

Whiting Oil and Gas Corporation

Weld County, CO
Sec. 29-T10N-R58W
Razor #29H-3216

Plan A

Plan: Rev A0

Sperry Drilling Services Proposal Report

11 June, 2014

Well Coordinates: 1,542,141.47 N, 3,447,629.66 E (40° 48' 37.28" N, 103° 52' 58.42" W)

Ground Level: 4,862.00 usft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Geodetic Scale Factor Applied

Version: 5000.1 Build: 70

Centered on Well Razor #29H-3216
KB 17' @ 4879.00usft (Original Well Elev)

N

True

API - US Survey Feet - Custom

HALLIBURTON

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	
3	1200.00	4.00	151.50	1199.84	-6.13	3.33	2.00	151.50	6.45	
4	5332.69	4.00	151.50	5322.46	-259.48	140.89	0.00	0.00	273.07	
5	6114.51	90.00	151.50	5807.00	-716.11	388.82	11.00	0.00	753.62	
6	6189.51	90.00	151.50	5807.00	-782.03	424.61	0.00	0.00	822.98	
7	7085.29	90.00	178.37	5807.00	-1639.12	655.28	3.00	90.00	1699.84	
8	13129.15	90.00	178.37	5807.00	-7680.54	826.82	0.00	0.00	7724.92	Razor 29H-3216 BHL

Azimuths to True North
 Magnetic Field
 Magnetic North: 8.05°
 Strength: 53032.0snT
 Dip Angle: 67.40°
 Date: 6/10/2014
 Model: BGGM2013

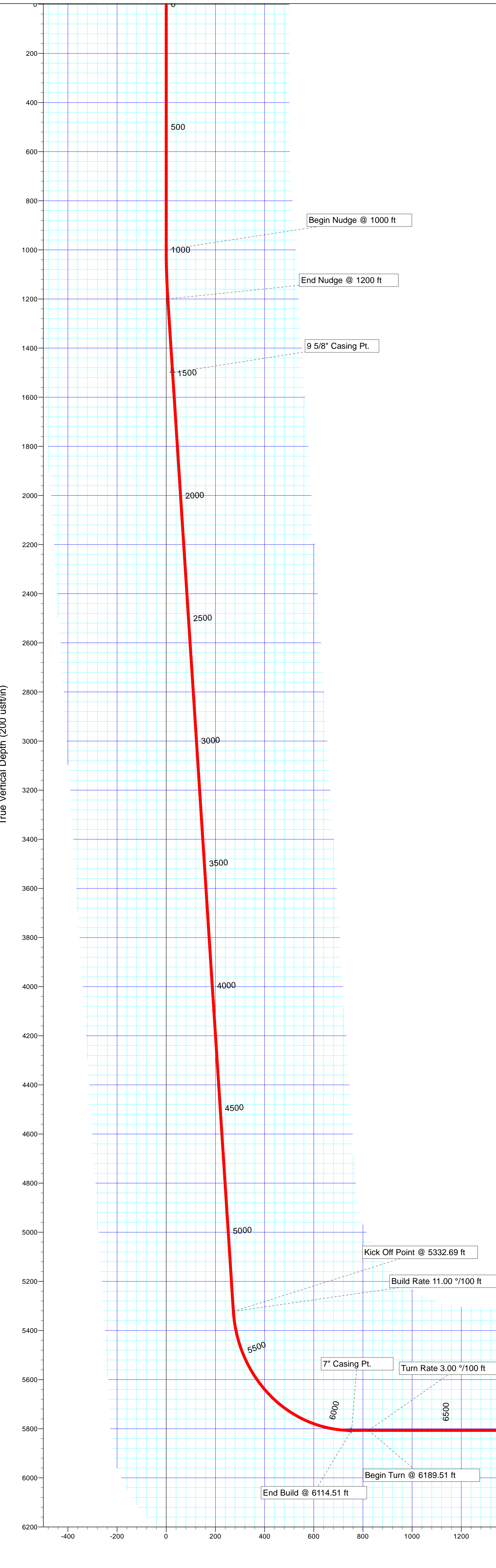
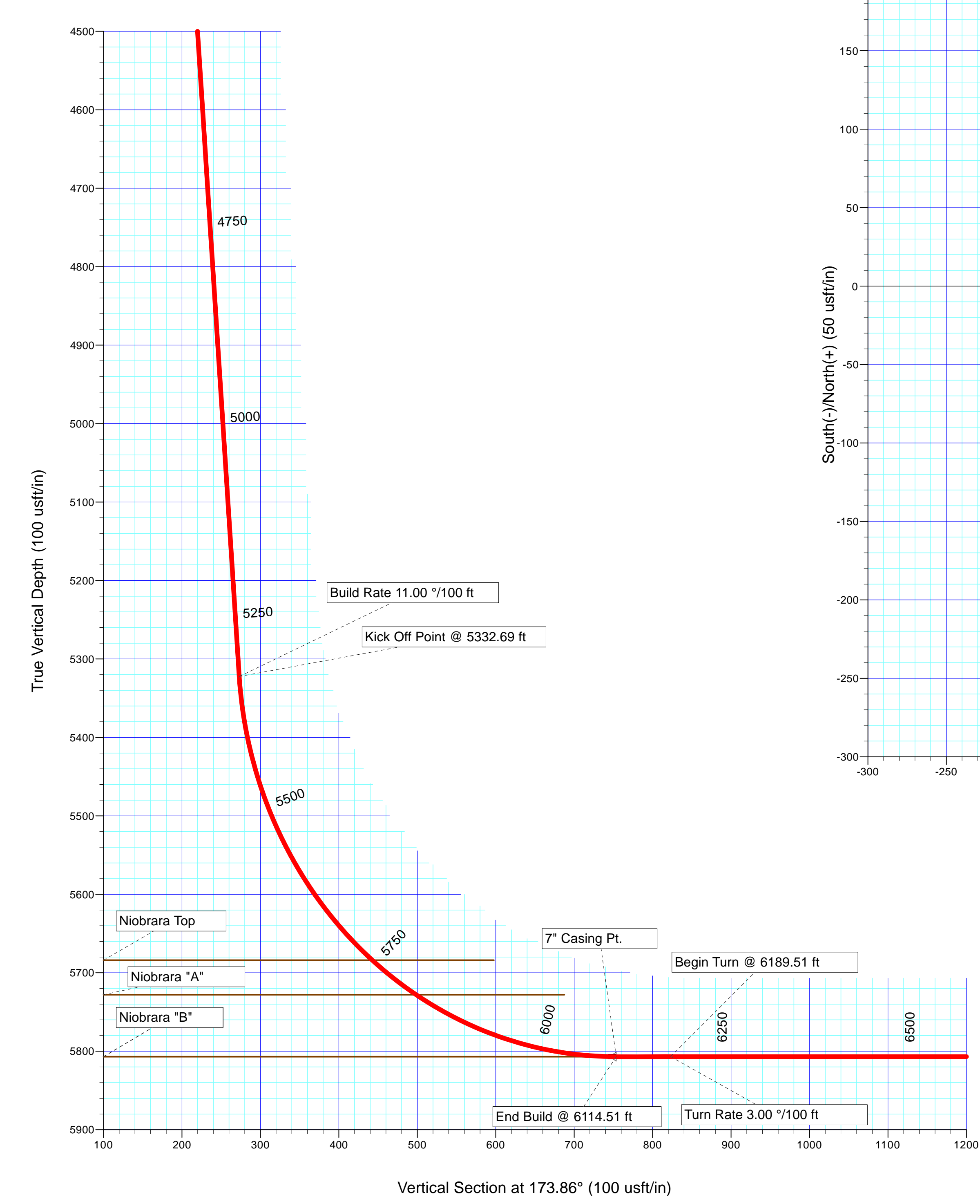
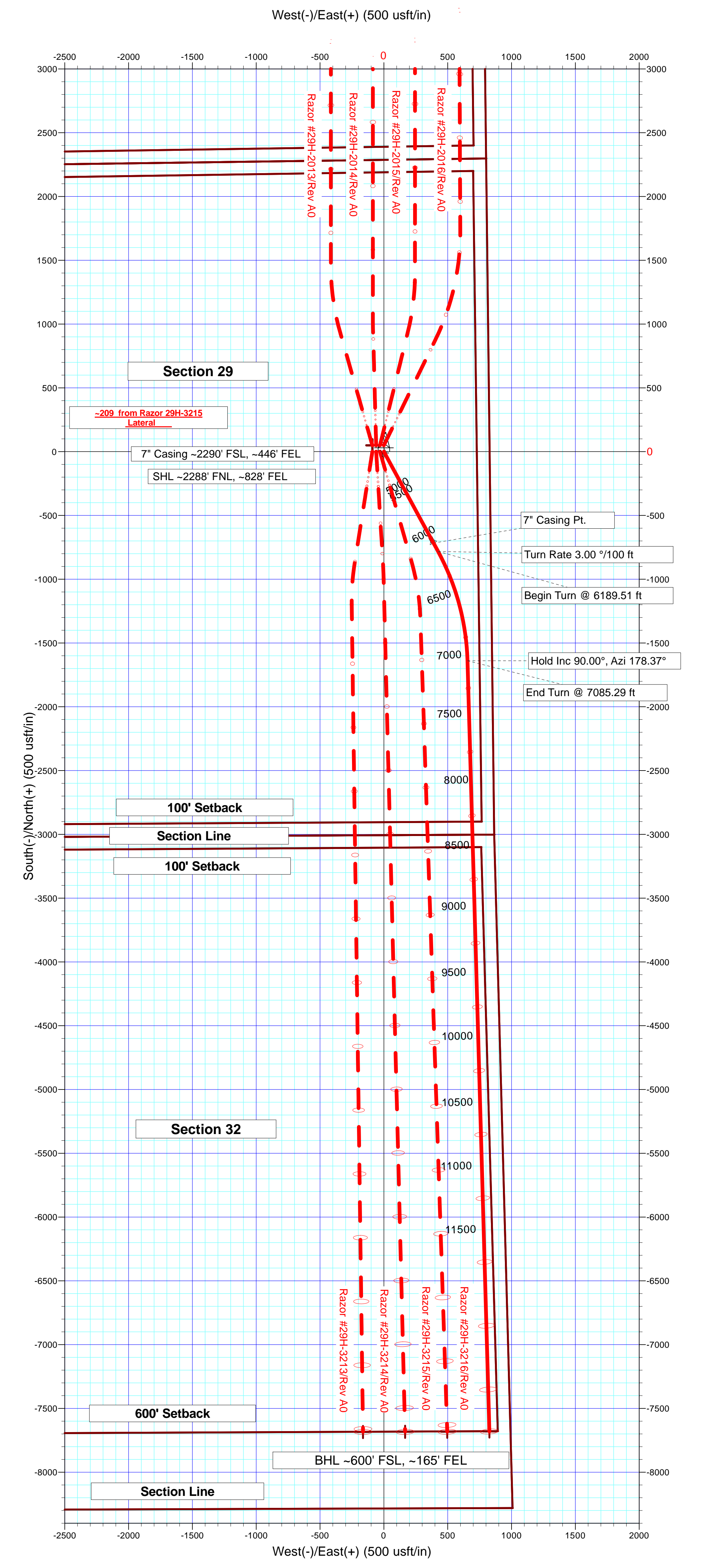
Plan: Rev A0 (Razor #29H-3216/Plan A)

Created By: Troy L. Stoute Date: 17:37, June 11 2014

Checked: _____ Date: _____

Reviewed: _____ Date: _____

Approved: _____ Date: _____



Vertical Section at 173.86° (200 usft/in)

Plan Report for Razor #29H-3216 - Rev A0

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)	Toolface Azimuth (°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 1000 ft										
1,100.00	2.00	151.50	1,099.98	-1.53	0.83	1.61	2.00	2.00	0.00	151.50
1,200.00	4.00	151.50	1,199.84	-6.13	3.33	6.45	2.00	2.00	0.00	0.00
End Nudge @ 1200 ft										
1,300.00	4.00	151.50	1,299.59	-12.26	6.66	12.91	0.00	0.00	0.00	0.00
1,400.00	4.00	151.50	1,399.35	-18.39	9.99	19.36	0.00	0.00	0.00	0.00
1,435.74	4.00	151.50	1,435.00	-20.58	11.18	21.66	0.00	0.00	0.00	0.00
Pierre										
1,500.00	4.00	151.50	1,499.11	-24.52	13.32	25.81	0.00	0.00	0.00	0.00
1,500.90	4.00	151.50	1,500.00	-24.58	13.35	25.87	0.00	0.00	0.00	0.00
9 5/8" Casing Pt.										
1,600.00	4.00	151.50	1,598.86	-30.65	16.64	32.26	0.00	0.00	0.00	0.00
1,700.00	4.00	151.50	1,698.62	-36.78	19.97	38.71	0.00	0.00	0.00	0.00
1,800.00	4.00	151.50	1,798.38	-42.91	23.30	45.16	0.00	0.00	0.00	0.00
1,900.00	4.00	151.50	1,898.13	-49.05	26.63	51.61	0.00	0.00	0.00	0.00
2,000.00	4.00	151.50	1,997.89	-55.18	29.96	58.06	0.00	0.00	0.00	0.00
2,100.00	4.00	151.50	2,097.65	-61.31	33.29	64.52	0.00	0.00	0.00	0.00
2,200.00	4.00	151.50	2,197.40	-67.44	36.61	70.97	0.00	0.00	0.00	0.00
2,300.00	4.00	151.50	2,297.16	-73.57	39.94	77.42	0.00	0.00	0.00	0.00
2,400.00	4.00	151.50	2,396.91	-79.70	43.27	83.87	0.00	0.00	0.00	0.00
2,500.00	4.00	151.50	2,496.67	-85.83	46.60	90.32	0.00	0.00	0.00	0.00
2,600.00	4.00	151.50	2,596.43	-91.96	49.93	96.77	0.00	0.00	0.00	0.00
2,700.00	4.00	151.50	2,696.18	-98.09	53.26	103.22	0.00	0.00	0.00	0.00
2,800.00	4.00	151.50	2,795.94	-104.22	56.59	109.68	0.00	0.00	0.00	0.00
2,900.00	4.00	151.50	2,895.70	-110.35	59.91	116.13	0.00	0.00	0.00	0.00
3,000.00	4.00	151.50	2,995.45	-116.48	63.24	122.58	0.00	0.00	0.00	0.00
3,100.00	4.00	151.50	3,095.21	-122.61	66.57	129.03	0.00	0.00	0.00	0.00
3,200.00	4.00	151.50	3,194.97	-128.74	69.90	135.48	0.00	0.00	0.00	0.00
3,300.00	4.00	151.50	3,294.72	-134.87	73.23	141.93	0.00	0.00	0.00	0.00
3,400.00	4.00	151.50	3,394.48	-141.00	76.56	148.38	0.00	0.00	0.00	0.00
3,500.00	4.00	151.50	3,494.23	-147.13	79.89	154.84	0.00	0.00	0.00	0.00
3,600.00	4.00	151.50	3,593.99	-153.26	83.21	161.29	0.00	0.00	0.00	0.00
3,700.00	4.00	151.50	3,693.75	-159.39	86.54	167.74	0.00	0.00	0.00	0.00
3,800.00	4.00	151.50	3,793.50	-165.52	89.87	174.19	0.00	0.00	0.00	0.00
3,900.00	4.00	151.50	3,893.26	-171.65	93.20	180.64	0.00	0.00	0.00	0.00
4,000.00	4.00	151.50	3,993.02	-177.78	96.53	187.09	0.00	0.00	0.00	0.00
4,100.00	4.00	151.50	4,092.77	-183.91	99.86	193.54	0.00	0.00	0.00	0.00
4,200.00	4.00	151.50	4,192.53	-190.04	103.18	199.99	0.00	0.00	0.00	0.00
4,300.00	4.00	151.50	4,292.29	-196.17	106.51	206.45	0.00	0.00	0.00	0.00
4,400.00	4.00	151.50	4,392.04	-202.30	109.84	212.90	0.00	0.00	0.00	0.00
4,500.00	4.00	151.50	4,491.80	-208.43	113.17	219.35	0.00	0.00	0.00	0.00
4,600.00	4.00	151.50	4,591.56	-214.56	116.50	225.80	0.00	0.00	0.00	0.00
4,700.00	4.00	151.50	4,691.31	-220.69	119.83	232.25	0.00	0.00	0.00	0.00
4,800.00	4.00	151.50	4,791.07	-226.82	123.16	238.70	0.00	0.00	0.00	0.00
4,900.00	4.00	151.50	4,890.82	-232.95	126.48	245.15	0.00	0.00	0.00	0.00
5,000.00	4.00	151.50	4,990.58	-239.08	129.81	251.61	0.00	0.00	0.00	0.00
5,100.00	4.00	151.50	5,090.34	-245.22	133.14	258.06	0.00	0.00	0.00	0.00
5,200.00	4.00	151.50	5,190.09	-251.35	136.47	264.51	0.00	0.00	0.00	0.00
5,300.00	4.00	151.50	5,289.85	-257.48	139.80	270.96	0.00	0.00	0.00	0.00
5,332.69	4.00	151.50	5,322.46	-259.48	140.89	273.07	0.00	0.00	0.00	0.00
Kick Off Point @ 5332.69 ft - Build Rate 11.00 °/100 ft										
5,400.00	11.40	151.50	5,389.12	-267.40	145.19	281.41	11.00	11.00	0.00	0.00
5,500.00	22.40	151.50	5,484.65	-292.92	159.04	308.26	11.00	11.00	0.00	0.00
5,600.00	33.40	151.50	5,572.89	-333.98	181.34	351.47	11.00	11.00	0.00	0.00
5,700.00	44.40	151.50	5,650.59	-389.09	211.26	409.46	11.00	11.00	0.00	0.00
5,749.11	49.81	151.50	5,684.00	-420.69	228.42	442.72	11.00	11.00	0.00	0.00

Plan Report for Razor #29H-3216 - Rev A0

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)	Toolface Azimuth (°)
Niobrara Top										
5,800.00	55.40	151.50	5,714.90	-456.21	247.70	480.10	11.00	11.00	0.00	0.00
5,823.88	58.03	151.50	5,728.00	-473.76	257.23	498.57	11.00	11.00	0.00	0.00
Niobrara "A"										
5,900.00	66.40	151.50	5,763.45	-532.89	289.33	560.79	11.00	11.00	0.00	0.00
6,000.00	77.40	151.50	5,794.46	-616.29	334.62	648.57	11.00	11.00	0.00	0.00
6,100.00	88.40	151.50	5,806.80	-703.37	381.90	740.20	11.00	11.00	0.00	0.00
6,114.51	90.00	151.50	5,807.00	-716.12	388.82	753.62	11.00	11.00	0.00	0.00
End Build @ 6114.51 ft - Niobrara "B" - 7" Casing Pt.										
6,189.51	90.00	151.50	5,807.00	-782.03	424.61	822.98	0.00	0.00	0.00	0.00
Turn Rate 3.00 °/100 ft - Begin Turn @ 6189.51 ft										
6,200.00	90.00	151.81	5,807.00	-791.26	429.59	832.69	3.00	0.00	3.00	90.00
6,300.00	90.00	154.81	5,807.00	-880.60	474.49	926.33	3.00	0.00	3.00	90.00
6,400.00	90.00	157.81	5,807.00	-972.16	514.66	1,021.67	3.00	0.00	3.00	90.00
6,500.00	90.00	160.81	5,807.00	-1,065.71	549.98	1,118.45	3.00	0.00	3.00	90.00
6,600.00	90.00	163.81	5,807.00	-1,160.97	580.35	1,216.42	3.00	0.00	3.00	90.00
6,700.00	90.00	166.81	5,807.00	-1,257.69	605.70	1,315.30	3.00	0.00	3.00	90.00
6,800.00	90.00	169.81	5,807.00	-1,355.61	625.95	1,414.82	3.00	0.00	3.00	90.00
6,900.00	90.00	172.81	5,807.00	-1,454.45	641.05	1,514.71	3.00	0.00	3.00	90.00
7,000.00	90.00	175.81	5,807.00	-1,553.95	650.95	1,614.70	3.00	0.00	3.00	90.00
7,085.29	90.00	178.37	5,807.00	-1,639.12	655.28	1,699.84	3.00	0.00	3.00	90.00
End Turn @ 7085.29 ft - Hold Inc 90.00°, Azi 178.37°										
7,100.00	90.00	178.37	5,807.00	-1,653.83	655.70	1,714.51	0.00	0.00	0.00	90.00
7,200.00	90.00	178.37	5,807.00	-1,753.79	658.53	1,814.20	0.00	0.00	0.00	0.00
7,300.00	90.00	178.37	5,807.00	-1,853.74	661.37	1,913.88	0.00	0.00	0.00	0.00
7,400.00	90.00	178.37	5,807.00	-1,953.70	664.21	2,013.57	0.00	0.00	0.00	0.00
7,500.00	90.00	178.37	5,807.00	-2,053.66	667.05	2,113.26	0.00	0.00	0.00	0.00
7,600.00	90.00	178.37	5,807.00	-2,153.62	669.89	2,212.95	0.00	0.00	0.00	0.00
7,700.00	90.00	178.37	5,807.00	-2,253.58	672.73	2,312.64	0.00	0.00	0.00	0.00
7,800.00	90.00	178.37	5,807.00	-2,353.54	675.56	2,412.33	0.00	0.00	0.00	0.00
7,900.00	90.00	178.37	5,807.00	-2,453.50	678.40	2,512.02	0.00	0.00	0.00	0.00
8,000.00	90.00	178.37	5,807.00	-2,553.46	681.24	2,611.71	0.00	0.00	0.00	0.00
8,100.00	90.00	178.37	5,807.00	-2,653.42	684.08	2,711.40	0.00	0.00	0.00	0.00
8,200.00	90.00	178.37	5,807.00	-2,753.38	686.92	2,811.09	0.00	0.00	0.00	0.00
8,300.00	90.00	178.37	5,807.00	-2,853.34	689.76	2,910.78	0.00	0.00	0.00	0.00
8,400.00	90.00	178.37	5,807.00	-2,953.30	692.59	3,010.47	0.00	0.00	0.00	0.00
8,500.00	90.00	178.37	5,807.00	-3,053.26	695.43	3,110.16	0.00	0.00	0.00	0.00
8,600.00	90.00	178.37	5,807.00	-3,153.22	698.27	3,209.85	0.00	0.00	0.00	0.00
8,700.00	90.00	178.37	5,807.00	-3,253.18	701.11	3,309.53	0.00	0.00	0.00	0.00
8,800.00	90.00	178.37	5,807.00	-3,353.14	703.95	3,409.22	0.00	0.00	0.00	0.00
8,900.00	90.00	178.37	5,807.00	-3,453.10	706.79	3,508.91	0.00	0.00	0.00	0.00
9,000.00	90.00	178.37	5,807.00	-3,553.06	709.62	3,608.60	0.00	0.00	0.00	0.00
9,100.00	90.00	178.37	5,807.00	-3,653.02	712.46	3,708.29	0.00	0.00	0.00	0.00
9,200.00	90.00	178.37	5,807.00	-3,752.98	715.30	3,807.98	0.00	0.00	0.00	0.00
9,300.00	90.00	178.37	5,807.00	-3,852.94	718.14	3,907.67	0.00	0.00	0.00	0.00
9,400.00	90.00	178.37	5,807.00	-3,952.90	720.98	4,007.36	0.00	0.00	0.00	0.00
9,500.00	90.00	178.37	5,807.00	-4,052.86	723.82	4,107.05	0.00	0.00	0.00	0.00
9,600.00	90.00	178.37	5,807.00	-4,152.82	726.65	4,206.74	0.00	0.00	0.00	0.00
9,700.00	90.00	178.37	5,807.00	-4,252.78	729.49	4,306.43	0.00	0.00	0.00	0.00
9,800.00	90.00	178.37	5,807.00	-4,352.74	732.33	4,406.12	0.00	0.00	0.00	0.00
9,900.00	90.00	178.37	5,807.00	-4,452.70	735.17	4,505.81	0.00	0.00	0.00	0.00
10,000.00	90.00	178.37	5,807.00	-4,552.66	738.01	4,605.50	0.00	0.00	0.00	0.00
10,100.00	90.00	178.37	5,807.00	-4,652.62	740.85	4,705.18	0.00	0.00	0.00	0.00
10,200.00	90.00	178.37	5,807.00	-4,752.58	743.68	4,804.87	0.00	0.00	0.00	0.00
10,300.00	90.00	178.37	5,807.00	-4,852.54	746.52	4,904.56	0.00	0.00	0.00	0.00
10,400.00	90.00	178.37	5,807.00	-4,952.50	749.36	5,004.25	0.00	0.00	0.00	0.00
10,500.00	90.00	178.37	5,807.00	-5,052.46	752.20	5,103.94	0.00	0.00	0.00	0.00
10,600.00	90.00	178.37	5,807.00	-5,152.42	755.04	5,203.63	0.00	0.00	0.00	0.00
10,700.00	90.00	178.37	5,807.00	-5,252.38	757.88	5,303.32	0.00	0.00	0.00	0.00

Plan Report for Razor #29H-3216 - Rev A0

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)	Toolface Azimuth (°)
10,800.00	90.00	178.37	5,807.00	-5,352.33	760.71	5,403.01	0.00	0.00	0.00	0.00
10,900.00	90.00	178.37	5,807.00	-5,452.29	763.55	5,502.70	0.00	0.00	0.00	0.00
11,000.00	90.00	178.37	5,807.00	-5,552.25	766.39	5,602.39	0.00	0.00	0.00	0.00
11,100.00	90.00	178.37	5,807.00	-5,652.21	769.23	5,702.08	0.00	0.00	0.00	0.00
11,200.00	90.00	178.37	5,807.00	-5,752.17	772.07	5,801.77	0.00	0.00	0.00	0.00
11,300.00	90.00	178.37	5,807.00	-5,852.13	774.90	5,901.46	0.00	0.00	0.00	0.00
11,400.00	90.00	178.37	5,807.00	-5,952.09	777.74	6,001.15	0.00	0.00	0.00	0.00
11,500.00	90.00	178.37	5,807.00	-6,052.05	780.58	6,100.83	0.00	0.00	0.00	0.00
11,600.00	90.00	178.37	5,807.00	-6,152.01	783.42	6,200.52	0.00	0.00	0.00	0.00
11,700.00	90.00	178.37	5,807.00	-6,251.97	786.26	6,300.21	0.00	0.00	0.00	0.00
11,800.00	90.00	178.37	5,807.00	-6,351.93	789.10	6,399.90	0.00	0.00	0.00	0.00
11,900.00	90.00	178.37	5,807.00	-6,451.89	791.93	6,499.59	0.00	0.00	0.00	0.00
12,000.00	90.00	178.37	5,807.00	-6,551.85	794.77	6,599.28	0.00	0.00	0.00	0.00
12,100.00	90.00	178.37	5,807.00	-6,651.81	797.61	6,698.97	0.00	0.00	0.00	0.00
12,200.00	90.00	178.37	5,807.00	-6,751.77	800.45	6,798.66	0.00	0.00	0.00	0.00
12,300.00	90.00	178.37	5,807.00	-6,851.73	803.29	6,898.35	0.00	0.00	0.00	0.00
12,400.00	90.00	178.37	5,807.00	-6,951.69	806.13	6,998.04	0.00	0.00	0.00	0.00
12,500.00	90.00	178.37	5,807.00	-7,051.65	808.96	7,097.73	0.00	0.00	0.00	0.00
12,600.00	90.00	178.37	5,807.00	-7,151.61	811.80	7,197.42	0.00	0.00	0.00	0.00
12,700.00	90.00	178.37	5,807.00	-7,251.57	814.64	7,297.11	0.00	0.00	0.00	0.00
12,800.00	90.00	178.37	5,807.00	-7,351.53	817.48	7,396.80	0.00	0.00	0.00	0.00
12,900.00	90.00	178.37	5,807.00	-7,451.49	820.32	7,496.48	0.00	0.00	0.00	0.00
13,000.00	90.00	178.37	5,807.00	-7,551.45	823.16	7,596.17	0.00	0.00	0.00	0.00
13,100.00	90.00	178.37	5,807.00	-7,651.41	825.99	7,695.86	0.00	0.00	0.00	0.00
13,129.10	90.00	178.37	5,807.00	-7,680.50	826.82	7,724.87	0.00	0.00	0.00	0.00
Total Depth 13129.15 ft										
13,129.15	90.00	178.37	5,807.00	-7,680.54	826.82	7,724.92	0.00	0.00	0.00	0.00

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,000.00	1,000.00	0.00	0.00	Begin Nudge @ 1000 ft
1,200.00	1,199.84	-6.13	3.33	End Nudge @ 1200 ft
5,332.69	5,322.46	-259.48	140.89	Kick Off Point @ 5332.69 ft
5,332.69	5,322.46	-259.48	140.89	Build Rate 11.00 °/100 ft
6,114.51	5,807.00	-716.12	388.82	End Build @ 6114.51 ft
6,189.51	5,807.00	-782.03	424.61	Turn Rate 3.00 °/100 ft
6,189.51	5,807.00	-782.03	424.61	Begin Turn @ 6189.51 ft
7,085.29	5,807.00	-1,639.12	655.28	End Turn @ 7085.29 ft
7,085.29	5,807.00	-1,639.12	655.28	Hold Inc 90.00°, Azi 178.37°
13,129.10	5,807.00	-7,680.50	826.82	Total Depth 13129.15 ft

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (usft)
				+N/-S (usft)	+E/-W (usft)	
Target	Razor 29H-3216 BHL	173.86	Slot	0.00	0.00	0.00

Survey tool program

From (usft)	To (usft)	Survey/Plan	Survey Tool
0.00	1,500.00	Rev A0	MWD+IFR1+MS+sag
1,500.00	6,114.51	Rev A0	MWD+IFR1+MS+sag
6,114.51	13,129.15	Rev A0	MWD+IFR1+MS+sag

Plan Report for Razor #29H-3216 - Rev A0**Casing Details**

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,500.90	1,500.00	9 5/8" Casing Pt.	9-5/8	13-1/2
6,114.51	5,807.00	7" Casing Pt.	7	8-3/4

Formation Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,435.74	1,435.00	Pierre		0.00	
5,749.11	5,684.00	Niobrara Top		0.00	
5,823.88	5,728.00	Niobrara "A"		0.00	
6,114.51	5,807.00	Niobrara "B"		0.00	

Targets associated with this wellbore

Target Name	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Shape
Razor Section 32 Lines	0.00	49.56	-90.00	Polygon
Razor Section 20 Lines	0.00	49.56	-90.00	Polygon
Razor Section 29 Lines	0.00	49.56	-90.00	Polygon
Razor Section 32 100' Setback	0.00	49.56	-90.00	Polygon
Razor Section 29 100' Setback	0.00	49.56	-90.00	Polygon
Razor Section 20 100' Setback	0.00	49.56	-90.00	Polygon
Razor 29H-3216 BHL	5,807.00	-7,680.54	826.82	Point

Directional Difficulty Index

Average Dogleg over Survey:	0.89 °/100usft	Maximum Dogleg over Survey:	11.00 °/100usft at 6,114.51 usft
Net Tortousity applicable to Plans:	0.89 °/100usft	Directional Difficulty Index:	6.486

Audit Info

North Reference Sheet for Sec. 29-T10N-R58W - Razor #29H-3216 - Plan A

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.

Vertical Depths are relative to KB 17' @ 4879.00usft (Original Well Elev). Northing and Easting are relative to Razor #29H-3216

Coordinate System is US State Plane 1983, Colorado Northern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Lambert Conformal Conic (2 parallel)

Central Meridian is -105.50°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:40° 47' 0.000 N°

False Easting: 3,000,000.00usft, False Northing: 1,000,000.00usft, Scale Reduction: 1.00000450

Grid Coordinates of Well: 1,542,141.47 usft N, 3,447,629.66 usft E

Geographical Coordinates of Well: 40° 48' 37.28" N, 103° 52' 58.42" W

Grid Convergence at Surface is: 1.04°

Based upon Minimum Curvature type calculations, at a Measured Depth of 13,129.15usft

the Bottom Hole Displacement is 7,724.92usft in the Direction of 173.86° (True).

Magnetic Convergence at surface is: -7.00° (10 June 2014, , BGGM2013)

