

Noble Energy

Weld County, CO (NAD 83)

Sec. 28-T6N-R65W (Five M 28 North PAD)

Five M E28-69HN - A2

MWD Survey

Sperry Drilling Services

Final Survey Report

05 January, 2013

Well Coordinates: 1,412,730.66 N, 3,229,004.62 E (40° 27' 48.35" N, 104° 40' 37.09" W)

Ground Level: 4,712.00 ft

Local Coordinate Origin:

Centered on Well Five M E28-69HN - Slot A2

Viewing Datum:

KB=24' @ 4736.00ft (H&P 322)

TVDs to System:

N

North Reference:

Grid

Unit System:

API - US Survey Feet - Custom

Geodetic Scale Factor Applied

Version: 2003.16 Build: 431

HALLIBURTON

Design Report for Five M E28-69HN - MWD Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
790.00	0.00	0.00	790.00	0.00	0.00	0.00	0.00
Tie On To Surface Casing Assumed Vertical							
915.00	0.04	162.90	915.00	-0.04	0.01	0.01	0.03
First MWD Survey							
1,102.00	0.71	110.60	1,102.00	-0.51	1.12	1.09	0.37
1,195.00	1.07	86.08	1,194.98	-0.66	2.52	2.49	0.56
1,288.00	1.21	76.14	1,287.97	-0.36	4.34	4.32	0.26
1,381.00	1.22	105.97	1,380.95	-0.40	6.25	6.23	0.67
1,474.00	1.43	90.04	1,473.92	-0.67	8.36	8.32	0.45
1,567.00	2.25	286.68	1,566.90	-0.15	7.77	7.76	3.92
1,660.00	3.33	328.75	1,659.80	2.69	4.62	4.73	2.41
1,753.00	6.45	335.59	1,752.45	9.75	1.06	1.46	3.41
1,846.00	8.89	329.59	1,844.61	20.71	-4.74	-3.87	2.76
1,941.00	11.58	329.92	1,938.09	35.29	-13.23	-11.75	2.83
2,036.00	10.51	327.30	2,031.33	50.84	-22.69	-20.56	1.24
2,131.00	9.16	325.42	2,124.93	64.35	-31.67	-28.96	1.46
2,226.00	9.83	326.75	2,218.63	77.36	-40.40	-37.15	0.74
2,320.00	10.46	328.34	2,311.16	91.34	-49.28	-45.44	0.73
2,415.00	9.59	330.23	2,404.71	105.54	-57.74	-53.30	0.98
2,510.00	10.44	326.59	2,498.26	119.60	-66.41	-61.37	1.12
2,605.00	9.02	328.01	2,591.89	133.10	-75.09	-69.49	1.52
2,699.00	10.32	329.29	2,684.56	146.59	-83.30	-77.12	1.40
2,794.00	11.44	326.00	2,777.85	161.72	-92.91	-86.10	1.35
2,889.00	11.49	326.11	2,870.95	177.38	-103.46	-95.98	0.06
2,984.00	10.14	324.42	2,964.26	192.04	-113.60	-105.51	1.46
3,079.00	11.01	331.14	3,057.65	206.79	-122.84	-114.13	1.59
3,173.00	9.79	330.06	3,150.11	221.57	-131.16	-121.83	1.31
3,268.00	9.66	326.09	3,243.74	235.19	-139.64	-129.73	0.72
3,363.00	9.00	326.81	3,337.49	248.02	-148.16	-137.70	0.71
3,458.00	10.20	329.96	3,431.15	261.52	-156.43	-145.41	1.38
3,553.00	10.00	329.46	3,524.68	275.91	-164.84	-153.21	0.23
3,648.00	8.42	328.60	3,618.45	288.95	-172.65	-160.48	1.67
3,743.00	9.81	328.46	3,712.25	301.78	-180.51	-167.79	1.46
3,838.00	10.89	329.63	3,805.71	316.42	-189.28	-175.95	1.16
3,933.00	10.97	329.15	3,898.98	331.93	-198.45	-184.47	0.13
4,028.00	9.40	328.07	3,992.48	346.27	-207.19	-192.60	1.66
4,123.00	6.87	318.66	4,086.52	357.12	-215.05	-200.00	3.00
4,217.00	4.85	323.91	4,180.03	364.56	-221.10	-205.74	2.22
4,312.00	2.36	297.51	4,274.84	368.71	-225.21	-209.66	3.08
4,407.00	1.36	270.62	4,369.79	369.62	-228.07	-212.49	1.37
4,502.00	1.42	195.35	4,464.77	368.50	-229.51	-213.97	1.79
4,597.00	1.35	207.61	4,559.74	366.37	-230.34	-214.89	0.32
4,882.00	0.53	35.53	4,844.72	364.47	-231.13	-215.76	0.66
4,976.00	0.04	312.96	4,938.72	364.85	-230.90	-215.51	0.56
5,071.00	0.22	337.20	5,033.72	365.04	-230.99	-215.60	0.19
5,166.00	0.46	174.28	5,128.72	364.83	-231.03	-215.64	0.71
5,261.00	0.34	120.17	5,223.72	364.30	-230.74	-215.38	0.40
5,356.00	0.96	167.84	5,318.71	363.38	-230.33	-215.01	0.81
5,451.00	1.07	122.57	5,413.70	362.13	-229.42	-214.15	0.83

Design Report for Five M E28-69HN - MWD Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
5,546.00	0.58	130.69	5,508.69	361.34	-228.31	-213.07	0.53
5,641.00	0.68	134.51	5,603.68	360.63	-227.54	-212.33	0.11
5,735.00	0.54	105.39	5,697.67	360.12	-226.71	-211.53	0.36
5,830.00	0.72	106.86	5,792.67	359.83	-225.71	-210.54	0.19
5,925.00	0.85	132.88	5,887.66	359.18	-224.62	-209.48	0.40
6,020.00	1.03	165.81	5,982.65	357.87	-223.90	-208.81	0.59
6,115.00	1.38	201.88	6,077.63	355.98	-224.12	-209.10	0.86
6,210.00	2.81	229.23	6,172.56	353.40	-226.31	-211.40	1.80
6,298.00	1.05	151.32	6,260.52	351.28	-227.55	-212.73	3.17
6,345.00	1.60	109.56	6,307.51	350.68	-226.73	-211.93	2.29
6,393.00	4.94	69.95	6,355.43	351.17	-224.15	-209.34	8.01
6,440.00	8.52	82.41	6,402.10	352.32	-218.80	-203.95	8.18
6,488.00	12.68	85.11	6,449.27	353.24	-210.02	-195.14	8.73
6,535.00	15.76	86.55	6,494.83	354.06	-198.51	-183.60	6.60
6,583.00	19.04	86.50	6,540.62	354.94	-184.18	-169.25	6.83
6,630.00	23.16	87.79	6,584.46	355.76	-167.29	-152.33	8.82
6,678.00	26.79	90.02	6,627.97	356.12	-147.03	-132.08	7.81
6,724.00	31.29	90.66	6,668.17	355.98	-124.71	-109.78	9.81
6,772.00	36.42	89.67	6,708.02	355.92	-97.98	-83.08	10.75
6,819.00	41.40	88.67	6,744.58	356.36	-68.47	-53.58	10.68
6,867.00	46.11	89.73	6,779.25	356.81	-35.29	-20.41	9.93
6,914.00	50.47	90.46	6,810.51	356.74	-0.21	14.64	9.35
6,962.00	54.12	89.81	6,839.86	356.66	37.76	52.57	7.68
7,009.00	56.26	90.89	6,866.69	356.42	76.34	91.11	4.93
7,057.00	58.47	92.75	6,892.58	355.13	116.74	131.42	5.64
7,104.00	62.13	93.32	6,915.86	352.96	157.50	172.06	7.86
7,152.00	65.62	93.38	6,936.99	350.44	200.52	214.93	7.27
7,199.00	68.42	91.96	6,955.34	348.43	243.73	258.03	6.57
7,247.00	71.59	92.57	6,971.75	346.65	288.80	302.98	6.71
7,294.00	74.78	91.21	6,985.35	345.17	333.76	347.84	7.33
7,329.00	77.12	91.98	6,993.84	344.22	367.70	381.71	7.02
7,419.00	84.91	90.63	7,007.89	342.21	456.50	470.35	8.78
7,449.00	87.50	90.42	7,009.87	341.94	486.43	500.24	8.66
7,542.00	93.15	90.76	7,009.35	340.98	579.38	593.08	6.09
7,635.00	92.40	90.77	7,004.84	339.74	672.27	685.83	0.81
7,728.00	88.33	90.02	7,004.25	339.10	765.24	778.69	4.45
7,821.00	87.13	89.50	7,007.94	339.49	858.17	871.55	1.41
7,914.00	88.43	89.47	7,011.54	340.32	951.09	964.43	1.40
8,007.00	89.01	89.69	7,013.62	341.01	1,044.06	1,057.35	0.67
8,100.00	90.52	90.07	7,014.00	341.20	1,137.06	1,150.28	1.67
8,193.00	92.16	89.31	7,011.82	341.70	1,230.03	1,243.19	1.94
8,287.00	86.95	89.91	7,012.55	342.34	1,323.99	1,337.09	5.58
8,380.00	89.01	90.75	7,015.83	341.81	1,416.93	1,429.93	2.39
8,473.00	88.34	89.62	7,017.98	341.51	1,509.90	1,522.81	1.41
8,566.00	90.83	91.84	7,018.65	340.32	1,602.88	1,615.65	3.59
8,659.00	88.67	90.37	7,019.06	338.53	1,695.85	1,708.47	2.81
8,752.00	88.67	89.40	7,021.22	338.72	1,788.82	1,801.37	1.04
8,845.00	90.96	91.99	7,021.52	337.59	1,881.80	1,894.22	3.72
8,938.00	89.23	90.56	7,021.36	335.52	1,974.77	1,987.03	2.41
9,031.00	89.32	90.47	7,022.54	334.68	2,067.76	2,079.90	0.14
9,124.00	91.27	90.10	7,022.06	334.22	2,160.76	2,172.79	2.13

Design Report for Five M E28-69HN - MWD Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
9,217.00	91.54	89.74	7,019.78	334.35	2,253.73	2,265.69	0.48
9,312.00	89.72	92.12	7,018.74	332.81	2,348.70	2,360.52	3.15
9,407.00	91.29	91.58	7,017.90	329.74	2,443.64	2,455.25	1.75
9,501.00	92.62	91.71	7,014.69	327.04	2,537.55	2,548.96	1.42
9,596.00	91.54	91.02	7,011.25	324.78	2,632.45	2,643.69	1.35
9,691.00	90.06	90.59	7,009.92	323.45	2,727.43	2,738.53	1.62
9,786.00	90.12	89.36	7,009.77	323.49	2,822.43	2,833.45	1.30
9,881.00	90.34	90.16	7,009.39	323.89	2,917.43	2,928.38	0.87
9,976.00	90.86	90.37	7,008.39	323.45	3,012.42	3,023.27	0.59
10,071.00	87.38	88.26	7,009.85	324.58	3,107.38	3,118.20	4.28
10,166.00	87.28	89.80	7,014.28	326.19	3,202.26	3,213.07	1.62
10,261.00	88.68	91.77	7,017.63	324.89	3,297.19	3,307.85	2.54
10,356.00	91.82	91.24	7,017.21	322.39	3,392.14	3,402.62	3.35
10,451.00	94.54	91.66	7,011.94	319.99	3,486.96	3,497.26	2.90
10,545.00	91.94	91.42	7,006.63	317.47	3,580.77	3,590.88	2.78
10,640.00	92.35	92.36	7,003.08	314.34	3,675.65	3,685.54	1.08
10,735.00	87.41	90.00	7,003.27	312.39	3,770.59	3,780.32	5.76
10,830.00	89.38	90.18	7,005.93	312.24	3,865.55	3,875.19	2.08
10,925.00	90.18	89.44	7,006.30	312.55	3,960.54	3,970.12	1.15
11,020.00	88.74	89.77	7,007.19	313.21	4,055.54	4,065.06	1.56
11,116.00	88.24	90.51	7,009.72	312.97	4,151.50	4,160.93	0.93
11,211.00	88.27	90.92	7,012.62	311.79	4,246.45	4,255.75	0.43
11,305.00	89.75	91.71	7,014.24	309.63	4,340.41	4,349.53	1.78
11,400.00	89.69	90.72	7,014.71	307.62	4,435.38	4,444.34	1.04
11,495.00	91.60	91.78	7,013.64	305.54	4,530.35	4,539.14	2.30
11,590.00	90.43	90.73	7,011.95	303.46	4,625.31	4,633.93	1.65
11,685.00	91.73	88.75	7,010.16	303.89	4,720.28	4,728.84	2.49
11,780.00	90.55	89.58	7,008.27	305.28	4,815.25	4,823.79	1.52
11,875.00	91.36	88.29	7,006.69	307.04	4,910.22	4,918.75	1.60
11,969.00	88.95	88.73	7,006.44	309.49	5,004.18	5,012.73	2.61
12,065.00	87.23	87.68	7,009.63	312.49	5,100.08	5,108.66	2.10
12,159.00	87.34	86.20	7,014.09	317.50	5,193.83	5,202.55	1.58
12,254.00	88.30	88.75	7,017.70	321.69	5,288.66	5,297.47	2.87
12,349.00	89.32	89.88	7,019.67	322.82	5,383.63	5,392.40	1.60
12,444.00	89.66	89.90	7,020.52	323.00	5,478.63	5,487.33	0.36
12,539.00	90.34	88.79	7,020.52	324.09	5,573.62	5,582.28	1.37
12,634.00	91.30	90.65	7,019.16	324.55	5,668.61	5,677.20	2.20
12,729.00	88.80	90.63	7,019.08	323.49	5,763.59	5,772.06	2.63
12,824.00	89.54	91.17	7,020.45	322.00	5,858.57	5,866.89	0.96
12,919.00	90.03	91.14	7,020.81	320.09	5,953.55	5,961.71	0.52
13,014.00	90.62	90.74	7,020.27	318.53	6,048.53	6,056.55	0.75
13,109.00	91.17	90.47	7,018.79	317.52	6,143.52	6,151.41	0.64
13,204.00	91.11	89.76	7,016.90	317.33	6,238.50	6,246.30	0.75
13,298.00	89.88	90.30	7,016.09	317.28	6,332.49	6,340.21	1.43
13,393.00	90.96	91.10	7,015.39	316.12	6,427.48	6,435.07	1.41
13,488.00	90.99	90.11	7,013.77	315.12	6,522.46	6,529.92	1.04
13,583.00	91.05	89.71	7,012.08	315.27	6,617.44	6,624.83	0.43
13,678.00	90.55	91.65	7,010.75	314.14	6,712.42	6,719.68	2.11
13,773.00	90.59	91.85	7,009.81	311.24	6,807.37	6,814.43	0.21
13,868.00	91.08	90.38	7,008.43	309.39	6,902.34	6,909.24	1.63
13,963.00	89.97	89.92	7,007.55	309.14	6,997.34	7,004.14	1.26

Design Report for Five M E28-69HN - MWD Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
13,997.00	89.35	89.16	7,007.76	309.42	7,031.33	7,038.12	2.88
Final MWD Survey							
14,060.00	89.35	89.16	7,008.47	310.34	7,094.32	7,101.09	0.00
Bit Projection - Estimated BHL 88'FNL 2079'FWL							

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
790.00	790.00	0.00	0.00	Tie On To Surface Casing Assumed Vertical
915.00	915.00	-0.04	0.01	First MWD Survey
13,997.00	7,007.76	309.42	7,031.33	Final MWD Survey
14,060.00	7,008.47	310.34	7,094.32	Bit Projection
14,060.00	7,008.47	310.34	7,094.32	Estimated BHL 88'FNL 2079'FWL

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (ft)
				+N/_S (ft)	+E/-W (ft)	
Target	Five M E28-69HN_PlanB - Rev0_BHL	87.61	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
790.00	14,060.00	Sperry MWD Survey	MWD

Design Report for Five M E28-69HN - MWD Survey

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Five M	0.00	0.00	8.00	225.79	3,495.75	1,412,956.44	3,232,500.25	40° 27' 50.256 N	104° 39' 51.840 W
- actual wellpath misses target center by 3503.04ft at 8.00ft MD (8.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1			2,373.75	535.79		1,413,266.43	3,231,378.29		
Point 2			5,015.75	414.79		1,413,145.44	3,234,020.19		
Point 3			5,057.75	-2,240.21		1,410,490.53	3,234,062.19		
Point 4			5,102.75	-4,896.21		1,407,834.63	3,234,107.19		
Point 5			2,443.75	-4,801.21		1,407,929.63	3,231,448.29		
Point 6			-215.25	-4,702.21		1,408,028.62	3,228,789.38		
Point 7			-271.25	-2,002.21		1,410,728.52	3,228,733.38		
Point 8			-287.25	660.79		1,413,391.43	3,228,717.38		
Point 9			2,373.75	535.79		1,413,266.43	3,231,378.29		
Five M	0.00	0.00	8.00	225.79	3,495.75	1,412,956.44	3,232,500.25	40° 27' 50.256 N	104° 39' 51.840 W
- actual wellpath misses target center by 3503.04ft at 8.00ft MD (8.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1			5,475.75	-45.21		1,412,685.45	3,234,480.18		
Point 2			7,659.75	-71.21		1,412,659.45	3,236,664.10		
Point 3			7,701.75	-2,262.21		1,410,468.53	3,236,706.09		
Point 4			7,743.75	-4,447.21		1,408,283.61	3,236,748.09		
Point 5			5,562.75	-4,436.21		1,408,294.61	3,234,567.17		
Point 6			5,517.75	-2,240.21		1,410,490.53	3,234,522.17		
Point 7			5,475.75	-45.21		1,412,685.45	3,234,480.18		
Five M	0.00	0.00	6,975.64	296.65	7,120.94	1,413,027.30	3,236,125.30	40° 27' 50.616 N	104° 39' 4.932 W
- actual wellpath misses target center by 44.43ft at 14060.00ft MD (7008.47 TVD, 310.34 N, 7094.32 E)									
- Point									
Five M	0.00	0.00	8.00	225.79	3,495.75	1,412,956.44	3,232,500.25	40° 27' 50.256 N	104° 39' 51.840 W
- actual wellpath misses target center by 3503.04ft at 8.00ft MD (8.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1			2,373.75	75.79		1,412,806.45	3,231,378.29		
Point 2			4,555.75	-45.21		1,412,685.45	3,233,560.21		
Point 3			4,597.75	-2,240.21		1,410,490.53	3,233,602.21		
Point 4			4,642.75	-4,436.21		1,408,294.61	3,233,647.21		
Point 5			2,443.75	-4,341.21		1,408,389.61	3,231,448.29		
Point 6			244.75	-4,242.21		1,408,488.61	3,229,249.37		
Point 7			188.75	-2,002.21		1,410,728.52	3,229,193.37		
Point 8			172.75	200.79		1,412,931.44	3,229,177.37		
Point 9			2,373.75	75.79		1,412,806.45	3,231,378.29		
Five M	0.00	0.00	8.00	225.79	3,495.75	1,412,956.44	3,232,500.25	40° 27' 50.256 N	104° 39' 51.840 W
- actual wellpath misses target center by 3503.04ft at 8.00ft MD (8.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1			5,015.75	414.79		1,413,145.44	3,234,020.19		
Point 2			7,659.75	388.79		1,413,119.44	3,236,664.10		
Point 3			7,701.75	-2,262.21		1,410,468.53	3,236,706.09		
Point 4			7,743.75	-4,907.21		1,407,823.63	3,236,748.09		
Point 5			5,102.75	-4,896.21		1,407,834.63	3,234,107.19		
Point 6			5,058.75	-2,240.21		1,410,490.53	3,234,063.19		
Point 7			5,015.75	414.79		1,413,145.44	3,234,020.19		

North Reference Sheet for Sec. 28-T6N-R65W (Five M 28 North PAD) - Five M E28-69HN

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

Vertical Depths are relative to KB=24' @ 4736.00ft (H&P 322). Northing and Easting are relative to Five M E28-69HN - Slot A2

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° 30' 0.000 W°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:40° 47' 0.000 N°

False Easting: 3,000,000.00ft, False Northing: 1,000,000.00ft, Scale Reduction: 0.99996372

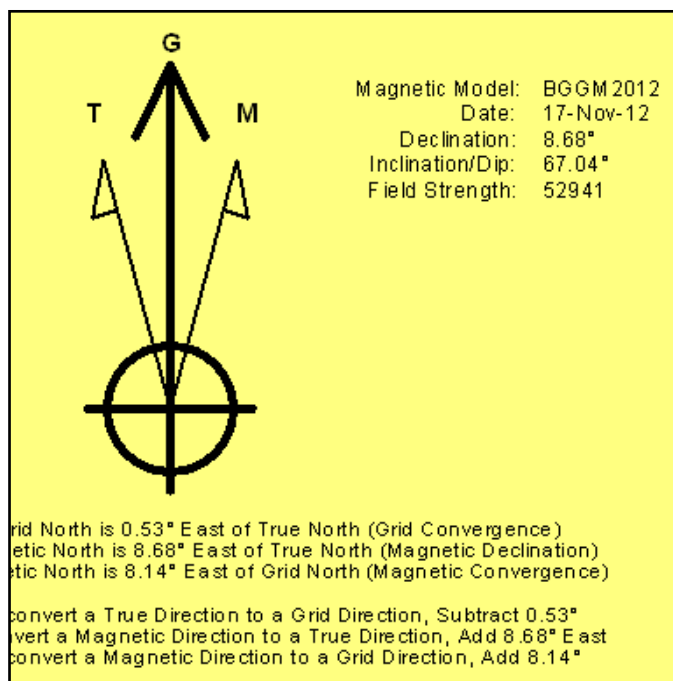
Grid Coordinates of Well: 1,412,730.66 ft N, 3,229,004.62 ft E

Geographical Coordinates of Well: 40° 27' 48.35" N, 104° 40' 37.09" W

Grid Convergence at Surface is: 0.53°

Based upon Minimum Curvature type calculations, at a Measured Depth of 14,060.00ft
the Bottom Hole Displacement is 7,101.11ft in the Direction of 87.50° (Grid).

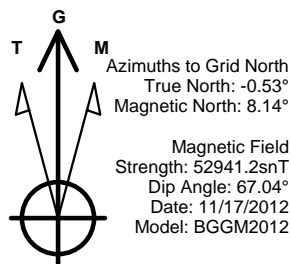
Magnetic Convergence at surface is: -8.14° (17 November 2012, , BGGM2012)



Project: Weld County, CO (NAD 83)
 Site: Sec. 28-T6N-R65W (Five M 28 North PAD)
 Well: Five M E28-69HN

Noble Energy

HALLIBURTON
 Sperry Drilling

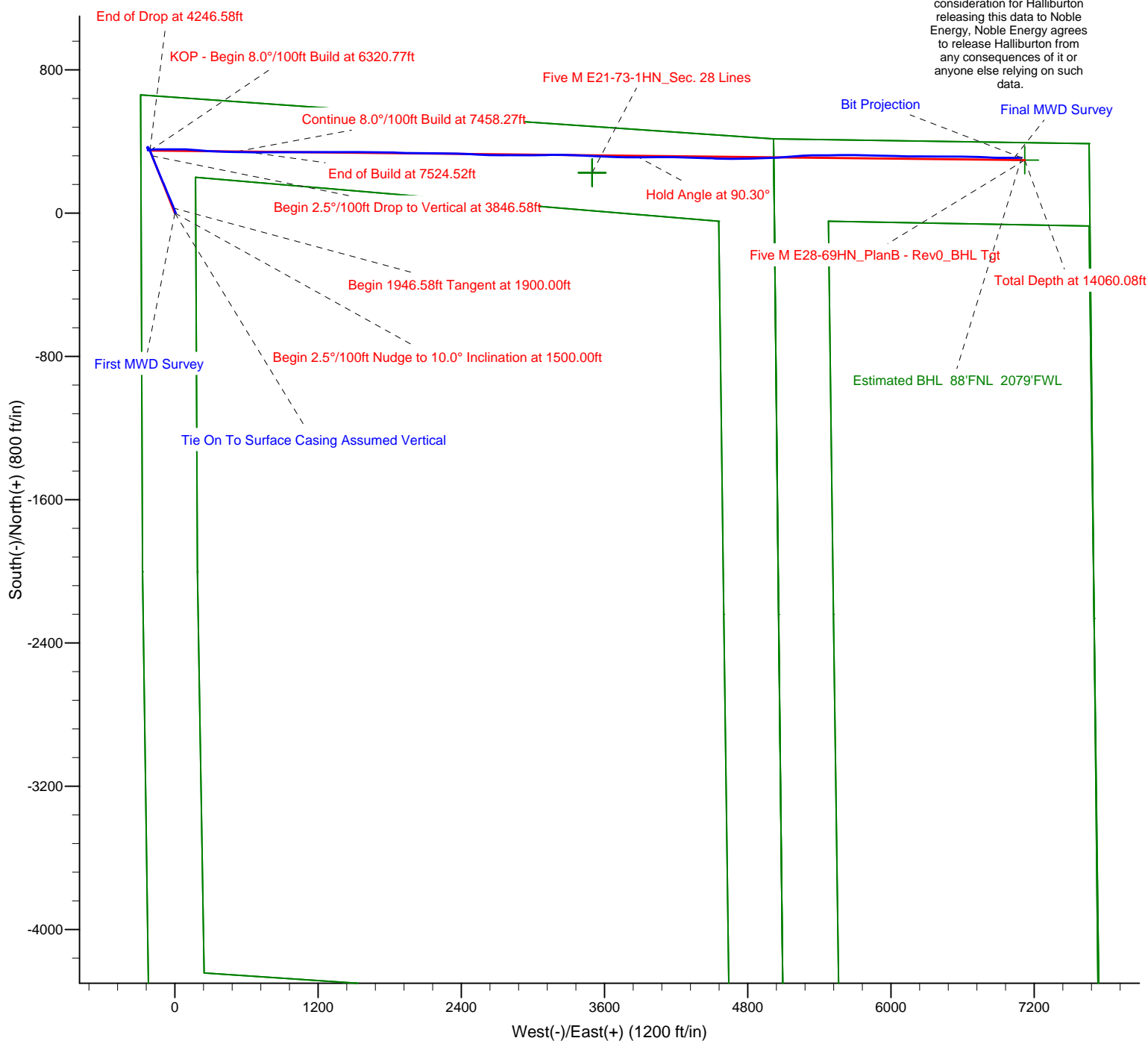


LEGEND

- Five M E28-69HN, Plan B, Plan B - Rev 0 Proposal V0
- MWD Survey

Permitted BHL: 100' FNL,
 2105' FWL

Halliburton Energy Services, Inc. ("Halliburton") recently completed directional drilling and MWD operations at the Five M E28-69HN well located at Weld County, CO. At the conclusion of the job Halliburton performed a final survey on the well. Noble Energy has requested that Halliburton provide them the distances from BHL to section lines from that final survey to allow Noble Energy to meet its requirements under Colorado law. These distances are generated by a mathematical algorithm based on rough data collected after the well is drilled. Halliburton considers it to be a rough estimate only and it is not to be relied upon in any application where accurate data is required. In consideration for Halliburton releasing this data to Noble Energy, Noble Energy agrees to release Halliburton from any consequences of it or anyone else relying on such data.



Project: Weld County, CO (NAD 83)
Site: Sec. 28-T6N-R65W (Five M 28 North PAD)
Well: Five M E28-69HN

Noble Energy

HALLIBURTON

Sperry Drilling



Azimuths to Grid North
True North: -0.53°
Magnetic North: 8.14°

Magnetic Field
Strength: 52941.2snT
Dip Angle: 67.04°
Date: 11/17/2012
Model: BGGM2012

LEGEND

- Five M E28-69HN, Plan B, Plan B - Rev 0 Proposal V0
- MWD Survey

Halliburton Energy Services, Inc. ("Halliburton") recently completed directional drilling and MWD operations at the Five M E28-69HN well located at Weld County, CO. At the conclusion of the job Halliburton performed a final survey on the well. Noble Energy has requested that Halliburton provide them the distances from BHL to section lines from that final survey to allow Noble Energy to meet its requirements under Colorado law. These distances are generated by a mathematical algorithm based on rough data collected after the well is drilled. Halliburton considers it to be a rough estimate only and it is not to be relied upon in any application where accurate data is required. In consideration for Halliburton releasing this data to Noble Energy, Noble Energy agrees to release Halliburton from any consequences of it or anyone else relying on such data.

