

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

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

**SE NE SEC. 14 T8N R60W 6th P.M.**

**BOOMSLANG FED 8-60 14A-13-18-3**

**ORIGINAL WELLBORE**

**11 June, 2019**

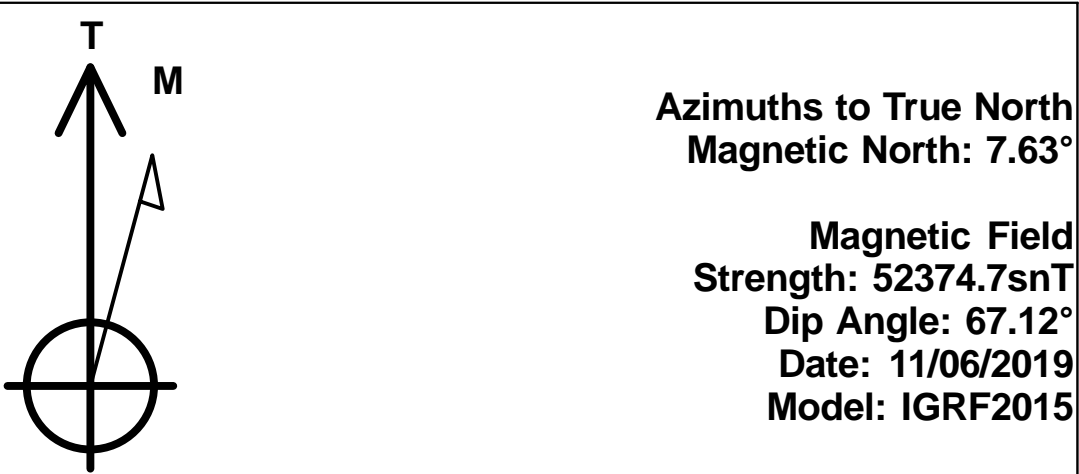
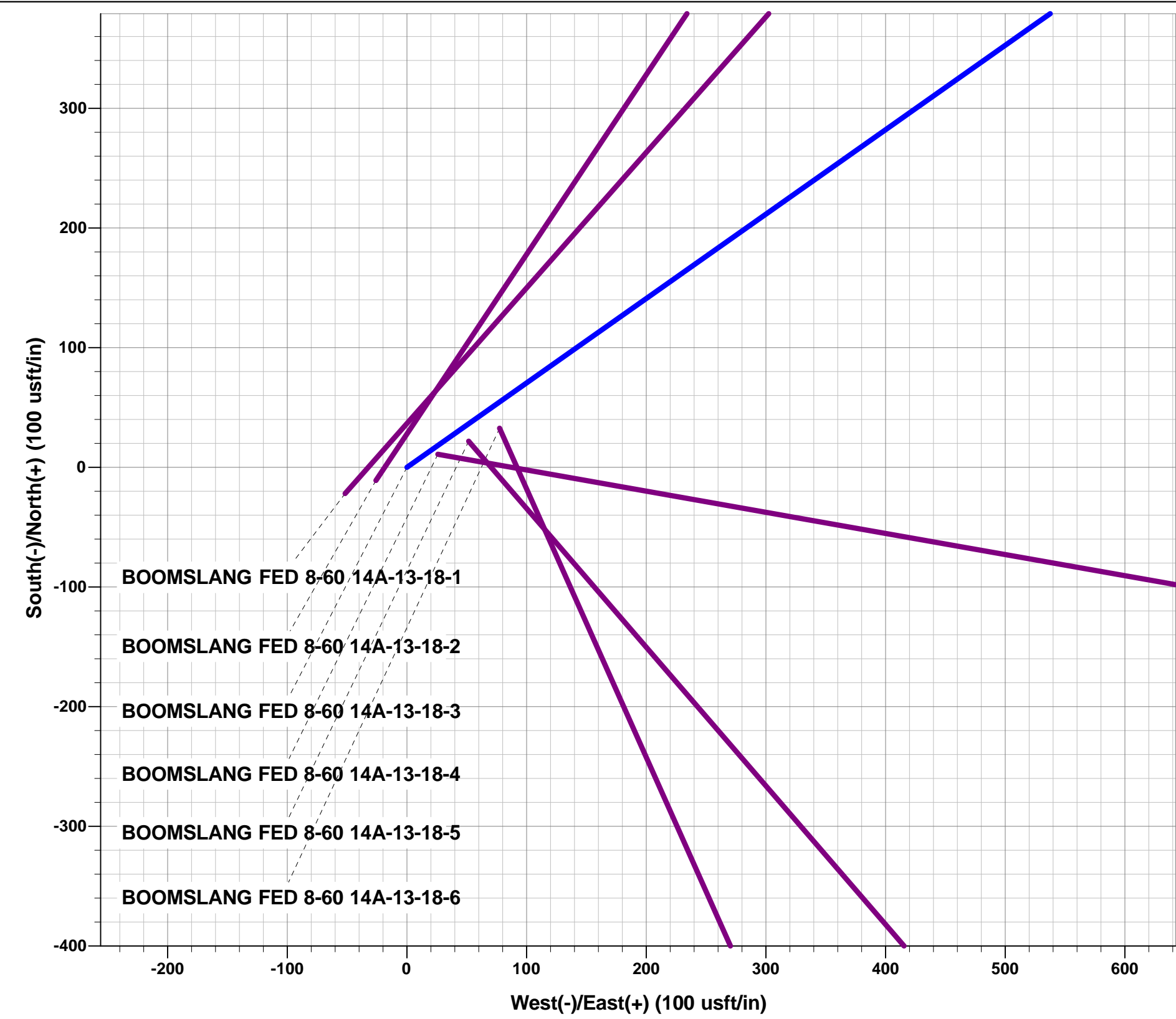
**Plan: PROPOSAL #3**



Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SE NE SEC. 14 T8N R60W 6th P.M.  
Well: BOOMSLANG FED 8-60 14A-13-18-3  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #3

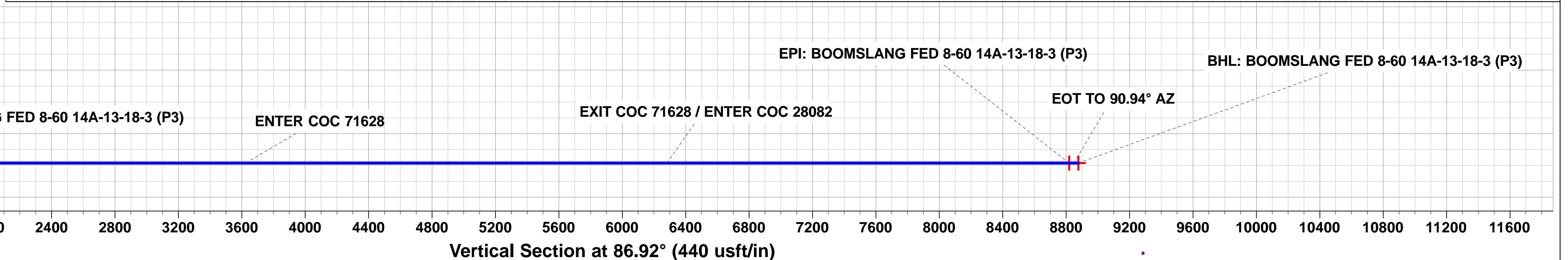
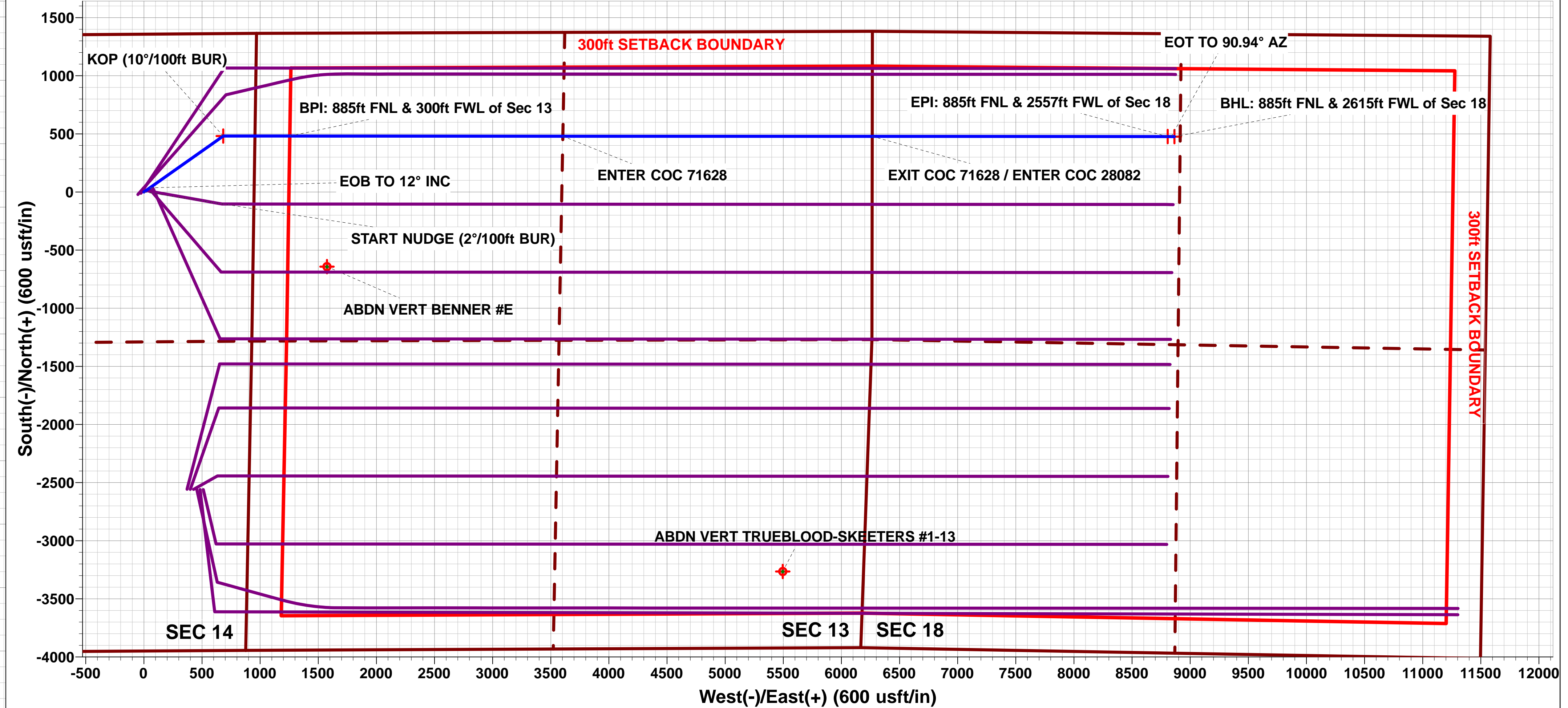
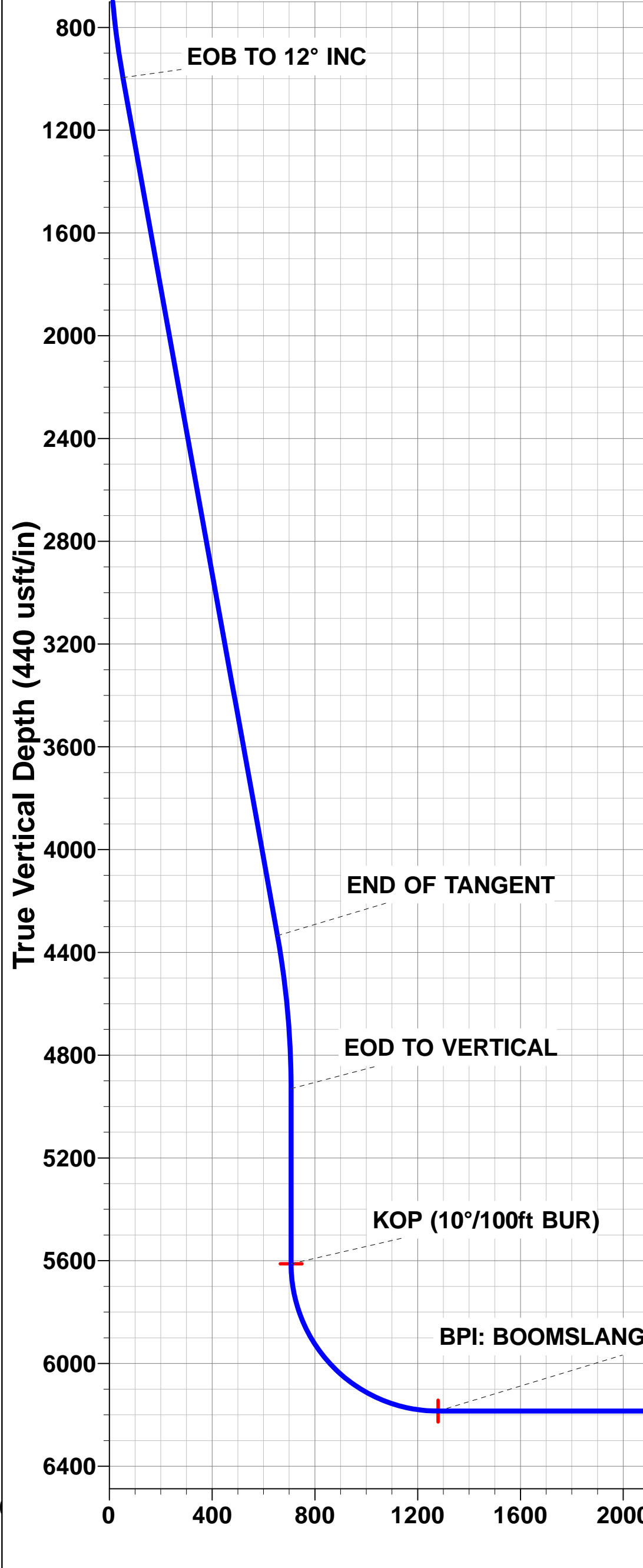
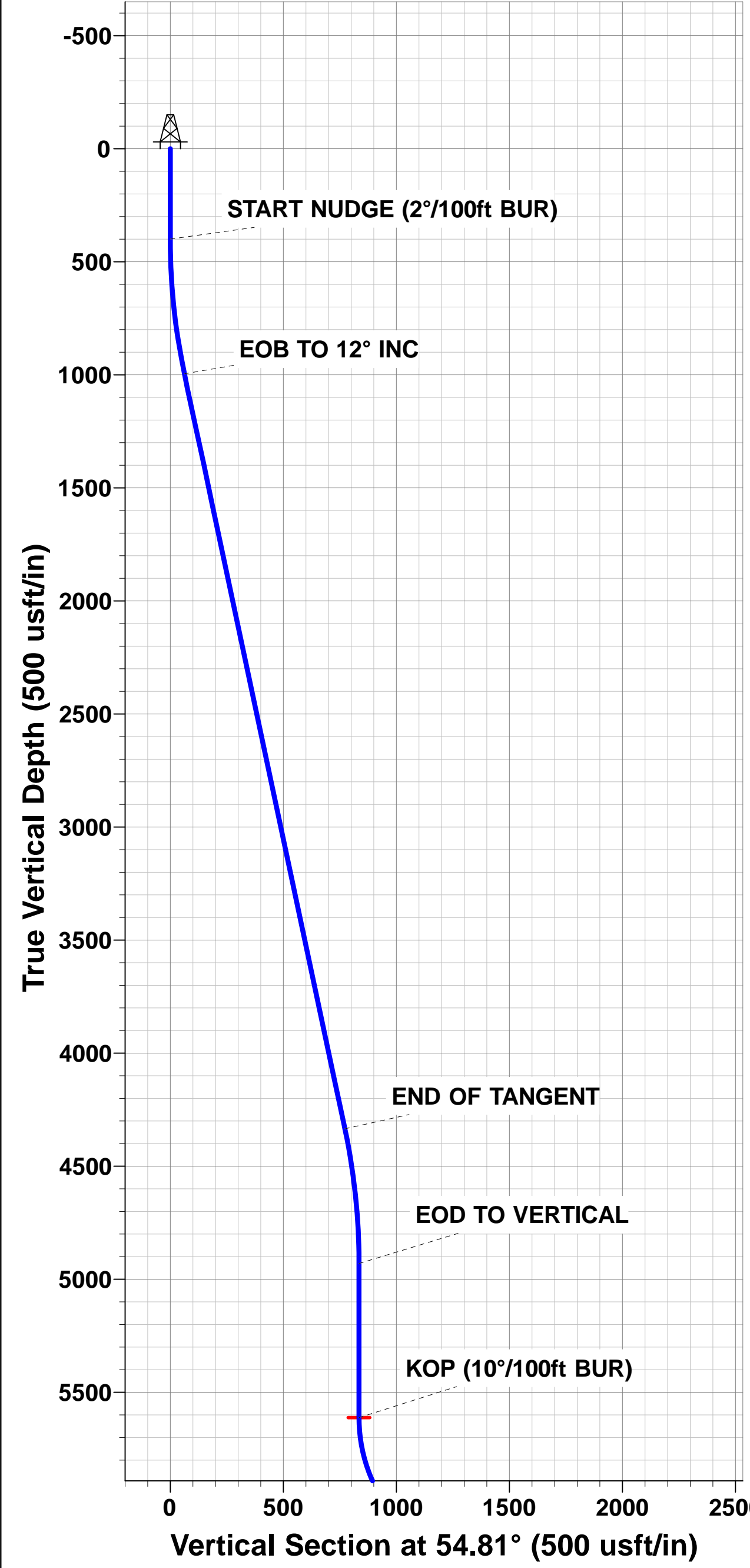
ANNOTATIONS										
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 1358ft FNL & 948ft FEL of Sec 14		
400.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft BUR)		
995.62	1000.00	12.00	54.81	36.08	51.16	53.02	62.60	EOB TO 12° INC		
4334.88	4413.86	12.00	54.81	445.17	631.19	654.17	772.38	END OF TANGENT		
4930.51	5013.86	0.00	0.00	481.25	682.35	707.19	834.99	EOD TO VERTICAL		
5612.14	5695.49	0.00	0.00	481.25	682.35	707.19	834.99	KOP (10°/100ft BUR)		
6185.10	6595.50	90.00	90.03	480.95	1255.31	1279.31	1407.95	BPI: 885ft FNL & 300ft FWL of Sec 13		
6185.10	8943.55	90.00	90.03	479.74	3603.36	3623.91	3756.00	ENTER COC 71628		
6185.11	11604.85	90.00	90.03	478.36	6264.66	6281.30	6417.30	EXIT COC 71628 / ENTER COC 28082		
6185.10	14146.50	90.00	90.03	477.03	8806.31	8819.22	8958.95	EPI: 885ft FNL & 2557ft FWL of Sec 18		
6185.10	14176.68	90.00	90.94	476.78	8836.49	8849.34	8989.13	EOT TO 90.94° AZ		
6185.10	14204.48	90.00	90.94	476.32	8864.29	8877.07	9016.93	BHL: 885ft FNL & 2615ft FWL of Sec 18		

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP: BOOMSLANG FED 8-60 14A-13-18-3 (P3)	5612.14	481.25	682.35	40.667419	-104.049336
BPI: BOOMSLANG FED 8-60 14A-13-18-3 (P3)	6185.10	480.95	1255.31	40.667418	-104.047271
EPI: BOOMSLANG FED 8-60 14A-13-18-3 (P3)	6185.10	477.03	8806.31	40.667403	-104.020052
BHL: BOOMSLANG FED 8-60 14A-13-18-3 (P3)	6185.10	476.32	8864.29	40.667401	-104.019843



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
450.70	450.10	PIERRE SH (BASE FOX HILLS)
3180.70	3233.28	PARKMAN
3900.70	3969.36	SUSSEX
4640.70	4722.96	SHANNON
5995.70	6114.92	SHARON SPRINGS SHALE
6055.70	6201.83	NIOBRARA FORMATION
6065.70	6217.88	NIOBRARA A CHALK
6155.70	6409.27	NIOBRARA B CHALK
6185.70	6595.50	NIOBRARA B LP

PROPOSED LOCAL COORDINATES:  
SHL:1358ft FNL & 948ft FEL of Sec 14  
BEGIN PROD INT: 885ft FNL & 300ft FWL of Sec 13  
END PROD INTERVAL: 885ft FNL & 2557ft FWL of Sec 18  
BHL: 885ft FNL & 2615ft FWL of Sec 18



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BOOMSLANG FED 8-60 14A-13-18-3
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB 25' @ 4900.10usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4900.10usft
<b>Site:</b>	SE NE SEC. 14 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BOOMSLANG FED 8-60 14A-13-18-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #3		

<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>	SE NE SEC. 14 T8N R60W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,488,828.86 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,401,656.69 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	1.10000 ft
		<b>Latitude:</b>	40.666228
		<b>Longitude:</b>	-104.052089
		<b>Grid Convergence:</b>	0.94 °

<b>Well</b>	BOOMSLANG FED 8-60 14A-13-18-3		
<b>Well Position</b>	<b>+N-S</b>	-47.37 usft	<b>Northing:</b> 1,488,782.82 usfi
	<b>+E-W</b>	81.28 usft	<b>Easting:</b> 3,401,738.74 usfi
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	usfi
		<b>Latitude:</b>	40.666098
		<b>Longitude:</b>	-104.051796
		<b>Ground Level:</b>	4,875.10 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	11/06/2019	7.63	67.12	52,375

<b>Design</b>	PROPOSAL #3			
<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>
	6,185.10	0.00	0.00	86.92

<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	-4,900.10	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	-4,500.10	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	12.00	54.81	995.62	-3,904.48	36.08	51.16	2.00	2.00	0.00	54.81	
4,413.86	12.00	54.81	4,334.88	-565.22	445.17	631.19	0.00	0.00	0.00	0.00	
5,013.86	0.00	0.00	4,930.51	30.41	481.25	682.35	2.00	-2.00	0.00	180.00	
5,695.49	0.00	0.00	5,612.14	712.04	481.25	682.35	0.00	0.00	0.00	0.00	KOP: BOOMSLANG
6,595.50	90.00	90.03	6,185.10	1,285.00	480.95	1,255.31	10.00	10.00	10.00	90.03	BPI: BOOMSLANG
14,146.50	90.00	90.03	6,185.10	1,285.00	477.03	8,806.31	0.00	0.00	0.00	0.00	EPI: BOOMSLANG
14,176.68	90.00	90.94	6,185.10	1,285.00	476.78	8,836.49	3.00	0.00	3.00	89.99	
14,204.48	90.00	90.94	6,185.10	1,285.00	476.32	8,864.29	0.00	0.00	0.00	0.00	BHL: BOOMSLANG

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BOOMSLANG FED 8-60 14A-13-18-3
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB 25' @ 4900.10usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4900.10usft
<b>Site:</b>	SE NE SEC. 14 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BOOMSLANG FED 8-60 14A-13-18-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #3		

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: 1358ft FNL &amp; 948ft FEL of Sec 14</b>										
0.00	0.00	0.00	0.00	4,900.10	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	4,800.10	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	4,700.10	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	4,600.10	0.00	0.00	0.00	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
400.00	0.00	0.00	400.00	4,500.10	0.00	0.00	0.00	0.00	0.00	0.00
<b>PIERRE SHALE (BASE FOX HILLS)</b>										
450.10	1.00	54.81	450.10	4,450.00	0.25	0.36	0.37	2.00	2.00	0.00
500.00	2.00	54.81	499.98	4,400.12	1.01	1.43	1.48	2.00	2.00	0.00
600.00	4.00	54.81	599.84	4,300.26	4.02	5.70	5.91	2.00	2.00	0.00
700.00	6.00	54.81	699.45	4,200.65	9.05	12.82	13.29	2.00	2.00	0.00
800.00	8.00	54.81	798.70	4,101.40	16.07	22.78	23.61	2.00	2.00	0.00
900.00	10.00	54.81	897.47	4,002.63	25.08	35.57	36.86	2.00	2.00	0.00
<b>EOB TO 12° INC</b>										
1,000.00	12.00	54.81	995.62	3,904.48	36.08	51.16	53.02	2.00	2.00	0.00
1,100.00	12.00	54.81	1,093.44	3,806.66	48.06	68.15	70.63	0.00	0.00	0.00
1,200.00	12.00	54.81	1,191.25	3,708.85	60.05	85.14	88.24	0.00	0.00	0.00
1,300.00	12.00	54.81	1,289.07	3,611.03	72.03	102.13	105.85	0.00	0.00	0.00
1,400.00	12.00	54.81	1,386.88	3,513.22	84.01	119.12	123.46	0.00	0.00	0.00
1,500.00	12.00	54.81	1,484.70	3,415.40	96.00	136.11	141.07	0.00	0.00	0.00
1,600.00	12.00	54.81	1,582.51	3,317.59	107.98	153.10	158.68	0.00	0.00	0.00
1,700.00	12.00	54.81	1,680.33	3,219.77	119.96	170.09	176.28	0.00	0.00	0.00
1,800.00	12.00	54.81	1,778.14	3,121.96	131.95	187.08	193.89	0.00	0.00	0.00
1,900.00	12.00	54.81	1,875.96	3,024.14	143.93	204.07	211.50	0.00	0.00	0.00
2,000.00	12.00	54.81	1,973.77	2,926.33	155.91	221.06	229.11	0.00	0.00	0.00
2,100.00	12.00	54.81	2,071.59	2,828.51	167.90	238.05	246.72	0.00	0.00	0.00
2,200.00	12.00	54.81	2,169.40	2,730.70	179.88	255.04	264.33	0.00	0.00	0.00
2,300.00	12.00	54.81	2,267.22	2,632.88	191.86	272.04	281.94	0.00	0.00	0.00
2,400.00	12.00	54.81	2,365.03	2,535.07	203.85	289.03	299.55	0.00	0.00	0.00
2,500.00	12.00	54.81	2,462.84	2,437.26	215.83	306.02	317.16	0.00	0.00	0.00
2,600.00	12.00	54.81	2,560.66	2,339.44	227.81	323.01	334.77	0.00	0.00	0.00
2,700.00	12.00	54.81	2,658.47	2,241.63	239.79	340.00	352.37	0.00	0.00	0.00
2,800.00	12.00	54.81	2,756.29	2,143.81	251.78	356.99	369.98	0.00	0.00	0.00
2,900.00	12.00	54.81	2,854.10	2,046.00	263.76	373.98	387.59	0.00	0.00	0.00
3,000.00	12.00	54.81	2,951.92	1,948.18	275.74	390.97	405.20	0.00	0.00	0.00
3,100.00	12.00	54.81	3,049.73	1,850.37	287.73	407.96	422.81	0.00	0.00	0.00
3,200.00	12.00	54.81	3,147.55	1,752.55	299.71	424.95	440.42	0.00	0.00	0.00
<b>PARKMAN</b>										
3,233.28	12.00	54.81	3,180.10	1,720.00	303.70	430.60	446.28	0.00	0.00	0.00
3,300.00	12.00	54.81	3,245.36	1,654.74	311.69	441.94	458.03	0.00	0.00	0.00
3,400.00	12.00	54.81	3,343.18	1,556.92	323.68	458.93	475.64	0.00	0.00	0.00
3,500.00	12.00	54.81	3,440.99	1,459.11	335.66	475.92	493.25	0.00	0.00	0.00
3,600.00	12.00	54.81	3,538.81	1,361.29	347.64	492.91	510.86	0.00	0.00	0.00
3,700.00	12.00	54.81	3,636.62	1,263.48	359.63	509.90	528.46	0.00	0.00	0.00
3,800.00	12.00	54.81	3,734.44	1,165.66	371.61	526.89	546.07	0.00	0.00	0.00
3,900.00	12.00	54.81	3,832.25	1,067.85	383.59	543.88	563.68	0.00	0.00	0.00
<b>SUSSEX</b>										
3,969.36	12.00	54.81	3,900.10	1,000.00	391.90	555.67	575.90	0.00	0.00	0.00
4,000.00	12.00	54.81	3,930.07	970.03	395.58	560.87	581.29	0.00	0.00	0.00
4,100.00	12.00	54.81	4,027.88	872.22	407.56	577.86	598.90	0.00	0.00	0.00
4,200.00	12.00	54.81	4,125.70	774.40	419.54	594.86	616.51	0.00	0.00	0.00
4,300.00	12.00	54.81	4,223.51	676.59	431.52	611.85	634.12	0.00	0.00	0.00



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BOOMSLANG FED 8-60 14A-13-18-3
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB 25' @ 4900.10usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4900.10usft
<b>Site:</b>	SE NE SEC. 14 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BOOMSLANG FED 8-60 14A-13-18-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #3		

## 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)
4,400.00	12.00	54.81	4,321.32	578.78	443.51	628.84	651.73	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>4,413.86</b>	<b>12.00</b>	<b>54.81</b>	<b>4,334.88</b>	<b>565.22</b>	<b>445.17</b>	<b>631.19</b>	<b>654.17</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,500.00	10.28	54.81	4,419.40	480.70	454.76	644.79	668.26	2.00	-2.00	0.00
4,600.00	8.28	54.81	4,518.08	382.02	464.05	657.96	681.91	2.00	-2.00	0.00
4,700.00	6.28	54.81	4,617.27	282.83	471.35	668.31	692.64	2.00	-2.00	0.00
<b>SHANNON</b>										
<b>4,722.96</b>	<b>5.82</b>	<b>54.81</b>	<b>4,640.10</b>	<b>260.00</b>	<b>472.74</b>	<b>670.29</b>	<b>694.69</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
4,800.00	4.28	54.81	4,716.84	183.26	476.65	675.83	700.43	2.00	-2.00	0.00
4,900.00	2.28	54.81	4,816.68	83.42	479.95	680.50	705.27	2.00	-2.00	0.00
5,000.00	0.28	54.81	4,916.65	-16.55	481.23	682.32	707.16	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
<b>5,013.86</b>	<b>0.00</b>	<b>0.00</b>	<b>4,930.51</b>	<b>-30.41</b>	<b>481.25</b>	<b>682.35</b>	<b>707.19</b>	<b>2.00</b>	<b>-2.00</b>	<b>-395.42</b>
5,100.00	0.00	0.00	5,016.65	-116.55	481.25	682.35	707.19	0.00	0.00	0.00
5,200.00	0.00	0.00	5,116.65	-216.55	481.25	682.35	707.19	0.00	0.00	0.00
5,300.00	0.00	0.00	5,216.65	-316.55	481.25	682.35	707.19	0.00	0.00	0.00
5,400.00	0.00	0.00	5,316.65	-416.55	481.25	682.35	707.19	0.00	0.00	0.00
5,500.00	0.00	0.00	5,416.65	-516.55	481.25	682.35	707.19	0.00	0.00	0.00
5,600.00	0.00	0.00	5,516.65	-616.55	481.25	682.35	707.19	0.00	0.00	0.00
<b>KOP (10°/100ft BUR)</b>										
<b>5,695.49</b>	<b>0.00</b>	<b>0.00</b>	<b>5,612.14</b>	<b>-712.04</b>	<b>481.25</b>	<b>682.35</b>	<b>707.19</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,700.00	0.45	90.03	5,616.65	-716.55	481.25	682.37	707.21	9.99	9.99	0.00
5,800.00	10.45	90.03	5,716.07	-815.97	481.25	691.85	716.68	10.00	10.00	0.00
5,900.00	20.45	90.03	5,812.33	-912.23	481.23	718.46	743.25	10.00	10.00	0.00
6,000.00	30.45	90.03	5,902.51	-1,002.41	481.21	761.38	786.10	10.00	10.00	0.00
6,100.00	40.45	90.03	5,983.87	-1,083.77	481.18	819.31	843.94	10.00	10.00	0.00
<b>SHARON SPRINGS SHALE</b>										
<b>6,114.92</b>	<b>41.94</b>	<b>90.03</b>	<b>5,995.10</b>	<b>-1,095.00</b>	<b>481.17</b>	<b>829.14</b>	<b>853.76</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,200.00	50.45	90.03	6,053.93	-1,153.83	481.14	890.48	915.01	10.00	10.00	0.00
<b>NIORARA FORMATION</b>										
<b>6,201.83</b>	<b>50.63</b>	<b>90.03</b>	<b>6,055.10</b>	<b>-1,155.00</b>	<b>481.14</b>	<b>891.90</b>	<b>916.43</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
<b>NIORARA A CHALK</b>										
<b>6,217.88</b>	<b>52.24</b>	<b>90.03</b>	<b>6,065.10</b>	<b>-1,165.00</b>	<b>481.14</b>	<b>904.44</b>	<b>928.95</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,300.00	60.45	90.03	6,110.57	-1,210.47	481.10	972.74	997.15	10.00	10.00	0.00
6,400.00	70.45	90.03	6,152.07	-1,251.97	481.05	1,063.58	1,087.86	10.00	10.00	0.00
<b>NIORARA B CHALK</b>										
<b>6,409.27</b>	<b>71.38</b>	<b>90.03</b>	<b>6,155.10</b>	<b>-1,255.00</b>	<b>481.05</b>	<b>1,072.34</b>	<b>1,096.61</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,500.00	80.45	90.03	6,177.16	-1,277.06	481.00	1,160.25	1,184.39	10.00	10.00	0.00
<b>BPI: 885ft FNL &amp; 300ft FWL of Sec 13 - NIOBRARA B LP</b>										
<b>6,595.50</b>	<b>90.00</b>	<b>90.03</b>	<b>6,185.10</b>	<b>-1,285.00</b>	<b>480.95</b>	<b>1,255.31</b>	<b>1,279.31</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,600.00	90.00	90.03	6,185.10	-1,285.00	480.95	1,259.81	1,283.80	0.00	0.00	0.00
6,700.00	90.00	90.03	6,185.10	-1,285.00	480.90	1,359.81	1,383.66	0.00	0.00	0.00
6,800.00	90.00	90.03	6,185.10	-1,285.00	480.85	1,459.81	1,483.51	0.00	0.00	0.00
6,900.00	90.00	90.03	6,185.10	-1,285.00	480.80	1,559.81	1,583.36	0.00	0.00	0.00
7,000.00	90.00	90.03	6,185.10	-1,285.00	480.74	1,659.81	1,683.22	0.00	0.00	0.00
7,100.00	90.00	90.03	6,185.10	-1,285.00	480.69	1,759.81	1,783.07	0.00	0.00	0.00
7,200.00	90.00	90.03	6,185.10	-1,285.00	480.64	1,859.81	1,882.92	0.00	0.00	0.00
7,300.00	90.00	90.03	6,185.10	-1,285.00	480.59	1,959.81	1,982.78	0.00	0.00	0.00
7,400.00	90.00	90.03	6,185.10	-1,285.00	480.54	2,059.81	2,082.63	0.00	0.00	0.00
7,500.00	90.00	90.03	6,185.10	-1,285.00	480.49	2,159.81	2,182.48	0.00	0.00	0.00
7,600.00	90.00	90.03	6,185.10	-1,285.00	480.43	2,259.81	2,282.33	0.00	0.00	0.00
7,700.00	90.00	90.03	6,185.10	-1,285.00	480.38	2,359.81	2,382.19	0.00	0.00	0.00
7,800.00	90.00	90.03	6,185.10	-1,285.00	480.33	2,459.81	2,482.04	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BOOMSLANG FED 8-60 14A-13-18-3
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB 25' @ 4900.10usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4900.10usft
<b>Site:</b>	SE NE SEC. 14 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BOOMSLANG FED 8-60 14A-13-18-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #3		

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	90.03	6,185.10	-1,285.00	480.28	2,559.81	2,581.89	0.00	0.00	0.00
8,000.00	90.00	90.03	6,185.10	-1,285.00	480.23	2,659.81	2,681.75	0.00	0.00	0.00
8,100.00	90.00	90.03	6,185.10	-1,285.00	480.17	2,759.81	2,781.60	0.00	0.00	0.00
8,200.00	90.00	90.03	6,185.10	-1,285.00	480.12	2,859.81	2,881.45	0.00	0.00	0.00
8,300.00	90.00	90.03	6,185.10	-1,285.00	480.07	2,959.81	2,981.31	0.00	0.00	0.00
8,400.00	90.00	90.03	6,185.10	-1,285.00	480.02	3,059.81	3,081.16	0.00	0.00	0.00
8,500.00	90.00	90.03	6,185.10	-1,285.00	479.97	3,159.81	3,181.01	0.00	0.00	0.00
8,600.00	90.00	90.03	6,185.10	-1,285.00	479.92	3,259.81	3,280.87	0.00	0.00	0.00
8,700.00	90.00	90.03	6,185.10	-1,285.00	479.86	3,359.81	3,380.72	0.00	0.00	0.00
8,800.00	90.00	90.03	6,185.10	-1,285.00	479.81	3,459.81	3,480.57	0.00	0.00	0.00
8,900.00	90.00	90.03	6,185.10	-1,285.00	479.76	3,559.81	3,580.43	0.00	0.00	0.00
<b>ENTER COC 71628</b>										
<b>8,943.55</b>	<b>90.00</b>	<b>90.03</b>	<b>6,185.10</b>	<b>-1,285.00</b>	<b>479.74</b>	<b>3,603.36</b>	<b>3,623.91</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
9,000.00	90.00	90.03	6,185.10	-1,285.00	479.71	3,659.81	3,680.28	0.00	0.00	0.00
9,100.00	90.00	90.03	6,185.10	-1,285.00	479.66	3,759.81	3,780.13	0.00	0.00	0.00
9,200.00	90.00	90.03	6,185.10	-1,285.00	479.60	3,859.81	3,879.99	0.00	0.00	0.00
9,300.00	90.00	90.03	6,185.10	-1,285.00	479.55	3,959.81	3,979.84	0.00	0.00	0.00
9,400.00	90.00	90.03	6,185.10	-1,285.00	479.50	4,059.81	4,079.69	0.00	0.00	0.00
9,500.00	90.00	90.03	6,185.10	-1,285.00	479.45	4,159.81	4,179.54	0.00	0.00	0.00
9,600.00	90.00	90.03	6,185.10	-1,285.00	479.40	4,259.81	4,279.40	0.00	0.00	0.00
9,700.00	90.00	90.03	6,185.10	-1,285.00	479.35	4,359.81	4,379.25	0.00	0.00	0.00
9,800.00	90.00	90.03	6,185.10	-1,285.00	479.29	4,459.81	4,479.10	0.00	0.00	0.00
9,900.00	90.00	90.03	6,185.10	-1,285.00	479.24	4,559.81	4,578.96	0.00	0.00	0.00
10,000.00	90.00	90.03	6,185.10	-1,285.00	479.19	4,659.81	4,678.81	0.00	0.00	0.00
10,100.00	90.00	90.03	6,185.10	-1,285.00	479.14	4,759.81	4,778.66	0.00	0.00	0.00
10,200.00	90.00	90.03	6,185.10	-1,285.00	479.09	4,859.81	4,878.52	0.00	0.00	0.00
10,300.00	90.00	90.03	6,185.10	-1,285.00	479.04	4,959.81	4,978.37	0.00	0.00	0.00
10,400.00	90.00	90.03	6,185.10	-1,285.00	478.98	5,059.81	5,078.22	0.00	0.00	0.00
10,500.00	90.00	90.03	6,185.10	-1,285.00	478.93	5,159.81	5,178.08	0.00	0.00	0.00
10,600.00	90.00	90.03	6,185.11	-1,285.01	478.88	5,259.81	5,277.93	0.00	0.00	0.00
10,700.00	90.00	90.03	6,185.11	-1,285.01	478.83	5,359.81	5,377.78	0.00	0.00	0.00
10,800.00	90.00	90.03	6,185.11	-1,285.01	478.78	5,459.81	5,477.64	0.00	0.00	0.00
10,900.00	90.00	90.03	6,185.11	-1,285.01	478.72	5,559.81	5,577.49	0.00	0.00	0.00
11,000.00	90.00	90.03	6,185.11	-1,285.01	478.67	5,659.81	5,677.34	0.00	0.00	0.00
11,100.00	90.00	90.03	6,185.11	-1,285.01	478.62	5,759.81	5,777.20	0.00	0.00	0.00
11,200.00	90.00	90.03	6,185.11	-1,285.01	478.57	5,859.81	5,877.05	0.00	0.00	0.00
11,300.00	90.00	90.03	6,185.11	-1,285.01	478.52	5,959.81	5,976.90	0.00	0.00	0.00
11,400.00	90.00	90.03	6,185.11	-1,285.01	478.47	6,059.81	6,076.75	0.00	0.00	0.00
11,500.00	90.00	90.03	6,185.11	-1,285.01	478.41	6,159.81	6,176.61	0.00	0.00	0.00
11,600.00	90.00	90.03	6,185.11	-1,285.01	478.36	6,259.81	6,276.46	0.00	0.00	0.00
<b>EXIT COC 71628 / ENTER COC 28082</b>										
<b>11,604.85</b>	<b>90.00</b>	<b>90.03</b>	<b>6,185.11</b>	<b>-1,285.01</b>	<b>478.36</b>	<b>6,264.66</b>	<b>6,281.30</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
11,700.00	90.00	90.03	6,185.11	-1,285.01	478.31	6,359.81	6,376.31	0.00	0.00	0.00
11,800.00	90.00	90.03	6,185.11	-1,285.01	478.26	6,459.81	6,476.17	0.00	0.00	0.00
11,900.00	90.00	90.03	6,185.11	-1,285.01	478.21	6,559.81	6,576.02	0.00	0.00	0.00
12,000.00	90.00	90.03	6,185.11	-1,285.01	478.16	6,659.81	6,675.87	0.00	0.00	0.00
12,100.00	90.00	90.03	6,185.11	-1,285.01	478.10	6,759.81	6,775.73	0.00	0.00	0.00
12,200.00	90.00	90.03	6,185.11	-1,285.01	478.05	6,859.81	6,875.58	0.00	0.00	0.00
12,300.00	90.00	90.03	6,185.11	-1,285.01	478.00	6,959.81	6,975.43	0.00	0.00	0.00
12,400.00	90.00	90.03	6,185.11	-1,285.01	477.95	7,059.81	7,075.29	0.00	0.00	0.00
12,500.00	90.00	90.03	6,185.11	-1,285.01	477.90	7,159.81	7,175.14	0.00	0.00	0.00
12,600.00	90.00	90.03	6,185.11	-1,285.01	477.84	7,259.81	7,274.99	0.00	0.00	0.00
12,700.00	90.00	90.03	6,185.11	-1,285.01	477.79	7,359.81	7,374.85	0.00	0.00	0.00
12,800.00	90.00	90.03	6,185.11	-1,285.01	477.74	7,459.81	7,474.70	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BOOMSLANG FED 8-60 14A-13-18-3
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB 25' @ 4900.10usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4900.10usft
<b>Site:</b>	SE NE SEC. 14 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BOOMSLANG FED 8-60 14A-13-18-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #3		

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)
12,900.00	90.00	90.03	6,185.11	-1,285.01	477.69	7,559.81	7,574.55	0.00	0.00	0.00
13,000.00	90.00	90.03	6,185.11	-1,285.01	477.64	7,659.81	7,674.40	0.00	0.00	0.00
13,100.00	90.00	90.03	6,185.11	-1,285.01	477.59	7,759.81	7,774.26	0.00	0.00	0.00
13,200.00	90.00	90.03	6,185.11	-1,285.01	477.53	7,859.81	7,874.11	0.00	0.00	0.00
13,300.00	90.00	90.03	6,185.11	-1,285.01	477.48	7,959.81	7,973.96	0.00	0.00	0.00
13,400.00	90.00	90.03	6,185.11	-1,285.01	477.43	8,059.81	8,073.82	0.00	0.00	0.00
13,500.00	90.00	90.03	6,185.11	-1,285.01	477.38	8,159.81	8,173.67	0.00	0.00	0.00
13,600.00	90.00	90.03	6,185.11	-1,285.01	477.33	8,259.81	8,273.52	0.00	0.00	0.00
13,700.00	90.00	90.03	6,185.11	-1,285.01	477.27	8,359.81	8,373.38	0.00	0.00	0.00
13,800.00	90.00	90.03	6,185.11	-1,285.01	477.22	8,459.81	8,473.23	0.00	0.00	0.00
13,900.00	90.00	90.03	6,185.11	-1,285.01	477.17	8,559.81	8,573.08	0.00	0.00	0.00
14,000.00	90.00	90.03	6,185.11	-1,285.01	477.12	8,659.81	8,672.94	0.00	0.00	0.00
14,100.00	90.00	90.03	6,185.11	-1,285.01	477.07	8,759.81	8,772.79	0.00	0.00	0.00
EPI: 885ft FNL & 2557ft FWL of Sec 18										
14,146.50	90.00	90.03	6,185.10	-1,285.00	477.03	8,806.31	8,819.22	0.00	0.00	0.00
EOT TO 90.94° AZ										
14,176.68	90.00	90.94	6,185.10	-1,285.00	476.78	8,836.49	8,849.34	3.00	0.00	3.00
14,200.00	90.00	90.94	6,185.10	-1,285.00	476.40	8,859.81	8,872.60	0.00	0.00	0.00
BHL: 885ft FNL & 2615ft FWL of Sec 18										
14,204.48	90.00	90.94	6,185.10	-1,285.00	476.32	8,864.29	8,877.07	0.00	0.00	0.00

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
450.10	450.10	PIERRE SHALE (BASE FOX HILLS				
3,233.28	3,180.10	PARKMAN				
3,969.36	3,900.10	SUSSEX				
4,722.96	4,640.10	SHANNON				
6,114.92	5,995.10	SHARON SPRINGS SHALE				
6,201.83	6,055.10	NIOBRARA FORMATION				
6,217.88	6,065.10	NIOBRARA A CHALK				
6,409.27	6,155.10	NIOBRARA B CHALK		0.00		
6,595.50	6,185.10	NIOBRARA B LP		0.00		

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BOOMSLANG FED 8-60 14A-13-18-3
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB 25' @ 4900.10usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4900.10usft
<b>Site:</b>	SE NE SEC. 14 T8N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BOOMSLANG FED 8-60 14A-13-18-3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #3		

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.00	0.00	0.00	0.00	SHL: 1358ft FNL & 948ft FEL of Sec 14
400.00	400.00	0.00	0.00	START NUDGE (2°/100ft BUR)
1,000.00	995.62	36.08	51.16	EOB TO 12° INC
4,413.86	4,334.88	445.17	631.19	END OF TANGENT
5,013.86	4,930.51	481.25	682.35	EOD TO VERTICAL
5,695.49	5,612.14	481.25	682.35	KOP (10°/100ft BUR)
6,595.50	6,185.10	480.95	1,255.31	BPI: 885ft FNL & 300ft FWL of Sec 13
8,943.55	6,185.10	479.74	3,603.36	ENTER COC 71628
11,604.85	6,185.11	478.36	6,264.66	EXIT COC 71628 / ENTER COC 28082
14,146.50	6,185.10	477.03	8,806.31	EPI: 885ft FNL & 2557ft FWL of Sec 18
14,176.68	6,185.10	476.78	8,836.49	EOT TO 90.94° AZ
14,204.48	6,185.10	476.32	8,864.29	BHL: 885ft FNL & 2615ft FWL of Sec 18