

# **EXTRACTION OIL & GAS**

**WELD COUNTY, COLORADO**

**SEC. 36 T6N R66W 6th P.M.**

**HINER 36C-24W**

**ORIGINAL WELLBORE**

**01 March, 2014**

**Plan: PROPOSAL #1**



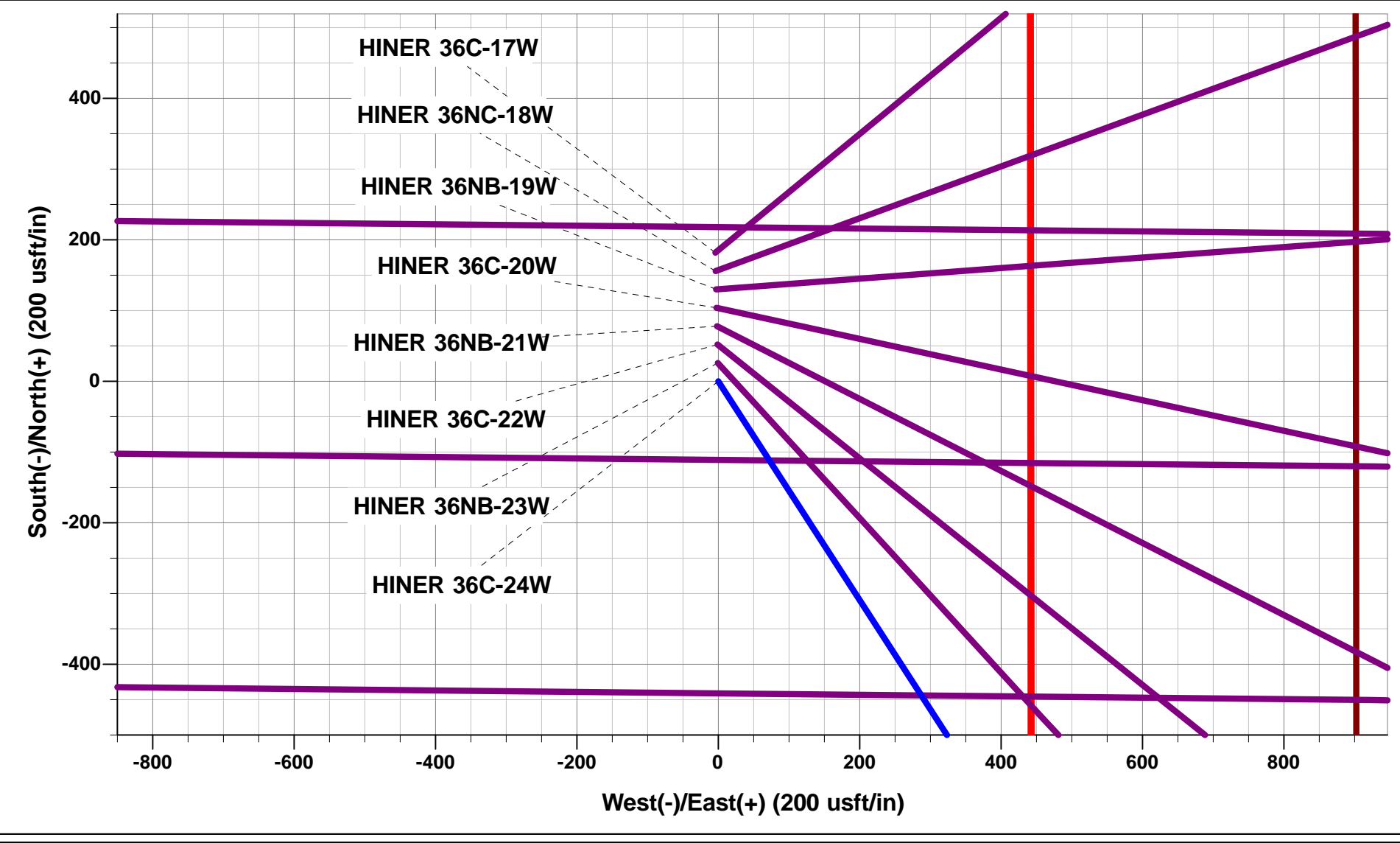


Project: WELD COUNTY, COLORADO  
Site: SEC. 36 T6N R66W 6th P.M.  
Well: HINER 36C-24W  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1



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)		
1919.8	1950.5	23.01	147.10	-191.4	123.8	-43.0	227.9	EOB TO 23.01° INC		
5352.6	5680.0	23.01	147.10	-1415.4	915.6	-317.7	1685.7	END OF TANGENT		
6472.4	6830.5	0.00	0.00	-1606.8	1039.4	-360.6	1913.7	EOD TO VERTICAL		
6502.4	6860.5	0.00	0.00	-1606.8	1039.4	-360.6	1913.7	KOP (9°/100ft BUR)		
7139.0	7860.5	90.00	270.20	-1604.6	402.8	228.7	2550.3	ICP - HINER 36C-24W *NEW*		
7139.0	12189.5	90.00	270.21	-1589.2	-3926.2	4235.6	6879.3	BHL - HINER 36C-24W		

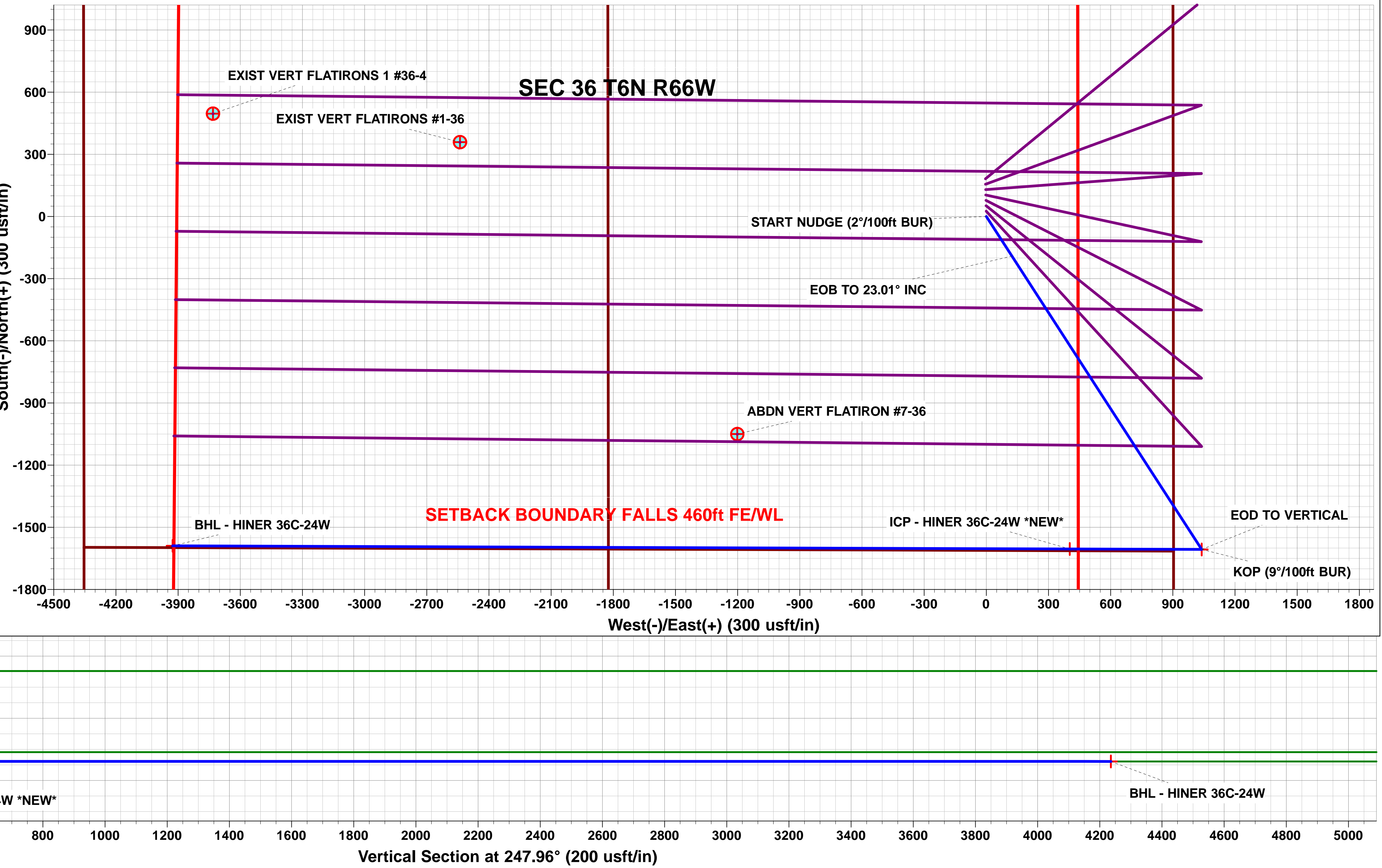
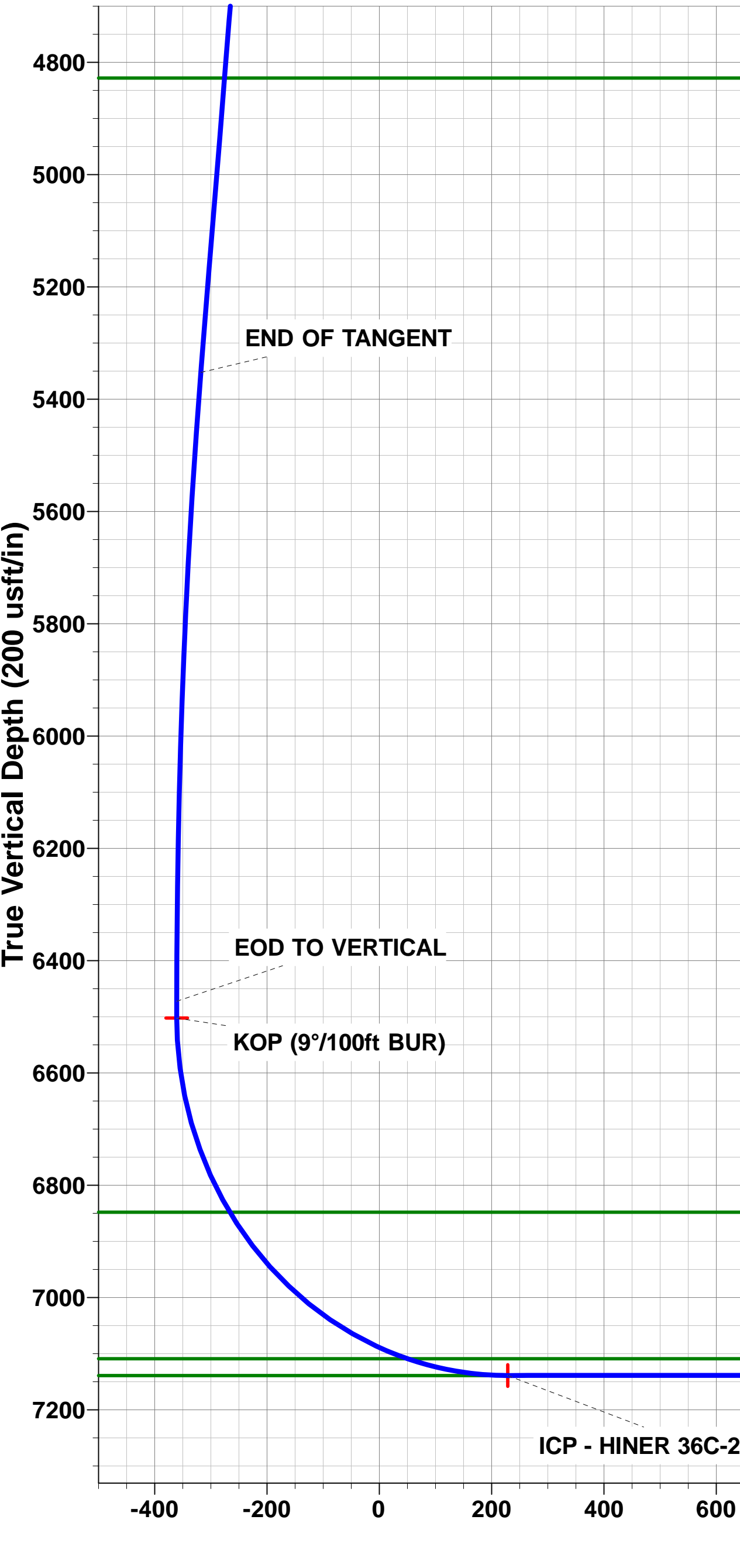
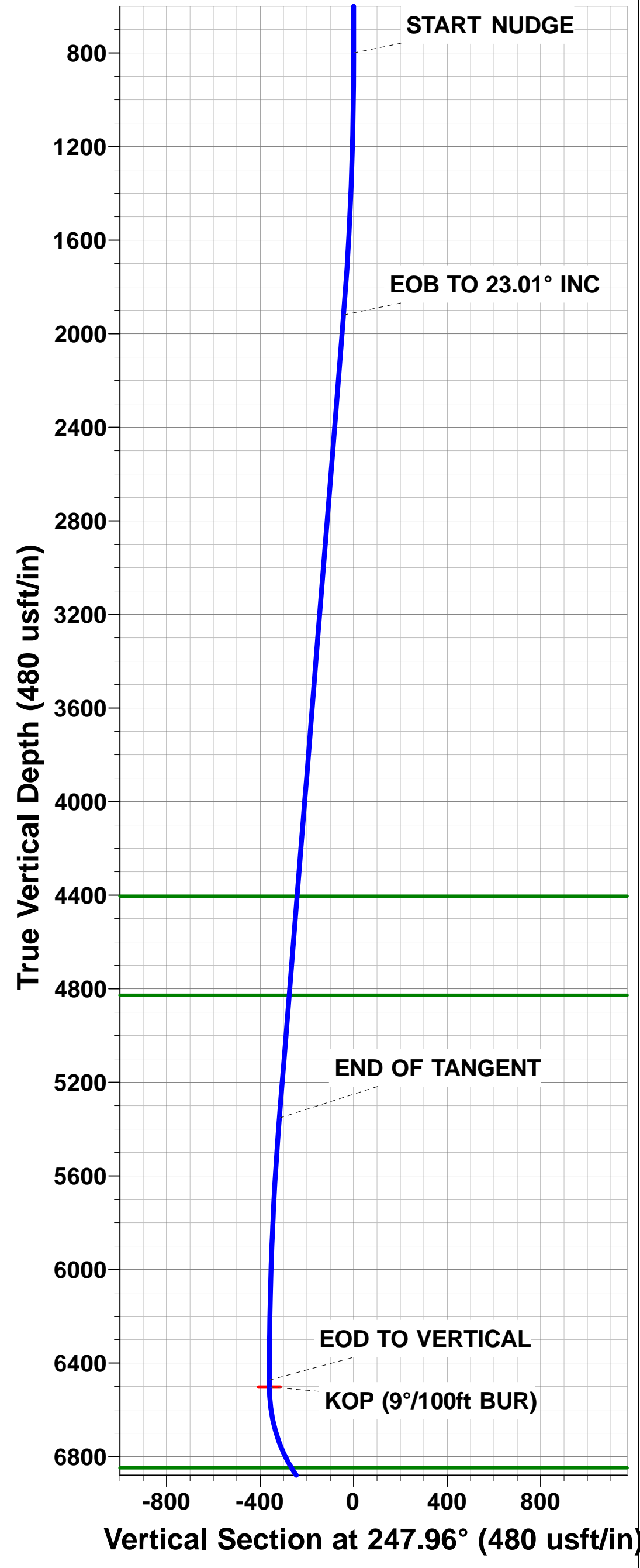
WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
BTW - HINER 36C-24W	6502.4	-1606.8	1039.4	40° 26' 41.048 N	104° 42' 55.259 W
ICP - HINER 36C-24W *NEW*	7139.0	-1604.6	402.8	40° 26' 41.069 N	104° 43' 3.493 W
BHL - HINER 36C-24W	7139.0	-1589.2	-3926.2	40° 26' 41.219 N	104° 43' 59.484 W



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4404.0	4649.4	SUSSEX
4828.0	5110.1	SHANNON
6848.0	7225.8	NIOBRARA
7109.0	7664.2	FORT HAYS
7139.0	7860.5	CODELL

Azimuths to True North  
Magnetic North: 8.48°

Magnetic Field  
Strength: 52877.5nT  
Dip Angle: 67.00°  
Date: 01/03/2014  
Model: IGRF2010



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HINER 36C-24W
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4685.0usft (H&P 319)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB-EST @ 4685.0usft (H&P 319)
<b>Site:</b>	SEC. 36 T6N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	HINER 36C-24W	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

<b>Project</b>	WELD COUNTY, COLORADO		
<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>	SEC. 36 T6N R66W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,407,602.94 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,217,326.94 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16"
		<b>Latitude:</b>	40° 26' 58.722 N
		<b>Longitude:</b>	104° 43' 8.756 W
		<b>Grid Convergence:</b>	0.50 °

<b>Well</b>	HINER 36C-24W		
<b>Well Position</b>	<b>+N-S</b>	-181.8 usft	<b>Northing:</b>
	<b>+E-W</b>	4.2 usft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>

<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>
	IGRF2010	01/03/2014	8.48	67.00	52,878

<b>Design</b>	PROPOSAL #1			
<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>
	7,139.0	0.0	0.0	247.96

<b>Plan Sections</b>											
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	-4,685.0	0.0	0.0	0.00	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	-3,885.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,950.5	23.01	147.10	1,919.8	-2,765.2	-191.4	123.8	2.00	2.00	0.00	147.10	
5,680.0	23.01	147.10	5,352.6	667.6	-1,415.4	915.6	0.00	0.00	0.00	0.00	
6,830.5	0.00	0.00	6,472.4	1,787.4	-1,606.8	1,039.4	2.00	-2.00	0.00	180.00	
6,860.5	0.00	0.00	6,502.4	1,817.4	-1,606.8	1,039.4	0.00	0.00	0.00	0.00	BTV - HINER 36C-2
7,860.5	90.00	270.20	7,139.0	2,454.0	-1,604.6	402.8	9.00	9.00	-8.98	270.20	ICP - HINER 36C-2
12,189.5	90.00	270.21	7,139.0	2,454.0	-1,589.2	-3,926.2	0.00	0.00	0.00	93.24	BHL - HINER 36C-2

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HINER 36C-24W
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4685.0usft (H&P 319)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB-EST @ 4685.0usft (H&P 319)
<b>Site:</b>	SEC. 36 T6N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	HINER 36C-24W	<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	4,685.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,585.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,485.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,385.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,285.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,185.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,085.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,985.00	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
800.0	0.00	0.00	800.0	3,885.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	2.00	147.10	900.0	3,785.02	-1.5	0.9	-0.3	2.00	2.00	0.00
1,000.0	4.00	147.10	999.8	3,685.16	-5.9	3.8	-1.3	2.00	2.00	0.00
1,100.0	6.00	147.10	1,099.5	3,585.55	-13.2	8.5	-3.0	2.00	2.00	0.00
1,200.0	8.00	147.10	1,198.7	3,486.30	-23.4	15.1	-5.3	2.00	2.00	0.00
1,300.0	10.00	147.10	1,297.5	3,387.53	-36.5	23.6	-8.2	2.00	2.00	0.00
1,400.0	12.00	147.10	1,395.6	3,289.38	-52.6	34.0	-11.8	2.00	2.00	0.00
1,500.0	14.00	147.10	1,493.1	3,191.94	-71.5	46.2	-16.0	2.00	2.00	0.00
1,600.0	16.00	147.10	1,589.6	3,095.36	-93.2	60.3	-20.9	2.00	2.00	0.00
1,700.0	18.00	147.10	1,685.3	2,999.73	-117.7	76.2	-26.4	2.00	2.00	0.00
1,800.0	20.00	147.10	1,779.8	2,905.18	-145.1	93.8	-32.6	2.00	2.00	0.00
1,900.0	22.00	147.10	1,873.2	2,811.83	-175.2	113.3	-39.3	2.00	2.00	0.00
<b>EOB TO 23.01° INC</b>										
1,950.5	23.01	147.10	1,919.8	2,765.19	-191.4	123.8	-43.0	2.00	2.00	0.00
2,000.0	23.01	147.10	1,965.4	2,719.62	-207.6	134.3	-46.6	0.00	0.00	0.00
2,100.0	23.01	147.10	2,057.4	2,627.57	-240.4	155.5	-54.0	0.00	0.00	0.00
2,200.0	23.01	147.10	2,149.5	2,535.53	-273.3	176.8	-61.3	0.00	0.00	0.00
2,300.0	23.01	147.10	2,241.5	2,443.48	-306.1	198.0	-68.7	0.00	0.00	0.00
2,400.0	23.01	147.10	2,333.6	2,351.44	-338.9	219.2	-76.1	0.00	0.00	0.00
2,500.0	23.01	147.10	2,425.6	2,259.40	-371.7	240.5	-83.4	0.00	0.00	0.00
2,600.0	23.01	147.10	2,517.6	2,167.35	-404.6	261.7	-90.8	0.00	0.00	0.00
2,700.0	23.01	147.10	2,609.7	2,075.31	-437.4	282.9	-98.2	0.00	0.00	0.00
2,800.0	23.01	147.10	2,701.7	1,983.27	-470.2	304.2	-105.5	0.00	0.00	0.00
2,900.0	23.01	147.10	2,793.8	1,891.22	-503.0	325.4	-112.9	0.00	0.00	0.00
3,000.0	23.01	147.10	2,885.8	1,799.18	-535.8	346.6	-120.3	0.00	0.00	0.00
3,100.0	23.01	147.10	2,977.9	1,707.13	-568.7	367.8	-127.6	0.00	0.00	0.00
3,200.0	23.01	147.10	3,069.9	1,615.09	-601.5	389.1	-135.0	0.00	0.00	0.00
3,300.0	23.01	147.10	3,162.0	1,523.05	-634.3	410.3	-142.4	0.00	0.00	0.00
3,400.0	23.01	147.10	3,254.0	1,431.00	-667.1	431.5	-149.7	0.00	0.00	0.00
3,500.0	23.01	147.10	3,346.0	1,338.96	-699.9	452.8	-157.1	0.00	0.00	0.00
3,600.0	23.01	147.10	3,438.1	1,246.92	-732.8	474.0	-164.5	0.00	0.00	0.00
3,700.0	23.01	147.10	3,530.1	1,154.87	-765.6	495.2	-171.8	0.00	0.00	0.00
3,800.0	23.01	147.10	3,622.2	1,062.83	-798.4	516.5	-179.2	0.00	0.00	0.00
3,900.0	23.01	147.10	3,714.2	970.78	-831.2	537.7	-186.5	0.00	0.00	0.00
4,000.0	23.01	147.10	3,806.3	878.74	-864.0	558.9	-193.9	0.00	0.00	0.00
4,100.0	23.01	147.10	3,898.3	786.70	-896.9	580.2	-201.3	0.00	0.00	0.00
4,200.0	23.01	147.10	3,990.3	694.65	-929.7	601.4	-208.6	0.00	0.00	0.00
4,300.0	23.01	147.10	4,082.4	602.61	-962.5	622.6	-216.0	0.00	0.00	0.00
4,400.0	23.01	147.10	4,174.4	510.56	-995.3	643.8	-223.4	0.00	0.00	0.00
4,500.0	23.01	147.10	4,266.5	418.52	-1,028.1	665.1	-230.7	0.00	0.00	0.00
4,600.0	23.01	147.10	4,358.5	326.48	-1,061.0	686.3	-238.1	0.00	0.00	0.00
<b>SUSSEX</b>										
4,649.4	23.01	147.10	4,404.0	281.00	-1,077.2	696.8	-241.7	0.00	0.00	0.00
4,700.0	23.01	147.10	4,450.6	234.43	-1,093.8	707.5	-245.5	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HINER 36C-24W
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4685.0usft (H&P 319)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB-EST @ 4685.0usft (H&P 319)
<b>Site:</b>	SEC. 36 T6N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	HINER 36C-24W	<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)
4,800.0	23.01	147.10	4,542.6	142.39	-1,126.6	728.8	-252.8	0.00	0.00	0.00
4,900.0	23.01	147.10	4,634.7	50.35	-1,159.4	750.0	-260.2	0.00	0.00	0.00
5,000.0	23.01	147.10	4,726.7	-41.70	-1,192.2	771.2	-267.6	0.00	0.00	0.00
5,100.0	23.01	147.10	4,818.7	-133.74	-1,225.1	792.5	-274.9	0.00	0.00	0.00
<b>SHANNON</b>										
<b>5,110.1</b>	<b>23.01</b>	<b>147.10</b>	<b>4,828.0</b>	<b>-143.00</b>	<b>-1,228.4</b>	<b>794.6</b>	<b>-275.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,200.0	23.01	147.10	4,910.8	-225.79	-1,257.9	813.7	-282.3	0.00	0.00	0.00
5,300.0	23.01	147.10	5,002.8	-317.83	-1,290.7	834.9	-289.7	0.00	0.00	0.00
5,400.0	23.01	147.10	5,094.9	-409.87	-1,323.5	856.2	-297.0	0.00	0.00	0.00
5,500.0	23.01	147.10	5,186.9	-501.92	-1,356.3	877.4	-304.4	0.00	0.00	0.00
5,600.0	23.01	147.10	5,279.0	-593.96	-1,389.2	898.6	-311.8	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>5,680.0</b>	<b>23.01</b>	<b>147.10</b>	<b>5,352.6</b>	<b>-667.59</b>	<b>-1,415.4</b>	<b>915.6</b>	<b>-317.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,700.0	22.61	147.10	5,371.0	-686.03	-1,421.9	919.8	-319.1	2.00	-2.00	0.00
5,800.0	20.61	147.10	5,464.0	-779.00	-1,452.9	939.8	-326.1	2.00	-2.00	0.00
5,900.0	18.61	147.10	5,558.2	-873.19	-1,481.0	958.0	-332.4	2.00	-2.00	0.00
6,000.0	16.61	147.10	5,653.5	-968.50	-1,506.4	974.5	-338.1	2.00	-2.00	0.00
6,100.0	14.61	147.10	5,749.8	-1,064.81	-1,529.0	989.1	-343.2	2.00	-2.00	0.00
6,200.0	12.61	147.10	5,847.0	-1,162.00	-1,548.8	1,001.9	-347.6	2.00	-2.00	0.00
6,300.0	10.61	147.10	5,944.9	-1,259.95	-1,565.7	1,012.8	-351.4	2.00	-2.00	0.00
6,400.0	8.61	147.10	6,043.5	-1,358.54	-1,579.7	1,021.9	-354.5	2.00	-2.00	0.00
6,500.0	6.61	147.10	6,142.7	-1,457.65	-1,590.8	1,029.1	-357.0	2.00	-2.00	0.00
6,600.0	4.61	147.10	6,242.2	-1,557.17	-1,599.0	1,034.4	-358.9	2.00	-2.00	0.00
6,700.0	2.61	147.10	6,342.0	-1,656.96	-1,604.3	1,037.8	-360.0	2.00	-2.00	0.00
6,800.0	0.61	147.10	6,441.9	-1,756.92	-1,606.7	1,039.3	-360.6	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
<b>6,830.5</b>	<b>0.00</b>	<b>0.00</b>	<b>6,472.4</b>	<b>-1,787.40</b>	<b>-1,606.8</b>	<b>1,039.4</b>	<b>-360.6</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
<b>KOP (9°/100ft BUR)</b>										
<b>6,860.5</b>	<b>0.00</b>	<b>0.00</b>	<b>6,502.4</b>	<b>-1,817.40</b>	<b>-1,606.8</b>	<b>1,039.4</b>	<b>-360.6</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,900.0	3.56	270.20	6,541.9	-1,856.89	-1,606.8	1,038.2	-359.5	9.00	9.00	0.00
7,000.0	12.56	270.20	6,640.8	-1,955.81	-1,606.7	1,024.2	-346.5	9.00	9.00	0.00
7,100.0	21.56	270.20	6,736.3	-2,051.31	-1,606.6	994.9	-319.4	9.00	9.00	0.00
7,200.0	30.56	270.20	6,826.1	-2,141.05	-1,606.5	951.0	-278.8	9.00	9.00	0.00
<b>NIOBRARA</b>										
<b>7,225.8</b>	<b>32.88</b>	<b>270.20</b>	<b>6,848.0</b>	<b>-2,163.00</b>	<b>-1,606.4</b>	<b>937.4</b>	<b>-266.2</b>	<b>9.00</b>	<b>9.00</b>	<b>0.00</b>
7,300.0	39.56	270.20	6,907.8	-2,222.82	-1,606.3	893.6	-225.7	9.00	9.00	0.00
7,400.0	48.56	270.20	6,979.6	-2,294.61	-1,606.1	824.1	-161.4	9.00	9.00	0.00
7,500.0	57.56	270.20	7,039.7	-2,354.65	-1,605.8	744.3	-87.4	9.00	9.00	0.00
7,600.0	66.56	270.20	7,086.5	-2,401.46	-1,605.5	656.0	-5.8	9.00	9.00	0.00
<b>FORT HAYS</b>										
<b>7,664.2</b>	<b>72.34</b>	<b>270.20</b>	<b>7,109.0</b>	<b>-2,424.00</b>	<b>-1,605.3</b>	<b>595.9</b>	<b>49.9</b>	<b>9.00</b>	<b>9.00</b>	<b>0.00</b>
7,700.0	75.56	270.20	7,118.9	-2,433.89	-1,605.1	561.6	81.7	9.00	9.00	0.00
7,800.0	84.56	270.20	7,136.1	-2,451.13	-1,604.8	463.2	172.8	9.00	9.00	0.00
<b>ICP - HINER 36C-24W *NEW* - CODELL</b>										
<b>7,860.5</b>	<b>90.00</b>	<b>270.20</b>	<b>7,139.0</b>	<b>-2,454.00</b>	<b>-1,604.6</b>	<b>402.8</b>	<b>228.7</b>	<b>9.00</b>	<b>9.00</b>	<b>0.00</b>
7,900.0	90.00	270.20	7,139.0	-2,454.00	-1,604.5	363.3	265.3	0.00	0.00	0.00
8,000.0	90.00	270.20	7,139.0	-2,454.00	-1,604.1	263.3	357.8	0.00	0.00	0.00
8,100.0	90.00	270.20	7,139.0	-2,454.00	-1,603.8	163.3	450.4	0.00	0.00	0.00
8,200.0	90.00	270.20	7,139.0	-2,454.00	-1,603.4	63.3	543.0	0.00	0.00	0.00
8,300.0	90.00	270.20	7,139.0	-2,454.00	-1,603.1	-36.7	635.5	0.00	0.00	0.00
8,400.0	90.00	270.20	7,139.0	-2,454.00	-1,602.7	-136.7	728.1	0.00	0.00	0.00
8,500.0	90.00	270.20	7,139.0	-2,454.00	-1,602.4	-236.7	820.6	0.00	0.00	0.00
8,600.0	90.00	270.20	7,139.0	-2,454.00	-1,602.0	-336.7	913.2	0.00	0.00	0.00



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HINER 36C-24W
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4685.0usft (H&P 319)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB-EST @ 4685.0usft (H&P 319)
<b>Site:</b>	SEC. 36 T6N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	HINER 36C-24W	<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)
8,700.0	90.00	270.20	7,139.0	-2,454.00	-1,601.7	-436.7	1,005.8	0.00	0.00	0.00
8,800.0	90.00	270.20	7,139.0	-2,454.00	-1,601.3	-536.7	1,098.3	0.00	0.00	0.00
8,900.0	90.00	270.20	7,139.0	-2,454.00	-1,601.0	-636.7	1,190.9	0.00	0.00	0.00
9,000.0	90.00	270.20	7,139.0	-2,453.99	-1,600.6	-736.7	1,283.5	0.00	0.00	0.00
9,100.0	90.00	270.20	7,139.0	-2,453.99	-1,600.3	-836.7	1,376.0	0.00	0.00	0.00
9,200.0	90.00	270.20	7,139.0	-2,453.99	-1,599.9	-936.7	1,468.6	0.00	0.00	0.00
9,300.0	90.00	270.20	7,139.0	-2,453.99	-1,599.6	-1,036.7	1,561.1	0.00	0.00	0.00
9,400.0	90.00	270.20	7,139.0	-2,453.99	-1,599.2	-1,136.7	1,653.7	0.00	0.00	0.00
9,500.0	90.00	270.20	7,139.0	-2,453.99	-1,598.9	-1,236.7	1,746.3	0.00	0.00	0.00
9,600.0	90.00	270.20	7,139.0	-2,453.99	-1,598.5	-1,336.7	1,838.8	0.00	0.00	0.00
9,700.0	90.00	270.20	7,139.0	-2,453.99	-1,598.2	-1,436.7	1,931.4	0.00	0.00	0.00
9,800.0	90.00	270.20	7,139.0	-2,453.99	-1,597.8	-1,536.7	2,024.0	0.00	0.00	0.00
9,900.0	90.00	270.20	7,139.0	-2,453.99	-1,597.5	-1,636.7	2,116.5	0.00	0.00	0.00
10,000.0	90.00	270.20	7,139.0	-2,453.99	-1,597.1	-1,736.7	2,209.1	0.00	0.00	0.00
10,100.0	90.00	270.20	7,139.0	-2,453.99	-1,596.7	-1,836.7	2,301.6	0.00	0.00	0.00
10,200.0	90.00	270.20	7,139.0	-2,453.99	-1,596.4	-1,936.7	2,394.2	0.00	0.00	0.00
10,300.0	90.00	270.20	7,139.0	-2,453.99	-1,596.0	-2,036.7	2,486.8	0.00	0.00	0.00
10,400.0	90.00	270.21	7,139.0	-2,453.99	-1,595.7	-2,136.7	2,579.3	0.00	0.00	0.00
10,500.0	90.00	270.21	7,139.0	-2,453.99	-1,595.3	-2,236.7	2,671.9	0.00	0.00	0.00
10,600.0	90.00	270.21	7,139.0	-2,453.99	-1,594.9	-2,336.7	2,764.4	0.00	0.00	0.00
10,700.0	90.00	270.21	7,139.0	-2,453.99	-1,594.6	-2,436.7	2,857.0	0.00	0.00	0.00
10,800.0	90.00	270.21	7,139.0	-2,453.99	-1,594.2	-2,536.7	2,949.6	0.00	0.00	0.00
10,900.0	90.00	270.21	7,139.0	-2,453.99	-1,593.9	-2,636.7	3,042.1	0.00	0.00	0.00
11,000.0	90.00	270.21	7,139.0	-2,453.99	-1,593.5	-2,736.7	3,134.7	0.00	0.00	0.00
11,100.0	90.00	270.21	7,139.0	-2,454.00	-1,593.1	-2,836.7	3,227.2	0.00	0.00	0.00
11,200.0	90.00	270.21	7,139.0	-2,454.00	-1,592.8	-2,936.7	3,319.8	0.00	0.00	0.00
11,300.0	90.00	270.21	7,139.0	-2,454.00	-1,592.4	-3,036.7	3,412.3	0.00	0.00	0.00
11,400.0	90.00	270.21	7,139.0	-2,454.00	-1,592.1	-3,136.7	3,504.9	0.00	0.00	0.00
11,500.0	90.00	270.21	7,139.0	-2,454.00	-1,591.7	-3,236.7	3,597.5	0.00	0.00	0.00
11,600.0	90.00	270.21	7,139.0	-2,454.00	-1,591.3	-3,336.7	3,690.0	0.00	0.00	0.00
11,700.0	90.00	270.21	7,139.0	-2,454.00	-1,591.0	-3,436.7	3,782.6	0.00	0.00	0.00
11,800.0	90.00	270.21	7,139.0	-2,454.00	-1,590.6	-3,536.7	3,875.1	0.00	0.00	0.00
11,900.0	90.00	270.21	7,139.0	-2,454.00	-1,590.2	-3,636.7	3,967.7	0.00	0.00	0.00
12,000.0	90.00	270.21	7,139.0	-2,454.00	-1,589.9	-3,736.7	4,060.3	0.00	0.00	0.00
12,100.0	90.00	270.21	7,139.0	-2,454.00	-1,589.5	-3,836.7	4,152.8	0.00	0.00	0.00
<b>BHL - HINER 36C-24W</b>										
<b>12,189.5</b>	<b>90.00</b>	<b>270.21</b>	<b>7,139.0</b>	<b>-2,454.00</b>	<b>-1,589.2</b>	<b>-3,926.2</b>	<b>4,235.6</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,649.4	4,404.0	SUSSEX		0.00	
5,110.1	4,828.0	SHANNON		0.00	
7,225.8	6,848.0	NIOBRARA		0.00	
7,664.2	7,109.0	FORT HAYS		0.00	
7,860.5	7,139.0	CODELL		0.00	

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HINER 36C-24W
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4685.0usft (H&P 319)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB-EST @ 4685.0usft (H&P 319)
<b>Site:</b>	SEC. 36 T6N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	HINER 36C-24W	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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)
1,950.5	1,919.8	-191.4	123.8	EOB TO 23.01° INC
5,680.0	5,352.6	-1,415.4	915.6	END OF TANGENT
6,830.5	6,472.4	-1,606.8	1,039.4	EOD TO VERTICAL
6,860.5	6,502.4	-1,606.8	1,039.4	KOP (9°/100ft BUR)
7,860.5	7,139.0	-1,604.6	402.8	ICP - HINER 36C-24W *NEW*
12,189.5	7,139.0	-1,589.2	-3,926.2	BHL - HINER 36C-24W