

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

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

**NW NW SEC. 27 T9N R60W 6th P.M.**

**BASHOR FED 9-60 27C-28-29-7**

**ORIGINAL WELLBORE**

**21 January, 2018**

**Plan: PROPOSAL #1**



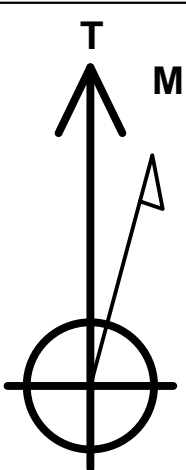
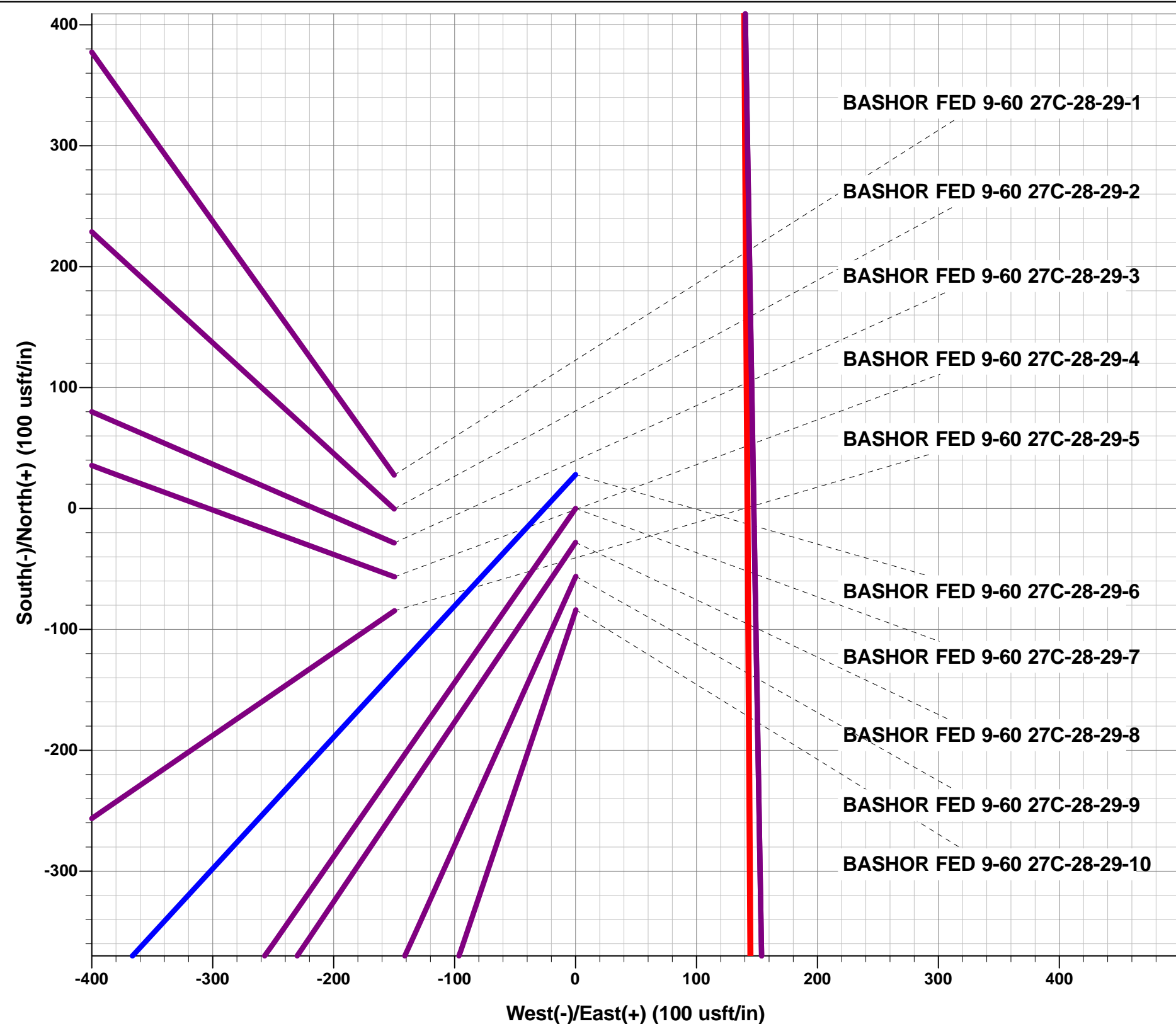
Project: WELD COUNTY, COLORADO (NAD 83)  
Site: NW NW SEC. 27 T9N R60W 6th P.M.  
Well: BASHOR FED 9-60 27C-28-29-7  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

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: 1110ft FNL & 460ft FWL of Sec 27
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	214.78	-51.42	-35.71	40.02	62.60	EOB TO 12° INC
4406.20	4486.77	12.00	214.78	-646.85	-449.23	503.52	787.54	END OF TANGENT
5001.82	5086.77	0.00	0.00	-698.27	-484.94	543.54	850.15	EOD TO VERTICAL
5689.14	5774.09	0.00	0.00	-698.27	-484.94	543.54	850.15	KOP (10°/100ft BUR)
6262.10	6674.09	90.00	268.64	-711.87	-1057.74	1115.37	1423.11	BPI: 1799ft FNL & 600ft FEL of Sec 28
6262.10	16202.34	90.00	268.64	-938.05	-10583.30	10624.77	10951.35	EPI: 1799ft FNL & 600ft FWL of Sec 29
6262.10	16502.07	90.00	268.62	-945.21	-10882.94	10923.91	11251.08	BHL: 1799ft FNL & 300ft FWL of Sec 29

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - BASHOR FED 9-60 27C-28-29-7	5689.14	-698.27	-484.94	40.723223	-104.088108
BPI - BASHOR FED 9-60 27C-28-29-7	6262.10	-711.87	-1057.74	40.723186	-104.090174
EPI - BASHOR FED 9-60 27C-28-29-7	6262.10	-938.05	-10583.30	40.722559	-104.124539
BHL - BASHOR FED 9-60 27C-28-29-7	6262.10	-945.21	-10882.94	40.722539	-104.125620



Azimuths to True North  
Magnetic North: 7.80°

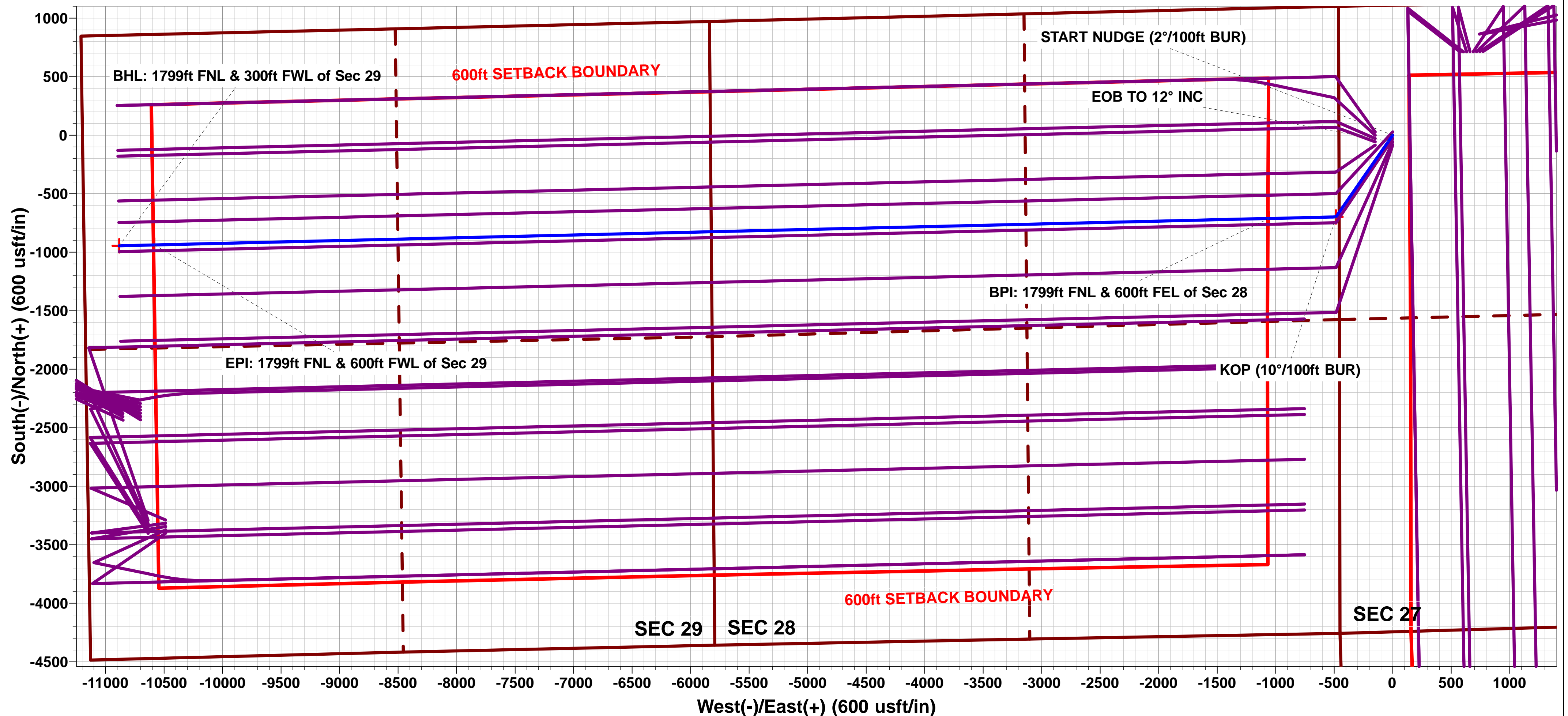
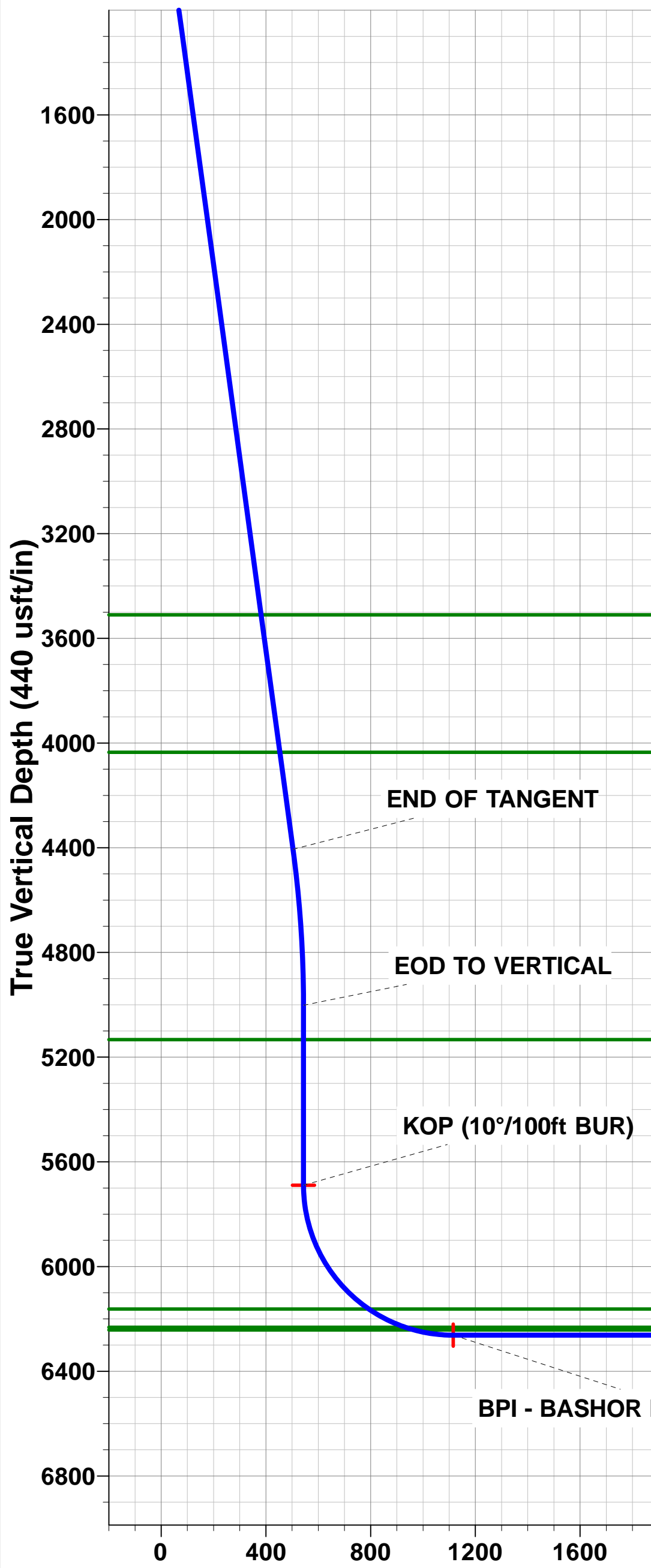
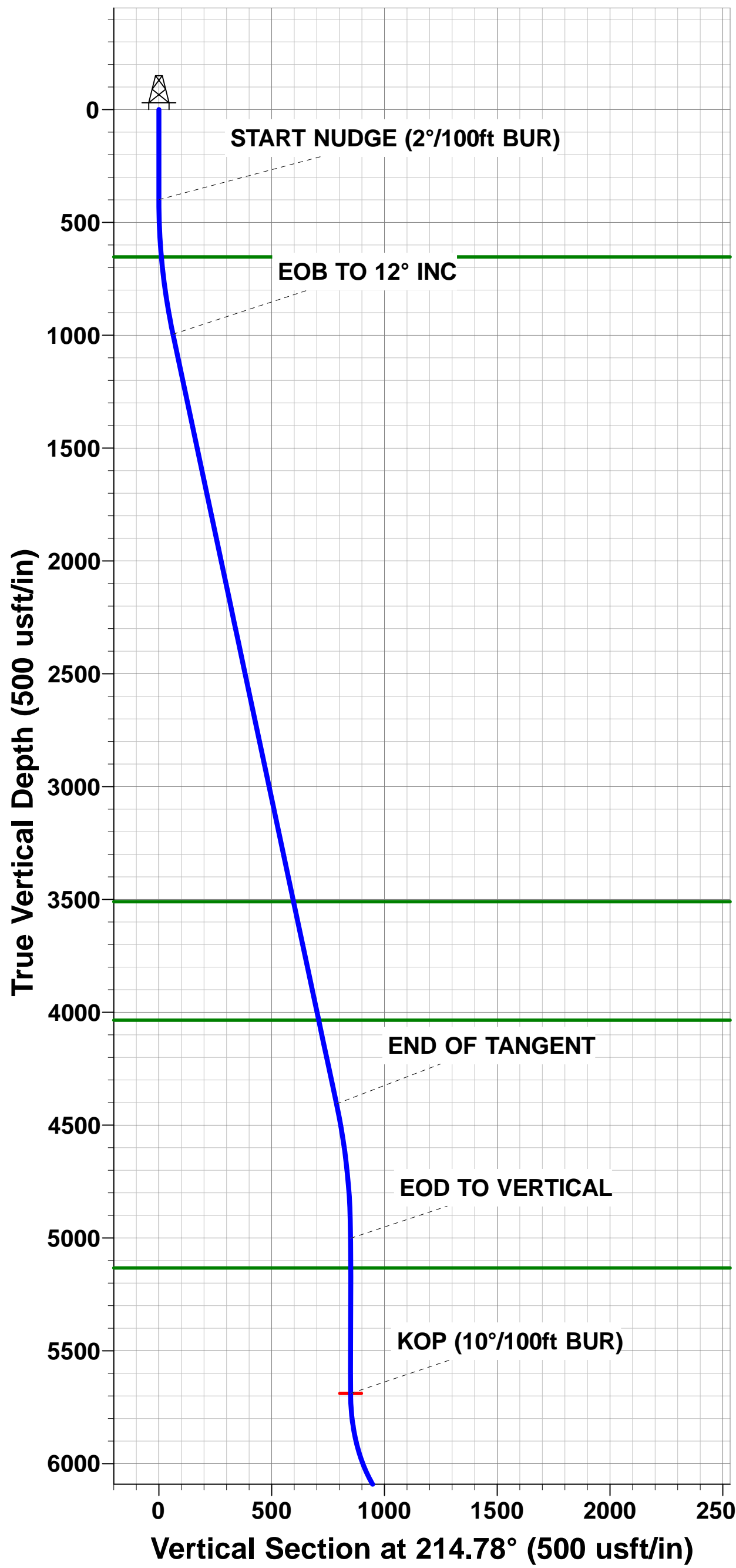
Magnetic Field  
Strength: 52559.6snT  
Dip Angle: 67.20°  
Date: 21/01/2018  
Model: IGRF2015

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
653.10	653.43	PIERRE SHALE
3510.10	3570.65	PARKMAN
4035.10	4107.38	SUSSEX
5133.10	5218.05	SHANNON
6162.10	6330.45	SHARON SPRINGS SHALE
6232.10	6487.86	NOBRARA FORMATION
6242.10	6522.26	NOBRARA A CHALK

PROPOSED LOCAL COORDINATES:

SHL: 1110ft FNL & 460ft FWL of Sec 27  
BEGIN PROD INT: 1799ft FNL & 600ft FEL of Sec 28  
END PROD INTERVAL: 1799ft FNL & 600ft FWL of Sec 29  
BHL: 1799ft FNL & 300ft FWL of Sec 29



BHL - BASHOR FED 9-60 27C-28-29-7

EPI - BASHOR FED 9-60 27C-28-29-7

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BASHOR FED 9-60 27C-28-29-7
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Site:</b>	NW NW SEC. 27 T9N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BASHOR FED 9-60 27C-28-29-7	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

<b>Project</b>	WELD COUNTY, COLORADO (NAD 83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

<b>Site</b>	NW NW SEC. 27 T9N R60W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,510,856.16usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,392,374.09usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.727092
		<b>Longitude:</b>	-104.084278
		<b>Grid Convergence:</b>	0.91 °

<b>Well</b>	BASHOR FED 9-60 27C-28-29-7		
<b>Well Position</b>	<b>+N/-S</b>	-711.18 usft	<b>Northing:</b> 1,510,135.87 usfi
	<b>+E/-W</b>	-576.53 usft	<b>Easting:</b> 3,391,808.99 usfi
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	usfi
		<b>Latitude:</b>	40.725140
		<b>Longitude:</b>	-104.086358
		<b>Ground Level:</b>	4,992.10 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	21/01/2018	7.81	67.20	52,560

<b>Design</b>	PROPOSAL #1			
<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>
	6,262.10	0.00	0.00	265.04

<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	-5,017.10	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	-4,617.10	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	12.00	214.78	995.62	-4,021.48	-51.42	-35.71	2.00	2.00	0.00	214.78	
4,486.77	12.00	214.78	4,406.20	-610.90	-646.85	-449.23	0.00	0.00	0.00	0.00	
5,086.77	0.00	0.00	5,001.82	-15.28	-698.27	-484.94	2.00	-2.00	0.00	180.00	
5,774.09	0.00	0.00	5,689.14	672.04	-698.27	-484.94	0.00	0.00	0.00	0.00	KOP - BASHOR FE
6,674.09	90.00	268.64	6,262.10	1,245.00	-711.87	-1,057.74	10.00	10.00	-10.15	268.64	BPI - BASHOR FEI
16,202.34	90.00	268.64	6,262.10	1,245.00	-938.05	-10,583.30	0.00	0.00	0.00	0.00	EPI - BASHOR FEI
16,502.07	90.00	268.62	6,262.10	1,245.00	-945.21	-10,882.94	0.01	0.00	-0.01	-89.75	BHL - BASHOR FE

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BASHOR FED 9-60 27C-28-29-7
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Site:</b>	NW NW SEC. 27 T9N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BASHOR FED 9-60 27C-28-29-7	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>SHL: 1110ft FNL &amp; 460ft FWL of Sec 27</b>										
0.00	0.00	0.00	0.00	5,017.10	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	4,917.10	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	4,817.10	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	4,717.10	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	4,617.10	0.00	0.00	0.00	0.00	0.00	0.00
500.00	2.00	214.78	499.98	4,517.12	-1.43	-1.00	1.12	2.00	2.00	0.00
600.00	4.00	214.78	599.84	4,417.26	-5.73	-3.98	4.46	2.00	2.00	0.00
<b>PIERRE SHALE (BASE OF FOX HILLS)</b>										
653.43	5.07	214.78	653.10	4,364.00	-9.20	-6.39	7.16	2.00	2.00	0.00
700.00	6.00	214.78	699.45	4,317.65	-12.89	-8.95	10.03	2.00	2.00	0.00
800.00	8.00	214.78	798.70	4,218.40	-22.90	-15.90	17.83	2.00	2.00	0.00
900.00	10.00	214.78	897.47	4,119.63	-35.75	-24.83	27.83	2.00	2.00	0.00
<b>EOB TO 12° INC</b>										
1,000.00	12.00	214.78	995.62	4,021.48	-51.42	-35.71	40.02	2.00	2.00	0.00
1,100.00	12.00	214.78	1,093.44	3,923.66	-68.50	-47.57	53.32	0.00	0.00	0.00
1,200.00	12.00	214.78	1,191.25	3,825.85	-85.57	-59.43	66.61	0.00	0.00	0.00
1,300.00	12.00	214.78	1,289.07	3,728.03	-102.65	-71.29	79.90	0.00	0.00	0.00
1,400.00	12.00	214.78	1,386.88	3,630.22	-119.73	-83.15	93.20	0.00	0.00	0.00
1,500.00	12.00	214.78	1,484.70	3,532.40	-136.80	-95.01	106.49	0.00	0.00	0.00
1,600.00	12.00	214.78	1,582.51	3,434.59	-153.88	-106.87	119.78	0.00	0.00	0.00
1,700.00	12.00	214.78	1,680.33	3,336.77	-170.96	-118.73	133.07	0.00	0.00	0.00
1,800.00	12.00	214.78	1,778.14	3,238.96	-188.03	-130.59	146.37	0.00	0.00	0.00
1,900.00	12.00	214.78	1,875.96	3,141.14	-205.11	-142.45	159.66	0.00	0.00	0.00
2,000.00	12.00	214.78	1,973.77	3,043.33	-222.19	-154.31	172.95	0.00	0.00	0.00
2,100.00	12.00	214.78	2,071.59	2,945.51	-239.26	-166.17	186.25	0.00	0.00	0.00
2,200.00	12.00	214.78	2,169.40	2,847.70	-256.34	-178.03	199.54	0.00	0.00	0.00
2,300.00	12.00	214.78	2,267.22	2,749.88	-273.42	-189.89	212.83	0.00	0.00	0.00
2,400.00	12.00	214.78	2,365.03	2,652.07	-290.50	-201.75	226.12	0.00	0.00	0.00
2,500.00	12.00	214.78	2,462.84	2,554.26	-307.57	-213.61	239.42	0.00	0.00	0.00
2,600.00	12.00	214.78	2,560.66	2,456.44	-324.65	-225.46	252.71	0.00	0.00	0.00
2,700.00	12.00	214.78	2,658.47	2,358.63	-341.73	-237.32	266.00	0.00	0.00	0.00
2,800.00	12.00	214.78	2,756.29	2,260.81	-358.80	-249.18	279.30	0.00	0.00	0.00
2,900.00	12.00	214.78	2,854.10	2,163.00	-375.88	-261.04	292.59	0.00	0.00	0.00
3,000.00	12.00	214.78	2,951.92	2,065.18	-392.96	-272.90	305.88	0.00	0.00	0.00
3,100.00	12.00	214.78	3,049.73	1,967.37	-410.03	-284.76	319.17	0.00	0.00	0.00
3,200.00	12.00	214.78	3,147.55	1,869.55	-427.11	-296.62	332.47	0.00	0.00	0.00
3,300.00	12.00	214.78	3,245.36	1,771.74	-444.19	-308.48	345.76	0.00	0.00	0.00
3,400.00	12.00	214.78	3,343.18	1,673.92	-461.26	-320.34	359.05	0.00	0.00	0.00
3,500.00	12.00	214.78	3,440.99	1,576.11	-478.34	-332.20	372.35	0.00	0.00	0.00
<b>PARKMAN</b>										
3,570.65	12.00	214.78	3,510.10	1,507.00	-490.41	-340.58	381.74	0.00	0.00	0.00
3,600.00	12.00	214.78	3,538.81	1,478.29	-495.42	-344.06	385.64	0.00	0.00	0.00
3,700.00	12.00	214.78	3,636.62	1,380.48	-512.49	-355.92	398.93	0.00	0.00	0.00
3,800.00	12.00	214.78	3,734.44	1,282.66	-529.57	-367.78	412.22	0.00	0.00	0.00
3,900.00	12.00	214.78	3,832.25	1,184.85	-546.65	-379.64	425.52	0.00	0.00	0.00
4,000.00	12.00	214.78	3,930.07	1,087.03	-563.73	-391.50	438.81	0.00	0.00	0.00
4,100.00	12.00	214.78	4,027.88	989.22	-580.80	-403.36	452.10	0.00	0.00	0.00
<b>SUSSEX</b>										
4,107.38	12.00	214.78	4,035.10	982.00	-582.06	-404.24	453.08	0.00	0.00	0.00
4,200.00	12.00	214.78	4,125.70	891.40	-597.88	-415.22	465.40	0.00	0.00	0.00
4,300.00	12.00	214.78	4,223.51	793.59	-614.96	-427.08	478.69	0.00	0.00	0.00



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BASHOR FED 9-60 27C-28-29-7
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Site:</b>	NW NW SEC. 27 T9N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BASHOR FED 9-60 27C-28-29-7	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,400.00	12.00	214.78	4,321.32	695.78	-632.03	-438.94	491.98	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>4,486.77</b>	<b>12.00</b>	<b>214.78</b>	<b>4,406.20</b>	<b>610.90</b>	<b>-646.85</b>	<b>-449.23</b>	<b>503.52</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,500.00	11.74	214.78	4,419.15	597.95	-649.09	-450.78	505.25	2.00	-2.00	0.00
4,600.00	9.74	214.78	4,517.39	499.71	-664.38	-461.41	517.16	2.00	-2.00	0.00
4,700.00	7.74	214.78	4,616.23	400.87	-676.86	-470.07	526.87	2.00	-2.00	0.00
4,800.00	5.74	214.78	4,715.53	301.57	-686.49	-476.76	534.37	2.00	-2.00	0.00
4,900.00	3.74	214.78	4,815.18	201.92	-693.27	-481.47	539.65	2.00	-2.00	0.00
5,000.00	1.74	214.78	4,915.07	102.03	-697.19	-484.19	542.70	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
<b>5,086.77</b>	<b>0.00</b>	<b>0.00</b>	<b>5,001.82</b>	<b>15.28</b>	<b>-698.27</b>	<b>-484.94</b>	<b>543.54</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
5,100.00	0.00	0.00	5,015.05	2.05	-698.27	-484.94	543.54	0.00	0.00	0.00
5,200.00	0.00	0.00	5,115.05	-97.95	-698.27	-484.94	543.54	0.00	0.00	0.00
<b>SHANNON</b>										
<b>5,218.05</b>	<b>0.00</b>	<b>0.00</b>	<b>5,133.10</b>	<b>-116.00</b>	<b>-698.27</b>	<b>-484.94</b>	<b>543.54</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,300.00	0.00	0.00	5,215.05	-197.95	-698.27	-484.94	543.54	0.00	0.00	0.00
5,400.00	0.00	0.00	5,315.05	-297.95	-698.27	-484.94	543.54	0.00	0.00	0.00
5,500.00	0.00	0.00	5,415.05	-397.95	-698.27	-484.94	543.54	0.00	0.00	0.00
5,600.00	0.00	0.00	5,515.05	-497.95	-698.27	-484.94	543.54	0.00	0.00	0.00
5,700.00	0.00	0.00	5,615.05	-597.95	-698.27	-484.94	543.54	0.00	0.00	0.00
<b>KOP (10°/100ft BUR)</b>										
<b>5,774.09</b>	<b>0.00</b>	<b>0.00</b>	<b>5,689.14</b>	<b>-672.04</b>	<b>-698.27</b>	<b>-484.94</b>	<b>543.54</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,800.00	2.59	268.64	5,715.04	-697.94	-698.28	-485.53	544.12	10.00	10.00	0.00
5,900.00	12.59	268.64	5,814.04	-796.94	-698.60	-498.72	557.29	10.00	10.00	0.00
6,000.00	22.59	268.64	5,909.24	-892.14	-699.31	-528.89	587.42	10.00	10.00	0.00
6,100.00	32.59	268.64	5,997.76	-980.66	-700.41	-575.13	633.58	10.00	10.00	0.00
6,200.00	42.59	268.64	6,076.90	-1,059.80	-701.86	-636.04	694.39	10.00	10.00	0.00
6,300.00	52.59	268.64	6,144.25	-1,127.15	-703.61	-709.76	767.98	10.00	10.00	0.00
<b>SHARON SPRINGS SHALE</b>										
<b>6,330.45</b>	<b>55.64</b>	<b>268.64</b>	<b>6,162.10</b>	<b>-1,145.00</b>	<b>-704.20</b>	<b>-734.42</b>	<b>792.60</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,400.00	62.59	268.64	6,197.78	-1,180.68	-705.61	-794.06	852.13	10.00	10.00	0.00
<b>NIORARA FORMATION</b>										
<b>6,487.86</b>	<b>71.38</b>	<b>268.64</b>	<b>6,232.10</b>	<b>-1,215.00</b>	<b>-707.53</b>	<b>-874.82</b>	<b>932.76</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,500.00	72.59	268.64	6,235.85	-1,218.75	-707.80	-886.36	944.28	10.00	10.00	0.00
<b>NIORARA A CHALK</b>										
<b>6,522.26</b>	<b>74.82</b>	<b>268.64</b>	<b>6,242.10</b>	<b>-1,225.00</b>	<b>-708.31</b>	<b>-907.72</b>	<b>965.60</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,600.00	82.59	268.64	6,257.32	-1,240.22	-710.12	-983.87	1,041.63	10.00	10.00	0.00
<b>BPI: 1799ft FNL &amp; 600ft FEL of Sec 28</b>										
<b>6,674.09</b>	<b>90.00</b>	<b>268.64</b>	<b>6,262.10</b>	<b>-1,245.00</b>	<b>-711.87</b>	<b>-1,057.74</b>	<b>1,115.37</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,700.00	90.00	268.64	6,262.10	-1,245.00	-712.49	-1,083.64	1,141.22	0.00	0.00	0.00
6,800.00	90.00	268.64	6,262.10	-1,245.00	-714.86	-1,183.61	1,241.03	0.00	0.00	0.00
6,900.00	90.00	268.64	6,262.10	-1,245.00	-717.24	-1,283.58	1,340.83	0.00	0.00	0.00
7,000.00	90.00	268.64	6,262.10	-1,245.00	-719.61	-1,383.56	1,440.63	0.00	0.00	0.00
7,100.00	90.00	268.64	6,262.10	-1,245.00	-721.99	-1,483.53	1,540.43	0.00	0.00	0.00
7,200.00	90.00	268.64	6,262.10	-1,245.00	-724.36	-1,583.50	1,640.24	0.00	0.00	0.00
7,300.00	90.00	268.64	6,262.10	-1,245.00	-726.73	-1,683.47	1,740.04	0.00	0.00	0.00
7,400.00	90.00	268.64	6,262.10	-1,245.00	-729.11	-1,783.44	1,839.84	0.00	0.00	0.00
7,500.00	90.00	268.64	6,262.10	-1,245.00	-731.48	-1,883.41	1,939.64	0.00	0.00	0.00
7,600.00	90.00	268.64	6,262.10	-1,245.00	-733.86	-1,983.39	2,039.45	0.00	0.00	0.00
7,700.00	90.00	268.64	6,262.10	-1,245.00	-736.23	-2,083.36	2,139.25	0.00	0.00	0.00
7,800.00	90.00	268.64	6,262.10	-1,245.00	-738.61	-2,183.33	2,239.05	0.00	0.00	0.00
7,900.00	90.00	268.64	6,262.10	-1,245.00	-740.98	-2,283.30	2,338.85	0.00	0.00	0.00
8,000.00	90.00	268.64	6,262.10	-1,245.00	-743.35	-2,383.27	2,438.65	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BASHOR FED 9-60 27C-28-29-7
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Site:</b>	NW NW SEC. 27 T9N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BASHOR FED 9-60 27C-28-29-7	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,100.00	90.00	268.64	6,262.10	-1,245.00	-745.73	-2,483.24	2,538.46	0.00	0.00	0.00
8,200.00	90.00	268.64	6,262.10	-1,245.00	-748.10	-2,583.22	2,638.26	0.00	0.00	0.00
8,300.00	90.00	268.64	6,262.10	-1,245.00	-750.48	-2,683.19	2,738.06	0.00	0.00	0.00
8,400.00	90.00	268.64	6,262.10	-1,245.00	-752.85	-2,783.16	2,837.86	0.00	0.00	0.00
8,500.00	90.00	268.64	6,262.10	-1,245.00	-755.23	-2,883.13	2,937.67	0.00	0.00	0.00
8,600.00	90.00	268.64	6,262.10	-1,245.00	-757.60	-2,983.10	3,037.47	0.00	0.00	0.00
8,700.00	90.00	268.64	6,262.10	-1,245.00	-759.97	-3,083.08	3,137.27	0.00	0.00	0.00
8,800.00	90.00	268.64	6,262.10	-1,245.00	-762.35	-3,183.05	3,237.07	0.00	0.00	0.00
8,900.00	90.00	268.64	6,262.10	-1,245.00	-764.72	-3,283.02	3,336.88	0.00	0.00	0.00
9,000.00	90.00	268.64	6,262.10	-1,245.00	-767.10	-3,382.99	3,436.68	0.00	0.00	0.00
9,100.00	90.00	268.64	6,262.10	-1,245.00	-769.47	-3,482.96	3,536.48	0.00	0.00	0.00
9,200.00	90.00	268.64	6,262.10	-1,245.00	-771.85	-3,582.93	3,636.28	0.00	0.00	0.00
9,300.00	90.00	268.64	6,262.10	-1,245.00	-774.22	-3,682.91	3,736.08	0.00	0.00	0.00
9,400.00	90.00	268.64	6,262.10	-1,245.00	-776.59	-3,782.88	3,835.89	0.00	0.00	0.00
9,500.00	90.00	268.64	6,262.10	-1,245.00	-778.97	-3,882.85	3,935.69	0.00	0.00	0.00
9,600.00	90.00	268.64	6,262.10	-1,245.00	-781.34	-3,982.82	4,035.49	0.00	0.00	0.00
9,700.00	90.00	268.64	6,262.10	-1,245.00	-783.72	-4,082.79	4,135.29	0.00	0.00	0.00
9,800.00	90.00	268.64	6,262.10	-1,245.00	-786.09	-4,182.77	4,235.10	0.00	0.00	0.00
9,900.00	90.00	268.64	6,262.10	-1,245.00	-788.47	-4,282.74	4,334.90	0.00	0.00	0.00
10,000.00	90.00	268.64	6,262.10	-1,245.00	-790.84	-4,382.71	4,434.70	0.00	0.00	0.00
10,100.00	90.00	268.64	6,262.10	-1,245.00	-793.21	-4,482.68	4,534.50	0.00	0.00	0.00
10,200.00	90.00	268.64	6,262.10	-1,245.00	-795.59	-4,582.65	4,634.31	0.00	0.00	0.00
10,300.00	90.00	268.64	6,262.10	-1,245.00	-797.96	-4,682.62	4,734.11	0.00	0.00	0.00
10,400.00	90.00	268.64	6,262.10	-1,245.00	-800.34	-4,782.60	4,833.91	0.00	0.00	0.00
10,500.00	90.00	268.64	6,262.10	-1,245.00	-802.71	-4,882.57	4,933.71	0.00	0.00	0.00
10,600.00	90.00	268.64	6,262.10	-1,245.00	-805.09	-4,982.54	5,033.51	0.00	0.00	0.00
10,700.00	90.00	268.64	6,262.10	-1,245.00	-807.46	-5,082.51	5,133.32	0.00	0.00	0.00
10,800.00	90.00	268.64	6,262.10	-1,245.00	-809.83	-5,182.48	5,233.12	0.00	0.00	0.00
10,900.00	90.00	268.64	6,262.10	-1,245.00	-812.21	-5,282.46	5,332.92	0.00	0.00	0.00
11,000.00	90.00	268.64	6,262.10	-1,245.00	-814.58	-5,382.43	5,432.72	0.00	0.00	0.00
11,100.00	90.00	268.64	6,262.10	-1,245.00	-816.96	-5,482.40	5,532.53	0.00	0.00	0.00
11,200.00	90.00	268.64	6,262.10	-1,245.00	-819.33	-5,582.37	5,632.33	0.00	0.00	0.00
11,300.00	90.00	268.64	6,262.10	-1,245.00	-821.71	-5,682.34	5,732.13	0.00	0.00	0.00
11,400.00	90.00	268.64	6,262.10	-1,245.00	-824.08	-5,782.31	5,831.93	0.00	0.00	0.00
11,500.00	90.00	268.64	6,262.10	-1,245.00	-826.45	-5,882.29	5,931.74	0.00	0.00	0.00
11,600.00	90.00	268.64	6,262.10	-1,245.00	-828.83	-5,982.26	6,031.54	0.00	0.00	0.00
11,700.00	90.00	268.64	6,262.10	-1,245.00	-831.20	-6,082.23	6,131.34	0.00	0.00	0.00
11,800.00	90.00	268.64	6,262.10	-1,245.00	-833.58	-6,182.20	6,231.14	0.00	0.00	0.00
11,900.00	90.00	268.64	6,262.10	-1,245.00	-835.95	-6,282.17	6,330.94	0.00	0.00	0.00
12,000.00	90.00	268.64	6,262.10	-1,245.00	-838.33	-6,382.15	6,430.75	0.00	0.00	0.00
12,100.00	90.00	268.64	6,262.10	-1,245.00	-840.70	-6,482.12	6,530.55	0.00	0.00	0.00
12,200.00	90.00	268.64	6,262.10	-1,245.00	-843.07	-6,582.09	6,630.35	0.00	0.00	0.00
12,300.00	90.00	268.64	6,262.10	-1,245.00	-845.45	-6,682.06	6,730.15	0.00	0.00	0.00
12,400.00	90.00	268.64	6,262.10	-1,245.00	-847.82	-6,782.03	6,829.96	0.00	0.00	0.00
12,500.00	90.00	268.64	6,262.10	-1,245.00	-850.20	-6,882.00	6,929.76	0.00	0.00	0.00
12,600.00	90.00	268.64	6,262.10	-1,245.00	-852.57	-6,981.98	7,029.56	0.00	0.00	0.00
12,700.00	90.00	268.64	6,262.10	-1,245.00	-854.95	-7,081.95	7,129.36	0.00	0.00	0.00
12,800.00	90.00	268.64	6,262.10	-1,245.00	-857.32	-7,181.92	7,229.17	0.00	0.00	0.00
12,900.00	90.00	268.64	6,262.10	-1,245.00	-859.69	-7,281.89	7,328.97	0.00	0.00	0.00
13,000.00	90.00	268.64	6,262.10	-1,245.00	-862.07	-7,381.86	7,428.77	0.00	0.00	0.00
13,100.00	90.00	268.64	6,262.10	-1,245.00	-864.44	-7,481.84	7,528.57	0.00	0.00	0.00
13,200.00	90.00	268.64	6,262.10	-1,245.00	-866.82	-7,581.81	7,628.37	0.00	0.00	0.00
13,300.00	90.00	268.64	6,262.10	-1,245.00	-869.19	-7,681.78	7,728.18	0.00	0.00	0.00
13,400.00	90.00	268.64	6,262.10	-1,245.00	-871.57	-7,781.75	7,827.98	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BASHOR FED 9-60 27C-28-29-7
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Site:</b>	NW NW SEC. 27 T9N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BASHOR FED 9-60 27C-28-29-7	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,500.00	90.00	268.64	6,262.10	-1,245.00	-873.94	-7,881.72	7,927.78	0.00	0.00	0.00
13,600.00	90.00	268.64	6,262.10	-1,245.00	-876.31	-7,981.69	8,027.58	0.00	0.00	0.00
13,700.00	90.00	268.64	6,262.10	-1,245.00	-878.69	-8,081.67	8,127.39	0.00	0.00	0.00
13,800.00	90.00	268.64	6,262.10	-1,245.00	-881.06	-8,181.64	8,227.19	0.00	0.00	0.00
13,900.00	90.00	268.64	6,262.10	-1,245.00	-883.44	-8,281.61	8,326.99	0.00	0.00	0.00
14,000.00	90.00	268.64	6,262.10	-1,245.00	-885.81	-8,381.58	8,426.79	0.00	0.00	0.00
14,100.00	90.00	268.64	6,262.10	-1,245.00	-888.19	-8,481.55	8,526.60	0.00	0.00	0.00
14,200.00	90.00	268.64	6,262.10	-1,245.00	-890.56	-8,581.53	8,626.40	0.00	0.00	0.00
14,300.00	90.00	268.64	6,262.10	-1,245.00	-892.93	-8,681.50	8,726.20	0.00	0.00	0.00
14,400.00	90.00	268.64	6,262.10	-1,245.00	-895.31	-8,781.47	8,826.00	0.00	0.00	0.00
14,500.00	90.00	268.64	6,262.10	-1,245.00	-897.68	-8,881.44	8,925.80	0.00	0.00	0.00
14,600.00	90.00	268.64	6,262.10	-1,245.00	-900.06	-8,981.41	9,025.61	0.00	0.00	0.00
14,700.00	90.00	268.64	6,262.10	-1,245.00	-902.43	-9,081.38	9,125.41	0.00	0.00	0.00
14,800.00	90.00	268.64	6,262.10	-1,245.00	-904.81	-9,181.36	9,225.21	0.00	0.00	0.00
14,900.00	90.00	268.64	6,262.10	-1,245.00	-907.18	-9,281.33	9,325.01	0.00	0.00	0.00
15,000.00	90.00	268.64	6,262.10	-1,245.00	-909.55	-9,381.30	9,424.82	0.00	0.00	0.00
15,100.00	90.00	268.64	6,262.10	-1,245.00	-911.93	-9,481.27	9,524.62	0.00	0.00	0.00
15,200.00	90.00	268.64	6,262.10	-1,245.00	-914.30	-9,581.24	9,624.42	0.00	0.00	0.00
15,300.00	90.00	268.64	6,262.10	-1,245.00	-916.68	-9,681.22	9,724.22	0.00	0.00	0.00
15,400.00	90.00	268.64	6,262.10	-1,245.00	-919.05	-9,781.19	9,824.03	0.00	0.00	0.00
15,500.00	90.00	268.64	6,262.10	-1,245.00	-921.43	-9,881.16	9,923.83	0.00	0.00	0.00
15,600.00	90.00	268.64	6,262.11	-1,245.01	-923.80	-9,981.13	10,023.63	0.00	0.00	0.00
15,700.00	90.00	268.64	6,262.11	-1,245.01	-926.17	-10,081.10	10,123.43	0.00	0.00	0.00
15,800.00	90.00	268.64	6,262.11	-1,245.01	-928.55	-10,181.07	10,223.23	0.00	0.00	0.00
15,900.00	90.00	268.64	6,262.11	-1,245.01	-930.92	-10,281.05	10,323.04	0.00	0.00	0.00
16,000.00	90.00	268.64	6,262.11	-1,245.01	-933.30	-10,381.02	10,422.84	0.00	0.00	0.00
16,100.00	90.00	268.64	6,262.11	-1,245.01	-935.67	-10,480.99	10,522.64	0.00	0.00	0.00
16,200.00	90.00	268.64	6,262.11	-1,245.01	-938.05	-10,580.96	10,622.44	0.00	0.00	0.00
<b>EPI: 1799ft FNL &amp; 600ft FWL of Sec 29</b>										
16,202.34	90.00	268.64	6,262.10	-1,245.00	-938.05	-10,583.30	10,624.77	0.00	0.00	0.00
16,300.00	90.00	268.63	6,262.10	-1,245.00	-940.38	-10,680.93	10,722.24	0.01	0.00	-0.01
16,400.00	90.00	268.63	6,262.10	-1,245.00	-942.76	-10,780.91	10,822.05	0.01	0.00	-0.01
16,500.00	90.00	268.62	6,262.10	-1,245.00	-945.16	-10,880.88	10,921.85	0.01	0.00	-0.01
<b>BHL: 1799ft FNL &amp; 300ft FWL of Sec 29</b>										
16,502.07	90.00	268.62	6,262.10	-1,245.00	-945.21	-10,882.94	10,923.91	0.01	0.00	-0.01

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
653.43	653.10	PIERRE SHALE (BASE OF FOX HI				
3,570.65	3,510.10	PARKMAN				
4,107.38	4,035.10	SUSSEX				
5,218.05	5,133.10	SHANNON				
6,330.45	6,162.10	SHARON SPRINGS SHALE				
6,487.86	6,232.10	NIOBRARA FORMATION				
6,522.26	6,242.10	NIOBRARA A CHALK				

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BASHOR FED 9-60 27C-28-29-7
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5017.10usft (Original Well Elev)
<b>Site:</b>	NW NW SEC. 27 T9N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BASHOR FED 9-60 27C-28-29-7	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

## Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.00	0.00	0.00	0.00	SHL: 1110ft FNL & 460ft FWL of Sec 27
400.00	400.00	0.00	0.00	START NUDGE (2°/100ft BUR)
1,000.00	995.62	-51.42	-35.71	EOB TO 12° INC
4,486.77	4,406.20	-646.85	-449.23	END OF TANGENT
5,086.77	5,001.82	-698.27	-484.94	EOD TO VERTICAL
5,774.09	5,689.14	-698.27	-484.94	KOP (10°/100ft BUR)
6,674.09	6,262.10	-711.87	-1,057.74	BPI: 1799ft FNL & 600ft FEL of Sec 28
16,202.34	6,262.10	-938.05	-10,583.30	EPI: 1799ft FNL & 600ft FWL of Sec 29
16,502.07	6,262.10	-945.21	-10,882.94	BHL: 1799ft FNL & 300ft FWL of Sec 29