b>Well Position</b>	<b>+N-S</b>	48.8 usft	<b>Northing:</b>
	<b>+E-W</b>	-70.3 usft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>
			usft
			<b>Latitude:</b>
			40.292242
			<b>Longitude:</b>
			-104.417044
			<b>Ground Level:</b>
			4,787.0 usft

<b>Wellbore</b>	ORIGINAL WELLBORE				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	02/11/2016	8.08	66.84	52,444

<b>Design</b>	PROPOSAL #2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N-S (usft)</b>	<b>+E-W (usft)</b>	<b>Direction (°)</b>
	6,484.0	0.0	0.0	276.38

<b>Plan Sections</b>											
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	-4,804.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	-3,104.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,364.7	13.29	52.66	2,358.8	-2,445.2	46.6	61.0	2.00	2.00	0.00	52.66	
5,378.6	13.29	52.66	5,291.9	487.9	466.9	612.1	0.00	0.00	0.00	0.00	
6,043.4	0.00	0.00	5,950.7	1,146.7	513.5	673.1	2.00	-2.00	0.00	180.00	
6,073.4	0.00	0.00	5,980.7	1,176.7	513.5	673.1	0.00	0.00	0.00	0.00	KOP - MUSTANG >
6,698.4	75.00	269.37	6,441.9	1,637.9	509.6	319.2	12.00	12.00	0.00	269.37	
6,798.4	75.00	269.37	6,467.8	1,663.8	508.5	222.6	0.00	0.00	0.00	0.00	
6,923.4	90.00	269.37	6,484.0	1,680.0	507.2	99.1	12.00	12.00	0.00	0.00	
11,144.3	90.00	269.37	6,484.0	1,680.0	460.8	-4,121.6	0.00	0.00	0.00	49.93	BHL - MUSTANG X

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MUSTANG X44-D14-22HNB
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB @ 4804.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB @ 4804.0usft
<b>Site:</b>	SE SE SEC. 22 T4N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	MUSTANG X44-D14-22HNB	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## 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)
<b>SHL: 548ft FSL &amp; 690ft FEL of Sec 22</b>										
0.0	0.00	0.00	0.0	4,804.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,704.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,604.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,504.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,404.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,304.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,204.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	4,104.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	4,004.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,904.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,804.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,704.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,604.00	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,504.00	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,404.00	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,304.00	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	3,204.00	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
1,700.0	0.00	0.00	1,700.0	3,104.00	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	2.00	52.66	1,800.0	3,004.02	1.1	1.4	-1.3	2.00	2.00	0.00
1,900.0	4.00	52.66	1,899.8	2,904.16	4.2	5.5	-5.0	2.00	2.00	0.00
2,000.0	6.00	52.66	1,999.5	2,804.55	9.5	12.5	-11.3	2.00	2.00	0.00
2,100.0	8.00	52.66	2,098.7	2,705.30	16.9	22.2	-20.1	2.00	2.00	0.00
2,200.0	10.00	52.66	2,197.5	2,606.53	26.4	34.6	-31.5	2.00	2.00	0.00
2,300.0	12.00	52.66	2,295.6	2,508.38	38.0	49.8	-45.2	2.00	2.00	0.00
<b>EOB TO 13.29° INC</b>										
2,364.7	13.29	52.66	2,358.8	2,445.25	46.6	61.0	-55.5	2.00	2.00	0.00
2,400.0	13.29	52.66	2,393.1	2,410.89	51.5	67.5	-61.3	0.00	0.00	0.00
2,500.0	13.29	52.66	2,490.4	2,313.57	65.4	85.8	-78.0	0.00	0.00	0.00
2,600.0	13.29	52.66	2,587.7	2,216.25	79.4	104.1	-94.6	0.00	0.00	0.00
2,700.0	13.29	52.66	2,685.1	2,118.93	93.3	122.3	-111.2	0.00	0.00	0.00
2,800.0	13.29	52.66	2,782.4	2,021.61	107.3	140.6	-127.8	0.00	0.00	0.00
2,900.0	13.29	52.66	2,879.7	1,924.29	121.2	158.9	-144.4	0.00	0.00	0.00
3,000.0	13.29	52.66	2,977.0	1,826.97	135.2	177.2	-161.1	0.00	0.00	0.00
3,100.0	13.29	52.66	3,074.3	1,729.65	149.1	195.5	-177.7	0.00	0.00	0.00
3,200.0	13.29	52.66	3,171.7	1,632.33	163.1	213.7	-194.3	0.00	0.00	0.00
3,300.0	13.29	52.66	3,269.0	1,535.01	177.0	232.0	-210.9	0.00	0.00	0.00
3,400.0	13.29	52.66	3,366.3	1,437.69	191.0	250.3	-227.5	0.00	0.00	0.00
3,500.0	13.29	52.66	3,463.6	1,340.37	204.9	268.6	-244.2	0.00	0.00	0.00
3,600.0	13.29	52.66	3,560.9	1,243.05	218.9	286.9	-260.8	0.00	0.00	0.00
3,700.0	13.29	52.66	3,658.3	1,145.73	232.8	305.2	-277.4	0.00	0.00	0.00
3,800.0	13.29	52.66	3,755.6	1,048.41	246.8	323.4	-294.0	0.00	0.00	0.00
3,900.0	13.29	52.66	3,852.9	951.09	260.7	341.7	-310.6	0.00	0.00	0.00
4,000.0	13.29	52.66	3,950.2	853.77	274.6	360.0	-327.3	0.00	0.00	0.00
4,100.0	13.29	52.66	4,047.5	756.45	288.6	378.3	-343.9	0.00	0.00	0.00
4,200.0	13.29	52.66	4,144.9	659.13	302.5	396.6	-360.5	0.00	0.00	0.00
4,300.0	13.29	52.66	4,242.2	561.81	316.5	414.9	-377.1	0.00	0.00	0.00
4,400.0	13.29	52.66	4,339.5	464.49	330.4	433.1	-393.7	0.00	0.00	0.00
4,500.0	13.29	52.66	4,436.8	367.17	344.4	451.4	-410.4	0.00	0.00	0.00
4,600.0	13.29	52.66	4,534.1	269.85	358.3	469.7	-427.0	0.00	0.00	0.00
4,700.0	13.29	52.66	4,631.5	172.53	372.3	488.0	-443.6	0.00	0.00	0.00
4,800.0	13.29	52.66	4,728.8	75.21	386.2	506.3	-460.2	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MUSTANG X44-D14-22HNB
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB @ 4804.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB @ 4804.0usft
<b>Site:</b>	SE SE SEC. 22 T4N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	MUSTANG X44-D14-22HNB	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## 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)
4,900.0	13.29	52.66	4,826.1	-22.11	400.2	524.6	-476.8	0.00	0.00	0.00
5,000.0	13.29	52.66	4,923.4	-119.43	414.1	542.8	-493.5	0.00	0.00	0.00
5,100.0	13.29	52.66	5,020.8	-216.75	428.1	561.1	-510.1	0.00	0.00	0.00
5,200.0	13.29	52.66	5,118.1	-314.07	442.0	579.4	-526.7	0.00	0.00	0.00
5,300.0	13.29	52.66	5,215.4	-411.39	456.0	597.7	-543.3	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>5,378.6</b>	<b>13.29</b>	<b>52.66</b>	<b>5,291.9</b>	<b>-487.88</b>	<b>466.9</b>	<b>612.1</b>	<b>-556.4</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,400.0	12.87	52.66	5,312.7	-508.73	469.9	615.9	-559.9	2.00	-2.00	0.00
5,500.0	10.87	52.66	5,410.6	-606.59	482.3	632.3	-574.7	2.00	-2.00	0.00
5,600.0	8.87	52.66	5,509.1	-705.10	492.7	645.9	-587.1	2.00	-2.00	0.00
5,700.0	6.87	52.66	5,608.2	-804.16	501.0	656.8	-597.0	2.00	-2.00	0.00
5,800.0	4.87	52.66	5,707.6	-903.63	507.2	664.9	-604.4	2.00	-2.00	0.00
5,900.0	2.87	52.66	5,807.4	-1,003.39	511.3	670.2	-609.3	2.00	-2.00	0.00
6,000.0	0.87	52.66	5,907.3	-1,103.34	513.3	672.8	-611.6	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
<b>6,043.4</b>	<b>0.00</b>	<b>0.00</b>	<b>5,950.7</b>	<b>-1,146.73</b>	<b>513.5</b>	<b>673.1</b>	<b>-611.9</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
<b>KOP (12°/100ft BUR)</b>										
<b>6,073.4</b>	<b>0.00</b>	<b>0.00</b>	<b>5,980.7</b>	<b>-1,176.73</b>	<b>513.5</b>	<b>673.1</b>	<b>-611.9</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,100.0	3.20	269.37	6,007.3	-1,203.32	513.5	672.4	-611.1	12.02	12.02	0.00
6,200.0	15.20	269.37	6,105.9	-1,301.86	513.3	656.4	-595.3	12.00	12.00	0.00
6,300.0	27.20	269.37	6,198.9	-1,394.92	512.9	620.3	-559.5	12.00	12.00	0.00
6,400.0	39.20	269.37	6,282.4	-1,478.45	512.3	565.7	-505.2	12.00	12.00	0.00
6,500.0	51.20	269.37	6,352.8	-1,548.79	511.5	494.8	-434.9	12.00	12.00	0.00
6,600.0	63.20	269.37	6,406.9	-1,602.86	510.6	411.0	-351.7	12.00	12.00	0.00
<b>START OF TANGENT</b>										
<b>6,698.4</b>	<b>75.00</b>	<b>269.37</b>	<b>6,441.9</b>	<b>-1,637.90</b>	<b>509.6</b>	<b>319.2</b>	<b>-260.6</b>	<b>12.00</b>	<b>12.00</b>	<b>0.00</b>
6,700.0	75.00	269.37	6,442.3	-1,638.32	509.6	317.7	-259.1	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>6,798.4</b>	<b>75.00</b>	<b>269.37</b>	<b>6,467.8</b>	<b>-1,663.79</b>	<b>508.5</b>	<b>222.6</b>	<b>-164.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,800.0	75.20	269.37	6,468.2	-1,664.20	508.5	221.1	-163.2	12.26	12.26	0.00
6,900.0	87.20	269.37	6,483.5	-1,679.48	507.4	122.4	-65.3	12.00	12.00	0.00
<b>HZ LP *NEW*: 1054ft FSL &amp; 589ft FEL of Sec 22</b>										
<b>6,923.4</b>	<b>90.00</b>	<b>269.37</b>	<b>6,484.0</b>	<b>-1,680.05</b>	<b>507.2</b>	<b>99.0</b>	<b>-42.1</b>	<b>11.98</b>	<b>11.98</b>	<b>0.00</b>
7,000.0	90.00	269.37	6,484.0	-1,680.05	506.3	22.4	34.0	0.00	0.00	0.00
7,100.0	90.00	269.37	6,484.0	-1,680.05	505.2	-77.5	133.2	0.00	0.00	0.00
7,200.0	90.00	269.37	6,484.0	-1,680.05	504.1	-177.5	232.5	0.00	0.00	0.00
7,300.0	90.00	269.37	6,484.0	-1,680.05	503.0	-277.5	331.7	0.00	0.00	0.00
7,400.0	90.00	269.37	6,484.0	-1,680.05	501.9	-377.5	431.0	0.00	0.00	0.00
7,500.0	90.00	269.37	6,484.0	-1,680.05	500.8	-477.5	530.2	0.00	0.00	0.00
7,600.0	90.00	269.37	6,484.0	-1,680.05	499.7	-577.5	629.5	0.00	0.00	0.00
7,700.0	90.00	269.37	6,484.0	-1,680.05	498.7	-677.5	728.7	0.00	0.00	0.00
7,800.0	90.00	269.37	6,484.0	-1,680.04	497.6	-777.5	828.0	0.00	0.00	0.00
7,900.0	90.00	269.37	6,484.0	-1,680.04	496.5	-877.5	927.2	0.00	0.00	0.00
8,000.0	90.00	269.37	6,484.0	-1,680.04	495.4	-977.5	1,026.5	0.00	0.00	0.00
8,100.0	90.00	269.37	6,484.0	-1,680.04	494.3	-1,077.5	1,125.7	0.00	0.00	0.00
8,200.0	90.00	269.37	6,484.0	-1,680.04	493.2	-1,177.5	1,225.0	0.00	0.00	0.00
8,300.0	90.00	269.37	6,484.0	-1,680.04	492.1	-1,277.5	1,324.2	0.00	0.00	0.00
8,400.0	90.00	269.37	6,484.0	-1,680.04	491.0	-1,377.5	1,423.5	0.00	0.00	0.00
8,500.0	90.00	269.37	6,484.0	-1,680.04	489.9	-1,477.5	1,522.7	0.00	0.00	0.00
8,600.0	90.00	269.37	6,484.0	-1,680.04	488.8	-1,577.5	1,622.0	0.00	0.00	0.00
8,700.0	90.00	269.37	6,484.0	-1,680.04	487.7	-1,677.5	1,721.3	0.00	0.00	0.00
8,800.0	90.00	269.37	6,484.0	-1,680.04	486.6	-1,777.4	1,820.5	0.00	0.00	0.00
8,900.0	90.00	269.37	6,484.0	-1,680.04	485.5	-1,877.4	1,919.8	0.00	0.00	0.00



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MUSTANG X44-D14-22HNB
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB @ 4804.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB @ 4804.0usft
<b>Site:</b>	SE SE SEC. 22 T4N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	MUSTANG X44-D14-22HNB	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## 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)
9,000.0	90.00	269.37	6,484.0	-1,680.04	484.4	-1,977.4	2,019.0	0.00	0.00	0.00
9,100.0	90.00	269.37	6,484.0	-1,680.03	483.3	-2,077.4	2,118.3	0.00	0.00	0.00
9,200.0	90.00	269.37	6,484.0	-1,680.03	482.2	-2,177.4	2,217.5	0.00	0.00	0.00
9,300.0	90.00	269.37	6,484.0	-1,680.03	481.1	-2,277.4	2,316.8	0.00	0.00	0.00
9,400.0	90.00	269.37	6,484.0	-1,680.03	480.0	-2,377.4	2,416.0	0.00	0.00	0.00
9,500.0	90.00	269.37	6,484.0	-1,680.03	478.9	-2,477.4	2,515.3	0.00	0.00	0.00
9,600.0	90.00	269.37	6,484.0	-1,680.03	477.8	-2,577.4	2,614.5	0.00	0.00	0.00
9,700.0	90.00	269.37	6,484.0	-1,680.03	476.7	-2,677.4	2,713.8	0.00	0.00	0.00
9,800.0	90.00	269.37	6,484.0	-1,680.03	475.6	-2,777.4	2,813.0	0.00	0.00	0.00
9,900.0	90.00	269.37	6,484.0	-1,680.02	474.5	-2,877.4	2,912.3	0.00	0.00	0.00
10,000.0	90.00	269.37	6,484.0	-1,680.02	473.4	-2,977.4	3,011.5	0.00	0.00	0.00
10,100.0	90.00	269.37	6,484.0	-1,680.02	472.3	-3,077.4	3,110.8	0.00	0.00	0.00
10,200.0	90.00	269.37	6,484.0	-1,680.02	471.2	-3,177.4	3,210.0	0.00	0.00	0.00
10,300.0	90.00	269.37	6,484.0	-1,680.02	470.1	-3,277.4	3,309.3	0.00	0.00	0.00
10,400.0	90.00	269.37	6,484.0	-1,680.02	469.0	-3,377.4	3,408.5	0.00	0.00	0.00
10,500.0	90.00	269.37	6,484.0	-1,680.01	467.9	-3,477.3	3,507.8	0.00	0.00	0.00
10,600.0	90.00	269.37	6,484.0	-1,680.01	466.8	-3,577.3	3,607.1	0.00	0.00	0.00
10,700.0	90.00	269.37	6,484.0	-1,680.01	465.7	-3,677.3	3,706.3	0.00	0.00	0.00
10,800.0	90.00	269.37	6,484.0	-1,680.01	464.6	-3,777.3	3,805.6	0.00	0.00	0.00
10,900.0	90.00	269.37	6,484.0	-1,680.01	463.5	-3,877.3	3,904.8	0.00	0.00	0.00
11,000.0	90.00	269.37	6,484.0	-1,680.00	462.4	-3,977.3	4,004.1	0.00	0.00	0.00
11,100.0	90.00	269.37	6,484.0	-1,680.00	461.3	-4,077.3	4,103.3	0.00	0.00	0.00
<b>BHL: 1042ft FSL &amp; 470ft FWL of Sec 22</b>										
<b>11,144.3</b>	<b>90.00</b>	<b>269.37</b>	<b>6,484.0</b>	<b>-1,680.00</b>	<b>460.8</b>	<b>-4,121.6</b>	<b>4,147.3</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
EXIST VERT CERVI # - plan misses target center by 1997.8usft at 10715.3usft MD (6484.0 TVD, 465.5 N, -3692.7 E) - Circle (radius 30.0)	0.00	0.00	7,552.0	-1,222.7	-3,674.2	1,349,882.16	3,298,427.58	40.288885	-104.430214
KOP - MUSTANG X44 - plan hits target center - Point	0.00	0.00	5,980.7	513.5	673.1	1,351,671.24	3,302,753.11	40.293651	-104.414631
HZ LP *NEW* - MUST1 - plan hits target center - Point	0.00	0.00	6,484.0	507.2	99.1	1,351,657.93	3,302,179.26	40.293634	-104.416689
BHL - MUSTANG X44 - plan hits target center - Point	0.00	0.00	6,484.0	460.8	-4,121.6	1,351,560.03	3,297,959.59	40.293506	-104.431819

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MUSTANG X44-D14-22HNB
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB @ 4804.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB @ 4804.0usft
<b>Site:</b>	SE SE SEC. 22 T4N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	MUSTANG X44-D14-22HNB	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.0	0.0	0.0	0.0	SHL: 548ft FSL & 690ft FEL of Sec 22
1,700.0	1,700.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2,364.7	2,358.8	46.6	61.0	EOB TO 13.29° INC
5,378.6	5,291.9	466.9	612.1	END OF TANGENT
6,043.4	5,950.7	513.5	673.1	EOD TO VERTICAL
6,073.4	5,980.7	513.5	673.1	KOP (12°/100ft BUR)
6,698.4	6,441.9	509.6	319.2	START OF TANGENT
6,798.4	6,467.8	508.5	222.6	END OF TANGENT
6,923.4	6,484.0	507.2	99.0	HZ LP *NEW*: 1054ft FSL & 589ft FEL of Sec 22
11,144.3	6,484.0	460.8	-4,121.6	BHL: 1042ft FSL & 470ft FWL of Sec 22