

Continental Resources, Inc.

**Weld County, CO
Sec. 14-T8N-R62W
Planck 1-14H**

Plan A Rev 1

Survey: Sidetrack #1

Sperry Drilling Services Standard Report

24 February, 2012

Well Coordinates: 1,488,580.52 N, 3,338,563.01 E (40° 40' 05.35" N, 104° 16' 46.25" W)
Ground Level: 5,049.00 ft

Local Coordinate Origin:	Centered on Well Planck 1-14H
Viewing Datum:	RKB 16' @ 5065.00ft (Cyclone 12)
TVDs to System:	N
North Reference:	True
Unit System:	API - US Survey Feet - Custom
Geodetic Scale Factor Applied	
Version: 2003.16 Build: 431	

HALLIBURTON

HALLIBURTON**Survey Report for Planck 1-14H - Sidetrack #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
Tie On							
610.00	0.22	110.11	610.00	-0.40	1.10	0.40	0.04
First MWD Survey (Original)							
701.00	0.30	78.49	701.00	-0.42	1.50	0.42	0.18
791.00	0.46	97.85	791.00	-0.42	2.09	0.42	0.23
882.00	0.28	73.48	881.99	-0.40	2.66	0.41	0.26
972.00	0.28	96.85	971.99	-0.37	3.09	0.37	0.13
1,064.00	0.62	124.20	1,063.99	-0.67	3.73	0.68	0.43
1,154.00	0.77	110.93	1,153.98	-1.16	4.69	1.17	0.24
1,245.00	0.68	137.89	1,244.98	-1.78	5.63	1.79	0.38
1,338.00	0.57	146.25	1,337.97	-2.58	6.25	2.59	0.15
1,430.00	0.91	142.42	1,429.96	-3.54	6.95	3.55	0.37
1,522.00	0.75	148.73	1,521.95	-4.63	7.71	4.64	0.20
1,613.00	0.81	126.44	1,612.94	-5.52	8.54	5.53	0.34
1,703.00	0.91	129.92	1,702.93	-6.36	9.60	6.37	0.13
1,794.00	0.72	136.09	1,793.93	-7.23	10.55	7.25	0.23
1,885.00	0.85	115.99	1,884.92	-7.94	11.55	7.96	0.33
1,975.00	0.71	106.60	1,974.91	-8.39	12.69	8.41	0.21
2,068.00	0.74	103.50	2,067.90	-8.70	13.82	8.72	0.05
2,163.00	0.62	81.75	2,162.89	-8.77	14.93	8.79	0.30
2,257.00	0.85	93.47	2,256.89	-8.74	16.13	8.76	0.29
2,350.00	0.59	116.46	2,349.88	-8.99	17.24	9.02	0.41
2,442.00	0.68	117.91	2,441.87	-9.46	18.15	9.49	0.10
2,473.00	0.74	113.89	2,472.87	-9.63	18.50	9.65	0.25
2,564.00	0.56	92.99	2,563.87	-9.89	19.48	9.92	0.32
2,658.00	0.25	120.76	2,657.86	-10.02	20.11	10.05	0.38
2,753.00	0.31	176.52	2,752.86	-10.38	20.31	10.41	0.28
2,847.00	0.31	116.98	2,846.86	-10.75	20.55	10.78	0.33
2,937.00	0.44	127.16	2,936.86	-11.07	21.04	11.10	0.16
3,030.00	0.34	143.76	3,029.86	-11.50	21.49	11.54	0.16
3,124.00	0.44	165.93	3,123.86	-12.08	21.74	12.11	0.19
3,218.00	0.34	204.50	3,217.85	-12.68	21.71	12.72	0.29
3,311.00	0.19	212.25	3,310.85	-13.07	21.52	13.10	0.17
3,405.00	0.44	160.89	3,404.85	-13.54	21.55	13.57	0.38
3,499.00	0.44	166.38	3,498.85	-14.23	21.75	14.26	0.04
3,593.00	0.54	177.20	3,592.84	-15.02	21.86	15.06	0.14
3,688.00	0.50	211.33	3,687.84	-15.82	21.67	15.86	0.32
3,781.00	0.25	222.06	3,780.84	-16.32	21.32	16.35	0.28
3,875.00	0.71	208.84	3,874.84	-16.98	20.90	17.02	0.50
3,968.00	0.91	237.78	3,967.83	-17.88	20.00	17.91	0.48
4,062.00	0.90	244.99	4,061.81	-18.59	18.70	18.62	0.12
4,156.00	0.95	251.74	4,155.80	-19.15	17.29	19.17	0.13
4,250.00	0.80	254.51	4,249.79	-19.57	15.92	19.59	0.17
4,343.00	1.51	248.19	4,342.77	-20.20	14.15	20.22	0.77
4,436.00	1.05	267.66	4,435.75	-20.69	12.16	20.71	0.67
4,529.00	0.66	297.99	4,528.74	-20.47	10.84	20.49	0.63
4,623.00	0.88	299.15	4,622.73	-19.86	9.73	19.88	0.23
4,718.00	0.79	309.50	4,717.72	-19.09	8.59	19.11	0.18
4,812.00	0.77	317.63	4,811.71	-18.21	7.66	18.23	0.12

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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
4,906.00	1.00	335.35	4,905.70	-17.00	6.90	17.01	0.38
4,999.00	1.24	340.40	4,998.68	-15.32	6.22	15.33	0.28
5,093.00	1.43	319.39	5,092.66	-13.47	5.12	13.48	0.55
5,187.00	1.64	320.07	5,186.62	-11.55	3.49	11.55	0.22
5,280.00	1.17	334.41	5,279.60	-9.67	2.22	9.67	0.63
5,374.00	0.75	330.36	5,373.58	-8.27	1.51	8.27	0.45
5,468.00	0.22	20.69	5,467.58	-7.56	1.26	7.57	0.67
5,561.00	0.12	24.55	5,560.58	-7.31	1.37	7.31	0.11
5,654.00	0.26	65.54	5,653.58	-7.13	1.60	7.14	0.20
5,748.00	0.40	109.15	5,747.58	-7.15	2.10	7.16	0.30
5,841.00	0.50	114.96	5,840.57	-7.43	2.78	7.43	0.12
5,934.00	0.49	116.61	5,933.57	-7.78	3.50	7.79	0.02
6,027.00	0.47	103.38	6,026.57	-8.05	4.23	8.05	0.12
6,121.00	0.57	139.86	6,120.56	-8.49	4.91	8.50	0.36
6,247.00	3.99	179.95	6,246.45	-13.36	5.31	13.37	2.84
6,278.00	7.86	184.55	6,277.28	-16.55	5.15	16.56	12.57
6,309.00	11.83	181.37	6,307.82	-21.84	4.90	21.85	12.92
6,340.00	15.26	177.77	6,337.95	-29.10	4.99	29.10	11.39
6,371.00	18.40	178.04	6,367.62	-38.07	5.31	38.07	10.13
6,402.00	21.58	179.50	6,396.75	-48.66	5.53	48.67	10.38
6,434.00	25.32	182.25	6,426.10	-61.39	5.31	61.39	12.17
6,465.00	29.00	182.28	6,453.68	-75.52	4.75	75.53	11.87
6,495.00	32.26	182.96	6,479.49	-90.79	4.05	90.80	10.93
6,527.00	36.25	182.87	6,505.93	-108.77	3.13	108.78	12.47
6,558.00	39.45	182.42	6,530.41	-127.77	2.26	127.78	10.36
6,590.00	42.51	180.86	6,554.56	-148.75	1.67	148.75	10.08
6,621.00	45.58	181.29	6,576.84	-170.29	1.26	170.29	9.95
6,653.00	49.05	182.41	6,598.53	-193.80	0.49	193.80	11.14
6,684.00	53.42	181.46	6,617.94	-217.95	-0.31	217.95	14.30
6,715.00	56.38	182.54	6,635.76	-243.29	-1.20	243.29	9.96
6,746.00	58.43	182.76	6,652.46	-269.38	-2.41	269.38	6.64
6,775.00	60.00	181.71	6,667.30	-294.27	-3.38	294.27	6.24
6,807.00	62.05	181.42	6,682.80	-322.26	-4.15	322.25	6.46
6,837.00	65.00	181.05	6,696.18	-349.10	-4.72	349.09	9.90
6,868.00	68.37	181.15	6,708.45	-377.56	-5.27	377.55	10.88
6,898.00	71.72	181.57	6,718.68	-405.75	-5.94	405.74	11.24
6,929.00	75.33	180.44	6,727.47	-435.47	-6.46	435.46	12.16
6,960.00	78.88	179.10	6,734.39	-465.68	-6.34	465.67	12.20
6,992.00	81.81	178.48	6,739.76	-497.21	-5.67	497.20	9.35
7,069.00	87.90	176.31	6,746.66	-573.78	-2.18	573.78	8.39
7,101.00	87.78	176.11	6,747.87	-605.69	-0.06	605.69	0.73
7,164.00	89.32	176.96	6,749.46	-668.55	3.74	668.56	2.79
7,228.00	90.31	177.66	6,749.67	-732.48	6.75	732.49	1.89
7,291.00	90.80	177.41	6,749.06	-795.42	9.46	795.43	0.87
7,354.00	90.74	177.16	6,748.21	-858.34	12.44	858.36	0.41
7,418.00	90.56	177.29	6,747.48	-922.26	15.54	922.29	0.35
7,481.00	89.57	177.76	6,747.41	-985.20	18.26	985.23	1.74
7,546.00	88.21	180.25	6,748.67	-1,050.18	19.39	1,050.20	4.36
7,609.00	88.33	180.06	6,750.57	-1,113.15	19.22	1,113.17	0.36
7,673.00	88.27	179.95	6,752.47	-1,177.12	19.21	1,177.15	0.20
7,736.00	88.27	180.12	6,754.37	-1,240.09	19.17	1,240.12	0.27

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7,798.00	88.40	180.08	6,756.17	-1,302.06	19.06	1,302.09	0.22
7,861.00	90.86	181.43	6,756.58	-1,365.05	18.23	1,365.08	4.45
7,924.00	91.30	180.90	6,755.39	-1,428.03	16.95	1,428.05	1.09
7,988.00	91.54	180.47	6,753.81	-1,492.00	16.19	1,492.02	0.77
8,005.00	91.17	181.09	6,753.41	-1,508.99	15.96	1,509.02	4.24
Kick Off Point (ST1)							
8,019.00	90.87	181.60	6,753.16	-1,522.99	15.63	1,523.01	4.24
First MWD Survey (ST1)							
8,050.00	90.68	183.99	6,752.74	-1,553.95	14.12	1,553.97	7.73
8,083.00	90.74	183.81	6,752.33	-1,586.87	11.87	1,586.88	0.57
8,115.00	90.68	183.80	6,751.93	-1,618.79	9.75	1,618.81	0.19
8,147.00	90.86	183.86	6,751.50	-1,650.72	7.61	1,650.73	0.59
8,180.00	90.74	184.15	6,751.04	-1,683.64	5.31	1,683.64	0.95
8,212.00	90.74	184.18	6,750.63	-1,715.55	2.98	1,715.55	0.09
8,309.00	90.99	183.77	6,749.16	-1,812.30	-3.74	1,812.30	0.50
8,373.00	91.48	184.08	6,747.78	-1,876.14	-8.12	1,876.13	0.91
8,437.00	91.11	183.75	6,746.34	-1,939.97	-12.49	1,939.95	0.77
8,501.00	92.41	183.55	6,744.37	-2,003.81	-16.56	2,003.79	2.06
8,565.00	90.49	183.75	6,742.75	-2,067.66	-20.63	2,067.63	3.02
8,629.00	90.68	184.02	6,742.10	-2,131.51	-24.97	2,131.47	0.52
8,694.00	90.12	183.71	6,741.64	-2,196.36	-29.35	2,196.31	0.98
8,758.00	88.70	184.13	6,742.30	-2,260.20	-33.73	2,260.15	2.31
8,855.00	89.44	183.87	6,743.88	-2,356.95	-40.49	2,356.89	0.81
8,951.00	89.26	184.09	6,744.97	-2,452.72	-47.15	2,452.64	0.30
9,015.00	89.14	182.96	6,745.86	-2,516.59	-51.09	2,516.51	1.78
9,078.00	89.01	183.01	6,746.88	-2,579.49	-54.37	2,579.41	0.22
9,141.00	90.25	180.74	6,747.28	-2,642.45	-56.43	2,642.37	4.11
9,236.00	89.81	182.29	6,747.24	-2,737.42	-58.94	2,737.33	1.70
9,300.00	89.38	181.91	6,747.69	-2,801.37	-61.29	2,801.28	0.90
9,363.00	89.32	181.95	6,748.40	-2,864.33	-63.41	2,864.23	0.11
9,426.00	88.27	181.75	6,749.73	-2,927.28	-65.44	2,927.18	1.70
9,489.00	87.90	181.46	6,751.83	-2,990.22	-67.20	2,990.12	0.75
9,552.00	88.58	180.89	6,753.77	-3,053.18	-68.50	3,053.08	1.41
9,615.00	90.25	182.00	6,754.41	-3,116.15	-70.08	3,116.05	3.18
9,710.00	90.99	181.52	6,753.38	-3,211.10	-73.00	3,210.99	0.93
9,804.00	90.86	179.73	6,751.86	-3,305.08	-74.03	3,304.97	1.91
9,868.00	91.92	179.82	6,750.31	-3,369.06	-73.78	3,368.95	1.66
9,964.00	91.42	179.17	6,747.51	-3,465.02	-72.93	3,464.90	0.85
10,027.00	92.10	179.93	6,745.58	-3,527.98	-72.44	3,527.87	1.62
10,090.00	90.25	178.55	6,744.29	-3,590.96	-71.60	3,590.85	3.66
10,153.00	90.74	178.77	6,743.74	-3,653.94	-70.13	3,653.83	0.85
10,217.00	90.25	178.37	6,743.19	-3,717.92	-68.53	3,717.81	0.99
10,280.00	90.56	178.48	6,742.75	-3,780.89	-66.80	3,780.79	5.52
10,343.00	90.19	178.30	6,742.33	-3,843.87	-65.03	3,843.77	0.65
10,405.00	90.99	178.78	6,741.69	-3,905.84	-63.45	3,905.74	1.50
10,467.00	91.24	178.78	6,740.49	-3,967.82	-62.13	3,967.72	0.40
10,528.00	90.68	178.59	6,739.47	-4,028.79	-60.73	4,028.70	0.97
10,620.00	89.38	178.99	6,739.42	-4,120.77	-58.79	4,120.68	1.48
10,682.00	89.01	178.94	6,740.29	-4,182.75	-57.67	4,182.66	0.60
10,743.00	88.76	178.92	6,741.48	-4,243.73	-56.53	4,243.64	0.41
10,805.00	88.09	178.82	6,743.18	-4,305.69	-55.31	4,305.61	1.09

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10,866.00	89.07	178.91	6,744.69	-4,366.66	-54.10	4,366.58	1.61
10,927.00	91.17	178.81	6,744.56	-4,427.65	-52.88	4,427.56	3.45
11,019.00	90.74	178.44	6,743.03	-4,519.61	-50.68	4,519.53	0.62
11,081.00	90.93	178.35	6,742.13	-4,581.58	-48.94	4,581.50	0.34
11,142.00	93.58	178.99	6,739.73	-4,642.51	-47.53	4,642.43	4.47
11,202.00	93.34	178.58	6,736.11	-4,702.38	-46.26	4,702.31	0.79
11,263.00	93.46	179.12	6,732.49	-4,763.26	-45.03	4,763.19	0.91
11,355.00	92.10	179.51	6,728.03	-4,855.15	-43.93	4,855.08	1.54
11,448.00	90.49	179.47	6,725.92	-4,948.12	-43.11	4,948.05	1.73
11,509.00	90.68	179.29	6,725.30	-5,009.11	-42.45	5,009.04	0.43
11,570.00	90.87	179.66	6,724.48	-5,070.10	-41.89	5,070.03	0.68
11,632.00	90.93	179.32	6,723.50	-5,132.09	-41.34	5,132.02	0.56
11,694.00	90.74	179.15	6,722.60	-5,194.08	-40.51	5,194.01	0.41
11,755.00	90.93	179.97	6,721.71	-5,255.07	-40.04	5,255.00	1.38
11,816.00	90.43	179.62	6,720.99	-5,316.07	-39.82	5,316.00	1.00
11,878.00	90.37	179.57	6,720.55	-5,378.06	-39.38	5,378.00	0.13
11,939.00	90.00	179.64	6,720.36	-5,439.06	-38.96	5,439.00	0.62
12,001.00	89.69	179.36	6,720.52	-5,501.06	-38.42	5,500.99	0.67
12,063.00	89.94	179.45	6,720.72	-5,563.05	-37.78	5,562.99	0.43
12,155.00	90.43	179.81	6,720.43	-5,655.05	-37.18	5,654.99	0.66
12,216.00	89.63	179.18	6,720.40	-5,716.05	-36.65	5,715.99	1.67
12,278.00	90.37	179.56	6,720.40	-5,778.04	-35.97	5,777.98	1.34
12,339.00	90.37	179.72	6,720.00	-5,839.04	-35.58	5,838.98	0.26
12,401.00	89.81	179.14	6,719.90	-5,901.04	-34.97	5,900.98	1.30
12,462.00	90.93	179.25	6,719.51	-5,962.03	-34.11	5,961.97	1.84
12,554.00	91.54	178.95	6,717.53	-6,054.00	-32.66	6,053.94	0.74
12,647.00	91.61	179.07	6,714.97	-6,146.95	-31.06	6,146.89	0.15
12,738.00	91.61	179.20	6,712.41	-6,237.90	-29.68	6,237.85	0.14
12,833.00	90.56	178.89	6,710.62	-6,332.87	-28.10	6,332.82	1.15
12,928.00	90.74	178.76	6,709.54	-6,427.84	-26.15	6,427.80	0.23
12,990.00	90.80	178.58	6,708.70	-6,489.82	-24.71	6,489.78	0.31
13,053.00	90.68	178.62	6,707.89	-6,552.80	-23.17	6,552.75	0.20
13,117.00	90.74	178.90	6,707.10	-6,616.78	-21.79	6,616.74	0.45
13,180.00	90.49	178.63	6,706.42	-6,679.76	-20.43	6,679.72	0.58
13,244.00	90.80	178.95	6,705.70	-6,743.74	-19.08	6,743.70	0.70
13,307.00	90.86	178.81	6,704.79	-6,806.72	-17.85	6,806.69	0.24
13,371.00	91.17	179.18	6,703.65	-6,870.70	-16.73	6,870.67	0.75
13,434.00	90.68	179.09	6,702.64	-6,933.69	-15.78	6,933.65	0.79
13,498.00	90.12	178.53	6,702.19	-6,997.67	-14.45	6,997.64	1.24
13,562.00	90.19	178.96	6,702.02	-7,061.65	-13.05	7,061.63	0.68
13,626.00	89.38	178.01	6,702.26	-7,125.63	-11.35	7,125.60	1.95
13,689.00	89.75	180.05	6,702.74	-7,188.62	-10.29	7,188.59	3.29
13,784.00	89.63	181.00	6,703.25	-7,283.61	-11.16	7,283.58	1.01
13,878.00	89.01	180.30	6,704.37	-7,377.60	-12.22	7,377.57	0.99
13,973.00	88.95	180.39	6,706.06	-7,472.58	-12.80	7,472.55	0.11
14,069.00	88.52	179.84	6,708.18	-7,568.55	-12.99	7,568.53	0.73
14,132.00	88.83	179.95	6,709.63	-7,631.54	-12.87	7,631.51	0.52
14,196.00	87.96	179.27	6,711.43	-7,695.51	-12.44	7,695.48	1.73
14,291.00	89.63	179.19	6,713.42	-7,790.48	-11.16	7,790.45	1.76
14,387.00	89.94	178.71	6,713.78	-7,886.46	-9.40	7,886.44	0.60
14,451.00	90.31	179.03	6,713.64	-7,950.45	-8.14	7,950.43	0.76

HALLIBURTON**Survey Report for Planck 1-14H - Sidetrack #1**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
14,513.00	90.00	178.42	6,713.48	-8,012.43	-6.76	8,012.41	1.10
14,577.00	89.63	178.69	6,713.68	-8,076.41	-5.15	8,076.39	0.72
14,640.00	89.81	178.60	6,713.99	-8,139.39	-3.66	8,139.38	0.32
14,704.00	90.19	178.53	6,713.99	-8,203.37	-2.05	8,203.36	0.60
14,766.00	90.62	178.15	6,713.55	-8,265.34	-0.26	8,265.33	0.93
14,829.00	90.56	178.46	6,712.90	-8,328.31	1.61	8,328.31	0.50
14,893.00	90.56	178.63	6,712.28	-8,392.29	3.23	8,392.28	0.27
14,957.00	90.37	178.19	6,711.76	-8,456.26	5.01	8,456.26	0.75
15,021.00	90.25	178.16	6,711.41	-8,520.23	7.04	8,520.23	0.19
15,083.00	90.12	178.33	6,711.21	-8,582.20	8.94	8,582.20	0.35
15,147.00	90.12	178.45	6,711.08	-8,646.17	10.74	8,646.18	0.19
15,210.00	90.00	178.49	6,711.01	-8,709.15	12.42	8,709.16	0.20
15,305.00	90.56	178.21	6,710.55	-8,804.11	15.16	8,804.12	0.66
15,400.00	91.92	178.41	6,708.49	-8,899.04	17.96	8,899.06	1.45
15,463.00	91.98	178.28	6,706.35	-8,961.98	19.78	8,962.00	0.23
15,526.00	92.04	178.15	6,704.14	-9,024.91	21.74	9,024.93	0.23
15,589.00	92.29	178.53	6,701.76	-9,087.84	23.56	9,087.87	0.72
15,653.00	91.79	178.23	6,699.48	-9,151.77	25.37	9,151.80	0.91
15,716.00	91.73	178.30	6,697.55	-9,214.72	27.28	9,214.75	0.15
15,780.00	91.67	178.54	6,695.65	-9,278.66	29.04	9,278.70	0.39
15,842.00	91.30	178.58	6,694.04	-9,340.62	30.60	9,340.66	0.60
15,906.00	91.30	179.18	6,692.59	-9,404.59	31.85	9,404.63	0.94
15,969.00	90.74	179.00	6,691.47	-9,467.58	32.85	9,467.61	0.93
16,032.00	90.93	178.92	6,690.55	-9,530.56	33.99	9,530.60	0.33
16,096.00	90.37	178.82	6,689.82	-9,594.54	35.26	9,594.58	0.89
16,160.00	90.00	178.64	6,689.62	-9,658.53	36.67	9,658.57	0.64

Final MWD Survey (ST1)

16,195.00	90.00	178.64	6,689.62	-9,693.52	37.50	9,693.56	0.00
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Projection to Bit**Survey Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
0.00	0.00	0.00	0.00	Tie On
610.00	610.00	-0.40	1.10	First MWD Survey (Original)
8,005.00	6,753.41	-1,508.99	15.96	Kick Off Point (ST1)
8,019.00	6,753.16	-1,522.99	15.63	First MWD Survey (ST1)
16,160.00	6,689.62	-9,658.53	36.67	Final MWD Survey (ST1)
16,195.00	6,689.62	-9,693.52	37.50	Projection to Bit

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (ft)
				+N/-S (ft)	+E/-W (ft)	
Target	Planck 1-14H Plan A Rev 0 BH Tgt	179.91	Slot	0.00	0.00	0.00

HALLIBURTON**Survey Report for Planck 1-14H - Sidetrack #1****Survey tool program**

From (ft)	To (ft)	Survey/Plan	Survey Tool
610.00	8,689.00	MWD Survey	MWD
8,005.00	16,195.00	Sidetrack #1	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
Planck 1-14H Plan A	0.00	0.00	6,789.00	-9,663.41	14.43	1,478,918.39	3,338,710.44	40° 38' 29.861 N	104° 16' 46.060 W
- survey misses target center by 101.96ft at 16160.00ft MD (6689.62 TVD, -9658.53 N, 36.67 E)									
- Point									
Planck 1-14H 600' S	0.00	0.00	-6.00	0.00	0.00	1,488,580.52	3,338,563.01	40° 40' 5.347 N	104° 16' 46.247 W
- survey misses target center by 6.00ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Planck 1-14H Sectio	0.00	0.00	-6.00	0.00	0.00	1,488,580.52	3,338,563.01	40° 40' 5.347 N	104° 16' 46.247 W
- survey misses target center by 6.00ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Planck 1-14H Cente	0.00	0.00	-6.00	0.00	0.00	1,488,580.52	3,338,563.01	40° 40' 5.347 N	104° 16' 46.247 W
- survey misses target center by 6.00ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Polygon									

HALLIBURTON**North Reference Sheet for Sec. 14-T8N-R62W - Planck 1-14H - 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 16' @ 5065.00ft (Cyclone 12). Northing and Easting are relative to Planck 1-14H

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: 0.99998334

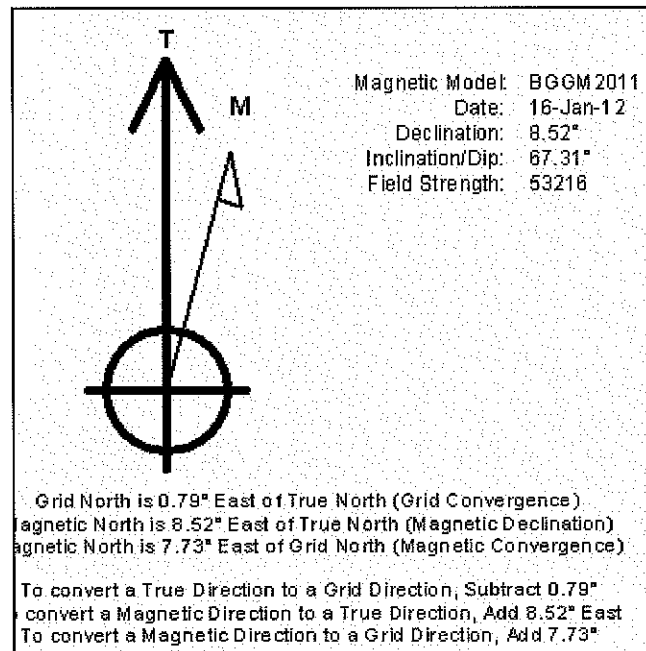
Grid Coordinates of Well: 1,488,580.52 ft N, 3,338,563.01 ft E

Geographical Coordinates of Well: 40° 40' 05.35" N, 104° 16' 46.25" W

Grid Convergence at Surface is: 0.79°

Based upon Minimum Curvature type calculations, at a Measured Depth of 16,195.00ft
the Bottom Hole Displacement is 9,693.59ft in the Direction of 179.78° (True).

Magnetic Convergence at surface is: -7.73° (16 January 2012, , BGGM2011)



Continental Resources, Inc.

**Weld County, CO
Sec. 14-T8N-R62W
Planck 1-14H**

Plan A Rev 1

Survey: MWD Survey

Sperry Drilling Services Standard Report

24 February, 2012

Well Coordinates: 1,488,580.52 N, 3,338,563.01 E (40° 40' 05.35" N, 104° 16' 46.25" W)
Ground Level: 5,049.00 ft

Local Coordinate Origin:	Centered on Well Planck 1-14H
Viewing Datum:	RKB 16' @ 5065.00ft (Cyclone 12)
TVDs to System:	N
North Reference:	True
Unit System:	API - US Survey Feet - Custom
Geodetic Scale Factor Applied	
Version: 2003.16 Build: 431	

HALLIBURTON

HALLIBURTON**Survey Report for Planck 1-14H - 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
Tie On							
610.00	0.22	110.11	610.00	-0.40	1.10	0.40	0.04
First MWD Survey (Original)							
701.00	0.30	78.49	701.00	-0.42	1.50	0.42	0.18
791.00	0.46	97.85	791.00	-0.42	2.09	0.42	0.23
882.00	0.28	73.48	881.99	-0.40	2.66	0.41	0.26
972.00	0.28	96.85	971.99	-0.37	3.09	0.37	0.13
1,064.00	0.62	124.20	1,063.99	-0.67	3.73	0.68	0.43
1,154.00	0.77	110.93	1,153.98	-1.16	4.69	1.17	0.24
1,245.00	0.68	137.89	1,244.98	-1.78	5.63	1.79	0.38
1,338.00	0.57	146.25	1,337.97	-2.58	6.25	2.59	0.15
1,430.00	0.91	142.42	1,429.96	-3.54	6.95	3.55	0.37
1,522.00	0.75	148.73	1,521.95	-4.63	7.71	4.64	0.20
1,613.00	0.81	126.44	1,612.94	-5.52	8.54	5.53	0.34
1,703.00	0.91	129.92	1,702.93	-6.36	9.60	6.37	0.13
1,794.00	0.72	136.09	1,793.93	-7.23	10.55	7.25	0.23
1,885.00	0.85	115.99	1,884.92	-7.94	11.55	7.96	0.33
1,975.00	0.71	106.60	1,974.91	-8.39	12.69	8.41	0.21
2,068.00	0.74	103.50	2,067.90	-8.70	13.82	8.72	0.05
2,163.00	0.62	81.75	2,162.89	-8.77	14.93	8.79	0.30
2,257.00	0.85	93.47	2,256.89	-8.74	16.13	8.76	0.29
2,350.00	0.59	116.46	2,349.88	-8.99	17.24	9.02	0.41
2,442.00	0.68	117.91	2,441.87	-9.46	18.15	9.49	0.10
2,473.00	0.74	113.89	2,472.87	-9.63	18.50	9.65	0.25
2,564.00	0.56	92.99	2,563.87	-9.89	19.48	9.92	0.32
2,658.00	0.25	120.76	2,657.86	-10.02	20.11	10.05	0.38
2,753.00	0.31	176.52	2,752.86	-10.38	20.31	10.41	0.28
2,847.00	0.31	116.98	2,846.86	-10.75	20.55	10.78	0.33
2,937.00	0.44	127.16	2,936.86	-11.07	21.04	11.10	0.16
3,030.00	0.34	143.76	3,029.86	-11.50	21.49	11.54	0.16
3,124.00	0.44	165.93	3,123.86	-12.08	21.74	12.11	0.19
3,218.00	0.34	204.50	3,217.85	-12.68	21.71	12.72	0.29
3,311.00	0.19	212.25	3,310.85	-13.07	21.52	13.10	0.17
3,405.00	0.44	160.89	3,404.85	-13.54	21.55	13.57	0.38
3,499.00	0.44	166.38	3,498.85	-14.23	21.75	14.26	0.04
3,593.00	0.54	177.20	3,592.84	-15.02	21.86	15.06	0.14
3,688.00	0.50	211.33	3,687.84	-15.82	21.67	15.86	0.32
3,781.00	0.25	222.06	3,780.84	-16.32	21.32	16.35	0.28
3,875.00	0.71	208.84	3,874.84	-16.98	20.90	17.02	0.50
3,968.00	0.91	237.78	3,967.83	-17.88	20.00	17.91	0.48
4,062.00	0.90	244.99	4,061.81	-18.59	18.70	18.62	0.12
4,156.00	0.95	251.74	4,155.80	-19.15	17.29	19.17	0.13
4,250.00	0.80	254.51	4,249.79	-19.57	15.92	19.59	0.17
4,343.00	1.51	248.19	4,342.77	-20.20	14.15	20.22	0.77
4,436.00	1.05	267.66	4,435.75	-20.69	12.16	20.71	0.67
4,529.00	0.66	297.99	4,528.74	-20.47	10.84	20.49	0.63
4,623.00	0.88	299.15	4,622.73	-19.86	9.73	19.88	0.23
4,718.00	0.79	309.50	4,717.72	-19.09	8.59	19.11	0.18
4,812.00	0.77	317.63	4,811.71	-18.21	7.66	18.23	0.12

HALLIBURTON**Survey Report for Planck 1-14H - MWD Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
4,906.00	1.00	335.35	4,905.70	-17.00	6.90	17.01	0.38
4,999.00	1.24	340.40	4,998.68	-15.32	6.22	15.33	0.28
5,093.00	1.43	319.39	5,092.66	-13.47	5.12	13.48	0.55
5,187.00	1.64	320.07	5,186.62	-11.55	3.49	11.55	0.22
5,280.00	1.17	334.41	5,279.60	-9.67	2.22	9.67	0.63
5,374.00	0.75	330.36	5,373.58	-8.27	1.51	8.27	0.45
5,468.00	0.22	20.69	5,467.58	-7.56	1.26	7.57	0.67
5,561.00	0.12	24.55	5,560.58	-7.31	1.37	7.31	0.11
5,654.00	0.26	65.54	5,653.58	-7.13	1.60	7.14	0.20
5,748.00	0.40	109.15	5,747.58	-7.15	2.10	7.16	0.30
5,841.00	0.50	114.96	5,840.57	-7.43	2.78	7.43	0.12
5,934.00	0.49	116.61	5,933.57	-7.78	3.50	7.79	0.02
6,027.00	0.47	103.38	6,026.57	-8.05	4.23	8.05	0.12
6,121.00	0.57	139.86	6,120.56	-8.49	4.91	8.50	0.36
6,175.00	0.57	130.90	6,174.56	-8.87	5.28	8.88	0.16
6,215.00	1.01	154.08	6,214.56	-9.32	5.59	9.33	1.34
6,247.00	3.99	179.95	6,246.52	-10.69	5.71	10.70	9.73
6,278.00	7.86	184.55	6,277.35	-13.88	5.54	13.89	12.57
6,309.00	11.83	181.37	6,307.89	-19.17	5.30	19.18	12.92
6,340.00	15.26	177.77	6,338.02	-26.43	5.38	26.44	11.39
6,371.00	18.40	178.04	6,367.69	-35.40	5.71	35.41	10.13
6,402.00	21.58	179.50	6,396.82	-45.99	5.93	46.00	10.38
6,434.00	25.32	182.25	6,426.17	-58.72	5.71	58.73	12.17
6,465.00	29.00	182.28	6,453.75	-72.85	5.15	72.86	11.87
6,495.00	32.26	182.96	6,479.56	-88.12	4.45	88.13	10.93
6,527.00	36.25	182.87	6,506.01	-106.11	3.53	106.11	12.47
6,558.00	39.45	182.42	6,530.48	-125.10	2.66	125.11	10.36
6,590.00	42.51	180.86	6,554.64	-146.08	2.06	146.08	10.08
6,621.00	45.58	181.29	6,576.92	-167.62	1.66	167.63	9.95
6,653.00	49.05	182.41	6,598.61	-191.13	0.89	191.13	11.14
6,684.00	53.42	181.46	6,618.01	-215.28	0.08	215.28	14.30
6,715.00	56.38	182.54	6,635.84	-240.62	-0.81	240.62	9.96
6,746.00	58.43	182.76	6,652.54	-266.71	-2.02	266.71	6.64
6,775.00	60.00	181.71	6,667.38	-291.61	-2.98	291.60	6.24
6,807.00	62.05	181.42	6,682.88	-319.59	-3.75	319.58	6.46
6,837.00	65.00	181.05	6,696.25	-346.43	-4.33	346.43	9.90
6,868.00	68.37	181.15	6,708.52	-374.89	-4.87	374.89	10.88
6,898.00	71.72	181.57	6,718.76	-403.08	-5.54	403.07	11.24
6,929.00	75.33	180.44	6,727.55	-432.80	-6.06	432.79	12.16
6,960.00	78.88	179.10	6,734.47	-463.01	-5.94	463.00	12.20
6,992.00	81.81	178.48	6,739.83	-494.55	-5.27	494.54	9.35
7,069.00	87.90	176.31	6,746.73	-571.11	-1.78	571.11	8.39
7,101.00	87.78	176.11	6,747.94	-603.02	0.33	603.02	0.73
7,164.00	89.32	176.96	6,749.53	-665.88	4.14	665.89	2.79
7,228.00	90.31	177.66	6,749.74	-729.81	7.14	729.82	1.89
7,291.00	90.80	177.41	6,749.13	-792.75	9.85	792.76	0.87
7,354.00	90.74	177.16	6,748.28	-855.67	12.84	855.69	0.41
7,418.00	90.56	177.29	6,747.56	-919.60	15.93	919.62	0.35
7,481.00	89.57	177.76	6,747.49	-982.54	18.65	982.56	1.74
7,546.00	88.21	180.25	6,748.75	-1,047.51	19.78	1,047.54	4.36
7,609.00	88.33	180.06	6,750.65	-1,110.48	19.61	1,110.51	0.36

HALLIBURTON**Survey Report for Planck 1-14H - MWD Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
7,673.00	88.27	179.95	6,752.55	-1,174.45	19.61	1,174.48	0.20
7,736.00	88.27	180.12	6,754.45	-1,237.42	19.57	1,237.45	0.27
7,798.00	88.40	180.08	6,756.25	-1,299.39	19.46	1,299.42	0.22
7,861.00	90.86	181.43	6,756.66	-1,362.38	18.63	1,362.41	4.45
7,924.00	91.30	180.90	6,755.47	-1,425.36	17.35	1,425.38	1.09
7,988.00	91.54	180.47	6,753.88	-1,489.33	16.59	1,489.36	0.77
8,050.00	92.10	180.81	6,751.91	-1,551.30	15.89	1,551.32	1.06
8,114.00	91.05	180.37	6,750.16	-1,615.27	15.23	1,615.29	1.78
8,209.00	90.74	180.44	6,748.67	-1,710.25	14.56	1,710.27	0.33
8,241.00	90.74	180.52	6,748.26	-1,742.25	14.29	1,742.27	0.25
8,306.00	90.99	180.80	6,747.28	-1,807.24	13.55	1,807.26	0.58
8,369.00	89.38	180.24	6,747.07	-1,870.23	12.97	1,870.25	2.71
8,432.00	87.65	180.52	6,748.71	-1,933.21	12.56	1,933.23	2.78
8,497.00	87.15	180.50	6,751.65	-1,998.14	11.98	1,998.15	0.77
8,593.00	86.23	180.60	6,757.20	-2,093.97	11.06	2,093.99	0.96
8,662.00	87.84	180.72	6,760.77	-2,162.87	10.27	2,162.89	2.34
8,689.00	87.71	180.40	6,761.81	-2,189.85	10.00	2,189.86	1.28
Final MWD Survey (Original)							

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
0.00	0.00	0.00	0.00	Tie On
610.00	610.00	-0.40	1.10	First MWD Survey (Original)
8,689.00	6,761.81	-2,189.85	10.00	Final MWD Survey (Original)
8,733.00				Projection to Bit (Original)

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (ft)	Origin +E/-W (ft)	Start TVD (ft)
Target	Planck 1-14H Plan A Rev 0 BH Tgt	179.91	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
610.00	8,689.00	MWD Survey	MWD
8,005.00	16,160.00	Sidetrack #1	MWD

HALLIBURTON**Survey Report for Planck 1-14H - 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
Planck 1-14H Plan A - survey misses target center by 7473.61ft at 8689.00ft MD (6761.81 TVD, -2189.85 N, 10.00 E) - Point	0.00	0.00	6,789.00	-9,663.41	14.43	1,478,918.39	3,338,710.44	40° 38' 29.861 N	104° 16' 46.060 W
Planck 1-14H 600' S - survey misses target center by 6.00ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Polygon	0.00	0.00	-6.00	0.00	0.00	1,488,580.52	3,338,563.01	40° 40' 5.347 N	104° 16' 46.247 W
Planck 1-14H Sectio - survey misses target center by 6.00ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Polygon	0.00	0.00	-6.00	0.00	0.00	1,488,580.52	3,338,563.01	40° 40' 5.347 N	104° 16' 46.247 W
Planck 1-14H Cente - survey misses target center by 6.00ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Polygon	0.00	0.00	-6.00	0.00	0.00	1,488,580.52	3,338,563.01	40° 40' 5.347 N	104° 16' 46.247 W

HALLIBURTON**North Reference Sheet for Sec. 14-T8N-R62W - Planck 1-14H - 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 16' @ 5065.00ft (Cyclone 12). Northing and Easting are relative to Planck 1-14H

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: 0.99998334

Grid Coordinates of Well: 1,488,580.52 ft N, 3,338,563.01 ft E

Geographical Coordinates of Well: 40° 40' 05.35" N, 104° 16' 46.25" W

Grid Convergence at Surface is: 0.79°

Based upon Minimum Curvature type calculations, at a Measured Depth of 8,689.00ft
the Bottom Hole Displacement is 2,189.88ft in the Direction of 179.74° (True).

Magnetic Convergence at surface is: -7.73° (16 January 2012, , BGGM2011)

