

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

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

**SW NE SEC. 17 T8N R60W 6th P.M.**

**HUNT 8-60 17B-20-2**

**ORIGINAL WELLBORE**

**31 July, 2018**

**Plan: PROPOSAL #2**

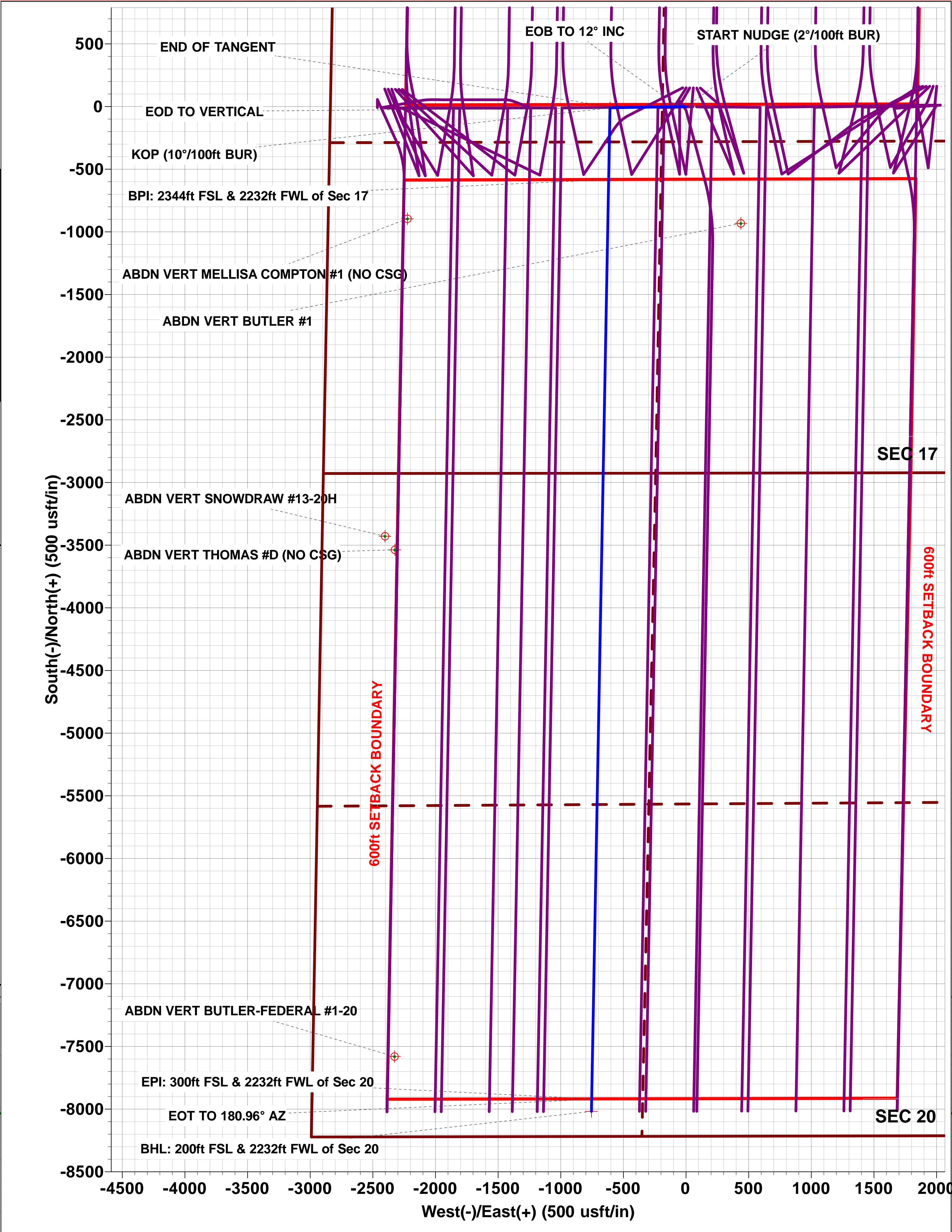
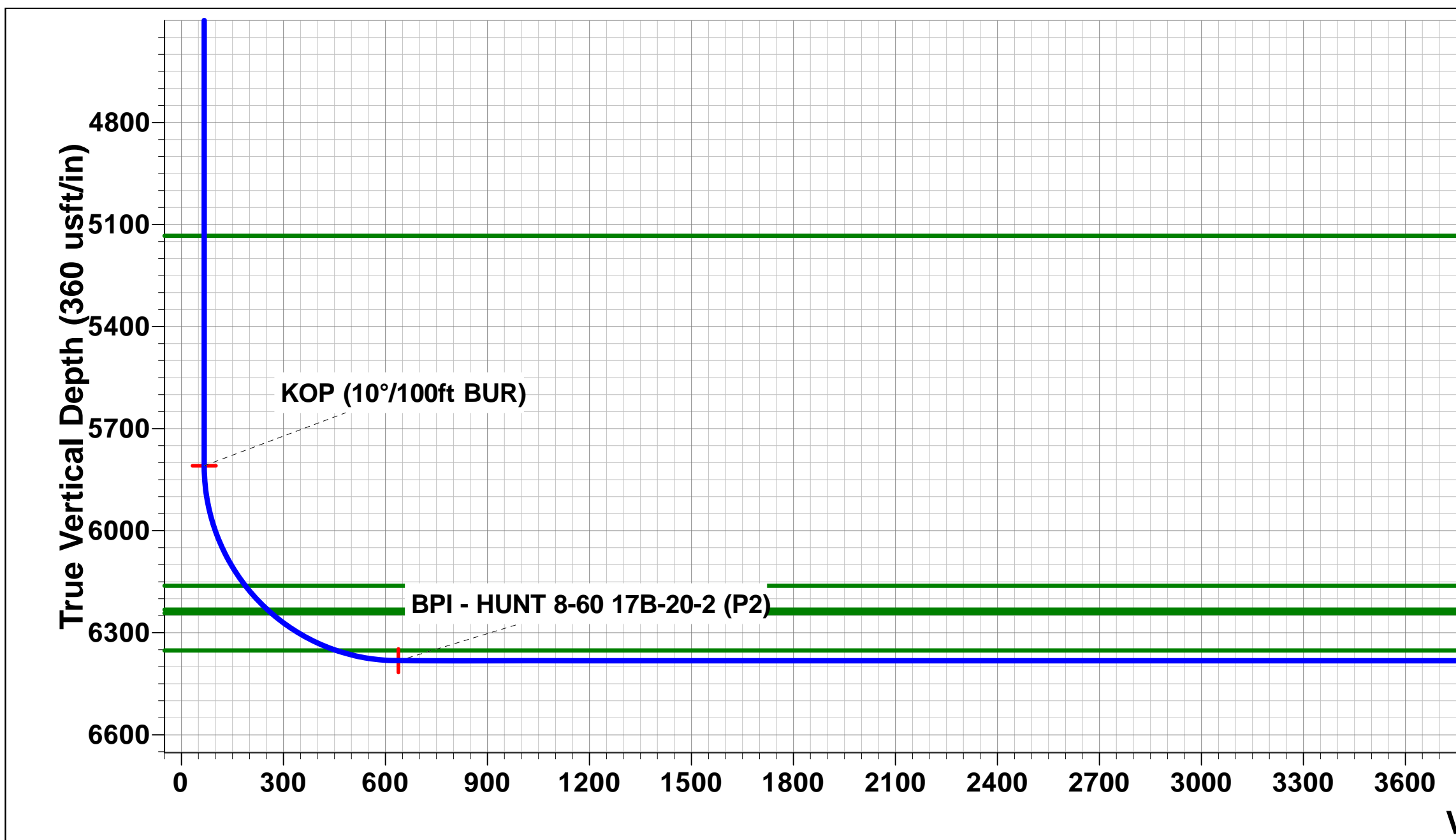
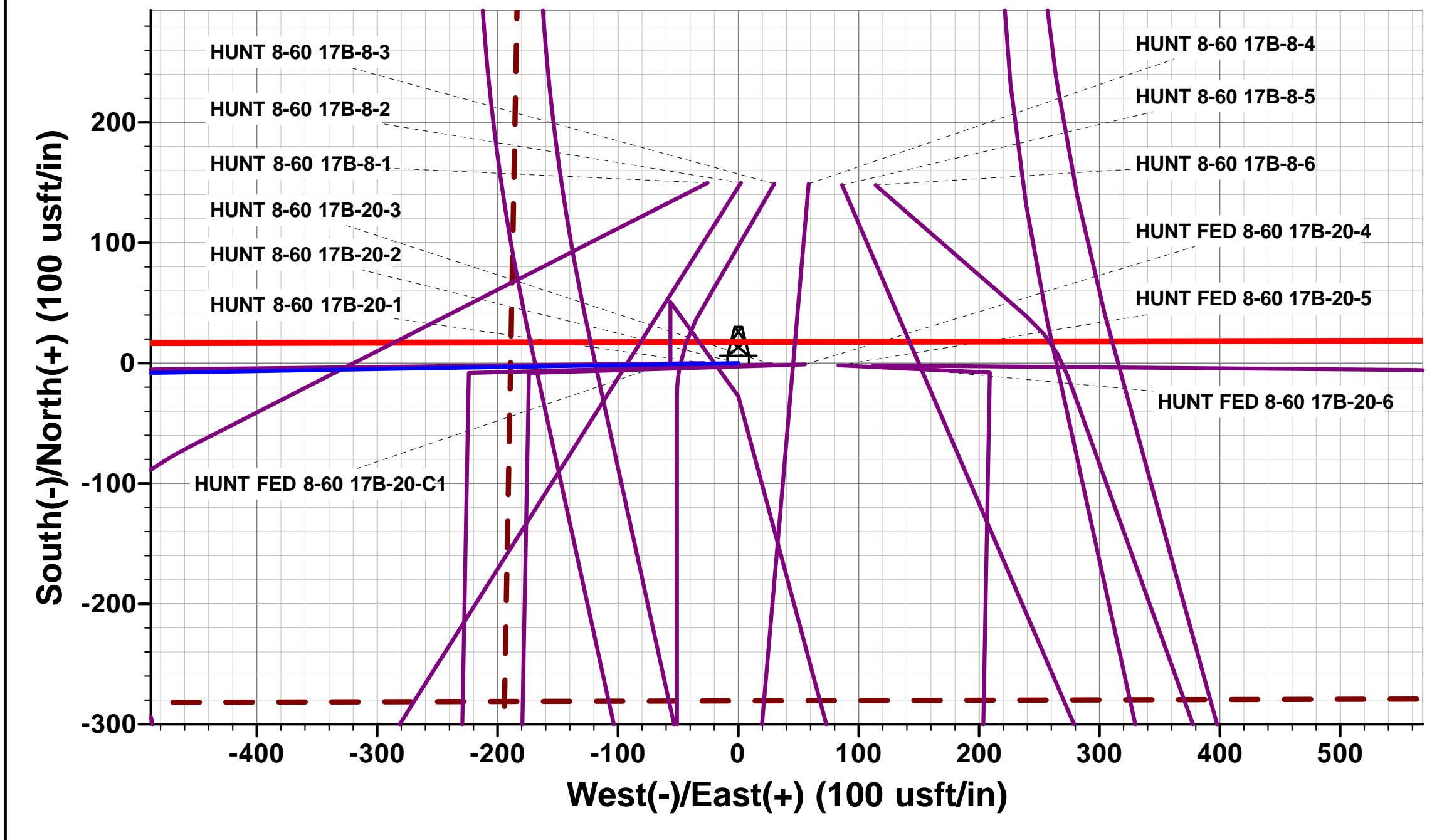
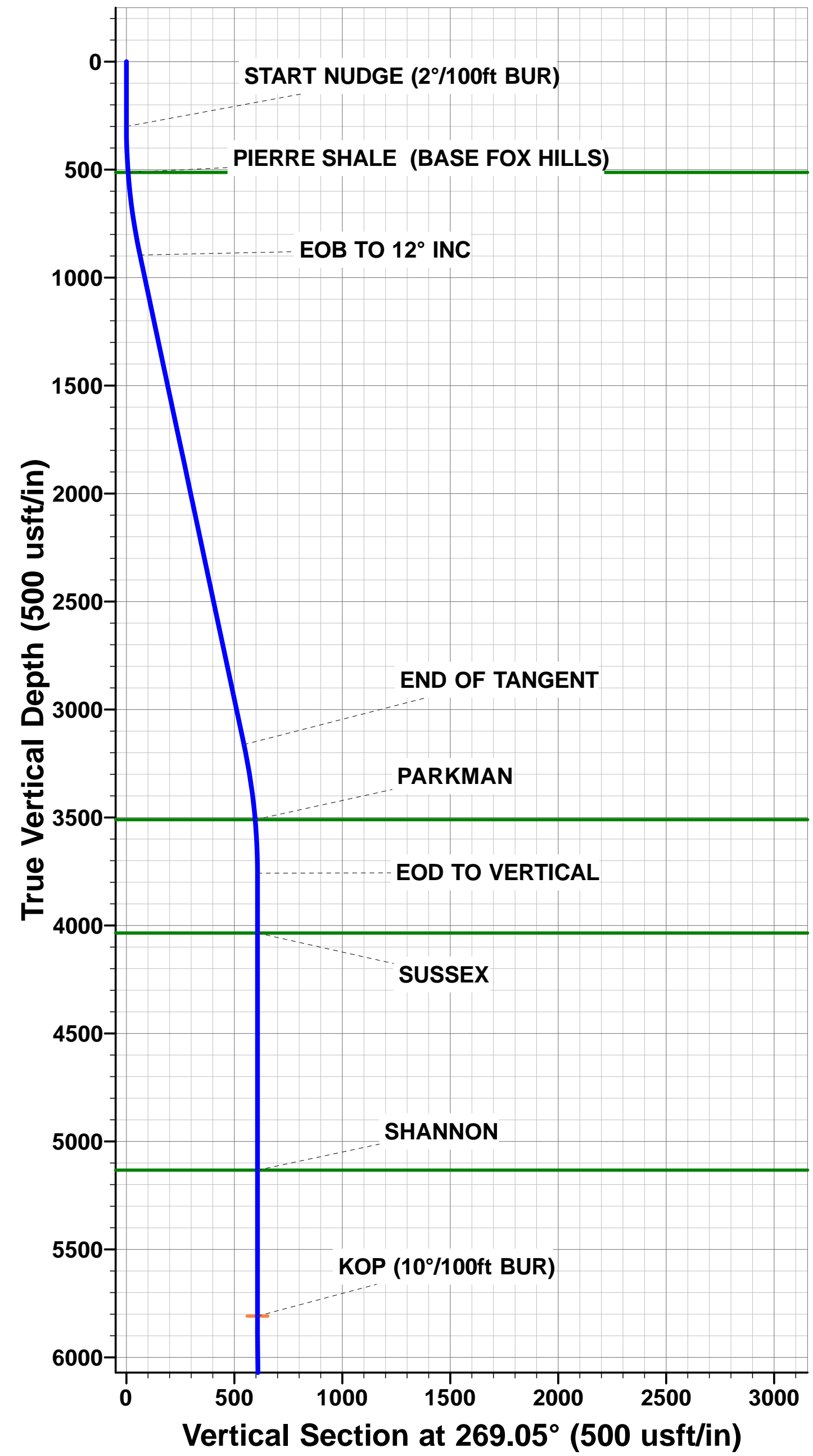






Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SW NE SEC. 17 T8N R60W 6th P.M.  
Well: HUNT 8-60 17B-20-2  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2

ANNOTATIONS										PROPOSED LOCAL COORDINATES:  SHL: 2364ft FNL & 2447ft FEL of Sec 17  SHL: 2364ft FNL & 2447ft FEL Sec 17  BPI: 2344ft FSL & 2232ft FWL Sec 17  EPI: 300ft FSL & 2232ft FWL Sec 20  BHL: 200ft FSL & 2232ft FWL of Sec 20
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 2364ft FNL & 2447ft FEL of Sec 17		
300.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft BUR)		
895.62	900.00	12.00	269.05	-1.03	-62.59	6.90	62.60	EOB TO 12° INC		
3162.59	3217.61	12.00	269.05	-9.00	-544.39	59.97	544.46	END OF TANGENT		
3758.21	3817.61	0.00	0.00	-10.04	-606.98	66.86	607.06	EOD TO VERTICAL		
5809.10	5868.50	0.00	0.00	-10.04	-606.98	66.86	607.06	KOP (10°/100ft BUR)		
6382.10	6768.52	90.00	181.06	-582.89	-617.58	638.19	1180.02	BPI: 2344ft FSL & 2232ft FWL of Sec 17		
6382.10	14105.12	90.00	181.05	-7918.24	-752.92	7953.96	8516.62	EPI: 300ft FSL & 2232ft FWL of Sec 20		
6382.10	14108.38	90.00	180.96	-7921.50	-752.98	7957.21	8519.88	EOT TO 180.96° AZ		
6382.10	14204.96	90.00	180.96	-8018.07	-754.59	8053.50	8616.46	BHL: 200ft FSL & 2232ft FWL of Sec 20		
WELLBORE TARGET DETAILS (LAT/LONG)										
Name					TVD	+N/-S	+E/-W	Latitude	Longitude	
KOP - HUNT 8-60 17B-20-2 (P2)					5809.10	-10.04	-606.98	40.663044	-104.116738	
BHL - HUNT 8-60 17B-20-2 (P2)					6382.10	-8018.07	-754.59	40.641064	-104.117269	
BPI - HUNT 8-60 17B-20-2 (P2)					6382.10	-582.89	-617.58	40.661472	-104.116776	
EPI - HUNT 8-60 17B-20-2 (P2)					6382.10	-7918.24	-752.92	40.641338	-104.117263	





# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HUNT 8-60 17B-20-2
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 4963.10usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4963.10usft (Original Well Elev)
<b>Site:</b>	SW NE SEC. 17 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	HUNT 8-60 17B-20-2	<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>	SW NE SEC. 17 T8N R60W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,487,551.70 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,384,321.29 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	1.10000 ft
		<b>Latitude:</b>	40.663483
		<b>Longitude:</b>	-104.114642
		<b>Grid Convergence:</b>	0.90 °

<b>Well</b>	HUNT 8-60 17B-20-2		
<b>Well Position</b>	<b>+N/-S</b>	-149.76 usft	<b>Northing:</b>
	<b>+E/-W</b>	25.52 usft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.00 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>
	IGRF2015	05/08/2017	7.87	67.16	52,578

<b>Design</b>	PROPOSAL #2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	185.38

<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
0.00	0.00	0.00	0.00	-4,963.10	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	-4,663.10	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	12.00	269.05	895.62	-4,067.48	-1.03	-62.59	2.00	2.00	0.00	269.05	
3,217.61	12.00	269.05	3,162.59	-1,800.51	-9.00	-544.39	0.00	0.00	0.00	0.00	
3,817.61	0.00	0.00	3,758.21	-1,204.89	-10.04	-606.98	2.00	-2.00	0.00	180.00	
5,868.50	0.00	0.00	5,809.10	846.00	-10.04	-606.98	0.00	0.00	0.00	0.00	KOP - HUNT 8-60 1
6,768.52	90.00	181.06	6,382.10	1,419.00	-582.89	-617.58	10.00	10.00	-19.88	181.06	BPI - HUNT 8-60 17
14,105.12	90.00	181.05	6,382.10	1,419.00	-7,918.24	-752.92	0.00	0.00	0.00	-37.31	EPI - HUNT 8-60 17
14,108.38	90.00	180.96	6,382.10	1,419.00	-7,921.51	-752.98	3.00	-0.14	-3.00	-92.67	
14,204.96	90.00	180.96	6,382.10	1,419.00	-8,018.07	-754.59	0.00	0.00	0.00	0.00	BHL - HUNT 8-60 1



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HUNT 8-60 17B-20-2
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 4963.10usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4963.10usft (Original Well Elev)
<b>Site:</b>	SW NE SEC. 17 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	HUNT 8-60 17B-20-2	<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: 2364ft FNL &amp; 2447ft FEL of Sec 17</b>										
0.00	0.00	0.00	0.00	4,963.10	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	4,863.10	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	4,763.10	0.00	0.00	0.00	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
300.00	0.00	0.00	300.00	4,663.10	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	269.05	399.98	4,563.12	-0.03	-1.74	0.19	2.00	2.00	0.00
500.00	4.00	269.05	499.84	4,463.26	-0.12	-6.98	0.77	2.00	2.00	0.00
<b>PIERRE SHALE (BASE FOX HILLS)</b>										
513.30	4.27	269.05	513.10	4,450.00	-0.13	-7.94	0.87	2.00	2.00	0.00
600.00	6.00	269.05	599.45	4,363.65	-0.26	-15.69	1.73	2.00	2.00	0.00
700.00	8.00	269.05	698.70	4,264.40	-0.46	-27.88	3.07	2.00	2.00	0.00
800.00	10.00	269.05	797.47	4,165.63	-0.72	-43.52	4.79	2.00	2.00	0.00
<b>EOB TO 12° INC</b>										
900.00	12.00	269.05	895.62	4,067.48	-1.03	-62.59	6.90	2.00	2.00	0.00
1,000.00	12.00	269.05	993.44	3,969.66	-1.38	-83.38	9.19	0.00	0.00	0.00
1,100.00	12.00	269.05	1,091.25	3,871.85	-1.72	-104.17	11.48	0.00	0.00	0.00
1,200.00	12.00	269.05	1,189.07	3,774.03	-2.07	-124.96	13.77	0.00	0.00	0.00
1,300.00	12.00	269.05	1,286.88	3,676.22	-2.41	-145.75	16.06	0.00	0.00	0.00
1,400.00	12.00	269.05	1,384.70	3,578.40	-2.75	-166.54	18.35	0.00	0.00	0.00
1,500.00	12.00	269.05	1,482.51	3,480.59	-3.10	-187.32	20.64	0.00	0.00	0.00
1,600.00	12.00	269.05	1,580.33	3,382.77	-3.44	-208.11	22.93	0.00	0.00	0.00
1,700.00	12.00	269.05	1,678.14	3,284.96	-3.78	-228.90	25.22	0.00	0.00	0.00
1,800.00	12.00	269.05	1,775.96	3,187.14	-4.13	-249.69	27.51	0.00	0.00	0.00
1,900.00	12.00	269.05	1,873.77	3,089.33	-4.47	-270.48	29.80	0.00	0.00	0.00
2,000.00	12.00	269.05	1,971.59	2,991.51	-4.82	-291.27	32.09	0.00	0.00	0.00
2,100.00	12.00	269.05	2,069.40	2,893.70	-5.16	-312.05	34.38	0.00	0.00	0.00
2,200.00	12.00	269.05	2,167.22	2,795.88	-5.50	-332.84	36.67	0.00	0.00	0.00
2,300.00	12.00	269.05	2,265.03	2,698.07	-5.85	-353.63	38.96	0.00	0.00	0.00
2,400.00	12.00	269.05	2,362.84	2,600.26	-6.19	-374.42	41.25	0.00	0.00	0.00
2,500.00	12.00	269.05	2,460.66	2,502.44	-6.53	-395.21	43.54	0.00	0.00	0.00
2,600.00	12.00	269.05	2,558.47	2,404.63	-6.88	-416.00	45.83	0.00	0.00	0.00
2,700.00	12.00	269.05	2,656.29	2,306.81	-7.22	-436.78	48.12	0.00	0.00	0.00
2,800.00	12.00	269.05	2,754.10	2,209.00	-7.57	-457.57	50.41	0.00	0.00	0.00
2,900.00	12.00	269.05	2,851.92	2,111.18	-7.91	-478.36	52.70	0.00	0.00	0.00
3,000.00	12.00	269.05	2,949.73	2,013.37	-8.25	-499.15	54.99	0.00	0.00	0.00
3,100.00	12.00	269.05	3,047.55	1,915.55	-8.60	-519.94	57.28	0.00	0.00	0.00
3,200.00	12.00	269.05	3,145.36	1,817.74	-8.94	-540.73	59.57	0.00	0.00	0.00
<b>END OF TANGENT</b>										
3,217.61	12.00	269.05	3,162.59	1,800.51	-9.00	-544.39	59.97	0.00	0.00	0.00
3,300.00	10.35	269.05	3,243.41	1,719.69	-9.27	-560.35	61.73	2.00	-2.00	0.00
3,400.00	8.35	269.05	3,342.08	1,621.02	-9.53	-576.60	63.52	2.00	-2.00	0.00
3,500.00	6.35	269.05	3,441.25	1,521.85	-9.75	-589.39	64.93	2.00	-2.00	0.00
<b>PARKMAN</b>										
3,569.19	4.97	269.05	3,510.10	1,453.00	-9.86	-596.22	65.68	2.00	-2.00	0.00
3,600.00	4.35	269.05	3,540.81	1,422.29	-9.90	-598.72	65.95	2.00	-2.00	0.00
3,700.00	2.35	269.05	3,640.63	1,322.47	-10.00	-604.57	66.60	2.00	-2.00	0.00
3,800.00	0.35	269.05	3,740.60	1,222.50	-10.04	-606.93	66.86	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
3,817.61	0.00	0.00	3,758.21	1,204.89	-10.04	-606.98	66.86	2.00	-2.00	0.00
3,900.00	0.00	0.00	3,840.60	1,122.50	-10.04	-606.98	66.86	0.00	0.00	0.00
4,000.00	0.00	0.00	3,940.60	1,022.50	-10.04	-606.98	66.86	0.00	0.00	0.00
<b>SUSSEX</b>										



## Planning Report



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<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4963.10usft (Original Well Elev)
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<b>Well:</b>	HUNT 8-60 17B-20-2	<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)
4,094.50	0.00	0.00	4,035.10	928.00	-10.04	-606.98	66.86	0.00	0.00	0.00
4,100.00	0.00	0.00	4,040.60	922.50	-10.04	-606.98	66.86	0.00	0.00	0.00
4,200.00	0.00	0.00	4,140.60	822.50	-10.04	-606.98	66.86	0.00	0.00	0.00
4,300.00	0.00	0.00	4,240.60	722.50	-10.04	-606.98	66.86	0.00	0.00	0.00
4,400.00	0.00	0.00	4,340.60	622.50	-10.04	-606.98	66.86	0.00	0.00	0.00
4,500.00	0.00	0.00	4,440.60	522.50	-10.04	-606.98	66.86	0.00	0.00	0.00
4,600.00	0.00	0.00	4,540.60	422.50	-10.04	-606.98	66.86	0.00	0.00	0.00
4,700.00	0.00	0.00	4,640.60	322.50	-10.04	-606.98	66.86	0.00	0.00	0.00
4,800.00	0.00	0.00	4,740.60	222.50	-10.04	-606.98	66.86	0.00	0.00	0.00
4,900.00	0.00	0.00	4,840.60	122.50	-10.04	-606.98	66.86	0.00	0.00	0.00
5,000.00	0.00	0.00	4,940.60	22.50	-10.04	-606.98	66.86	0.00	0.00	0.00
5,100.00	0.00	0.00	5,040.60	-77.50	-10.04	-606.98	66.86	0.00	0.00	0.00
<b>SHANNON</b>										
5,192.50	0.00	0.00	5,133.10	-170.00	-10.04	-606.98	66.86	0.00	0.00	0.00
5,200.00	0.00	0.00	5,140.60	-177.50	-10.04	-606.98	66.86	0.00	0.00	0.00
5,300.00	0.00	0.00	5,240.60	-277.50	-10.04	-606.98	66.86	0.00	0.00	0.00
5,400.00	0.00	0.00	5,340.60	-377.50	-10.04	-606.98	66.86	0.00	0.00	0.00
5,500.00	0.00	0.00	5,440.60	-477.50	-10.04	-606.98	66.86	0.00	0.00	0.00
5,600.00	0.00	0.00	5,540.60	-577.50	-10.04	-606.98	66.86	0.00	0.00	0.00
5,700.00	0.00	0.00	5,640.60	-677.50	-10.04	-606.98	66.86	0.00	0.00	0.00
5,800.00	0.00	0.00	5,740.60	-777.50	-10.04	-606.98	66.86	0.00	0.00	0.00
<b>KOP (10°/100ft BUR)</b>										
5,868.50	0.00	0.00	5,809.10	-846.00	-10.04	-606.98	66.86	0.00	0.00	0.00
5,900.00	3.15	181.06	5,840.59	-877.49	-10.90	-607.00	67.73	10.00	10.00	0.00
6,000.00	13.15	181.06	5,939.45	-976.35	-25.06	-607.26	81.84	10.00	10.00	0.00
6,100.00	23.15	181.06	6,034.35	-1,071.25	-56.16	-607.83	112.87	10.00	10.00	0.00
6,200.00	33.15	181.06	6,122.42	-1,159.32	-103.27	-608.71	159.85	10.00	10.00	0.00
<b>SHARON SPRINGS SHALE</b>										
6,248.81	38.03	181.06	6,162.10	-1,199.00	-131.66	-609.23	188.17	10.00	10.00	0.00
6,300.00	43.15	181.06	6,200.96	-1,237.86	-164.95	-609.85	221.36	10.00	10.00	0.00
<b>NIORARA FORMATION</b>										
6,344.33	47.58	181.06	6,232.10	-1,269.00	-196.48	-610.43	252.81	10.00	10.00	0.00
<b>NIORARA A CHALK</b>										
6,359.38	49.08	181.06	6,242.10	-1,279.00	-207.72	-610.64	264.02	10.00	10.00	0.00
6,400.00	53.15	181.06	6,267.60	-1,304.50	-239.33	-611.22	295.54	10.00	10.00	0.00
6,500.00	63.15	181.06	6,320.31	-1,357.21	-324.14	-612.79	380.13	10.00	10.00	0.00
<b>NIORARA B CHALK</b>										
6,582.33	71.38	181.06	6,352.10	-1,389.00	-399.99	-614.20	455.78	10.00	10.00	0.00
6,600.00	73.14	181.06	6,357.48	-1,394.38	-416.82	-614.51	472.57	10.00	10.00	0.00
6,700.00	83.14	181.06	6,378.00	-1,414.90	-514.55	-616.32	570.03	10.00	10.00	0.00
<b>BPI: 2344ft FSL &amp; 2232ft FWL of Sec 17</b>										
6,768.52	90.00	181.06	6,382.10	-1,419.00	-582.89	-617.58	638.19	10.00	10.00	0.00
6,800.00	90.00	181.06	6,382.10	-1,419.00	-614.37	-618.17	669.58	0.00	0.00	0.00
6,900.00	90.00	181.06	6,382.11	-1,419.01	-714.35	-620.02	769.30	0.00	0.00	0.00
7,000.00	90.00	181.06	6,382.12	-1,419.02	-814.33	-621.87	869.02	0.00	0.00	0.00
7,100.00	90.00	181.06	6,382.12	-1,419.02	-914.32	-623.72	968.73	0.00	0.00	0.00
7,200.00	90.00	181.06	6,382.13	-1,419.03	-1,014.30	-625.57	1,068.45	0.00	0.00	0.00
7,300.00	90.00	181.06	6,382.14	-1,419.04	-1,114.28	-627.42	1,168.17	0.00	0.00	0.00
7,400.00	90.00	181.06	6,382.15	-1,419.05	-1,214.26	-629.27	1,267.88	0.00	0.00	0.00
7,500.00	90.00	181.06	6,382.15	-1,419.05	-1,314.25	-631.12	1,367.60	0.00	0.00	0.00
7,600.00	90.00	181.06	6,382.16	-1,419.06	-1,414.23	-632.97	1,467.32	0.00	0.00	0.00
7,700.00	90.00	181.06	6,382.16	-1,419.06	-1,514.21	-634.82	1,567.03	0.00	0.00	0.00
7,800.00	90.00	181.06	6,382.17	-1,419.07	-1,614.20	-636.66	1,666.75	0.00	0.00	0.00



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HUNT 8-60 17B-20-2
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 4963.10usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4963.10usft (Original Well Elev)
<b>Site:</b>	SW NE SEC. 17 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	HUNT 8-60 17B-20-2	<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)
7,900.00	90.00	181.06	6,382.18	-1,419.08	-1,714.18	-638.51	1,766.46	0.00	0.00	0.00
8,000.00	90.00	181.06	6,382.18	-1,419.08	-1,814.16	-640.36	1,866.18	0.00	0.00	0.00
8,100.00	90.00	181.06	6,382.19	-1,419.09	-1,914.14	-642.21	1,965.90	0.00	0.00	0.00
8,200.00	90.00	181.06	6,382.19	-1,419.09	-2,014.13	-644.06	2,065.61	0.00	0.00	0.00
8,300.00	90.00	181.06	6,382.20	-1,419.10	-2,114.11	-645.91	2,165.33	0.00	0.00	0.00
8,400.00	90.00	181.06	6,382.20	-1,419.10	-2,214.09	-647.76	2,265.05	0.00	0.00	0.00
8,500.00	90.00	181.06	6,382.20	-1,419.10	-2,314.08	-649.60	2,364.76	0.00	0.00	0.00
8,600.00	90.00	181.06	6,382.21	-1,419.11	-2,414.06	-651.45	2,464.48	0.00	0.00	0.00
8,700.00	90.00	181.06	6,382.21	-1,419.11	-2,514.04	-653.30	2,564.19	0.00	0.00	0.00
8,800.00	90.00	181.06	6,382.22	-1,419.12	-2,614.03	-655.15	2,663.91	0.00	0.00	0.00
8,900.00	90.00	181.06	6,382.22	-1,419.12	-2,714.01	-656.99	2,763.63	0.00	0.00	0.00
9,000.00	90.00	181.06	6,382.22	-1,419.12	-2,813.99	-658.84	2,863.34	0.00	0.00	0.00
9,100.00	90.00	181.06	6,382.22	-1,419.12	-2,913.97	-660.69	2,963.06	0.00	0.00	0.00
9,200.00	90.00	181.06	6,382.23	-1,419.13	-3,013.96	-662.53	3,062.78	0.00	0.00	0.00
9,300.00	90.00	181.06	6,382.23	-1,419.13	-3,113.94	-664.38	3,162.49	0.00	0.00	0.00
9,400.00	90.00	181.06	6,382.23	-1,419.13	-3,213.92	-666.23	3,262.21	0.00	0.00	0.00
9,500.00	90.00	181.06	6,382.23	-1,419.13	-3,313.91	-668.07	3,361.92	0.00	0.00	0.00
9,600.00	90.00	181.06	6,382.24	-1,419.14	-3,413.89	-669.92	3,461.64	0.00	0.00	0.00
9,700.00	90.00	181.06	6,382.24	-1,419.14	-3,513.87	-671.77	3,561.36	0.00	0.00	0.00
9,800.00	90.00	181.06	6,382.24	-1,419.14	-3,613.85	-673.61	3,661.07	0.00	0.00	0.00
9,900.00	90.00	181.06	6,382.24	-1,419.14	-3,713.84	-675.46	3,760.79	0.00	0.00	0.00
10,000.00	90.00	181.06	6,382.24	-1,419.14	-3,813.82	-677.30	3,860.50	0.00	0.00	0.00
10,100.00	90.00	181.06	6,382.24	-1,419.14	-3,913.80	-679.15	3,960.22	0.00	0.00	0.00
10,200.00	90.00	181.06	6,382.24	-1,419.14	-4,013.79	-680.99	4,059.94	0.00	0.00	0.00
10,300.00	90.00	181.06	6,382.24	-1,419.14	-4,113.77	-682.84	4,159.65	0.00	0.00	0.00
10,400.00	90.00	181.06	6,382.24	-1,419.14	-4,213.75	-684.68	4,259.37	0.00	0.00	0.00
10,500.00	90.00	181.06	6,382.24	-1,419.14	-4,313.74	-686.53	4,359.08	0.00	0.00	0.00
10,600.00	90.00	181.06	6,382.24	-1,419.14	-4,413.72	-688.37	4,458.80	0.00	0.00	0.00
10,700.00	90.00	181.06	6,382.24	-1,419.14	-4,513.70	-690.22	4,558.52	0.00	0.00	0.00
10,800.00	90.00	181.06	6,382.24	-1,419.14	-4,613.68	-692.06	4,658.23	0.00	0.00	0.00
10,900.00	90.00	181.06	6,382.24	-1,419.14	-4,713.67	-693.90	4,757.95	0.00	0.00	0.00
11,000.00	90.00	181.06	6,382.24	-1,419.14	-4,813.65	-695.75	4,857.66	0.00	0.00	0.00
11,100.00	90.00	181.06	6,382.24	-1,419.14	-4,913.63	-697.59	4,957.38	0.00	0.00	0.00
11,200.00	90.00	181.06	6,382.24	-1,419.14	-5,013.62	-699.44	5,057.10	0.00	0.00	0.00
11,300.00	90.00	181.06	6,382.24	-1,419.14	-5,113.60	-701.28	5,156.81	0.00	0.00	0.00
11,400.00	90.00	181.06	6,382.23	-1,419.13	-5,213.58	-703.12	5,256.53	0.00	0.00	0.00
11,500.00	90.00	181.06	6,382.23	-1,419.13	-5,313.57	-704.97	5,356.24	0.00	0.00	0.00
11,600.00	90.00	181.06	6,382.23	-1,419.13	-5,413.55	-706.81	5,455.96	0.00	0.00	0.00
11,700.00	90.00	181.06	6,382.23	-1,419.13	-5,513.53	-708.65	5,555.67	0.00	0.00	0.00
11,800.00	90.00	181.06	6,382.22	-1,419.12	-5,613.51	-710.49	5,655.39	0.00	0.00	0.00
11,900.00	90.00	181.06	6,382.22	-1,419.12	-5,713.50	-712.34	5,755.11	0.00	0.00	0.00
12,000.00	90.00	181.06	6,382.22	-1,419.12	-5,813.48	-714.18	5,854.82	0.00	0.00	0.00
12,100.00	90.00	181.06	6,382.21	-1,419.11	-5,913.46	-716.02	5,954.54	0.00	0.00	0.00
12,200.00	90.00	181.06	6,382.21	-1,419.11	-6,013.45	-717.86	6,054.25	0.00	0.00	0.00
12,300.00	90.00	181.06	6,382.21	-1,419.11	-6,113.43	-719.70	6,153.97	0.00	0.00	0.00
12,400.00	90.00	181.06	6,382.20	-1,419.10	-6,213.41	-721.55	6,253.69	0.00	0.00	0.00
12,500.00	90.00	181.06	6,382.20	-1,419.10	-6,313.40	-723.39	6,353.40	0.00	0.00	0.00
12,600.00	90.00	181.05	6,382.19	-1,419.09	-6,413.38	-725.23	6,453.12	0.00	0.00	0.00
12,700.00	90.00	181.05	6,382.19	-1,419.09	-6,513.36	-727.07	6,552.83	0.00	0.00	0.00
12,800.00	90.00	181.05	6,382.18	-1,419.08	-6,613.35	-728.91	6,652.55	0.00	0.00	0.00
12,900.00	90.00	181.05	6,382.18	-1,419.08	-6,713.33	-730.75	6,752.26	0.00	0.00	0.00
13,000.00	90.00	181.05	6,382.17	-1,419.07	-6,813.31	-732.59	6,851.98	0.00	0.00	0.00
13,100.00	90.00	181.05	6,382.17	-1,419.07	-6,913.29	-734.43	6,951.70	0.00	0.00	0.00
13,200.00	90.00	181.05	6,382.16	-1,419.06	-7,013.28	-736.27	7,051.41	0.00	0.00	0.00



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well HUNT 8-60 17B-20-2
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 4963.10usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4963.10usft (Original Well Elev)
<b>Site:</b>	SW NE SEC. 17 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	HUNT 8-60 17B-20-2	<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)
13,300.00	90.00	181.05	6,382.16	-1,419.06	-7,113.26	-738.11	7,151.13	0.00	0.00	0.00
13,400.00	90.00	181.05	6,382.15	-1,419.05	-7,213.24	-739.95	7,250.84	0.00	0.00	0.00
13,500.00	90.00	181.05	6,382.14	-1,419.04	-7,313.23	-741.79	7,350.56	0.00	0.00	0.00
13,600.00	90.00	181.05	6,382.14	-1,419.04	-7,413.21	-743.63	7,450.27	0.00	0.00	0.00
13,700.00	90.00	181.05	6,382.13	-1,419.03	-7,513.19	-745.47	7,549.99	0.00	0.00	0.00
13,800.00	90.00	181.05	6,382.12	-1,419.02	-7,613.18	-747.31	7,649.70	0.00	0.00	0.00
13,900.00	90.00	181.05	6,382.12	-1,419.02	-7,713.16	-749.15	7,749.42	0.00	0.00	0.00
14,000.00	90.00	181.05	6,382.11	-1,419.01	-7,813.14	-750.99	7,849.14	0.00	0.00	0.00
14,100.00	90.00	181.05	6,382.10	-1,419.00	-7,913.12	-752.83	7,948.85	0.00	0.00	0.00
<b>EPI: 300ft FSL &amp; 2232ft FWL of Sec 20</b>										
<b>14,105.12</b>	<b>90.00</b>	<b>181.05</b>	<b>6,382.10</b>	<b>-1,419.00</b>	<b>-7,918.24</b>	<b>-752.92</b>	<b>7,953.96</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>EOT TO 180.96° AZ</b>										
<b>14,108.38</b>	<b>90.00</b>	<b>180.96</b>	<b>6,382.10</b>	<b>-1,419.00</b>	<b>-7,921.50</b>	<b>-752.98</b>	<b>7,957.21</b>	<b>3.00</b>	<b>-0.14</b>	<b>-3.00</b>
14,200.00	90.00	180.96	6,382.10	-1,419.00	-8,013.11	-754.51	8,048.55	0.00	0.00	0.00
<b>BHL: 200ft FSL &amp; 2232ft FWL of Sec 20</b>										
<b>14,204.96</b>	<b>90.00</b>	<b>180.96</b>	<b>6,382.10</b>	<b>-1,419.00</b>	<b>-8,018.07</b>	<b>-754.59</b>	<b>8,053.50</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
513.30	513.10	PIERRE SHALE (BASE FOX HILLS				
3,569.19	3,510.10	PARKMAN				
4,094.50	4,035.10	SUSSEX				
5,192.50	5,133.10	SHANNON				
6,248.81	6,162.10	SHARON SPRINGS SHALE				
6,344.33	6,232.10	NIOBRARA FORMATION				
6,359.38	6,242.10	NIOBRARA A CHALK				
6,582.33	6,352.10	NIOBRARA B CHALK				

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.00	0.00	0.00	0.00	SHL: 2364ft FNL & 2447ft FEL of Sec 17
300.00	300.00	0.00	0.00	START NUDGE (2°/100ft BUR)
900.00	895.62	-1.03	-62.59	EOB TO 12° INC
3,217.61	3,162.59	-9.00	-544.39	END OF TANGENT
3,817.61	3,758.21	-10.04	-606.98	EOD TO VERTICAL
5,868.50	5,809.10	-10.04	-606.98	KOP (10°/100ft BUR)
6,768.52	6,382.10	-582.89	-617.58	BPI: 2344ft FSL & 2232ft FWL of Sec 17
14,105.12	6,382.10	-7,918.24	-752.92	EPI: 300ft FSL & 2232ft FWL of Sec 20
14,108.38	6,382.10	-7,921.50	-752.98	EOT TO 180.96° AZ
14,204.96	6,382.10	-8,018.07	-754.59	BHL: 200ft FSL & 2232ft FWL of Sec 20