

# **BISON OIL & GAS II, LLC**

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

**NE NW SEC. 4 T8N R60W 6th P.M.**

**STAMPEDE FED 8-60 4-9-1**

**ORIGINAL WELLBORE**

**23 October, 2017**

**Plan: PROPOSAL #1**





Project: WELD COUNTY, COLORADO (NAD 83)  
Site: NE NW SEC. 4 T8N R60W 6th P.M.  
Well: STAMPEDE FED 8-60 4-9-1  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

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: 410ft FNL & 2275ft FWL of Sec 4	
500.0	500.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)	
1095.6	1100.0	12.00	45.67	43.7	44.8	-42.5	62.6	EOB TO 12° INC	
3109.9	3159.3	12.00	45.67	343.0	351.0	-333.2	490.7	END OF TANGENT	
3705.5	3759.3	0.00	0.00	386.7	395.8	-375.7	553.3	EOD TO VERTICAL	
5832.4	5886.2	0.00	0.00	386.7	395.8	-375.7	553.3	KOP (10°/100ft BUR)	
6405.3	6786.1	90.00	180.68	-186.2	389.0	196.7	1126.2	BPI: 600ft FSL & 2665ft FWL of Sec 4	
6405.3	16268.4	90.00	180.69	-9667.8	276.0	9671.7	10608.6	EPI: 600ft FNL & 2664ft FWL of Sec 9	
6405.3	16272.0	90.00	180.58	-9671.4	276.0	9675.3	10612.2	EOT TO 180.58° AZ	
6405.3	16567.9	90.00	180.58	-9967.3	273.0	9971.0	10908.1	BHL: 300ft FNL & 2665ft FWL of Sec 9	

PROPOSED LOCAL COORDINATES:

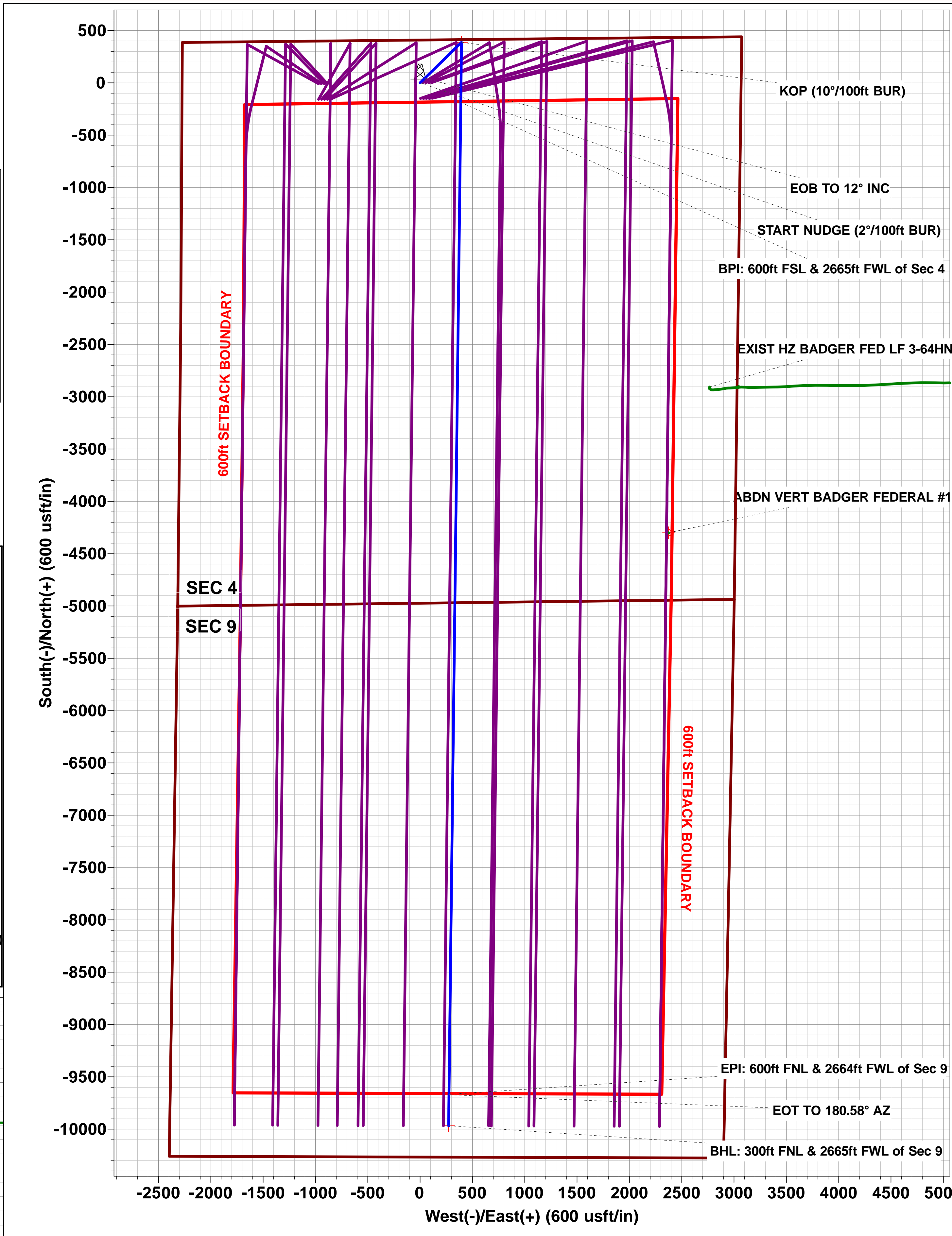
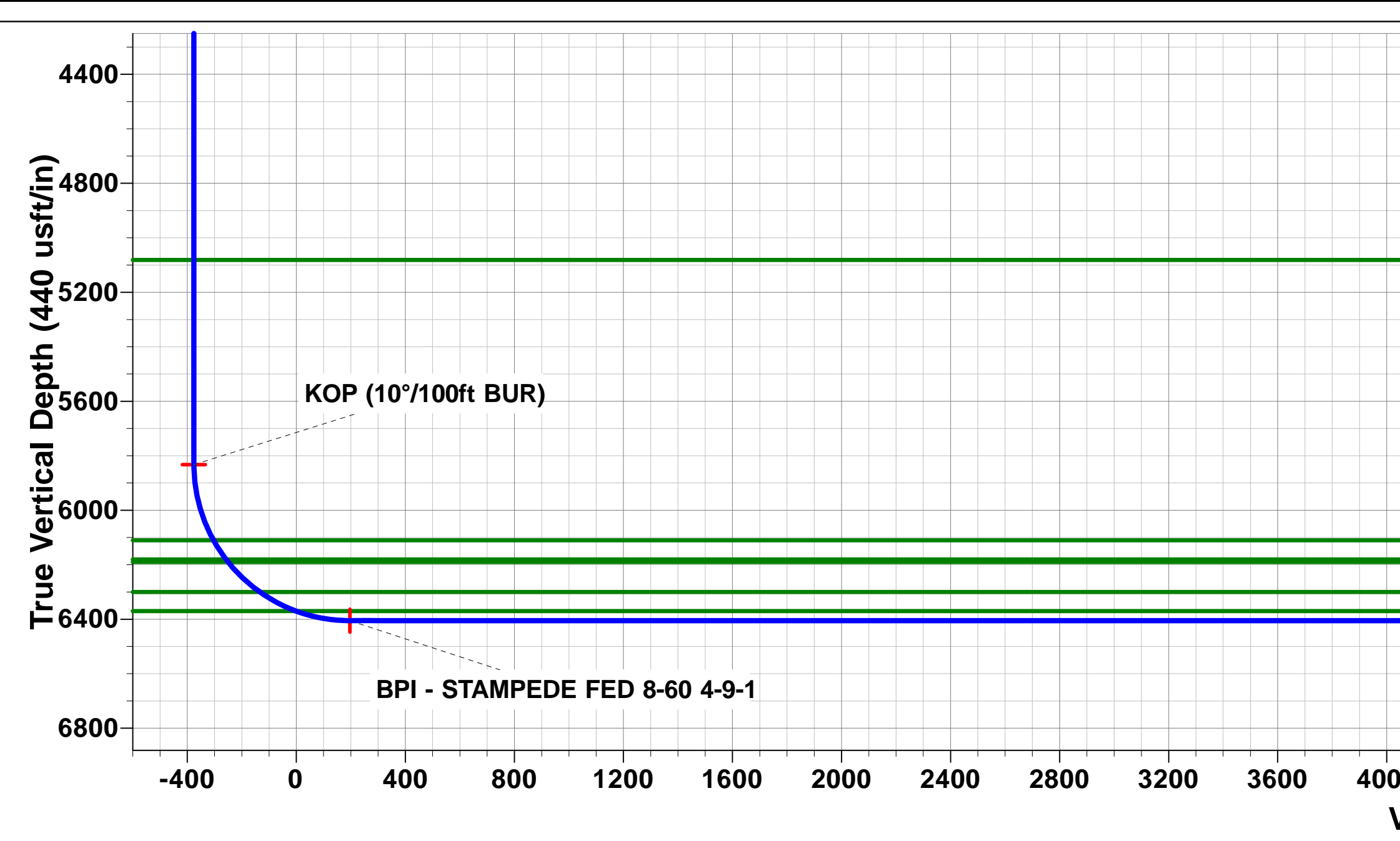
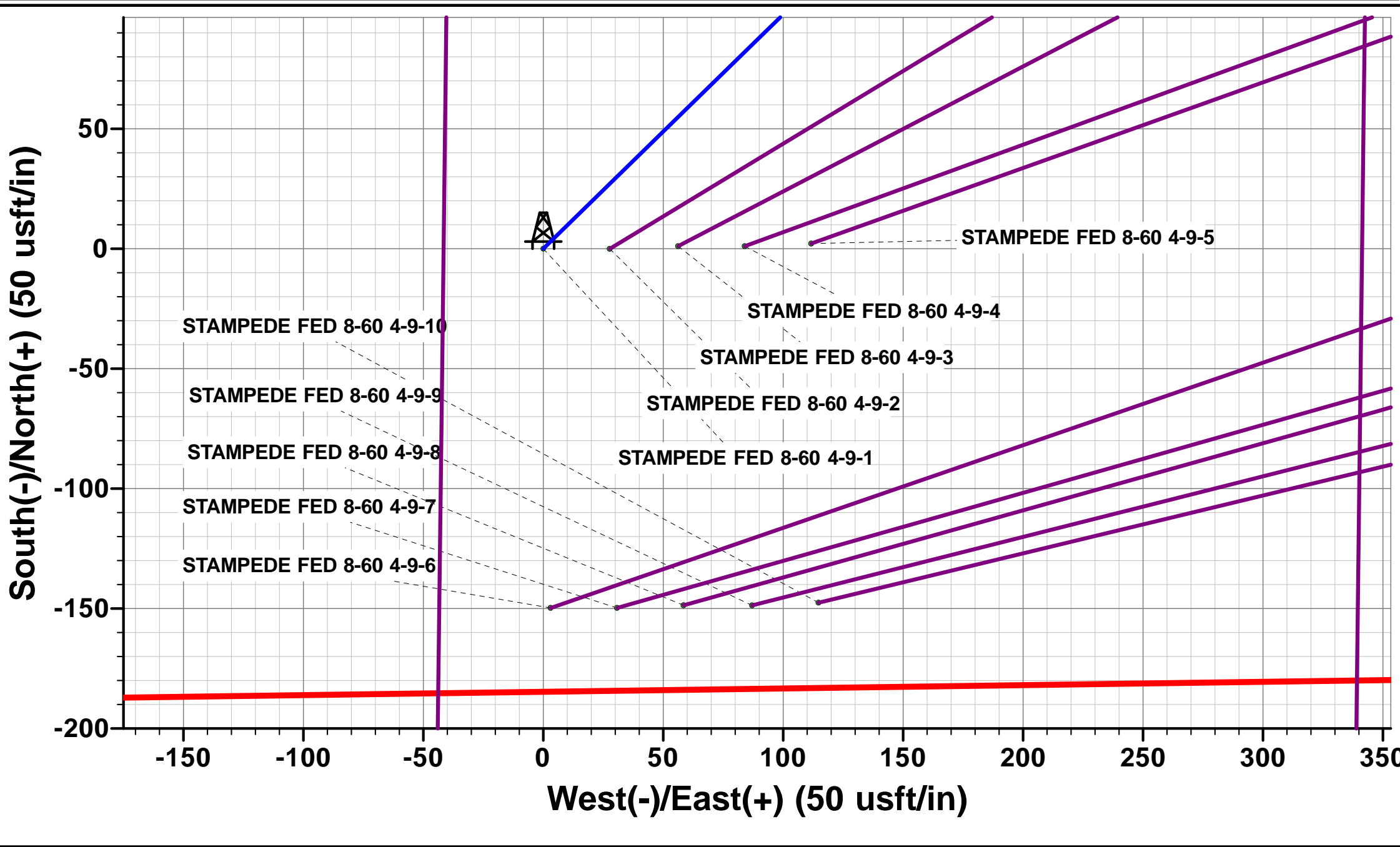
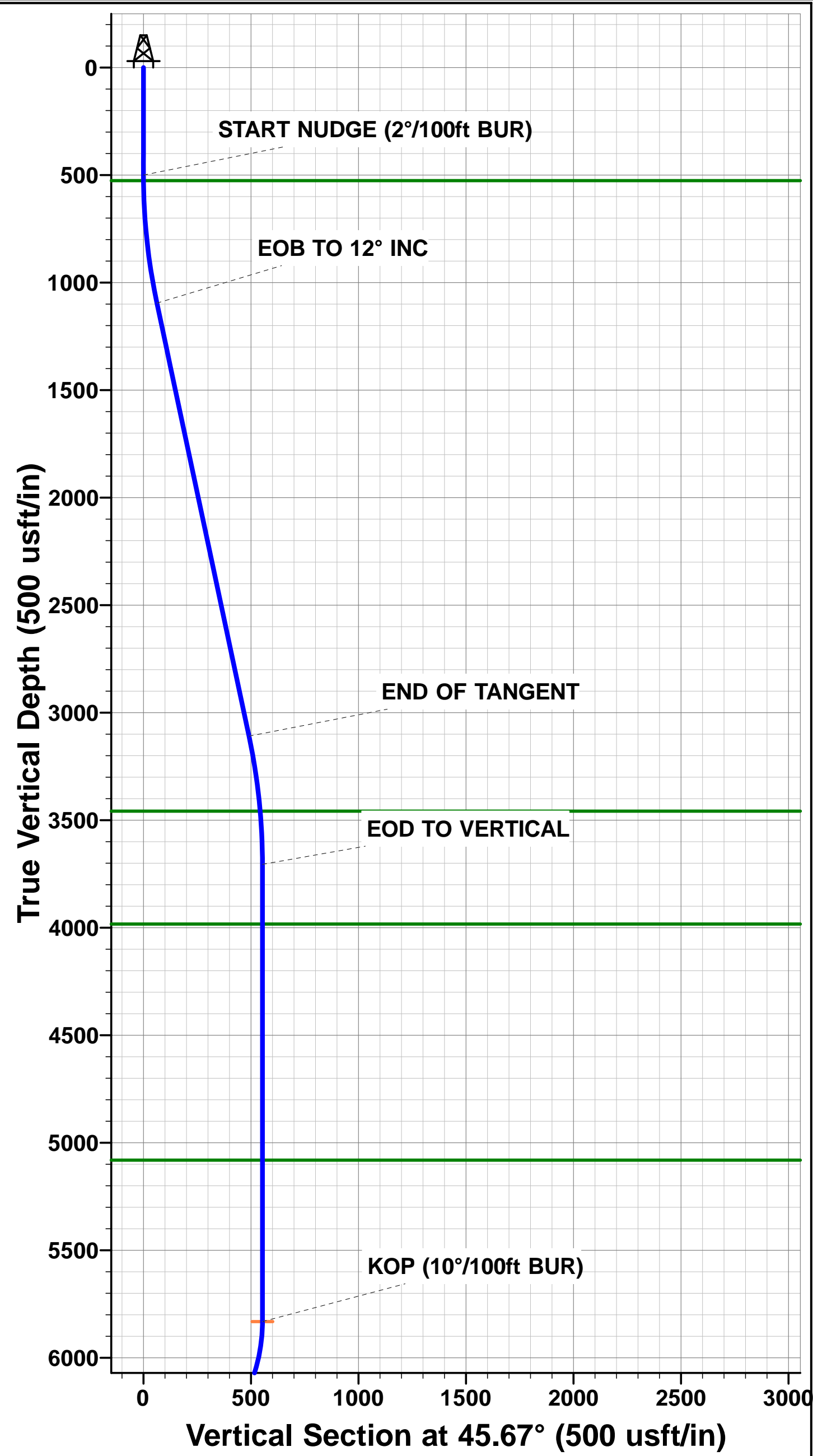
SHL: 410ft FNL & 2275ft FWL Sec 4

BPI: 600ft FNL & 2665ft FWL Sec 4

EPI: 600ft FSL & 2664ft FWL Sec 9

BHL: 300ft FSL & 2665ft FWL of Sec 9

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N-S	+E-W	Latitude	Longitude
KOP - STAMPEDE FED 8-60 4-9-1	5832.4	386.7	395.8	40.698808	-104.095515
BPI - STAMPEDE FED 8-60 4-9-1	6405.3	-186.2	389.0	40.697236	-104.095539
EPI - STAMPEDE FED 8-60 4-9-1	6405.3	-9667.8	276.0	40.671211	-104.095947
BHL - STAMPEDE FED 8-60 4-9-1	6405.3	-9967.3	273.0	40.670389	-104.095958



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STAMPEDE FED 8-60 4-9-1
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Site:</b>	NE NW SEC. 4 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STAMPEDE FED 8-60 4-9-1	<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

<b>Site</b>	NE NW SEC. 4 T8N R60W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,500,110.53 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,389,033.65 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.697747
		<b>Longitude:</b>	-104.096942
		<b>Grid Convergence:</b>	0.91 °

<b>Well</b>	STAMPEDE FED 8-60 4-9-1		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	usft
		<b>Latitude:</b>	40.697747
		<b>Longitude:</b>	-104.096942
		<b>Ground Level:</b>	4,931.3 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	23/10/2017	7.84	67.18	52,573

<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>
	6,405.3	0.0	0.0	178.43

<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	-4,956.3	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	-4,456.3	0.0	0.0	0.00	0.00	0.00	0.00	
1,100.0	12.00	45.67	1,095.6	-3,860.7	43.7	44.8	2.00	2.00	0.00	45.67	
3,159.3	12.00	45.67	3,109.9	-1,846.4	343.0	351.0	0.00	0.00	0.00	0.00	
3,759.3	0.00	0.00	3,705.5	-1,250.8	386.7	395.8	2.00	-2.00	0.00	180.00	
5,886.2	0.00	0.00	5,832.4	876.1	386.7	395.8	0.00	0.00	0.00	0.00	KOP - STAMPEDE
6,786.1	90.00	180.68	6,405.3	1,449.0	-186.2	389.0	10.00	10.00	-19.93	180.68	BPI - STAMPEDE F
16,268.4	90.00	180.69	6,405.3	1,449.0	-9,667.8	276.0	0.00	0.00	0.00	88.02	EPI - STAMPEDE F
16,272.0	90.00	180.58	6,405.3	1,449.0	-9,671.4	276.0	3.00	-0.01	-3.00	-90.13	
16,567.9	90.00	180.58	6,405.3	1,449.0	-9,967.3	273.0	0.00	0.00	0.00	0.00	BHL - STAMPEDE

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STAMPEDE FED 8-60 4-9-1
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Site:</b>	NE NW SEC. 4 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STAMPEDE FED 8-60 4-9-1	<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)
<b>SHL: 410ft FNL &amp; 2275ft FWL of Sec 4</b>										
0.0	0.00	0.00	0.0	4,956.30	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,856.30	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,756.30	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,656.30	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,556.30	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
500.0	0.00	0.00	500.0	4,456.30	0.0	0.0	0.0	0.00	0.00	0.00
<b>PIERRE SHALE (BASE FOX HILLS)</b>										
526.3	0.53	45.67	526.3	4,430.00	0.1	0.1	-0.1	2.00	2.00	0.00
600.0	2.00	45.67	600.0	4,356.32	1.2	1.2	-1.2	2.00	2.00	0.00
700.0	4.00	45.67	699.8	4,256.46	4.9	5.0	-4.7	2.00	2.00	0.00
800.0	6.00	45.67	799.5	4,156.85	11.0	11.2	-10.7	2.00	2.00	0.00
900.0	8.00	45.67	898.7	4,057.60	19.5	19.9	-18.9	2.00	2.00	0.00
1,000.0	10.00	45.67	997.5	3,958.83	30.4	31.1	-29.6	2.00	2.00	0.00
<b>EOB TO 12° INC</b>										
1,100.0	12.00	45.67	1,095.6	3,860.68	43.7	44.8	-42.5	2.00	2.00	0.00
1,200.0	12.00	45.67	1,193.4	3,762.86	58.3	59.6	-56.6	0.00	0.00	0.00
1,300.0	12.00	45.67	1,291.3	3,665.05	72.8	74.5	-70.7	0.00	0.00	0.00
1,400.0	12.00	45.67	1,389.1	3,567.23	87.3	89.4	-84.9	0.00	0.00	0.00
1,500.0	12.00	45.67	1,486.9	3,469.42	101.9	104.3	-99.0	0.00	0.00	0.00
1,600.0	12.00	45.67	1,584.7	3,371.60	116.4	119.1	-113.1	0.00	0.00	0.00
1,700.0	12.00	45.67	1,682.5	3,273.79	130.9	134.0	-127.2	0.00	0.00	0.00
1,800.0	12.00	45.67	1,780.3	3,175.97	145.5	148.9	-141.3	0.00	0.00	0.00
1,900.0	12.00	45.67	1,878.1	3,078.16	160.0	163.8	-155.4	0.00	0.00	0.00
2,000.0	12.00	45.67	1,976.0	2,980.34	174.5	178.6	-169.6	0.00	0.00	0.00
2,100.0	12.00	45.67	2,073.8	2,882.53	189.0	193.5	-183.7	0.00	0.00	0.00
2,200.0	12.00	45.67	2,171.6	2,784.71	203.6	208.4	-197.8	0.00	0.00	0.00
2,300.0	12.00	45.67	2,269.4	2,686.90	218.1	223.2	-211.9	0.00	0.00	0.00
2,400.0	12.00	45.67	2,367.2	2,589.08	232.6	238.1	-226.0	0.00	0.00	0.00
2,500.0	12.00	45.67	2,465.0	2,491.27	247.2	253.0	-240.1	0.00	0.00	0.00
2,600.0	12.00	45.67	2,562.8	2,393.46	261.7	267.9	-254.3	0.00	0.00	0.00
2,700.0	12.00	45.67	2,660.7	2,295.64	276.2	282.7	-268.4	0.00	0.00	0.00
2,800.0	12.00	45.67	2,758.5	2,197.83	290.8	297.6	-282.5	0.00	0.00	0.00
2,900.0	12.00	45.67	2,856.3	2,100.01	305.3	312.5	-296.6	0.00	0.00	0.00
3,000.0	12.00	45.67	2,954.1	2,002.20	319.8	327.3	-310.7	0.00	0.00	0.00
3,100.0	12.00	45.67	3,051.9	1,904.38	334.3	342.2	-324.8	0.00	0.00	0.00
<b>END OF TANGENT</b>										
3,159.3	12.00	45.67	3,109.9	1,846.42	343.0	351.0	-333.2	0.00	0.00	0.00
3,200.0	11.19	45.67	3,149.8	1,806.51	348.7	356.9	-338.8	2.00	-2.00	0.00
3,300.0	9.19	45.67	3,248.2	1,708.09	361.0	369.5	-350.8	2.00	-2.00	0.00
3,400.0	7.19	45.67	3,347.2	1,609.11	371.0	379.7	-360.4	2.00	-2.00	0.00
3,500.0	5.19	45.67	3,446.6	1,509.70	378.5	387.4	-367.8	2.00	-2.00	0.00
<b>PARKMAN</b>										
3,511.7	4.95	45.67	3,458.3	1,498.00	379.2	388.2	-368.5	2.00	-2.00	0.00
3,600.0	3.19	45.67	3,546.3	1,409.97	383.6	392.6	-372.7	2.00	-2.00	0.00
3,700.0	1.19	45.67	3,646.3	1,310.05	386.3	395.4	-375.3	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
3,759.3	0.00	0.00	3,705.5	1,250.80	386.7	395.8	-375.7	2.00	-2.00	0.00
3,800.0	0.00	0.00	3,746.2	1,210.05	386.7	395.8	-375.7	0.00	0.00	0.00
3,900.0	0.00	0.00	3,846.2	1,110.05	386.7	395.8	-375.7	0.00	0.00	0.00
4,000.0	0.00	0.00	3,946.2	1,010.05	386.7	395.8	-375.7	0.00	0.00	0.00
<b>SUSSEX</b>										



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STAMPEDE FED 8-60 4-9-1
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Site:</b>	NE NW SEC. 4 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STAMPEDE FED 8-60 4-9-1	<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)
<b>4,037.1</b>	<b>0.00</b>	<b>0.00</b>	<b>3,983.3</b>	<b>973.00</b>	<b>386.7</b>	<b>395.8</b>	<b>-375.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,100.0	0.00	0.00	4,046.2	910.05	386.7	395.8	-375.7	0.00	0.00	0.00
4,200.0	0.00	0.00	4,146.2	810.05	386.7	395.8	-375.7	0.00	0.00	0.00
4,300.0	0.00	0.00	4,246.2	710.05	386.7	395.8	-375.7	0.00	0.00	0.00
4,400.0	0.00	0.00	4,346.2	610.05	386.7	395.8	-375.7	0.00	0.00	0.00
4,500.0	0.00	0.00	4,446.2	510.05	386.7	395.8	-375.7	0.00	0.00	0.00
4,600.0	0.00	0.00	4,546.2	410.05	386.7	395.8	-375.7	0.00	0.00	0.00
4,700.0	0.00	0.00	4,646.2	310.05	386.7	395.8	-375.7	0.00	0.00	0.00
4,800.0	0.00	0.00	4,746.2	210.05	386.7	395.8	-375.7	0.00	0.00	0.00
4,900.0	0.00	0.00	4,846.2	110.05	386.7	395.8	-375.7	0.00	0.00	0.00
5,000.0	0.00	0.00	4,946.2	10.05	386.7	395.8	-375.7	0.00	0.00	0.00
5,100.0	0.00	0.00	5,046.2	-89.95	386.7	395.8	-375.7	0.00	0.00	0.00
<b>SHANNON</b>										
<b>5,135.1</b>	<b>0.00</b>	<b>0.00</b>	<b>5,081.3</b>	<b>-125.00</b>	<b>386.7</b>	<b>395.8</b>	<b>-375.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,200.0	0.00	0.00	5,146.2	-189.95	386.7	395.8	-375.7	0.00	0.00	0.00
5,300.0	0.00	0.00	5,246.2	-289.95	386.7	395.8	-375.7	0.00	0.00	0.00
5,400.0	0.00	0.00	5,346.2	-389.95	386.7	395.8	-375.7	0.00	0.00	0.00
5,500.0	0.00	0.00	5,446.2	-489.95	386.7	395.8	-375.7	0.00	0.00	0.00
5,600.0	0.00	0.00	5,546.2	-589.95	386.7	395.8	-375.7	0.00	0.00	0.00
5,700.0	0.00	0.00	5,646.2	-689.95	386.7	395.8	-375.7	0.00	0.00	0.00
5,800.0	0.00	0.00	5,746.2	-789.95	386.7	395.8	-375.7	0.00	0.00	0.00
<b>KOP (10°/100ft BUR)</b>										
<b>5,886.2</b>	<b>0.00</b>	<b>0.00</b>	<b>5,832.4</b>	<b>-876.10</b>	<b>386.7</b>	<b>395.8</b>	<b>-375.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,900.0	1.38	180.68	5,846.2	-889.95	386.5	395.8	-375.6	10.00	10.00	0.00
6,000.0	11.39	180.68	5,945.5	-989.20	375.4	395.7	-364.5	10.00	10.00	0.00
6,100.0	21.39	180.68	6,041.3	-1,085.02	347.3	395.3	-336.3	10.00	10.00	0.00
<b>SHARON SPRINGS SHALE</b>										
<b>6,176.3</b>	<b>29.02</b>	<b>180.68</b>	<b>6,110.3</b>	<b>-1,154.00</b>	<b>314.8</b>	<b>395.0</b>	<b>-303.9</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,200.0	31.39	180.68	6,130.8	-1,174.48	302.9	394.8	-291.9	10.00	10.00	0.00
<b>NIORRARA FORMATION</b>										
<b>6,260.0</b>	<b>37.39</b>	<b>180.68</b>	<b>6,180.3</b>	<b>-1,224.00</b>	<b>269.0</b>	<b>394.4</b>	<b>-258.1</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
<b>NIORRARA A CHALK</b>										
<b>6,272.7</b>	<b>38.66</b>	<b>180.68</b>	<b>6,190.3</b>	<b>-1,234.00</b>	<b>261.2</b>	<b>394.3</b>	<b>-250.3</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,300.0	41.39	180.68	6,211.2	-1,254.88	243.6	394.1	-232.7	10.00	10.00	0.00
6,400.0	51.39	180.68	6,280.1	-1,323.77	171.3	393.3	-160.5	10.00	10.00	0.00
<b>NIORRARA B CHALK</b>										
<b>6,433.7</b>	<b>54.76</b>	<b>180.68</b>	<b>6,300.3</b>	<b>-1,344.00</b>	<b>144.4</b>	<b>392.9</b>	<b>-133.6</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,500.0	61.39	180.68	6,335.4	-1,379.05	88.1	392.3	-77.4	10.00	10.00	0.00
<b>NIORRARA C CHALK</b>										
<b>6,584.8</b>	<b>69.87</b>	<b>180.68</b>	<b>6,370.3</b>	<b>-1,414.00</b>	<b>11.0</b>	<b>391.4</b>	<b>-0.3</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,600.0	71.39	180.68	6,375.4	-1,419.05	-3.4	391.2	14.1	10.00	10.00	0.00
6,700.0	81.39	180.68	6,398.8	-1,442.55	-100.4	390.1	111.1	10.00	10.00	0.00
<b>BPI: 600ft FSL &amp; 2665ft FWL of Sec 4</b>										
<b>6,786.1</b>	<b>90.00</b>	<b>180.68</b>	<b>6,405.3</b>	<b>-1,449.00</b>	<b>-186.2</b>	<b>389.0</b>	<b>196.7</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,800.0	90.00	180.68	6,405.3	-1,449.00	-200.1	388.9	210.7	0.00	0.00	0.00
6,900.0	90.00	180.68	6,405.3	-1,449.00	-300.1	387.7	310.6	0.00	0.00	0.00
7,000.0	90.00	180.68	6,405.3	-1,449.00	-400.1	386.5	410.5	0.00	0.00	0.00
7,100.0	90.00	180.68	6,405.3	-1,449.00	-500.1	385.3	510.4	0.00	0.00	0.00
7,200.0	90.00	180.68	6,405.3	-1,449.00	-600.1	384.2	610.4	0.00	0.00	0.00
7,300.0	90.00	180.68	6,405.3	-1,449.00	-700.1	383.0	710.3	0.00	0.00	0.00
7,400.0	90.00	180.68	6,405.3	-1,449.00	-800.1	381.8	810.2	0.00	0.00	0.00
7,500.0	90.00	180.68	6,405.3	-1,449.00	-900.0	380.6	910.1	0.00	0.00	0.00
7,600.0	90.00	180.68	6,405.3	-1,449.00	-1,000.0	379.4	1,010.1	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STAMPEDE FED 8-60 4-9-1
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Site:</b>	NE NW SEC. 4 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STAMPEDE FED 8-60 4-9-1	<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)
7,700.0	90.00	180.68	6,405.3	-1,449.00	-1,100.0	378.2	1,110.0	0.00	0.00	0.00
7,800.0	90.00	180.68	6,405.3	-1,449.00	-1,200.0	377.1	1,209.9	0.00	0.00	0.00
7,900.0	90.00	180.68	6,405.3	-1,449.00	-1,300.0	375.9	1,309.8	0.00	0.00	0.00
8,000.0	90.00	180.68	6,405.3	-1,449.00	-1,400.0	374.7	1,409.7	0.00	0.00	0.00
8,100.0	90.00	180.68	6,405.3	-1,449.00	-1,500.0	373.5	1,509.7	0.00	0.00	0.00
8,200.0	90.00	180.68	6,405.3	-1,449.01	-1,600.0	372.3	1,609.6	0.00	0.00	0.00
8,300.0	90.00	180.68	6,405.3	-1,449.01	-1,700.0	371.2	1,709.5	0.00	0.00	0.00
8,400.0	90.00	180.68	6,405.3	-1,449.01	-1,800.0	370.0	1,809.4	0.00	0.00	0.00
8,500.0	90.00	180.68	6,405.3	-1,449.01	-1,900.0	368.8	1,909.4	0.00	0.00	0.00
8,600.0	90.00	180.68	6,405.3	-1,449.01	-2,000.0	367.6	2,009.3	0.00	0.00	0.00
8,700.0	90.00	180.68	6,405.3	-1,449.01	-2,100.0	366.4	2,109.2	0.00	0.00	0.00
8,800.0	90.00	180.68	6,405.3	-1,449.01	-2,200.0	365.2	2,209.1	0.00	0.00	0.00
8,900.0	90.00	180.68	6,405.3	-1,449.01	-2,299.9	364.0	2,309.1	0.00	0.00	0.00
9,000.0	90.00	180.68	6,405.3	-1,449.01	-2,399.9	362.9	2,409.0	0.00	0.00	0.00
9,100.0	90.00	180.68	6,405.3	-1,449.01	-2,499.9	361.7	2,508.9	0.00	0.00	0.00
9,200.0	90.00	180.68	6,405.3	-1,449.01	-2,599.9	360.5	2,608.8	0.00	0.00	0.00
9,300.0	90.00	180.68	6,405.3	-1,449.01	-2,699.9	359.3	2,708.7	0.00	0.00	0.00
9,400.0	90.00	180.68	6,405.3	-1,449.01	-2,799.9	358.1	2,808.7	0.00	0.00	0.00
9,500.0	90.00	180.68	6,405.3	-1,449.01	-2,899.9	356.9	2,908.6	0.00	0.00	0.00
9,600.0	90.00	180.68	6,405.3	-1,449.01	-2,999.9	355.7	3,008.5	0.00	0.00	0.00
9,700.0	90.00	180.68	6,405.3	-1,449.01	-3,099.9	354.6	3,108.4	0.00	0.00	0.00
9,800.0	90.00	180.68	6,405.3	-1,449.01	-3,199.9	353.4	3,208.4	0.00	0.00	0.00
9,900.0	90.00	180.68	6,405.3	-1,449.01	-3,299.9	352.2	3,308.3	0.00	0.00	0.00
10,000.0	90.00	180.68	6,405.3	-1,449.01	-3,399.9	351.0	3,408.2	0.00	0.00	0.00
10,100.0	90.00	180.68	6,405.3	-1,449.01	-3,499.9	349.8	3,508.1	0.00	0.00	0.00
10,200.0	90.00	180.68	6,405.3	-1,449.01	-3,599.9	348.6	3,608.1	0.00	0.00	0.00
10,300.0	90.00	180.68	6,405.3	-1,449.01	-3,699.9	347.4	3,708.0	0.00	0.00	0.00
10,400.0	90.00	180.68	6,405.3	-1,449.01	-3,799.8	346.2	3,807.9	0.00	0.00	0.00
10,500.0	90.00	180.68	6,405.3	-1,449.01	-3,899.8	345.1	3,907.8	0.00	0.00	0.00
10,600.0	90.00	180.68	6,405.3	-1,449.01	-3,999.8	343.9	4,007.7	0.00	0.00	0.00
10,700.0	90.00	180.68	6,405.3	-1,449.01	-4,099.8	342.7	4,107.7	0.00	0.00	0.00
10,800.0	90.00	180.68	6,405.3	-1,449.01	-4,199.8	341.5	4,207.6	0.00	0.00	0.00
10,900.0	90.00	180.68	6,405.3	-1,449.01	-4,299.8	340.3	4,307.5	0.00	0.00	0.00
11,000.0	90.00	180.68	6,405.3	-1,449.01	-4,399.8	339.1	4,407.4	0.00	0.00	0.00
11,100.0	90.00	180.68	6,405.3	-1,449.01	-4,499.8	337.9	4,507.4	0.00	0.00	0.00
11,200.0	90.00	180.68	6,405.3	-1,449.01	-4,599.8	336.7	4,607.3	0.00	0.00	0.00
11,300.0	90.00	180.68	6,405.3	-1,449.01	-4,699.8	335.5	4,707.2	0.00	0.00	0.00
11,400.0	90.00	180.68	6,405.3	-1,449.01	-4,799.8	334.3	4,807.1	0.00	0.00	0.00
11,500.0	90.00	180.68	6,405.3	-1,449.01	-4,899.8	333.1	4,907.0	0.00	0.00	0.00
11,600.0	90.00	180.68	6,405.3	-1,449.01	-4,999.8	332.0	5,007.0	0.00	0.00	0.00
11,700.0	90.00	180.68	6,405.3	-1,449.01	-5,099.8	330.8	5,106.9	0.00	0.00	0.00
11,800.0	90.00	180.68	6,405.3	-1,449.01	-5,199.7	329.6	5,206.8	0.00	0.00	0.00
11,900.0	90.00	180.68	6,405.3	-1,449.01	-5,299.7	328.4	5,306.7	0.00	0.00	0.00
12,000.0	90.00	180.68	6,405.3	-1,449.01	-5,399.7	327.2	5,406.7	0.00	0.00	0.00
12,100.0	90.00	180.68	6,405.3	-1,449.01	-5,499.7	326.0	5,506.6	0.00	0.00	0.00
12,200.0	90.00	180.68	6,405.3	-1,449.01	-5,599.7	324.8	5,606.5	0.00	0.00	0.00
12,300.0	90.00	180.68	6,405.3	-1,449.01	-5,699.7	323.6	5,706.4	0.00	0.00	0.00
12,400.0	90.00	180.68	6,405.3	-1,449.01	-5,799.7	322.4	5,806.4	0.00	0.00	0.00
12,500.0	90.00	180.68	6,405.3	-1,449.01	-5,899.7	321.2	5,906.3	0.00	0.00	0.00
12,600.0	90.00	180.68	6,405.3	-1,449.01	-5,999.7	320.0	6,006.2	0.00	0.00	0.00
12,700.0	90.00	180.68	6,405.3	-1,449.01	-6,099.7	318.8	6,106.1	0.00	0.00	0.00
12,800.0	90.00	180.68	6,405.3	-1,449.01	-6,199.7	317.6	6,206.0	0.00	0.00	0.00
12,900.0	90.00	180.69	6,405.3	-1,449.01	-6,299.7	316.4	6,306.0	0.00	0.00	0.00
13,000.0	90.00	180.69	6,405.3	-1,449.01	-6,399.7	315.2	6,405.9	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STAMPEDE FED 8-60 4-9-1
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Site:</b>	NE NW SEC. 4 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STAMPEDE FED 8-60 4-9-1	<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)
13,100.0	90.00	180.69	6,405.3	-1,449.01	-6,499.7	314.0	6,505.8	0.00	0.00	0.00
13,200.0	90.00	180.69	6,405.3	-1,449.01	-6,599.6	312.8	6,605.7	0.00	0.00	0.00
13,300.0	90.00	180.69	6,405.3	-1,449.01	-6,699.6	311.6	6,705.7	0.00	0.00	0.00
13,400.0	90.00	180.69	6,405.3	-1,449.01	-6,799.6	310.5	6,805.6	0.00	0.00	0.00
13,500.0	90.00	180.69	6,405.3	-1,449.01	-6,899.6	309.3	6,905.5	0.00	0.00	0.00
13,600.0	90.00	180.69	6,405.3	-1,449.01	-6,999.6	308.1	7,005.4	0.00	0.00	0.00
13,700.0	90.00	180.69	6,405.3	-1,449.01	-7,099.6	306.9	7,105.3	0.00	0.00	0.00
13,800.0	90.00	180.69	6,405.3	-1,449.01	-7,199.6	305.7	7,205.3	0.00	0.00	0.00
13,900.0	90.00	180.69	6,405.3	-1,449.01	-7,299.6	304.5	7,305.2	0.00	0.00	0.00
14,000.0	90.00	180.69	6,405.3	-1,449.01	-7,399.6	303.3	7,405.1	0.00	0.00	0.00
14,100.0	90.00	180.69	6,405.3	-1,449.01	-7,499.6	302.1	7,505.0	0.00	0.00	0.00
14,200.0	90.00	180.69	6,405.3	-1,449.01	-7,599.6	300.9	7,605.0	0.00	0.00	0.00
14,300.0	90.00	180.69	6,405.3	-1,449.01	-7,699.6	299.7	7,704.9	0.00	0.00	0.00
14,400.0	90.00	180.69	6,405.3	-1,449.01	-7,799.6	298.5	7,804.8	0.00	0.00	0.00
14,500.0	90.00	180.69	6,405.3	-1,449.01	-7,899.6	297.3	7,904.7	0.00	0.00	0.00
14,600.0	90.00	180.69	6,405.3	-1,449.01	-7,999.5	296.1	8,004.7	0.00	0.00	0.00
14,700.0	90.00	180.69	6,405.3	-1,449.01	-8,099.5	294.9	8,104.6	0.00	0.00	0.00
14,800.0	90.00	180.69	6,405.3	-1,449.01	-8,199.5	293.7	8,204.5	0.00	0.00	0.00
14,900.0	90.00	180.69	6,405.3	-1,449.00	-8,299.5	292.5	8,304.4	0.00	0.00	0.00
15,000.0	90.00	180.69	6,405.3	-1,449.00	-8,399.5	291.3	8,404.3	0.00	0.00	0.00
15,100.0	90.00	180.69	6,405.3	-1,449.00	-8,499.5	290.1	8,504.3	0.00	0.00	0.00
15,200.0	90.00	180.69	6,405.3	-1,449.00	-8,599.5	288.9	8,604.2	0.00	0.00	0.00
15,300.0	90.00	180.69	6,405.3	-1,449.00	-8,699.5	287.7	8,704.1	0.00	0.00	0.00
15,400.0	90.00	180.69	6,405.3	-1,449.00	-8,799.5	286.5	8,804.0	0.00	0.00	0.00
15,500.0	90.00	180.69	6,405.3	-1,449.00	-8,899.5	285.3	8,904.0	0.00	0.00	0.00
15,600.0	90.00	180.69	6,405.3	-1,449.00	-8,999.5	284.1	9,003.9	0.00	0.00	0.00
15,700.0	90.00	180.69	6,405.3	-1,449.00	-9,099.5	282.9	9,103.8	0.00	0.00	0.00
15,800.0	90.00	180.69	6,405.3	-1,449.00	-9,199.5	281.7	9,203.7	0.00	0.00	0.00
15,900.0	90.00	180.69	6,405.3	-1,449.00	-9,299.5	280.4	9,303.6	0.00	0.00	0.00
16,000.0	90.00	180.69	6,405.3	-1,449.00	-9,399.4	279.2	9,403.6	0.00	0.00	0.00
16,100.0	90.00	180.69	6,405.3	-1,449.00	-9,499.4	278.0	9,503.5	0.00	0.00	0.00
16,200.0	90.00	180.69	6,405.3	-1,449.00	-9,599.4	276.8	9,603.4	0.00	0.00	0.00
<b>EPI: 600ft FNL &amp; 2664ft FWL of Sec 9</b>										
<b>16,268.4</b>	<b>90.00</b>	<b>180.69</b>	<b>6,405.3</b>	<b>-1,449.00</b>	<b>-9,667.8</b>	<b>276.0</b>	<b>9,671.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>EOT TO 180.58° AZ</b>										
<b>16,272.0</b>	<b>90.00</b>	<b>180.58</b>	<b>6,405.3</b>	<b>-1,449.00</b>	<b>-9,671.4</b>	<b>276.0</b>	<b>9,675.3</b>	<b>3.00</b>	<b>-0.01</b>	<b>-3.00</b>
16,300.0	90.00	180.58	6,405.3	-1,449.00	-9,699.4	275.7	9,703.3	0.00	0.00	0.00
16,400.0	90.00	180.58	6,405.3	-1,449.00	-9,799.4	274.7	9,803.3	0.00	0.00	0.00
16,500.0	90.00	180.58	6,405.3	-1,449.00	-9,899.4	273.7	9,903.2	0.00	0.00	0.00
<b>BHL: 300ft FNL &amp; 2665ft FWL of Sec 9</b>										
<b>16,567.9</b>	<b>90.00</b>	<b>180.58</b>	<b>6,405.3</b>	<b>-1,449.00</b>	<b>-9,967.3</b>	<b>273.0</b>	<b>9,971.0</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well STAMPEDE FED 8-60 4-9-1
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4956.3usft (Original Well Elev)
<b>Site:</b>	NE NW SEC. 4 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	STAMPEDE FED 8-60 4-9-1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
526.3	526.3	PIERRE SHALE (BASE FOX HILLS			
3,511.7	3,458.3	PARKMAN			
4,037.1	3,983.3	SUSSEX			
5,135.1	5,081.3	SHANNON			
6,176.3	6,110.3	SHARON SPRINGS SHALE			
6,260.0	6,180.3	NIOBRARA FORMATION			
6,272.7	6,190.3	NIOBRARA A CHALK			
6,433.7	6,300.3	NIOBRARA B CHALK			
6,584.8	6,370.3	NIOBRARA C CHALK			

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.0	0.0	0.0	0.0	SHL: 410ft FNL & 2275ft FWL of Sec 4
500.0	500.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,100.0	1,095.6	43.7	44.8	EOB TO 12° INC
3,159.3	3,109.9	343.0	351.0	END OF TANGENT
3,759.3	3,705.5	386.7	395.8	EOD TO VERTICAL
5,886.2	5,832.4	386.7	395.8	KOP (10°/100ft BUR)
6,786.1	6,405.3	-186.2	389.0	BPI: 600ft FSL & 2665ft FWL of Sec 4
16,268.4	6,405.3	-9,667.8	276.0	EPI: 600ft FNL & 2664ft FWL of Sec 9
16,272.0	6,405.3	-9,671.4	276.0	EOT TO 180.58° AZ
16,567.9	6,405.3	-9,967.3	273.0	BHL: 300ft FNL & 2665ft FWL of Sec 9