

# **BONANZA CREEK ENERGY INC.**

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

**SW SW SEC. 28 T5N R61W 6th P.M.**

**PRONGHORN 14-44-28HNC**

**ORIGINAL WELLBORE**

**03 November, 2014**

**Plan: PROPOSAL #1**

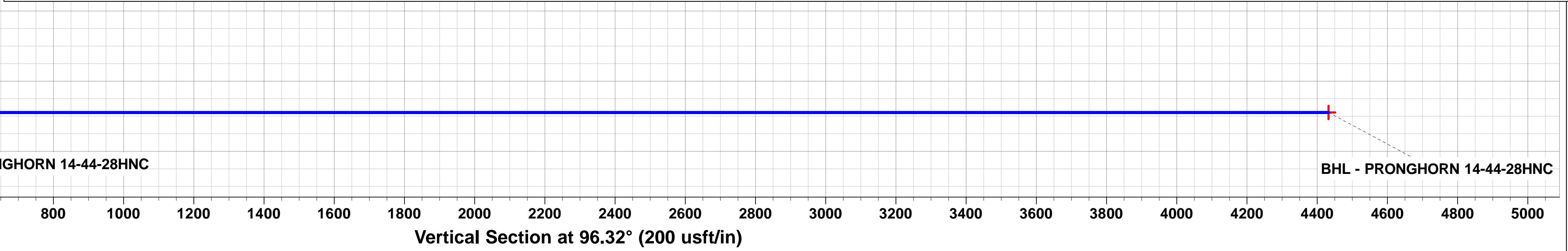
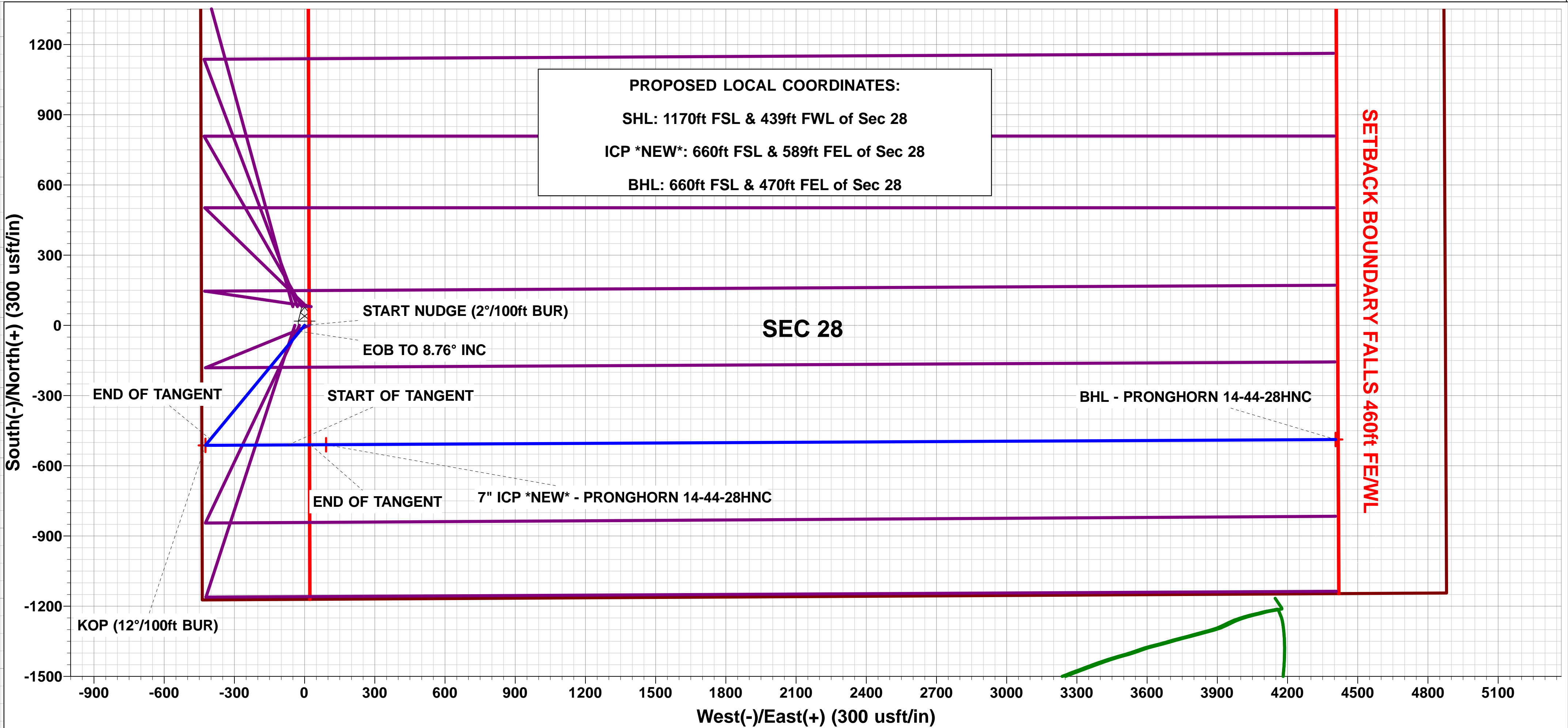
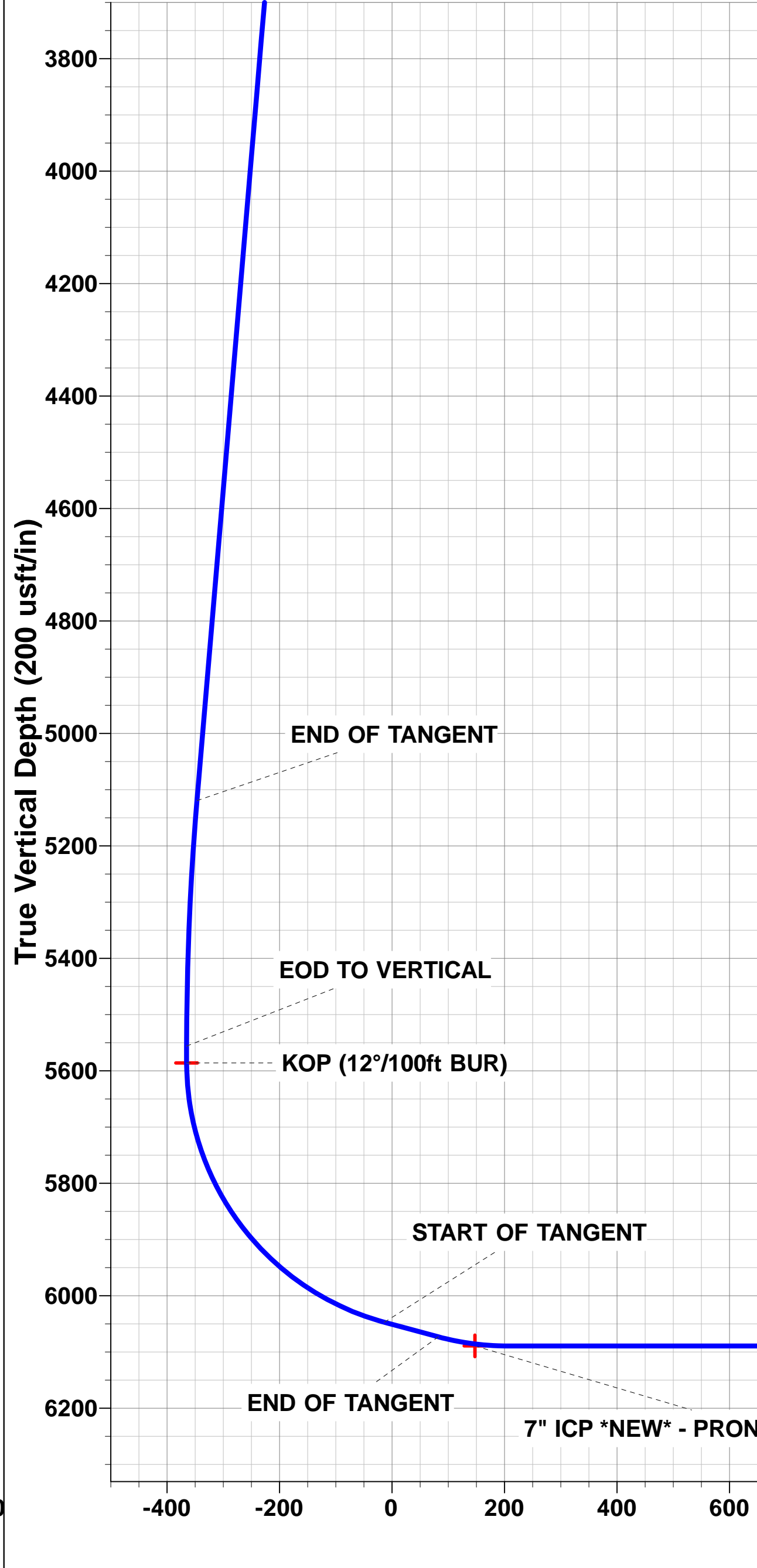
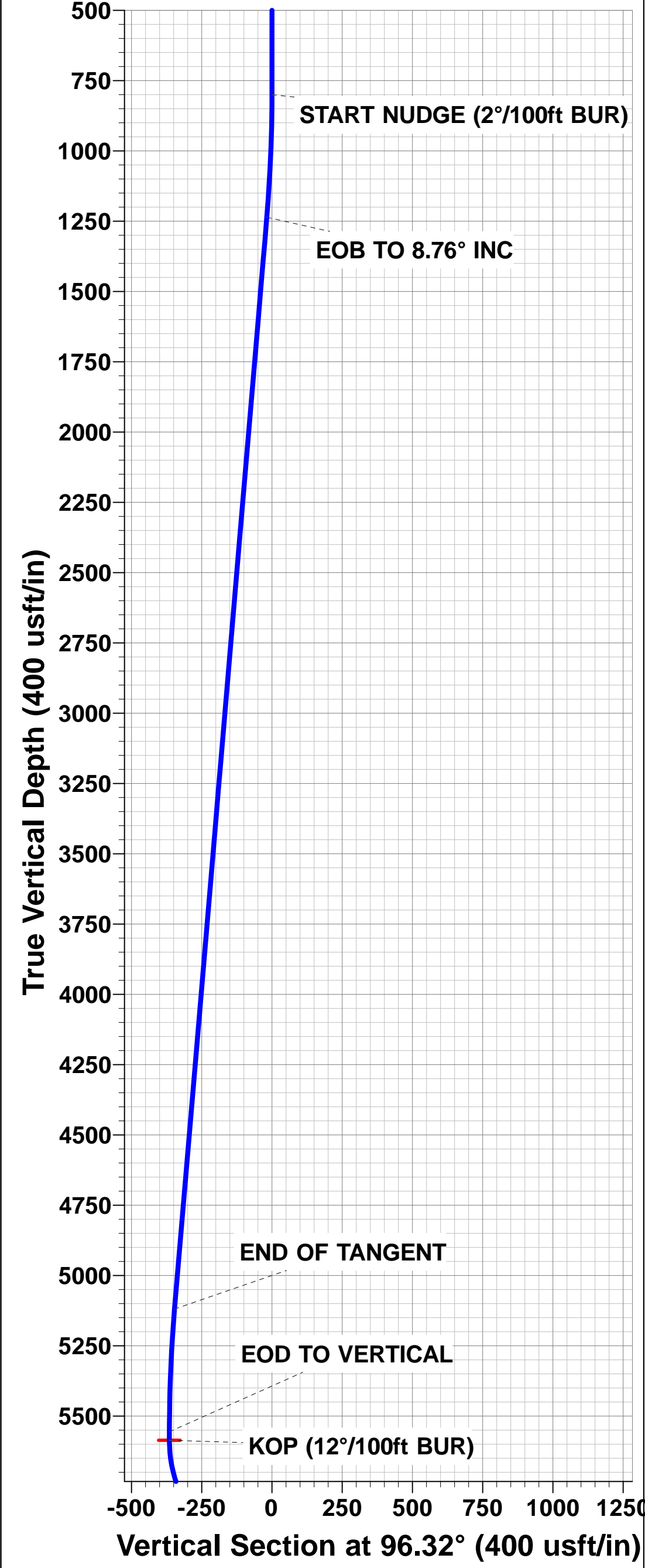
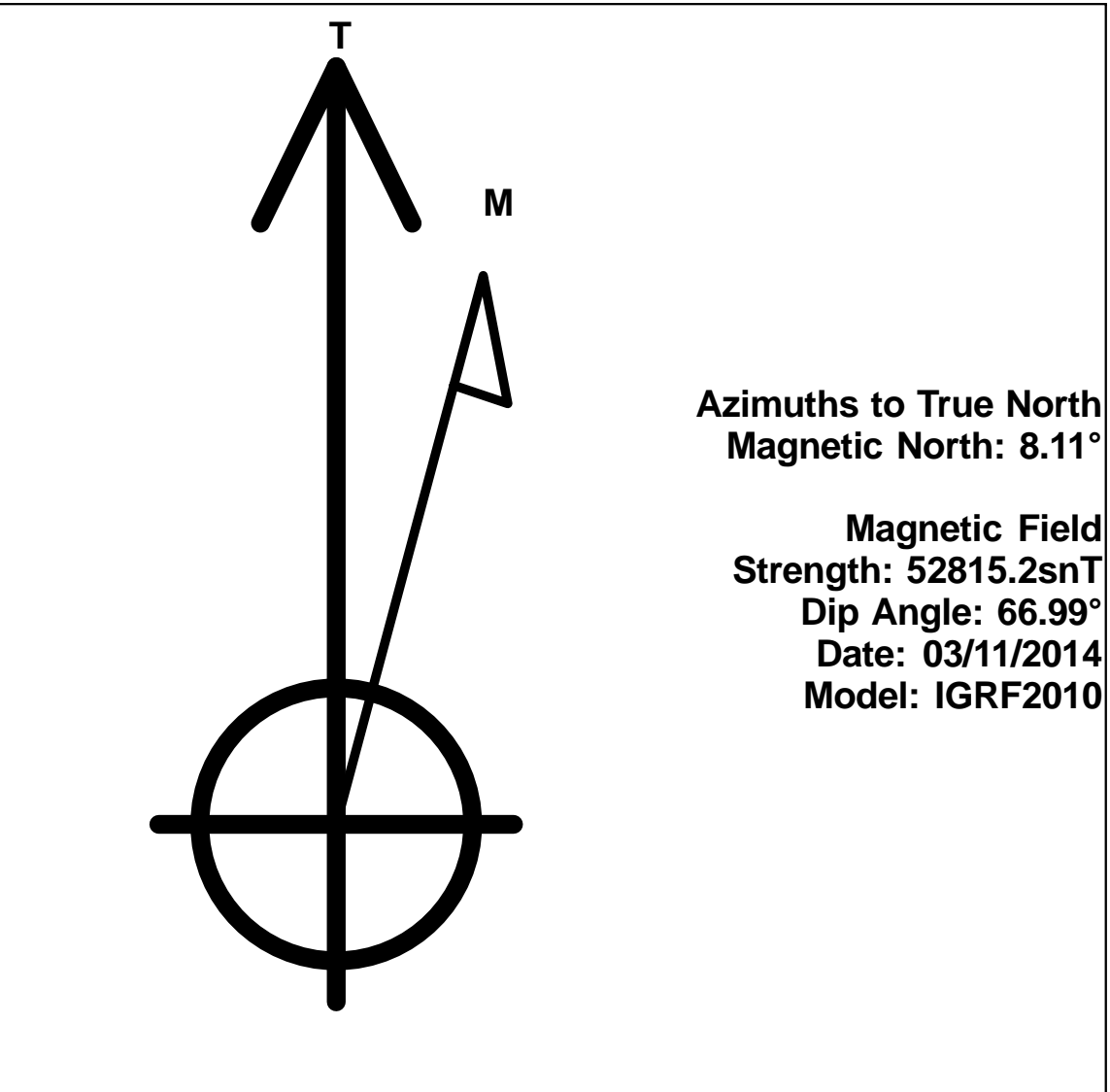
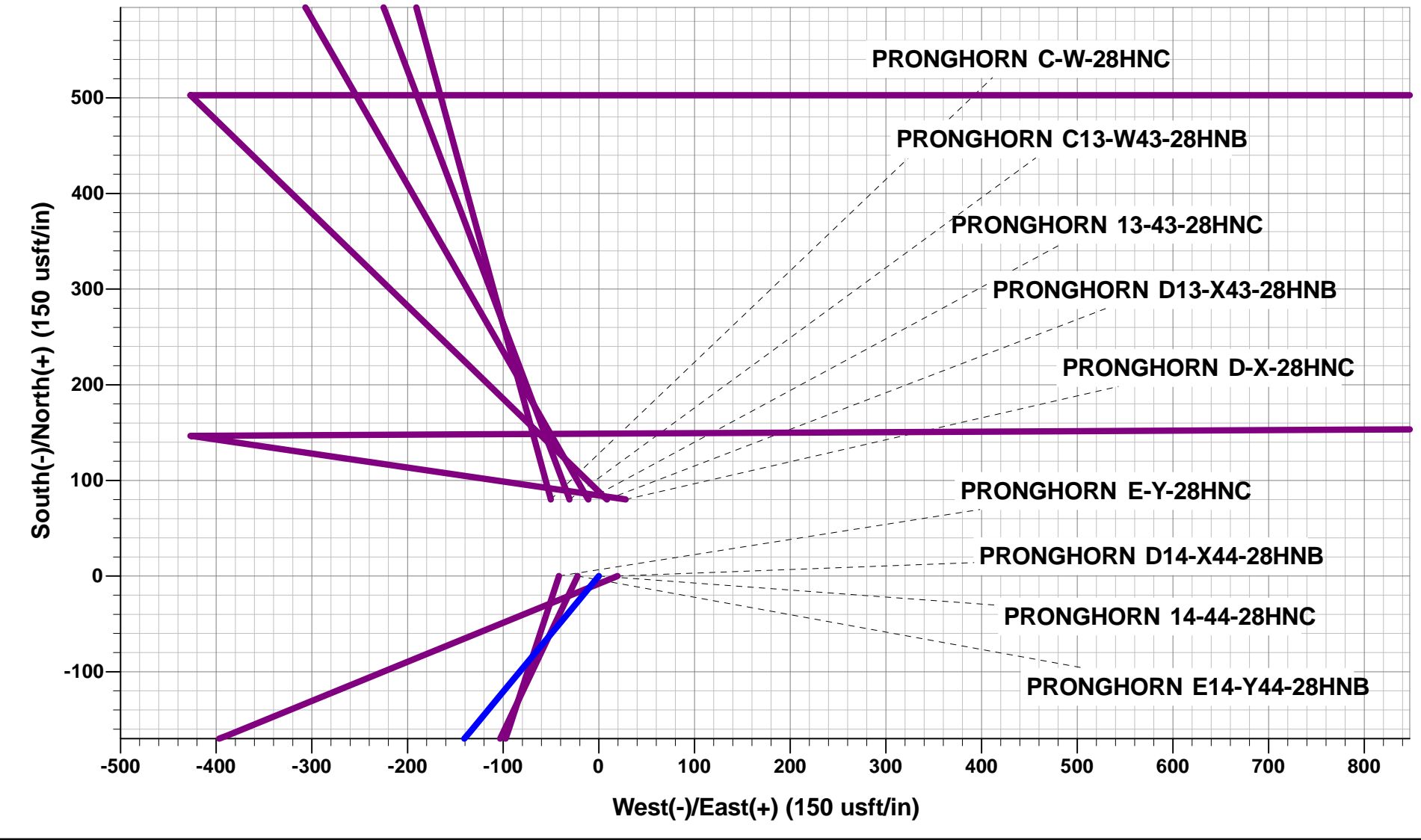




Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SW SW SEC. 28 T5N R61W 6th P.M.  
Well: PRONGHORN 14-44-28HNC  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

ANNOTATIONS								
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
800.0	800.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1236.3	1238.0	8.76	219.59	-25.8	-21.3	-18.3	33.4	EOB TO 8.76° INC
5119.8	5167.3	8.76	219.59	-486.9	-402.7	-346.7	631.9	END OF TANGENT
5556.1	5605.4	0.00	0.00	-512.7	-424.0	-365.0	665.3	EOD TO VERTICAL
5586.1	5635.4	0.00	0.00	-512.7	-424.0	-365.0	665.3	KOP (12°/100ft BUR)
6047.3	6260.4	75.00	89.70	-510.8	-70.1	-13.5	1019.2	START OF TANGENT
6073.2	6360.4	75.00	89.70	-510.3	26.5	82.5	1115.8	END OF TANGENT
6089.4	6485.4	90.00	89.70	-509.7	150.0	205.2	1239.4	7" ICP *NEW* - PRONGHORN 14-44-28HNC
6089.4	10741.0	90.00	89.71	-487.8	4405.6	4432.5	5495.0	BHL - PRONGHORN 14-44-28HNC

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - PRONGHORN 14-44-28HNC	5586.1	-512.7	-424.0	40.366383	-104.223532
BHL - PRONGHORN 14-44-28HNC	6089.4	-487.8	4405.6	40.366450	-104.206200
7" ICP *NEW* - PRONGHORN 14-44-28HNC	6089.4	-510.0	92.0	40.366390	-104.221680



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PRONGHORN 14-44-28HNC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4612.4usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4612.4usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 28 T5N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	PRONGHORN 14-44-28HNC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

<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

Site	SW SW SEC. 28 T5N R61W 6th P.M.				
Site Position:		Northing:	1,379,471.89usft	Latitude:	40.368010
From:	Lat/Long	Easting:	3,356,038.93usft	Longitude:	-104.222190
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft	Grid Convergence:	0.83 °

Well	PRONGHORN 14-44-28HNC					
Well Position	+N/-S	-80.2 usft	Northing:	1,379,392.47 usft	Latitude:	40.367790
	+E/-W	50.2 usft	Easting:	3,356,090.23 usft	Longitude:	-104.222010
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,595.4 usft

<b>Wellbore</b>	ORIGINAL WELLBORE				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	03/11/2014	8.11	66.99	52,815

<b>Design</b>	PROPOSAL #1				
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<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>	
	6,089.4	0.0	0.0	96.32	

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	-4,612.4	0.0	0.0	0.00	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	-3,812.4	0.0	0.0	0.00	0.00	0.00	0.00	
1,238.0	8.76	219.59	1,236.3	-3,376.1	-25.8	-21.3	2.00	2.00	0.00	219.59	
5,167.3	8.76	219.59	5,119.8	507.4	-486.9	-402.7	0.00	0.00	0.00	0.00	
5,605.4	0.00	0.00	5,556.1	943.7	-512.7	-424.0	2.00	-2.00	0.00	180.00	
5,635.4	0.00	0.00	5,586.1	973.7	-512.7	-424.0	0.00	0.00	0.00	0.00	KOP - PRONGHOF
6,260.4	75.00	89.70	6,047.3	1,434.9	-510.8	-70.1	12.00	12.00	0.00	89.70	
6,360.4	75.00	89.70	6,073.2	1,460.8	-510.3	26.5	0.00	0.00	0.00	0.00	
6,485.4	90.00	89.70	6,089.4	1,477.0	-509.7	150.0	12.00	12.00	0.00	0.00	
10,741.0	90.00	89.71	6,089.4	1,477.0	-487.8	4,405.6	0.00	0.00	0.00	82.63	BHL - PRONGHOR

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PRONGHORN 14-44-28HNC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4612.4usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4612.4usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 28 T5N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	PRONGHORN 14-44-28HNC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
0.0	0.00	0.00	0.0	4,612.40	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,512.40	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,412.40	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,312.40	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,212.40	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,112.40	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,012.40	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,912.40	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
800.0	0.00	0.00	800.0	3,812.40	0.0	0.0	0.0	0.00	0.00	0.00
900.0	2.00	219.59	900.0	3,712.42	-1.3	-1.1	-1.0	2.00	2.00	0.00
1,000.0	4.00	219.59	999.8	3,612.56	-5.4	-4.4	-3.8	2.00	2.00	0.00
1,100.0	6.00	219.59	1,099.5	3,512.95	-12.1	-10.0	-8.6	2.00	2.00	0.00
1,200.0	8.00	219.59	1,198.7	3,413.70	-21.5	-17.8	-15.3	2.00	2.00	0.00
EOB TO 8.76° INC										
1,238.0	8.76	219.59	1,236.3	3,376.07	-25.8	-21.3	-18.3	2.00	2.00	0.00
1,300.0	8.76	219.59	1,297.6	3,314.83	-33.0	-27.3	-23.5	0.00	0.00	0.00
1,400.0	8.76	219.59	1,396.4	3,215.99	-44.8	-37.0	-31.9	0.00	0.00	0.00
1,500.0	8.76	219.59	1,495.2	3,117.16	-56.5	-46.7	-40.2	0.00	0.00	0.00
1,600.0	8.76	219.59	1,594.1	3,018.33	-68.2	-56.4	-48.6	0.00	0.00	0.00
1,700.0	8.76	219.59	1,692.9	2,919.49	-80.0	-66.1	-56.9	0.00	0.00	0.00
1,800.0	8.76	219.59	1,791.7	2,820.66	-91.7	-75.8	-65.3	0.00	0.00	0.00
1,900.0	8.76	219.59	1,890.6	2,721.83	-103.5	-85.6	-73.7	0.00	0.00	0.00
2,000.0	8.76	219.59	1,989.4	2,622.99	-115.2	-95.3	-82.0	0.00	0.00	0.00
2,100.0	8.76	219.59	2,088.2	2,524.16	-126.9	-105.0	-90.4	0.00	0.00	0.00
2,200.0	8.76	219.59	2,187.1	2,425.33	-138.7	-114.7	-98.7	0.00	0.00	0.00
2,300.0	8.76	219.59	2,285.9	2,326.49	-150.4	-124.4	-107.1	0.00	0.00	0.00
2,400.0	8.76	219.59	2,384.7	2,227.66	-162.1	-134.1	-115.4	0.00	0.00	0.00
2,500.0	8.76	219.59	2,483.6	2,128.83	-173.9	-143.8	-123.8	0.00	0.00	0.00
2,600.0	8.76	219.59	2,582.4	2,029.99	-185.6	-153.5	-132.1	0.00	0.00	0.00
2,700.0	8.76	219.59	2,681.2	1,931.16	-197.3	-163.2	-140.5	0.00	0.00	0.00
2,800.0	8.76	219.59	2,780.1	1,832.33	-209.1	-172.9	-148.9	0.00	0.00	0.00
2,900.0	8.76	219.59	2,878.9	1,733.49	-220.8	-182.6	-157.2	0.00	0.00	0.00
3,000.0	8.76	219.59	2,977.7	1,634.66	-232.6	-192.3	-165.6	0.00	0.00	0.00
3,100.0	8.76	219.59	3,076.6	1,535.83	-244.3	-202.0	-173.9	0.00	0.00	0.00
3,200.0	8.76	219.59	3,175.4	1,437.00	-256.0	-211.7	-182.3	0.00	0.00	0.00
3,300.0	8.76	219.59	3,274.2	1,338.16	-267.8	-221.4	-190.6	0.00	0.00	0.00
3,400.0	8.76	219.59	3,373.1	1,239.33	-279.5	-231.2	-199.0	0.00	0.00	0.00
3,500.0	8.76	219.59	3,471.9	1,140.50	-291.2	-240.9	-207.3	0.00	0.00	0.00
3,600.0	8.76	219.59	3,570.7	1,041.66	-303.0	-250.6	-215.7	0.00	0.00	0.00
3,700.0	8.76	219.59	3,669.6	942.83	-314.7	-260.3	-224.1	0.00	0.00	0.00
3,800.0	8.76	219.59	3,768.4	844.00	-326.5	-270.0	-232.4	0.00	0.00	0.00
3,900.0	8.76	219.59	3,867.2	745.16	-338.2	-279.7	-240.8	0.00	0.00	0.00
4,000.0	8.76	219.59	3,966.1	646.33	-349.9	-289.4	-249.1	0.00	0.00	0.00
4,100.0	8.76	219.59	4,064.9	547.50	-361.7	-299.1	-257.5	0.00	0.00	0.00
4,200.0	8.76	219.59	4,163.7	448.66	-373.4	-308.8	-265.8	0.00	0.00	0.00
4,300.0	8.76	219.59	4,262.6	349.83	-385.1	-318.5	-274.2	0.00	0.00	0.00
4,400.0	8.76	219.59	4,361.4	251.00	-396.9	-328.2	-282.6	0.00	0.00	0.00
4,500.0	8.76	219.59	4,460.2	152.16	-408.6	-337.9	-290.9	0.00	0.00	0.00
4,600.0	8.76	219.59	4,559.1	53.33	-420.4	-347.6	-299.3	0.00	0.00	0.00
4,700.0	8.76	219.59	4,657.9	-45.50	-432.1	-357.3	-307.6	0.00	0.00	0.00
4,800.0	8.76	219.59	4,756.7	-144.34	-443.8	-367.0	-316.0	0.00	0.00	0.00
4,900.0	8.76	219.59	4,855.6	-243.17	-455.6	-376.8	-324.3	0.00	0.00	0.00
5,000.0	8.76	219.59	4,954.4	-342.00	-467.3	-386.5	-332.7	0.00	0.00	0.00
5,100.0	8.76	219.59	5,053.2	-440.84	-479.0	-396.2	-341.0	0.00	0.00	0.00
END OF TANGENT										
5,167.3	8.76	219.59	5,119.8	-507.37	-486.9	-402.7	-346.7	0.00	0.00	0.00
5,200.0	8.11	219.59	5,152.1	-539.70	-490.6	-405.8	-349.3	2.00	-2.00	0.00
5,300.0	6.11	219.59	5,251.3	-638.93	-500.2	-413.6	-356.1	2.00	-2.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PRONGHORN 14-44-28HNC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4612.4usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4612.4usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 28 T5N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	PRONGHORN 14-44-28HNC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
5,400.0	4.11	219.59	5,350.9	-738.52	-507.0	-419.3	-361.0	2.00	-2.00	0.00
5,500.0	2.11	219.59	5,450.8	-838.37	-511.2	-422.8	-363.9	2.00	-2.00	0.00
5,600.0	0.11	219.59	5,550.7	-938.35	-512.7	-424.0	-365.0	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
<b>5,605.4</b>	<b>0.00</b>	<b>0.00</b>	<b>5,556.1</b>	<b>-943.70</b>	<b>-512.7</b>	<b>-424.0</b>	<b>-365.0</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
<b>KOP (12°/100ft BUR)</b>										
<b>5,635.4</b>	<b>0.00</b>	<b>0.00</b>	<b>5,586.1</b>	<b>-973.70</b>	<b>-512.7</b>	<b>-424.0</b>	<b>-365.0</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,700.0	7.76	89.70	5,650.6	-1,038.15	-512.7	-419.6	-360.7	12.00	12.00	0.00
5,800.0	19.76	89.70	5,747.5	-1,135.10	-512.6	-395.9	-337.1	12.00	12.00	0.00
5,900.0	31.76	89.70	5,837.4	-1,225.00	-512.3	-352.5	-294.0	12.00	12.00	0.00
6,000.0	43.76	89.70	5,916.3	-1,303.92	-512.0	-291.4	-233.3	12.00	12.00	0.00
6,100.0	55.76	89.70	5,980.8	-1,368.40	-511.6	-215.2	-157.6	12.00	12.00	0.00
6,200.0	67.76	89.70	6,028.0	-1,415.64	-511.1	-127.3	-70.2	12.00	12.00	0.00
<b>START OF TANGENT</b>										
<b>6,260.4</b>	<b>75.00</b>	<b>89.70</b>	<b>6,047.3</b>	<b>-1,434.90</b>	<b>-510.8</b>	<b>-70.1</b>	<b>-13.5</b>	<b>12.00</b>	<b>12.00</b>	<b>0.00</b>
6,300.0	75.00	89.70	6,057.6	-1,445.16	-510.6	-31.8	24.6	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>6,360.4</b>	<b>75.00</b>	<b>89.70</b>	<b>6,073.2</b>	<b>-1,460.78</b>	<b>-510.3</b>	<b>26.5</b>	<b>82.5</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,400.0	79.76	89.70	6,081.8	-1,469.44	-510.1	65.2	120.9	12.00	12.00	0.00
<b>7" ICP *NEW* - PRONGHORN 14-44-28HNC</b>										
<b>6,485.4</b>	<b>90.00</b>	<b>89.70</b>	<b>6,089.4</b>	<b>-1,477.05</b>	<b>-509.7</b>	<b>150.0</b>	<b>205.2</b>	<b>12.00</b>	<b>12.00</b>	<b>0.00</b>
6,500.0	90.00	89.70	6,089.4	-1,477.05	-509.6	164.7	219.8	0.00	0.00	0.00
6,600.0	90.00	89.70	6,089.4	-1,477.05	-509.1	264.7	319.1	0.00	0.00	0.00
6,700.0	90.00	89.70	6,089.4	-1,477.05	-508.6	364.7	418.4	0.00	0.00	0.00
6,800.0	90.00	89.70	6,089.4	-1,477.05	-508.0	464.7	517.8	0.00	0.00	0.00
6,900.0	90.00	89.70	6,089.4	-1,477.05	-507.5	564.7	617.1	0.00	0.00	0.00
7,000.0	90.00	89.70	6,089.4	-1,477.05	-507.0	664.7	716.4	0.00	0.00	0.00
7,100.0	90.00	89.70	6,089.4	-1,477.05	-506.5	764.7	815.8	0.00	0.00	0.00
7,200.0	90.00	89.70	6,089.4	-1,477.05	-506.0	864.7	915.1	0.00	0.00	0.00
7,300.0	90.00	89.70	6,089.4	-1,477.05	-505.4	964.7	1,014.4	0.00	0.00	0.00
7,400.0	90.00	89.70	6,089.4	-1,477.04	-504.9	1,064.7	1,113.8	0.00	0.00	0.00
7,500.0	90.00	89.70	6,089.4	-1,477.04	-504.4	1,164.7	1,213.1	0.00	0.00	0.00
7,600.0	90.00	89.70	6,089.4	-1,477.04	-503.9	1,264.7	1,312.5	0.00	0.00	0.00
7,700.0	90.00	89.70	6,089.4	-1,477.04	-503.4	1,364.7	1,411.8	0.00	0.00	0.00
7,800.0	90.00	89.70	6,089.4	-1,477.04	-502.8	1,464.7	1,511.1	0.00	0.00	0.00
7,900.0	90.00	89.70	6,089.4	-1,477.04	-502.3	1,564.7	1,610.5	0.00	0.00	0.00
8,000.0	90.00	89.70	6,089.4	-1,477.04	-501.8	1,664.7	1,709.8	0.00	0.00	0.00
8,100.0	90.00	89.70	6,089.4	-1,477.04	-501.3	1,764.7	1,809.1	0.00	0.00	0.00
8,200.0	90.00	89.70	6,089.4	-1,477.04	-500.8	1,864.7	1,908.5	0.00	0.00	0.00
8,300.0	90.00	89.70	6,089.4	-1,477.04	-500.3	1,964.7	2,007.8	0.00	0.00	0.00
8,400.0	90.00	89.70	6,089.4	-1,477.04	-499.7	2,064.7	2,107.1	0.00	0.00	0.00
8,500.0	90.00	89.70	6,089.4	-1,477.04	-499.2	2,164.7	2,206.5	0.00	0.00	0.00
8,600.0	90.00	89.70	6,089.4	-1,477.04	-498.7	2,264.7	2,305.8	0.00	0.00	0.00
8,700.0	90.00	89.71	6,089.4	-1,477.03	-498.2	2,364.7	2,405.1	0.00	0.00	0.00
8,800.0	90.00	89.71	6,089.4	-1,477.03	-497.7	2,464.7	2,504.5	0.00	0.00	0.00
8,900.0	90.00	89.71	6,089.4	-1,477.03	-497.2	2,564.7	2,603.8	0.00	0.00	0.00
9,000.0	90.00	89.71	6,089.4	-1,477.03	-496.7	2,664.7	2,703.1	0.00	0.00	0.00
9,100.0	90.00	89.71	6,089.4	-1,477.03	-496.1	2,764.7	2,802.5	0.00	0.00	0.00
9,200.0	90.00	89.71	6,089.4	-1,477.03	-495.6	2,864.7	2,901.8	0.00	0.00	0.00
9,300.0	90.00	89.71	6,089.4	-1,477.03	-495.1	2,964.7	3,001.1	0.00	0.00	0.00
9,400.0	90.00	89.71	6,089.4	-1,477.02	-494.6	3,064.7	3,100.5	0.00	0.00	0.00
9,500.0	90.00	89.71	6,089.4	-1,477.02	-494.1	3,164.7	3,199.8	0.00	0.00	0.00
9,600.0	90.00	89.71	6,089.4	-1,477.02	-493.6	3,264.7	3,299.1	0.00	0.00	0.00
9,700.0	90.00	89.71	6,089.4	-1,477.02	-493.1	3,364.7	3,398.5	0.00	0.00	0.00
9,800.0	90.00	89.71	6,089.4	-1,477.02	-492.6	3,464.7	3,497.8	0.00	0.00	0.00
9,900.0	90.00	89.71	6,089.4	-1,477.02	-492.0	3,564.7	3,597.1	0.00	0.00	0.00
10,000.0	90.00	89.71	6,089.4	-1,477.01	-491.5	3,664.6	3,696.5	0.00	0.00	0.00
10,100.0	90.00	89.71	6,089.4	-1,477.01	-491.0	3,764.6	3,795.8	0.00	0.00	0.00
10,200.0	90.00	89.71	6,089.4	-1,477.01	-490.5	3,864.6	3,895.2	0.00	0.00	0.00





<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PRONGHORN 14-44-28HNC
<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>TVD Reference:</b>	KB-EST @ 4612.4usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4612.4usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 28 T5N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	PRONGHORN 14-44-28HNC	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
10,300.0	90.00	89.71	6,089.4	-1,477.01	-490.0	3,964.6	3,994.5	0.00	0.00	0.00
10,400.0	90.00	89.71	6,089.4	-1,477.01	-489.5	4,064.6	4,093.8	0.00	0.00	0.00
10,500.0	90.00	89.71	6,089.4	-1,477.01	-489.0	4,164.6	4,193.2	0.00	0.00	0.00
10,600.0	90.00	89.71	6,089.4	-1,477.00	-488.5	4,264.6	4,292.5	0.00	0.00	0.00
10,700.0	90.00	89.71	6,089.4	-1,477.00	-488.0	4,364.6	4,391.8	0.00	0.00	0.00
<b>BHL - PRONGHORN 14-44-28HNC</b>										
<b>10,741.0</b>	<b>90.00</b>	<b>89.71</b>	<b>6,089.4</b>	<b>-1,477.00</b>	<b>-487.8</b>	<b>4,405.6</b>	<b>4,432.5</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Plan Annotations					
MD (usft)	TVD (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
800.0	800.0	0.0	0.0	START NUDGE (2°/100ft BUR)	
1,238.0	1,236.3	-25.8	-21.3	EOB TO 8.76° INC	
5,167.3	5,119.8	-486.9	-402.7	END OF TANGENT	
5,605.4	5,556.1	-512.7	-424.0	EOD TO VERTICAL	
5,635.4	5,586.1	-512.7	-424.0	KOP (12°/100ft BUR)	
6,260.4	6,047.3	-510.8	-70.1	START OF TANGENT	
6,360.4	6,073.2	-510.3	26.5	END OF TANGENT	
6,485.4	6,089.4	-509.7	150.0	7" ICP *NEW* - PRONGHORN 14-44-28HNC	
10,741.0	6,089.4	-487.8	4,405.6	BHL - PRONGHORN 14-44-28HNC	