

# **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 18-7-4**

**Wellbore #1**

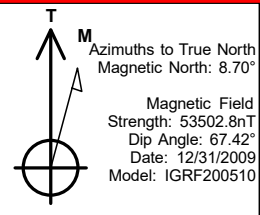
**Plan: Design #1**

## **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 18-7-4  
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 1.50
1076.0	4.14	211.44	1075.8	-8.5	-5.2	-8.4	10.0	Start 4594.5 hold at 1076.0 MD
5670.5	4.14	211.44	5658.2	-291.5	-178.2	-289.6	341.7	Start Drop -1.50
5946.5	0.00	0.00	5934.0	-300.0	-183.4	-298.1	351.6	Start Build 10.00
6846.5	90.00	360.00	6507.0	273.0	-183.4	274.8	924.6	Start 178.8 hold at 6846.5 MD
7025.3	90.00	360.00	6507.0	451.8	-183.4	453.6	1103.4	Start DLS 0.01 TFO 90.03
15598.5	90.00	1.15	6507.0	9024.4	-97.4	9025.0	9676.6	Start 150.2 hold at 15598.5 MD
15748.7	90.00	1.15	6507.0	9174.6	-94.3	9175.0	9826.8	TD at 15748.7

#### PROPOSED LOCAL COORDINATES:

SHL: 546 ft FSL & 2520 ft FWL Sec 18

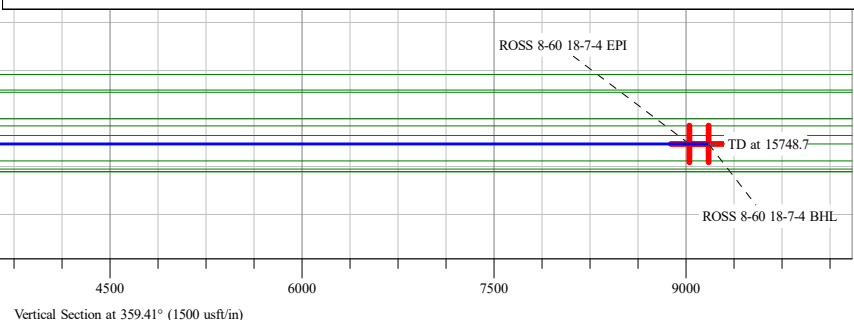
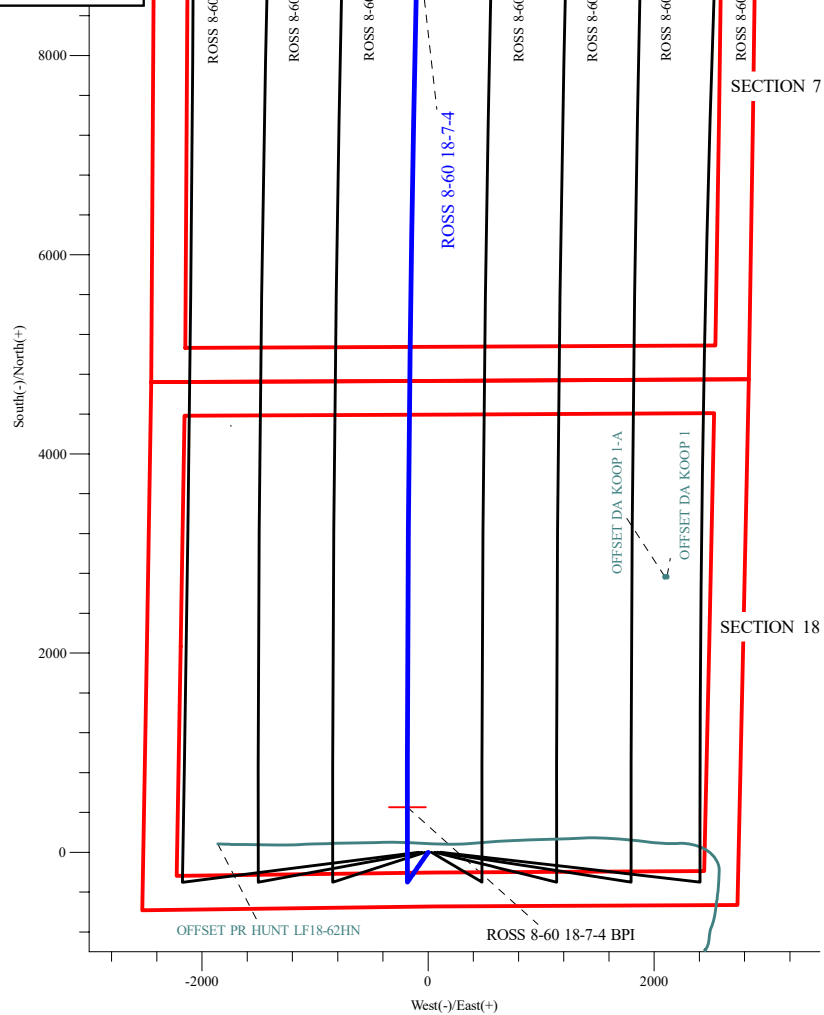
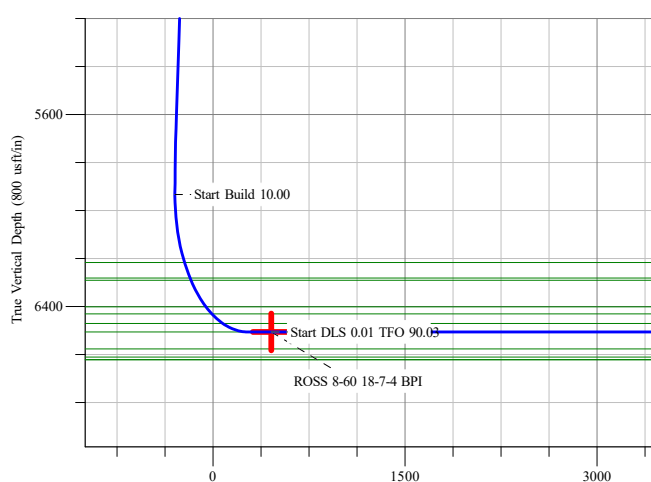
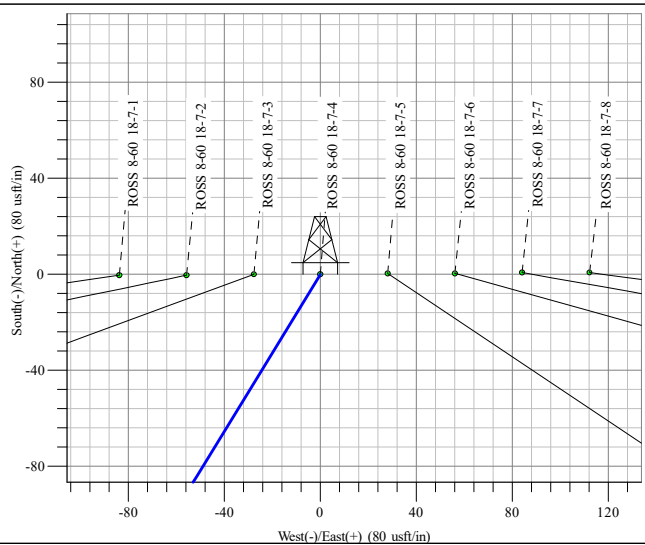
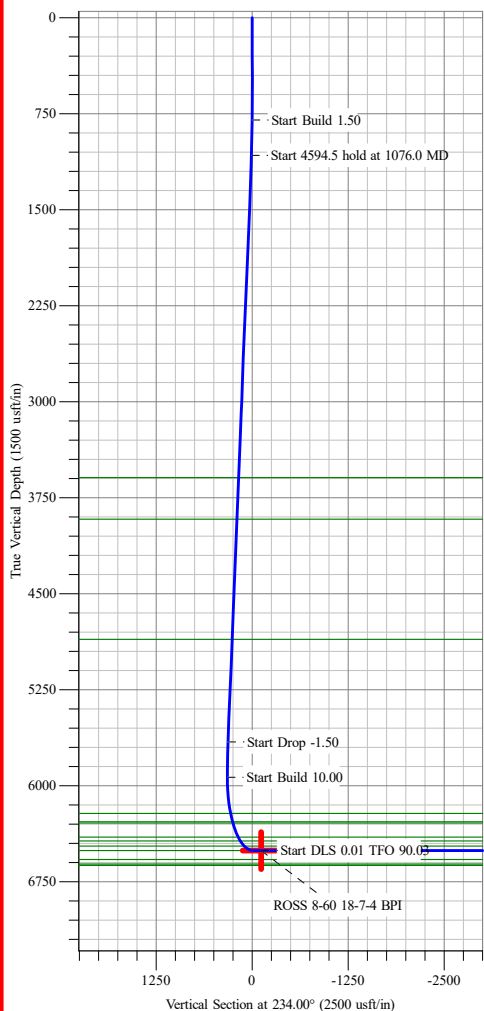
BPI: 1000 ft FSL & 2330 ft FWL Sec 18

EPI: 1000 ft FNL & 2330 ft FWL Sec 7

BHL: 850 ft FNL & 2330 ft FWL Sec 7

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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
ROSS 8-60 18-7-4 BHL	6507.0	9174.5	-96.5	1494088.44	3378518.30	40° 40' 54.012 N	104° 8' 6.698 W
ROSS 8-60 18-7-4 BPI	6507.0	451.8	-183.4	1485365.53	3378565.71	40° 39' 27.821 N	104° 8' 7.825 W
ROSS 8-60 18-7-4 EPI	6507.0	9024.4	-97.4	1493938.35	3378519.78	40° 40' 52.529 N	104° 8' 6.709 W



## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well ROSS 8-60 18-7-4
<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 18-7-4	<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 18-7-4		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	usft
<b>Grid Convergence:</b>	0.88 °	<b>Ground Level:</b>	4,950.2 usft
		<b>Latitude:</b>	40° 39' 23.357 N
		<b>Longitude:</b>	104° 8' 5.446 W

<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	53,502.78565901

<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	359.41

<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	15,748.7	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 18-7-4
<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 18-7-4	<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)	
Start Build 1.50										
900.0	1.50	211.44	900.0	-1.1	-0.7	-1.1	1.50	1.50	0.00	
1,000.0	3.00	211.44	999.9	-4.5	-2.7	-4.4	1.50	1.50	0.00	
1,076.0	4.14	211.44	1,075.8	-8.5	-5.2	-8.4	1.50	1.50	0.00	
Start 4594.5 hold at 1076.0 MD										
1,100.0	4.14	211.44	1,099.7	-10.0	-6.1	-9.9	0.00	0.00	0.00	
1,200.0	4.14	211.44	1,199.4	-16.1	-9.9	-16.0	0.00	0.00	0.00	
1,300.0	4.14	211.44	1,299.2	-22.3	-13.6	-22.2	0.00	0.00	0.00	
1,400.0	4.14	211.44	1,398.9	-28.5	-17.4	-28.3	0.00	0.00	0.00	
1,500.0	4.14	211.44	1,498.7	-34.6	-21.2	-34.4	0.00	0.00	0.00	
1,600.0	4.14	211.44	1,598.4	-40.8	-24.9	-40.5	0.00	0.00	0.00	
1,700.0	4.14	211.44	1,698.1	-46.9	-28.7	-46.6	0.00	0.00	0.00	
1,800.0	4.14	211.44	1,797.9	-53.1	-32.5	-52.8	0.00	0.00	0.00	
1,900.0	4.14	211.44	1,897.6	-59.3	-36.2	-58.9	0.00	0.00	0.00	
2,000.0	4.14	211.44	1,997.3	-65.4	-40.0	-65.0	0.00	0.00	0.00	
2,100.0	4.14	211.44	2,097.1	-71.6	-43.8	-71.1	0.00	0.00	0.00	
2,200.0	4.14	211.44	2,196.8	-77.7	-47.5	-77.2	0.00	0.00	0.00	
2,300.0	4.14	211.44	2,296.6	-83.9	-51.3	-83.4	0.00	0.00	0.00	
2,400.0	4.14	211.44	2,396.3	-90.1	-55.1	-89.5	0.00	0.00	0.00	
2,500.0	4.14	211.44	2,496.0	-96.2	-58.8	-95.6	0.00	0.00	0.00	
2,600.0	4.14	211.44	2,595.8	-102.4	-62.6	-101.7	0.00	0.00	0.00	
2,700.0	4.14	211.44	2,695.5	-108.5	-66.3	-107.8	0.00	0.00	0.00	
2,800.0	4.14	211.44	2,795.3	-114.7	-70.1	-114.0	0.00	0.00	0.00	
2,900.0	4.14	211.44	2,895.0	-120.9	-73.9	-120.1	0.00	0.00	0.00	
3,000.0	4.14	211.44	2,994.7	-127.0	-77.6	-126.2	0.00	0.00	0.00	
3,100.0	4.14	211.44	3,094.5	-133.2	-81.4	-132.3	0.00	0.00	0.00	
3,200.0	4.14	211.44	3,194.2	-139.3	-85.2	-138.4	0.00	0.00	0.00	
3,300.0	4.14	211.44	3,294.0	-145.5	-88.9	-144.6	0.00	0.00	0.00	
3,400.0	4.14	211.44	3,393.7	-151.6	-92.7	-150.7	0.00	0.00	0.00	
3,500.0	4.14	211.44	3,493.4	-157.8	-96.5	-156.8	0.00	0.00	0.00	
3,600.0	4.14	211.44	3,593.2	-164.0	-100.2	-162.9	0.00	0.00	0.00	
3,700.0	4.14	211.44	3,692.9	-170.1	-104.0	-169.0	0.00	0.00	0.00	
3,800.0	4.14	211.44	3,792.6	-176.3	-107.8	-175.2	0.00	0.00	0.00	
3,900.0	4.14	211.44	3,892.4	-182.4	-111.5	-181.3	0.00	0.00	0.00	
4,000.0	4.14	211.44	3,992.1	-188.6	-115.3	-187.4	0.00	0.00	0.00	
4,100.0	4.14	211.44	4,091.9	-194.8	-119.1	-193.5	0.00	0.00	0.00	
4,200.0	4.14	211.44	4,191.6	-200.9	-122.8	-199.6	0.00	0.00	0.00	
4,300.0	4.14	211.44	4,291.3	-207.1	-126.6	-205.8	0.00	0.00	0.00	
4,400.0	4.14	211.44	4,391.1	-213.2	-130.4	-211.9	0.00	0.00	0.00	
4,500.0	4.14	211.44	4,490.8	-219.4	-134.1	-218.0	0.00	0.00	0.00	
4,600.0	4.14	211.44	4,590.6	-225.6	-137.9	-224.1	0.00	0.00	0.00	
4,700.0	4.14	211.44	4,690.3	-231.7	-141.7	-230.3	0.00	0.00	0.00	
4,800.0	4.14	211.44	4,790.0	-237.9	-145.4	-236.4	0.00	0.00	0.00	

## Survey Report

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<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 18-7-4	<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)
4,900.0	4.14	211.44	4,889.8	-244.0	-149.2	-242.5	0.00	0.00	0.00
5,000.0	4.14	211.44	4,989.5	-250.2	-153.0	-248.6	0.00	0.00	0.00
5,100.0	4.14	211.44	5,089.3	-256.4	-156.7	-254.7	0.00	0.00	0.00
5,200.0	4.14	211.44	5,189.0	-262.5	-160.5	-260.9	0.00	0.00	0.00
5,300.0	4.14	211.44	5,288.7	-268.7	-164.2	-267.0	0.00	0.00	0.00
5,400.0	4.14	211.44	5,388.5	-274.8	-168.0	-273.1	0.00	0.00	0.00
5,500.0	4.14	211.44	5,488.2	-281.0	-171.8	-279.2	0.00	0.00	0.00
5,600.0	4.14	211.44	5,587.9	-287.2	-175.5	-285.3	0.00	0.00	0.00
5,670.5	4.14	211.44	5,658.2	-291.5	-178.2	-289.6	0.00	0.00	0.00
<b>Start Drop -1.50</b>									
5,700.0	3.70	211.44	5,687.7	-293.2	-179.3	-291.4	1.50	-1.50	0.00
5,800.0	2.20	211.44	5,787.6	-297.6	-181.9	-295.7	1.50	-1.50	0.00
5,900.0	0.70	211.44	5,887.5	-299.8	-183.3	-297.9	1.50	-1.50	0.00
5,946.5	0.00	0.00	5,934.0	-300.0	-183.4	-298.1	1.50	-1.50	0.00
<b>Start Build 10.00</b>									
6,000.0	5.35	360.00	5,987.4	-297.5	-183.4	-295.6	10.00	10.00	0.00
6,100.0	15.35	360.00	6,085.7	-279.6	-183.4	-277.7	10.00	10.00	0.00
6,200.0	25.35	360.00	6,179.3	-244.8	-183.4	-242.9	10.00	10.00	0.00
6,300.0	35.35	360.00	6,265.5	-194.4	-183.4	-192.5	10.00	10.00	0.00
6,400.0	45.35	360.00	6,341.6	-129.7	-183.4	-127.8	10.00	10.00	0.00
6,500.0	55.35	360.00	6,405.3	-52.8	-183.4	-50.9	10.00	10.00	0.00
6,600.0	65.35	360.00	6,454.8	34.0	-183.4	35.9	10.00	10.00	0.00
6,700.0	75.35	360.00	6,488.3	128.1	-183.4	129.9	10.00	10.00	0.00
6,800.0	85.35	360.00	6,505.1	226.5	-183.4	228.4	10.00	10.00	0.00
6,846.5	90.00	360.00	6,507.0	273.0	-183.4	274.8	10.00	10.00	0.00
<b>Start 178.8 hold at 6846.5 MD</b>									
6,900.0	90.00	360.00	6,507.0	326.5	-183.4	328.3	0.00	0.00	0.00
7,000.0	90.00	360.00	6,507.0	426.5	-183.4	428.3	0.00	0.00	0.00
7,025.3	90.00	360.00	6,507.0	451.8	-183.4	453.6	0.00	0.00	0.00
<b>Start DLS 0.01 TFO 90.03</b>									
7,100.0	90.00	0.01	6,507.0	526.5	-183.4	528.3	0.01	0.00	0.01
7,200.0	90.00	0.02	6,507.0	626.5	-183.4	628.3	0.01	0.00	0.01
7,300.0	90.00	0.04	6,507.0	726.5	-183.3	728.3	0.01	0.00	0.01
7,400.0	90.00	0.05	6,507.0	826.5	-183.2	828.3	0.01	0.00	0.01
7,500.0	90.00	0.06	6,507.0	926.5	-183.1	928.3	0.01	0.00	0.01
7,600.0	90.00	0.08	6,507.0	1,026.5	-183.0	1,028.3	0.01	0.00	0.01
7,700.0	90.00	0.09	6,507.0	1,126.5	-182.9	1,128.3	0.01	0.00	0.01
7,800.0	90.00	0.10	6,507.0	1,226.5	-182.7	1,228.3	0.01	0.00	0.01
7,900.0	90.00	0.12	6,507.0	1,326.5	-182.5	1,328.3	0.01	0.00	0.01
8,000.0	90.00	0.13	6,507.0	1,426.5	-182.3	1,428.3	0.01	0.00	0.01
8,100.0	90.00	0.14	6,507.0	1,526.5	-182.0	1,528.3	0.01	0.00	0.01
8,200.0	90.00	0.16	6,507.0	1,626.5	-181.8	1,628.3	0.01	0.00	0.01
8,300.0	90.00	0.17	6,507.0	1,726.5	-181.5	1,728.2	0.01	0.00	0.01

## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well ROSS 8-60 18-7-4
<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 18-7-4	<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	90.00	0.18	6,507.0	1,826.5	-181.2	1,828.2	0.01	0.00	0.01
8,500.0	90.00	0.20	6,507.0	1,926.5	-180.9	1,928.2	0.01	0.00	0.01
8,600.0	90.00	0.21	6,507.0	2,026.5	-180.5	2,028.2	0.01	0.00	0.01
8,700.0	90.00	0.22	6,507.0	2,126.5	-180.1	2,128.2	0.01	0.00	0.01
8,800.0	90.00	0.24	6,507.0	2,226.5	-179.7	2,228.2	0.01	0.00	0.01
8,900.0	90.00	0.25	6,507.0	2,326.5	-179.3	2,328.2	0.01	0.00	0.01
9,000.0	90.00	0.26	6,507.0	2,426.5	-178.8	2,428.2	0.01	0.00	0.01
9,100.0	90.00	0.28	6,507.0	2,526.5	-178.4	2,528.2	0.01	0.00	0.01
9,200.0	90.00	0.29	6,507.0	2,626.5	-177.9	2,628.2	0.01	0.00	0.01
9,300.0	90.00	0.31	6,507.0	2,726.5	-177.3	2,728.1	0.01	0.00	0.01
9,400.0	90.00	0.32	6,507.0	2,826.5	-176.8	2,828.1	0.01	0.00	0.01
9,500.0	90.00	0.33	6,507.0	2,926.5	-176.2	2,928.1	0.01	0.00	0.01
9,600.0	90.00	0.35	6,507.0	3,026.5	-175.6	3,028.1	0.01	0.00	0.01
9,700.0	90.00	0.36	6,507.0	3,126.5	-175.0	3,128.1	0.01	0.00	0.01
9,800.0	90.00	0.37	6,507.0	3,226.5	-174.4	3,228.1	0.01	0.00	0.01
9,900.0	90.00	0.39	6,507.0	3,326.4	-173.7	3,328.1	0.01	0.00	0.01
10,000.0	90.00	0.40	6,507.0	3,426.4	-173.0	3,428.0	0.01	0.00	0.01
10,100.0	90.00	0.41	6,507.0	3,526.4	-172.3	3,528.0	0.01	0.00	0.01
10,200.0	90.00	0.43	6,507.0	3,626.4	-171.6	3,628.0	0.01	0.00	0.01
10,300.0	90.00	0.44	6,507.0	3,726.4	-170.8	3,728.0	0.01	0.00	0.01
10,400.0	90.00	0.45	6,507.0	3,826.4	-170.1	3,828.0	0.01	0.00	0.01
10,500.0	90.00	0.47	6,507.0	3,926.4	-169.3	3,928.0	0.01	0.00	0.01
10,600.0	90.00	0.48	6,507.0	4,026.4	-168.4	4,027.9	0.01	0.00	0.01
10,700.0	90.00	0.49	6,507.0	4,126.4	-167.6	4,127.9	0.01	0.00	0.01
10,800.0	90.00	0.51	6,507.0	4,226.4	-166.7	4,227.9	0.01	0.00	0.01
10,900.0	90.00	0.52	6,507.0	4,326.4	-165.8	4,327.9	0.01	0.00	0.01
11,000.0	90.00	0.53	6,507.0	4,426.4	-164.9	4,427.9	0.01	0.00	0.01
11,100.0	90.00	0.55	6,507.0	4,526.4	-164.0	4,527.9	0.01	0.00	0.01
11,200.0	90.00	0.56	6,507.0	4,626.4	-163.0	4,627.8	0.01	0.00	0.01
11,300.0	90.00	0.57	6,507.0	4,726.4	-162.0	4,727.8	0.01	0.00	0.01
11,400.0	90.00	0.59	6,507.0	4,826.4	-161.0	4,827.8	0.01	0.00	0.01
11,500.0	90.00	0.60	6,507.0	4,926.4	-160.0	4,927.8	0.01	0.00	0.01
11,600.0	90.00	0.61	6,507.0	5,026.4	-158.9	5,027.7	0.01	0.00	0.01
11,700.0	90.00	0.63	6,507.0	5,126.4	-157.8	5,127.7	0.01	0.00	0.01
11,800.0	90.00	0.64	6,507.0	5,226.4	-156.7	5,227.7	0.01	0.00	0.01
11,900.0	90.00	0.65	6,507.0	5,326.4	-155.6	5,327.7	0.01	0.00	0.01
12,000.0	90.00	0.67	6,507.0	5,426.4	-154.4	5,427.7	0.01	0.00	0.01
12,100.0	90.00	0.68	6,507.0	5,526.3	-153.3	5,527.6	0.01	0.00	0.01
12,200.0	90.00	0.69	6,507.0	5,626.3	-152.1	5,627.6	0.01	0.00	0.01
12,300.0	90.00	0.71	6,507.0	5,726.3	-150.8	5,727.6	0.01	0.00	0.01
12,400.0	90.00	0.72	6,507.0	5,826.3	-149.6	5,827.6	0.01	0.00	0.01
12,500.0	90.00	0.73	6,507.0	5,926.3	-148.3	5,927.5	0.01	0.00	0.01

## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well ROSS 8-60 18-7-4
<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 18-7-4	<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	0.75	6,507.0	6,026.3	-147.0	6,027.5	0.01	0.00	0.01
12,700.0	90.00	0.76	6,507.0	6,126.3	-145.7	6,127.5	0.01	0.00	0.01
12,800.0	90.00	0.77	6,507.0	6,226.3	-144.4	6,227.4	0.01	0.00	0.01
12,900.0	90.00	0.79	6,507.0	6,326.3	-143.0	6,327.4	0.01	0.00	0.01
13,000.0	90.00	0.80	6,507.0	6,426.3	-141.6	6,427.4	0.01	0.00	0.01
13,100.0	90.00	0.81	6,507.0	6,526.3	-140.2	6,527.4	0.01	0.00	0.01
13,200.0	90.00	0.83	6,507.0	6,626.2	-138.8	6,627.3	0.01	0.00	0.01
13,300.0	90.00	0.84	6,507.0	6,726.2	-137.3	6,727.3	0.01	0.00	0.01
13,400.0	90.00	0.86	6,507.0	6,826.2	-135.8	6,827.3	0.01	0.00	0.01
13,500.0	90.00	0.87	6,507.0	6,926.2	-134.3	6,927.2	0.01	0.00	0.01
13,600.0	90.00	0.88	6,507.0	7,026.2	-132.8	7,027.2	0.01	0.00	0.01
13,700.0	90.00	0.90	6,507.0	7,126.2	-131.2	7,127.2	0.01	0.00	0.01
13,800.0	90.00	0.91	6,507.0	7,226.2	-129.7	7,227.1	0.01	0.00	0.01
13,900.0	90.00	0.92	6,507.0	7,326.2	-128.1	7,327.1	0.01	0.00	0.01
14,000.0	90.00	0.94	6,507.0	7,426.2	-126.4	7,427.1	0.01	0.00	0.01
14,100.0	90.00	0.95	6,507.0	7,526.1	-124.8	7,527.0	0.01	0.00	0.01
14,200.0	90.00	0.96	6,507.0	7,626.1	-123.1	7,627.0	0.01	0.00	0.01
14,300.0	90.00	0.98	6,507.0	7,726.1	-121.4	7,726.9	0.01	0.00	0.01
14,400.0	90.00	0.99	6,507.0	7,826.1	-119.7	7,826.9	0.01	0.00	0.01
14,500.0	90.00	1.00	6,507.0	7,926.1	-118.0	7,926.9	0.01	0.00	0.01
14,600.0	90.00	1.02	6,507.0	8,026.1	-116.2	8,026.8	0.01	0.00	0.01
14,700.0	90.00	1.03	6,507.0	8,126.0	-114.4	8,126.8	0.01	0.00	0.01
14,800.0	90.00	1.04	6,507.0	8,226.0	-112.6	8,226.8	0.01	0.00	0.01
14,900.0	90.00	1.06	6,507.0	8,326.0	-110.8	8,326.7	0.01	0.00	0.01
15,000.0	90.00	1.07	6,507.0	8,426.0	-108.9	8,426.7	0.01	0.00	0.01
15,100.0	90.00	1.08	6,507.0	8,526.0	-107.1	8,526.6	0.01	0.00	0.01
15,200.0	90.00	1.10	6,507.0	8,626.0	-105.2	8,626.6	0.01	0.00	0.01
15,300.0	90.00	1.11	6,507.0	8,725.9	-103.2	8,726.5	0.01	0.00	0.01
15,400.0	90.00	1.12	6,507.0	8,825.9	-101.3	8,826.5	0.01	0.00	0.01
15,500.0	90.00	1.14	6,507.0	8,925.9	-99.3	8,926.5	0.01	0.00	0.01
15,598.5	90.00	1.15	6,507.0	9,024.4	-97.4	9,025.0	0.01	0.00	0.01
<b>Start 150.2 hold at 15598.5 MD</b>									
15,600.0	90.00	1.15	6,507.0	9,025.9	-97.3	9,026.4	0.00	0.00	0.00
15,700.0	90.00	1.15	6,507.0	9,125.9	-95.3	9,126.4	0.00	0.00	0.00
15,748.7	90.00	1.15	6,507.0	9,174.6	-94.3	9,175.0	0.00	0.00	0.00
<b>TD at 15748.7</b>									

## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well ROSS 8-60 18-7-4
<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 18-7-4	<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 18-7-4 BF - plan hits target center - Point	0.00	0.89	6,507.0	451.8	-183.4	1,485,365.53	3,378,565.71	40° 39' 27.821 N	104° 8' 7.825 W
ROSS 8-60 18-7-4 EF - plan hits target center - Point	0.00	0.88	6,507.0	9,024.4	-97.4	1,493,938.35	3,378,519.77	40° 40' 52.529 N	104° 8' 6.709 W
ROSS 8-60 18-7-4 BF - plan misses target center by 2.2usft at 15748.6usft MD (6507.0 TVD, 9174.5 N, -94.3 E) - Point	0.00	0.88	6,507.0	9,174.5	-96.5	1,494,088.45	3,378,518.29	40° 40' 54.012 N	104° 8' 6.698 W

### Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
800	800	0	0	Start Build 1.50
1076	1076	-9	-5	Start 4594.5 hold at 1076.0 MD
5670	5658	-291	-178	Start Drop -1.50
5946	5934	-300	-183	Start Build 10.00
6846	6507	273	-183	Start 178.8 hold at 6846.5 MD
7025	6507	452	-183	Start DLS 0.01 TFO 90.03
15,599	6507	9024	-97	Start 150.2 hold at 15598.5 MD
15,749	6507	9175	-94	TD at 15748.7