

Bison Oil & Gas II, LLC

WELD COUNTY, COLORADO (NAD 83)

HUNT 8-60 17B

HUNT FED 8-60 17B-20-4

Wellbore #1

Plan: Design #1

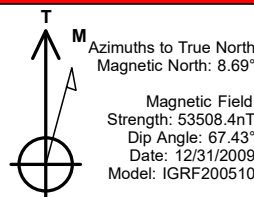
Standard Survey Report

05 May, 2020





Project: WELD COUNTY, COLORADO (NAD 83)
Site: HUNT 8-60 17B
Well: HUNT FED 8-60 17B-20-4
Wellbore: Wellbore #1
Design: Design #1



ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Dep	Annotation
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	Start Build 1.50
2149.15	20.24	106.41	2121.27	-66.62	226.19	99.98	235.80	Start 2735.32 hold at 2149.15 MD
4884.46	20.24	106.41	4687.73	-333.96	1133.80	501.15	1181.96	Start Drop -1.50
6233.61	0.00	0.00	6009.00	-400.58	1359.99	601.12	1417.76	Start 100.00 hold at 6233.61 MD
6333.61	0.00	0.00	6109.00	-400.58	1359.99	601.12	1417.76	Start Build 30.86
6378.26	13.78	4.06	6153.22	-395.25	1360.37	595.91	1423.10	Start DLS 30.86 TFO 176.91
6714.45	90.00	181.06	6383.00	-575.58	1359.99	774.12	1614.31	Start 7338.67 hold at 6714.45 MD
14053.12	90.00	181.06	6383.00	-7913.00	1224.41	8007.15	8952.98	Start 100.00 hold at 14053.12 MD
14153.12	90.00	181.06	6383.00	-8012.99	1222.57	8105.72	9052.98	TD at 14153.12

PROPOSED LOCAL COORDINATES:

SHL: 2365 ft FNL & 2391 ft FEL Sec 17

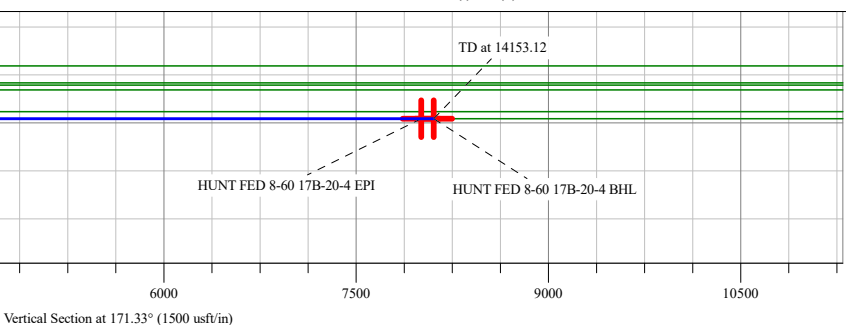
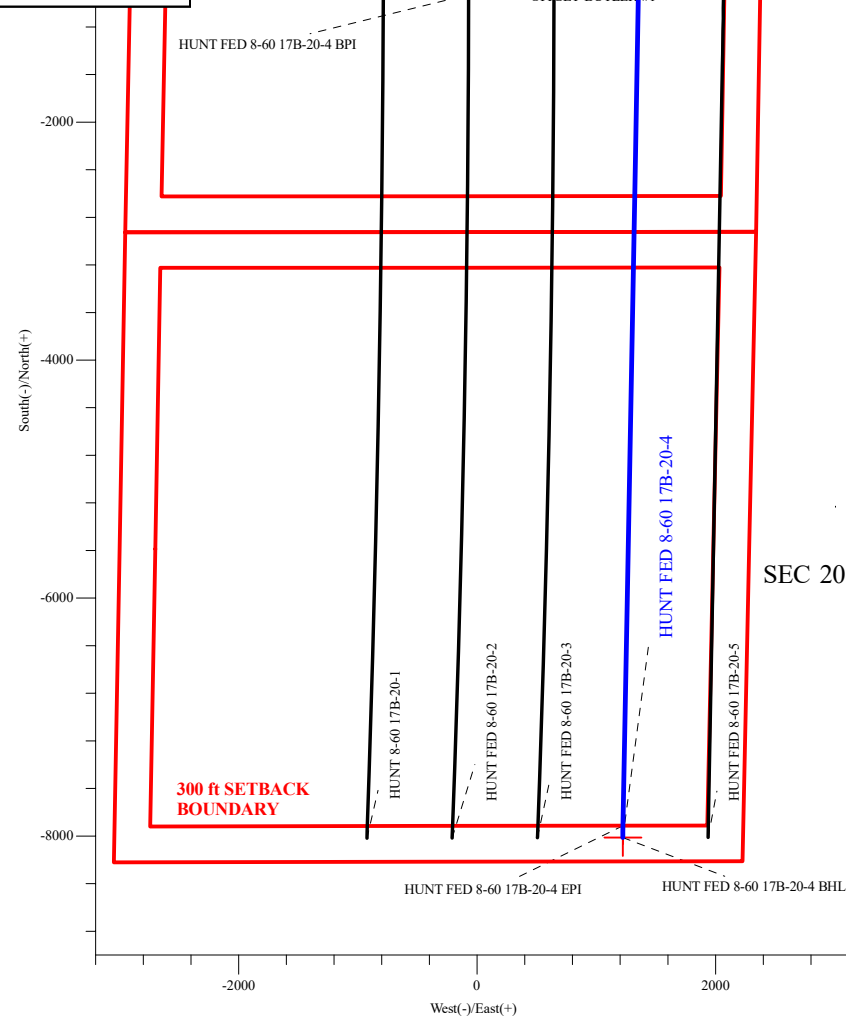
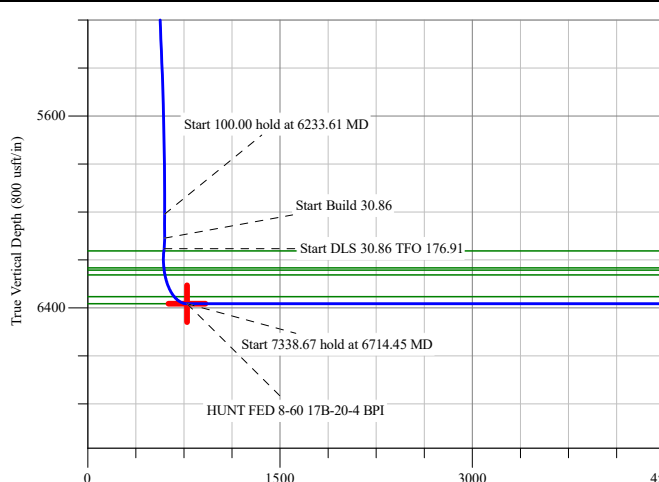
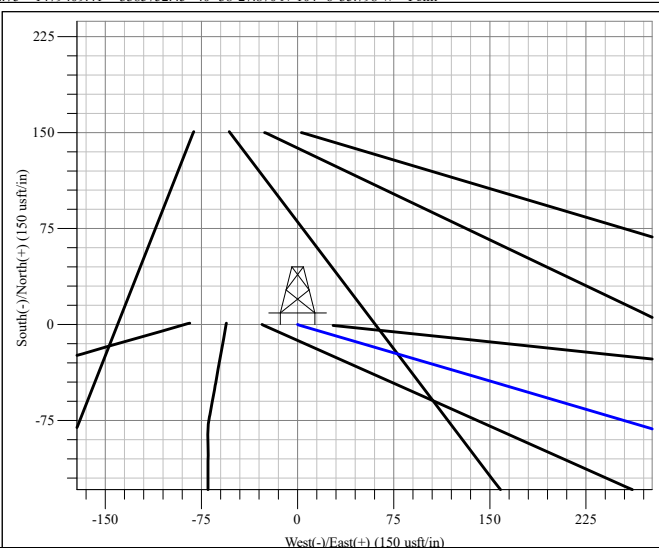
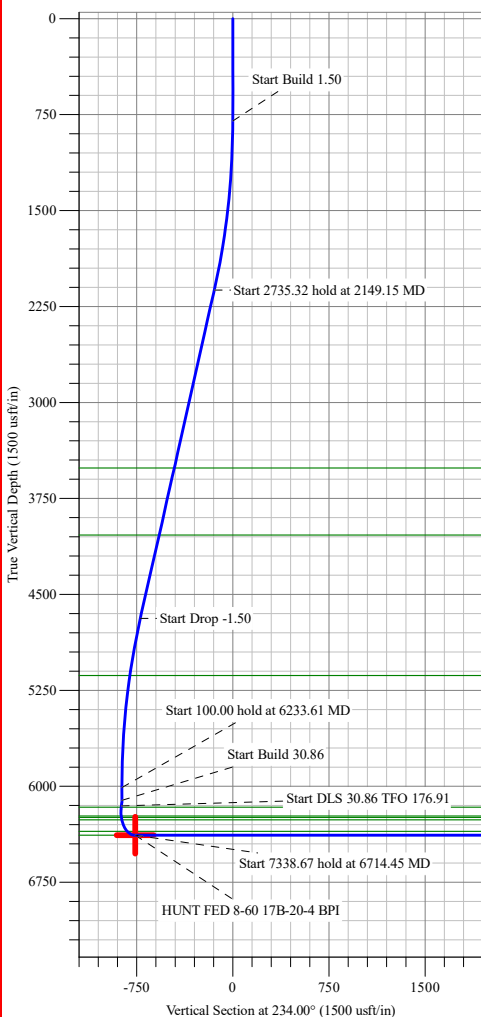
BPI: 2347 ft FSL & 1021 ft FEL Sec 17

EPI: 300 ft FSL & 1007 ft FEL Sec 20

BHL: 200 ft FSL & 1007 ft FEL Sec 20

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
HUNT FED 8-60 17B-20-4 BPI	6383.00	-575.58	1359.99	1486847.89	3385773.46	40° 39' 41.360 N 104° 6' 34.013 W	
HUNT FED 8-60 17B-20-4 EPI	6383.00	-7913.00	1224.41	1479509.24	3383752.55	40° 38' 28.856 N 104° 6' 35.777 W	
HUNT FED 8-60 17B-20-4 BHL	6383.00	-8012.83	1222.75	1479409.41	3383752.45	40° 38' 27.870 N 104° 6' 35.798 W	Point



SEC 17

SEC 20

Survey Report



Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well HUNT FED 8-60 17B-20-4
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	GL @ 4938.80usft
Site:	HUNT 8-60 17B	MD Reference:	GL @ 4938.80usft
Well:	HUNT FED 8-60 17B-20-4	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM

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	HUNT 8-60 17B		
Site Position:		Northing:	1,488,068.40 usft
From:	Lat/Long	Easting:	3,416,121.97 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	40° 39' 48.532 N
		Longitude:	104° 0' 0.000 W
		Grid Convergence:	0.97 °

Well	HUNT FED 8-60 17B-20-4		
Well Position	+N/-S	0.00 usft	Northing: 1,487,402.15 usft
	+E/-W	0.00 usft	Easting: 3,384,404.64 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	40° 39' 47.048 N
		Longitude:	104° 6' 51.660 W
		Ground Level:	4,938.80 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	8.69	67.43	53,508.40301571

Design	Design #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	171.33	

Survey Tool Program	Date	4/22/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	14,153.12	Design #1 (Wellbore #1)	MWD	Fixed:v2:standard declination	

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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 1.50										
900.00	1.50	106.41	899.99	-0.37	1.26	0.55	1.50	1.50	0.00	

Survey Report



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Site:	HUNT 8-60 17B	MD Reference:	GL @ 4938.80usft
Well:	HUNT FED 8-60 17B-20-4	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM

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)
1,000.00	3.00	106.41	999.91	-1.48	5.02	2.22	1.50	1.50	0.00
1,100.00	4.50	106.41	1,099.69	-3.33	11.30	4.99	1.50	1.50	0.00
1,200.00	6.00	106.41	1,199.27	-5.91	20.07	8.87	1.50	1.50	0.00
1,300.00	7.50	106.41	1,298.57	-9.23	31.35	13.86	1.50	1.50	0.00
1,400.00	9.00	106.41	1,397.54	-13.29	45.11	19.94	1.50	1.50	0.00
1,500.00	10.50	106.41	1,496.09	-18.07	61.36	27.12	1.50	1.50	0.00
1,600.00	12.00	106.41	1,594.16	-23.58	80.07	35.39	1.50	1.50	0.00
1,700.00	13.50	106.41	1,691.70	-29.82	101.24	44.75	1.50	1.50	0.00
1,800.00	15.00	106.41	1,788.62	-36.77	124.85	55.18	1.50	1.50	0.00
1,900.00	16.50	106.41	1,884.86	-44.44	150.89	66.69	1.50	1.50	0.00
2,000.00	18.00	106.41	1,980.36	-52.82	179.33	79.27	1.50	1.50	0.00
2,100.00	19.50	106.41	2,075.05	-61.90	210.17	92.89	1.50	1.50	0.00
2,149.15	20.24	106.41	2,121.27	-66.62	226.19	99.98	1.50	1.50	0.00
Start 2735.32 hold at 2149.15 MD									
2,200.00	20.24	106.41	2,168.98	-71.59	243.06	107.43	0.00	0.00	0.00
2,300.00	20.24	106.41	2,262.81	-81.37	276.24	122.10	0.00	0.00	0.00
2,400.00	20.24	106.41	2,356.64	-91.14	309.43	136.77	0.00	0.00	0.00
2,500.00	20.24	106.41	2,450.46	-100.91	342.61	151.43	0.00	0.00	0.00
2,600.00	20.24	106.41	2,544.29	-110.69	375.79	166.10	0.00	0.00	0.00
2,700.00	20.24	106.41	2,638.12	-120.46	408.97	180.77	0.00	0.00	0.00
2,800.00	20.24	106.41	2,731.94	-130.23	442.15	195.43	0.00	0.00	0.00
2,900.00	20.24	106.41	2,825.77	-140.01	475.33	210.10	0.00	0.00	0.00
3,000.00	20.24	106.41	2,919.60	-149.78	508.51	224.76	0.00	0.00	0.00
3,100.00	20.24	106.41	3,013.43	-159.55	541.69	239.43	0.00	0.00	0.00
3,200.00	20.24	106.41	3,107.25	-169.33	574.88	254.10	0.00	0.00	0.00
3,300.00	20.24	106.41	3,201.08	-179.10	608.06	268.76	0.00	0.00	0.00
3,400.00	20.24	106.41	3,294.91	-188.87	641.24	283.43	0.00	0.00	0.00
3,500.00	20.24	106.41	3,388.73	-198.65	674.42	298.10	0.00	0.00	0.00
3,600.00	20.24	106.41	3,482.56	-208.42	707.60	312.76	0.00	0.00	0.00
3,630.31	20.24	106.41	3,511.00	-211.38	717.66	317.21	0.00	0.00	0.00
Parkman									
3,700.00	20.24	106.41	3,576.39	-218.19	740.78	327.43	0.00	0.00	0.00
3,800.00	20.24	106.41	3,670.21	-227.97	773.96	342.10	0.00	0.00	0.00
3,900.00	20.24	106.41	3,764.04	-237.74	807.14	356.76	0.00	0.00	0.00
4,000.00	20.24	106.41	3,857.87	-247.51	840.33	371.43	0.00	0.00	0.00
4,100.00	20.24	106.41	3,951.69	-257.29	873.51	386.09	0.00	0.00	0.00
4,189.85	20.24	106.41	4,036.00	-266.07	903.32	399.27	0.00	0.00	0.00
Sussex									
4,200.00	20.24	106.41	4,045.52	-267.06	906.69	400.76	0.00	0.00	0.00
4,300.00	20.24	106.41	4,139.35	-276.83	939.87	415.43	0.00	0.00	0.00
4,400.00	20.24	106.41	4,233.17	-286.61	973.05	430.09	0.00	0.00	0.00
4,500.00	20.24	106.41	4,327.00	-296.38	1,006.23	444.76	0.00	0.00	0.00
4,600.00	20.24	106.41	4,420.83	-306.16	1,039.41	459.43	0.00	0.00	0.00

Survey Report



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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM

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)
4,700.00	20.24	106.41	4,514.65	-315.93	1,072.60	474.09	0.00	0.00	0.00
4,800.00	20.24	106.41	4,608.48	-325.70	1,105.78	488.76	0.00	0.00	0.00
4,884.46	20.24	106.41	4,687.73	-333.96	1,133.80	501.15	0.00	0.00	0.00
Start Drop -1.50									
4,900.00	20.00	106.41	4,702.32	-335.47	1,138.93	503.41	1.50	-1.50	0.00
5,000.00	18.50	106.41	4,796.72	-344.78	1,170.56	517.39	1.50	-1.50	0.00
5,100.00	17.00	106.41	4,891.96	-353.40	1,199.81	530.32	1.50	-1.50	0.00
5,200.00	15.50	106.41	4,987.96	-361.31	1,226.66	542.19	1.50	-1.50	0.00
5,300.00	14.00	106.41	5,084.66	-368.50	1,251.09	552.99	1.50	-1.50	0.00
5,350.77	13.24	106.41	5,134.00	-371.88	1,262.56	558.06	1.50	-1.50	0.00
Shannon									
5,400.00	12.50	106.41	5,181.99	-374.98	1,273.08	562.71	1.50	-1.50	0.00
5,500.00	11.00	106.41	5,279.89	-380.74	1,292.62	571.34	1.50	-1.50	0.00
5,600.00	9.50	106.41	5,378.29	-385.77	1,309.70	578.89	1.50	-1.50	0.00
5,700.00	8.00	106.41	5,477.12	-390.07	1,324.30	585.34	1.50	-1.50	0.00
5,800.00	6.50	106.41	5,576.32	-393.63	1,336.41	590.70	1.50	-1.50	0.00
5,900.00	5.00	106.41	5,675.81	-396.47	1,346.03	594.95	1.50	-1.50	0.00
6,000.00	3.50	106.41	5,775.54	-398.56	1,353.14	598.09	1.50	-1.50	0.00
6,100.00	2.00	106.41	5,875.42	-399.92	1,357.75	600.13	1.50	-1.50	0.00
6,200.00	0.50	106.41	5,975.39	-400.54	1,359.85	601.06	1.50	-1.50	0.00
6,233.61	0.00	0.00	6,009.00	-400.58	1,359.99	601.12	1.50	-1.50	0.00
Start 100.00 hold at 6233.61 MD									
6,300.00	0.00	0.00	6,075.39	-400.58	1,359.99	601.12	0.00	0.00	0.00
6,333.61	0.00	0.00	6,109.00	-400.58	1,359.99	601.12	0.00	0.00	0.00
Start Build 30.86									
6,340.00	1.97	4.06	6,115.39	-400.47	1,360.00	601.01	30.86	30.86	0.00
6,350.00	5.06	4.06	6,125.37	-399.86	1,360.04	600.42	30.86	30.86	0.00
6,360.00	8.15	4.06	6,135.30	-398.71	1,360.12	599.30	30.86	30.86	0.00
6,370.00	11.23	4.06	6,145.16	-397.03	1,360.24	597.65	30.86	30.86	0.00
6,378.26	13.78	4.06	6,153.22	-395.25	1,360.37	595.91	30.86	30.86	0.00
Start DLS 30.86 TFO 176.91									
6,380.00	13.24	4.19	6,154.91	-394.84	1,360.40	595.51	30.86	-30.82	7.27
6,388.27	10.70	4.96	6,163.00	-393.13	1,360.53	593.84	30.86	-30.80	9.32
Sharon Springs Shale									
6,390.00	10.16	5.17	6,164.70	-392.82	1,360.56	593.54	30.86	-30.79	12.11
6,400.00	7.09	6.99	6,174.59	-391.33	1,360.72	592.09	30.86	-30.75	18.20
6,410.00	4.03	11.56	6,184.54	-390.37	1,360.86	591.16	30.86	-30.57	45.72
6,420.00	1.15	41.02	6,194.53	-389.95	1,361.00	590.77	30.86	-28.86	294.54
6,430.00	2.33	162.62	6,204.53	-390.07	1,361.13	590.90	30.86	11.81	1,216.07
6,440.00	5.34	173.16	6,214.50	-390.73	1,361.24	591.57	30.86	30.18	105.40
6,450.00	8.41	176.07	6,224.43	-391.92	1,361.35	592.77	30.86	30.68	29.10
6,458.70	11.09	177.30	6,233.00	-393.39	1,361.43	594.23	30.86	30.77	14.09
Niobrara Formation									
6,460.00	11.49	177.43	6,234.28	-393.65	1,361.44	594.49	30.86	30.80	10.35
6,468.95	14.25	178.16	6,243.00	-395.64	1,361.52	596.46	30.86	30.81	8.09

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Design:	Design #1	Database:	EDM

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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)
Niobrara A Chalk									
6,470.00	14.57	178.22	6,244.02	-395.90	1,361.53	596.73	30.86	30.82	6.41
6,480.00	17.65	178.74	6,253.63	-398.67	1,361.60	599.48	30.86	30.83	5.20
6,489.93	20.72	179.11	6,263.00	-401.93	1,361.66	602.71	30.86	30.84	3.70
Niobrara A Landing Point									
6,490.00	20.74	179.11	6,263.07	-401.96	1,361.66	602.74	30.86	30.84	3.17
6,500.00	23.82	179.39	6,272.32	-405.75	1,361.71	606.49	30.86	30.85	2.77
6,510.00	26.91	179.61	6,281.36	-410.03	1,361.74	610.73	30.86	30.85	2.17
6,520.00	29.99	179.78	6,290.15	-414.80	1,361.77	615.44	30.86	30.85	1.75
6,530.00	33.08	179.93	6,298.67	-420.03	1,361.78	620.62	30.86	30.85	1.45
6,540.00	36.16	180.05	6,306.90	-425.71	1,361.78	626.23	30.86	30.86	1.23
6,550.00	39.25	180.16	6,314.81	-431.82	1,361.77	632.28	30.86	30.86	1.06
6,560.00	42.34	180.25	6,322.38	-438.36	1,361.75	638.73	30.86	30.86	0.93
6,570.00	45.42	180.33	6,329.59	-445.29	1,361.71	645.58	30.86	30.86	0.83
6,580.00	48.51	180.41	6,336.41	-452.59	1,361.67	652.79	30.86	30.86	0.74
6,590.00	51.59	180.47	6,342.83	-460.26	1,361.61	660.36	30.86	30.86	0.68
6,600.00	54.68	180.54	6,348.83	-468.26	1,361.54	668.26	30.86	30.86	0.62
6,607.43	56.97	180.58	6,353.00	-474.40	1,361.48	674.33	30.86	30.86	0.58
Niobrara B Chalk									
6,610.00	57.77	180.59	6,354.39	-476.57	1,361.45	676.46	30.86	30.86	0.56
6,620.00	60.85	180.65	6,359.49	-485.17	1,361.36	684.95	30.86	30.86	0.54
6,630.00	63.94	180.70	6,364.12	-494.03	1,361.26	693.69	30.86	30.86	0.51
6,640.00	67.02	180.75	6,368.27	-503.12	1,361.14	702.67	30.86	30.86	0.48
6,650.00	70.11	180.79	6,371.93	-512.43	1,361.02	711.85	30.86	30.86	0.46
6,660.00	73.20	180.84	6,375.07	-521.92	1,360.88	721.21	30.86	30.86	0.44
6,670.00	76.28	180.88	6,377.70	-531.57	1,360.74	730.72	30.86	30.86	0.43
6,680.00	79.37	180.92	6,379.81	-541.34	1,360.58	740.36	30.86	30.86	0.42
6,690.00	82.46	180.96	6,381.39	-551.21	1,360.42	750.09	30.86	30.86	0.41
6,700.00	85.54	181.00	6,382.44	-561.15	1,360.25	759.90	30.86	30.86	0.40
6,710.00	88.63	181.04	6,382.95	-571.14	1,360.07	769.74	30.86	30.86	0.40
6,714.45	90.00	181.06	6,383.00	-575.58	1,359.99	774.12	30.86	30.86	0.40
Start 7338.67 hold at 6714.45 MD - Niobrara B Landing Point - HUNT FED 8-60 17B-20-4 BPI									
6,800.00	90.00	181.06	6,383.00	-661.12	1,358.41	858.44	0.00	0.00	0.00
6,900.00	90.00	181.06	6,383.00	-761.10	1,356.56	957.00	0.00	0.00	0.00
7,000.00	90.00	181.06	6,383.00	-861.09	1,354.72	1,055.56	0.00	0.00	0.00
7,100.00	90.00	181.06	6,383.00	-961.07	1,352.87	1,154.13	0.00	0.00	0.00
7,200.00	90.00	181.06	6,383.00	-1,061.05	1,351.02	1,252.69	0.00	0.00	0.00
7,300.00	90.00	181.06	6,383.00	-1,161.04	1,349.17	1,351.25	0.00	0.00	0.00
7,400.00	90.00	181.06	6,383.00	-1,261.02	1,347.33	1,449.81	0.00	0.00	0.00
7,500.00	90.00	181.06	6,383.00	-1,361.00	1,345.48	1,548.37	0.00	0.00	0.00
7,600.00	90.00	181.06	6,383.00	-1,460.98	1,343.63	1,646.93	0.00	0.00	0.00
7,700.00	90.00	181.06	6,383.00	-1,560.97	1,341.78	1,745.49	0.00	0.00	0.00
7,800.00	90.00	181.06	6,383.00	-1,660.95	1,339.94	1,844.05	0.00	0.00	0.00
7,900.00	90.00	181.06	6,383.00	-1,760.93	1,338.09	1,942.61	0.00	0.00	0.00

Survey Report



Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well HUNT FED 8-60 17B-20-4
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	GL @ 4938.80usft
Site:	HUNT 8-60 17B	MD Reference:	GL @ 4938.80usft
Well:	HUNT FED 8-60 17B-20-4	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM

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)
8,000.00	90.00	181.06	6,383.00	-1,860.92	1,336.24	2,041.17	0.00	0.00	0.00
8,100.00	90.00	181.06	6,383.00	-1,960.90	1,334.39	2,139.73	0.00	0.00	0.00
8,200.00	90.00	181.06	6,383.00	-2,060.88	1,332.55	2,238.29	0.00	0.00	0.00
8,300.00	90.00	181.06	6,383.00	-2,160.86	1,330.70	2,336.85	0.00	0.00	0.00
8,400.00	90.00	181.06	6,383.00	-2,260.85	1,328.85	2,435.41	0.00	0.00	0.00
8,500.00	90.00	181.06	6,383.00	-2,360.83	1,327.00	2,533.97	0.00	0.00	0.00
8,600.00	90.00	181.06	6,383.00	-2,460.81	1,325.16	2,632.53	0.00	0.00	0.00
8,700.00	90.00	181.06	6,383.00	-2,560.80	1,323.31	2,731.09	0.00	0.00	0.00
8,800.00	90.00	181.06	6,383.00	-2,660.78	1,321.46	2,829.65	0.00	0.00	0.00
8,900.00	90.00	181.06	6,383.00	-2,760.76	1,319.61	2,928.21	0.00	0.00	0.00
9,000.00	90.00	181.06	6,383.00	-2,860.75	1,317.77	3,026.77	0.00	0.00	0.00
9,100.00	90.00	181.06	6,383.00	-2,960.73	1,315.92	3,125.33	0.00	0.00	0.00
9,200.00	90.00	181.06	6,383.00	-3,060.71	1,314.07	3,223.90	0.00	0.00	0.00
9,300.00	90.00	181.06	6,383.00	-3,160.69	1,312.22	3,322.46	0.00	0.00	0.00
9,400.00	90.00	181.06	6,383.00	-3,260.68	1,310.38	3,421.02	0.00	0.00	0.00
9,500.00	90.00	181.06	6,383.00	-3,360.66	1,308.53	3,519.58	0.00	0.00	0.00
9,600.00	90.00	181.06	6,383.00	-3,460.64	1,306.68	3,618.14	0.00	0.00	0.00
9,700.00	90.00	181.06	6,383.00	-3,560.63	1,304.83	3,716.70	0.00	0.00	0.00
9,800.00	90.00	181.06	6,383.00	-3,660.61	1,302.99	3,815.26	0.00	0.00	0.00
9,900.00	90.00	181.06	6,383.00	-3,760.59	1,301.14	3,913.82	0.00	0.00	0.00
10,000.00	90.00	181.06	6,383.00	-3,860.57	1,299.29	4,012.38	0.00	0.00	0.00
10,100.00	90.00	181.06	6,383.00	-3,960.56	1,297.45	4,110.94	0.00	0.00	0.00
10,200.00	90.00	181.06	6,383.00	-4,060.54	1,295.60	4,209.50	0.00	0.00	0.00
10,300.00	90.00	181.06	6,383.00	-4,160.52	1,293.75	4,308.06	0.00	0.00	0.00
10,400.00	90.00	181.06	6,383.00	-4,260.51	1,291.90	4,406.62	0.00	0.00	0.00
10,500.00	90.00	181.06	6,383.00	-4,360.49	1,290.06	4,505.18	0.00	0.00	0.00
10,600.00	90.00	181.06	6,383.00	-4,460.47	1,288.21	4,603.74	0.00	0.00	0.00
10,700.00	90.00	181.06	6,383.00	-4,560.46	1,286.36	4,702.30	0.00	0.00	0.00
10,800.00	90.00	181.06	6,383.00	-4,660.44	1,284.51	4,800.86	0.00	0.00	0.00
10,900.00	90.00	181.06	6,383.00	-4,760.42	1,282.67	4,899.42	0.00	0.00	0.00
11,000.00	90.00	181.06	6,383.00	-4,860.40	1,280.82	4,997.98	0.00	0.00	0.00
11,100.00	90.00	181.06	6,383.00	-4,960.39	1,278.97	5,096.54	0.00	0.00	0.00
11,200.00	90.00	181.06	6,383.00	-5,060.37	1,277.12	5,195.11	0.00	0.00	0.00
11,300.00	90.00	181.06	6,383.00	-5,160.35	1,275.28	5,293.67	0.00	0.00	0.00
11,400.00	90.00	181.06	6,383.00	-5,260.34	1,273.43	5,392.23	0.00	0.00	0.00
11,500.00	90.00	181.06	6,383.00	-5,360.32	1,271.58	5,490.79	0.00	0.00	0.00
11,600.00	90.00	181.06	6,383.00	-5,460.30	1,269.73	5,589.35	0.00	0.00	0.00
11,700.00	90.00	181.06	6,383.00	-5,560.28	1,267.89	5,687.91	0.00	0.00	0.00
11,800.00	90.00	181.06	6,383.00	-5,660.27	1,266.04	5,786.47	0.00	0.00	0.00
11,900.00	90.00	181.06	6,383.00	-5,760.25	1,264.19	5,885.03	0.00	0.00	0.00
12,000.00	90.00	181.06	6,383.00	-5,860.23	1,262.34	5,983.59	0.00	0.00	0.00
12,100.00	90.00	181.06	6,383.00	-5,960.22	1,260.50	6,082.15	0.00	0.00	0.00
12,200.00	90.00	181.06	6,383.00	-6,060.20	1,258.65	6,180.71	0.00	0.00	0.00

Survey Report



Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well HUNT FED 8-60 17B-20-4
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	GL @ 4938.80usft
Site:	HUNT 8-60 17B	MD Reference:	GL @ 4938.80usft
Well:	HUNT FED 8-60 17B-20-4	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM

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)
12,300.00	90.00	181.06	6,383.00	-6,160.18	1,256.80	6,279.27	0.00	0.00	0.00
12,400.00	90.00	181.06	6,383.00	-6,260.17	1,254.95	6,377.83	0.00	0.00	0.00
12,500.00	90.00	181.06	6,383.00	-6,360.15	1,253.11	6,476.39	0.00	0.00	0.00
12,600.00	90.00	181.06	6,383.00	-6,460.13	1,251.26	6,574.95	0.00	0.00	0.00
12,700.00	90.00	181.06	6,383.00	-6,560.11	1,249.41	6,673.51	0.00	0.00	0.00
12,800.00	90.00	181.06	6,383.00	-6,660.10	1,247.56	6,772.07	0.00	0.00	0.00
12,900.00	90.00	181.06	6,383.00	-6,760.08	1,245.72	6,870.63	0.00	0.00	0.00
13,000.00	90.00	181.06	6,383.00	-6,860.06	1,243.87	6,969.19	0.00	0.00	0.00
13,100.00	90.00	181.06	6,383.00	-6,960.05	1,242.02	7,067.75	0.00	0.00	0.00
13,200.00	90.00	181.06	6,383.00	-7,060.03	1,240.17	7,166.32	0.00	0.00	0.00
13,300.00	90.00	181.06	6,383.00	-7,160.01	1,238.33	7,264.88	0.00	0.00	0.00
13,400.00	90.00	181.06	6,383.00	-7,259.99	1,236.48	7,363.44	0.00	0.00	0.00
13,500.00	90.00	181.06	6,383.00	-7,359.98	1,234.63	7,462.00	0.00	0.00	0.00
13,600.00	90.00	181.06	6,383.00	-7,459.96	1,232.78	7,560.56	0.00	0.00	0.00
13,700.00	90.00	181.06	6,383.00	-7,559.94	1,230.94	7,659.12	0.00	0.00	0.00
13,800.00	90.00	181.06	6,383.00	-7,659.93	1,229.09	7,757.68	0.00	0.00	0.00
13,900.00	90.00	181.06	6,383.00	-7,759.91	1,227.24	7,856.24	0.00	0.00	0.00
14,000.00	90.00	181.06	6,383.00	-7,859.89	1,225.39	7,954.80	0.00	0.00	0.00
14,053.12	90.00	181.06	6,383.00	-7,913.00	1,224.41	8,007.15	0.00	0.00	0.00
Start 100.00 hold at 14053.12 MD - HUNT FED 8-60 17B-20-4 EPI									
14,100.00	90.00	181.06	6,383.00	-7,959.88	1,223.55	8,053.36	0.00	0.00	0.00
14,152.96	90.00	181.06	6,383.00	-8,012.82	1,222.57	8,105.55	0.00	0.00	0.00
HUNT FED 8-60 17B-20-4 zBHL									
14,153.12	90.00	181.06	6,383.00	-8,012.99	1,222.57	8,105.72	0.00	0.00	0.00
TD at 14153.12									

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
HUNT FED 8-60 17B- - plan hits target center - Point	0.00	0.00	6,383.00	-7,913.00	1,224.41	1,479,509.25	3,385,752.55	40° 38' 28.856 N	104° 6' 35.777 W
HUNT FED 8-60 17B- - plan hits target center - Point	0.00	0.00	6,383.00	-575.58	1,359.99	1,486,847.89	3,385,773.46	40° 39' 41.360 N	104° 6' 34.013 W
HUNT FED 8-60 17B- - plan misses target center by 0.18usft at 14152.96usft MD (6383.00 TVD, -8012.82 N, 1222.57 E) - Point	0.00	0.00	6,383.00	-8,012.83	1,222.75	1,479,409.41	3,385,752.45	40° 38' 27.870 N	104° 6' 35.798 W

Survey Report



Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well HUNT FED 8-60 17B-20-4
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	GL @ 4938.80usft
Site:	HUNT 8-60 17B	MD Reference:	GL @ 4938.80usft
Well:	HUNT FED 8-60 17B-20-4	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,630.31	3,511.00	Parkman			
4,189.85	4,036.00	Sussex			
5,350.77	5,134.00	Shannon			
6,388.27	6,163.00	Sharon Springs Shale			
6,458.70	6,233.00	Niobrara Formation			
6,468.95	6,243.00	Niobrara A Chalk			
6,489.93	6,263.00	Niobrara A Landing Point			
6,607.43	6,353.00	Niobrara B Chalk			
6,714.45	6,383.00	Niobrara B Landing Point			

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
2149	2121	-67	226	Start 2735.32 hold at 2149.15 MD
4884	4688	-334	1134	Start Drop -1.50
6234	6009	-401	1360	Start 100.00 hold at 6233.61 MD
6334	6109	-401	1360	Start Build 30.86
6378	6153	-395	1360	Start DLS 30.86 TFO 176.91
6714	6383	-576	1360	Start 7338.67 hold at 6714.45 MD
14,053	6383	-7913	1224	Start 100.00 hold at 14053.12 MD
14,153	6383	-8013	1223	TD at 14153.12

Checked By: _____ Approved By: _____ Date: _____