

Bison Oil & Gas II, LLC

WELD COUNTY, COLORADO (NAD 83)

ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.

ROSS 8-60 18-7-10

Wellbore #1

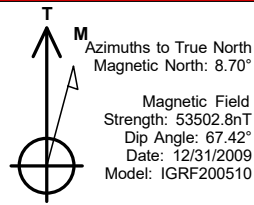
Plan: Design #1

Standard Survey Report

01 September, 2020



Project: WELD COUNTY, COLORADO (NAD 83)
Site: ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.
Well: ROSS 8-60 18-7-10
Wellbore: Wellbore #1
Design: Design #1



ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Dep	Annotation
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.0	Start Build 2.00
1735.8	18.72	100.06	1719.2	-26.5	149.1	-2.1	151.5	Start 3491.5 hold at 1735.8 MD
5227.3	18.72	100.06	5026.1	-222.2	1252.2	-17.5	1271.8	Start Drop -2.00
6163.0	0.00	0.00	5945.3	-248.6	1401.4	-19.6	1423.3	Start Build 10.20
7045.3	90.00	0.87	6507.0	313.0	1409.9	536.1	1984.9	Start DLS 0.02 TFO -180.00
7195.4	89.98	0.87	6507.0	463.1	1412.2	684.6	2135.0	Start DLS 0.01 TFO -85.39
15762.6	90.02	0.27	6507.0	9029.8	1498.0	9153.2	10702.2	Start 149.8 hold at 15762.6 MD
15912.3	90.02	0.27	6506.9	9179.6	1498.7	9301.1	10852.0	TD at 15912.3

PROPOSED LOCAL COORDINATES:

SHL: 545 ft FSL & 2579 ft FEL Sec 18

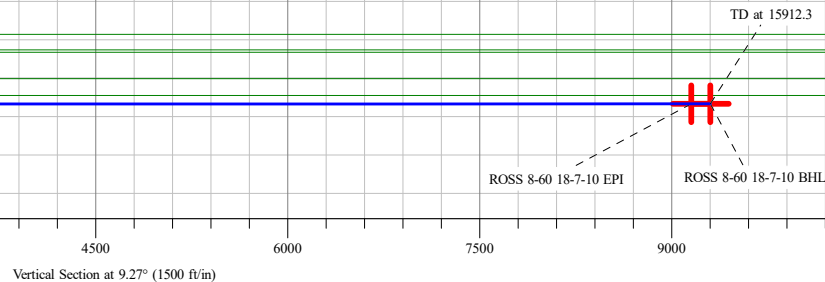
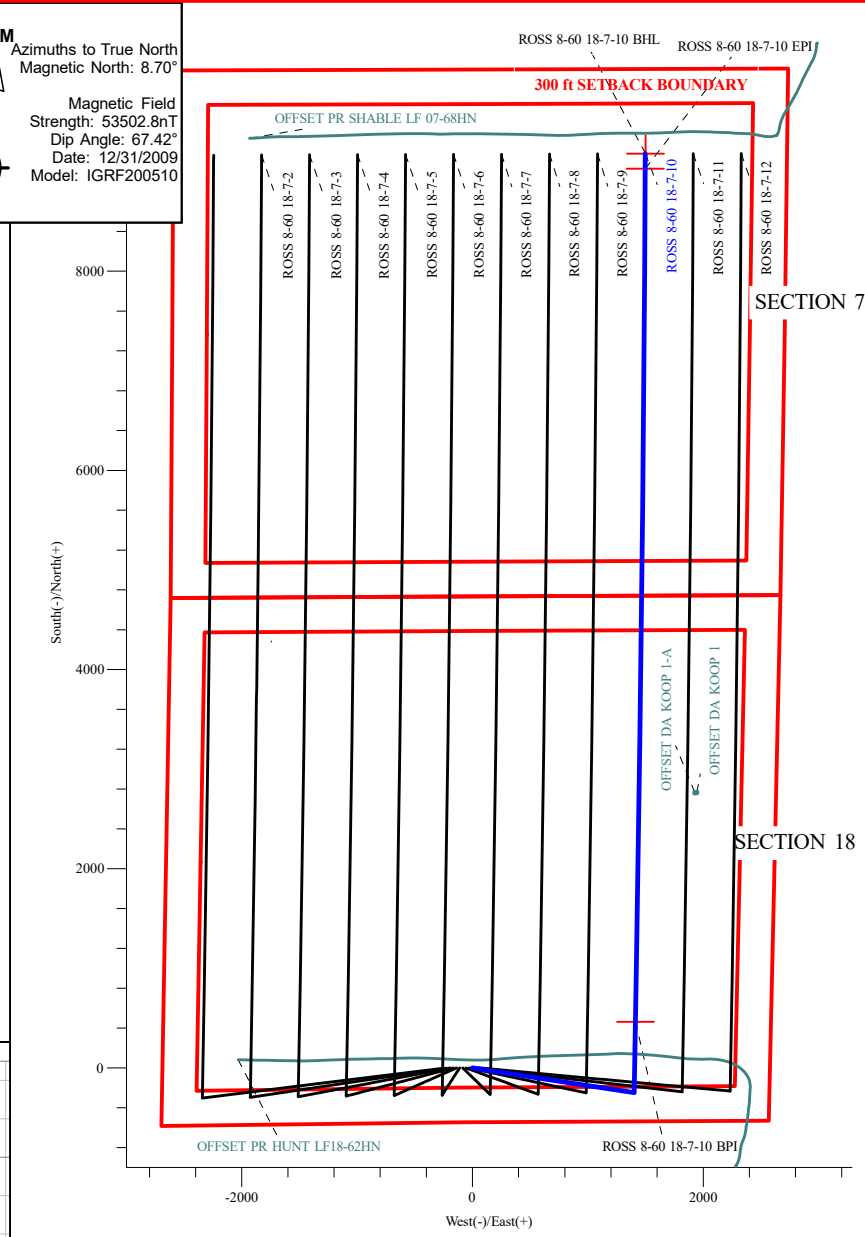
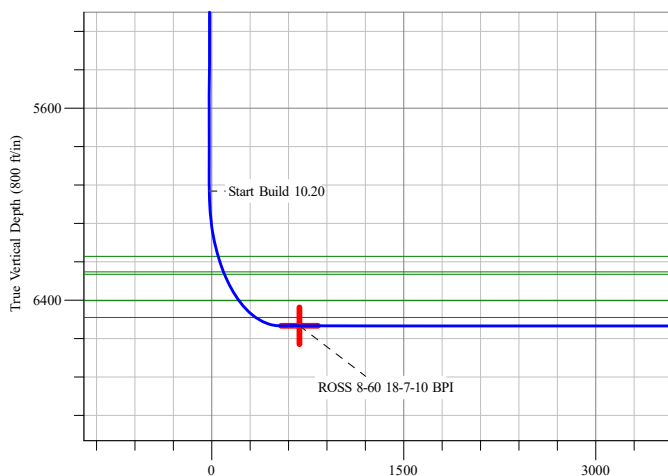
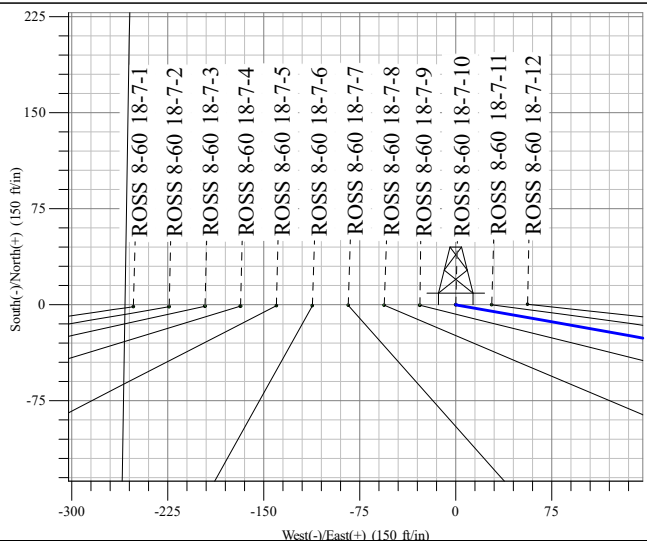
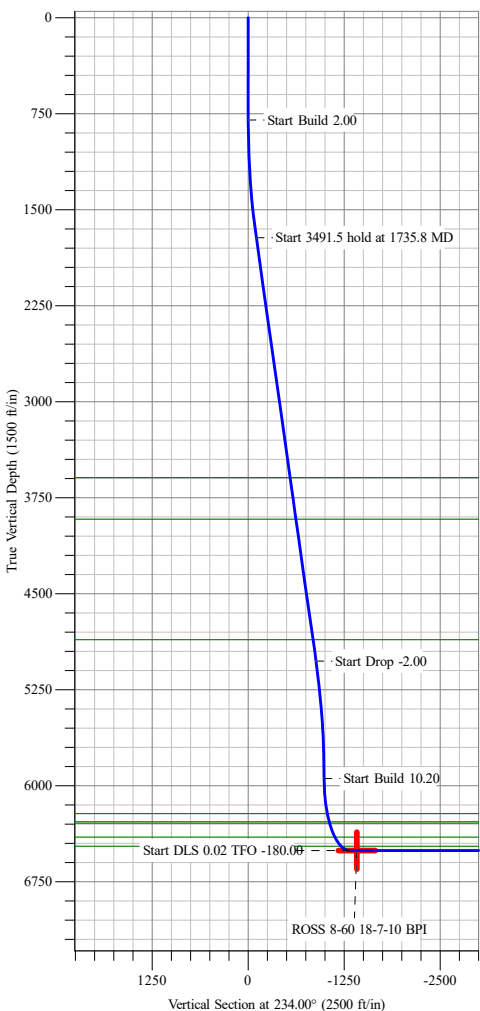
BPI: 1000 ft FSL & 1175 ft FEL Sec 18

EPI: 1000 ft FNL & 1227 ft FEL Sec 7

BHL: 850 ft FNL & 1228 ft FEL Sec 7

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
ROSS 8-60 18-7-10 BPI	6507.0	463.1	1412.2	452752.39	1030326.36	40° 39' 27.943 N 104° 7' 44.940 W	
ROSS 8-60 18-7-10 EPI	6507.0	9029.8	1498.0	455363.61	1030312.28	40° 40' 52.594 N 104° 7' 43.820 W	
ROSS 8-60 18-7-10 BHL	6507.0	9179.5	1498.8	455409.25	1030311.83	40° 40' 54.073 N 104° 7' 43.810 W	Point



Survey Report

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well ROSS 8-60 18-7-10
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB 25 @ 4978.1ft
Site:	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	MD Reference:	KB 25 @ 4978.1ft
Well:	ROSS 8-60 18-7-10	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.16 Single User Db

Project	WELD COUNTY, COLORADO (NAD 83),		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.			
Site Position:		Northing:		452,604.25 m	
From:		Easting:		1,029,881.06 m	
Position Uncertainty:		Slot Radius:		13.200 in	

Well	ROSS 8-60 18-7-10					
Well Position	+N/-S	0.0 ft	Northing:	452,604.62 m	Latitude:	40° 39' 23.367 N
	+E/-W	0.0 ft	Easting:	1,029,898.14 m	Longitude:	104° 8' 3.264 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,953.1 ft
Grid Convergence:		0.88 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	8.70	67.42	53,502.84899339

Survey Tool Program	Date	9/1/2020			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	15,912.3	Design #1 (Wellbore #1)	MWD	Fixed:v2:standard declination	

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
900.0	2.00	100.06	900.0	-0.3	1.7	0.0	2.00	2.00	0.00
1,000.0	4.00	100.06	999.8	-1.2	6.9	-0.1	2.00	2.00	0.00
1,100.0	6.00	100.06	1,099.5	-2.7	15.5	-0.2	2.00	2.00	0.00
1,200.0	8.00	100.06	1,198.7	-4.9	27.5	-0.4	2.00	2.00	0.00
1,300.0	10.00	100.06	1,297.5	-7.6	42.9	-0.6	2.00	2.00	0.00
1,400.0	12.00	100.06	1,395.6	-10.9	61.6	-0.9	2.00	2.00	0.00

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Site:	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	MD Reference:	KB 25 @ 4978.1ft
Well:	ROSS 8-60 18-7-10	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.16 Single User Db

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,500.0	14.00	100.06	1,493.1	-14.9	83.8	-1.2	2.00	2.00	0.00
1,600.0	16.00	100.06	1,589.6	-19.4	109.3	-1.5	2.00	2.00	0.00
1,700.0	18.00	100.06	1,685.3	-24.5	138.1	-1.9	2.00	2.00	0.00
1,735.8	18.72	100.06	1,719.2	-26.5	149.1	-2.1	2.00	2.00	0.00
Start 3491.5 hold at 1735.8 MD									
1,800.0	18.72	100.06	1,780.1	-30.1	169.4	-2.4	0.00	0.00	0.00
1,900.0	18.72	100.06	1,874.8	-35.7	201.0	-2.8	0.00	0.00	0.00
2,000.0	18.72	100.06	1,969.5	-41.3	232.6	-3.2	0.00	0.00	0.00
2,100.0	18.72	100.06	2,064.2	-46.9	264.2	-3.7	0.00	0.00	0.00
2,200.0	18.72	100.06	2,158.9	-52.5	295.8	-4.1	0.00	0.00	0.00
2,300.0	18.72	100.06	2,253.6	-58.1	327.4	-4.6	0.00	0.00	0.00
2,400.0	18.72	100.06	2,348.3	-63.7	359.0	-5.0	0.00	0.00	0.00
2,500.0	18.72	100.06	2,443.0	-69.3	390.6	-5.5	0.00	0.00	0.00
2,600.0	18.72	100.06	2,537.8	-74.9	422.2	-5.9	0.00	0.00	0.00
2,700.0	18.72	100.06	2,632.5	-80.5	453.8	-6.3	0.00	0.00	0.00
2,800.0	18.72	100.06	2,727.2	-86.1	485.4	-6.8	0.00	0.00	0.00
2,900.0	18.72	100.06	2,821.9	-91.7	517.0	-7.2	0.00	0.00	0.00
3,000.0	18.72	100.06	2,916.6	-97.3	548.6	-7.7	0.00	0.00	0.00
3,100.0	18.72	100.06	3,011.3	-102.9	580.2	-8.1	0.00	0.00	0.00
3,200.0	18.72	100.06	3,106.0	-108.5	611.7	-8.5	0.00	0.00	0.00
3,300.0	18.72	100.06	3,200.7	-114.1	643.3	-9.0	0.00	0.00	0.00
3,400.0	18.72	100.06	3,295.5	-119.7	674.9	-9.4	0.00	0.00	0.00
3,500.0	18.72	100.06	3,390.2	-125.3	706.5	-9.9	0.00	0.00	0.00
3,600.0	18.72	100.06	3,484.9	-130.9	738.1	-10.3	0.00	0.00	0.00
3,700.0	18.72	100.06	3,579.6	-136.6	769.7	-10.7	0.00	0.00	0.00
3,800.0	18.72	100.06	3,674.3	-142.2	801.3	-11.2	0.00	0.00	0.00
3,900.0	18.72	100.06	3,769.0	-147.8	832.9	-11.6	0.00	0.00	0.00
4,000.0	18.72	100.06	3,863.7	-153.4	864.5	-12.1	0.00	0.00	0.00
4,100.0	18.72	100.06	3,958.4	-159.0	896.1	-12.5	0.00	0.00	0.00
4,200.0	18.72	100.06	4,053.2	-164.6	927.7	-12.9	0.00	0.00	0.00
4,300.0	18.72	100.06	4,147.9	-170.2	959.3	-13.4	0.00	0.00	0.00
4,400.0	18.72	100.06	4,242.6	-175.8	990.9	-13.8	0.00	0.00	0.00
4,500.0	18.72	100.06	4,337.3	-181.4	1,022.5	-14.3	0.00	0.00	0.00
4,600.0	18.72	100.06	4,432.0	-187.0	1,054.1	-14.7	0.00	0.00	0.00
4,700.0	18.72	100.06	4,526.7	-192.6	1,085.6	-15.2	0.00	0.00	0.00
4,800.0	18.72	100.06	4,621.4	-198.2	1,117.2	-15.6	0.00	0.00	0.00
4,900.0	18.72	100.06	4,716.1	-203.8	1,148.8	-16.0	0.00	0.00	0.00
5,000.0	18.72	100.06	4,810.9	-209.4	1,180.4	-16.5	0.00	0.00	0.00
5,100.0	18.72	100.06	4,905.6	-215.0	1,212.0	-16.9	0.00	0.00	0.00
5,200.0	18.72	100.06	5,000.3	-220.6	1,243.6	-17.4	0.00	0.00	0.00
5,227.3	18.72	100.06	5,026.1	-222.2	1,252.2	-17.5	0.00	0.00	0.00
Start Drop -2.00									
5,300.0	17.26	100.06	5,095.3	-226.1	1,274.3	-17.8	2.00	-2.00	0.00

Survey Report

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well ROSS 8-60 18-7-10
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB 25 @ 4978.1ft
Site:	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	MD Reference:	KB 25 @ 4978.1ft
Well:	ROSS 8-60 18-7-10	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.16 Single User Db

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.0	15.26	100.06	5,191.3	-231.0	1,301.9	-18.2	2.00	-2.00	0.00
5,500.0	13.26	100.06	5,288.2	-235.3	1,326.2	-18.5	2.00	-2.00	0.00
5,600.0	11.26	100.06	5,385.9	-239.0	1,347.1	-18.8	2.00	-2.00	0.00
5,700.0	9.26	100.06	5,484.3	-242.1	1,364.6	-19.0	2.00	-2.00	0.00
5,800.0	7.26	100.06	5,583.3	-244.6	1,378.8	-19.2	2.00	-2.00	0.00
5,900.0	5.26	100.06	5,682.7	-246.5	1,389.5	-19.4	2.00	-2.00	0.00
6,000.0	3.26	100.06	5,782.4	-247.8	1,396.8	-19.5	2.00	-2.00	0.00
6,100.0	1.26	100.06	5,882.3	-248.5	1,400.7	-19.5	2.00	-2.00	0.00
6,163.0	0.00	0.00	5,945.3	-248.6	1,401.4	-19.6	2.00	-2.00	0.00
Start Build 10.20									
6,200.0	3.77	0.87	5,982.3	-247.4	1,401.4	-18.4	10.20	10.20	0.00
6,300.0	13.97	0.87	6,080.9	-232.0	1,401.6	-3.1	10.20	10.20	0.00
6,400.0	24.17	0.87	6,175.3	-199.4	1,402.1	29.2	10.20	10.20	0.00
6,500.0	34.38	0.87	6,262.4	-150.5	1,402.9	77.5	10.20	10.20	0.00
6,600.0	44.58	0.87	6,339.5	-87.0	1,403.8	140.3	10.20	10.20	0.00
6,700.0	54.78	0.87	6,404.1	-10.9	1,405.0	215.6	10.20	10.20	0.00
6,800.0	64.98	0.87	6,454.3	75.5	1,406.3	301.1	10.20	10.20	0.00
6,900.0	75.18	0.87	6,488.3	169.3	1,407.7	394.0	10.20	10.20	0.00
7,000.0	85.38	0.87	6,505.1	267.8	1,409.2	491.3	10.20	10.20	0.00
7,045.3	90.00	0.87	6,507.0	313.0	1,409.9	536.1	10.20	10.20	0.00
Start DLS 0.02 TFO -180.00									
7,100.0	89.99	0.87	6,507.0	367.7	1,410.8	590.2	0.02	-0.02	0.00
7,195.4	89.98	0.87	6,507.0	463.1	1,412.2	684.6	0.02	-0.02	0.00
Start DLS 0.01 TFO -85.39 - ROSS 8-60 18-7-10 BPI									
7,200.0	89.98	0.87	6,507.0	467.7	1,412.3	689.1	0.01	0.00	-0.01
7,300.0	89.98	0.87	6,507.0	567.7	1,413.8	788.1	0.01	0.00	-0.01
7,400.0	89.98	0.86	6,507.1	667.7	1,415.3	887.0	0.01	0.00	-0.01
7,500.0	89.98	0.85	6,507.1	767.7	1,416.8	985.9	0.01	0.00	-0.01
7,600.0	89.98	0.85	6,507.2	867.6	1,418.3	1,084.8	0.01	0.00	-0.01
7,700.0	89.98	0.84	6,507.2	967.6	1,419.8	1,183.8	0.01	0.00	-0.01
7,800.0	89.98	0.83	6,507.2	1,067.6	1,421.2	1,282.7	0.01	0.00	-0.01
7,900.0	89.98	0.82	6,507.3	1,167.6	1,422.7	1,381.6	0.01	0.00	-0.01
8,000.0	89.98	0.82	6,507.3	1,267.6	1,424.1	1,480.5	0.01	0.00	-0.01
8,100.0	89.98	0.81	6,507.3	1,367.6	1,425.5	1,579.4	0.01	0.00	-0.01
8,200.0	89.98	0.80	6,507.4	1,467.6	1,426.9	1,678.3	0.01	0.00	-0.01
8,300.0	89.98	0.80	6,507.4	1,567.6	1,428.3	1,777.2	0.01	0.00	-0.01
8,400.0	89.98	0.79	6,507.4	1,667.6	1,429.7	1,876.1	0.01	0.00	-0.01
8,500.0	89.98	0.78	6,507.5	1,767.6	1,431.1	1,975.1	0.01	0.00	-0.01
8,600.0	89.98	0.78	6,507.5	1,867.5	1,432.5	2,074.0	0.01	0.00	-0.01
8,700.0	89.98	0.77	6,507.5	1,967.5	1,433.8	2,172.9	0.01	0.00	-0.01
8,800.0	89.98	0.76	6,507.6	2,067.5	1,435.1	2,271.8	0.01	0.00	-0.01
8,900.0	89.99	0.75	6,507.6	2,167.5	1,436.5	2,370.7	0.01	0.00	-0.01
9,000.0	89.99	0.75	6,507.6	2,267.5	1,437.8	2,469.6	0.01	0.00	-0.01

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,100.0	89.99	0.74	6,507.6	2,367.5	1,439.1	2,568.4	0.01	0.00	-0.01
9,200.0	89.99	0.73	6,507.6	2,467.5	1,440.4	2,667.3	0.01	0.00	-0.01
9,300.0	89.99	0.73	6,507.7	2,567.5	1,441.6	2,766.2	0.01	0.00	-0.01
9,400.0	89.99	0.72	6,507.7	2,667.5	1,442.9	2,865.1	0.01	0.00	-0.01
9,500.0	89.99	0.71	6,507.7	2,767.5	1,444.1	2,964.0	0.01	0.00	-0.01
9,600.0	89.99	0.71	6,507.7	2,867.5	1,445.4	3,062.9	0.01	0.00	-0.01
9,700.0	89.99	0.70	6,507.7	2,967.5	1,446.6	3,161.8	0.01	0.00	-0.01
9,800.0	89.99	0.69	6,507.8	3,067.4	1,447.8	3,260.7	0.01	0.00	-0.01
9,900.0	89.99	0.68	6,507.8	3,167.4	1,449.0	3,359.5	0.01	0.00	-0.01
10,000.0	89.99	0.68	6,507.8	3,267.4	1,450.2	3,458.4	0.01	0.00	-0.01
10,100.0	89.99	0.67	6,507.8	3,367.4	1,451.4	3,557.3	0.01	0.00	-0.01
10,200.0	89.99	0.66	6,507.8	3,467.4	1,452.5	3,656.2	0.01	0.00	-0.01
10,300.0	89.99	0.66	6,507.8	3,567.4	1,453.7	3,755.0	0.01	0.00	-0.01
10,400.0	89.99	0.65	6,507.8	3,667.4	1,454.8	3,853.9	0.01	0.00	-0.01
10,500.0	89.99	0.64	6,507.9	3,767.4	1,456.0	3,952.8	0.01	0.00	-0.01
10,600.0	90.00	0.64	6,507.9	3,867.4	1,457.1	4,051.6	0.01	0.00	-0.01
10,700.0	90.00	0.63	6,507.9	3,967.4	1,458.2	4,150.5	0.01	0.00	-0.01
10,800.0	90.00	0.62	6,507.9	4,067.4	1,459.3	4,249.4	0.01	0.00	-0.01
10,900.0	90.00	0.61	6,507.9	4,167.4	1,460.4	4,348.2	0.01	0.00	-0.01
11,000.0	90.00	0.61	6,507.9	4,267.4	1,461.4	4,447.1	0.01	0.00	-0.01
11,100.0	90.00	0.60	6,507.9	4,367.4	1,462.5	4,545.9	0.01	0.00	-0.01
11,200.0	90.00	0.59	6,507.9	4,467.4	1,463.5	4,644.8	0.01	0.00	-0.01
11,300.0	90.00	0.59	6,507.9	4,567.4	1,464.5	4,743.7	0.01	0.00	-0.01
11,400.0	90.00	0.58	6,507.9	4,667.3	1,465.6	4,842.5	0.01	0.00	-0.01
11,500.0	90.00	0.57	6,507.9	4,767.3	1,466.6	4,941.4	0.01	0.00	-0.01
11,600.0	90.00	0.57	6,507.9	4,867.3	1,467.6	5,040.2	0.01	0.00	-0.01
11,700.0	90.00	0.56	6,507.9	4,967.3	1,468.5	5,139.1	0.01	0.00	-0.01
11,800.0	90.00	0.55	6,507.9	5,067.3	1,469.5	5,237.9	0.01	0.00	-0.01
11,900.0	90.00	0.54	6,507.9	5,167.3	1,470.5	5,336.7	0.01	0.00	-0.01
12,000.0	90.00	0.54	6,507.9	5,267.3	1,471.4	5,435.6	0.01	0.00	-0.01
12,100.0	90.00	0.53	6,507.9	5,367.3	1,472.3	5,534.4	0.01	0.00	-0.01
12,200.0	90.00	0.52	6,507.9	5,467.3	1,473.3	5,633.3	0.01	0.00	-0.01
12,300.0	90.00	0.52	6,507.9	5,567.3	1,474.2	5,732.1	0.01	0.00	-0.01
12,400.0	90.01	0.51	6,507.9	5,667.3	1,475.1	5,830.9	0.01	0.00	-0.01
12,500.0	90.01	0.50	6,507.9	5,767.3	1,475.9	5,929.8	0.01	0.00	-0.01
12,600.0	90.01	0.49	6,507.8	5,867.3	1,476.8	6,028.6	0.01	0.00	-0.01
12,700.0	90.01	0.49	6,507.8	5,967.3	1,477.7	6,127.4	0.01	0.00	-0.01
12,800.0	90.01	0.48	6,507.8	6,067.3	1,478.5	6,226.2	0.01	0.00	-0.01
12,900.0	90.01	0.47	6,507.8	6,167.3	1,479.3	6,325.1	0.01	0.00	-0.01
13,000.0	90.01	0.47	6,507.8	6,267.3	1,480.2	6,423.9	0.01	0.00	-0.01
13,100.0	90.01	0.46	6,507.8	6,367.3	1,481.0	6,522.7	0.01	0.00	-0.01
13,200.0	90.01	0.45	6,507.8	6,467.3	1,481.8	6,621.5	0.01	0.00	-0.01
13,300.0	90.01	0.45	6,507.7	6,567.3	1,482.6	6,720.3	0.01	0.00	-0.01

Survey Report

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well ROSS 8-60 18-7-10
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB 25 @ 4978.1ft
Site:	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	MD Reference:	KB 25 @ 4978.1ft
Well:	ROSS 8-60 18-7-10	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.16 Single User Db

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
13,400.0	90.01	0.44	6,507.7	6,667.3	1,483.3	6,819.2	0.01	0.00	-0.01
13,500.0	90.01	0.43	6,507.7	6,767.3	1,484.1	6,918.0	0.01	0.00	-0.01
13,600.0	90.01	0.42	6,507.7	6,867.3	1,484.8	7,016.8	0.01	0.00	-0.01
13,700.0	90.01	0.42	6,507.7	6,967.3	1,485.6	7,115.6	0.01	0.00	-0.01
13,800.0	90.01	0.41	6,507.6	7,067.3	1,486.3	7,214.4	0.01	0.00	-0.01
13,900.0	90.01	0.40	6,507.6	7,167.3	1,487.0	7,313.2	0.01	0.00	-0.01
14,000.0	90.01	0.40	6,507.6	7,267.3	1,487.7	7,412.0	0.01	0.00	-0.01
14,100.0	90.01	0.39	6,507.6	7,367.2	1,488.4	7,510.8	0.01	0.00	-0.01
14,200.0	90.02	0.38	6,507.5	7,467.2	1,489.1	7,609.6	0.01	0.00	-0.01
14,300.0	90.02	0.38	6,507.5	7,567.2	1,489.7	7,708.4	0.01	0.00	-0.01
14,400.0	90.02	0.37	6,507.5	7,667.2	1,490.4	7,807.2	0.01	0.00	-0.01
14,500.0	90.02	0.36	6,507.5	7,767.2	1,491.0	7,906.0	0.01	0.00	-0.01
14,600.0	90.02	0.35	6,507.4	7,867.2	1,491.6	8,004.8	0.01	0.00	-0.01
14,700.0	90.02	0.35	6,507.4	7,967.2	1,492.2	8,103.6	0.01	0.00	-0.01
14,800.0	90.02	0.34	6,507.4	8,067.2	1,492.8	8,202.4	0.01	0.00	-0.01
14,900.0	90.02	0.33	6,507.3	8,167.2	1,493.4	8,301.2	0.01	0.00	-0.01
15,000.0	90.02	0.33	6,507.3	8,267.2	1,494.0	8,399.9	0.01	0.00	-0.01
15,100.0	90.02	0.32	6,507.3	8,367.2	1,494.6	8,498.7	0.01	0.00	-0.01
15,200.0	90.02	0.31	6,507.2	8,467.2	1,495.1	8,597.5	0.01	0.00	-0.01
15,300.0	90.02	0.31	6,507.2	8,567.2	1,495.7	8,696.3	0.01	0.00	-0.01
15,400.0	90.02	0.30	6,507.1	8,667.2	1,496.2	8,795.1	0.01	0.00	-0.01
15,500.0	90.02	0.29	6,507.1	8,767.2	1,496.7	8,893.8	0.01	0.00	-0.01
15,600.0	90.02	0.28	6,507.1	8,867.2	1,497.2	8,992.6	0.01	0.00	-0.01
15,700.0	90.02	0.28	6,507.0	8,967.2	1,497.7	9,091.4	0.01	0.00	-0.01
15,762.6	90.02	0.28	6,507.0	9,029.8	1,498.0	9,153.2	0.00	0.00	0.00
Start 149.8 hold at 15762.6 MD - ROSS 8-60 18-7-10 EPI									
15,800.0	90.02	0.27	6,507.0	9,067.2	1,498.2	9,190.1	0.01	0.00	-0.01
15,900.0	90.02	0.27	6,506.9	9,167.2	1,498.7	9,288.9	0.00	0.00	0.00
15,912.3	90.02	0.27	6,506.9	9,179.5	1,498.7	9,301.1	0.00	0.00	0.00
TD at 15912.3 - ROSS 8-60 18-7-10 BHL									

Survey Report

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well ROSS 8-60 18-7-10
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB 25 @ 4978.1ft
Site:	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	MD Reference:	KB 25 @ 4978.1ft
Well:	ROSS 8-60 18-7-10	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.16 Single User Db

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (m)	Easting (m)	Latitude	Longitude
ROSS 8-60 18-7-10 BPI - plan hits target center - Point	0.00	0.89	6,507.0	463.1	1,412.2	452,752.39	1,030,326.36	40° 39' 27.943 N	104° 7' 44.940 W
ROSS 8-60 18-7-10 EPI - plan hits target center - Point	0.00	0.89	6,507.0	9,029.8	1,498.0	455,363.61	1,030,312.29	40° 40' 52.594 N	104° 7' 43.820 W
ROSS 8-60 18-7-10 BHI - plan misses target center by 0.1ft at 15912.3ft MD (6506.9 TVD, 9179.5 N, 1498.7 E) - Point	0.00	0.89	6,507.0	9,179.5	1,498.8	455,409.25	1,030,311.84	40° 40' 54.073 N	104° 7' 43.810 W

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,714.2	3,593.0	Parkman			
4,057.3	3,918.0	Sussex			
5,049.8	4,858.0	Shannon			
6,446.6	6,217.0	Sharon Springs Shale			
6,524.1	6,282.0	Niobrara Formation			
6,536.7	6,292.0	Niobrara A Chalk			
6,696.3	6,402.0	Niobrara B Chalk			
6,846.0	6,472.0	Niobrara C Chalk			

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
800	800	0	0	Start Build 2.00
1736	1719	-26	149	Start 3491.5 hold at 1735.8 MD
5227	5026	-222	1252	Start Drop -2.00
6163	5945	-249	1401	Start Build 10.20
7045	6507	313	1410	Start DLS 0.02 TFO -180.00
7195	6507	463	1412	Start DLS 0.01 TFO -85.39
15,763	6507	9030	1498	Start 149.8 hold at 15762.6 MD
15,912	6507	9180	1499	TD at 15912.3