

Continental Resources, Inc.

Weld County, CO
Sec. 1-T7N-R62W
Marconi 1-1H

Plan B Rev 0

Survey: Sperry MWD Survey Main Hole

Sperry Drilling Services Standard Report

06 October, 2011

Well Coordinates: 1,467,312.08 N, 3,343,897.24 E (40° 36' 34.47" N, 104° 15' 40.89" W)
Ground Level: 4,917.00 ft

Local Coordinate Origin:	Centered on Well Marconi 1-1H
Viewing Datum:	RKB 16 ft. @ 4933.00ft (Cyclone 12)
TVDs to System:	N
North Reference:	True
Unit System:	API - US Survey Feet - Custom
Geodetic Scale Factor Applied	
Version: 2003.16 Build: 43I	

HALLIBURTON

Survey Report for Marconi 1-1H - Sperry MWD Survey Main Hole

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
Surface Tie In							
567.00	0.13	31.21	567.00	0.55	0.33	-0.56	0.02
First Sperry MWD Survey @ 567.00 ft - Main Hole							
628.00	0.07	263.53	628.00	0.61	0.33	-0.61	0.30
721.00	0.22	172.07	721.00	0.42	0.30	-0.43	0.25
811.00	0.15	196.67	811.00	0.14	0.29	-0.14	0.12
902.00	0.39	218.67	902.00	-0.22	0.06	0.22	0.28
992.00	0.31	251.45	992.00	-0.53	-0.36	0.54	0.24
1,083.00	0.59	223.72	1,082.99	-0.95	-0.92	0.97	0.38
1,175.00	0.42	269.60	1,174.99	-1.30	-1.58	1.32	0.46
1,267.00	0.25	232.38	1,266.99	-1.42	-2.08	1.46	0.29
1,358.00	0.17	252.00	1,357.99	-1.58	-2.36	1.62	0.12
1,448.00	0.13	246.29	1,447.99	-1.67	-2.58	1.71	0.05
1,542.00	0.31	262.44	1,541.99	-1.74	-2.93	1.79	0.20
1,636.00	0.38	286.93	1,635.99	-1.69	-3.48	1.74	0.17
1,730.00	0.16	316.90	1,729.98	-1.50	-3.87	1.56	0.27
1,823.00	0.34	258.76	1,822.98	-1.46	-4.23	1.53	0.31
1,917.00	0.07	9.46	1,916.98	-1.46	-4.49	1.53	0.39
2,012.00	0.07	132.29	2,011.98	-1.44	-4.44	1.51	0.13
2,105.00	1.01	143.42	2,104.98	-2.13	-3.91	2.20	1.01
2,199.00	0.93	129.68	2,198.96	-3.29	-2.83	3.33	0.26
2,293.00	0.75	136.29	2,292.95	-4.22	-1.82	4.25	0.22
2,387.00	0.51	164.13	2,386.95	-5.06	-1.28	5.09	0.41
2,480.00	0.79	153.72	2,479.94	-6.04	-0.88	6.05	0.33
2,573.00	0.72	159.56	2,572.93	-7.16	-0.39	7.17	0.11
2,667.00	0.92	188.68	2,666.93	-8.46	-0.30	8.46	0.48
2,761.00	0.86	199.41	2,760.91	-9.87	-0.65	9.88	0.19
2,854.00	0.70	177.69	2,853.91	-11.10	-0.86	11.11	0.36
2,948.00	0.80	159.44	2,947.90	-12.29	-0.61	12.29	0.27
3,041.00	0.68	156.33	3,040.89	-13.40	-0.16	13.40	0.14
3,133.00	0.97	172.08	3,132.88	-14.67	0.17	14.66	0.40
3,226.00	0.97	178.68	3,225.87	-16.24	0.30	16.23	0.12
3,320.00	0.24	190.25	3,319.86	-17.23	0.28	17.22	0.78
3,414.00	0.88	158.77	3,413.86	-18.09	0.51	18.08	0.73
3,508.00	0.60	138.32	3,507.85	-19.13	1.10	19.11	0.41
3,601.00	0.53	148.85	3,600.84	-19.86	1.64	19.83	0.13
3,694.00	0.59	120.50	3,693.84	-20.48	2.28	20.44	0.30
3,786.00	0.46	148.69	3,785.84	-21.03	2.88	20.98	0.31
3,880.00	0.35	122.86	3,879.83	-21.51	3.31	21.45	0.22
3,974.00	0.48	134.90	3,973.83	-21.94	3.83	21.88	0.17
4,068.00	0.47	134.02	4,067.83	-22.49	4.39	22.41	0.01
4,161.00	0.56	135.67	4,160.82	-23.08	4.98	22.99	0.10
4,254.00	0.58	154.89	4,253.82	-23.83	5.50	23.74	0.21
4,348.00	0.37	154.88	4,347.82	-24.54	5.83	24.44	0.22
4,442.00	0.31	156.33	4,441.81	-25.04	6.06	24.94	0.06
4,534.00	0.16	79.14	4,533.81	-25.25	6.29	25.14	0.34
4,626.00	0.28	129.16	4,625.81	-25.37	6.59	25.25	0.23
4,720.00	0.14	57.95	4,719.81	-25.45	6.86	25.33	0.29
4,815.00	0.37	65.27	4,814.81	-25.26	7.24	25.14	0.24

Survey Report for Marconi 1-1H - Sperry MWD Survey Main Hole

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
4,909.00	0.83	58.82	4,908.81	-24.78	8.10	24.64	0.49
5,002.00	0.76	29.08	5,001.80	-23.89	8.97	23.74	0.44
5,096.00	0.52	38.43	5,095.79	-23.01	9.54	22.85	0.28
5,189.00	0.92	52.70	5,188.78	-22.23	10.40	22.06	0.47
5,283.00	0.92	47.85	5,282.77	-21.27	11.56	21.07	0.08
5,377.00	0.84	50.59	5,376.76	-20.32	12.65	20.11	0.10
5,470.00	1.12	74.84	5,469.75	-19.65	14.05	19.42	0.53
5,564.00	1.31	61.52	5,563.73	-18.90	15.89	18.63	0.36
5,658.00	1.31	66.51	5,657.70	-17.96	17.82	17.66	0.12
5,751.00	1.39	76.57	5,750.68	-17.27	19.89	16.94	0.27
5,845.00	1.03	81.74	5,844.66	-16.89	21.83	16.52	0.40
5,939.00	1.02	76.45	5,938.64	-16.57	23.48	16.18	0.10
6,033.00	1.35	55.34	6,032.62	-15.74	25.21	15.33	0.58
6,126.00	1.90	75.45	6,125.58	-14.73	27.60	14.28	0.84
6,220.00	1.59	94.26	6,219.54	-14.44	30.41	13.93	0.69
6,314.00	1.35	102.53	6,313.51	-14.78	32.79	14.23	0.34
6,356.00	1.32	101.26	6,355.50	-14.98	33.75	14.42	0.10
Final Sperry MWD Survey @ 6356.00 ft - Main Hole							
6,410.00	1.32	101.26	6,409.48	-15.22	34.97	14.64	0.00
Straight Line Projection to TD @ 6410.00 ft -Main Hole							

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	Surface Tie In
567.00	567.00	0.55	0.33	First Sperry MWD Survey @ 567.00 ft - Main Hole
6,356.00	6,355.50	-14.98	33.75	Final Sperry MWD Survey @ 6356.00 ft - Main Hole
6,410.00	6,409.48	-15.22	34.97	Straight Line Projection to TD @ 6410.00 ft -Main Hole

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (ft)
				+N/-S (ft)	+E/-W (ft)	
Target	Marconi 1-1H Plan A Rev 0 BH Tgt	180.95	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
567.00	0.00	Sperry MWD Survey	MWD
6,037.00	7,711.00	Sperry MWD Survey Sidetrack #1	MWD

Survey Report for Marconi 1-1H - Sperry MWD Survey Main Hole**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
Marconi 1-1 600' Se	0.00	0.00	-5.00	0.00	0.00	1,467,312.08	3,343,897.24	0° 36' 34.473560 N	1° 15' 40.885200 W
- survey misses target center by 5.00ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Marconi 1-1 Center :	0.00	0.00	-5.00	0.00	0.00	1,467,312.08	3,343,897.24	0° 36' 34.473560 N	1° 15' 40.885200 W
- survey misses target center by 5.00ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Marconi 1-1H Plan A	0.00	0.00	6,594.00	-9,568.59	-158.05	1,457,742.44	3,343,872.86	0° 34' 59.923160 N	1° 15' 42.933600 W
- survey misses target center by 9557.10ft at 6410.00ft MD (6409.48 TVD, -15.22 N, 34.97 E)									
- Point									
Marconi 1-1 Section	0.00	0.00	-5.00	0.00	0.00	1,467,312.08	3,343,897.24	0° 36' 34.473560 N	1° 15' 40.885200 W
- survey misses target center by 5.00ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Polygon									

North Reference Sheet for Sec. 1-T7N-R62W - Marconi 1-1H - Plan B Rev 0

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 ft. @ 4933.00ft (Cyclone 12). Northing and Easting are relative to Marconi 1-1H

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' 0.000000 W°, Longitude Origin: 0° 0' 0.000000 E°, Latitude Origin: 40° 46' 60.000000 N°

False Easting: 3,000,000.00ft, False Northing: 1,000,000.00ft, Scale Reduction: 0.99997642

Grid Coordinates of Well: 1,467,312.08 ft N, 3,343,897.24 ft E

Geographical Coordinates of Well: 40° 36' 34.47" N, 104° 15' 40.89" W

Grid Convergence at Surface is: 0.80°

Based upon Minimum Curvature type calculations, at a Measured Depth of 6,410.00ft
the Bottom Hole Displacement is 38.14ft in the Direction of 113.52° (True).

Magnetic Convergence at surface is: -7.76° (23 August 2011, , BGGM2011)

