

BISON OIL & GAS II, LLC

WELD COUNTY, COLORADO (NAD 83)

NW NE SEC. 27 T9N R60 W 6th P.M.

BASHOR 9-60 27B-34-1

ORIGINAL WELLBORE

03 July, 2017

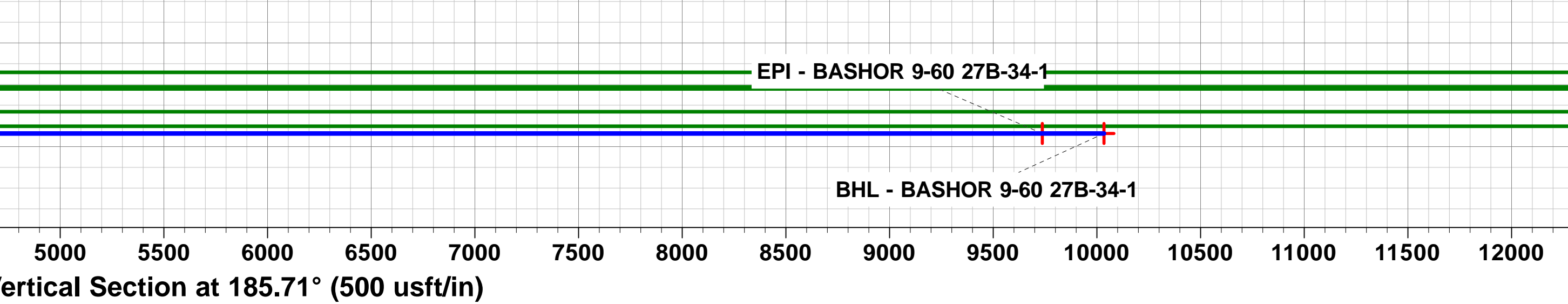
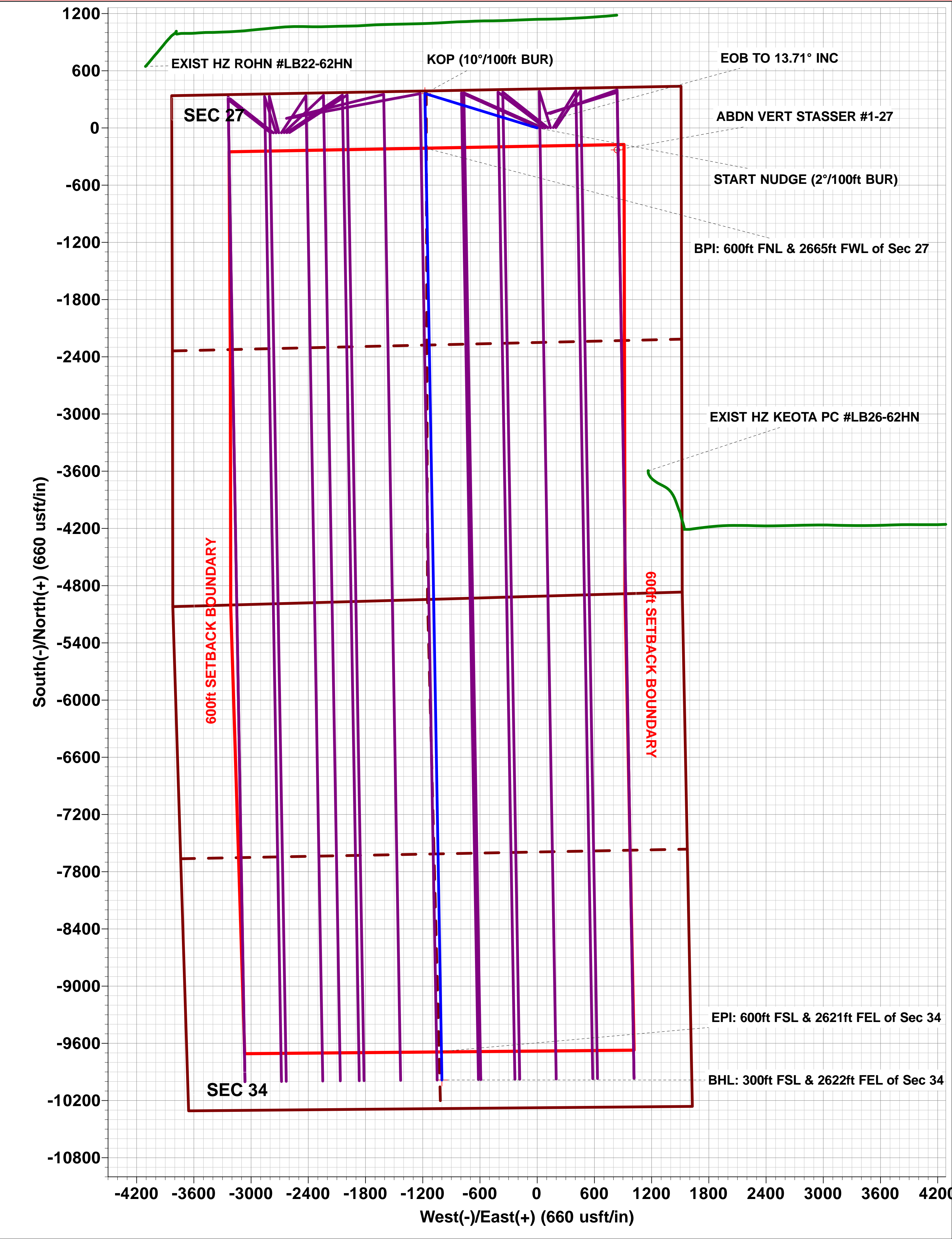
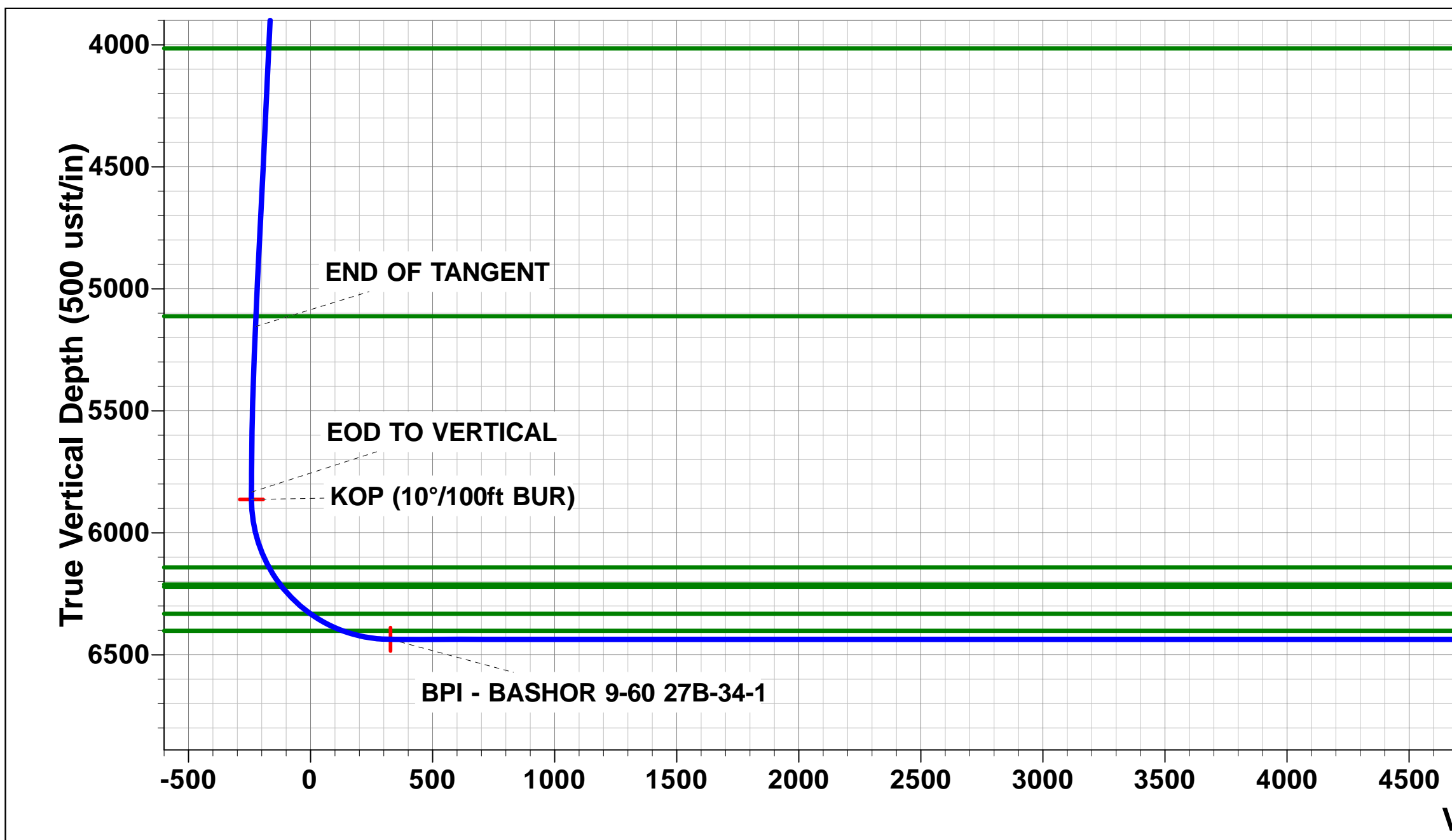
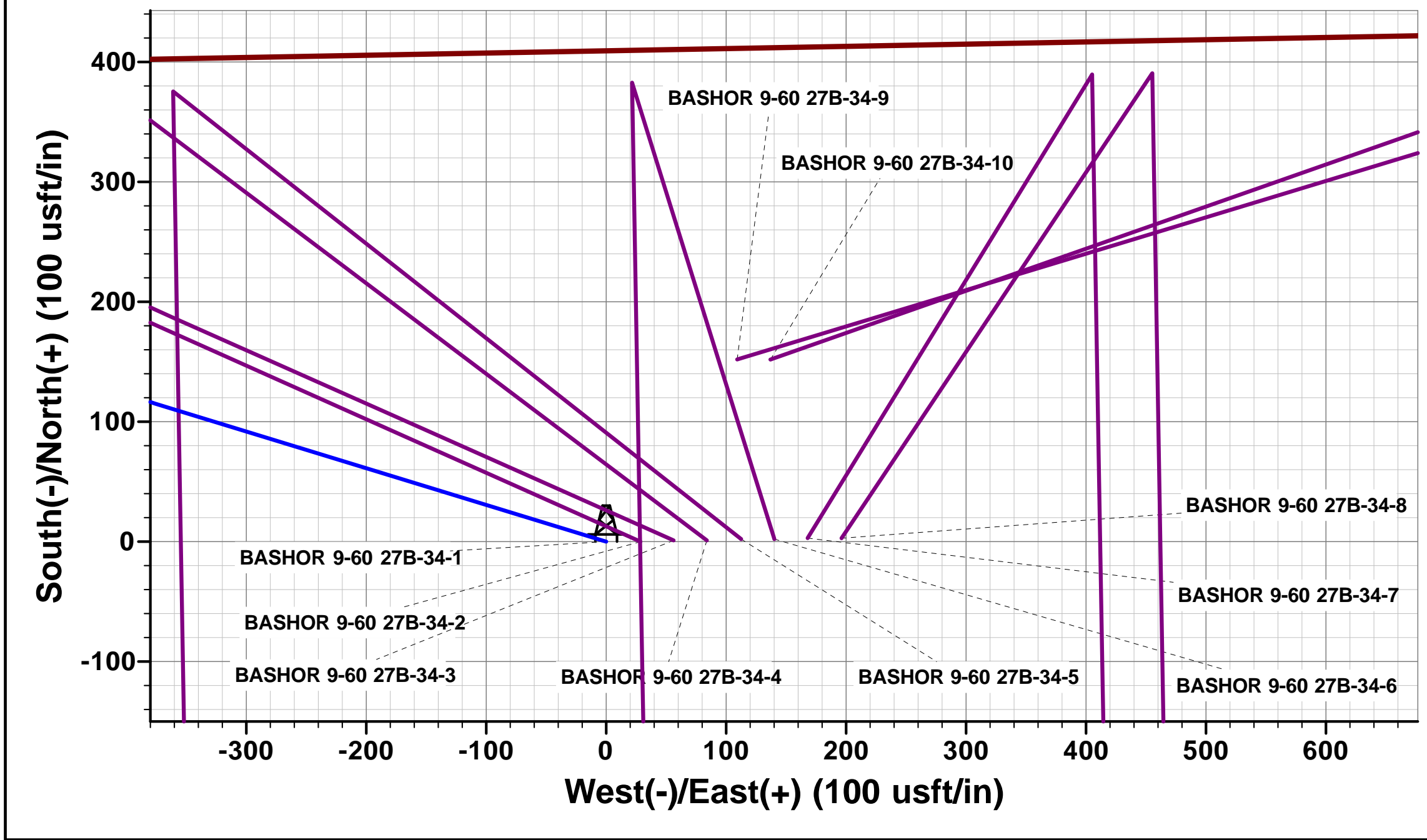
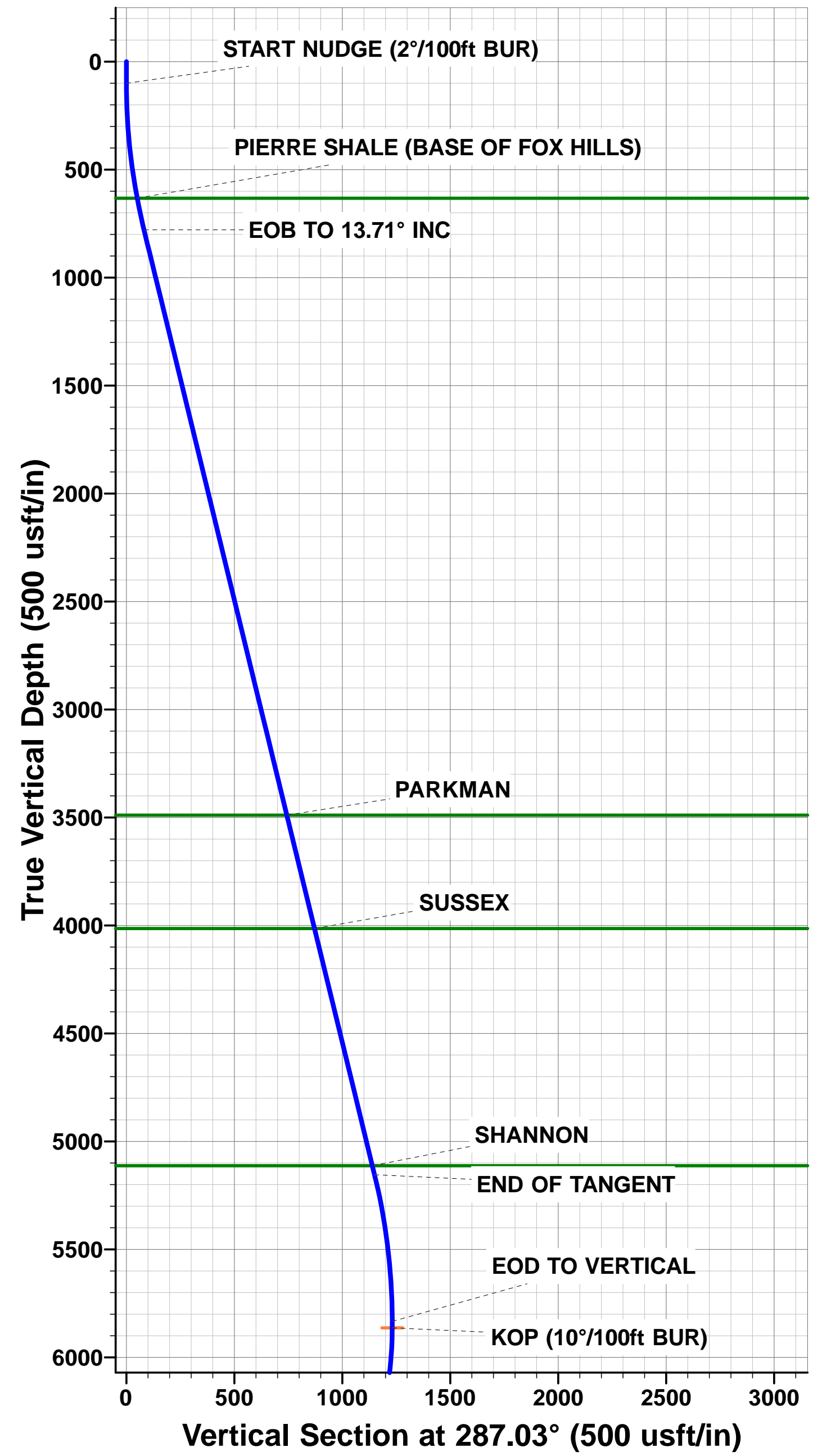
Plan: PROPOSAL #1





Project: WELD COUNTY, COLORADO (NAD 83)
Site: NW NE SEC. 27 T9N R60 W 6th P.M.
Well: BASHOR 9-60 27B-34-1
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS											PROPOSED LOCAL COORDINATES: SHL: 410ft FNL & 1509ft FEL Sec 27 BPI: 600ft FNL & 2665ft FWL Sec 27 EPI: 600ft FSL & 2621ft FEL Sec 34 BHL: 300ft FSL & 2622ft FEL of Sec 34
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 & 1509ft FEL of Sec 27			
100.0	100.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2"/100ft BUR)			
779.2	785.7	13.71	287.03	23.9	-78.1	-16.0	81.7	EOB TO 13.71° INC			
5154.5	5289.5	13.71	287.03	336.6	-1099.0	-225.5	1149.4	END OF TANGENT			
5833.7	5975.2	0.00	0.00	360.5	-1177.1	-241.5	1231.1	EOD TO VERTICAL			
5863.7	6005.2	0.00	0.00	360.5	-1177.1	-241.5	1231.1	KOP (10"/100ft BUR)			
6436.7	6905.2	90.00	179.01	-212.4	-1167.2	327.5	1804.0	BPI: 600ft FNL & 2665ft FWL of Sec 27			
6436.7	16379.2	90.00	179.02	-9685.0	-1004.3	9736.9	11278.0	EPI: 600ft FSL & 2621ft FEL of Sec 34			
6436.7	16678.7	90.00	178.97	-9984.5	-999.0	10034.3	11577.6	BHL: 300ft FSL & 2622ft FEL of Sec 34			
WELLBORE TARGET DETAILS (LAT/LONG)											
Name				TVD	+N/-S	+E/-W	Latitude		Longitude		
KOP - BASHOR 9-60 27B-34-1				5863.7	360.5	-1177.1	40.728225		-104.078447		
BHL - BASHOR 9-60 27B-34-1				6436.7	-9984.5	-999.0	40.699831		-104.077803		
BPI - BASHOR 9-60 27B-34-1				6436.7	-212.4	-1167.2	40.726653		-104.078411		
EPI - BASHOR 9-60 27B-34-1				6436.7	-9685.0	-1004.3	40.700653		-104.077822		



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BASHOR 9-60 27B-34-1
Company:	BISON OIL & GAS II, LLC	TVD Reference:	KB-EST @ 5017.7usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 5017.7usft (Original Well Elev)
Site:	NW NE SEC. 27 T9N R60 W 6th P.M.	North Reference:	True
Well:	BASHOR 9-60 27B-34-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

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. 27 T9N R60 W 6th P.M.		
Site Position:		Northing:	1,510,953.37 usft
From:	Lat/Long	Easting:	3,395,166.17 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.727236
		Longitude:	-104.074200
		Grid Convergence:	0.92 °

Well	BASHOR 9-60 27B-34-1		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	03/07/2017	7.86	67.22	52,625

Design	PROPOSAL #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	6,436.7	0.0	0.0	185.71

Plan Sections											
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	-5,017.7	0.0	0.0	0.00	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	-4,917.7	0.0	0.0	0.00	0.00	0.00	0.00	
785.7	13.71	287.03	779.2	-4,238.5	23.9	-78.1	2.00	2.00	0.00	287.03	
5,289.5	13.71	287.03	5,154.5	136.8	336.6	-1,099.0	0.00	0.00	0.00	0.00	
5,975.2	0.00	0.00	5,833.7	816.0	360.5	-1,177.1	2.00	-2.00	0.00	180.00	
6,005.2	0.00	0.00	5,863.7	846.0	360.5	-1,177.1	0.00	0.00	0.00	0.00	KOP - BASHOR 9-60
6,905.2	90.00	179.01	6,436.7	1,419.0	-212.4	-1,167.2	10.00	10.00	19.89	179.01	BPI - BASHOR 9-60
16,379.2	90.00	179.02	6,436.7	1,419.0	-9,685.0	-1,004.3	0.00	0.00	0.00	66.88	EPI - BASHOR 9-60
16,678.7	90.00	178.97	6,436.7	1,419.0	-9,984.5	-999.0	0.02	0.00	-0.02	-97.10	BHL - BASHOR 9-60

Planning Report



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Company:	BISON OIL & GAS II, LLC	TVD Reference:	KB-EST @ 5017.7usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 5017.7usft (Original Well Elev)
Site:	NW NE SEC. 27 T9N R60 W 6th P.M.	North Reference:	True
Well:	BASHOR 9-60 27B-34-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)
SHL: 410ft FNL & 1509ft FEL of Sec 27										
0.0	0.00	0.00	0.0	5,017.70	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
100.0	0.00	0.00	100.0	4,917.70	0.0	0.0	0.0	0.00	0.00	0.00
200.0	2.00	287.03	200.0	4,817.72	0.5	-1.7	-0.3	2.00	2.00	0.00
300.0	4.00	287.03	299.8	4,717.86	2.0	-6.7	-1.4	2.00	2.00	0.00
400.0	6.00	287.03	399.5	4,618.25	4.6	-15.0	-3.1	2.00	2.00	0.00
500.0	8.00	287.03	498.7	4,519.00	8.2	-26.7	-5.5	2.00	2.00	0.00
600.0	10.00	287.03	597.5	4,420.23	12.7	-41.6	-8.5	2.00	2.00	0.00
PIERRE SHALE (BASE OF FOX HILLS)										
635.8	10.72	287.03	632.7	4,385.00	14.6	-47.8	-9.8	2.00	2.00	0.00
700.0	12.00	287.03	695.6	4,322.08	18.3	-59.9	-12.3	2.00	2.00	0.00
EOB TO 13.71° INC										
785.7	13.71	287.03	779.2	4,238.53	23.9	-78.1	-16.0	2.00	2.00	0.00
800.0	13.71	287.03	793.1	4,224.64	24.9	-81.3	-16.7	0.00	0.00	0.00
900.0	13.71	287.03	890.2	4,127.49	31.9	-104.0	-21.3	0.00	0.00	0.00
1,000.0	13.71	287.03	987.4	4,030.34	38.8	-126.7	-26.0	0.00	0.00	0.00
1,100.0	13.71	287.03	1,084.5	3,933.19	45.7	-149.3	-30.6	0.00	0.00	0.00
1,200.0	13.71	287.03	1,181.7	3,836.04	52.7	-172.0	-35.3	0.00	0.00	0.00
1,300.0	13.71	287.03	1,278.8	3,738.89	59.6	-194.7	-39.9	0.00	0.00	0.00
1,400.0	13.71	287.03	1,376.0	3,641.74	66.6	-217.3	-44.6	0.00	0.00	0.00
1,500.0	13.71	287.03	1,473.1	3,544.59	73.5	-240.0	-49.2	0.00	0.00	0.00
1,600.0	13.71	287.03	1,570.3	3,447.44	80.4	-262.7	-53.9	0.00	0.00	0.00
1,700.0	13.71	287.03	1,667.4	3,350.29	87.4	-285.3	-58.5	0.00	0.00	0.00
1,800.0	13.71	287.03	1,764.6	3,253.14	94.3	-308.0	-63.2	0.00	0.00	0.00
1,900.0	13.71	287.03	1,861.7	3,156.00	101.3	-330.7	-67.8	0.00	0.00	0.00
2,000.0	13.71	287.03	1,958.9	3,058.85	108.2	-353.4	-72.5	0.00	0.00	0.00
2,100.0	13.71	287.03	2,056.0	2,961.70	115.2	-376.0	-77.2	0.00	0.00	0.00
2,200.0	13.71	287.03	2,153.2	2,864.55	122.1	-398.7	-81.8	0.00	0.00	0.00
2,300.0	13.71	287.03	2,250.3	2,767.40	129.0	-421.4	-86.5	0.00	0.00	0.00
2,400.0	13.71	287.03	2,347.5	2,670.25	136.0	-444.0	-91.1	0.00	0.00	0.00
2,500.0	13.71	287.03	2,444.6	2,573.10	142.9	-466.7	-95.8	0.00	0.00	0.00
2,600.0	13.71	287.03	2,541.7	2,475.95	149.9	-489.4	-100.4	0.00	0.00	0.00
2,700.0	13.71	287.03	2,638.9	2,378.80	156.8	-512.0	-105.1	0.00	0.00	0.00
2,800.0	13.71	287.03	2,736.0	2,281.65	163.8	-534.7	-109.7	0.00	0.00	0.00
2,900.0	13.71	287.03	2,833.2	2,184.50	170.7	-557.4	-114.4	0.00	0.00	0.00
3,000.0	13.71	287.03	2,930.3	2,087.35	177.6	-580.0	-119.0	0.00	0.00	0.00
3,100.0	13.71	287.03	3,027.5	1,990.21	184.6	-602.7	-123.7	0.00	0.00	0.00
3,200.0	13.71	287.03	3,124.6	1,893.06	191.5	-625.4	-128.3	0.00	0.00	0.00
3,300.0	13.71	287.03	3,221.8	1,795.91	198.5	-648.0	-133.0	0.00	0.00	0.00
3,400.0	13.71	287.03	3,318.9	1,698.76	205.4	-670.7	-137.6	0.00	0.00	0.00
3,500.0	13.71	287.03	3,416.1	1,601.61	212.4	-693.4	-142.3	0.00	0.00	0.00
PARKMAN										
3,575.8	13.71	287.03	3,489.7	1,528.00	217.6	-710.5	-145.8	0.00	0.00	0.00
3,600.0	13.71	287.03	3,513.2	1,504.46	219.3	-716.0	-146.9	0.00	0.00	0.00
3,700.0	13.71	287.03	3,610.4	1,407.31	226.2	-738.7	-151.6	0.00	0.00	0.00
3,800.0	13.71	287.03	3,707.5	1,310.16	233.2	-761.4	-156.2	0.00	0.00	0.00
3,900.0	13.71	287.03	3,804.7	1,213.01	240.1	-784.0	-160.9	0.00	0.00	0.00
4,000.0	13.71	287.03	3,901.8	1,115.86	247.1	-806.7	-165.5	0.00	0.00	0.00
4,100.0	13.71	287.03	3,999.0	1,018.71	254.0	-829.4	-170.2	0.00	0.00	0.00
SUSSEX										
4,116.2	13.71	287.03	4,014.7	1,003.00	255.1	-833.0	-170.9	0.00	0.00	0.00
4,200.0	13.71	287.03	4,096.1	921.56	260.9	-852.0	-174.8	0.00	0.00	0.00

Planning Report



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Well:	BASHOR 9-60 27B-34-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)
4,300.0	13.71	287.03	4,193.3	824.42	267.9	-874.7	-179.5	0.00	0.00	0.00
4,400.0	13.71	287.03	4,290.4	727.27	274.8	-897.4	-184.1	0.00	0.00	0.00
4,500.0	13.71	287.03	4,387.6	630.12	281.8	-920.1	-188.8	0.00	0.00	0.00
4,600.0	13.71	287.03	4,484.7	532.97	288.7	-942.7	-193.4	0.00	0.00	0.00
4,700.0	13.71	287.03	4,581.9	435.82	295.7	-965.4	-198.1	0.00	0.00	0.00
4,800.0	13.71	287.03	4,679.0	338.67	302.6	-988.1	-202.7	0.00	0.00	0.00
4,900.0	13.71	287.03	4,776.2	241.52	309.5	-1,010.7	-207.4	0.00	0.00	0.00
5,000.0	13.71	287.03	4,873.3	144.37	316.5	-1,033.4	-212.0	0.00	0.00	0.00
5,100.0	13.71	287.03	4,970.5	47.22	323.4	-1,056.1	-216.7	0.00	0.00	0.00
5,200.0	13.71	287.03	5,067.6	-49.93	330.4	-1,078.7	-221.3	0.00	0.00	0.00
SHANNON										
5,246.4	13.71	287.03	5,112.7	-95.00	333.6	-1,089.2	-223.5	0.00	0.00	0.00
END OF TANGENT										
5,289.5	13.71	287.03	5,154.5	-136.83	336.6	-1,099.0	-225.5	0.00	0.00	0.00
5,300.0	13.50	287.03	5,164.8	-147.08	337.3	-1,101.4	-226.0	2.00	-2.00	0.00
5,400.0	11.50	287.03	5,262.4	-244.70	343.6	-1,122.1	-230.2	2.00	-2.00	0.00
5,500.0	9.50	287.03	5,360.7	-343.02	349.0	-1,139.5	-233.8	2.00	-2.00	0.00
5,600.0	7.50	287.03	5,459.6	-441.92	353.3	-1,153.6	-236.7	2.00	-2.00	0.00
5,700.0	5.50	287.03	5,559.0	-541.27	356.6	-1,164.5	-238.9	2.00	-2.00	0.00
5,800.0	3.50	287.03	5,658.7	-640.96	358.9	-1,172.0	-240.5	2.00	-2.00	0.00
5,900.0	1.50	287.03	5,758.6	-740.86	360.2	-1,176.2	-241.3	2.00	-2.00	0.00
EOD TO VERTICAL										
5,975.2	0.00	0.00	5,833.7	-816.00	360.5	-1,177.1	-241.5	2.00	-2.00	0.00
6,000.0	0.00	0.00	5,858.5	-840.85	360.5	-1,177.1	-241.5	0.00	0.00	0.00
KOP (10°/100ft BUR)										
6,005.2	0.00	0.00	5,863.7	-846.00	360.5	-1,177.1	-241.5	0.00	0.00	0.00
6,100.0	9.48	179.01	5,958.1	-940.42	352.7	-1,177.0	-233.7	10.00	10.00	0.00
6,200.0	19.48	179.01	6,054.8	-1,037.11	327.7	-1,176.5	-208.9	10.00	10.00	0.00
SHARON SPRINGS SHALE										
6,295.4	29.02	179.01	6,141.7	-1,124.00	288.6	-1,175.9	-170.0	10.00	10.00	0.00
6,300.0	29.48	179.01	6,145.7	-1,128.01	286.3	-1,175.8	-167.8	10.00	10.00	0.00
NIOBRARA FORMATION										
6,379.1	37.40	179.01	6,211.7	-1,194.00	242.7	-1,175.1	-124.5	10.00	10.00	0.00
NIOBRARA A CHALK										
6,391.8	38.67	179.01	6,221.7	-1,204.00	234.9	-1,174.9	-116.8	10.00	10.00	0.00
6,400.0	39.48	179.01	6,228.0	-1,210.33	229.8	-1,174.8	-111.7	10.00	10.00	0.00
6,500.0	49.48	179.01	6,299.3	-1,281.59	159.8	-1,173.6	-42.2	10.00	10.00	0.00
NIOBRARA B CHALK										
6,552.8	54.76	179.01	6,331.7	-1,314.00	118.1	-1,172.9	-0.8	10.00	10.00	0.00
6,600.0	59.48	179.01	6,357.3	-1,339.61	78.5	-1,172.2	38.6	10.00	10.00	0.00
6,700.0	69.48	179.01	6,400.3	-1,382.64	-11.6	-1,170.6	128.1	10.00	10.00	0.00
NIOBRARA C CHALK										
6,703.9	69.87	179.01	6,401.7	-1,384.00	-15.3	-1,170.6	131.7	10.00	10.00	0.00
6,800.0	79.48	179.01	6,427.1	-1,409.37	-107.8	-1,169.0	223.7	10.00	10.00	0.00
6,900.0	89.48	179.01	6,436.7	-1,418.98	-207.2	-1,167.3	322.4	10.00	10.00	0.00
BPI: 600ft FNL & 2665ft FWL of Sec 27										
6,905.2	90.00	179.01	6,436.7	-1,419.00	-212.4	-1,167.2	327.5	10.00	10.00	0.00
7,000.0	90.00	179.01	6,436.7	-1,419.01	-307.2	-1,165.5	421.7	0.00	0.00	0.00
7,100.0	90.00	179.01	6,436.7	-1,419.01	-407.2	-1,163.8	521.0	0.00	0.00	0.00
7,200.0	90.00	179.01	6,436.7	-1,419.02	-507.2	-1,162.1	620.3	0.00	0.00	0.00
7,300.0	90.00	179.01	6,436.7	-1,419.02	-607.1	-1,160.3	719.6	0.00	0.00	0.00
7,400.0	90.00	179.01	6,436.7	-1,419.03	-707.1	-1,158.6	819.0	0.00	0.00	0.00
7,500.0	90.00	179.01	6,436.7	-1,419.04	-807.1	-1,156.9	918.3	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BASHOR 9-60 27B-34-1
Company:	BISON OIL & GAS II, LLC	TVD Reference:	KB-EST @ 5017.7usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 5017.7usft (Original Well Elev)
Site:	NW NE SEC. 27 T9N R60 W 6th P.M.	North Reference:	True
Well:	BASHOR 9-60 27B-34-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)
7,600.0	90.00	179.01	6,436.7	-1,419.04	-907.1	-1,155.1	1,017.6	0.00	0.00	0.00
7,700.0	90.00	179.01	6,436.7	-1,419.05	-1,007.1	-1,153.4	1,116.9	0.00	0.00	0.00
7,800.0	90.00	179.01	6,436.8	-1,419.05	-1,107.1	-1,151.7	1,216.2	0.00	0.00	0.00
7,900.0	90.00	179.01	6,436.8	-1,419.06	-1,207.0	-1,149.9	1,315.5	0.00	0.00	0.00
8,000.0	90.00	179.01	6,436.8	-1,419.06	-1,307.0	-1,148.2	1,414.9	0.00	0.00	0.00
8,100.0	90.00	179.01	6,436.8	-1,419.07	-1,407.0	-1,146.5	1,514.2	0.00	0.00	0.00
8,200.0	90.00	179.01	6,436.8	-1,419.07	-1,507.0	-1,144.7	1,613.5	0.00	0.00	0.00
8,300.0	90.00	179.01	6,436.8	-1,419.07	-1,607.0	-1,143.0	1,712.8	0.00	0.00	0.00
8,400.0	90.00	179.01	6,436.8	-1,419.08	-1,707.0	-1,141.3	1,812.1	0.00	0.00	0.00
8,500.0	90.00	179.01	6,436.8	-1,419.08	-1,807.0	-1,139.6	1,911.4	0.00	0.00	0.00
8,600.0	90.00	179.01	6,436.8	-1,419.09	-1,906.9	-1,137.8	2,010.8	0.00	0.00	0.00
8,700.0	90.00	179.01	6,436.8	-1,419.09	-2,006.9	-1,136.1	2,110.1	0.00	0.00	0.00
8,800.0	90.00	179.01	6,436.8	-1,419.10	-2,106.9	-1,134.4	2,209.4	0.00	0.00	0.00
8,900.0	90.00	179.01	6,436.8	-1,419.10	-2,206.9	-1,132.6	2,308.7	0.00	0.00	0.00
9,000.0	90.00	179.01	6,436.8	-1,419.10	-2,306.9	-1,130.9	2,408.0	0.00	0.00	0.00
9,100.0	90.00	179.01	6,436.8	-1,419.11	-2,406.9	-1,129.2	2,507.3	0.00	0.00	0.00
9,200.0	90.00	179.01	6,436.8	-1,419.11	-2,506.9	-1,127.5	2,606.6	0.00	0.00	0.00
9,300.0	90.00	179.01	6,436.8	-1,419.11	-2,606.8	-1,125.7	2,706.0	0.00	0.00	0.00
9,400.0	90.00	179.01	6,436.8	-1,419.12	-2,706.8	-1,124.0	2,805.3	0.00	0.00	0.00
9,500.0	90.00	179.01	6,436.8	-1,419.12	-2,806.8	-1,122.3	2,904.6	0.00	0.00	0.00
9,600.0	90.00	179.01	6,436.8	-1,419.12	-2,906.8	-1,120.6	3,003.9	0.00	0.00	0.00
9,700.0	90.00	179.01	6,436.8	-1,419.12	-3,006.8	-1,118.8	3,103.2	0.00	0.00	0.00
9,800.0	90.00	179.01	6,436.8	-1,419.13	-3,106.8	-1,117.1	3,202.5	0.00	0.00	0.00
9,900.0	90.00	179.01	6,436.8	-1,419.13	-3,206.7	-1,115.4	3,301.9	0.00	0.00	0.00
10,000.0	90.00	179.01	6,436.8	-1,419.13	-3,306.7	-1,113.7	3,401.2	0.00	0.00	0.00
10,100.0	90.00	179.01	6,436.8	-1,419.13	-3,406.7	-1,111.9	3,500.5	0.00	0.00	0.00
10,200.0	90.00	179.01	6,436.8	-1,419.14	-3,506.7	-1,110.2	3,599.8	0.00	0.00	0.00
10,300.0	90.00	179.01	6,436.8	-1,419.14	-3,606.7	-1,108.5	3,699.1	0.00	0.00	0.00
10,400.0	90.00	179.01	6,436.8	-1,419.14	-3,706.7	-1,106.8	3,798.4	0.00	0.00	0.00
10,500.0	90.00	179.01	6,436.8	-1,419.14	-3,806.7	-1,105.0	3,897.8	0.00	0.00	0.00
10,600.0	90.00	179.01	6,436.8	-1,419.14	-3,906.6	-1,103.3	3,997.1	0.00	0.00	0.00
10,700.0	90.00	179.01	6,436.8	-1,419.14	-4,006.6	-1,101.6	4,096.4	0.00	0.00	0.00
10,800.0	90.00	179.01	6,436.8	-1,419.14	-4,106.6	-1,099.9	4,195.7	0.00	0.00	0.00
10,900.0	90.00	179.01	6,436.8	-1,419.15	-4,206.6	-1,098.2	4,295.0	0.00	0.00	0.00
11,000.0	90.00	179.01	6,436.8	-1,419.15	-4,306.6	-1,096.4	4,394.3	0.00	0.00	0.00
11,100.0	90.00	179.01	6,436.8	-1,419.15	-4,406.6	-1,094.7	4,493.7	0.00	0.00	0.00
11,200.0	90.00	179.01	6,436.8	-1,419.15	-4,506.6	-1,093.0	4,593.0	0.00	0.00	0.00
11,300.0	90.00	179.01	6,436.8	-1,419.15	-4,606.5	-1,091.3	4,692.3	0.00	0.00	0.00
11,400.0	90.00	179.01	6,436.8	-1,419.15	-4,706.5	-1,089.5	4,791.6	0.00	0.00	0.00
11,500.0	90.00	179.01	6,436.8	-1,419.15	-4,806.5	-1,087.8	4,890.9	0.00	0.00	0.00
11,600.0	90.00	179.01	6,436.8	-1,419.15	-4,906.5	-1,086.1	4,990.3	0.00	0.00	0.00
11,700.0	90.00	179.02	6,436.8	-1,419.15	-5,006.5	-1,084.4	5,089.6	0.00	0.00	0.00
11,800.0	90.00	179.02	6,436.8	-1,419.15	-5,106.5	-1,082.7	5,188.9	0.00	0.00	0.00
11,900.0	90.00	179.02	6,436.8	-1,419.15	-5,206.5	-1,081.0	5,288.2	0.00	0.00	0.00
12,000.0	90.00	179.02	6,436.8	-1,419.15	-5,306.4	-1,079.2	5,387.5	0.00	0.00	0.00
12,100.0	90.00	179.02	6,436.8	-1,419.15	-5,406.4	-1,077.5	5,486.8	0.00	0.00	0.00
12,200.0	90.00	179.02	6,436.8	-1,419.15	-5,506.4	-1,075.8	5,586.2	0.00	0.00	0.00
12,300.0	90.00	179.02	6,436.8	-1,419.15	-5,606.4	-1,074.1	5,685.5	0.00	0.00	0.00
12,400.0	90.00	179.02	6,436.8	-1,419.15	-5,706.4	-1,072.4	5,784.8	0.00	0.00	0.00
12,500.0	90.00	179.02	6,436.8	-1,419.14	-5,806.4	-1,070.6	5,884.1	0.00	0.00	0.00
12,600.0	90.00	179.02	6,436.8	-1,419.14	-5,906.3	-1,068.9	5,983.4	0.00	0.00	0.00
12,700.0	90.00	179.02	6,436.8	-1,419.14	-6,006.3	-1,067.2	6,082.7	0.00	0.00	0.00
12,800.0	90.00	179.02	6,436.8	-1,419.14	-6,106.3	-1,065.5	6,182.1	0.00	0.00	0.00
12,900.0	90.00	179.02	6,436.8	-1,419.14	-6,206.3	-1,063.8	6,281.4	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BASHOR 9-60 27B-34-1
Company:	BISON OIL & GAS II, LLC	TVD Reference:	KB-EST @ 5017.7usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 5017.7usft (Original Well Elev)
Site:	NW NE SEC. 27 T9N R60 W 6th P.M.	North Reference:	True
Well:	BASHOR 9-60 27B-34-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)
13,000.0	90.00	179.02	6,436.8	-1,419.14	-6,306.3	-1,062.1	6,380.7	0.00	0.00	0.00
13,100.0	90.00	179.02	6,436.8	-1,419.13	-6,406.3	-1,060.4	6,480.0	0.00	0.00	0.00
13,200.0	90.00	179.02	6,436.8	-1,419.13	-6,506.3	-1,058.6	6,579.3	0.00	0.00	0.00
13,300.0	90.00	179.02	6,436.8	-1,419.13	-6,606.2	-1,056.9	6,678.7	0.00	0.00	0.00
13,400.0	90.00	179.02	6,436.8	-1,419.13	-6,706.2	-1,055.2	6,778.0	0.00	0.00	0.00
13,500.0	90.00	179.02	6,436.8	-1,419.13	-6,806.2	-1,053.5	6,877.3	0.00	0.00	0.00
13,600.0	90.00	179.02	6,436.8	-1,419.12	-6,906.2	-1,051.8	6,976.6	0.00	0.00	0.00
13,700.0	90.00	179.02	6,436.8	-1,419.12	-7,006.2	-1,050.1	7,075.9	0.00	0.00	0.00
13,800.0	90.00	179.02	6,436.8	-1,419.12	-7,106.2	-1,048.4	7,175.2	0.00	0.00	0.00
13,900.0	90.00	179.02	6,436.8	-1,419.12	-7,206.2	-1,046.6	7,274.6	0.00	0.00	0.00
14,000.0	90.00	179.02	6,436.8	-1,419.11	-7,306.1	-1,044.9	7,373.9	0.00	0.00	0.00
14,100.0	90.00	179.02	6,436.8	-1,419.11	-7,406.1	-1,043.2	7,473.2	0.00	0.00	0.00
14,200.0	90.00	179.02	6,436.8	-1,419.11	-7,506.1	-1,041.5	7,572.5	0.00	0.00	0.00
14,300.0	90.00	179.02	6,436.8	-1,419.10	-7,606.1	-1,039.8	7,671.8	0.00	0.00	0.00
14,400.0	90.00	179.02	6,436.8	-1,419.10	-7,706.1	-1,038.1	7,771.1	0.00	0.00	0.00
14,500.0	90.00	179.02	6,436.8	-1,419.09	-7,806.1	-1,036.4	7,870.5	0.00	0.00	0.00
14,600.0	90.00	179.02	6,436.8	-1,419.09	-7,906.1	-1,034.7	7,969.8	0.00	0.00	0.00
14,700.0	90.00	179.02	6,436.8	-1,419.09	-8,006.0	-1,033.0	8,069.1	0.00	0.00	0.00
14,800.0	90.00	179.02	6,436.8	-1,419.08	-8,106.0	-1,031.3	8,168.4	0.00	0.00	0.00
14,900.0	90.00	179.02	6,436.8	-1,419.08	-8,206.0	-1,029.5	8,267.7	0.00	0.00	0.00
15,000.0	90.00	179.02	6,436.8	-1,419.07	-8,306.0	-1,027.8	8,367.1	0.00	0.00	0.00
15,100.0	90.00	179.02	6,436.8	-1,419.07	-8,406.0	-1,026.1	8,466.4	0.00	0.00	0.00
15,200.0	90.00	179.02	6,436.8	-1,419.06	-8,506.0	-1,024.4	8,565.7	0.00	0.00	0.00
15,300.0	90.00	179.02	6,436.8	-1,419.06	-8,606.0	-1,022.7	8,665.0	0.00	0.00	0.00
15,400.0	90.00	179.02	6,436.8	-1,419.06	-8,705.9	-1,021.0	8,764.3	0.00	0.00	0.00
15,500.0	90.00	179.02	6,436.8	-1,419.05	-8,805.9	-1,019.3	8,863.7	0.00	0.00	0.00
15,600.0	90.00	179.02	6,436.7	-1,419.04	-8,905.9	-1,017.6	8,963.0	0.00	0.00	0.00
15,700.0	90.00	179.02	6,436.7	-1,419.04	-9,005.9	-1,015.9	9,062.3	0.00	0.00	0.00
15,800.0	90.00	179.02	6,436.7	-1,419.03	-9,105.9	-1,014.2	9,161.6	0.00	0.00	0.00
15,900.0	90.00	179.02	6,436.7	-1,419.03	-9,205.9	-1,012.5	9,260.9	0.00	0.00	0.00
16,000.0	90.00	179.02	6,436.7	-1,419.02	-9,305.9	-1,010.8	9,360.2	0.00	0.00	0.00
16,100.0	90.00	179.02	6,436.7	-1,419.02	-9,405.8	-1,009.1	9,459.6	0.00	0.00	0.00
16,200.0	90.00	179.02	6,436.7	-1,419.01	-9,505.8	-1,007.4	9,558.9	0.00	0.00	0.00
16,300.0	90.00	179.02	6,436.7	-1,419.00	-9,605.8	-1,005.6	9,658.2	0.00	0.00	0.00
EPI: 600ft FSL & 2621ft FEL of Sec 34										
16,379.2	90.00	179.02	6,436.7	-1,419.00	-9,685.0	-1,004.3	9,736.9	0.00	0.00	0.00
16,400.0	90.00	179.02	6,436.7	-1,419.00	-9,705.8	-1,003.9	9,757.5	0.02	0.00	-0.02
16,500.0	90.00	179.00	6,436.7	-1,419.00	-9,805.8	-1,002.2	9,856.8	0.02	0.00	-0.02
16,600.0	90.00	178.98	6,436.7	-1,419.00	-9,905.8	-1,000.5	9,956.2	0.02	0.00	-0.02
BHL: 300ft FSL & 2622ft FEL of Sec 34										
16,678.7	90.00	178.97	6,436.7	-1,419.00	-9,984.5	-999.0	10,034.3	0.02	0.00	-0.02

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well BASHOR 9-60 27B-34-1
Company:	BISON OIL & GAS II, LLC	TVD Reference:	KB-EST @ 5017.7usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 5017.7usft (Original Well Elev)
Site:	NW NE SEC. 27 T9N R60 W 6th P.M.	North Reference:	True
Well:	BASHOR 9-60 27B-34-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
635.8	632.7	PIERRE SHALE (BASE OF FOX HI			
3,575.8	3,489.7	PARKMAN			
4,116.2	4,014.7	SUSSEX			
5,246.4	5,112.7	SHANNON			
6,295.4	6,141.7	SHARON SPRINGS SHALE			
6,379.1	6,211.7	NIOBRARA FORMATION			
6,391.8	6,221.7	NIOBRARA A CHALK			
6,552.8	6,331.7	NIOBRARA B CHALK			
6,703.9	6,401.7	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 & 1509ft FEL of Sec 27
100.0	100.0	0.0	0.0	START NUDGE (2°/100ft BUR)
785.7	779.2	23.9	-78.1	EOB TO 13.71° INC
5,289.5	5,154.5	336.6	-1,099.0	END OF TANGENT
5,975.2	5,833.7	360.5	-1,177.1	EOD TO VERTICAL
6,005.2	5,863.7	360.5	-1,177.1	KOP (10°/100ft BUR)
6,905.2	6,436.7	-212.4	-1,167.2	BPI: 600ft FNL & 2665ft FWL of Sec 27
16,379.2	6,436.7	-9,685.0	-1,004.3	EPI: 600ft FSL & 2621ft FEL of Sec 34
16,678.7	6,436.7	-9,984.5	-999.0	BHL: 300ft FSL & 2622ft FEL of Sec 34