

Continental Resources, Inc.

Weld County, CO
Sec. 13-T8N-R62W
Dunn 1-13H

Plan A

Survey: Sperry MWD Surveys

Sperry Drilling Services Final Survey Report

17 January, 2012

Well Coordinates: 1,488,598.73 N, 3,339,883.90 E (40° 40' 05.35" N, 104° 16' 29.10" W)
Ground Level: 5,032.00 ft

Local Coordinate Origin:	Centered on Well Dunn 1-13H
Viewing Datum:	KB @ 5048.00ft (Rig KB)
TVDs to System:	N
North Reference:	Grid
Unit System:	API - US Survey Feet - Custom
Geodetic Scale Factor Applied	
Version: 2003.16 Build: 431	

HALLIBURTON

HALLIBURTON**Survey Report for Dunn 1-13H - Sperry MWD Surveys**

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
639.00	0.71	255.21	638.98	-1.01	-3.83	0.95	0.11
First Sperry MWD Survey of Sidetrack at 639'							
731.00	0.94	260.74	730.97	-1.28	-5.12	1.20	0.26
821.00	1.03	259.09	820.96	-1.55	-6.65	1.45	0.10
910.00	0.98	251.25	909.95	-1.95	-8.15	1.82	0.16
1,000.00	1.19	232.88	999.93	-2.76	-9.63	2.61	0.45
1,091.00	0.90	236.27	1,090.92	-3.72	-10.97	3.56	0.33
1,182.00	0.76	218.69	1,181.91	-4.59	-11.95	4.41	0.32
1,274.00	0.88	213.43	1,273.90	-5.66	-12.72	5.47	0.15
1,364.00	0.60	205.48	1,363.89	-6.66	-13.30	6.46	0.33
1,456.00	0.70	217.59	1,455.88	-7.54	-13.85	7.33	0.18
1,547.00	0.78	216.01	1,546.88	-8.48	-14.55	8.26	0.09
1,638.00	0.62	208.89	1,637.87	-9.41	-15.16	9.18	0.20
1,730.00	0.55	199.31	1,729.86	-10.27	-15.54	10.03	0.13
1,823.00	0.57	192.53	1,822.86	-11.14	-15.79	10.90	0.07
1,914.00	0.59	175.05	1,913.86	-12.05	-15.85	11.81	0.19
2,006.00	0.57	178.76	2,005.85	-12.98	-15.80	12.74	0.05
2,100.00	0.83	161.19	2,099.84	-14.09	-15.57	13.85	0.36
2,194.00	0.47	162.78	2,193.84	-15.10	-15.23	14.87	0.38
2,286.00	0.68	144.44	2,285.83	-15.91	-14.80	15.68	0.30
2,380.00	0.69	173.43	2,379.83	-16.92	-14.42	16.70	0.36
2,474.00	0.63	187.35	2,473.82	-18.00	-14.42	17.78	0.18
2,567.00	0.82	208.79	2,566.81	-19.09	-14.80	18.86	0.35
2,661.00	0.83	213.19	2,660.80	-20.25	-15.50	20.01	0.07
2,756.00	0.70	204.65	2,755.79	-21.35	-16.12	21.10	0.18
2,847.00	0.81	191.25	2,846.79	-22.49	-16.48	22.23	0.23
2,877.00	0.99	206.58	2,876.78	-22.93	-16.63	22.67	1.00
2,971.00	0.98	200.27	2,970.77	-24.41	-17.27	24.14	0.12
3,065.00	1.05	191.19	3,064.75	-26.01	-17.72	25.73	0.19
3,159.00	0.92	180.15	3,158.74	-27.60	-17.89	27.33	0.24
3,253.00	0.94	181.90	3,252.73	-29.13	-17.92	28.86	0.04
3,347.00	1.23	167.45	3,346.71	-30.89	-17.72	30.61	0.42
3,440.00	1.17	159.99	3,439.69	-32.75	-17.18	32.49	0.18
3,533.00	1.22	144.92	3,532.67	-34.45	-16.29	34.20	0.34
3,627.00	1.20	142.28	3,626.65	-36.05	-15.11	35.82	0.06
3,720.00	1.32	129.84	3,719.63	-37.51	-13.69	37.30	0.32
3,815.00	1.23	125.86	3,814.60	-38.81	-12.03	38.62	0.13
3,908.00	0.93	109.86	3,907.59	-39.65	-10.51	39.48	0.45
4,002.00	0.96	104.96	4,001.58	-40.11	-9.03	39.97	0.09
4,095.00	1.01	93.49	4,094.56	-40.36	-7.46	40.24	0.22
4,189.00	1.09	106.39	4,188.55	-40.66	-5.77	40.57	0.26
4,283.00	1.31	107.46	4,282.53	-41.24	-3.89	41.18	0.24
4,376.00	0.58	82.21	4,375.51	-41.49	-2.41	41.45	0.89
4,470.00	0.28	91.42	4,469.51	-41.44	-1.71	41.40	0.33
4,564.00	0.34	42.41	4,563.51	-41.23	-1.29	41.21	0.28
4,658.00	0.36	85.65	4,657.51	-41.01	-0.81	40.99	0.28
4,751.00	0.34	143.43	4,750.51	-41.21	-0.35	41.20	0.36
4,846.00	0.58	208.54	4,845.50	-41.85	-0.41	41.84	0.56
4,939.00	0.75	196.74	4,938.50	-42.85	-0.81	42.83	0.23

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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (%100ft)
5,033.00	0.48	211.07	5,032.49	-43.78	-1.20	43.75	0.33
5,127.00	0.72	351.72	5,126.49	-43.53	-1.48	43.50	1.21
5,222.00	0.71	18.35	5,221.48	-42.38	-1.38	42.36	0.35
5,314.00	0.62	24.28	5,313.48	-41.39	-1.00	41.37	0.12
5,408.00	1.05	25.02	5,407.47	-40.14	-0.43	40.13	0.46
5,501.00	1.06	28.95	5,500.45	-38.62	0.35	38.62	0.08
5,595.00	0.93	29.57	5,594.44	-37.19	1.15	37.21	0.14
5,688.00	0.79	41.23	5,687.42	-36.05	1.94	36.08	0.24
5,781.00	0.78	41.18	5,780.42	-35.10	2.78	35.13	0.01
5,874.00	0.61	36.34	5,873.41	-34.22	3.49	34.27	0.19
5,967.00	0.48	30.60	5,966.41	-33.49	3.98	33.54	0.15
6,060.00	0.51	25.61	6,059.40	-32.78	4.36	32.84	0.06
6,154.00	0.55	24.20	6,153.40	-31.99	4.73	32.06	0.04
6,175.00	0.62	12.71	6,174.40	-31.79	4.79	31.86	0.65
6,218.00	0.16	68.75	6,217.40	-31.54	4.90	31.61	1.27
6,250.00	2.81	185.87	6,249.38	-32.30	4.86	32.37	9.02
6,281.00	6.74	190.25	6,280.27	-34.85	4.46	34.91	12.72
6,312.00	10.37	181.70	6,310.92	-39.43	4.05	39.49	12.38
6,343.00	14.81	176.77	6,341.17	-46.18	4.19	46.24	14.72
6,375.00	19.59	174.69	6,371.73	-55.61	4.92	55.68	15.06
6,406.00	23.30	175.31	6,400.58	-66.90	5.90	66.98	11.99
6,437.00	26.99	177.15	6,428.64	-80.04	6.76	80.13	12.17
6,468.00	30.32	178.30	6,455.84	-94.89	7.34	94.99	10.89
6,500.00	33.59	179.04	6,482.98	-111.82	7.73	111.92	10.29
6,531.00	36.84	180.31	6,508.31	-129.69	7.82	129.79	10.75
6,562.00	40.31	180.98	6,532.54	-149.02	7.60	149.11	11.27
6,593.00	42.97	181.25	6,555.70	-169.61	7.19	169.70	8.60
6,625.00	45.24	180.42	6,578.68	-191.88	6.87	191.96	7.32
6,656.00	48.19	180.49	6,599.93	-214.44	6.69	214.52	9.52
6,687.00	52.16	180.21	6,619.78	-238.24	6.55	238.31	12.83
6,717.00	55.34	178.47	6,637.52	-262.43	6.84	262.50	11.59
6,749.00	59.11	178.46	6,654.84	-289.32	7.56	289.40	11.78
6,781.00	62.62	178.63	6,670.42	-317.26	8.27	317.35	10.98
6,812.00	66.54	179.16	6,683.72	-345.25	8.80	345.34	12.74
6,843.00	71.74	180.04	6,694.76	-374.20	9.00	374.30	16.98
6,874.00	75.74	179.30	6,703.43	-403.96	9.18	404.05	13.11
6,905.00	80.13	177.18	6,709.91	-434.25	10.11	434.35	15.66
6,936.00	85.22	175.47	6,713.87	-464.92	12.08	465.05	17.31
6,998.00	91.54	175.39	6,715.62	-526.67	17.02	526.86	10.19
7,093.00	90.80	174.96	6,713.68	-621.31	25.01	621.62	0.90
7,157.00	89.63	176.08	6,713.44	-685.11	30.01	685.49	2.53
7,220.00	90.99	176.15	6,713.10	-747.96	34.28	748.40	2.16
7,283.00	92.29	176.95	6,711.29	-810.82	38.06	811.30	2.42
7,346.00	91.23	177.20	6,709.36	-873.71	41.28	874.23	1.73
7,411.00	91.79	176.90	6,707.65	-938.60	44.62	939.17	0.98
7,474.00	91.36	177.57	6,705.91	-1,001.50	47.66	1,002.11	1.26
7,537.00	91.92	177.42	6,704.11	-1,064.42	50.41	1,065.06	0.92
7,598.00	90.62	178.37	6,702.76	-1,125.36	52.65	1,126.03	2.64
7,660.00	90.43	179.73	6,702.19	-1,187.35	53.68	1,188.02	2.21
7,721.00	90.25	181.34	6,701.83	-1,248.34	53.11	1,249.00	2.66
7,782.00	88.95	180.74	6,702.25	-1,309.33	52.00	1,309.96	2.35



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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (%100ft)
7,843.00	89.14	181.32	6,703.27	-1,370.31	50.91	1,370.92	1.00
7,905.00	89.38	181.89	6,704.07	-1,432.28	49.17	1,432.86	1.00
7,966.00	87.78	182.31	6,705.58	-1,493.22	46.94	1,493.76	2.71
8,028.00	87.78	182.49	6,707.99	-1,555.12	44.34	1,555.61	0.29
8,089.00	87.40	182.14	6,710.55	-1,616.01	41.88	1,616.46	0.85
8,151.00	89.51	182.63	6,712.22	-1,677.93	39.30	1,678.33	3.49
8,212.00	88.15	182.24	6,713.47	-1,738.86	36.71	1,739.22	2.32
8,273.00	88.27	182.33	6,715.37	-1,799.78	34.28	1,800.10	0.25
8,335.00	88.27	182.34	6,717.24	-1,861.70	31.75	1,861.97	0.02
8,396.00	89.20	183.69	6,718.59	-1,922.60	28.55	1,922.82	2.69
8,458.00	90.43	184.86	6,718.79	-1,984.43	23.92	1,984.56	2.74
8,519.00	89.38	183.46	6,718.89	-2,045.27	19.50	2,045.33	2.87
8,581.00	90.74	184.25	6,718.83	-2,107.12	15.33	2,107.11	2.54
8,641.00	90.00	183.61	6,718.44	-2,166.98	11.22	2,166.90	1.63
8,703.00	88.76	183.06	6,719.11	-2,228.87	7.61	2,228.73	2.19
8,763.00	88.89	182.89	6,720.34	-2,288.78	4.50	2,288.58	0.36
8,824.00	90.68	183.94	6,720.57	-2,349.66	0.87	2,349.41	3.40
8,886.00	89.44	181.10	6,720.51	-2,411.60	-1.86	2,411.29	5.00
8,947.00	89.81	180.56	6,720.90	-2,472.59	-2.74	2,472.27	1.07
9,040.00	89.69	179.37	6,721.31	-2,565.59	-2.69	2,565.25	1.29
9,100.00	89.20	179.67	6,721.89	-2,625.58	-2.18	2,625.25	0.96
9,162.00	89.69	181.82	6,722.49	-2,687.57	-2.99	2,687.22	3.56
9,223.00	88.58	181.93	6,723.41	-2,748.53	-4.99	2,748.14	1.83
9,284.00	87.22	180.90	6,725.65	-2,809.47	-6.49	2,809.05	2.80
9,345.00	87.53	180.57	6,728.44	-2,870.40	-7.27	2,869.96	0.74
9,407.00	88.33	180.60	6,730.68	-2,932.35	-7.91	2,931.90	1.29
9,468.00	88.58	180.03	6,732.33	-2,993.33	-8.24	2,992.86	1.02
9,529.00	89.63	179.72	6,733.28	-3,054.32	-8.11	3,053.85	1.79
9,590.00	90.12	179.42	6,733.41	-3,115.32	-7.65	3,114.85	0.94
9,652.00	89.63	178.47	6,733.55	-3,177.31	-6.51	3,176.85	1.72
9,713.00	90.19	178.91	6,733.64	-3,238.29	-5.11	3,237.84	1.17
9,775.00	90.43	178.29	6,733.31	-3,300.27	-3.60	3,299.84	1.07
9,836.00	90.87	177.81	6,732.62	-3,361.23	-1.52	3,360.83	1.07
9,897.00	89.88	179.29	6,732.22	-3,422.21	0.02	3,421.82	2.92
9,961.00	90.93	179.77	6,731.76	-3,486.20	0.55	3,485.81	1.80
10,024.00	89.20	178.73	6,731.69	-3,549.20	1.37	3,548.81	3.20
10,087.00	90.06	179.03	6,732.10	-3,612.18	2.60	3,611.81	1.45
10,149.00	90.31	178.93	6,731.90	-3,674.17	3.70	3,673.81	0.43
10,213.00	89.75	179.16	6,731.87	-3,738.16	4.77	3,737.81	0.95
10,276.00	90.06	179.58	6,731.97	-3,801.16	5.46	3,800.81	0.83
10,339.00	90.37	179.03	6,731.73	-3,864.15	6.23	3,863.81	1.00
10,402.00	91.17	180.48	6,730.89	-3,927.14	6.50	3,926.79	2.63
10,465.00	90.12	180.52	6,730.18	-3,990.14	5.95	3,989.77	1.67
10,529.00	90.31	180.79	6,729.94	-4,054.13	5.22	4,053.75	0.52
10,592.00	89.81	180.99	6,729.87	-4,117.12	4.24	4,116.72	0.85
10,655.00	90.19	181.59	6,729.87	-4,180.11	2.82	4,179.67	1.13
10,718.00	88.58	181.65	6,730.55	-4,243.08	1.04	4,242.61	2.56
10,781.00	89.01	182.17	6,731.87	-4,306.03	-1.06	4,305.52	1.07
10,845.00	89.69	182.92	6,732.60	-4,369.96	-3.90	4,369.40	1.58
10,938.00	89.75	183.10	6,733.05	-4,462.83	-8.79	4,462.19	0.20

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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (%/100ft)
11,002.00	90.43	182.47	6,732.95	-4,526.75	-11.90	4,526.06	1.45
11,065.00	90.31	182.66	6,732.55	-4,589.69	-14.71	4,588.94	0.36
11,128.00	90.56	182.09	6,732.07	-4,652.63	-17.33	4,651.84	0.99
11,190.00	90.31	182.67	6,731.60	-4,714.58	-19.90	4,713.74	1.02
11,253.00	89.69	182.44	6,731.60	-4,777.51	-22.71	4,776.63	1.05
11,316.00	89.75	182.93	6,731.90	-4,840.44	-25.66	4,839.50	0.78
11,380.00	90.43	183.34	6,731.80	-4,904.35	-29.16	4,903.35	1.24
11,443.00	90.56	184.36	6,731.26	-4,967.20	-33.39	4,966.13	1.63
11,506.00	90.19	183.15	6,730.85	-5,030.06	-37.51	5,028.92	2.01
11,569.00	89.88	183.66	6,730.81	-5,092.95	-41.26	5,091.75	0.95
11,632.00	89.75	182.81	6,731.01	-5,155.85	-44.81	5,154.59	1.36
11,696.00	91.67	183.79	6,730.22	-5,219.74	-48.50	5,218.41	3.37
11,759.00	91.30	183.16	6,728.59	-5,282.60	-52.31	5,281.21	1.16
11,822.00	91.61	182.16	6,726.99	-5,345.51	-55.24	5,344.07	1.66
11,885.00	90.74	181.41	6,725.70	-5,408.47	-57.20	5,406.98	1.82
11,949.00	89.44	181.18	6,725.59	-5,472.45	-58.64	5,470.94	2.06
12,011.00	88.70	180.62	6,726.60	-5,534.43	-59.62	5,532.90	1.50
12,074.00	88.83	179.88	6,727.96	-5,597.42	-59.89	5,595.87	1.19
12,137.00	88.70	179.95	6,729.32	-5,660.40	-59.80	5,658.85	0.23
12,233.00	89.81	180.51	6,730.57	-5,756.39	-60.18	5,754.82	1.30
12,296.00	89.13	178.78	6,731.15	-5,819.38	-59.79	5,817.82	2.95
12,359.00	88.58	177.80	6,732.41	-5,882.34	-57.91	5,880.80	1.78
12,422.00	89.81	177.31	6,733.29	-5,945.28	-55.23	5,943.76	2.10
12,486.00	90.99	176.91	6,732.85	-6,009.19	-52.00	6,007.72	1.95
12,549.00	91.05	176.68	6,731.72	-6,072.08	-48.48	6,070.66	0.38
12,613.00	90.56	176.01	6,730.82	-6,135.95	-44.40	6,134.58	1.30
12,676.00	91.73	176.81	6,729.57	-6,198.81	-40.46	6,197.49	2.25
12,739.00	91.36	178.16	6,727.87	-6,261.72	-37.69	6,260.44	2.22
12,803.00	91.11	177.70	6,726.49	-6,325.67	-35.38	6,324.41	0.82
12,897.00	91.05	177.53	6,724.72	-6,419.57	-31.47	6,418.36	0.19
12,960.00	91.05	176.54	6,723.56	-6,482.47	-28.21	6,481.31	1.57
13,022.00	91.17	176.57	6,722.36	-6,544.35	-24.49	6,543.23	0.20
13,085.00	91.79	177.93	6,720.73	-6,607.25	-21.47	6,606.18	2.37
13,148.00	89.69	175.54	6,719.92	-6,670.14	-17.88	6,669.11	5.05
13,211.00	89.75	177.81	6,720.23	-6,733.03	-14.22	6,732.04	3.60
13,273.00	90.49	178.99	6,720.10	-6,795.00	-12.49	6,794.04	2.25
13,305.00	91.05	180.23	6,719.67	-6,827.00	-12.27	6,826.03	4.25
13,369.00	89.81	177.49	6,719.19	-6,890.98	-11.00	6,890.02	4.70
13,432.00	89.94	173.24	6,719.32	-6,953.76	-5.91	6,952.87	6.75
13,495.00	89.63	169.33	6,719.56	-7,016.02	3.63	7,015.27	6.23
13,558.00	90.68	170.98	6,719.39	-7,078.08	14.40	7,077.49	3.10
13,622.00	91.67	171.51	6,718.08	-7,141.32	24.14	7,140.87	1.75
13,686.00	91.48	171.20	6,716.32	-7,204.57	33.76	7,204.26	0.57
13,717.00	91.36	170.63	6,715.55	-7,235.17	38.65	7,234.93	1.88
13,780.00	90.93	170.56	6,714.29	-7,297.32	48.95	7,297.22	0.69
13,842.00	91.24	170.49	6,713.12	-7,358.46	59.15	7,358.51	0.51
13,906.00	90.62	170.44	6,712.08	-7,421.57	69.75	7,421.77	0.97
13,967.00	90.06	168.91	6,711.72	-7,481.57	80.68	7,481.94	2.67
14,031.00	89.26	168.86	6,712.10	-7,544.37	93.02	7,544.92	1.25
14,094.00	89.88	169.37	6,712.57	-7,606.24	104.92	7,606.95	1.27
14,158.00	91.11	171.31	6,712.02	-7,669.32	115.65	7,670.19	3.59

Survey Report for Dunn 1-13H - Sperry MWD Surveys

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (%/100ft)
14,221.00	92.53	171.05	6,710.02	-7,731.54	125.31	7,732.56	2.29
14,285.00	93.15	172.80	6,706.84	-7,794.83	134.29	7,795.97	2.90
14,348.00	92.23	172.42	6,703.89	-7,857.24	142.38	7,858.49	1.58
14,412.00	91.73	172.02	6,701.68	-7,920.61	151.04	7,921.99	1.00
14,476.00	91.42	171.84	6,699.92	-7,983.95	160.02	7,985.46	0.56
14,540.00	91.48	171.77	6,698.30	-8,047.28	169.14	8,048.91	0.14
14,635.00	91.48	172.29	6,695.84	-8,141.33	182.31	8,143.15	0.55
14,698.00	90.37	171.34	6,694.83	-8,203.68	191.28	8,205.63	2.32
14,792.00	90.19	171.20	6,694.37	-8,296.59	205.54	8,298.74	0.24
14,855.00	89.81	172.78	6,694.37	-8,358.97	214.32	8,361.25	2.58
14,918.00	89.20	174.35	6,694.91	-8,421.57	221.38	8,423.95	2.67
14,981.00	88.70	174.96	6,696.07	-8,484.28	227.25	8,486.75	1.25
15,046.00	88.21	175.17	6,697.82	-8,549.02	232.84	8,551.56	0.82
15,109.00	87.16	176.65	6,700.36	-8,611.80	237.33	8,614.41	2.88
15,172.00	86.11	176.10	6,704.06	-8,674.57	241.31	8,677.22	1.88
15,236.00	85.55	176.13	6,708.72	-8,738.25	245.63	8,740.97	0.88
15,300.00	86.22	176.53	6,713.31	-8,801.96	249.72	8,804.72	1.22
15,364.00	85.67	176.14	6,717.83	-8,865.66	253.80	8,868.49	1.05
15,396.00	85.17	176.48	6,720.39	-8,897.50	255.85	8,900.35	1.89
15,492.00	82.38	175.87	6,730.80	-8,992.71	262.22	8,995.64	2.97
15,557.00	80.88	176.66	6,740.26	-9,056.88	266.40	9,059.87	2.60
15,588.00	79.93	177.62	6,745.43	-9,087.40	267.93	9,090.41	4.33
Last MWD Survey at 15588'							
15,625.00	79.93	177.62	6,751.90	-9,123.80	269.44	9,126.83	0.00
Straight Line Projection to TD							

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
639.00	638.98	-1.01	-3.83	First Sperry MWD Survey of Sidetrack at 639'
15,588.00	6,745.43	-9,087.40	267.93	Last MWD Survey at 15588'
15,625.00	6,751.90	-9,123.80	269.44	Straight Line Projection to TD

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	+N/-S (ft)	+E/-W (ft)	Start TVD (ft)
Target	Dunn 1-13H_PlanA - Rev1_BHL Tgt	179.13	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
639.00	15,625.00	Sperry MWD Surveys	MWD

HALLIBURTON**Survey Report for Dunn 1-13H - Sperry MWD Surveys****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
Dunn 1-13H_600'	0.00	0.00	0.00	0.00	0.00	1,488,598.73	3,339,883.90	40° 40' 5.347 N	104° 16' 29.104 W
- survey hits target center									
- Polygon									
Dunn 1-13H_Sec. 24	0.00	0.00	0.00	0.00	0.00	1,488,598.73	3,339,883.90	40° 40' 5.347 N	104° 16' 29.104 W
- survey hits target center									
- Polygon									
Dunn 1-13H_Sec. 13	0.00	0.00	0.00	0.00	0.00	1,488,598.73	3,339,883.90	40° 40' 5.347 N	104° 16' 29.104 W
- survey hits target center									
- Polygon									
Dunn	0.00	0.00	6,774.00	-9,673.24	146.16	1,478,925.66	3,340,030.06	40° 38' 29.753 N	104° 16' 28.942 W
- survey misses target center by 563.53ft at 15625.00ft MD (6751.90 TVD, -9123.80 N, 269.44 E)									
- Point									

HALLIBURTON**North Reference Sheet for Sec. 13-T8N-R62W - Dunn 1-13H - Plan A**

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

Vertical Depths are relative to KB @ 5048.00ft (Rig KB). Northing and Easting are relative to Dunn 1-13H

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

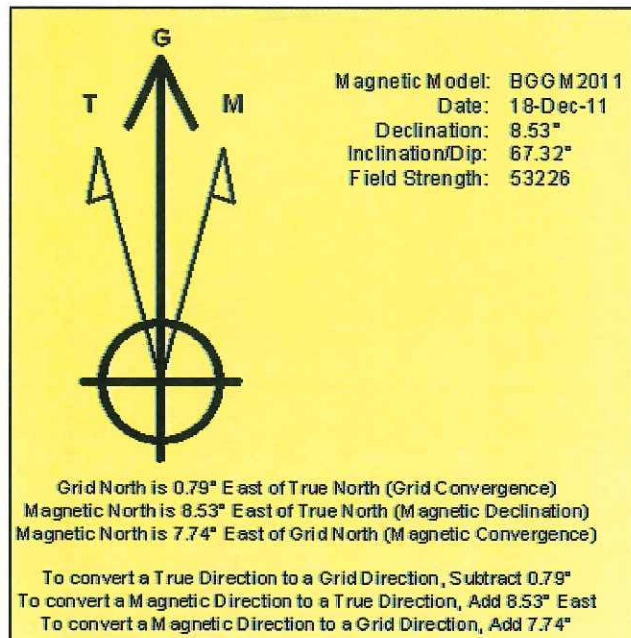
Grid Coordinates of Well: 1,488,598.73 ft N, 3,339,883.90 ft E

Geographical Coordinates of Well: 40° 40' 05.35" N, 104° 16' 29.10" W

Grid Convergence at Surface is: 0.79°

Based upon Minimum Curvature type calculations, at a Measured Depth of 15,625.00ft
the Bottom Hole Displacement is 9,127.78ft in the Direction of 178.31° (Grid).

Magnetic Convergence at surface is: -7.74° (18 December 2011, , BGGM2011)



Project: Weld County, CO
Site: Sec. 13-T8N-R62W
Well: Dunn 1-13H

Continental Resources, Inc.

HALLIBURTON
Sperry Drilling

