

Chesapeake Energy

Weld County, CO (NAD 27)

Sec. 11-T11N-R65W

Wagner 11-65 11-1H

Sidetrack 1 Plan D

Survey: Sperry Sidetrack 1 MWD Survey

Sperry Drilling Services Standard Report

23 June, 2011

Well Coordinates: 582,687.22 N, 2,240,267.56 E (40° 55' 46.69" N, 104° 37' 49.90" W)
Ground Level: 5,658.00 ft

Local Coordinate Origin:	Centered on Well Wagner 11-65 11-1H
Viewing Datum:	KB (RKB 20 ft.) @ 5678.00ft (Cyclone 26)
TVDs to System:	N
North Reference:	Grid
Unit System:	API - US Survey Feet - Custom

Geodetic Scale Factor Applied
Version: 2003.16 Build: 43I

HALLIBURTON

Survey Report for Wagner 11-65 11-1H - Sperry Sidetrack 1 MWD Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
7,838.00	16.93	355.77	7,834.49	57.01	26.90	55.72	0.00
Tie In at 7838.00ft							
7,869.00	14.68	355.81	7,864.31	65.43	26.28	64.16	7.26
First MWD Survey at 7869.00ft							
7,901.00	13.99	349.50	7,895.32	73.28	25.28	72.05	5.33
7,932.00	15.34	346.09	7,925.31	80.94	23.61	79.78	5.17
7,964.00	17.37	347.57	7,956.01	89.72	21.56	88.64	6.48
7,995.00	19.34	351.62	7,985.44	99.32	19.82	98.31	7.57
8,026.00	21.17	355.96	8,014.52	109.98	18.67	109.01	7.63
8,057.00	24.99	357.72	8,043.03	122.11	18.02	121.16	12.52
8,089.00	31.11	359.63	8,071.26	137.15	17.70	136.19	19.33
8,120.00	38.27	3.70	8,096.74	154.76	18.27	153.76	24.26
8,151.00	45.58	5.00	8,119.79	175.40	19.85	174.31	23.75
8,183.00	53.61	5.12	8,140.51	199.65	22.00	198.43	25.10
8,214.00	61.23	3.12	8,157.19	225.68	23.86	224.36	25.17
8,242.00	67.43	2.05	8,169.32	250.88	24.99	249.48	22.41
8,273.00	73.87	1.10	8,179.58	280.10	25.79	278.63	20.97
8,304.00	76.45	1.82	8,187.52	310.06	26.55	308.52	8.62
8,336.00	80.41	2.94	8,193.94	341.37	27.85	339.74	12.84
8,367.00	85.71	4.53	8,197.68	372.07	29.86	370.31	17.84
8,399.00	90.09	3.89	8,198.86	403.95	32.21	402.06	13.83
8,430.00	91.29	3.55	8,198.48	434.89	34.22	432.87	4.02
8,461.00	90.59	2.77	8,197.97	465.83	35.93	463.70	3.38
8,493.00	89.85	2.08	8,197.85	497.80	37.28	495.58	3.16
8,524.00	88.95	1.22	8,198.18	528.79	38.17	526.49	4.02
8,555.00	90.12	0.94	8,198.43	559.78	38.76	557.42	3.88
8,587.00	89.48	359.10	8,198.54	591.78	38.77	589.39	6.09
8,618.00	90.34	359.45	8,198.59	622.78	38.38	620.37	3.00
8,650.00	91.11	359.14	8,198.18	654.77	37.98	652.35	2.59
8,681.00	91.39	359.48	8,197.51	685.76	37.61	683.32	1.42
8,713.00	91.45	359.45	8,196.71	717.75	37.31	715.29	0.21
8,744.00	92.28	359.76	8,195.71	748.73	37.10	746.25	2.86
8,776.00	92.50	0.07	8,194.37	780.71	37.05	778.19	1.19
8,807.00	93.27	359.93	8,192.81	811.67	37.05	809.12	2.52
8,838.00	93.33	359.42	8,191.03	842.61	36.88	840.05	1.65
8,870.00	92.74	358.59	8,189.33	874.56	36.32	871.99	3.18
8,901.00	91.79	356.83	8,188.11	905.51	35.08	902.96	6.45
8,933.00	90.71	355.92	8,187.41	937.44	33.06	934.95	4.41
8,964.00	90.65	355.53	8,187.04	968.35	30.75	965.93	1.27
8,995.00	90.77	355.52	8,186.66	999.26	28.33	996.91	0.39
9,027.00	89.78	356.48	8,186.50	1,031.18	26.10	1,028.90	4.31
9,058.00	89.63	357.02	8,186.66	1,062.13	24.34	1,059.90	1.81
9,090.00	89.91	357.17	8,186.79	1,094.09	22.72	1,091.90	0.99
9,121.00	89.88	357.36	8,186.85	1,125.05	21.24	1,122.90	0.62
9,152.00	89.41	358.42	8,187.04	1,156.03	20.10	1,153.90	3.74
9,184.00	89.29	358.57	8,187.40	1,188.01	19.26	1,185.89	0.60
9,215.00	89.17	358.34	8,187.82	1,219.00	18.42	1,216.88	0.84
9,247.00	88.77	358.07	8,188.39	1,250.98	17.42	1,248.87	1.51
9,278.00	89.57	359.21	8,188.84	1,281.97	16.68	1,279.86	4.49
9,309.00	91.11	0.06	8,188.66	1,312.96	16.49	1,310.84	5.67

Survey Report for Wagner 11-65 11-1H - Sperry Sidetrack 1 MWD Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
9,341.00	91.17	0.20	8,188.02	1,344.96	16.56	1,342.79	0.48
9,372.00	91.36	359.59	8,187.34	1,375.95	16.50	1,373.76	2.06
9,404.00	90.52	358.81	8,186.81	1,407.94	16.06	1,405.73	3.58
9,435.00	89.88	359.00	8,186.71	1,438.94	15.46	1,436.72	2.15
9,467.00	89.20	358.87	8,186.96	1,470.93	14.87	1,468.71	2.16
9,498.00	89.08	358.59	8,187.43	1,501.92	14.18	1,499.70	0.98
9,530.00	88.92	358.40	8,187.99	1,533.90	13.34	1,531.69	0.78
9,561.00	89.38	358.80	8,188.45	1,564.89	12.58	1,562.68	1.97
9,592.00	89.20	358.51	8,188.83	1,595.88	11.86	1,593.67	1.10
9,624.00	89.08	358.26	8,189.31	1,627.86	10.96	1,625.66	0.87
9,655.00	90.40	358.40	8,189.45	1,658.85	10.05	1,656.65	4.28
9,687.00	91.51	358.18	8,188.92	1,690.83	9.10	1,688.64	3.54
9,718.00	91.63	357.99	8,188.07	1,721.80	8.06	1,719.63	0.72
9,749.00	91.39	357.53	8,187.25	1,752.77	6.85	1,750.62	1.67
9,781.00	90.49	357.55	8,186.73	1,784.73	5.48	1,782.61	2.81
9,812.00	90.34	357.31	8,186.50	1,815.70	4.09	1,813.61	0.91
9,844.00	89.85	357.51	8,186.45	1,847.67	2.64	1,845.61	1.65
9,875.00	90.03	357.37	8,186.48	1,878.64	1.26	1,876.61	0.74
9,906.00	90.52	357.24	8,186.33	1,909.60	-0.20	1,907.61	1.64
9,938.00	90.43	357.55	8,186.07	1,941.57	-1.66	1,939.61	1.01
9,969.00	89.88	357.24	8,185.98	1,972.53	-3.06	1,970.61	2.04
10,000.00	89.57	356.36	8,186.13	2,003.49	-4.80	2,001.61	3.01
10,032.00	89.11	356.94	8,186.50	2,035.43	-6.66	2,033.60	2.31
10,063.00	88.77	356.96	8,187.07	2,066.38	-8.31	2,064.60	1.10
10,095.00	88.95	356.93	8,187.71	2,098.33	-10.02	2,096.59	0.57
10,126.00	88.46	356.95	8,188.41	2,129.27	-11.67	2,127.58	1.58
10,157.00	88.06	356.43	8,189.35	2,160.21	-13.46	2,158.56	2.12
10,189.00	87.57	356.92	8,190.57	2,192.13	-15.32	2,190.54	2.16
10,220.00	87.38	356.47	8,191.94	2,223.05	-17.10	2,221.50	1.57
10,252.00	86.73	356.19	8,193.58	2,254.94	-19.15	2,253.46	2.21
10,283.00	87.01	356.30	8,195.28	2,285.83	-21.18	2,284.40	0.97
10,314.00	87.88	356.22	8,196.66	2,316.73	-23.20	2,315.37	2.82
10,345.00	88.12	356.24	8,197.74	2,347.65	-25.23	2,346.34	0.78
10,377.00	88.34	355.91	8,198.73	2,379.56	-27.42	2,378.32	1.24
10,408.00	88.64	356.27	8,199.54	2,410.47	-29.54	2,409.30	1.51
10,440.00	89.35	355.65	8,200.11	2,442.39	-31.79	2,441.29	2.95
10,471.00	90.46	355.67	8,200.16	2,473.30	-34.14	2,472.27	3.58
10,502.00	90.34	355.96	8,199.94	2,504.21	-36.40	2,503.26	1.01
10,534.00	90.00	355.78	8,199.85	2,536.13	-38.70	2,535.25	1.20
10,565.00	89.11	355.38	8,200.09	2,567.04	-41.09	2,566.23	3.15
10,597.00	89.20	355.30	8,200.56	2,598.93	-43.69	2,598.21	0.38
10,628.00	89.94	355.52	8,200.79	2,629.83	-46.17	2,629.19	2.49
10,659.00	90.71	355.68	8,200.62	2,660.74	-48.55	2,660.17	2.54
10,691.00	90.86	355.57	8,200.18	2,692.64	-50.99	2,692.15	0.58
10,722.00	90.89	354.75	8,199.70	2,723.53	-53.61	2,723.13	2.65
10,754.00	90.86	354.43	8,199.21	2,755.38	-56.62	2,755.09	1.00
10,785.00	90.46	354.03	8,198.86	2,786.22	-59.74	2,786.04	1.82
10,816.00	90.37	354.37	8,198.63	2,817.06	-62.87	2,816.99	1.13
10,848.00	90.12	354.22	8,198.50	2,848.90	-66.05	2,848.94	0.91
10,879.00	91.20	354.27	8,198.14	2,879.74	-69.16	2,879.89	3.49
10,911.00	92.25	355.39	8,197.18	2,911.60	-72.04	2,911.85	4.80

Survey Report for Wagner 11-65 11-1H - Sperry Sidetrack 1 MWD Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
10,942.00	92.56	355.92	8,195.88	2,942.48	-74.39	2,942.80	1.98
10,973.00	92.13	354.28	8,194.61	2,973.34	-77.03	2,973.75	5.46
11,005.00	92.31	354.67	8,193.37	3,005.17	-80.11	3,005.69	1.34
11,036.00	92.80	355.67	8,191.99	3,036.03	-82.72	3,036.63	3.59
11,068.00	93.33	356.34	8,190.27	3,067.90	-84.95	3,068.58	2.67
11,099.00	94.22	357.62	8,188.23	3,098.79	-86.58	3,099.51	5.02
11,130.00	95.09	358.06	8,185.72	3,129.67	-87.74	3,130.40	3.14
11,162.00	94.47	358.27	8,183.05	3,161.54	-88.76	3,162.29	2.04
11,193.00	93.88	357.63	8,180.79	3,192.44	-89.87	3,193.21	2.80
11,225.00	93.64	358.60	8,178.70	3,224.35	-90.92	3,225.13	3.12
11,256.00	93.45	358.69	8,176.78	3,255.28	-91.65	3,256.07	0.68
11,287.00	93.45	358.40	8,174.91	3,286.22	-92.44	3,287.00	0.93
11,319.00	93.48	358.16	8,172.98	3,318.14	-93.40	3,318.94	0.75
11,350.00	92.96	357.81	8,171.24	3,349.08	-94.48	3,349.89	2.02
11,382.00	92.99	357.73	8,169.58	3,381.01	-95.73	3,381.85	0.27
11,413.00	93.02	357.88	8,167.95	3,411.94	-96.91	3,412.80	0.49
11,445.00	92.43	358.22	8,166.43	3,443.89	-98.00	3,444.77	2.13
11,476.00	91.91	357.88	8,165.26	3,474.85	-99.05	3,475.74	2.00
11,508.00	91.29	358.30	8,164.36	3,506.82	-100.12	3,507.73	2.34
11,539.00	91.08	358.02	8,163.72	3,537.79	-101.12	3,538.72	1.13
11,570.00	91.20	358.24	8,163.11	3,568.77	-102.13	3,569.71	0.81
11,602.00	91.36	357.92	8,162.39	3,600.75	-103.20	3,601.70	1.12
11,633.00	91.76	358.20	8,161.55	3,631.72	-104.25	3,632.68	1.57
11,665.00	91.97	358.01	8,160.50	3,663.68	-105.31	3,664.66	0.88
11,696.00	92.09	357.72	8,159.41	3,694.64	-106.46	3,695.64	1.01
11,727.00	91.97	357.96	8,158.31	3,725.60	-107.63	3,726.62	0.87
11,759.00	92.25	357.31	8,157.13	3,757.55	-108.95	3,758.60	2.21
11,790.00	92.50	357.88	8,155.85	3,788.50	-110.25	3,789.57	2.01
11,822.00	92.37	357.96	8,154.49	3,820.45	-111.41	3,821.54	0.48
11,905.00	92.16	357.25	8,151.21	3,903.31	-114.87	3,904.48	0.89
11,937.00	92.13	357.23	8,150.01	3,935.25	-116.41	3,936.45	0.11
Last MWD Survey at 11937.00ft							
11,996.00	92.13	357.23	8,147.82	3,994.14	-119.26	3,995.41	0.00
Bit Extrapolation to TD 11996.00ft							

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
7,838.00	7,834.49	57.01	26.90	Tie In at 7838.00ft
7,869.00	7,864.31	65.43	26.28	First MWD Survey at 7869.00ft
11,937.00	8,150.01	3,935.25	-116.41	Last MWD Survey at 11937.00ft
11,996.00	8,147.82	3,994.14	-119.26	Bit Extrapolation to TD 11996.00ft

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (ft)	+E/-W (ft)	Start TVD (ft)
User	No Target (Freehand)	357.38	Slot	0.00	0.00	0.00

Survey Report for Wagner 11-65 11-1H - Sperry Sidetrack 1 MWD Survey

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
7,869.00	11,996.00	Sperry Sidetrack 1 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
Wagner 11-65 11-1H - survey misses target center by 7834.74ft at 7838.00ft MD (7834.49 TVD, 57.01 N, 26.90 E) - Polygon	0.00	0.00	0.00	0.00	0.00	582,687.21	2,240,267.56	40° 55' 46.693 N	104° 37' 49.901 W
Wagner 11-65 11-1H - survey misses target center by 19.11ft at 11996.00ft MD (8147.82 TVD, 3994.14 N, -119.26 E) - Point	0.00	0.00	8,147.00	3,993.82	-138.35	586,681.14	2,240,129.21	40° 56' 26.167 N	104° 37' 51.193 W
Wagner 11-65 11-1H - survey misses target center by 7834.74ft at 7838.00ft MD (7834.49 TVD, 57.01 N, 26.90 E) - Polygon	0.00	0.00	0.00	0.00	0.00	582,687.22	2,240,267.56	40° 55' 46.693 N	104° 37' 49.901 W

Project: Weld County, CO (NAD 27)
Site: Sec. 11-T11N-R65W
Well: Wagner 11-65 11-1H

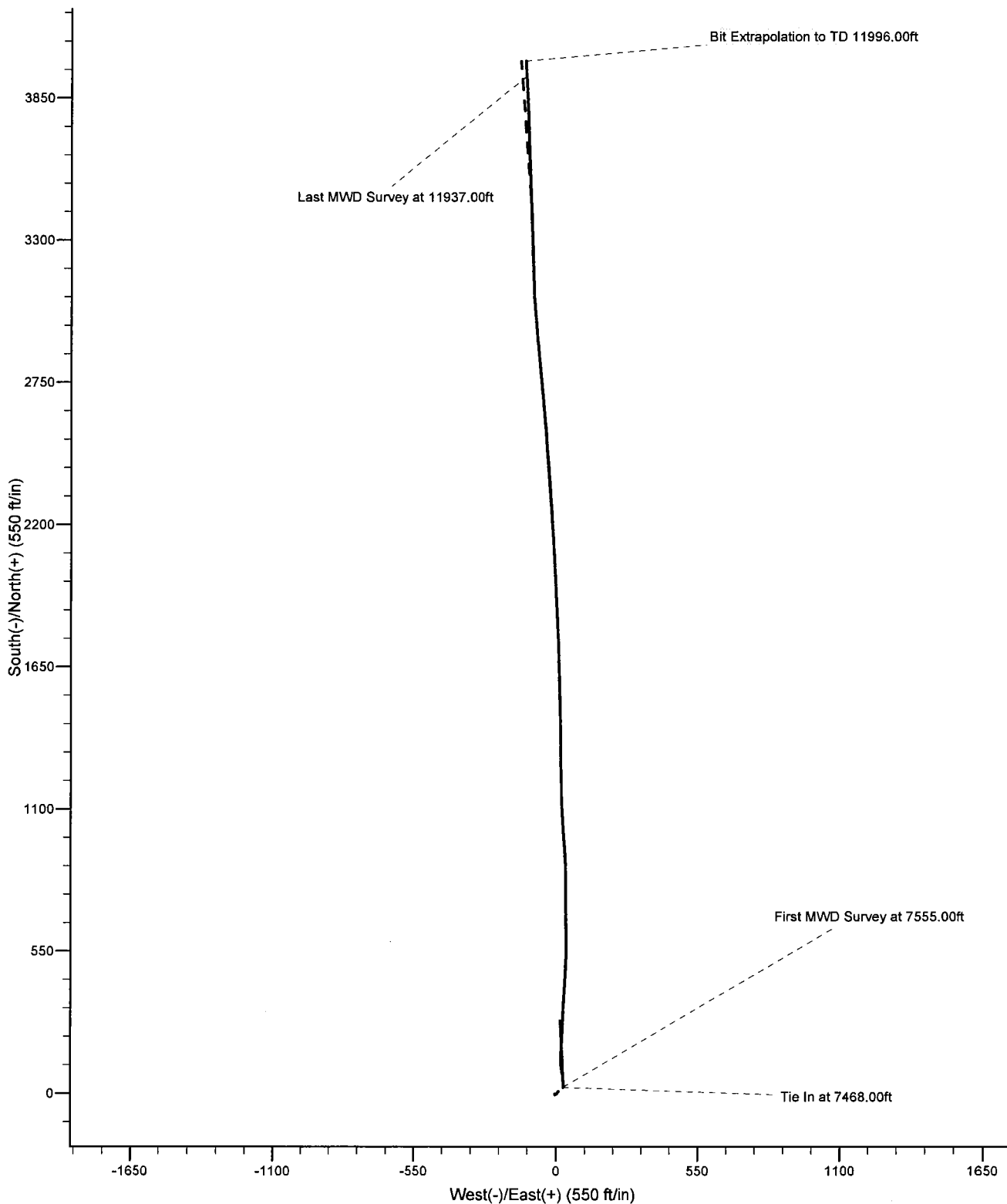
Chesapeake Energy

HALLIBURTON

Sperry Drilling

LEGEND

- Wagner 11-65 11-1H, Plan D Rev 0
- Wagner 11-65 11-1H, Sperry MWD Survey



Project: Weld County, CO (NAD 27)
Site: Sec. 11-T11N-R65W
Well: Wagner 11-65 11-1H

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