

# EOG Resources, Inc.

Weld County, CO (NAD 27)

Sec. 36-T11N-R62W

Garden Creek 27-36H

Plan A Rev 1

Design: Plan A Rev 1

## Sperry Drilling Services Standard Report

30 January, 2011

Well Coordinates: 567,481.22 N, 2,338,576.02 E (40° 53' 04.99" N, 104° 16' 32.06" W)

Ground Level: 5,106.00 ft

Local Coordinate Origin:

Centered on Well Garden Creek 27-36H

Viewing Datum:

RKB 25' @ 5131.00ft (True 30)

TVDs to System:

N

North Reference:

True

Unit System:

API - US Survey Feet - Custom

Geodetic Scale Factor Applied

Version: 2003.16 Build: 43I

**HALLIBURTON**

## Design Report for Garden Creek 27-36H - Plan A Rev 1

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
1,142.00	0.00	0.00	1,142.00	0.00	0.00	0.00	0.00
<b>Tie-on to Gyro Survey</b>							
1,188.00	0.74	331.47	1,188.00	0.26	-0.14	-0.28	1.61
<b>First Sperry MWD Survey</b>							
1,462.00	0.59	331.21	1,461.98	3.05	-1.67	-3.32	0.05
1,736.00	0.57	335.69	1,735.97	5.53	-2.91	-5.93	0.02
2,021.00	0.74	314.89	2,020.95	8.12	-4.79	-9.09	0.10
2,280.00	0.47	343.78	2,279.93	10.32	-6.28	-11.68	0.15
2,572.00	0.40	296.26	2,571.93	11.92	-7.52	-13.69	0.12
2,863.00	0.72	312.33	2,862.91	13.60	-9.79	-16.49	0.12
3,151.00	0.52	292.71	3,150.90	15.33	-12.33	-19.51	0.10
3,440.00	0.79	288.65	3,439.88	16.47	-15.43	-22.54	0.09
3,730.00	0.91	331.46	3,729.85	19.13	-18.42	-26.54	0.22
4,020.00	0.52	5.94	4,019.83	22.46	-19.39	-29.55	0.19
4,309.00	0.55	347.79	4,308.81	25.12	-19.54	-31.51	0.06
4,600.00	1.68	327.77	4,599.75	30.10	-22.11	-36.81	0.40
4,890.00	1.26	334.01	4,889.66	36.56	-25.78	-43.93	0.15
5,181.00	1.31	319.25	5,180.59	41.96	-29.35	-50.25	0.11
5,468.00	0.55	282.86	5,467.55	44.75	-32.84	-54.69	0.32
5,757.00	0.31	297.84	5,756.54	45.42	-34.88	-56.63	0.09
6,045.00	0.14	271.52	6,044.54	45.79	-35.92	-57.64	0.07
6,343.00	0.29	166.64	6,342.54	45.07	-36.11	-57.28	0.12
6,363.00	0.33	152.31	6,362.54	44.97	-36.07	-57.18	0.43
6,394.00	1.27	168.19	6,393.53	44.55	-35.96	-56.81	3.09
6,426.00	4.18	161.28	6,425.49	43.10	-35.51	-55.48	9.14
6,458.00	8.62	165.17	6,457.29	39.68	-34.53	-52.39	13.93
6,491.00	11.88	167.35	6,489.75	33.97	-33.15	-47.44	9.95
6,523.00	15.66	166.64	6,520.83	26.55	-31.43	-41.06	11.82
6,555.00	19.85	163.78	6,551.30	17.13	-28.91	-32.71	13.37
6,587.00	23.53	162.58	6,581.03	5.81	-25.48	-22.38	11.58
6,619.00	27.68	162.10	6,609.88	-7.36	-21.28	-10.22	12.98
6,651.00	31.73	161.54	6,637.67	-22.42	-16.33	3.80	12.69
6,683.00	35.82	161.27	6,664.26	-39.28	-10.66	19.58	12.79
6,716.00	39.47	161.10	6,690.39	-58.35	-4.16	37.49	11.07
6,748.00	43.19	160.86	6,714.41	-78.33	2.73	56.31	11.64
6,780.00	47.41	160.93	6,736.92	-99.81	10.17	76.58	13.19
6,812.00	51.19	159.92	6,757.78	-122.66	18.31	98.29	12.05
6,845.00	53.31	159.44	6,777.98	-147.13	27.37	121.80	6.53
6,877.00	54.32	160.00	6,796.87	-171.36	36.32	145.05	3.46
6,910.00	56.40	160.62	6,815.63	-196.92	45.46	169.37	6.49
6,942.00	60.14	160.65	6,832.46	-222.59	54.49	193.69	11.69
6,974.00	63.24	160.32	6,847.63	-249.14	63.90	218.88	9.73
7,007.00	66.15	160.15	6,861.74	-277.22	73.99	245.63	8.83
7,038.00	70.21	158.22	6,873.26	-304.11	84.22	271.65	14.31
7,070.00	74.59	157.37	6,882.93	-332.34	95.74	299.54	13.92
7,102.00	78.15	157.50	6,890.47	-361.05	107.68	328.06	11.13
7,134.00	82.13	157.85	6,895.95	-390.21	119.65	356.91	12.48
7,150.00	83.82	157.76	6,897.90	-404.91	125.65	371.43	10.58
7,167.00	85.13	157.72	6,899.54	-420.57	132.06	386.91	7.71

## Design Report for Garden Creek 27-36H - Plan A Rev 1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
7,180.00	85.65	157.82	6,900.59	-432.57	136.96	396.77	4.07
7,210.00	86.54	157.45	6,902.63	-460.25	148.35	426.17	3.21
7,240.00	87.42	157.09	6,904.21	-487.88	159.92	453.68	3.17
7,271.00	87.96	158.56	6,905.46	-516.56	171.61	482.00	5.05
7,302.00	88.24	158.67	6,906.49	-545.41	182.91	510.15	0.97
7,332.00	88.58	158.57	6,907.32	-573.34	193.84	537.40	1.18
7,362.00	87.60	158.14	6,908.32	-601.20	204.90	564.70	3.57
7,393.00	85.38	157.90	6,910.22	-629.90	216.48	592.95	7.20
7,423.00	84.78	158.09	6,912.79	-657.61	227.68	620.24	2.10
7,454.00	85.53	158.20	6,915.41	-686.28	239.18	648.42	2.45
7,484.00	86.93	159.42	6,917.38	-714.19	250.00	675.57	6.18
7,515.00	88.34	159.26	6,918.66	-743.17	260.93	703.55	4.58
7,545.00	89.57	159.09	6,919.21	-771.20	271.59	730.68	4.14
7,576.00	89.75	158.88	6,919.39	-800.14	282.71	758.77	0.89
7,606.00	90.86	158.86	6,919.23	-828.12	293.52	785.97	3.70
7,637.00	91.85	158.98	6,918.50	-857.04	304.67	814.06	3.22
7,667.00	92.41	159.01	6,917.38	-885.03	315.42	841.22	1.87
7,697.00	91.08	158.58	6,916.47	-912.98	326.26	868.42	4.66
7,728.00	90.62	157.93	6,916.01	-941.77	337.74	896.67	2.57
7,758.00	90.74	157.95	6,915.65	-969.57	349.01	924.07	0.41
7,788.00	90.68	157.20	6,915.28	-997.30	360.45	951.55	2.51
7,819.00	90.43	157.03	6,914.98	-1,025.86	372.51	980.05	0.98
7,849.00	90.46	156.97	6,914.75	-1,053.47	384.23	1,007.65	0.22
7,879.00	90.83	157.70	6,914.41	-1,081.16	395.79	1,035.18	2.73
7,910.00	90.93	156.98	6,913.94	-1,109.76	407.73	1,063.63	2.34
7,940.00	90.80	156.76	6,913.48	-1,137.34	419.51	1,091.25	0.85
7,971.00	91.32	156.72	6,912.91	-1,165.82	431.75	1,119.83	1.68
8,001.00	91.93	156.92	6,912.06	-1,193.39	443.56	1,147.45	2.14
8,032.00	91.52	156.53	6,911.13	-1,221.85	455.80	1,176.02	1.82
8,062.00	91.02	156.27	6,910.46	-1,249.34	467.81	1,203.74	1.88
8,093.00	90.18	155.38	6,910.14	-1,277.61	480.50	1,232.50	3.95
8,123.00	90.34	155.47	6,910.00	-1,304.90	492.98	1,260.42	0.61
8,154.00	91.56	155.74	6,909.49	-1,333.12	505.78	1,289.22	4.03
8,184.00	92.37	156.01	6,908.46	-1,360.49	518.04	1,317.03	2.85
8,214.00	92.74	155.84	6,907.12	-1,387.85	530.26	1,344.82	1.36
8,245.00	92.10	155.45	6,905.81	-1,416.07	543.04	1,373.60	2.42
8,277.00	91.51	155.01	6,904.80	-1,445.11	556.44	1,403.40	2.30
8,309.00	90.71	154.00	6,904.18	-1,473.99	570.21	1,433.35	4.03
8,342.00	91.32	154.40	6,903.60	-1,503.69	584.57	1,464.30	2.21
8,374.00	92.42	154.60	6,902.55	-1,532.56	598.34	1,494.25	3.49
8,406.00	90.74	153.40	6,901.67	-1,561.31	612.36	1,524.29	6.45
8,438.00	89.51	152.23	6,901.60	-1,589.77	626.98	1,554.57	5.30
8,468.00	89.85	150.43	6,901.77	-1,616.09	641.37	1,583.20	6.11
8,500.00	90.52	148.16	6,901.67	-1,643.60	657.71	1,614.05	7.40
8,533.00	90.71	147.61	6,901.31	-1,671.55	675.25	1,646.08	1.76
8,565.00	90.96	147.01	6,900.85	-1,698.48	692.53	1,677.21	2.03
8,597.00	91.80	146.32	6,900.07	-1,725.21	710.11	1,708.41	3.40
8,630.00	92.50	146.84	6,898.84	-1,752.73	728.27	1,740.59	2.64
8,662.00	91.23	145.99	6,897.80	-1,779.37	745.97	1,771.81	4.77
8,695.00	91.63	146.73	6,896.97	-1,806.84	764.24	1,804.03	2.55
8,727.00	92.43	146.88	6,895.84	-1,833.60	781.75	1,835.21	2.54

## Design Report for Garden Creek 27-36H - Plan A Rev 1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
8,759.00	90.93	146.42	6,894.90	-1,860.32	799.33	1,866.41	4.90
8,792.00	90.19	144.78	6,894.58	-1,887.55	817.98	1,898.72	5.45
8,823.00	90.62	144.44	6,894.36	-1,912.82	835.93	1,929.19	1.77
8,856.00	91.05	143.07	6,893.88	-1,939.43	855.44	1,961.70	4.35
8,888.00	91.56	142.73	6,893.15	-1,964.94	874.73	1,993.30	1.92
8,920.00	91.70	142.09	6,892.24	-1,990.29	894.25	2,024.94	2.05
8,952.00	92.19	141.24	6,891.15	-2,015.38	914.08	2,056.63	3.06
8,984.00	91.67	140.02	6,890.07	-2,040.10	934.37	2,088.39	4.14
9,016.00	91.72	139.78	6,889.13	-2,064.57	954.97	2,120.20	0.77
9,049.00	90.31	138.76	6,888.54	-2,089.57	976.50	2,153.05	5.27
9,081.00	89.41	138.62	6,888.62	-2,113.60	997.62	2,184.94	2.85
9,113.00	89.23	138.60	6,889.00	-2,137.61	1,018.78	2,216.84	0.57
9,146.00	89.85	138.82	6,889.27	-2,162.40	1,040.56	2,249.72	1.99
9,178.00	90.28	137.53	6,889.23	-2,186.25	1,061.89	2,281.63	4.25
9,209.00	91.11	137.75	6,888.85	-2,209.15	1,082.78	2,312.56	2.77
9,242.00	90.19	136.60	6,888.48	-2,233.36	1,105.21	2,345.51	4.46
9,273.00	90.28	136.33	6,888.35	-2,255.83	1,126.56	2,376.48	0.92
9,304.00	89.45	134.96	6,888.43	-2,277.99	1,148.23	2,407.46	5.17
9,337.00	89.51	135.02	6,888.73	-2,301.32	1,171.57	2,440.46	0.26
9,369.00	88.61	133.65	6,889.25	-2,323.68	1,194.46	2,472.45	5.12
9,400.00	88.80	133.96	6,889.95	-2,345.14	1,216.82	2,503.44	1.17
9,432.00	88.78	131.49	6,890.63	-2,366.84	1,240.32	2,535.42	7.72
9,464.00	88.65	131.83	6,891.34	-2,388.11	1,264.23	2,567.39	1.14
9,496.00	88.50	129.39	6,892.14	-2,408.93	1,288.51	2,599.33	7.64
9,529.00	88.45	129.46	6,893.02	-2,429.88	1,313.99	2,632.21	0.26
9,561.00	88.61	129.31	6,893.84	-2,450.18	1,338.72	2,664.10	0.69
9,593.00	89.32	128.23	6,894.42	-2,470.21	1,363.66	2,695.96	4.04
9,624.00	90.00	126.71	6,894.60	-2,489.07	1,388.26	2,726.77	5.37
9,656.00	90.18	126.29	6,894.55	-2,508.10	1,413.99	2,758.50	1.43
9,688.00	90.22	124.63	6,894.44	-2,526.67	1,440.05	2,790.15	5.19
9,721.00	90.34	123.56	6,894.28	-2,545.16	1,467.38	2,822.66	3.26
9,753.00	91.39	123.09	6,893.79	-2,562.74	1,494.11	2,854.11	3.59
9,784.00	92.35	121.76	6,892.78	-2,579.35	1,520.26	2,884.47	5.29
9,816.00	93.07	121.80	6,891.27	-2,596.19	1,547.43	2,915.71	2.25
9,848.00	91.91	120.83	6,889.88	-2,612.80	1,574.75	2,946.91	4.72
9,880.00	92.03	120.73	6,888.78	-2,629.17	1,602.22	2,978.05	0.49
9,911.00	90.56	121.00	6,888.08	-2,645.07	1,628.83	3,008.24	4.82
9,944.00	90.74	121.11	6,887.71	-2,662.09	1,657.09	3,040.41	0.64
9,976.00	90.64	120.77	6,887.32	-2,678.54	1,684.54	3,071.59	1.11
10,007.00	90.68	120.54	6,886.96	-2,694.35	1,711.20	3,101.75	0.75
10,040.00	90.81	120.85	6,886.53	-2,711.19	1,739.58	3,133.87	1.02
10,072.00	91.52	121.15	6,885.88	-2,727.67	1,767.00	3,165.06	2.41
10,103.00	91.29	119.70	6,885.12	-2,743.36	1,793.72	3,195.19	4.73
10,136.00	89.81	119.82	6,884.81	-2,759.74	1,822.37	3,227.18	4.50
10,168.00	89.97	119.79	6,884.87	-2,775.65	1,850.14	3,258.21	0.51
10,201.00	90.88	119.68	6,884.62	-2,792.01	1,878.79	3,290.20	2.78
10,233.00	91.94	119.64	6,883.84	-2,807.84	1,906.59	3,321.20	3.31
10,265.00	90.59	119.88	6,883.13	-2,823.72	1,934.36	3,352.22	4.28
10,296.00	90.64	120.05	6,882.80	-2,839.21	1,961.22	3,382.30	0.57
10,329.00	91.20	119.73	6,882.27	-2,855.65	1,989.82	3,414.31	1.95
10,361.00	89.81	119.14	6,881.98	-2,871.37	2,017.69	3,445.29	4.72

## Design Report for Garden Creek 27-36H - Plan A Rev 1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
10,393.00	89.75	119.09	6,882.11	-2,886.94	2,045.65	3,476.22	0.24
10,426.00	90.34	119.43	6,882.08	-2,903.07	2,074.44	3,508.15	2.06
10,457.00	90.80	119.88	6,881.77	-2,918.41	2,101.37	3,538.19	2.08
10,489.00	91.23	119.76	6,881.21	-2,934.32	2,129.13	3,569.22	1.40
10,520.00	91.77	119.44	6,880.39	-2,949.63	2,156.08	3,599.24	2.02
10,552.00	92.01	119.44	6,879.34	-2,965.35	2,183.93	3,630.21	0.75
10,584.00	91.54	119.16	6,878.35	-2,981.00	2,211.82	3,661.15	1.71
10,616.00	91.91	119.08	6,877.38	-2,996.57	2,239.77	3,692.07	1.18
10,648.00	92.32	118.54	6,876.20	-3,011.98	2,267.78	3,722.94	2.12
10,679.00	91.23	118.02	6,875.24	-3,026.66	2,295.07	3,752.78	3.90
10,711.00	91.48	118.49	6,874.49	-3,041.80	2,323.25	3,783.58	1.66
10,743.00	89.51	118.66	6,874.21	-3,057.11	2,351.35	3,814.43	6.18
10,775.00	89.81	118.33	6,874.40	-3,072.37	2,379.47	3,845.28	1.39
10,808.00	90.70	118.67	6,874.25	-3,088.12	2,408.47	3,877.09	2.89
10,839.00	91.11	118.85	6,873.76	-3,103.03	2,435.65	3,907.00	1.44
10,871.00	91.91	118.59	6,872.92	-3,118.40	2,463.70	3,937.87	2.63
10,904.00	91.24	118.10	6,872.01	-3,134.06	2,492.73	3,969.64	2.51
10,936.00	90.96	118.03	6,871.40	-3,149.12	2,520.96	4,000.42	0.90
10,967.00	89.14	117.70	6,871.37	-3,163.60	2,548.37	4,030.20	5.97
10,999.00	88.69	117.73	6,871.98	-3,178.48	2,576.69	4,060.92	1.41
11,030.00	89.11	117.60	6,872.57	-3,192.88	2,604.14	4,090.68	1.42
11,063.00	89.22	117.91	6,873.05	-3,208.24	2,633.34	4,122.37	1.00
11,095.00	89.63	119.61	6,873.38	-3,223.64	2,661.39	4,153.25	5.46
11,127.00	90.06	118.71	6,873.46	-3,239.23	2,689.34	4,184.19	3.12
11,160.00	90.09	118.71	6,873.42	-3,255.08	2,718.28	4,216.03	0.09
11,192.00	89.22	118.53	6,873.61	-3,270.41	2,746.37	4,246.89	2.78
11,225.00	89.28	119.27	6,874.04	-3,286.36	2,775.26	4,278.76	2.25
11,257.00	89.58	120.05	6,874.36	-3,302.19	2,803.06	4,309.77	2.61
11,289.00	89.69	120.02	6,874.57	-3,318.21	2,830.76	4,340.83	0.36
11,322.00	90.03	120.01	6,874.65	-3,334.71	2,859.34	4,372.86	1.03
11,354.00	90.52	119.16	6,874.49	-3,350.51	2,887.17	4,403.86	3.07
11,385.00	89.63	119.12	6,874.45	-3,365.61	2,914.24	4,433.83	2.87
11,418.00	89.41	119.52	6,874.73	-3,381.77	2,943.01	4,465.77	1.38
11,450.00	90.00	119.76	6,874.89	-3,397.59	2,970.83	4,496.77	1.99
11,482.00	90.49	119.65	6,874.76	-3,413.45	2,998.62	4,527.79	1.57
11,515.00	89.79	120.56	6,874.68	-3,430.00	3,027.17	4,559.83	3.48
11,547.00	89.51	120.90	6,874.87	-3,446.35	3,054.67	4,590.99	1.38
11,580.00	89.97	120.89	6,875.02	-3,463.30	3,082.99	4,623.14	1.39
11,612.00	90.99	120.36	6,874.75	-3,479.60	3,110.53	4,654.27	3.59
11,645.00	91.64	120.75	6,874.00	-3,496.37	3,138.94	4,686.37	2.30
11,677.00	90.77	119.55	6,873.32	-3,512.44	3,166.60	4,717.44	4.63
11,708.00	90.95	119.72	6,872.86	-3,527.76	3,193.54	4,747.48	0.80
11,741.00	89.81	119.21	6,872.64	-3,544.00	3,222.27	4,779.43	3.78
11,773.00	89.44	119.07	6,872.85	-3,559.58	3,250.22	4,810.37	1.24
11,805.00	89.54	119.02	6,873.13	-3,575.11	3,278.20	4,841.29	0.35
11,838.00	89.66	119.30	6,873.36	-3,591.19	3,307.01	4,873.20	0.92
11,869.00	89.63	119.14	6,873.56	-3,606.32	3,334.07	4,903.18	0.53
11,902.00	89.60	118.78	6,873.78	-3,622.30	3,362.94	4,935.06	1.09
11,932.00	89.57	118.74	6,873.99	-3,636.74	3,389.24	4,964.01	0.17
11,966.00	90.55	118.56	6,873.96	-3,653.04	3,419.08	4,996.81	2.93

## Design Report for Garden Creek 27-36H - Plan A Rev 1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
11,999.00	90.93	118.81	6,873.53	-3,668.88	3,448.02	5,028.64	1.38
12,031.00	91.11	118.42	6,872.96	-3,684.20	3,476.11	5,059.50	1.34
12,064.00	91.17	118.34	6,872.31	-3,899.88	3,505.14	5,091.29	0.30
12,096.00	91.32	118.04	6,871.61	-3,714.99	3,533.34	5,122.08	1.05
12,128.00	91.45	117.92	6,870.84	-3,730.00	3,561.59	5,152.84	0.55
12,160.00	91.85	117.80	6,869.92	-3,744.95	3,589.87	5,183.57	1.30
12,191.00	92.19	117.84	6,868.82	-3,759.41	3,617.27	5,213.33	1.10
12,223.00	92.56	117.38	6,867.50	-3,774.23	3,645.60	5,244.02	1.84
12,254.00	92.02	118.10	6,866.26	-3,788.64	3,673.01	5,273.76	2.90
12,287.00	91.87	118.40	6,865.14	-3,804.26	3,702.07	5,305.52	1.02
12,319.00	90.80	118.79	6,864.39	-3,819.57	3,730.16	5,336.37	3.56
12,351.00	90.70	118.69	6,863.97	-3,834.95	3,758.21	5,367.24	0.44
12,383.00	90.98	118.70	6,863.50	-3,850.31	3,786.28	5,398.12	0.88
12,415.00	91.17	118.65	6,862.90	-3,865.67	3,814.35	5,428.98	0.61
12,448.00	90.00	119.61	6,862.57	-3,881.73	3,843.17	5,460.88	4.59
12,480.00	90.22	120.44	6,862.51	-3,897.74	3,870.88	5,491.94	2.68
12,512.00	90.75	120.26	6,862.24	-3,913.91	3,898.49	5,523.05	1.75
12,545.00	91.57	120.43	6,861.57	-3,930.58	3,926.96	5,555.12	2.54
12,576.00	92.22	120.55	6,860.54	-3,946.30	3,953.66	5,585.25	2.13
12,607.00	91.42	121.80	6,859.56	-3,962.34	3,980.17	5,615.47	4.79
12,640.00	90.71	120.90	6,858.94	-3,979.50	4,008.35	5,647.67	3.47
12,672.00	89.05	120.67	6,859.01	-3,995.88	4,035.84	5,678.83	5.24
12,704.00	89.04	121.25	6,859.54	-4,012.34	4,063.28	5,710.01	1.81
12,736.00	89.54	120.84	6,859.94	-4,028.84	4,090.69	5,741.20	2.02
12,768.00	90.03	120.85	6,860.06	-4,045.25	4,118.16	5,772.37	1.53
12,801.00	90.77	121.18	6,859.83	-4,062.25	4,146.44	5,804.53	2.46
12,833.00	91.56	120.66	6,859.18	-4,078.69	4,173.89	5,835.70	2.96
12,861.00	92.35	120.78	6,858.23	-4,092.99	4,197.95	5,862.94	2.85
Last Sperry MWD Survey							
12,910.00	92.35	120.78	6,856.22	-4,118.04	4,240.01	5,910.62	0.00
Straight Line Projection to TD							

### Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,142.00	1,142.00	0.00	0.00	Tie-on to Gyro Survey
1,188.00	1,188.00	0.26	-0.14	First Sperry MWD Survey
12,861.00	6,858.23	-4,092.99	4,197.95	Last Sperry MWD Survey
12,910.00	6,856.22	-4,118.04	4,240.01	Straight Line Projection to TD

### Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (ft)
				+N/-S (ft)	+E/-W (ft)	
Target	Garden Creek 27-36H Plan A Rev 1 BH Tgt	133.94	Slot	0.00	0.00	0.00



## Design Report for Garden Creek 27-36H - Plan A Rev 1

### Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
1,142.00	12,910.00	Sperry MWD Survey	MWD

### 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
Garden Creek 27-36H	0.00	0.00	0.00	0.00	0.00	567,481.22	2,338,576.02	40.884719	-104.275571
- actual wellpath hits target center									
- Polygon									
Point 1				4,795.12	525.14	568,072.53	2,343,363.52		
Point 2				4,929.66	-4,755.51	562,794.15	2,343,570.96		
Point 3				-296.33	-4,714.05	562,763.44	2,338,344.80		
Point 4				-522.93	494.86	567,968.82	2,338,046.30		
Garden Creek 27-36H	0.00	0.00	6,882.00	-4,151.07	4,308.12	563,389.96	2,342,941.13	40.873325	-104.259994
- actual wellpath misses target center by 79.97ft at 12910.00ft MD (6856.22 TVD, -4118.04 N, 4240.01 E)									
- Point									
Garden Creek 27-36H	0.00	0.00	6,880.10	-3,256.50	2,700.25	564,262.26	2,341,321.03	40.875781	-104.265807
- actual wellpath misses target center by 11.94ft at 11144.86ft MD (6873.44 TVD, -3247.81 N, 2705.00 E)									
- Point									
Garden Creek 27-36H	0.00	0.00	0.00	0.00	0.00	567,481.22	2,338,576.02	40.884719	-104.275571
- actual wellpath hits target center									
- Polygon									
Point 1				4,195.12	-74.86	567,464.29	2,342,771.85		
Point 2				4,308.12	-4,157.07	563,383.96	2,342,941.21		
Point 3				303.67	-4,114.05	563,371.68	2,338,936.47		
Point 4				77.07	-105.14	567,377.15	2,338,654.54		

## North Reference Sheet for Sec. 36-T11N-R62W - Garden Creek 27-36H - Plan A Rev 1

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

Vertical Depths are relative to RKB 25' @ 5131.00ft (True 30). Northing and Easting are relative to Garden Creek 27-36H

Coordinate System is US State Plane 1927 (Exact solution), Colorado North 501 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Lambert Conformal Conic (2 parallel)

Central Meridian is -105.500000°, Longitude Origin:0.000000°, Latitude Origin:40.783333°

False Easting: 2,000,000.00ft, False Northing: 0.00ft, Scale Reduction: 1.00001802

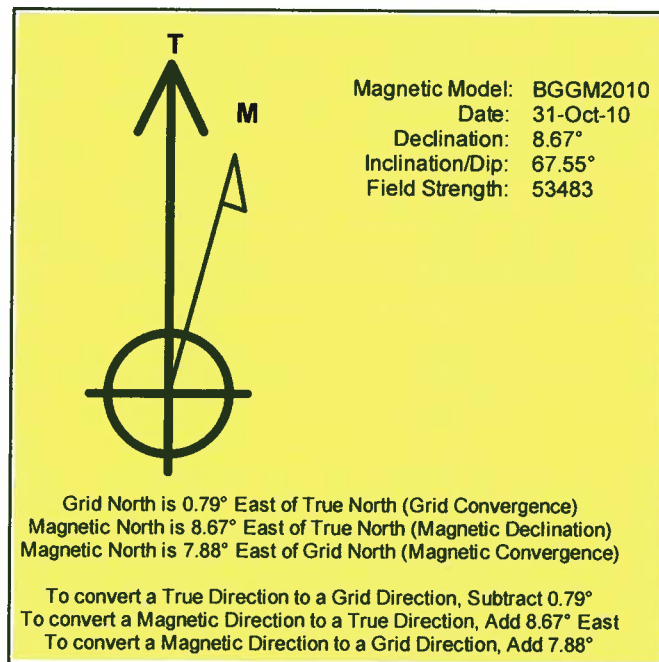
Grid Coordinates of Well: 567,481.22 ft N, 2,338,576.02 ft E

Geographical Coordinates of Well: 40° 53' 04.99" N, 104° 16' 32.06" W

Grid Convergence at Surface is: 0.79°

Based upon Minimum Curvature type calculations, at a Measured Depth of 12,910.00ft  
the Bottom Hole Displacement is 5,910.66ft in the Direction of 134.16° (True).

Magnetic Convergence at surface is: -7.88° (31 October 2010, , BGGM2010)



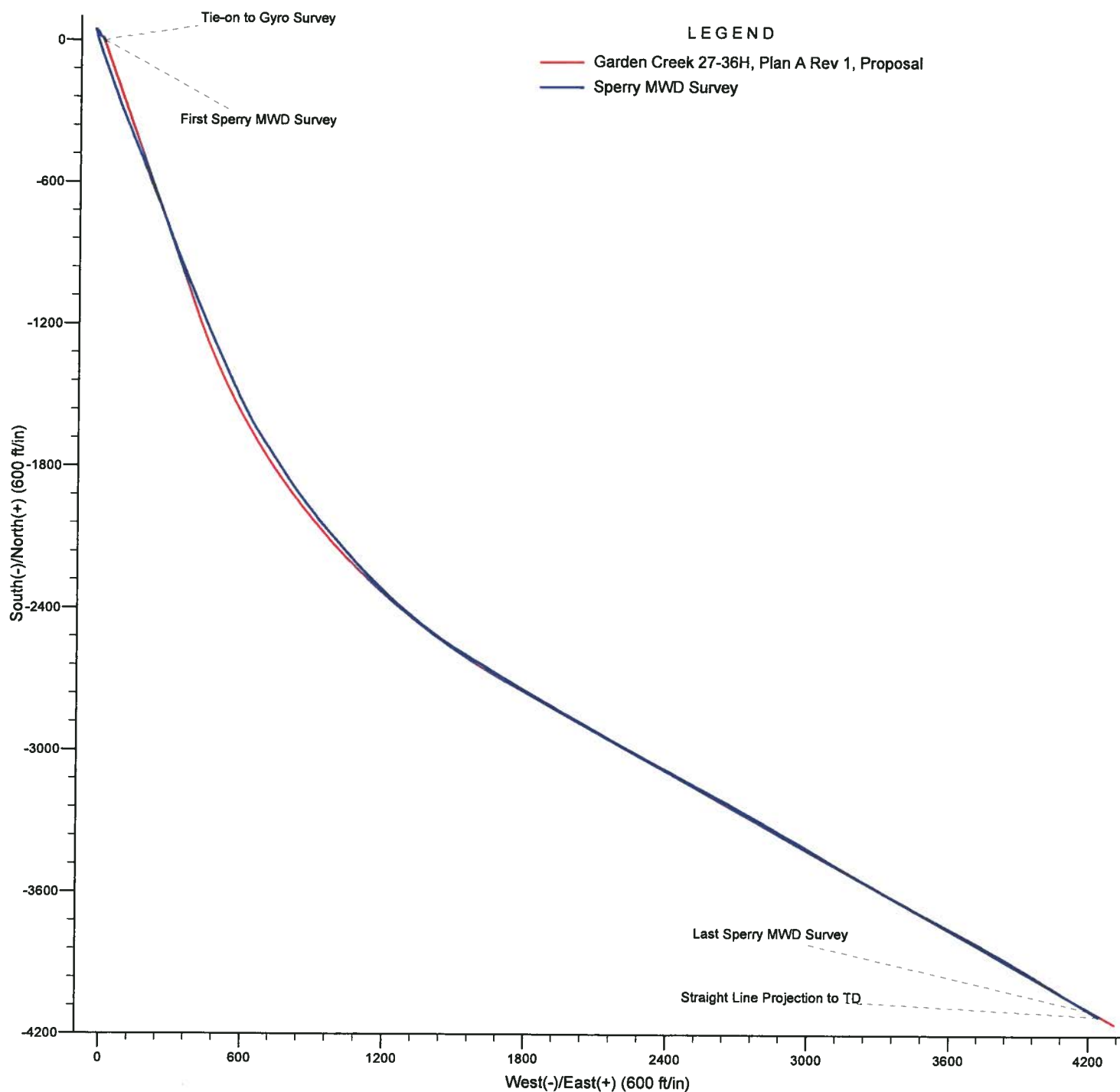


Project: Weld County, CO (NAD 27)  
Site: Sec. 36-T11N-R62W  
Well: Garden Creek 27-36H

# EOG Resources, Inc.

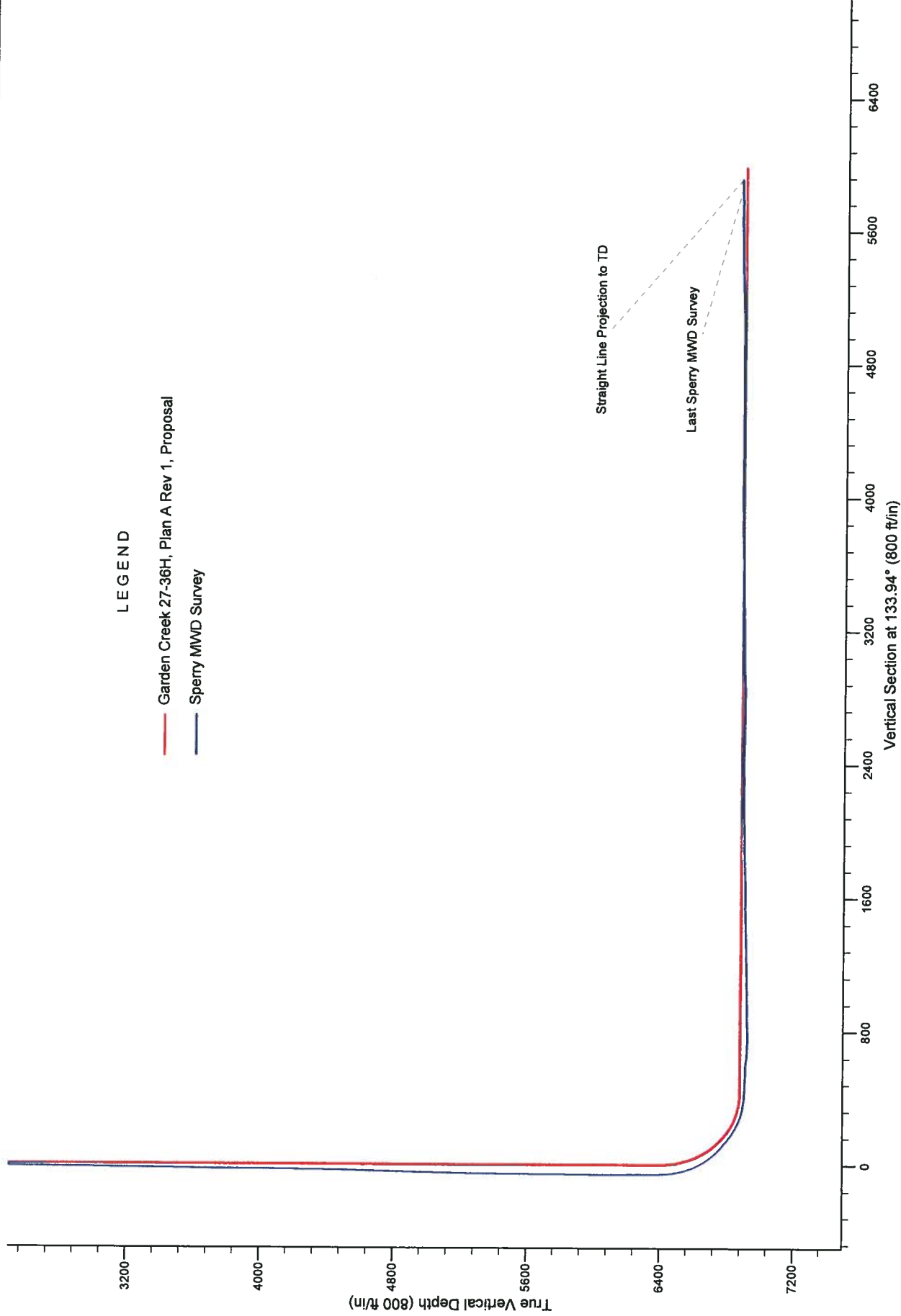
**HALLIBURTON**

Sperry Drilling



Project: Weld County, CO (NAD 27)  
Site: Sec. 36-T11N-R62W  
Well: Garden Creek 27-36H

# EOG Resources, Inc.





WELL DETAILS: Garden Creek 27-38K(Sperry Drilling Services)

N-S 0.0 +E-W 0.0 Northing 5976132 Easting 2343672.75 UTM Zone 18Q UTM Datum NAD83 UTM Spheroid GRS80 UTM Units Meter UTM Projection UTM

Offset Elev: 5100.0 Lat: 40° 52' 43.86" N Long: 104° 16' 32.58" W

Slut



Created by: The Phoenix  
Modified: 10/11/2011  
Author: J. J. Berry  
Checked: J. J. Berry  
Date: 10/11/2011  
Model: 2010/10/11

Survey Data originated by Sperry  
Drilling Services. Phoenix  
Technology Services utilized said  
data for presentation purposes  
only.

