

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

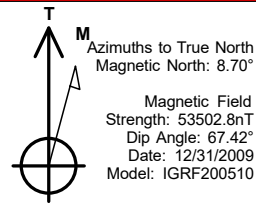
Plan: Design #1

Standard Survey Report

02 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 18-7-4
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
1623.3	12.35	253.08	1616.9	-25.7	-84.6	-18.0	88.4	Start 3700.7 hold at 1623.3 MD
5324.0	12.35	253.08	5232.1	-256.1	-841.8	-179.3	879.9	Start Drop -1.50
6147.4	0.00	0.00	6049.0	-281.8	-926.4	-197.3	968.3	Start Build 10.00
7047.4	90.00	0.88	6622.0	291.1	-917.6	372.5	1541.2	Start DLS 0.02 TFO -180.00
7197.1	89.97	0.88	6622.0	440.9	-915.3	521.4	1691.0	Start DLS 0.01 TFO -83.88
15778.5	90.03	0.27	6622.0	9021.8	-829.3	9059.8	10272.3	Start 149.7 hold at 15778.5 MD
15928.2	90.03	0.27	6621.9	9171.5	-828.6	9208.8	10422.1	TD at 15928.2

PROPOSED LOCAL COORDINATES:

SHL: 546 ft FSL & 2520 ft FWL Sec 18

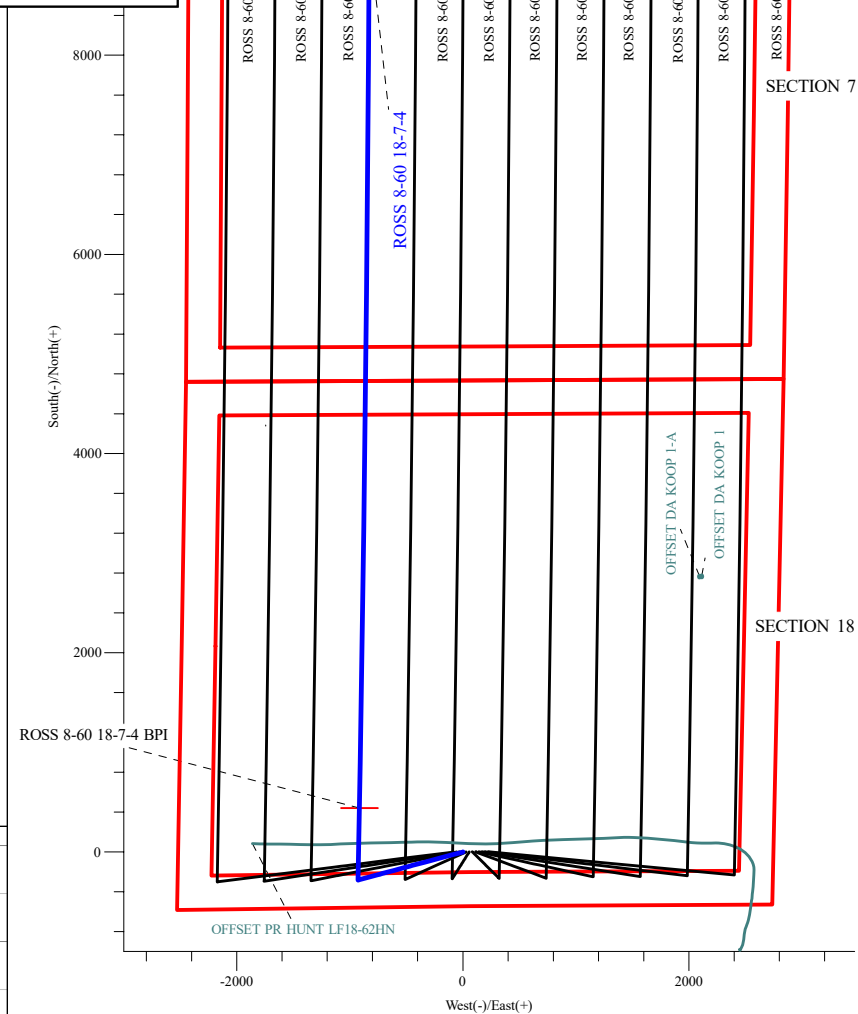
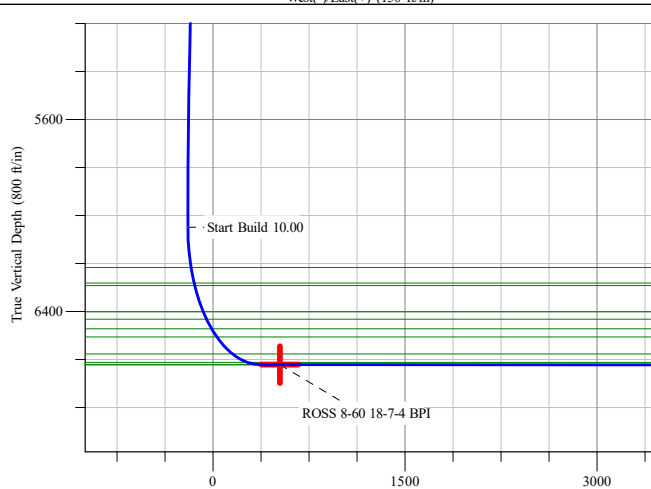
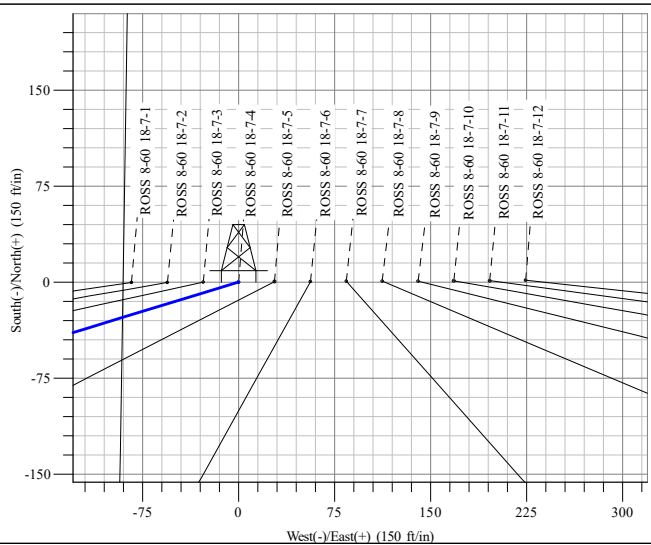
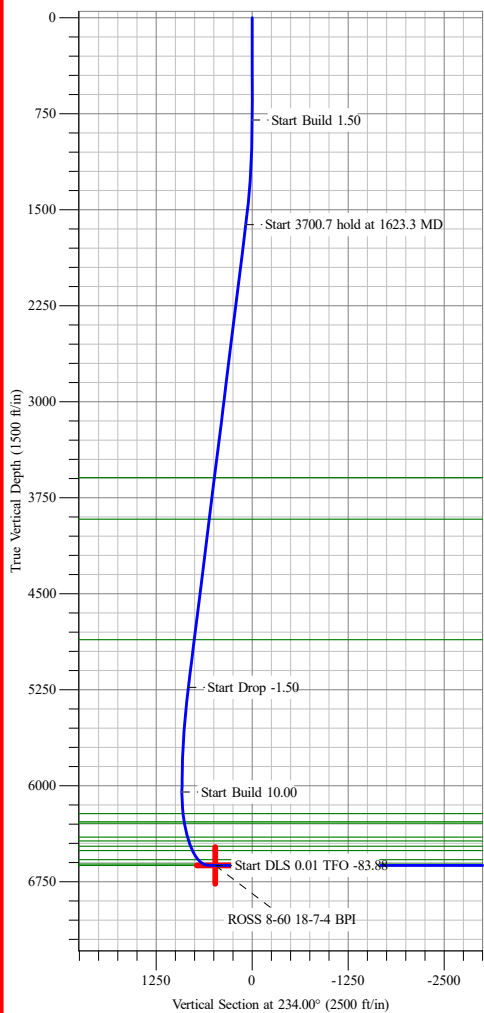
BPI: 1000 ft FSL & 1598 ft FWL Sec 18

EPI: 1000 ft FNL & 1598 ft FWL Sec 7

BHL: 850 ft FNL & 1598 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 BPI	6622.0	440.9	-915.3	452733.56	1029565.88	40° 39' 27.713 N 104° 8' 17.322 W	
ROSS 8-60 18-7-4 EPI	6622.0	9021.8	-829.3	455349.11	1029551.83	40° 40' 52.504 N 104° 8' 16.210 W	
ROSS 8-60 18-7-4 BHL	6622.0	9171.5	-828.5	455394.75	1029551.38	40° 40' 53.983 N 104° 8' 16.199 W	Point



Survey Report

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well ROSS 8-60 18-7-4
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	WELL @ 4953.0ft (Original Well Elev)
Site:	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	MD Reference:	WELL @ 4953.0ft (Original Well Elev)
Well:	ROSS 8-60 18-7-4	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			Latitude:			40° 39' 23.364 N		
From:			Lat/Long			Easting:			1,029,881.06 m			Longitude:			104° 8' 3.991 W		
Position Uncertainty:			0.0 ft			Slot Radius:			13.200 in								

Well	ROSS 8-60 18-7-4					
Well Position	+N/-S	0.0 ft	Northing:	452,603.50 m	Latitude:	40° 39' 23.357 N
	+E/-W	0.0 ft	Easting:	1,029,846.90 m	Longitude:	104° 8' 5.446 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,950.2 ft
Grid Convergence:		0.88 °				

Wellbore	Wellbore #1				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	8.70	67.42	53,502.78565901

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 1.50									
900.0	1.50	253.08	900.0	-0.4	-1.3	-0.3	1.50	1.50	0.00
1,000.0	3.00	253.08	999.9	-1.5	-5.0	-1.1	1.50	1.50	0.00
1,100.0	4.50	253.08	1,099.7	-3.4	-11.3	-2.4	1.50	1.50	0.00
1,200.0	6.00	253.08	1,199.3	-6.1	-20.0	-4.3	1.50	1.50	0.00
1,300.0	7.50	253.08	1,298.6	-9.5	-31.3	-6.7	1.50	1.50	0.00
1,400.0	9.00	253.08	1,397.5	-13.7	-45.0	-9.6	1.50	1.50	0.00
1,500.0	10.50	253.08	1,496.1	-18.6	-61.2	-13.0	1.50	1.50	0.00
1,600.0	12.00	253.08	1,594.2	-24.3	-79.9	-17.0	1.50	1.50	0.00
1,623.3	12.35	253.08	1,616.9	-25.7	-84.6	-18.0	1.50	1.50	0.00
Start 3700.7 hold at 1623.3 MD									
1,700.0	12.35	253.08	1,691.9	-30.5	-100.3	-21.3	0.00	0.00	0.00
1,800.0	12.35	253.08	1,789.6	-36.7	-120.7	-25.7	0.00	0.00	0.00

Survey Report

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Well:	ROSS 8-60 18-7-4	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)
1,900.0	12.35	253.08	1,887.2	-42.9	-141.2	-30.1	0.00	0.00	0.00
2,000.0	12.35	253.08	1,984.9	-49.2	-161.6	-34.4	0.00	0.00	0.00
2,100.0	12.35	253.08	2,082.6	-55.4	-182.1	-38.8	0.00	0.00	0.00
2,200.0	12.35	253.08	2,180.3	-61.6	-202.6	-43.1	0.00	0.00	0.00
2,300.0	12.35	253.08	2,278.0	-67.8	-223.0	-47.5	0.00	0.00	0.00
2,400.0	12.35	253.08	2,375.7	-74.1	-243.5	-51.9	0.00	0.00	0.00
2,500.0	12.35	253.08	2,473.4	-80.3	-263.9	-56.2	0.00	0.00	0.00
2,600.0	12.35	253.08	2,571.0	-86.5	-284.4	-60.6	0.00	0.00	0.00
2,700.0	12.35	253.08	2,668.7	-92.7	-304.9	-64.9	0.00	0.00	0.00
2,800.0	12.35	253.08	2,766.4	-99.0	-325.3	-69.3	0.00	0.00	0.00
2,900.0	12.35	253.08	2,864.1	-105.2	-345.8	-73.6	0.00	0.00	0.00
3,000.0	12.35	253.08	2,961.8	-111.4	-366.3	-78.0	0.00	0.00	0.00
3,100.0	12.35	253.08	3,059.5	-117.6	-386.7	-82.4	0.00	0.00	0.00
3,200.0	12.35	253.08	3,157.2	-123.9	-407.2	-86.7	0.00	0.00	0.00
3,300.0	12.35	253.08	3,254.8	-130.1	-427.6	-91.1	0.00	0.00	0.00
3,400.0	12.35	253.08	3,352.5	-136.3	-448.1	-95.4	0.00	0.00	0.00
3,500.0	12.35	253.08	3,450.2	-142.5	-468.6	-99.8	0.00	0.00	0.00
3,600.0	12.35	253.08	3,547.9	-148.7	-489.0	-104.1	0.00	0.00	0.00
3,700.0	12.35	253.08	3,645.6	-155.0	-509.5	-108.5	0.00	0.00	0.00
3,800.0	12.35	253.08	3,743.3	-161.2	-530.0	-112.9	0.00	0.00	0.00
3,900.0	12.35	253.08	3,841.0	-167.4	-550.4	-117.2	0.00	0.00	0.00
4,000.0	12.35	253.08	3,938.6	-173.6	-570.9	-121.6	0.00	0.00	0.00
4,100.0	12.35	253.08	4,036.3	-179.9	-591.3	-125.9	0.00	0.00	0.00
4,200.0	12.35	253.08	4,134.0	-186.1	-611.8	-130.3	0.00	0.00	0.00
4,300.0	12.35	253.08	4,231.7	-192.3	-632.3	-134.6	0.00	0.00	0.00
4,400.0	12.35	253.08	4,329.4	-198.5	-652.7	-139.0	0.00	0.00	0.00
4,500.0	12.35	253.08	4,427.1	-204.8	-673.2	-143.4	0.00	0.00	0.00
4,600.0	12.35	253.08	4,524.8	-211.0	-693.6	-147.7	0.00	0.00	0.00
4,700.0	12.35	253.08	4,622.4	-217.2	-714.1	-152.1	0.00	0.00	0.00
4,800.0	12.35	253.08	4,720.1	-223.4	-734.6	-156.4	0.00	0.00	0.00
4,900.0	12.35	253.08	4,817.8	-229.7	-755.0	-160.8	0.00	0.00	0.00
5,000.0	12.35	253.08	4,915.5	-235.9	-775.5	-165.2	0.00	0.00	0.00
5,100.0	12.35	253.08	5,013.2	-242.1	-796.0	-169.5	0.00	0.00	0.00
5,200.0	12.35	253.08	5,110.9	-248.3	-816.4	-173.9	0.00	0.00	0.00
5,300.0	12.35	253.08	5,208.6	-254.6	-836.9	-178.2	0.00	0.00	0.00
5,324.0	12.35	253.08	5,232.1	-256.1	-841.8	-179.3	0.00	0.00	0.00
Start Drop -1.50									
5,400.0	11.21	253.08	5,306.4	-260.6	-856.6	-182.4	1.50	-1.50	0.00
5,500.0	9.71	253.08	5,404.7	-265.8	-874.0	-186.1	1.50	-1.50	0.00
5,600.0	8.21	253.08	5,503.5	-270.4	-888.9	-189.3	1.50	-1.50	0.00
5,700.0	6.71	253.08	5,602.7	-274.2	-901.3	-191.9	1.50	-1.50	0.00
5,800.0	5.21	253.08	5,702.1	-277.2	-911.3	-194.1	1.50	-1.50	0.00
5,900.0	3.71	253.08	5,801.8	-279.4	-918.7	-195.6	1.50	-1.50	0.00

Survey Report

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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)
6,000.0	2.21	253.08	5,901.7	-280.9	-923.6	-196.7	1.50	-1.50	0.00
6,100.0	0.71	253.08	6,001.6	-281.7	-926.1	-197.2	1.50	-1.50	0.00
6,147.4	0.00	0.00	6,049.0	-281.8	-926.4	-197.3	1.50	-1.50	0.00
Start Build 10.00									
6,200.0	5.26	0.88	6,101.6	-279.4	-926.3	-194.9	10.00	10.00	0.00
6,300.0	15.26	0.88	6,199.8	-261.6	-926.1	-177.2	10.00	10.00	0.00
6,400.0	25.26	0.88	6,293.5	-227.0	-925.5	-142.8	10.00	10.00	0.00
6,500.0	35.26	0.88	6,379.8	-176.6	-924.8	-92.7	10.00	10.00	0.00
6,600.0	45.26	0.88	6,456.0	-112.1	-923.8	-28.5	10.00	10.00	0.00
6,700.0	55.26	0.88	6,519.9	-35.3	-922.6	47.8	10.00	10.00	0.00
6,800.0	65.26	0.88	6,569.4	51.4	-921.3	134.1	10.00	10.00	0.00
6,900.0	75.26	0.88	6,603.1	145.4	-919.8	227.6	10.00	10.00	0.00
7,000.0	85.26	0.88	6,620.0	243.8	-918.3	325.5	10.00	10.00	0.00
7,047.4	90.00	0.88	6,622.0	291.1	-917.6	372.5	10.00	10.00	0.00
Start DLS 0.02 TFO -180.00									
7,100.0	89.99	0.88	6,622.0	343.8	-916.8	424.9	0.02	-0.02	0.00
7,197.1	89.97	0.88	6,622.0	440.9	-915.3	521.4	0.02	-0.02	0.00
Start DLS 0.01 TFO -83.88 - ROSS 8-60 18-7-4 BPI									
7,200.0	89.97	0.88	6,622.0	443.7	-915.3	524.3	0.01	0.00	-0.01
7,300.0	89.97	0.87	6,622.1	543.7	-913.7	623.7	0.01	0.00	-0.01
7,400.0	89.97	0.86	6,622.1	643.7	-912.2	723.2	0.01	0.00	-0.01
7,500.0	89.97	0.85	6,622.2	743.7	-910.7	822.6	0.01	0.00	-0.01
7,600.0	89.97	0.85	6,622.2	843.7	-909.3	922.1	0.01	0.00	-0.01
7,700.0	89.97	0.84	6,622.3	943.7	-907.8	1,021.5	0.01	0.00	-0.01
7,800.0	89.97	0.83	6,622.3	1,043.7	-906.3	1,121.0	0.01	0.00	-0.01
7,900.0	89.97	0.83	6,622.4	1,143.7	-904.9	1,220.5	0.01	0.00	-0.01
8,000.0	89.97	0.82	6,622.4	1,243.7	-903.4	1,319.9	0.01	0.00	-0.01
8,100.0	89.97	0.81	6,622.5	1,343.7	-902.0	1,419.4	0.01	0.00	-0.01
8,200.0	89.98	0.81	6,622.5	1,443.6	-900.6	1,518.8	0.01	0.00	-0.01
8,300.0	89.98	0.80	6,622.5	1,543.6	-899.2	1,618.3	0.01	0.00	-0.01
8,400.0	89.98	0.79	6,622.6	1,643.6	-897.8	1,717.7	0.01	0.00	-0.01
8,500.0	89.98	0.78	6,622.6	1,743.6	-896.4	1,817.2	0.01	0.00	-0.01
8,600.0	89.98	0.78	6,622.7	1,843.6	-895.1	1,916.7	0.01	0.00	-0.01
8,700.0	89.98	0.77	6,622.7	1,943.6	-893.7	2,016.1	0.01	0.00	-0.01
8,800.0	89.98	0.76	6,622.7	2,043.6	-892.4	2,115.6	0.01	0.00	-0.01
8,900.0	89.98	0.76	6,622.8	2,143.6	-891.1	2,215.1	0.01	0.00	-0.01
9,000.0	89.98	0.75	6,622.8	2,243.6	-889.8	2,314.5	0.01	0.00	-0.01
9,100.0	89.98	0.74	6,622.8	2,343.6	-888.5	2,414.0	0.01	0.00	-0.01
9,200.0	89.98	0.74	6,622.9	2,443.6	-887.2	2,513.5	0.01	0.00	-0.01
9,300.0	89.98	0.73	6,622.9	2,543.5	-885.9	2,612.9	0.01	0.00	-0.01
9,400.0	89.98	0.72	6,622.9	2,643.5	-884.6	2,712.4	0.01	0.00	-0.01
9,500.0	89.99	0.71	6,622.9	2,743.5	-883.4	2,811.9	0.01	0.00	-0.01
9,600.0	89.99	0.71	6,623.0	2,843.5	-882.1	2,911.4	0.01	0.00	-0.01

Survey Report

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Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	WELL @ 4953.0ft (Original Well Elev)
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Well:	ROSS 8-60 18-7-4	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)
9,700.0	89.99	0.70	6,623.0	2,943.5	-880.9	3,010.8	0.01	0.00	-0.01
9,800.0	89.99	0.69	6,623.0	3,043.5	-879.7	3,110.3	0.01	0.00	-0.01
9,900.0	89.99	0.69	6,623.0	3,143.5	-878.5	3,209.8	0.01	0.00	-0.01
10,000.0	89.99	0.68	6,623.1	3,243.5	-877.3	3,309.3	0.01	0.00	-0.01
10,100.0	89.99	0.67	6,623.1	3,343.5	-876.1	3,408.8	0.01	0.00	-0.01
10,200.0	89.99	0.66	6,623.1	3,443.5	-874.9	3,508.2	0.01	0.00	-0.01
10,300.0	89.99	0.66	6,623.1	3,543.5	-873.8	3,607.7	0.01	0.00	-0.01
10,400.0	89.99	0.65	6,623.1	3,643.5	-872.7	3,707.2	0.01	0.00	-0.01
10,500.0	89.99	0.64	6,623.1	3,743.5	-871.5	3,806.7	0.01	0.00	-0.01
10,600.0	89.99	0.64	6,623.2	3,843.5	-870.4	3,906.2	0.01	0.00	-0.01
10,700.0	89.99	0.63	6,623.2	3,943.4	-869.3	4,005.7	0.01	0.00	-0.01
10,800.0	89.99	0.62	6,623.2	4,043.4	-868.2	4,105.2	0.01	0.00	-0.01
10,900.0	90.00	0.62	6,623.2	4,143.4	-867.1	4,204.6	0.01	0.00	-0.01
11,000.0	90.00	0.61	6,623.2	4,243.4	-866.1	4,304.1	0.01	0.00	-0.01
11,100.0	90.00	0.60	6,623.2	4,343.4	-865.0	4,403.6	0.01	0.00	-0.01
11,200.0	90.00	0.59	6,623.2	4,443.4	-864.0	4,503.1	0.01	0.00	-0.01
11,300.0	90.00	0.59	6,623.2	4,543.4	-862.9	4,602.6	0.01	0.00	-0.01
11,400.0	90.00	0.58	6,623.2	4,643.4	-861.9	4,702.1	0.01	0.00	-0.01
11,500.0	90.00	0.57	6,623.2	4,743.4	-860.9	4,801.6	0.01	0.00	-0.01
11,600.0	90.00	0.57	6,623.2	4,843.4	-859.9	4,901.1	0.01	0.00	-0.01
11,700.0	90.00	0.56	6,623.2	4,943.4	-858.9	5,000.6	0.01	0.00	-0.01
11,800.0	90.00	0.55	6,623.2	5,043.4	-858.0	5,100.1	0.01	0.00	-0.01
11,900.0	90.00	0.55	6,623.2	5,143.4	-857.0	5,199.6	0.01	0.00	-0.01
12,000.0	90.00	0.54	6,623.2	5,243.4	-856.0	5,299.1	0.01	0.00	-0.01
12,100.0	90.00	0.53	6,623.2	5,343.4	-855.1	5,398.6	0.01	0.00	-0.01
12,200.0	90.01	0.52	6,623.2	5,443.4	-854.2	5,498.1	0.01	0.00	-0.01
12,300.0	90.01	0.52	6,623.2	5,543.4	-853.3	5,597.7	0.01	0.00	-0.01
12,400.0	90.01	0.51	6,623.2	5,643.4	-852.4	5,697.2	0.01	0.00	-0.01
12,500.0	90.01	0.50	6,623.1	5,743.4	-851.5	5,796.7	0.01	0.00	-0.01
12,600.0	90.01	0.50	6,623.1	5,843.4	-850.6	5,896.2	0.01	0.00	-0.01
12,700.0	90.01	0.49	6,623.1	5,943.3	-849.8	5,995.7	0.01	0.00	-0.01
12,800.0	90.01	0.48	6,623.1	6,043.3	-848.9	6,095.2	0.01	0.00	-0.01
12,900.0	90.01	0.48	6,623.1	6,143.3	-848.1	6,194.7	0.01	0.00	-0.01
13,000.0	90.01	0.47	6,623.1	6,243.3	-847.3	6,294.2	0.01	0.00	-0.01
13,100.0	90.01	0.46	6,623.0	6,343.3	-846.5	6,393.8	0.01	0.00	-0.01
13,200.0	90.01	0.45	6,623.0	6,443.3	-845.7	6,493.3	0.01	0.00	-0.01
13,300.0	90.01	0.45	6,623.0	6,543.3	-844.9	6,592.8	0.01	0.00	-0.01
13,400.0	90.01	0.44	6,623.0	6,643.3	-844.1	6,692.3	0.01	0.00	-0.01
13,500.0	90.02	0.43	6,622.9	6,743.3	-843.3	6,791.9	0.01	0.00	-0.01
13,600.0	90.02	0.43	6,622.9	6,843.3	-842.6	6,891.4	0.01	0.00	-0.01
13,700.0	90.02	0.42	6,622.9	6,943.3	-841.8	6,990.9	0.01	0.00	-0.01
13,800.0	90.02	0.41	6,622.9	7,043.3	-841.1	7,090.4	0.01	0.00	-0.01
13,900.0	90.02	0.40	6,622.8	7,143.3	-840.4	7,190.0	0.01	0.00	-0.01

Survey Report

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well ROSS 8-60 18-7-4
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	WELL @ 4953.0ft (Original Well Elev)
Site:	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	MD Reference:	WELL @ 4953.0ft (Original Well Elev)
Well:	ROSS 8-60 18-7-4	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)
14,000.0	90.02	0.40	6,622.8	7,243.3	-839.7	7,289.5	0.01	0.00	-0.01
14,100.0	90.02	0.39	6,622.8	7,343.3	-839.0	7,389.0	0.01	0.00	-0.01
14,200.0	90.02	0.38	6,622.7	7,443.3	-838.3	7,488.5	0.01	0.00	-0.01
14,300.0	90.02	0.38	6,622.7	7,543.3	-837.7	7,588.1	0.01	0.00	-0.01
14,400.0	90.02	0.37	6,622.7	7,643.3	-837.0	7,687.6	0.01	0.00	-0.01
14,500.0	90.02	0.36	6,622.6	7,743.3	-836.4	7,787.1	0.01	0.00	-0.01
14,600.0	90.02	0.36	6,622.6	7,843.3	-835.8	7,886.7	0.01	0.00	-0.01
14,700.0	90.02	0.35	6,622.5	7,943.3	-835.1	7,986.2	0.01	0.00	-0.01
14,800.0	90.02	0.34	6,622.5	8,043.3	-834.5	8,085.8	0.01	0.00	-0.01
14,900.0	90.03	0.33	6,622.4	8,143.3	-834.0	8,185.3	0.01	0.00	-0.01
15,000.0	90.03	0.33	6,622.4	8,243.3	-833.4	8,284.8	0.01	0.00	-0.01
15,100.0	90.03	0.32	6,622.4	8,343.3	-832.8	8,384.4	0.01	0.00	-0.01
15,200.0	90.03	0.31	6,622.3	8,443.3	-832.3	8,483.9	0.01	0.00	-0.01
15,300.0	90.03	0.31	6,622.3	8,543.3	-831.7	8,583.5	0.01	0.00	-0.01
15,400.0	90.03	0.30	6,622.2	8,643.3	-831.2	8,683.0	0.01	0.00	-0.01
15,500.0	90.03	0.29	6,622.2	8,743.3	-830.7	8,782.6	0.01	0.00	-0.01
15,600.0	90.03	0.29	6,622.1	8,843.3	-830.2	8,882.1	0.01	0.00	-0.01
15,700.0	90.03	0.28	6,622.0	8,943.3	-829.7	8,981.7	0.01	0.00	-0.01
15,778.5	90.03	0.27	6,622.0	9,021.8	-829.3	9,059.8	0.01	0.00	-0.01
Start 149.7 hold at 15778.5 MD - ROSS 8-60 18-7-4 EPI									
15,800.0	90.03	0.27	6,622.0	9,043.3	-829.2	9,081.2	0.00	0.00	0.00
15,900.0	90.03	0.27	6,621.9	9,143.3	-828.7	9,180.8	0.00	0.00	0.00
15,928.2	90.03	0.27	6,621.9	9,171.5	-828.6	9,208.8	0.00	0.00	0.00
TD at 15928.2 - ROSS 8-60 18-7-4 BHL									

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 18-7-4 BF - plan hits target center - Point	0.00	0.88	6,622.0	440.9	-915.3	452,733.56	1,029,565.88	40° 39' 27.713 N	104° 8' 17.322 W
ROSS 8-60 18-7-4 EF - plan hits target center - Point	0.00	0.88	6,622.0	9,021.8	-829.3	455,349.11	1,029,551.83	40° 40' 52.504 N	104° 8' 16.210 W
ROSS 8-60 18-7-4 BF - plan misses target center by 0.2ft at 15928.2ft MD (6621.9 TVD, 9171.5 N, -828.6 E) - Point	0.00	0.88	6,622.0	9,171.5	-828.5	455,394.75	1,029,551.39	40° 40' 53.983 N	104° 8' 16.199 W

Survey Report

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well ROSS 8-60 18-7-4
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	WELL @ 4953.0ft (Original Well Elev)
Site:	ROSS 8-60 18 SESW & SWSE SEC 18 T8N R60W 6th P.M.	MD Reference:	WELL @ 4953.0ft (Original Well Elev)
Well:	ROSS 8-60 18-7-4	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.16 Single User Db

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,646.2	3,593.0	Parkman				
3,978.9	3,918.0	Sussex				
4,941.1	4,858.0	Shannon				
6,317.9	6,217.0	Sharon Springs Shale				
6,387.3	6,282.0	Niobrara Formation				
6,398.3	6,292.0	Niobrara A Chalk				
6,527.7	6,402.0	Niobrara B Chalk				
6,566.8	6,432.0	Niobrara B Landing Point				
6,623.2	6,472.0	Niobrara C Chalk				
6,678.0	6,507.0	Niobrara C Landing Point				
6,818.9	6,577.0	Ft Hays				
6,940.4	6,612.0	Codell				
7,047.4	6,622.0	Codell Landing Point				
9,700.2	6,623.0	Carlile Shale				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
800	800	0	0	Start Build 1.50	
1623	1617	-26	-85	Start 3700.7 hold at 1623.3 MD	
5324	5232	-256	-842	Start Drop -1.50	
6147	6049	-282	-926	Start Build 10.00	
7047	6622	291	-918	Start DLS 0.02 TFO -180.00	
7197	6622	441	-915	Start DLS 0.01 TFO -83.88	
15,778	6622	9022	-829	Start 149.7 hold at 15778.5 MD	
15,928	6622	9171	-829	TD at 15928.2	