

# **Bison Oil & Gas II, LLC**

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

**HALE 8-60 22 SWNW SEC 22 T8N R80W 6TH PM**

**HALE FED 8-60 22-23-10**

**Wellbore #1**

**Plan: Design #1**

## **Standard Survey Report**

**09 July, 2020**



Project: WELD COUNTY, COLORADO (NAD 83)  
Site: HALE 8-60 22 SWNW SEC 22 T8N R80W 6TH PM  
Well: HALE FED 8-60 22-23-10  
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
2333.5	30.67	198.58	2261.3	-379.8	-127.7	-22.6	400.7	Start 2765.8 hold at 2333.5 MD
5099.4	30.67	198.58	4640.3	-1717.1	-577.3	-102.2	1811.6	Start Drop -2.00
6632.9	0.00	0.00	6101.6	-2097.0	-705.0	-124.9	2212.3	Start Build 19.87
7085.9	90.00	90.00	6390.0	-2097.0	-416.6	153.2	2500.7	Start DLS 0.03 TFO -90.01
14437.2	90.00	87.47	6390.0	-1934.6	6932.3	7197.2	9852.1	Start 100.7 hold at 14437.2 MD
14537.9	90.00	87.47	6390.0	-1930.2	7032.9	7293.0	9952.7	TD at 14537.9

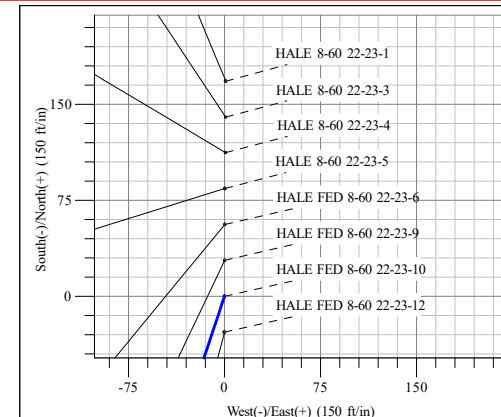
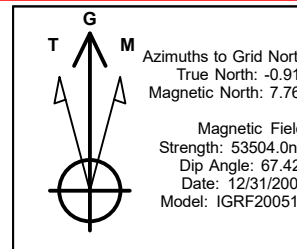
#### PROPOSED LOCAL COORDINATES:

SHL: 2192 ft FNL & 710 ft FWL Sec 22

BPI: 1019 ft FSL & 300 ft FWL Sec 22

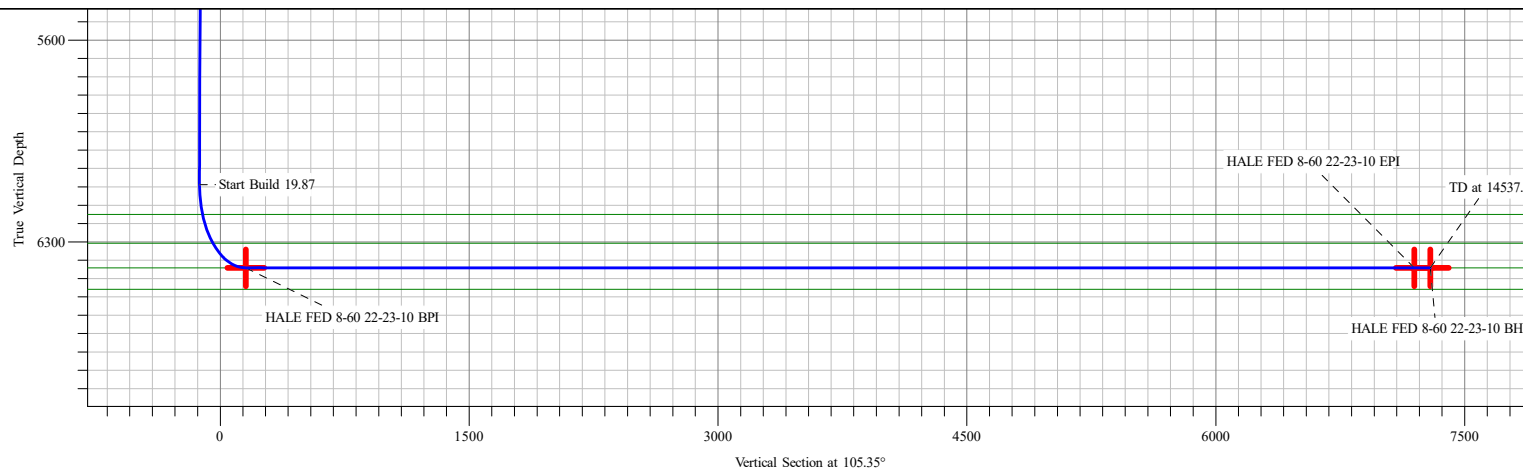
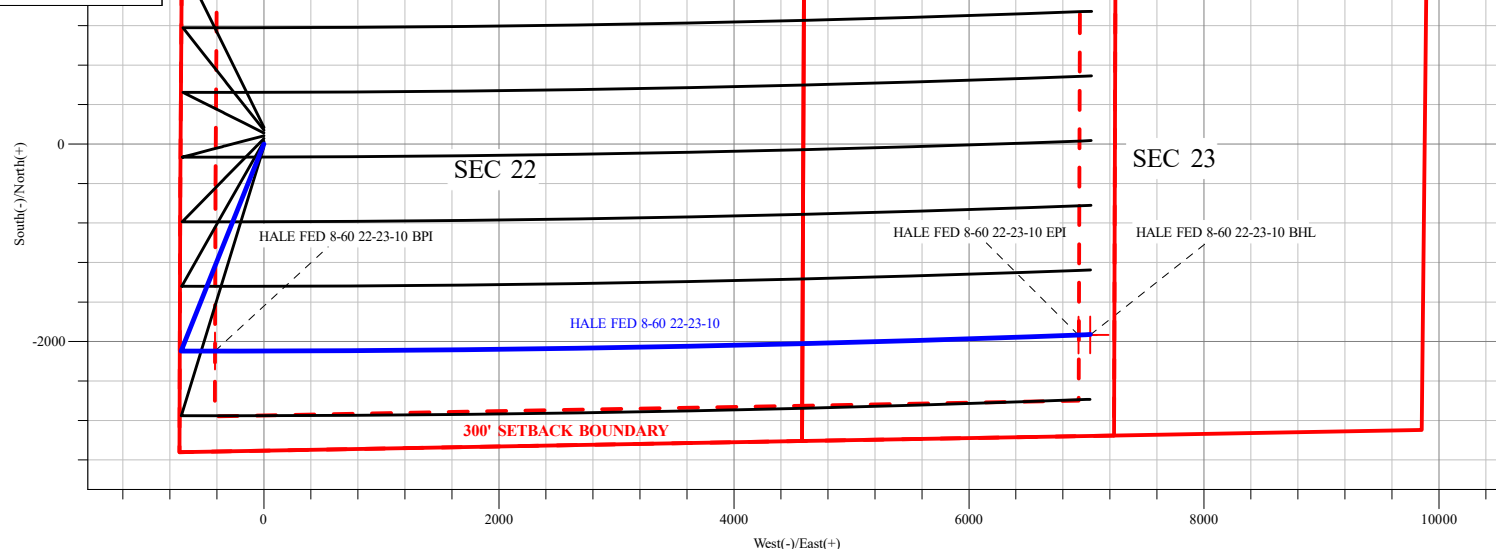
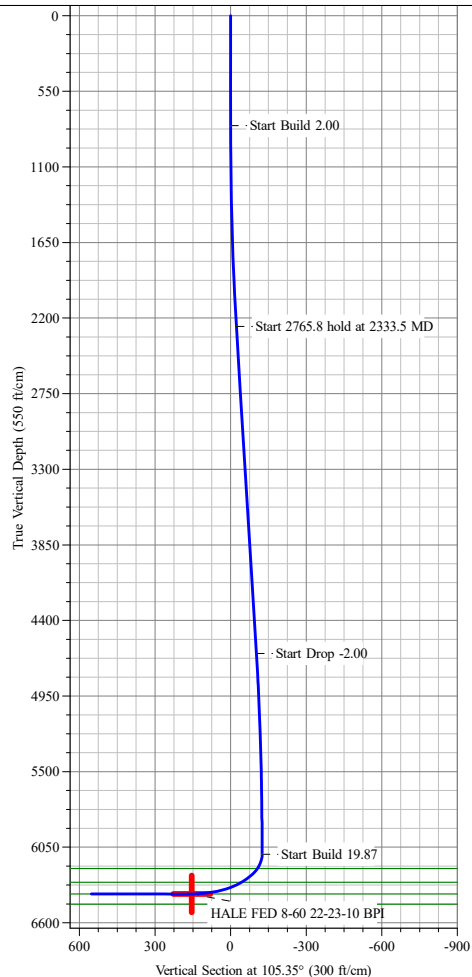
EPI: 1025 ft FSL & 2350 ft FWL Sec 23

BHL: 1025 ft FSL & 2450 ft FWL Sec 23



#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
HALE FED 8-60 22-23-10 BPI	6390.0	-2097.0	-415.6	451210.07	1033994.41	40° 38' 36.082 N	104° 5' 9.859 W
HALE FED 8-60 22-23-10 EPI	6390.0	-1934.6	6932.3	451259.56	1036234.06	40° 38' 36.517 N	104° 3' 34.517 W
HALE FED 8-60 22-23-10 BHL	6390.0	-1930.2	7032.9	451260.17	1036264.51	40° 38' 36.521 N	104° 3' 33.221 W



## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well HALE FED 8-60 22-23-10
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB 25 @ 4956.8ft
<b>Site:</b>	HALE 8-60 22 SWNW SEC 22 T8N R80W 6TH PM	<b>MD Reference:</b>	KB 25 @ 4956.8ft
<b>Well:</b>	HALE FED 8-60 22-23-10	<b>North Reference:</b>	Grid
<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		

Site	HALE 8-60 22 SWNW SEC 22 T8N R80W 6TH PM				
Site Position:		Northing:	451,874.90 m	Latitude:	40° 38' 57.566 N
From:	Lat/Long	Easting:	1,034,121.18 m	Longitude:	104° 5' 4.013 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in		

Well	HALE FED 8-60 22-23-10					
Well Position	+N/-S	0.0 ft	Northing:	451,849.24 m	Latitude:	40° 38' 56.735 N
	+E/-W	0.0 ft	Easting:	1,034,121.09 m	Longitude:	104° 5' 4.034 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,931.8 ft
Grid Convergence:		0.91 °				

<b>Wellbore</b>	Wellbore #1				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	8.67	67.42	53,504.04862823

<b>Design</b>	Design #1				
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<b>Audit Notes:</b>					
<b>Version:</b>		<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	105.35

Survey Tool Program		Date	7/9/2020		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	14,537.9	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

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<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB 25 @ 4956.8ft
<b>Site:</b>	HALE 8-60 22 SWNW SEC 22 T8N R80W 6TH PM	<b>MD Reference:</b>	KB 25 @ 4956.8ft
<b>Well:</b>	HALE FED 8-60 22-23-10	<b>North Reference:</b>	Grid
<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 (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
<b>Start Build 2.00</b>									
900.0	2.00	198.58	900.0	-1.7	-0.6	-0.1	2.00	2.00	0.00
1,000.0	4.00	198.58	999.8	-6.6	-2.2	-0.4	2.00	2.00	0.00
1,100.0	6.00	198.58	1,099.5	-14.9	-5.0	-0.9	2.00	2.00	0.00
1,200.0	8.00	198.58	1,198.7	-26.4	-8.9	-1.6	2.00	2.00	0.00
1,300.0	10.00	198.58	1,297.5	-41.3	-13.9	-2.5	2.00	2.00	0.00
1,400.0	12.00	198.58	1,395.6	-59.3	-19.9	-3.5	2.00	2.00	0.00
1,500.0	14.00	198.58	1,493.1	-80.7	-27.1	-4.8	2.00	2.00	0.00
1,600.0	16.00	198.58	1,589.6	-105.2	-35.4	-6.3	2.00	2.00	0.00
1,700.0	18.00	198.58	1,685.3	-132.9	-44.7	-7.9	2.00	2.00	0.00
1,800.0	20.00	198.58	1,779.8	-163.8	-55.1	-9.8	2.00	2.00	0.00
1,900.0	22.00	198.58	1,873.2	-197.7	-66.5	-11.8	2.00	2.00	0.00
2,000.0	24.00	198.58	1,965.2	-234.8	-78.9	-14.0	2.00	2.00	0.00
2,100.0	26.00	198.58	2,055.8	-274.8	-92.4	-16.4	2.00	2.00	0.00
2,200.0	28.00	198.58	2,144.9	-317.8	-106.9	-18.9	2.00	2.00	0.00
2,300.0	30.00	198.58	2,232.4	-363.8	-122.3	-21.7	2.00	2.00	0.00
2,333.5	30.67	198.58	2,261.3	-379.8	-127.7	-22.6	2.00	2.00	0.00
<b>Start 2765.8 hold at 2333.5 MD</b>									
2,400.0	30.67	198.58	2,318.5	-412.0	-138.5	-24.5	0.00	0.00	0.00
2,500.0	30.67	198.58	2,404.5	-460.3	-154.8	-27.4	0.00	0.00	0.00
2,600.0	30.67	198.58	2,490.5	-508.7	-171.0	-30.3	0.00	0.00	0.00
2,700.0	30.67	198.58	2,576.5	-557.0	-187.3	-33.2	0.00	0.00	0.00
2,800.0	30.67	198.58	2,662.6	-605.4	-203.5	-36.0	0.00	0.00	0.00
2,900.0	30.67	198.58	2,748.6	-653.7	-219.8	-38.9	0.00	0.00	0.00
3,000.0	30.67	198.58	2,834.6	-702.1	-236.0	-41.8	0.00	0.00	0.00
3,100.0	30.67	198.58	2,920.6	-750.4	-252.3	-44.7	0.00	0.00	0.00
3,200.0	30.67	198.58	3,006.6	-798.8	-268.6	-47.6	0.00	0.00	0.00
3,300.0	30.67	198.58	3,092.6	-847.1	-284.8	-50.4	0.00	0.00	0.00
3,400.0	30.67	198.58	3,178.6	-895.5	-301.1	-53.3	0.00	0.00	0.00
3,500.0	30.67	198.58	3,264.6	-943.8	-317.3	-56.2	0.00	0.00	0.00
3,600.0	30.67	198.58	3,350.6	-992.2	-333.6	-59.1	0.00	0.00	0.00
3,700.0	30.67	198.58	3,436.7	-1,040.5	-349.8	-62.0	0.00	0.00	0.00
3,800.0	30.67	198.58	3,522.7	-1,088.9	-366.1	-64.8	0.00	0.00	0.00
3,900.0	30.67	198.58	3,608.7	-1,137.2	-382.3	-67.7	0.00	0.00	0.00
4,000.0	30.67	198.58	3,694.7	-1,185.6	-398.6	-70.6	0.00	0.00	0.00
4,100.0	30.67	198.58	3,780.7	-1,233.9	-414.8	-73.5	0.00	0.00	0.00
4,200.0	30.67	198.58	3,866.7	-1,282.3	-431.1	-76.4	0.00	0.00	0.00
4,300.0	30.67	198.58	3,952.7	-1,330.7	-447.4	-79.2	0.00	0.00	0.00
4,400.0	30.67	198.58	4,038.7	-1,379.0	-463.6	-82.1	0.00	0.00	0.00
4,500.0	30.67	198.58	4,124.7	-1,427.4	-479.9	-85.0	0.00	0.00	0.00
4,600.0	30.67	198.58	4,210.8	-1,475.7	-496.1	-87.9	0.00	0.00	0.00
4,700.0	30.67	198.58	4,296.8	-1,524.1	-512.4	-90.7	0.00	0.00	0.00
4,800.0	30.67	198.58	4,382.8	-1,572.4	-528.6	-93.6	0.00	0.00	0.00

## Survey Report

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<b>Well:</b>	HALE FED 8-60 22-23-10	<b>North Reference:</b>	Grid
<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 (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,900.0	30.67	198.58	4,468.8	-1,620.8	-544.9	-96.5	0.00	0.00	0.00
5,000.0	30.67	198.58	4,554.8	-1,669.1	-561.1	-99.4	0.00	0.00	0.00
5,099.4	30.67	198.58	4,640.3	-1,717.1	-577.3	-102.2	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
5,100.0	30.66	198.58	4,640.8	-1,717.5	-577.4	-102.3	2.00	-2.00	0.00
5,200.0	28.66	198.58	4,727.7	-1,764.4	-593.2	-105.1	2.00	-2.00	0.00
5,300.0	26.66	198.58	4,816.3	-1,808.4	-608.0	-107.7	2.00	-2.00	0.00
5,400.0	24.66	198.58	4,906.4	-1,849.4	-621.8	-110.1	2.00	-2.00	0.00
5,500.0	22.66	198.58	4,998.0	-1,887.4	-634.5	-112.4	2.00	-2.00	0.00
5,600.0	20.66	198.58	5,090.9	-1,922.4	-646.3	-114.5	2.00	-2.00	0.00
5,700.0	18.66	198.58	5,185.1	-1,954.3	-657.0	-116.4	2.00	-2.00	0.00
5,800.0	16.66	198.58	5,280.4	-1,983.0	-666.7	-118.1	2.00	-2.00	0.00
5,900.0	14.66	198.58	5,376.7	-2,008.6	-675.3	-119.6	2.00	-2.00	0.00
6,000.0	12.66	198.58	5,473.8	-2,031.0	-682.8	-120.9	2.00	-2.00	0.00
6,100.0	10.66	198.58	5,571.8	-2,050.2	-689.3	-122.1	2.00	-2.00	0.00
6,200.0	8.66	198.58	5,670.4	-2,066.1	-694.6	-123.0	2.00	-2.00	0.00
6,300.0	6.66	198.58	5,769.5	-2,078.7	-698.8	-123.8	2.00	-2.00	0.00
6,400.0	4.66	198.58	5,869.0	-2,088.0	-702.0	-124.3	2.00	-2.00	0.00
6,500.0	2.66	198.58	5,968.8	-2,094.1	-704.0	-124.7	2.00	-2.00	0.00
6,600.0	0.66	198.58	6,068.7	-2,096.8	-704.9	-124.8	2.00	-2.00	0.00
6,632.9	0.00	0.00	6,101.6	-2,097.0	-705.0	-124.9	2.00	-2.00	0.00
<b>Start Build 19.87</b>									
6,700.0	13.33	90.00	6,168.1	-2,097.0	-697.2	-117.4	19.87	19.87	0.00
6,800.0	33.20	90.00	6,259.5	-2,097.0	-657.9	-79.5	19.87	19.87	0.00
6,900.0	53.07	90.00	6,332.1	-2,097.0	-589.9	-13.8	19.87	19.87	0.00
7,000.0	72.94	90.00	6,377.3	-2,097.0	-501.2	71.6	19.87	19.87	0.00
7,085.9	90.00	90.00	6,390.0	-2,097.0	-416.6	153.2	19.87	19.87	0.00
<b>Start DLS 0.03 TFO -90.01</b>									
7,086.9	90.00	90.00	6,390.0	-2,097.0	-415.6	154.2	0.00	0.00	0.00
<b>22-23-10 BPI</b>									
7,100.0	90.00	90.00	6,390.0	-2,097.0	-402.5	166.9	0.04	0.00	-0.04
7,200.0	90.00	89.96	6,390.0	-2,097.0	-302.5	263.3	0.03	0.00	-0.03
7,300.0	90.00	89.93	6,390.0	-2,096.9	-202.5	359.7	0.03	0.00	-0.03
7,400.0	90.00	89.89	6,390.0	-2,096.7	-102.5	456.1	0.03	0.00	-0.03
7,500.0	90.00	89.86	6,390.0	-2,096.5	-2.5	552.5	0.03	0.00	-0.03
7,600.0	90.00	89.82	6,390.0	-2,096.2	97.5	648.8	0.03	0.00	-0.03
7,700.0	90.00	89.79	6,390.0	-2,095.9	197.5	745.2	0.03	0.00	-0.03
7,800.0	90.00	89.75	6,390.0	-2,095.5	297.5	841.5	0.03	0.00	-0.03
7,900.0	90.00	89.72	6,390.0	-2,095.0	397.5	937.8	0.03	0.00	-0.03
8,000.0	90.00	89.69	6,390.0	-2,094.5	497.5	1,034.1	0.03	0.00	-0.03
8,100.0	90.00	89.65	6,390.0	-2,093.9	597.5	1,130.4	0.03	0.00	-0.03
8,200.0	90.00	89.62	6,390.0	-2,093.3	697.5	1,226.6	0.03	0.00	-0.03
8,300.0	90.00	89.58	6,390.0	-2,092.6	797.5	1,322.9	0.03	0.00	-0.03

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<b>Design:</b>	Design #1	<b>Database:</b>	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)
8,400.0	90.00	89.55	6,390.0	-2,091.8	897.5	1,419.1	0.03	0.00	-0.03
8,500.0	90.00	89.51	6,390.0	-2,091.0	997.5	1,515.3	0.03	0.00	-0.03
8,600.0	90.00	89.48	6,390.0	-2,090.1	1,097.5	1,611.5	0.03	0.00	-0.03
8,700.0	90.00	89.44	6,390.0	-2,089.2	1,197.5	1,707.7	0.03	0.00	-0.03
8,800.0	90.00	89.41	6,390.0	-2,088.2	1,297.5	1,803.9	0.03	0.00	-0.03
8,900.0	90.00	89.38	6,390.0	-2,087.1	1,397.5	1,900.0	0.03	0.00	-0.03
9,000.0	90.00	89.34	6,390.0	-2,086.0	1,497.5	1,996.2	0.03	0.00	-0.03
9,100.0	90.00	89.31	6,390.0	-2,084.8	1,597.5	2,092.3	0.03	0.00	-0.03
9,200.0	90.00	89.27	6,390.0	-2,083.6	1,697.5	2,188.4	0.03	0.00	-0.03
9,300.0	90.00	89.24	6,390.0	-2,082.3	1,797.4	2,284.5	0.03	0.00	-0.03
9,400.0	90.00	89.20	6,390.0	-2,080.9	1,897.4	2,380.5	0.03	0.00	-0.03
9,500.0	90.00	89.17	6,390.0	-2,079.5	1,997.4	2,476.6	0.03	0.00	-0.03
9,600.0	90.00	89.13	6,390.0	-2,078.0	2,097.4	2,572.6	0.03	0.00	-0.03
9,700.0	90.00	89.10	6,390.0	-2,076.5	2,197.4	2,668.6	0.03	0.00	-0.03
9,800.0	90.00	89.07	6,390.0	-2,074.9	2,297.4	2,764.6	0.03	0.00	-0.03
9,900.0	90.00	89.03	6,390.0	-2,073.2	2,397.4	2,860.6	0.03	0.00	-0.03
10,000.0	90.00	89.00	6,390.0	-2,071.5	2,497.4	2,956.6	0.03	0.00	-0.03
10,100.0	90.00	88.96	6,390.0	-2,069.7	2,597.3	3,052.5	0.03	0.00	-0.03
10,200.0	90.00	88.93	6,390.0	-2,067.9	2,697.3	3,148.4	0.03	0.00	-0.03
10,300.0	90.00	88.89	6,390.0	-2,066.0	2,797.3	3,244.3	0.03	0.00	-0.03
10,400.0	90.00	88.86	6,390.0	-2,064.0	2,897.3	3,340.2	0.03	0.00	-0.03
10,500.0	90.00	88.82	6,390.0	-2,062.0	2,997.3	3,436.1	0.03	0.00	-0.03
10,600.0	90.00	88.79	6,390.0	-2,059.9	3,097.3	3,532.0	0.03	0.00	-0.03
10,700.0	90.00	88.76	6,390.0	-2,057.7	3,197.2	3,627.8	0.03	0.00	-0.03
10,800.0	90.00	88.72	6,390.0	-2,055.5	3,297.2	3,723.7	0.03	0.00	-0.03
10,900.0	90.00	88.69	6,390.0	-2,053.3	3,397.2	3,819.5	0.03	0.00	-0.03
11,000.0	90.00	88.65	6,390.0	-2,051.0	3,497.2	3,915.3	0.03	0.00	-0.03
11,100.0	90.00	88.62	6,390.0	-2,048.6	3,597.1	4,011.0	0.03	0.00	-0.03
11,200.0	90.00	88.58	6,390.0	-2,046.1	3,697.1	4,106.8	0.03	0.00	-0.03
11,300.0	90.00	88.55	6,390.0	-2,043.6	3,797.1	4,202.5	0.03	0.00	-0.03
11,400.0	90.00	88.51	6,390.0	-2,041.1	3,897.0	4,298.3	0.03	0.00	-0.03
11,500.0	90.00	88.48	6,390.0	-2,038.5	3,997.0	4,394.0	0.03	0.00	-0.03
11,600.0	90.00	88.45	6,390.0	-2,035.8	4,097.0	4,489.7	0.03	0.00	-0.03
11,700.0	90.00	88.41	6,390.0	-2,033.0	4,196.9	4,585.3	0.03	0.00	-0.03
11,800.0	90.00	88.38	6,390.0	-2,030.2	4,296.9	4,681.0	0.03	0.00	-0.03
11,900.0	90.00	88.34	6,390.0	-2,027.4	4,396.8	4,776.6	0.03	0.00	-0.03
12,000.0	90.00	88.31	6,390.0	-2,024.4	4,496.8	4,872.2	0.03	0.00	-0.03
12,100.0	90.00	88.27	6,390.0	-2,021.5	4,596.8	4,967.8	0.03	0.00	-0.03
12,200.0	90.00	88.24	6,390.0	-2,018.4	4,696.7	5,063.4	0.03	0.00	-0.03
12,300.0	90.00	88.20	6,390.0	-2,015.3	4,796.7	5,159.0	0.03	0.00	-0.03
12,400.0	90.00	88.17	6,390.0	-2,012.1	4,896.6	5,254.5	0.03	0.00	-0.03
12,500.0	90.00	88.14	6,390.0	-2,008.9	4,996.6	5,350.1	0.03	0.00	-0.03

## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well HALE FED 8-60 22-23-10
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB 25 @ 4956.8ft
<b>Site:</b>	HALE 8-60 22 SWNW SEC 22 T8N R80W 6TH PM	<b>MD Reference:</b>	KB 25 @ 4956.8ft
<b>Well:</b>	HALE FED 8-60 22-23-10	<b>North Reference:</b>	Grid
<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 (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,600.0	90.00	88.10	6,390.0	-2,005.6	5,096.5	5,445.6	0.03	0.00	-0.03
12,700.0	90.00	88.07	6,390.0	-2,002.3	5,196.4	5,541.1	0.03	0.00	-0.03
12,800.0	90.00	88.03	6,390.0	-1,998.9	5,296.4	5,636.6	0.03	0.00	-0.03
12,900.0	90.00	88.00	6,390.0	-1,995.4	5,396.3	5,732.0	0.03	0.00	-0.03
13,000.0	90.00	87.96	6,390.0	-1,991.9	5,496.3	5,827.5	0.03	0.00	-0.03
13,100.0	90.00	87.93	6,390.0	-1,988.3	5,596.2	5,922.9	0.03	0.00	-0.03
13,200.0	90.00	87.89	6,390.0	-1,984.7	5,696.1	6,018.3	0.03	0.00	-0.03
13,300.0	90.00	87.86	6,390.0	-1,981.0	5,796.1	6,113.7	0.03	0.00	-0.03
13,400.0	90.00	87.83	6,390.0	-1,977.2	5,896.0	6,209.0	0.03	0.00	-0.03
13,500.0	90.00	87.79	6,390.0	-1,973.4	5,995.9	6,304.4	0.03	0.00	-0.03
13,600.0	90.00	87.76	6,390.0	-1,969.5	6,095.8	6,399.7	0.03	0.00	-0.03
13,700.0	90.00	87.72	6,390.0	-1,965.6	6,195.8	6,495.0	0.03	0.00	-0.03
13,800.0	90.00	87.69	6,390.0	-1,961.6	6,295.7	6,590.3	0.03	0.00	-0.03
13,900.0	90.00	87.65	6,390.0	-1,957.5	6,395.6	6,685.6	0.03	0.00	-0.03
14,000.0	90.00	87.62	6,390.0	-1,953.4	6,495.5	6,780.9	0.03	0.00	-0.03
14,100.0	90.00	87.58	6,390.0	-1,949.2	6,595.4	6,876.1	0.03	0.00	-0.03
14,200.0	90.00	87.55	6,390.0	-1,944.9	6,695.3	6,971.3	0.03	0.00	-0.03
14,300.0	90.00	87.52	6,390.0	-1,940.6	6,795.3	7,066.6	0.03	0.00	-0.03
14,400.0	90.00	87.48	6,390.0	-1,936.3	6,895.2	7,161.7	0.03	0.00	-0.03
14,437.2	90.00	87.47	6,390.0	-1,934.6	6,932.3	7,197.2	0.03	0.00	-0.03
<b>Start 100.7 hold at 14437.2 MD - 22-23-10 EPI</b>									
14,500.0	90.00	87.47	6,390.0	-1,931.9	6,995.1	7,256.9	0.00	0.00	0.00
14,537.1	90.00	87.47	6,390.0	-1,930.2	7,032.1	7,292.2	0.00	0.00	0.00
<b>22-23-10 BHL</b>									
14,537.9	90.00	87.47	6,390.0	-1,930.2	7,032.9	7,293.0	0.00	0.00	0.00
<b>TD at 14537.9</b>									

## Survey Report

<b>Company:</b>	Bison Oil & Gas II, LLC	<b>Local Co-ordinate Reference:</b>	Well HALE FED 8-60 22-23-10
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB 25 @ 4956.8ft
<b>Site:</b>	HALE 8-60 22 SWNW SEC 22 T8N R80W 6TH PM	<b>MD Reference:</b>	KB 25 @ 4956.8ft
<b>Well:</b>	HALE FED 8-60 22-23-10	<b>North Reference:</b>	Grid
<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

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
2334	2261	-380	-128	Start 2765.8 hold at 2333.5 MD
5099	4640	-1717	-577	Start Drop -2.00
6633	6102	-2097	-705	Start Build 19.87
7086	6390	-2097	-417	Start DLS 0.03 TFO -90.01
14,437	6390	-1935	6932	Start 100.7 hold at 14437.2 MD
14,538	6390	-1930	7033	TD at 14537.9