

HALLIBURTON**Sperry Drilling**

Survey Report

Company: Chesapeake
Well: O E Burge 6H

Rig: Nomac 242
Job Number: NE-MJ-8369153
Engineers: Gary Opachick, Paul Tice
VS Direction: 135.01
North Reference: GRID

County: Marshall
State: West Virginia

Tie-on Survey Data:

MD	INC	AZI	TVD	NS	EW
2550	0.84	121.99	2549.68	-31.34	5.05

MD	INC	AZI	TVD	NS	EW	VS
2700	0.66	139.25	2699.67	-32.58	6.55	27.67
2742	1.6	212.48	2741.66	-33.25	6.39	28.04
2785	3.55	226.84	2784.62	-34.67	5.1	28.12
2828	5.17	235.46	2827.49	-36.68	2.53	27.73
2870	6.92	237.58	2869.26	-39.10	-1.16	26.84
2913	8.01	239.66	2911.89	-42.01	-5.93	25.51
2955	8.38	239.41	2953.46	-45.04	-11.09	24.01
3039	7.8	237.21	3036.62	-51.25	-21.16	21.28
3124	7.08	235.94	3120.91	-57.31	-30.35	19.07
3209	6.95	235.92	3205.27	-63.12	-38.95	17.10
3295	6.48	235.33	3290.68	-68.79	-47.25	15.25
3380	6.02	233.89	3375.18	-74.15	-54.79	13.70
3465	7.07	234.84	3459.62	-79.78	-62.66	12.12
3550	8.29	234.62	3543.86	-86.34	-71.94	10.21
3636	9.84	236.46	3628.78	-93.99	-83.12	7.71
3721	10.15	235.68	3712.49	-102.23	-95.36	4.88
3806	9.31	233.01	3796.27	-110.59	-107.04	2.54
3892	8.92	231.51	3881.18	-118.92	-117.81	0.82
3977	9.46	233.95	3965.09	-127.14	-128.62	-1.02
4105	9.50	240.78	4091.35	-138.48	-146.33	-5.52
4190	9.98	238.23	4175.12	-145.78	-158.72	-9.11
4275	9.85	232.83	4258.85	-154.06	-170.78	-11.79
4361	10.21	231.63	4343.54	-163.23	-182.62	-13.67
4446	9.51	230.18	4427.28	-172.41	-193.92	-15.17
4531	9.10	225.46	4511.17	-181.62	-204.10	-15.85
4617	10.17	231.07	4595.95	-191.16	-214.86	-16.71
4702	9.84	230.42	4679.66	-200.50	-226.29	-18.18
4790	10.29	233.46	4766.31	-209.97	-238.40	-20.05

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MD	INC	AZI	TVD	NS	EW	VS
4875	9.87	229.90	4850.00	-219.18	-250.07	-21.79
4957	10.64	237.84	4930.69	-227.74	-261.86	-24.07
5043	10.29	237.37	5015.26	-236.11	-275.05	-27.47
5128	10.04	235.17	5098.93	-244.43	-287.53	-30.41
5213	9.86	233.71	5182.65	-252.97	-299.47	-32.81
5298	9.68	237.57	5266.42	-261.11	-311.37	-35.47
5384	9.42	237.23	5351.22	-268.80	-323.39	-38.53
5469	9.68	235.98	5435.04	-276.56	-335.17	-41.36
5554	9.35	232.41	5518.88	-284.78	-346.56	-43.61
5639	9.83	240.00	5602.69	-292.62	-358.32	-46.38
5774	9.98	242.36	5735.68	-303.81	-378.67	-52.85
5859	9.15	238.89	5819.50	-310.72	-390.98	-56.67
5944	8.61	234.35	5903.48	-317.92	-401.94	-59.32
6031	7.6	227.37	5989.61	-325.61	-411.46	-60.62
6114	8.88	232.81	6071.75	-333.20	-420.60	-61.71
6200	10.50	240.83	6156.53	-341.03	-432.73	-64.75
6285	9.65	238.60	6240.22	-348.51	-445.57	-68.53
6328	10.89	238.78	6282.53	-352.50	-452.12	-70.34
6413	9.51	231.50	6366.19	-361.03	-464.48	-73.05
6498	8.27	227.06	6450.16	-369.57	-474.46	-74.06
6583	9.91	230.80	6534.09	-378.36	-484.60	-75.02
6625	9.65	231.78	6575.48	-382.82	-490.17	-75.80
6668	9.72	215.81	6617.88	-387.99	-495.12	-75.64
6711	11.25	205.41	6660.16	-394.72	-499.04	-73.66
6753	13.13	189.63	6701.23	-403.13	-501.60	-69.52
6796	15.28	168.27	6742.94	-413.50	-501.27	-61.95
6838	19.22	153.51	6783.06	-425.11	-497.06	-50.76
6881	23.89	147.18	6823.05	-438.77	-489.18	-35.53
6924	28.36	145.39	6861.65	-454.50	-478.65	-16.96
6966	33.10	144.71	6897.74	-472.08	-466.36	4.17
7009	37.85	144.37	6932.75	-492.40	-451.88	28.77
7051	38.79	144.59	6965.70	-513.60	-436.75	54.46
7094	43.53	144.68	6998.06	-536.67	-420.38	82.35
7137	48.51	144.27	7027.91	-561.84	-402.40	112.86
7179	54.66	144.60	7054.00	-588.60	-383.27	145.31
7222	61.63	145.87	7076.68	-618.59	-362.47	181.23
7265	67.12	146.08	7095.27	-650.72	-340.78	219.28
7307	75.11	145.51	7108.85	-683.55	-318.46	258.29
7350	82.88	146.64	7117.05	-718.55	-294.92	299.68
7393	89.87	145.01	7119.77	-754.03	-270.83	341.80
7435	89.73	142.25	7119.92	-787.85	-245.93	383.32
7478	89.76	140.14	7120.11	-821.36	-218.99	426.07

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MD	INC	AZI	TVD	NS	EW	VS
7520	92.86	137.56	7119.14	-852.97	-191.36	467.95
7565	93.64	138.81	7116.59	-886.45	-161.41	512.81
7650	94.61	138.55	7110.48	-950.12	-105.43	597.42
7735	94.48	138.71	7103.74	-1013.71	-49.43	681.98
7821	93.03	138.32	7098.11	-1077.99	7.42	767.63
7906	90.37	137.85	7095.59	-1141.21	64.17	852.47
7991	91.21	138.25	7094.42	-1204.42	120.98	937.34
8076	89.16	136.76	7094.14	-1267.09	178.40	1022.25
8162	90.17	136.80	7094.65	-1329.76	237.29	1108.20
8247	91.05	135.45	7093.75	-1391.03	296.19	1193.18
8332	90.94	134.22	7092.27	-1450.95	356.46	1278.17
8417	91.88	133.16	7090.18	-1509.64	417.91	1363.12
8503	88.96	133.61	7089.55	-1568.71	480.40	1449.07
8588	87.98	133.78	7091.82	-1627.41	541.83	1534.02
8673	88.99	133.89	7094.07	-1686.26	603.12	1618.97
8758	87.34	134.65	7096.80	-1745.56	663.95	1703.91
8844	88.35	134.32	7100.03	-1805.78	725.26	1789.85
8929	90.13	134.89	7101.16	-1865.46	785.77	1874.83
9014	89.66	132.95	7101.31	-1924.42	846.99	1959.81
9099	90.37	132.55	7101.29	-1982.12	909.40	2044.75
9184	90.67	132.44	7100.52	-2039.54	972.07	2129.66
9270	91.32	131.18	7099.02	-2096.87	1036.16	2215.51
9355	91.28	132.86	7097.10	-2153.75	1099.29	2300.37
9440	89.29	135.30	7096.67	-2212.87	1160.34	2385.35
9525	90.10	135.42	7097.12	-2273.35	1220.06	2470.35
9611	88.05	136.55	7098.50	-2335.19	1279.81	2556.32
9696	88.25	137.42	7101.25	-2397.30	1337.76	2641.22
9781	88.92	137.23	7103.35	-2459.78	1395.36	2726.12
9866	89.56	137.70	7104.48	-2522.40	1452.82	2811.04
9951	90.64	138.06	7104.33	-2585.45	1509.83	2895.93
10037	90.57	136.65	7103.42	-2648.70	1568.08	2981.85
10122	88.99	135.90	7103.74	-2710.12	1626.84	3066.83
10207	88.32	132.19	7105.74	-2769.19	1687.91	3151.78
10292	89.19	131.43	7107.59	-2825.84	1751.25	3236.62
10378	89.63	131.74	7108.48	-2882.92	1815.57	3322.46
10463	90.34	132.39	7108.50	-2939.86	1878.67	3407.35
10548	90.51	134.72	7107.87	-2998.42	1940.27	3492.31
10633	91.25	134.67	7106.57	-3058.20	2000.69	3577.30
10719	92.16	134.69	7104.02	-3118.64	2061.81	3663.26
10804	90.71	133.90	7101.90	-3177.98	2122.63	3748.23
10889	90.74	132.38	7100.82	-3236.09	2184.65	3833.17
10974	91.28	130.71	7099.32	-3292.45	2248.25	3918.00

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MD	INC	AZI	TVD	NS	EW	VS
11060	91.08	132.18	7097.55	-3349.36	2312.70	4003.81
11145	89.19	132.89	7097.35	-3406.82	2375.33	4088.73
11230	89.49	133.95	7098.33	-3465.25	2437.06	4173.69
11315	90.60	134.44	7098.25	-3524.50	2498.00	4258.68
11401	88.48	132.72	7098.94	-3583.78	2560.29	4344.64
11486	89.70	132.89	7100.29	-3641.53	2622.65	4429.57
11571	90.57	131.83	7100.09	-3698.80	2685.45	4514.47
11656	90.78	134.40	7099.09	-3756.88	2747.49	4599.41
11741	89.16	134.79	7099.14	-3816.56	2808.02	4684.41
11827	89.97	135.26	7099.79	-3877.40	2868.80	4770.40
11912	90.74	135.44	7099.27	-3937.86	2928.54	4855.40
11997	91.45	134.57	7097.65	-3997.95	2988.63	4940.38
12082	89.76	136.24	7096.75	-4058.47	3048.30	5025.37
12168	88.66	133.15	7097.93	-4118.94	3109.43	5111.35
12253	89.53	133.46	7099.28	-4177.23	3171.28	5196.30
12338	90.37	133.49	7099.36	-4235.71	3232.96	5281.27
12423	87.41	134.31	7101.00	-4294.63	3294.19	5366.23
12509	88.12	134.92	7104.36	-4354.98	3355.36	5452.16
12594	88.99	134.68	7106.51	-4414.86	3415.65	5537.13
12679	88.32	139.54	7108.51	-4477.10	3473.46	5622.02
12764	90.71	134.18	7109.23	-4539.09	3531.56	5706.94
12850	88.42	132.68	7109.89	-4598.21	3594.01	5792.90
12935	87.88	134.14	7112.63	-4656.59	3655.73	5877.82
13020	88.66	134.69	7115.20	-4716.05	3716.41	5962.77
13089	89.60	135.25	7116.25	-4764.81	3765.22	6031.76
13136	89.60	135.25	7116.58	-4798.19	3798.30	6078.76

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WV GEOLOGICAL SURVEY
MORGANTOWN, WV

DLS	COMPASS					
0.19	2700	0.66	139.25	0	0	0
3.67	2742	1.6	212.48	0	0	0
4.75	2785	3.55	226.84	0	0	0
4.05	2828	5.17	235.46	0	0	0
4.20	2870	6.92	237.58	0	0	0
2.62	2913	8.01	239.66	0	0	0
0.88	2955	8.38	239.41	0	0	0
0.78	3039	7.8	237.21	0	0	0
0.87	3124	7.08	235.94	0	0	0
0.16	3209	6.95	235.92	0	0	0
0.55	3295	6.48	235.33	0	0	0
0.57	3380	6.02	233.89	0	0	0
1.24	3465	7.07	234.84	0	0	0
1.44	3550	8.29	234.62	0	0	0
1.83	3636	9.84	236.46	0	0	0
0.40	3721	10.15	235.68	0	0	0
1.12	3806	9.31	233.01	0	0	0
0.53	3892	8.92	231.51	0	0	0
0.78	3977	9.46	233.95	0	0	0
0.88	4105	9.5	240.78	0	0	0
0.76	4190	9.98	238.23	0	0	0
1.10	4275	9.85	232.83	0	0	0
0.48	4361	1	231.63	0	-9.21	0
0.88	4446	9.51	230.18	0	0	0
1.02	4531	9.1	225.46	0	0	0
1.66	4617	10.17	231.07	0	0	0
0.41	4702	9.84	230.42	0	0	0
0.79	4790	10.29	233.46	0	0	0

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DLS	COMPASS					
0.88	4875	9.87	229.9	0	0	0
1.96	4957	10.64	237.84	0	0	0
0.43	5043	10.29	237.37	0	0	0
0.54	5128	10.04	235.17	0	0	0
0.37	5213	9.86	233.71	0	0	0
0.80	5295	9.68	237.57	-3	0	0
0.31	5384	9.42	237.23	0	0	0
0.40	5469	9.68	235.98	0	0	0
0.80	5554	9.35	232.41	0	0	0
1.59	5639	9.83	240	0	0	0
0.32	5774	9.98	242.36	0	0	0
1.19	5859	9.15	238.89	0	0	0
1.04	5944	8.61	234.35	0	0	0
1.61	6031	9.6	227.37	0	2	0
1.80	6114	8.88	232.81	0	0	0
2.44	6200	10.5	240.83	0	0	0
1.10	6285	9.65	238.6	0	0	0
2.90	6328	10.89	238.78	0	0	0
2.22	6413	9.51	231.5	0	0	0
1.67	6498	8.27	227.06	0	0	0
2.05	6583	9.91	230.8	0	0	0
0.73	6625	9.65	231.78	0	0	0
6.23	6668	9.72	215.81	0	0	0
5.64	6711	11.25	205.41	0	0	0
9.08	6753	13.13	189.63	0	0	0
13.08	6796	15.28	168.27	0	0	0
13.95	6838	19.22	153.51	0	0	0
12.12	6881	23.89	147.18	0	0	0
10.56	6924	28.36	145.39	0	0	0
11.32	6966	33.1	144.71	0	0	0
11.05	7009	37.85	144.37	0	0	0
2.27	7051	38.79	144.59	0	0	0
11.02	7094	43.53	144.68	0	0	0
11.61	7137	48.51	144.27	0	0	0
14.66	7179	54.66	144.6	0	0	0
16.39	7222	61.63	145.87	0	0	0
12.79	7265	67.12	146.08	0	0	0
19.05	7307	75.11	145.51	0	0	0
18.26	7350	82.88	146.64	0	0	0
16.69	7393	89.87	145.01	0	0	0
6.58	7435	89.73	142.25	0	0	0
4.9	7478	89.76	140.14	0	0	0

DLS	COMPASS					
9.61	7520	92.86	137.56	0	0	0
3.27	7565	93.64	138.81	0	0	0
1.18	7650	94.61	138.55	0	0	0
0.24	7735	94.48	138.71	0	0	0
1.75	7821	93.03	138.32	0	0	0
3.17	7906	90.37	137.85	0	0	0
1.09	7991	91.21	138.25	0	0	0
2.98	8076	89.16	136.76	0	0	0
1.17	8162	90.17	136.8	0	0	0
1.9	8247	91.05	135.45	0	0	0
1.46	8332	90.94	134.22	0	0	0
1.66	8417	91.88	133.16	0	0	0
3.45	8503	88.96	133.61	0	0	0
1.17	8588	87.98	133.78	0	0	0
1.20	8673	88.99	133.89	0	0	0
2.14	8758	87.34	134.65	0	0	0
1.24	8844	88.35	134.32	0	0	0
2.2	8929	90.13	134.89	0	0	0
2.35	9014	89.66	132.95	0	0	0
0.95	9099	90.37	132.55	0	0	0
0.38	9184	90.67	132.44	0	0	0
1.65	9270	91.32	131.18	0	0	0
1.99	9355	91.28	132.86	0	0	0
3.70	9440	89.29	135.3	0	0	0
0.96	9525	90.1	135.42	0	0	0
2.73	9611	88.05	136.55	0	0	0
1.05	9696	88.25	137.42	0	0	0
0.82	9781	88.92	137.23	0	0	0
0.94	9866	89.56	137.7	0	0	0
1.33	9951	90.64	138.06	0	0	0
1.64	10037	90.57	136.65	0	0	0
2.06	10121	88.99	135.9	-1	0	0
4.43	10207	88.32	132.19	0	0	0
1.36	10292	89.19	131.43	0	0	0
0.63	10378	89.63	131.74	0	0	0
1.13	10463	90.34	132.39	0	0	0
2.74	10548	90.51	134.72	0	0	0
0.87	10633	91.25	134.67	0	0	0
1.06	10719	92.16	134.69	0	0	0
1.94	10804	90.71	133.9	0	0	0
1.80	10889	90.74	132.38	0	0	0
2.06	10974	91.28	130.71	0	0	0

WV GEOLOGICAL SURVEY
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DLS	COMPASS					
1.72	11060	91.08	132.18	0	0	0
2.38	11145	89.19	132.89	0	0	0
1.30	11230	89.49	133.95	0	0	0
1.42	11315	90.6	134.44	0	0	0
3.18	11401	88.48	132.72	0	0	0
1.44	11486	89.7	132.89	0	0	0
1.62	11571	90.57	131.83	0	0	0
3.03	11656	90.78	134.4	0	0	0
1.95	11741	89.16	134.79	0	0	0
1.08	11827	89.97	135.26	0	0	0
0.94	11912	90.74	135.44	0	0	0
1.32	11997	91.45	134.57	0	0	0
2.79	12082	89.76	136.24	0	0	0
3.82	12168	88.66	133.15	0	0	0
1.09	12253	89.53	133.46	0	0	0
0.99	12338	90.37	133.49	0	0	0
3.61	12423	87.41	134.31	0	0	0
1.09	12509	88.12	134.92	0	0	0
1.06	12594	88.99	134.68	0	0	0
5.76	12679	88.32	139.54	0	0	0
6.90	12764	90.71	134.18	0	0	0
3.18	12850	88.42	132.68	0	0	0
1.84	12935	87.88	134.14	0	0	0
1.12	13020	88.66	134.69	0	0	0
1.59	13089	89.6	135.25	0	0	0
0.01	13136	89.6	135.25	0	0	0

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