



# **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**

**12 November, 2019**

**Plan: PROPOSAL #3**





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 #3

ANNOTATIONS

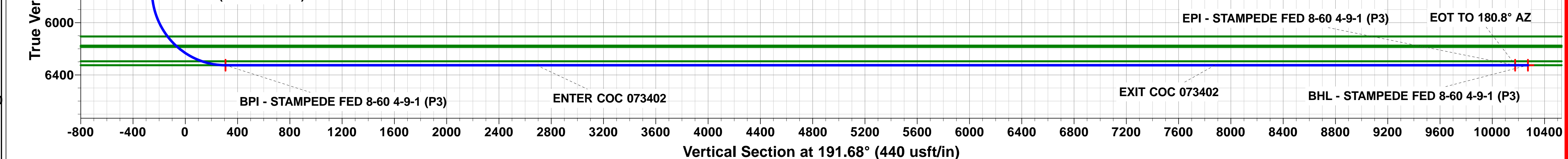
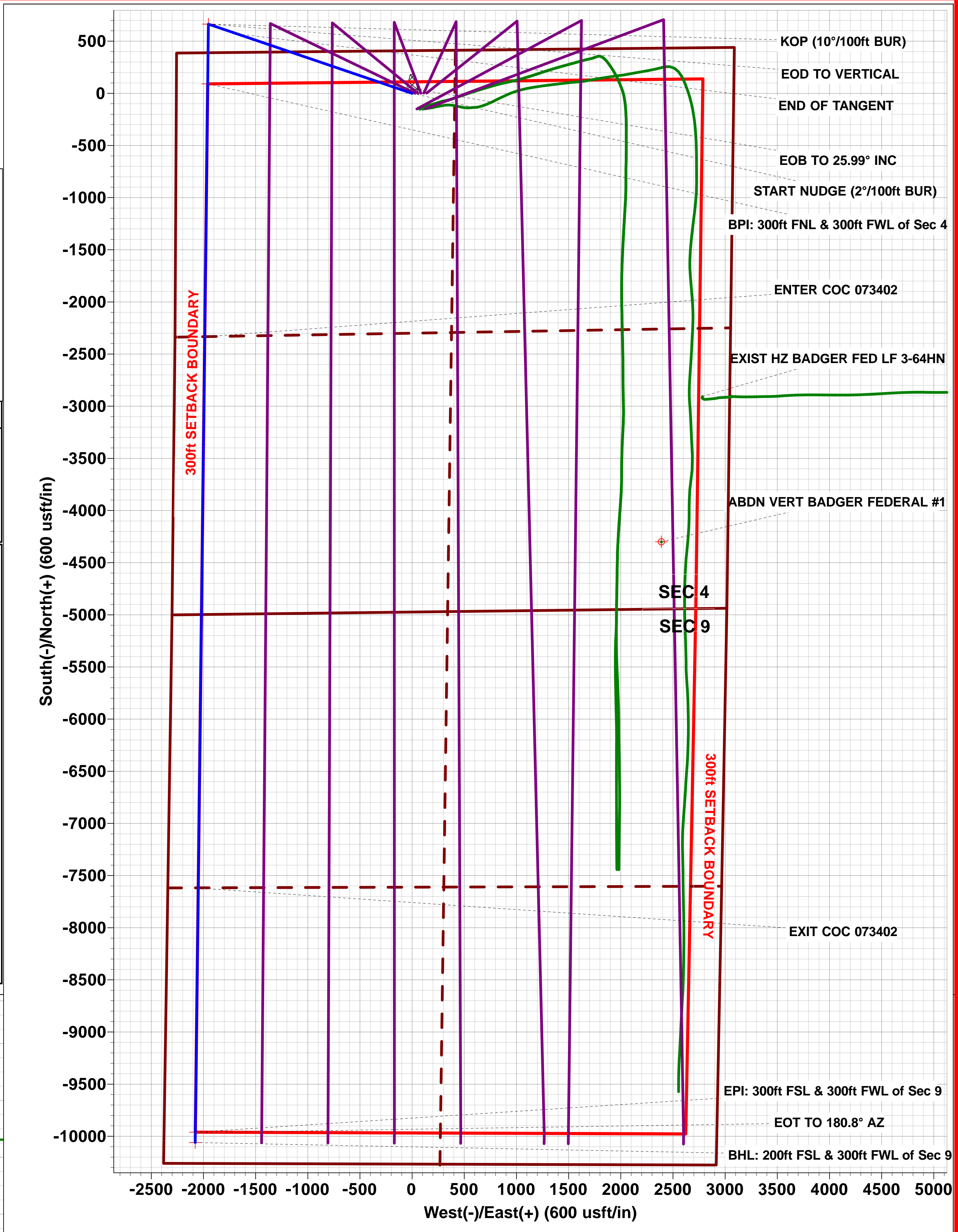
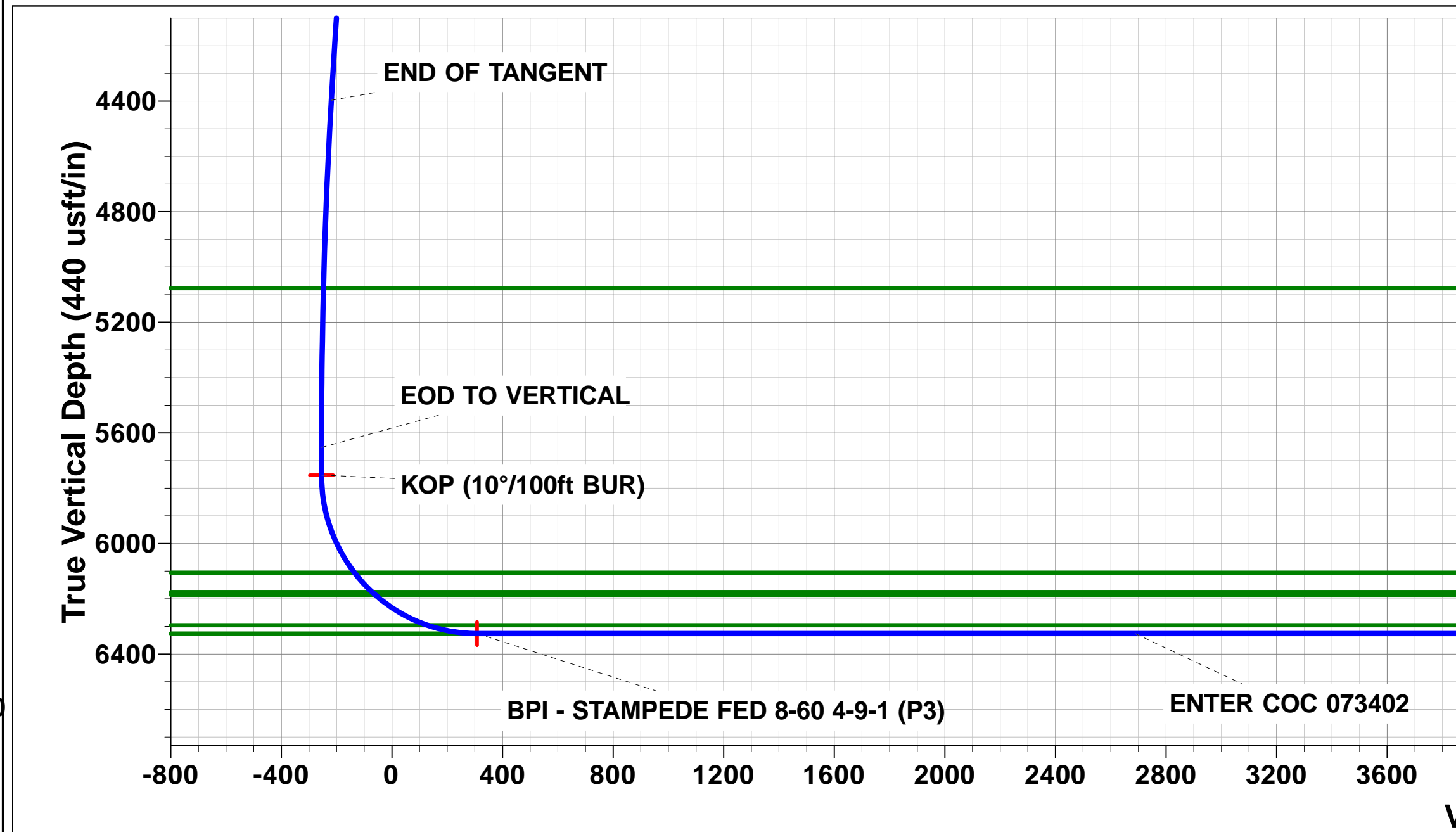
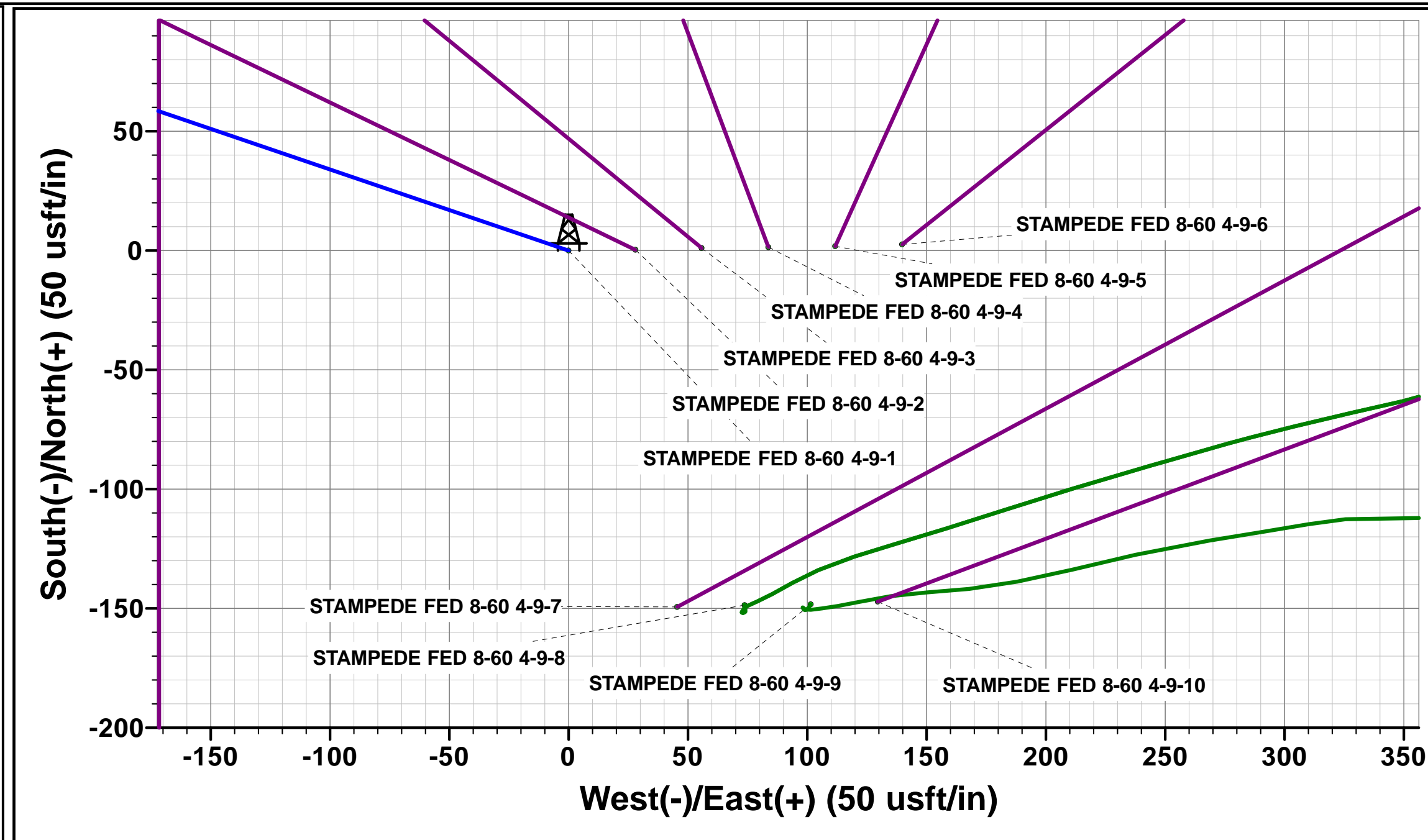
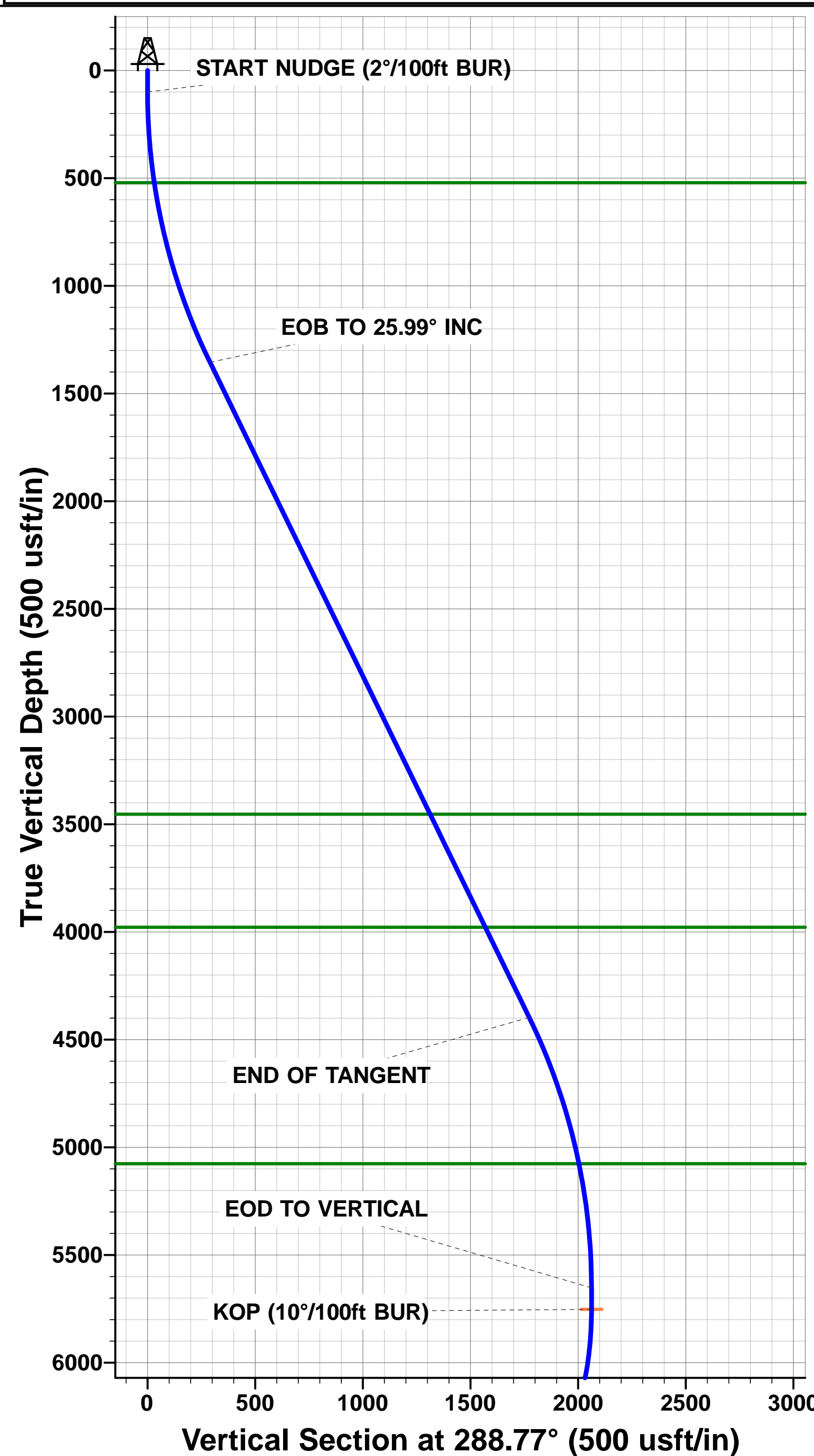
MD	Inc	Azi	TVD	+N-S	+E-W	Vsect	Dep	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 410ft FNL & 2260ft FWL of Sec 4
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	START NUDDGE (2°/100ft BUR)
1399.47	25.99	288.77	1355.36	93.23	-274.29	-35.80	289.70	EOB TO 25.99° INC
4783.60	25.99	288.77	4397.27	570.49	-1678.34	-219.04	1772.65	END OF TANGENT
6083.07	0.00	288.77	5652.64	663.72	-1952.63	-254.84	2062.35	EOD TO VERTICAL
6183.07	0.00	0.00	5752.64	663.72	-1952.63	-254.84	2062.35	KOP (10°/100ft BUR)
7083.07	90.00	180.67	6325.60	90.81	-1959.33	307.58	2635.30	BPI: 300ft FNL & 300ft FWL of Sec 4
9507.65	90.00	180.67	6325.62	-2333.60	-1987.71	2687.57	5059.88	ENTER COC 073402
14794.01	90.00	180.68	6325.62	-7619.60	-2049.85	7876.77	10346.24	EXIT COC 073402
17134.86	90.00	180.68	6325.60	-9960.29	-2077.47	10174.62	12687.09	EPI: 300ft FSL & 300ft FWL of Sec 9
17139.07	90.00	180.80	6325.60	-9964.50	-2077.53	10178.75	12691.30	EOT TO 180.8° AZ
17234.69	90.00	180.80	6325.60	-10060.11	-2078.87	10272.65	12786.92	BHL: 200ft FSL & 300ft FWL of Sec 9

PROPOSED LOCAL COORDINATES:

SHL: 410ft FNL & 2260ft FWL Sec 4  
 BPI: 300ft FNL & 300ft FWL Sec 4  
 EPI: 300ft FSL & 300ft FWL Sec 9  
 BHL: 200ft FSL & 300ft 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 (P3)	5752.64	663.72	-1952.63	40.699568	-104.104037
BPI - STAMPEDE FED 8-60 4-9-1 (P3)	6325.60	90.81	-1959.33	40.697995	-104.104061
EPI - STAMPEDE FED 8-60 4-9-1 (P3)	6325.60	-9960.28	-2077.47	40.670407	-104.104484
BHL - STAMPEDE FED 8-60 4-9-1 (P3)	6325.60	-10060.11	-2078.87	40.670133	-104.104489



## Planning Report

<b>Database:</b>	EDM 5000.15.1	<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 25' @ 4951.60usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4951.60usft
<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 #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> 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>	0.00 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>	-0.38 usft	<b>Northing:</b> 1,500,109.92 usft
	<b>+E/-W</b>	-14.70 usft	<b>Easting:</b> 3,389,018.96 usft
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b> usft
			<b>Latitude:</b> 40.697746
			<b>Longitude:</b> -104.096995
			<b>Ground Level:</b> 4,926.60 usft

<b>Wellbore</b> ORIGINAL WELLBORE					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2019-11-12	7.62	67.13	52,337.64107272

<b>Design</b> PROPOSAL #3				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	191.68

<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	-4,951.60	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	-4,851.60	0.00	0.00	0.00	0.00	0.00	0.00	
1,399.47	25.99	288.77	1,355.37	-3,596.23	93.23	-274.29	2.00	2.00	0.00	288.77	
4,783.60	25.99	288.77	4,397.27	-554.33	570.49	-1,678.34	0.00	0.00	0.00	0.00	
6,083.07	0.00	0.00	5,652.64	701.04	663.72	-1,952.63	2.00	-2.00	0.00	180.00	
6,183.07	0.00	0.00	5,752.64	801.04	663.72	-1,952.63	0.00	0.00	0.00	0.00	KOP - STAMPEDE
7,083.07	90.00	180.67	6,325.60	1,374.00	90.81	-1,959.33	10.00	10.00	-19.93	180.67	BPI - STAMPEDE F
17,134.86	90.00	180.68	6,325.60	1,374.00	-9,960.28	-2,077.47	0.00	0.00	0.00	81.87	EPI - STAMPEDE F
17,139.07	90.00	180.80	6,325.60	1,374.00	-9,964.50	-2,077.53	3.00	-0.01	3.00	90.24	
17,234.69	90.00	180.80	6,325.60	1,374.00	-10,060.11	-2,078.87	0.00	0.00	0.00	0.00	BHL - STAMPEDE

Planning Report

<b>Database:</b>	EDM 5000.15.1	<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 25' @ 4951.60usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4951.60usft
<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 #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: 410ft FNL &amp; 2260ft FWL of Sec 4</b>										
0.00	0.00	0.00	0.00	4,951.60	0.00	0.00	0.00	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
100.00	0.00	0.00	100.00	4,851.60	0.00	0.00	0.00	0.00	0.00	0.00
200.00	2.00	288.77	199.98	4,751.62	0.56	-1.65	-0.22	2.00	2.00	0.00
300.00	4.00	288.77	299.84	4,651.76	2.25	-6.61	-0.86	2.00	2.00	0.00
400.00	6.00	288.77	399.45	4,552.15	5.05	-14.86	-1.94	2.00	2.00	0.00
500.00	8.00	288.77	498.70	4,452.90	8.97	-26.40	-3.45	2.00	2.00	0.00
<b>PIERRE SHALE (BASE FOX HILLS)</b>										
523.14	8.46	288.77	521.60	4,430.00	10.04	-29.53	-3.85	2.00	2.00	0.00
600.00	10.00	288.77	597.47	4,354.13	14.01	-41.21	-5.38	2.00	2.00	0.00
700.00	12.00	288.77	695.62	4,255.98	20.15	-59.27	-7.74	2.00	2.00	0.00
800.00	14.00	288.77	793.06	4,158.54	27.39	-80.57	-10.52	2.00	2.00	0.00
900.00	16.00	288.77	889.64	4,061.96	35.72	-105.07	-13.71	2.00	2.00	0.00
1,000.00	18.00	288.77	985.27	3,966.33	45.12	-132.75	-17.33	2.00	2.00	0.00
1,100.00	20.00	288.77	1,079.82	3,871.78	55.60	-163.58	-21.35	2.00	2.00	0.00
1,200.00	22.00	288.77	1,173.17	3,778.43	67.13	-197.50	-25.78	2.00	2.00	0.00
1,300.00	24.00	288.77	1,265.21	3,686.39	79.71	-234.50	-30.60	2.00	2.00	0.00
<b>EOB TO 25.99° INC</b>										
1,399.47	25.99	288.77	1,355.36	3,596.24	93.23	-274.29	-35.80	2.00	2.00	0.00
1,400.00	25.99	288.77	1,355.84	3,595.76	93.31	-274.51	-35.83	0.02	0.02	0.00
1,500.00	25.99	288.77	1,445.73	3,505.87	107.41	-316.00	-41.24	0.00	0.00	0.00
1,600.00	25.99	288.77	1,535.62	3,415.98	121.51	-357.49	-46.66	0.00	0.00	0.00
1,700.00	25.99	288.77	1,625.50	3,326.10	135.62	-398.98	-52.07	0.00	0.00	0.00
1,800.00	25.99	288.77	1,715.39	3,236.21	149.72	-440.47	-57.49	0.00	0.00	0.00
1,900.00	25.99	288.77	1,805.28	3,146.32	163.82	-481.95	-62.90	0.00	0.00	0.00
2,000.00	25.99	288.77	1,895.17	3,056.43	177.93	-523.44	-68.32	0.00	0.00	0.00
2,100.00	25.99	288.77	1,985.05	2,966.55	192.03	-564.93	-73.73	0.00	0.00	0.00
2,200.00	25.99	288.77	2,074.94	2,876.66	206.13	-606.42	-79.14	0.00	0.00	0.00
2,300.00	25.99	288.77	2,164.83	2,786.77	220.23	-647.91	-84.56	0.00	0.00	0.00
2,400.00	25.99	288.77	2,254.72	2,696.88	234.34	-689.40	-89.97	0.00	0.00	0.00
2,500.00	25.99	288.77	2,344.60	2,607.00	248.44	-730.89	-95.39	0.00	0.00	0.00
2,600.00	25.99	288.77	2,434.49	2,517.11	262.54	-772.38	-100.80	0.00	0.00	0.00
2,700.00	25.99	288.77	2,524.38	2,427.22	276.64	-813.87	-106.22	0.00	0.00	0.00
2,800.00	25.99	288.77	2,614.27	2,337.33	290.75	-855.36	-111.63	0.00	0.00	0.00
2,900.00	25.99	288.77	2,704.15	2,247.45	304.85	-896.85	-117.05	0.00	0.00	0.00
3,000.00	25.99	288.77	2,794.04	2,157.56	318.95	-938.34	-122.46	0.00	0.00	0.00
3,100.00	25.99	288.77	2,883.93	2,067.67	333.06	-979.83	-127.88	0.00	0.00	0.00
3,200.00	25.99	288.77	2,973.81	1,977.79	347.16	-1,021.32	-133.29	0.00	0.00	0.00
3,300.00	25.99	288.77	3,063.70	1,887.90	361.26	-1,062.80	-138.71	0.00	0.00	0.00
3,400.00	25.99	288.77	3,153.59	1,798.01	375.36	-1,104.29	-144.12	0.00	0.00	0.00
3,500.00	25.99	288.77	3,243.48	1,708.12	389.47	-1,145.78	-149.54	0.00	0.00	0.00
3,600.00	25.99	288.77	3,333.36	1,618.24	403.57	-1,187.27	-154.95	0.00	0.00	0.00
3,700.00	25.99	288.77	3,423.25	1,528.35	417.67	-1,228.76	-160.37	0.00	0.00	0.00
<b>PARKMAN</b>										
3,733.76	25.99	288.77	3,453.60	1,498.00	422.43	-1,242.77	-162.19	0.00	0.00	0.00
3,800.00	25.99	288.77	3,513.14	1,438.46	431.77	-1,270.25	-165.78	0.00	0.00	0.00
3,900.00	25.99	288.77	3,603.03	1,348.57	445.88	-1,311.74	-171.20	0.00	0.00	0.00
4,000.00	25.99	288.77	3,692.91	1,258.69	459.98	-1,353.23	-176.61	0.00	0.00	0.00
4,100.00	25.99	288.77	3,782.80	1,168.80	474.08	-1,394.72	-182.03	0.00	0.00	0.00
4,200.00	25.99	288.77	3,872.69	1,078.91	488.19	-1,436.21	-187.44	0.00	0.00	0.00
4,300.00	25.99	288.77	3,962.58	989.02	502.29	-1,477.70	-192.86	0.00	0.00	0.00
<b>SUSSEX</b>										

Planning Report

<b>Database:</b>	EDM 5000.15.1	<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 25' @ 4951.60usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4951.60usft
<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 #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>4,317.83</b>	<b>25.99</b>	<b>288.77</b>	<b>3,978.60</b>	<b>973.00</b>	<b>504.80</b>	<b>-1,485.09</b>	<b>-193.82</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,400.00	25.99	288.77	4,052.46	899.14	516.39	-1,519.19	-198.27	0.00	0.00	0.00
4,500.00	25.99	288.77	4,142.35	809.25	530.49	-1,560.68	-203.69	0.00	0.00	0.00
4,600.00	25.99	288.77	4,232.24	719.36	544.60	-1,602.17	-209.10	0.00	0.00	0.00
4,700.00	25.99	288.77	4,322.13	629.47	558.70	-1,643.65	-214.51	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>4,783.60</b>	<b>25.99</b>	<b>288.77</b>	<b>4,397.27</b>	<b>554.33</b>	<b>570.49</b>	<b>-1,678.34</b>	<b>-219.04</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,800.00	25.66	288.77	4,412.03	539.57	572.79	-1,685.10	-219.92	2.00	-2.00	0.00
4,900.00	23.66	288.77	4,502.91	448.69	586.22	-1,724.61	-225.08	2.00	-2.00	0.00
5,000.00	21.66	288.77	4,595.18	356.42	598.62	-1,761.08	-229.84	2.00	-2.00	0.00
5,100.00	19.66	288.77	4,688.75	262.85	609.97	-1,794.49	-234.20	2.00	-2.00	0.00
5,200.00	17.66	288.77	4,783.48	168.12	620.27	-1,824.78	-238.15	2.00	-2.00	0.00
5,300.00	15.66	288.77	4,879.28	72.32	629.49	-1,851.93	-241.70	2.00	-2.00	0.00
5,400.00	13.66	288.77	4,976.02	-24.42	637.64	-1,875.89	-244.82	2.00	-2.00	0.00
5,500.00	11.66	288.77	5,073.58	-121.98	644.69	-1,896.64	-247.53	2.00	-2.00	0.00
<b>SHANNON</b>										
<b>5,503.08</b>	<b>11.60</b>	<b>288.77</b>	<b>5,076.60</b>	<b>-125.00</b>	<b>644.89</b>	<b>-1,897.23</b>	<b>-247.61</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
5,600.00	9.66	288.77	5,171.85	-220.25	650.65	-1,914.16	-249.82	2.00	-2.00	0.00
5,700.00	7.66	288.77	5,270.71	-319.11	655.49	-1,928.42	-251.68	2.00	-2.00	0.00
5,800.00	5.66	288.77	5,370.03	-418.43	659.23	-1,939.40	-253.11	2.00	-2.00	0.00
5,900.00	3.66	288.77	5,469.69	-518.09	661.84	-1,947.09	-254.12	2.00	-2.00	0.00
6,000.00	1.66	288.77	5,569.58	-617.98	663.34	-1,951.49	-254.69	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
<b>6,083.07</b>	<b>0.00</b>	<b>288.77</b>	<b>5,652.64</b>	<b>-701.04</b>	<b>663.72</b>	<b>-1,952.63</b>	<b>-254.84</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
6,100.00	0.00	0.00	5,669.57	-717.97	663.72	-1,952.63	-254.84	0.00	0.00	0.00
<b>KOP (10°/100ft BUR)</b>										
<b>6,183.07</b>	<b>0.00</b>	<b>0.00</b>	<b>5,752.64</b>	<b>-801.04</b>	<b>663.72</b>	<b>-1,952.63</b>	<b>-254.84</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,200.00	1.69	180.67	5,769.56	-817.96	663.47	-1,952.63	-254.59	10.00	10.00	0.00
6,300.00	11.69	180.67	5,868.76	-917.16	651.84	-1,952.77	-243.17	10.00	10.00	0.00
6,400.00	21.69	180.67	5,964.42	-1,012.82	623.15	-1,953.10	-215.01	10.00	10.00	0.00
6,500.00	31.69	180.67	6,053.65	-1,102.05	578.29	-1,953.63	-170.97	10.00	10.00	0.00
<b>SHARON SPRINGS SHALE</b>										
<b>6,563.34</b>	<b>38.03</b>	<b>180.67</b>	<b>6,105.60</b>	<b>-1,154.00</b>	<b>542.11</b>	<b>-1,954.05</b>	<b>-135.45</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,600.00	41.69	180.67	6,133.73	-1,182.13	518.62	-1,954.33	-112.39	10.00	10.00	0.00
<b>NIOBRARA FORMATION</b>										
<b>6,658.86</b>	<b>47.58</b>	<b>180.67</b>	<b>6,175.60</b>	<b>-1,224.00</b>	<b>477.28</b>	<b>-1,954.81</b>	<b>-71.82</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
<b>NIOBRARA A CHALK</b>										
<b>6,673.90</b>	<b>49.08</b>	<b>180.67</b>	<b>6,185.60</b>	<b>-1,234.00</b>	<b>466.05</b>	<b>-1,954.94</b>	<b>-60.79</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,700.00	51.69	180.67	6,202.24	-1,250.64	445.95	-1,955.18	-41.05	10.00	10.00	0.00
6,800.00	61.69	180.67	6,257.08	-1,305.48	362.48	-1,956.15	40.88	10.00	10.00	0.00
<b>NIOBRARA B CHALK</b>										
<b>6,896.85</b>	<b>71.38</b>	<b>180.67</b>	<b>6,295.60</b>	<b>-1,344.00</b>	<b>273.76</b>	<b>-1,957.19</b>	<b>127.98</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,900.00	71.69	180.67	6,296.60	-1,345.00	270.77	-1,957.22	130.92	10.00	10.00	0.00
7,000.00	81.69	180.67	6,319.59	-1,367.99	173.58	-1,958.36	226.32	10.00	10.00	0.00
<b>BPI: 300ft FNL &amp; 300ft FWL of Sec 4 - NIOBRARA B LP</b>										
<b>7,083.07</b>	<b>90.00</b>	<b>180.67</b>	<b>6,325.60</b>	<b>-1,374.00</b>	<b>90.81</b>	<b>-1,959.33</b>	<b>307.58</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
7,100.00	90.00	180.67	6,325.60	-1,374.00	73.88	-1,959.53	324.19	0.00	0.00	0.00
7,200.00	90.00	180.67	6,325.60	-1,374.00	-26.11	-1,960.70	422.36	0.00	0.00	0.00
7,300.00	90.00	180.67	6,325.60	-1,374.00	-126.11	-1,961.86	520.52	0.00	0.00	0.00
7,400.00	90.00	180.67	6,325.60	-1,374.00	-226.10	-1,963.03	618.68	0.00	0.00	0.00
7,500.00	90.00	180.67	6,325.60	-1,374.00	-326.09	-1,964.20	716.84	0.00	0.00	0.00
7,600.00	90.00	180.67	6,325.60	-1,374.00	-426.08	-1,965.37	815.00	0.00	0.00	0.00
7,700.00	90.00	180.67	6,325.61	-1,374.01	-526.08	-1,966.54	913.16	0.00	0.00	0.00

Planning Report

<b>Database:</b>	EDM 5000.15.1	<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 25' @ 4951.60usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4951.60usft
<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 #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)
7,800.00	90.00	180.67	6,325.61	-1,374.01	-626.07	-1,967.71	1,011.32	0.00	0.00	0.00
7,900.00	90.00	180.67	6,325.61	-1,374.01	-726.06	-1,968.88	1,109.48	0.00	0.00	0.00
8,000.00	90.00	180.67	6,325.61	-1,374.01	-826.06	-1,970.05	1,207.64	0.00	0.00	0.00
8,100.00	90.00	180.67	6,325.61	-1,374.01	-926.05	-1,971.22	1,305.80	0.00	0.00	0.00
8,200.00	90.00	180.67	6,325.61	-1,374.01	-1,026.04	-1,972.39	1,403.97	0.00	0.00	0.00
8,300.00	90.00	180.67	6,325.61	-1,374.01	-1,126.04	-1,973.56	1,502.13	0.00	0.00	0.00
8,400.00	90.00	180.67	6,325.61	-1,374.01	-1,226.03	-1,974.74	1,600.29	0.00	0.00	0.00
8,500.00	90.00	180.67	6,325.61	-1,374.01	-1,326.02	-1,975.91	1,698.45	0.00	0.00	0.00
8,600.00	90.00	180.67	6,325.61	-1,374.01	-1,426.02	-1,977.08	1,796.61	0.00	0.00	0.00
8,700.00	90.00	180.67	6,325.61	-1,374.01	-1,526.01	-1,978.25	1,894.77	0.00	0.00	0.00
8,800.00	90.00	180.67	6,325.61	-1,374.01	-1,626.00	-1,979.42	1,992.93	0.00	0.00	0.00
8,900.00	90.00	180.67	6,325.61	-1,374.01	-1,726.00	-1,980.59	2,091.09	0.00	0.00	0.00
9,000.00	90.00	180.67	6,325.61	-1,374.01	-1,825.99	-1,981.76	2,189.25	0.00	0.00	0.00
9,100.00	90.00	180.67	6,325.61	-1,374.01	-1,925.98	-1,982.93	2,287.42	0.00	0.00	0.00
9,200.00	90.00	180.67	6,325.61	-1,374.01	-2,025.97	-1,984.11	2,385.58	0.00	0.00	0.00
9,300.00	90.00	180.67	6,325.62	-1,374.02	-2,125.97	-1,985.28	2,483.74	0.00	0.00	0.00
9,400.00	90.00	180.67	6,325.62	-1,374.02	-2,225.96	-1,986.45	2,581.90	0.00	0.00	0.00
9,500.00	90.00	180.67	6,325.62	-1,374.02	-2,325.95	-1,987.62	2,680.06	0.00	0.00	0.00
<b>ENTER COC 073402</b>										
<b>9,507.65</b>	<b>90.00</b>	<b>180.67</b>	<b>6,325.62</b>	<b>-1,374.02</b>	<b>-2,333.60</b>	<b>-1,987.71</b>	<b>2,687.57</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
9,600.00	90.00	180.67	6,325.62	-1,374.02	-2,425.95	-1,988.79	2,778.22	0.00	0.00	0.00
9,700.00	90.00	180.67	6,325.62	-1,374.02	-2,525.94	-1,989.97	2,876.38	0.00	0.00	0.00
9,800.00	90.00	180.67	6,325.62	-1,374.02	-2,625.93	-1,991.14	2,974.55	0.00	0.00	0.00
9,900.00	90.00	180.67	6,325.62	-1,374.02	-2,725.93	-1,992.31	3,072.71	0.00	0.00	0.00
10,000.00	90.00	180.67	6,325.62	-1,374.02	-2,825.92	-1,993.48	3,170.87	0.00	0.00	0.00
10,100.00	90.00	180.67	6,325.62	-1,374.02	-2,925.91	-1,994.66	3,269.03	0.00	0.00	0.00
10,200.00	90.00	180.67	6,325.62	-1,374.02	-3,025.91	-1,995.83	3,367.19	0.00	0.00	0.00
10,300.00	90.00	180.67	6,325.62	-1,374.02	-3,125.90	-1,997.00	3,465.35	0.00	0.00	0.00
10,400.00	90.00	180.67	6,325.62	-1,374.02	-3,225.89	-1,998.18	3,563.52	0.00	0.00	0.00
10,500.00	90.00	180.67	6,325.62	-1,374.02	-3,325.89	-1,999.35	3,661.68	0.00	0.00	0.00
10,600.00	90.00	180.67	6,325.62	-1,374.02	-3,425.88	-2,000.52	3,759.84	0.00	0.00	0.00
10,700.00	90.00	180.67	6,325.62	-1,374.02	-3,525.87	-2,001.70	3,858.00	0.00	0.00	0.00
10,800.00	90.00	180.67	6,325.62	-1,374.02	-3,625.86	-2,002.87	3,956.16	0.00	0.00	0.00
10,900.00	90.00	180.67	6,325.62	-1,374.02	-3,725.86	-2,004.04	4,054.32	0.00	0.00	0.00
11,000.00	90.00	180.67	6,325.62	-1,374.02	-3,825.85	-2,005.22	4,152.49	0.00	0.00	0.00
11,100.00	90.00	180.67	6,325.62	-1,374.02	-3,925.84	-2,006.39	4,250.65	0.00	0.00	0.00
11,200.00	90.00	180.67	6,325.62	-1,374.02	-4,025.84	-2,007.56	4,348.81	0.00	0.00	0.00
11,300.00	90.00	180.67	6,325.62	-1,374.02	-4,125.83	-2,008.74	4,446.97	0.00	0.00	0.00
11,400.00	90.00	180.67	6,325.62	-1,374.02	-4,225.82	-2,009.91	4,545.13	0.00	0.00	0.00
11,500.00	90.00	180.67	6,325.62	-1,374.02	-4,325.82	-2,011.09	4,643.29	0.00	0.00	0.00
11,600.00	90.00	180.67	6,325.62	-1,374.02	-4,425.81	-2,012.26	4,741.46	0.00	0.00	0.00
11,700.00	90.00	180.67	6,325.62	-1,374.02	-4,525.80	-2,013.44	4,839.62	0.00	0.00	0.00
11,800.00	90.00	180.67	6,325.62	-1,374.02	-4,625.80	-2,014.61	4,937.78	0.00	0.00	0.00
11,900.00	90.00	180.67	6,325.62	-1,374.02	-4,725.79	-2,015.79	5,035.94	0.00	0.00	0.00
12,000.00	90.00	180.67	6,325.62	-1,374.02	-4,825.78	-2,016.96	5,134.10	0.00	0.00	0.00
12,100.00	90.00	180.67	6,325.62	-1,374.02	-4,925.78	-2,018.14	5,232.27	0.00	0.00	0.00
12,200.00	90.00	180.67	6,325.62	-1,374.02	-5,025.77	-2,019.31	5,330.43	0.00	0.00	0.00
12,300.00	90.00	180.67	6,325.62	-1,374.02	-5,125.76	-2,020.49	5,428.59	0.00	0.00	0.00
12,400.00	90.00	180.67	6,325.62	-1,374.02	-5,225.75	-2,021.66	5,526.75	0.00	0.00	0.00
12,500.00	90.00	180.67	6,325.62	-1,374.02	-5,325.75	-2,022.84	5,624.91	0.00	0.00	0.00
12,600.00	90.00	180.67	6,325.62	-1,374.02	-5,425.74	-2,024.02	5,723.08	0.00	0.00	0.00
12,700.00	90.00	180.67	6,325.62	-1,374.02	-5,525.73	-2,025.19	5,821.24	0.00	0.00	0.00
12,800.00	90.00	180.67	6,325.62	-1,374.02	-5,625.73	-2,026.37	5,919.40	0.00	0.00	0.00
12,900.00	90.00	180.67	6,325.62	-1,374.02	-5,725.72	-2,027.54	6,017.56	0.00	0.00	0.00

Planning Report

<b>Database:</b>	EDM 5000.15.1	<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 25' @ 4951.60usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4951.60usft
<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 #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)
13,000.00	90.00	180.67	6,325.62	-1,374.02	-5,825.71	-2,028.72	6,115.73	0.00	0.00	0.00
13,100.00	90.00	180.67	6,325.62	-1,374.02	-5,925.71	-2,029.90	6,213.89	0.00	0.00	0.00
13,200.00	90.00	180.67	6,325.62	-1,374.02	-6,025.70	-2,031.07	6,312.05	0.00	0.00	0.00
13,300.00	90.00	180.67	6,325.62	-1,374.02	-6,125.69	-2,032.25	6,410.21	0.00	0.00	0.00
13,400.00	90.00	180.67	6,325.62	-1,374.02	-6,225.69	-2,033.43	6,508.37	0.00	0.00	0.00
13,500.00	90.00	180.67	6,325.62	-1,374.02	-6,325.68	-2,034.60	6,606.54	0.00	0.00	0.00
13,600.00	90.00	180.67	6,325.62	-1,374.02	-6,425.67	-2,035.78	6,704.70	0.00	0.00	0.00
13,700.00	90.00	180.67	6,325.62	-1,374.02	-6,525.66	-2,036.96	6,802.86	0.00	0.00	0.00
13,800.00	90.00	180.67	6,325.62	-1,374.02	-6,625.66	-2,038.14	6,901.02	0.00	0.00	0.00
13,900.00	90.00	180.67	6,325.62	-1,374.02	-6,725.65	-2,039.31	6,999.19	0.00	0.00	0.00
14,000.00	90.00	180.67	6,325.62	-1,374.02	-6,825.64	-2,040.49	7,097.35	0.00	0.00	0.00
14,100.00	90.00	180.67	6,325.62	-1,374.02	-6,925.64	-2,041.67	7,195.51	0.00	0.00	0.00
14,200.00	90.00	180.67	6,325.62	-1,374.02	-7,025.63	-2,042.85	7,293.67	0.00	0.00	0.00
14,300.00	90.00	180.67	6,325.62	-1,374.02	-7,125.62	-2,044.02	7,391.84	0.00	0.00	0.00
14,400.00	90.00	180.68	6,325.62	-1,374.02	-7,225.62	-2,045.20	7,490.00	0.00	0.00	0.00
14,500.00	90.00	180.68	6,325.62	-1,374.02	-7,325.61	-2,046.38	7,588.16	0.00	0.00	0.00
14,600.00	90.00	180.68	6,325.62	-1,374.02	-7,425.60	-2,047.56	7,686.32	0.00	0.00	0.00
14,700.00	90.00	180.68	6,325.62	-1,374.02	-7,525.60	-2,048.74	7,784.49	0.00	0.00	0.00
<b>EXIT COC 073402</b>										
<b>14,794.01</b>	<b>90.00</b>	<b>180.68</b>	<b>6,325.62</b>	<b>-1,374.02</b>	<b>-7,619.60</b>	<b>-2,049.85</b>	<b>7,876.77</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
14,800.00	90.00	180.68	6,325.62	-1,374.02	-7,625.59	-2,049.92	7,882.65	0.00	0.00	0.00
14,900.00	90.00	180.68	6,325.62	-1,374.02	-7,725.58	-2,051.10	7,980.81	0.00	0.00	0.00
15,000.00	90.00	180.68	6,325.61	-1,374.01	-7,825.57	-2,052.27	8,078.97	0.00	0.00	0.00
15,100.00	90.00	180.68	6,325.61	-1,374.01	-7,925.57	-2,053.45	8,177.14	0.00	0.00	0.00
15,200.00	90.00	180.68	6,325.61	-1,374.01	-8,025.56	-2,054.63	8,275.30	0.00	0.00	0.00
15,300.00	90.00	180.68	6,325.61	-1,374.01	-8,125.55	-2,055.81	8,373.46	0.00	0.00	0.00
15,400.00	90.00	180.68	6,325.61	-1,374.01	-8,225.55	-2,056.99	8,471.63	0.00	0.00	0.00
15,500.00	90.00	180.68	6,325.61	-1,374.01	-8,325.54	-2,058.17	8,569.79	0.00	0.00	0.00
15,600.00	90.00	180.68	6,325.61	-1,374.01	-8,425.53	-2,059.35	8,667.95	0.00	0.00	0.00
15,700.00	90.00	180.68	6,325.61	-1,374.01	-8,525.53	-2,060.53	8,766.11	0.00	0.00	0.00
15,800.00	90.00	180.68	6,325.61	-1,374.01	-8,625.52	-2,061.71	8,864.28	0.00	0.00	0.00
15,900.00	90.00	180.68	6,325.61	-1,374.01	-8,725.51	-2,062.89	8,962.44	0.00	0.00	0.00
16,000.00	90.00	180.68	6,325.61	-1,374.01	-8,825.50	-2,064.07	9,060.60	0.00	0.00	0.00
16,100.00	90.00	180.68	6,325.61	-1,374.01	-8,925.50	-2,065.25	9,158.77	0.00	0.00	0.00
16,200.00	90.00	180.68	6,325.61	-1,374.01	-9,025.49	-2,066.43	9,256.93	0.00	0.00	0.00
16,300.00	90.00	180.68	6,325.61	-1,374.01	-9,125.48	-2,067.61	9,355.09	0.00	0.00	0.00
16,400.00	90.00	180.68	6,325.61	-1,374.01	-9,225.48	-2,068.79	9,453.25	0.00	0.00	0.00
16,500.00	90.00	180.68	6,325.61	-1,374.01	-9,325.47	-2,069.97	9,551.42	0.00	0.00	0.00
16,600.00	90.00	180.68	6,325.60	-1,374.00	-9,425.46	-2,071.15	9,649.58	0.00	0.00	0.00
16,700.00	90.00	180.68	6,325.60	-1,374.00	-9,525.46	-2,072.33	9,747.74	0.00	0.00	0.00
16,800.00	90.00	180.68	6,325.60	-1,374.00	-9,625.45	-2,073.51	9,845.91	0.00	0.00	0.00
16,900.00	90.00	180.68	6,325.60	-1,374.00	-9,725.44	-2,074.70	9,944.07	0.00	0.00	0.00
17,000.00	90.00	180.68	6,325.60	-1,374.00	-9,825.43	-2,075.88	10,042.23	0.00	0.00	0.00
17,100.00	90.00	180.68	6,325.60	-1,374.00	-9,925.43	-2,077.06	10,140.40	0.00	0.00	0.00
<b>EPI: 300ft FSL &amp; 300ft FWL of Sec 9</b>										
<b>17,134.86</b>	<b>90.00</b>	<b>180.68</b>	<b>6,325.60</b>	<b>-1,374.00</b>	<b>-9,960.29</b>	<b>-2,077.47</b>	<b>10,174.62</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>EOT TO 180.8° AZ</b>										
<b>17,139.07</b>	<b>90.00</b>	<b>180.80</b>	<b>6,325.60</b>	<b>-1,374.00</b>	<b>-9,964.50</b>	<b>-2,077.53</b>	<b>10,178.75</b>	<b>3.00</b>	<b>-0.01</b>	<b>3.00</b>
17,200.00	90.00	180.80	6,325.60	-1,374.00	-10,025.42	-2,078.38	10,238.59	0.00	0.00	0.00
<b>BHL: 200ft FSL &amp; 300ft FWL of Sec 9</b>										
<b>17,234.69</b>	<b>90.00</b>	<b>180.80</b>	<b>6,325.60</b>	<b>-1,374.00</b>	<b>-10,060.11</b>	<b>-2,078.87</b>	<b>10,272.65</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Planning Report

<b>Database:</b>	EDM 5000.15.1	<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 25' @ 4951.60usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB 25' @ 4951.60usft
<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 #3		

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
523.14	521.60	PIERRE SHALE (BASE FOX HILLS)		0.00	
3,733.76	3,453.60	PARKMAN		0.00	
4,317.83	3,978.60	SUSSEX		0.00	
5,503.08	5,076.60	SHANNON		0.00	
6,563.34	6,105.60	SHARON SPRINGS SHALE		0.00	
6,658.86	6,175.60	NIOBRARA FORMATION		0.00	
6,673.90	6,185.60	NIOBRARA A CHALK		0.00	
6,896.85	6,295.60	NIOBRARA B CHALK		0.00	
7,083.07	6,325.60	NIOBRARA B LP		0.00	

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.00	0.00	0.00	0.00	SHL: 410ft FNL & 2260ft FWL of Sec 4
100.00	100.00	0.00	0.00	START NUDGE (2°/100ft BUR)
1,399.47	1,355.36	93.23	-274.29	EOB TO 25.99° INC
4,783.60	4,397.27	570.49	-1,678.34	END OF TANGENT
6,083.07	5,652.64	663.72	-1,952.63	EOD TO VERTICAL
6,183.07	5,752.64	663.72	-1,952.63	KOP (10°/100ft BUR)
7,083.07	6,325.60	90.81	-1,959.33	BPI: 300ft FNL & 300ft FWL of Sec 4
9,507.65	6,325.62	-2,333.60	-1,987.71	ENTER COC 073402
14,794.01	6,325.62	-7,619.60	-2,049.85	EXIT COC 073402
17,134.86	6,325.60	-9,960.29	-2,077.47	EPI: 300ft FSL & 300ft FWL of Sec 9
17,139.07	6,325.60	-9,964.50	-2,077.53	EOT TO 180.8° AZ
17,234.69	6,325.60	-10,060.11	-2,078.87	BHL: 200ft FSL & 300ft FWL of Sec 9