

# **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 18-7-8**

**Wellbore #1**

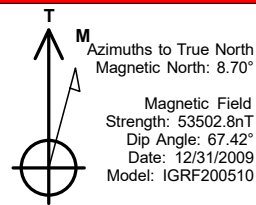
**Plan: Design #1**

## **Standard Survey Report**

**12 April, 2021**



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



#### ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.0	Start Build 2.00
2532.7	34.65	97.45	2429.0	-65.9	503.9	65.5	508.2	Start 2280.6 hold at 2532.7 MD
4813.3	34.65	97.45	4305.0	-234.1	1789.8	232.7	1805.0	Start Drop -2.00
6546.1	0.00	0.00	5934.0	-300.0	2293.7	298.2	2313.3	Start Build 10.00
7446.1	90.00	0.00	6507.0	273.0	2293.7	852.0	2886.2	Start DLS 0.01 TFO -180.00
7641.4	89.97	0.00	6507.0	468.3	2293.7	1040.8	3081.5	Start DLS 0.02 TFO 88.42
16207.9	90.03	1.84	6507.0	9033.3	2431.3	9354.7	11648.0	Start 149.5 hold at 16207.9 MD
16357.2	90.03	1.84	6506.9	9182.6	2436.1	9500.2	11797.4	TD at 16357.2

#### PROPOSED LOCAL COORDINATES:

SHL: 545 ft FSL & 2635 ft FEL Sec 18

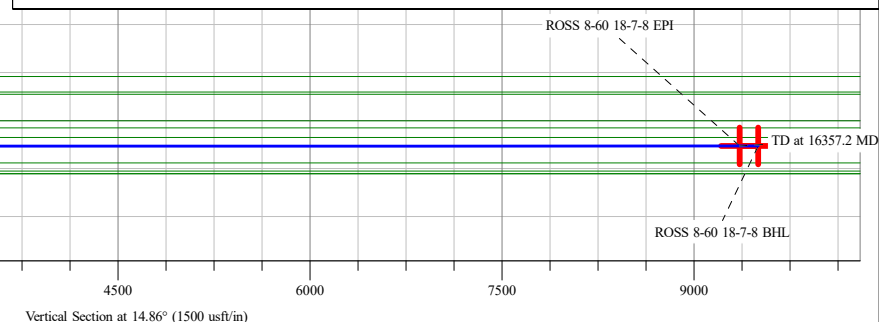
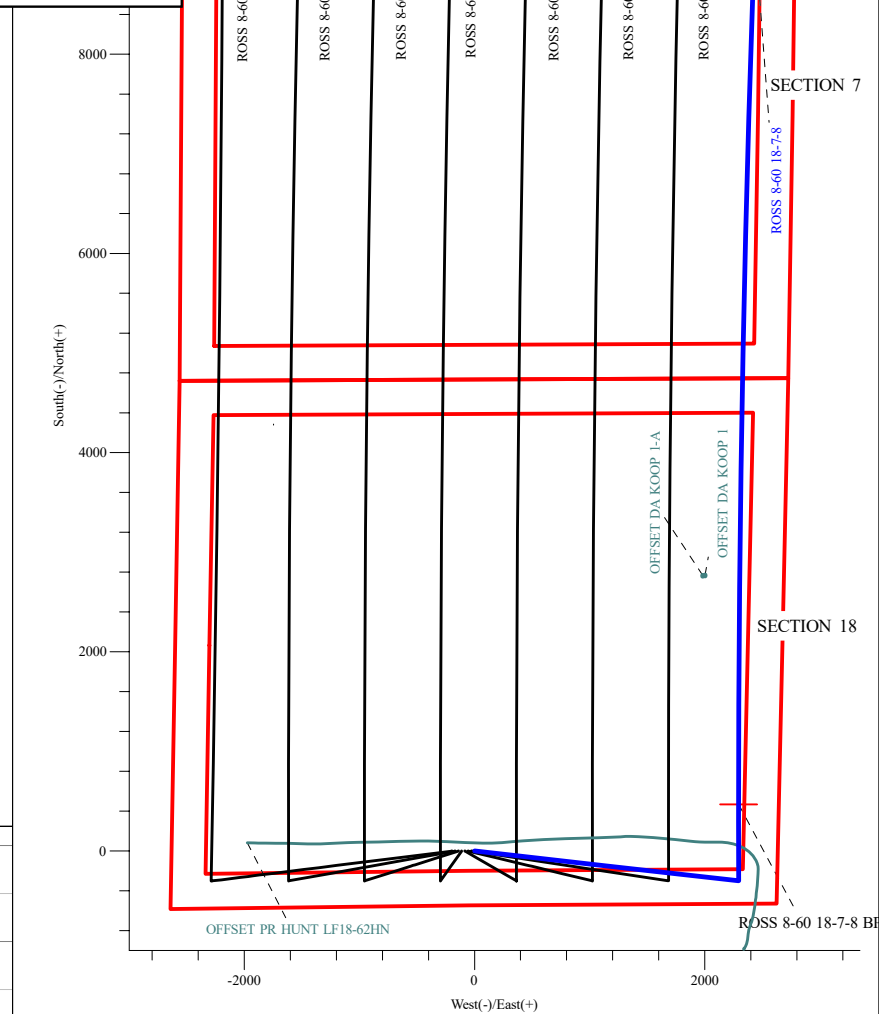
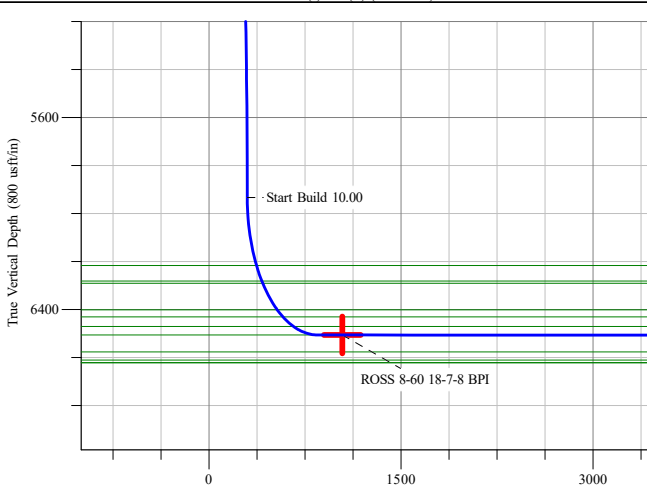
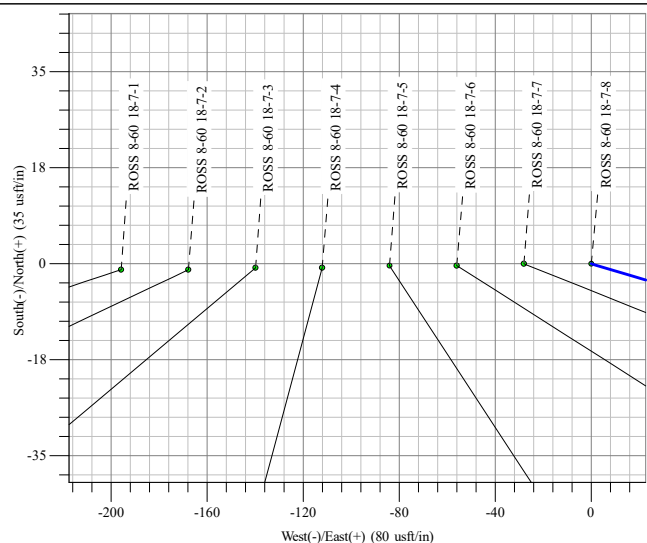
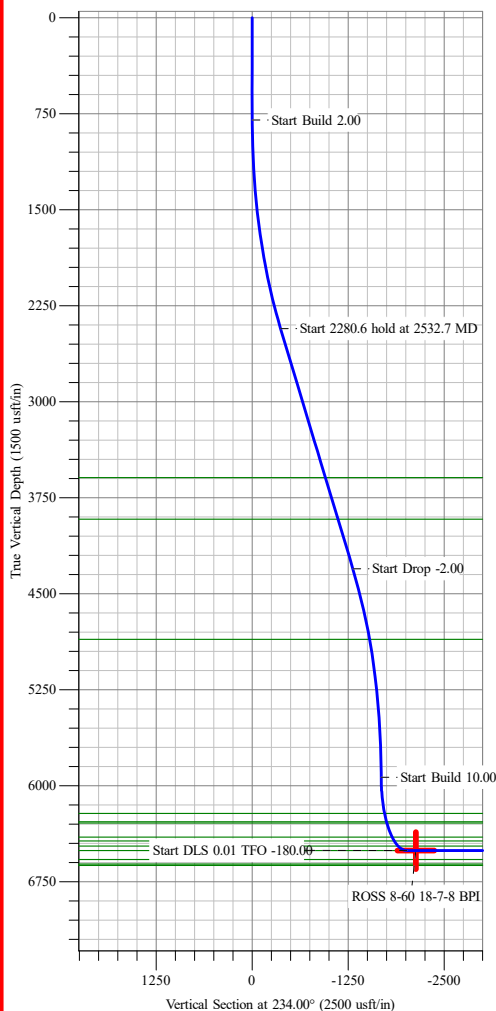
BPI: 1000 ft FSL & 350 ft FEL Sec 18

EPI: 1000 ft FNL & 350 ft FEL Sec 7

BHL: 850 ft FNL & 350 ft FEL Sec 7

#### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
ROSS 8-60 18-7-8 BHL	6507.0	9183.4	2433.0	1494138.71	3381159.35	40° 40' 54.106 N 104° 7' 32.412 W	
ROSS 8-60 18-7-8 BPI	6507.0	468.3	2293.7	1485422.63	3381154.32	40° 39' 27.990 N 104° 7' 34.230 W	
ROSS 8-60 18-7-8 EPI	6507.0	9033.3	2431.3	1493988.60	3381160.01	40° 40' 52.622 N 104° 7' 32.434 W	Point



## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well ROSS 8-60 18-7-8
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Site:</b>	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	<b>MD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Well:</b>	ROSS 8-60 18-7-8	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #1	<b>Database:</b>	EDM 5000.16 Single User Db

<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>	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,484,919.11 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,378,868.10 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	40° 39' 23.364 N
		<b>Longitude:</b>	104° 8' 3.991 W

<b>Well</b>	ROSS 8-60 18-7-8		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b> 1,484,919.10 usft
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b> 3,378,868.10 usft
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	usft
<b>Grid Convergence:</b>	0.88 °	<b>Ground Level:</b>	4,952.5 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	12/31/2009	8.70	67.42	53,502.82788223

<b>Design</b>	Design #1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0	
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	14.86	

<b>Survey Tool Program</b>	<b>Date</b> 4/12/2021				
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.0	16,357.4	Design #1 (Wellbore #1)	MWD	Fixed:v2:standard declination	

<b>Planned Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
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	

## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well ROSS 8-60 18-7-8
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Site:</b>	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	<b>MD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Well:</b>	ROSS 8-60 18-7-8	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #1	<b>Database:</b>	EDM 5000.16 Single User Db

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>Start Build 2.00</b>									
900.0	2.00	97.45	900.0	-0.2	1.7	0.2	2.00	2.00	0.00
1,000.0	4.00	97.45	999.8	-0.9	6.9	0.9	2.00	2.00	0.00
1,100.0	6.00	97.45	1,099.4	-2.0	15.6	2.0	2.00	2.00	0.00
1,200.0	8.00	97.45	1,198.7	-3.6	27.6	3.6	2.00	2.00	0.00
1,300.0	10.00	97.45	1,297.5	-5.6	43.2	5.6	2.00	2.00	0.00
1,400.0	12.00	97.45	1,395.6	-8.1	62.1	8.1	2.00	2.00	0.00
1,500.0	14.00	97.45	1,493.1	-11.0	84.4	11.0	2.00	2.00	0.00
1,600.0	16.00	97.45	1,589.6	-14.4	110.0	14.3	2.00	2.00	0.00
1,700.0	18.00	97.45	1,685.3	-18.2	139.0	18.1	2.00	2.00	0.00
1,800.0	20.00	97.45	1,779.8	-22.4	171.3	22.3	2.00	2.00	0.00
1,900.0	22.00	97.45	1,873.2	-27.1	206.8	26.9	2.00	2.00	0.00
2,000.0	24.00	97.45	1,965.2	-32.1	245.6	31.9	2.00	2.00	0.00
2,100.0	26.00	97.45	2,055.8	-37.6	287.5	37.4	2.00	2.00	0.00
2,200.0	28.00	97.45	2,144.9	-43.5	332.5	43.2	2.00	2.00	0.00
2,300.0	30.00	97.45	2,232.4	-49.8	380.6	49.5	2.00	2.00	0.00
2,400.0	32.00	97.45	2,318.1	-56.5	431.6	56.1	2.00	2.00	0.00
2,500.0	34.00	97.45	2,402.0	-63.5	485.6	63.1	2.00	2.00	0.00
2,532.7	34.65	97.45	2,429.0	-65.9	503.9	65.5	2.00	2.00	0.00
<b>Start 2280.6 hold at 2532.7 MD</b>									
2,600.0	34.65	97.45	2,484.3	-70.9	541.9	70.4	0.00	0.00	0.00
2,700.0	34.65	97.45	2,566.6	-78.2	598.2	77.8	0.00	0.00	0.00
2,800.0	34.65	97.45	2,648.8	-85.6	654.6	85.1	0.00	0.00	0.00
2,900.0	34.65	97.45	2,731.1	-93.0	711.0	92.4	0.00	0.00	0.00
3,000.0	34.65	97.45	2,813.4	-100.4	767.4	99.8	0.00	0.00	0.00
3,100.0	34.65	97.45	2,895.6	-107.7	823.8	107.1	0.00	0.00	0.00
3,200.0	34.65	97.45	2,977.9	-115.1	880.2	114.4	0.00	0.00	0.00
3,300.0	34.65	97.45	3,060.1	-122.5	936.5	121.8	0.00	0.00	0.00
3,400.0	34.65	97.45	3,142.4	-129.9	992.9	129.1	0.00	0.00	0.00
3,500.0	34.65	97.45	3,224.7	-137.2	1,049.3	136.4	0.00	0.00	0.00
3,600.0	34.65	97.45	3,306.9	-144.6	1,105.7	143.8	0.00	0.00	0.00
3,700.0	34.65	97.45	3,389.2	-152.0	1,162.1	151.1	0.00	0.00	0.00
3,800.0	34.65	97.45	3,471.4	-159.4	1,218.5	158.4	0.00	0.00	0.00
3,900.0	34.65	97.45	3,553.7	-166.7	1,274.8	165.7	0.00	0.00	0.00
4,000.0	34.65	97.45	3,636.0	-174.1	1,331.2	173.1	0.00	0.00	0.00
4,100.0	34.65	97.45	3,718.2	-181.5	1,387.6	180.4	0.00	0.00	0.00
4,200.0	34.65	97.45	3,800.5	-188.9	1,444.0	187.7	0.00	0.00	0.00
4,300.0	34.65	97.45	3,882.7	-196.2	1,500.4	195.1	0.00	0.00	0.00
4,400.0	34.65	97.45	3,965.0	-203.6	1,556.7	202.4	0.00	0.00	0.00
4,500.0	34.65	97.45	4,047.3	-211.0	1,613.1	209.7	0.00	0.00	0.00
4,600.0	34.65	97.45	4,129.5	-218.4	1,669.5	217.1	0.00	0.00	0.00
4,700.0	34.65	97.45	4,211.8	-225.7	1,725.9	224.4	0.00	0.00	0.00
4,800.0	34.65	97.45	4,294.0	-233.1	1,782.3	231.7	0.00	0.00	0.00

## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well ROSS 8-60 18-7-8
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Site:</b>	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	<b>MD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Well:</b>	ROSS 8-60 18-7-8	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #1	<b>Database:</b>	EDM 5000.16 Single User Db

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,813.3	34.65	97.45	4,305.0	-234.1	1,789.8	232.7	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
4,900.0	32.92	97.45	4,377.0	-240.3	1,837.6	238.9	2.00	-2.00	0.00
5,000.0	30.92	97.45	4,461.9	-247.2	1,890.0	245.7	2.00	-2.00	0.00
5,100.0	28.92	97.45	4,548.6	-253.7	1,939.5	252.2	2.00	-2.00	0.00
5,200.0	26.92	97.45	4,636.9	-259.7	1,985.9	258.2	2.00	-2.00	0.00
5,300.0	24.92	97.45	4,726.9	-265.4	2,029.2	263.8	2.00	-2.00	0.00
5,400.0	22.92	97.45	4,818.3	-270.7	2,069.4	269.0	2.00	-2.00	0.00
5,500.0	20.92	97.45	4,911.0	-275.5	2,106.5	273.9	2.00	-2.00	0.00
5,600.0	18.92	97.45	5,005.0	-279.9	2,140.2	278.3	2.00	-2.00	0.00
5,700.0	16.92	97.45	5,100.2	-283.9	2,170.7	282.2	2.00	-2.00	0.00
5,800.0	14.92	97.45	5,196.3	-287.5	2,197.9	285.8	2.00	-2.00	0.00
5,900.0	12.92	97.45	5,293.4	-290.6	2,221.8	288.9	2.00	-2.00	0.00
6,000.0	10.92	97.45	5,391.2	-293.3	2,242.3	291.5	2.00	-2.00	0.00
6,100.0	8.92	97.45	5,489.7	-295.5	2,259.4	293.7	2.00	-2.00	0.00
6,200.0	6.92	97.45	5,588.8	-297.3	2,273.0	295.5	2.00	-2.00	0.00
6,300.0	4.92	97.45	5,688.2	-298.6	2,283.3	296.8	2.00	-2.00	0.00
6,400.0	2.92	97.45	5,788.0	-299.5	2,290.0	297.7	2.00	-2.00	0.00
6,500.0	0.92	97.45	5,887.9	-300.0	2,293.4	298.2	2.00	-2.00	0.00
6,546.1	0.00	0.00	5,934.0	-300.0	2,293.7	298.2	2.00	-2.00	0.00
<b>Start Build 10.00</b>									
6,600.0	5.39	0.00	5,987.9	-297.5	2,293.7	300.7	10.00	10.00	0.00
6,700.0	15.39	0.00	6,086.1	-279.4	2,293.7	318.1	10.00	10.00	0.00
6,800.0	25.39	0.00	6,179.7	-244.6	2,293.7	351.7	10.00	10.00	0.00
6,900.0	35.39	0.00	6,265.8	-194.1	2,293.7	400.6	10.00	10.00	0.00
7,000.0	45.39	0.00	6,341.9	-129.4	2,293.7	463.1	10.00	10.00	0.00
7,100.0	55.39	0.00	6,405.6	-52.4	2,293.7	537.5	10.00	10.00	0.00
7,200.0	65.39	0.00	6,454.9	34.4	2,293.7	621.4	10.00	10.00	0.00
7,300.0	75.39	0.00	6,488.4	128.5	2,293.7	712.4	10.00	10.00	0.00
7,400.0	85.39	0.00	6,505.1	226.9	2,293.7	807.5	10.00	10.00	0.00
7,446.1	90.00	0.00	6,507.0	273.0	2,293.7	852.0	10.00	10.00	0.00
<b>Start DLS 0.01 TFO -180.00</b>									
7,500.0	89.99	0.00	6,507.0	326.9	2,293.7	904.1	0.01	-0.01	0.00
7,600.0	89.98	0.00	6,507.0	426.9	2,293.7	1,000.8	0.01	-0.01	0.00
7,641.4	89.97	0.00	6,507.0	468.3	2,293.7	1,040.8	0.01	-0.01	0.00
<b>Start DLS 0.02 TFO 88.42</b>									
7,700.0	89.97	0.01	6,507.0	526.9	2,293.7	1,097.5	0.02	0.00	0.02
7,800.0	89.98	0.03	6,507.1	626.9	2,293.8	1,194.1	0.02	0.00	0.02
7,900.0	89.98	0.06	6,507.1	726.9	2,293.9	1,290.8	0.02	0.00	0.02
8,000.0	89.98	0.08	6,507.2	826.9	2,294.0	1,387.5	0.02	0.00	0.02
8,100.0	89.98	0.10	6,507.2	926.9	2,294.1	1,484.2	0.02	0.00	0.02
8,200.0	89.98	0.12	6,507.2	1,026.9	2,294.3	1,580.9	0.02	0.00	0.02
8,300.0	89.98	0.14	6,507.3	1,126.9	2,294.5	1,677.6	0.02	0.00	0.02

## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well ROSS 8-60 18-7-8
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Site:</b>	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	<b>MD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Well:</b>	ROSS 8-60 18-7-8	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #1	<b>Database:</b>	EDM 5000.16 Single User Db

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,400.0	89.98	0.16	6,507.3	1,226.9	2,294.8	1,774.3	0.02	0.00	0.02
8,500.0	89.98	0.18	6,507.3	1,326.9	2,295.1	1,871.1	0.02	0.00	0.02
8,600.0	89.98	0.21	6,507.4	1,426.9	2,295.5	1,967.8	0.02	0.00	0.02
8,700.0	89.98	0.23	6,507.4	1,526.9	2,295.8	2,064.5	0.02	0.00	0.02
8,800.0	89.98	0.25	6,507.4	1,626.9	2,296.2	2,161.3	0.02	0.00	0.02
8,900.0	89.98	0.27	6,507.5	1,726.9	2,296.7	2,258.1	0.02	0.00	0.02
9,000.0	89.98	0.29	6,507.5	1,826.9	2,297.2	2,354.9	0.02	0.00	0.02
9,100.0	89.98	0.31	6,507.5	1,926.9	2,297.7	2,451.7	0.02	0.00	0.02
9,200.0	89.98	0.33	6,507.6	2,026.9	2,298.3	2,548.5	0.02	0.00	0.02
9,300.0	89.98	0.36	6,507.6	2,126.9	2,298.9	2,645.3	0.02	0.00	0.02
9,400.0	89.99	0.38	6,507.6	2,226.9	2,299.5	2,742.1	0.02	0.00	0.02
9,500.0	89.99	0.40	6,507.6	2,326.9	2,300.2	2,838.9	0.02	0.00	0.02
9,600.0	89.99	0.42	6,507.7	2,426.9	2,300.9	2,935.7	0.02	0.00	0.02
9,700.0	89.99	0.44	6,507.7	2,526.9	2,301.7	3,032.6	0.02	0.00	0.02
9,800.0	89.99	0.46	6,507.7	2,626.9	2,302.5	3,129.4	0.02	0.00	0.02
9,900.0	89.99	0.49	6,507.7	2,726.9	2,303.3	3,226.3	0.02	0.00	0.02
10,000.0	89.99	0.51	6,507.8	2,826.9	2,304.2	3,323.2	0.02	0.00	0.02
10,100.0	89.99	0.53	6,507.8	2,926.9	2,305.1	3,420.1	0.02	0.00	0.02
10,200.0	89.99	0.55	6,507.8	3,026.8	2,306.0	3,517.0	0.02	0.00	0.02
10,300.0	89.99	0.57	6,507.8	3,126.8	2,307.0	3,613.9	0.02	0.00	0.02
10,400.0	89.99	0.59	6,507.8	3,226.8	2,308.0	3,710.8	0.02	0.00	0.02
10,500.0	89.99	0.61	6,507.8	3,326.8	2,309.1	3,807.7	0.02	0.00	0.02
10,600.0	89.99	0.64	6,507.9	3,426.8	2,310.1	3,904.6	0.02	0.00	0.02
10,700.0	89.99	0.66	6,507.9	3,526.8	2,311.3	4,001.6	0.02	0.00	0.02
10,800.0	89.99	0.68	6,507.9	3,626.8	2,312.4	4,098.5	0.02	0.00	0.02
10,900.0	89.99	0.70	6,507.9	3,726.8	2,313.6	4,195.5	0.02	0.00	0.02
11,000.0	89.99	0.72	6,507.9	3,826.8	2,314.9	4,292.4	0.02	0.00	0.02
11,100.0	90.00	0.74	6,507.9	3,926.8	2,316.2	4,389.4	0.02	0.00	0.02
11,200.0	90.00	0.76	6,507.9	4,026.8	2,317.5	4,486.4	0.02	0.00	0.02
11,300.0	90.00	0.79	6,507.9	4,126.8	2,318.8	4,583.4	0.02	0.00	0.02
11,400.0	90.00	0.81	6,507.9	4,226.8	2,320.2	4,680.4	0.02	0.00	0.02
11,500.0	90.00	0.83	6,507.9	4,326.7	2,321.7	4,777.4	0.02	0.00	0.02
11,600.0	90.00	0.85	6,507.9	4,426.7	2,323.1	4,874.4	0.02	0.00	0.02
11,700.0	90.00	0.87	6,507.9	4,526.7	2,324.6	4,971.5	0.02	0.00	0.02
11,800.0	90.00	0.89	6,507.9	4,626.7	2,326.2	5,068.5	0.02	0.00	0.02
11,900.0	90.00	0.92	6,508.0	4,726.7	2,327.7	5,165.6	0.02	0.00	0.02
12,000.0	90.00	0.94	6,508.0	4,826.7	2,329.4	5,262.6	0.02	0.00	0.02
12,100.0	90.00	0.96	6,507.9	4,926.7	2,331.0	5,359.7	0.02	0.00	0.02
12,200.0	90.00	0.98	6,507.9	5,026.7	2,332.7	5,456.8	0.02	0.00	0.02
12,300.0	90.00	1.00	6,507.9	5,126.6	2,334.4	5,553.8	0.02	0.00	0.02
12,400.0	90.00	1.02	6,507.9	5,226.6	2,336.2	5,650.9	0.02	0.00	0.02
12,500.0	90.00	1.04	6,507.9	5,326.6	2,338.0	5,748.0	0.02	0.00	0.02

## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well ROSS 8-60 18-7-8
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Site:</b>	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	<b>MD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Well:</b>	ROSS 8-60 18-7-8	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #1	<b>Database:</b>	EDM 5000.16 Single User Db

### Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,600.0	90.00	1.07	6,507.9	5,426.6	2,339.8	5,845.1	0.02	0.00	0.02
12,700.0	90.00	1.09	6,507.9	5,526.6	2,341.7	5,942.3	0.02	0.00	0.02
12,800.0	90.01	1.11	6,507.9	5,626.6	2,343.6	6,039.4	0.02	0.00	0.02
12,900.0	90.01	1.13	6,507.9	5,726.5	2,345.6	6,136.5	0.02	0.00	0.02
13,000.0	90.01	1.15	6,507.9	5,826.5	2,347.6	6,233.7	0.02	0.00	0.02
13,100.0	90.01	1.17	6,507.9	5,926.5	2,349.6	6,330.8	0.02	0.00	0.02
13,200.0	90.01	1.19	6,507.9	6,026.5	2,351.7	6,428.0	0.02	0.00	0.02
13,300.0	90.01	1.22	6,507.9	6,126.5	2,353.8	6,525.2	0.02	0.00	0.02
13,400.0	90.01	1.24	6,507.8	6,226.4	2,355.9	6,622.4	0.02	0.00	0.02
13,500.0	90.01	1.26	6,507.8	6,326.4	2,358.1	6,719.6	0.02	0.00	0.02
13,600.0	90.01	1.28	6,507.8	6,426.4	2,360.3	6,816.8	0.02	0.00	0.02
13,700.0	90.01	1.30	6,507.8	6,526.4	2,362.6	6,914.0	0.02	0.00	0.02
13,800.0	90.01	1.32	6,507.8	6,626.3	2,364.9	7,011.2	0.02	0.00	0.02
13,900.0	90.01	1.34	6,507.7	6,726.3	2,367.2	7,108.4	0.02	0.00	0.02
14,000.0	90.01	1.37	6,507.7	6,826.3	2,369.5	7,205.6	0.02	0.00	0.02
14,100.0	90.01	1.39	6,507.7	6,926.2	2,372.0	7,302.9	0.02	0.00	0.02
14,200.0	90.01	1.41	6,507.7	7,026.2	2,374.4	7,400.1	0.02	0.00	0.02
14,300.0	90.01	1.43	6,507.7	7,126.2	2,376.9	7,497.4	0.02	0.00	0.02
14,400.0	90.01	1.45	6,507.6	7,226.2	2,379.4	7,594.7	0.02	0.00	0.02
14,500.0	90.02	1.47	6,507.6	7,326.1	2,381.9	7,692.0	0.02	0.00	0.02
14,600.0	90.02	1.50	6,507.6	7,426.1	2,384.5	7,789.2	0.02	0.00	0.02
14,700.0	90.02	1.52	6,507.6	7,526.1	2,387.2	7,886.5	0.02	0.00	0.02
14,800.0	90.02	1.54	6,507.5	7,626.0	2,389.8	7,983.8	0.02	0.00	0.02
14,900.0	90.02	1.56	6,507.5	7,726.0	2,392.5	8,081.2	0.02	0.00	0.02
15,000.0	90.02	1.58	6,507.5	7,825.9	2,395.3	8,178.5	0.02	0.00	0.02
15,100.0	90.02	1.60	6,507.4	7,925.9	2,398.0	8,275.8	0.02	0.00	0.02
15,200.0	90.02	1.62	6,507.4	8,025.9	2,400.9	8,373.2	0.02	0.00	0.02
15,300.0	90.02	1.65	6,507.4	8,125.8	2,403.7	8,470.5	0.02	0.00	0.02
15,400.0	90.02	1.67	6,507.3	8,225.8	2,406.6	8,567.9	0.02	0.00	0.02
15,500.0	90.02	1.69	6,507.3	8,325.7	2,409.5	8,665.2	0.02	0.00	0.02
15,600.0	90.02	1.71	6,507.3	8,425.7	2,412.5	8,762.6	0.02	0.00	0.02
15,700.0	90.02	1.73	6,507.2	8,525.6	2,415.5	8,860.0	0.02	0.00	0.02
15,800.0	90.02	1.75	6,507.2	8,625.6	2,418.5	8,957.4	0.02	0.00	0.02
15,900.0	90.02	1.77	6,507.1	8,725.6	2,421.6	9,054.8	0.02	0.00	0.02
16,000.0	90.02	1.80	6,507.1	8,825.5	2,424.7	9,152.2	0.02	0.00	0.02
16,100.0	90.02	1.82	6,507.0	8,925.5	2,427.9	9,249.6	0.02	0.00	0.02
16,200.0	90.03	1.84	6,507.0	9,025.4	2,431.1	9,347.0	0.02	0.00	0.02
16,207.9	90.03	1.84	6,507.0	9,033.3	2,431.3	9,354.7	0.02	0.00	0.02
<b>Start 149.5 hold at 16207.9 MD</b>									
16,300.0	90.03	1.84	6,507.0	9,125.4	2,434.3	9,444.5	0.00	0.00	0.00
16,357.2	90.03	1.84	6,506.9	9,182.6	2,436.1	9,500.2	0.00	0.00	0.00
<b>TD at 16357.2</b>									

## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well ROSS 8-60 18-7-8
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Site:</b>	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	<b>MD Reference:</b>	WELL @ 4953.0usft (Original Well Elev)
<b>Well:</b>	ROSS 8-60 18-7-8	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #1	<b>Database:</b>	EDM 5000.16 Single User Db

### Design Targets

#### Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
ROSS 8-60 18-7-8 BF - plan hits target center - Point	0.00	0.89	6,507.0	468.3	2,293.7	1,485,422.63	3,381,154.31	40° 39' 27.990 N	104° 7' 34.230 W
ROSS 8-60 18-7-8 BF - plan misses target center by 3.3usft at 16357.2usft MD (6506.9 TVD, 9182.6 N, 2436.1 E) - Point	0.00	0.89	6,507.0	9,183.4	2,433.0	1,494,138.71	3,381,159.34	40° 40' 54.106 N	104° 7' 32.412 W
ROSS 8-60 18-7-8 EF - plan hits target center - Point	0.00	0.89	6,507.0	9,033.3	2,431.3	1,493,988.60	3,381,160.01	40° 40' 52.622 N	104° 7' 32.434 W

### Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
800	800	0	0	Start Build 2.00
2533	2429	-66	504	Start 2280.6 hold at 2532.7 MD
4813	4305	-234	1790	Start Drop -2.00
6546	5934	-300	2294	Start Build 10.00
7446	6507	273	2294	Start DLS 0.01 TFO -180.00
7641	6507	468	2294	Start DLS 0.02 TFO 88.42
16,208	6507	9033	2431	Start 149.5 hold at 16207.9 MD
16,357	6507	9183	2436	TD at 16357.4