

Company: HRM RESOURCES, LLC
WellName: FRITZLER #8-8-17
Location: SEC 17, 6N-66W

Vertical Section calculated on an Azimuth of: 137.4554

Survey Calculation Method: Minimum Curvature

FileName: F:\WELL REPORTS\HRM Resources LLC\Fritzler 8-8-17\Fritzler #8-8-17, Directional Survey.sr5

#	Depth Feet	Inc Degrees	Azimuth Degrees	TVD Feet	SubSea Feet	North Feet	East Feet	Section Feet	Dogleg /100 ft	BldRate /100 ft	Trnrate /100 ft	Comment
0	0.00	0.00	137.46	0.00	4785.00	0.00	0.00	0.00	0.00	0.00	0.00	
1	100.00	0.00	137.46	100.00	4685.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	137.46	200.00	4585.00	0.00	0.00	0.00	0.00	0.00	0.00	
3	300.00	0.00	137.46	300.00	4485.00	0.00	0.00	0.00	0.00	0.00	0.00	
4	400.00	0.00	137.46	400.00	4385.00	0.00	0.00	0.00	0.00	0.00	0.00	
5	500.00	0.00	137.46	500.00	4285.00	0.00	0.00	0.00	0.00	0.00	0.00	
6	600.00	0.00	137.46	600.00	4185.00	0.00	0.00	0.00	0.00	0.00	0.00	
7	700.00	0.00	137.46	700.00	4085.00	0.00	0.00	0.00	0.00	0.00	0.00	
8	716.00	0.00	137.46	716.00	4069.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP, B.G. =1°/100'
9	800.00	0.84	137.46	800.00	3985.00	-0.45	0.42	0.62	1.00	1.00	0.00	
10	900.00	1.84	137.46	899.97	3885.03	-2.18	2.00	2.95	1.00	1.00	0.00	
11	1000.00	2.84	137.46	999.88	3785.12	-5.18	4.76	7.04	1.00	1.00	0.00	
12	1100.00	3.84	137.46	1099.71	3685.29	-9.48	8.70	12.86	1.00	1.00	0.00	
13	1200.00	4.84	137.46	1199.42	3585.58	-15.05	13.81	20.43	1.00	1.00	0.00	
14	1300.00	5.84	137.46	1298.99	3486.01	-21.91	20.11	29.74	1.00	1.00	0.00	
15	1400.00	6.84	137.46	1398.38	3386.62	-30.04	27.57	40.78	1.00	1.00	0.00	
16	1500.00	7.84	137.46	1497.56	3287.44	-39.46	36.21	53.56	1.00	1.00	0.00	
17	1600.00	8.84	137.46	1596.50	3188.50	-50.14	46.02	68.06	1.00	1.00	0.00	TOS, 9.5°
18	1666.00	9.50	137.46	1661.65	3123.35	-57.89	53.13	78.58	1.00	1.00	0.00	
19	1700.00	9.50	137.46	1695.19	3089.81	-62.03	56.93	84.19	0.00	0.00	0.00	
20	1800.00	9.50	137.46	1793.82	2991.18	-74.19	68.09	100.69	0.00	0.00	0.00	
21	1900.00	9.50	137.46	1892.44	2892.56	-86.35	79.25	117.20	0.00	0.00	0.00	
22	2000.00	9.50	137.46	1991.07	2793.93	-98.51	90.41	133.70	0.00	0.00	0.00	
23	2100.00	9.50	137.46	2089.70	2695.30	-110.67	101.57	150.21	0.00	0.00	0.00	
24	2200.00	9.50	137.46	2188.33	2596.67	-122.83	112.73	166.71	0.00	0.00	0.00	
25	2300.00	9.50	137.46	2286.96	2498.04	-134.99	123.89	183.22	0.00	0.00	0.00	
26	2400.00	9.50	137.46	2385.59	2399.41	-147.15	135.05	199.72	0.00	0.00	0.00	
27	2500.00	9.50	137.46	2484.22	2300.78	-159.31	146.21	216.23	0.00	0.00	0.00	
28	2600.00	9.50	137.46	2582.84	2202.16	-171.47	157.37	232.73	0.00	0.00	0.00	
29	2700.00	9.50	137.46	2681.47	2103.53	-183.63	168.52	249.24	0.00	0.00	0.00	
30	2800.00	9.50	137.46	2780.10	2004.90	-195.79	179.68	265.74	0.00	0.00	0.00	
31	2900.00	9.50	137.46	2878.73	1906.27	-207.95	190.84	282.25	0.00	0.00	0.00	
32	3000.00	9.50	137.46	2977.36	1807.64	-220.11	202.00	298.75	0.00	0.00	0.00	
33	3100.00	9.50	137.46	3075.99	1709.01	-232.27	213.16	315.26	0.00	0.00	0.00	
34	3200.00	9.50	137.46	3174.62	1610.38	-244.43	224.32	331.76	0.00	0.00	0.00	
35	3300.00	9.50	137.46	3273.25	1511.75	-256.59	235.48	348.27	0.00	0.00	0.00	
36	3400.00	9.50	137.46	3371.87	1413.13	-268.75	246.64	364.77	0.00	0.00	0.00	
37	3500.00	9.50	137.46	3470.50	1314.50	-280.91	257.80	381.28	0.00	0.00	0.00	
38	3600.00	9.50	137.46	3569.13	1215.87	-293.06	268.96	397.78	0.00	0.00	0.00	
39	3700.00	9.50	137.46	3667.76	1117.24	-305.22	280.12	414.28	0.00	0.00	0.00	
40	3800.00	9.50	137.46	3766.39	1018.61	-317.38	291.28	430.79	0.00	0.00	0.00	
41	3900.00	9.50	137.46	3865.02	919.98	-329.54	302.44	447.29	0.00	0.00	0.00	

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Vertical Section calculated on an Azimuth of: 137.4554

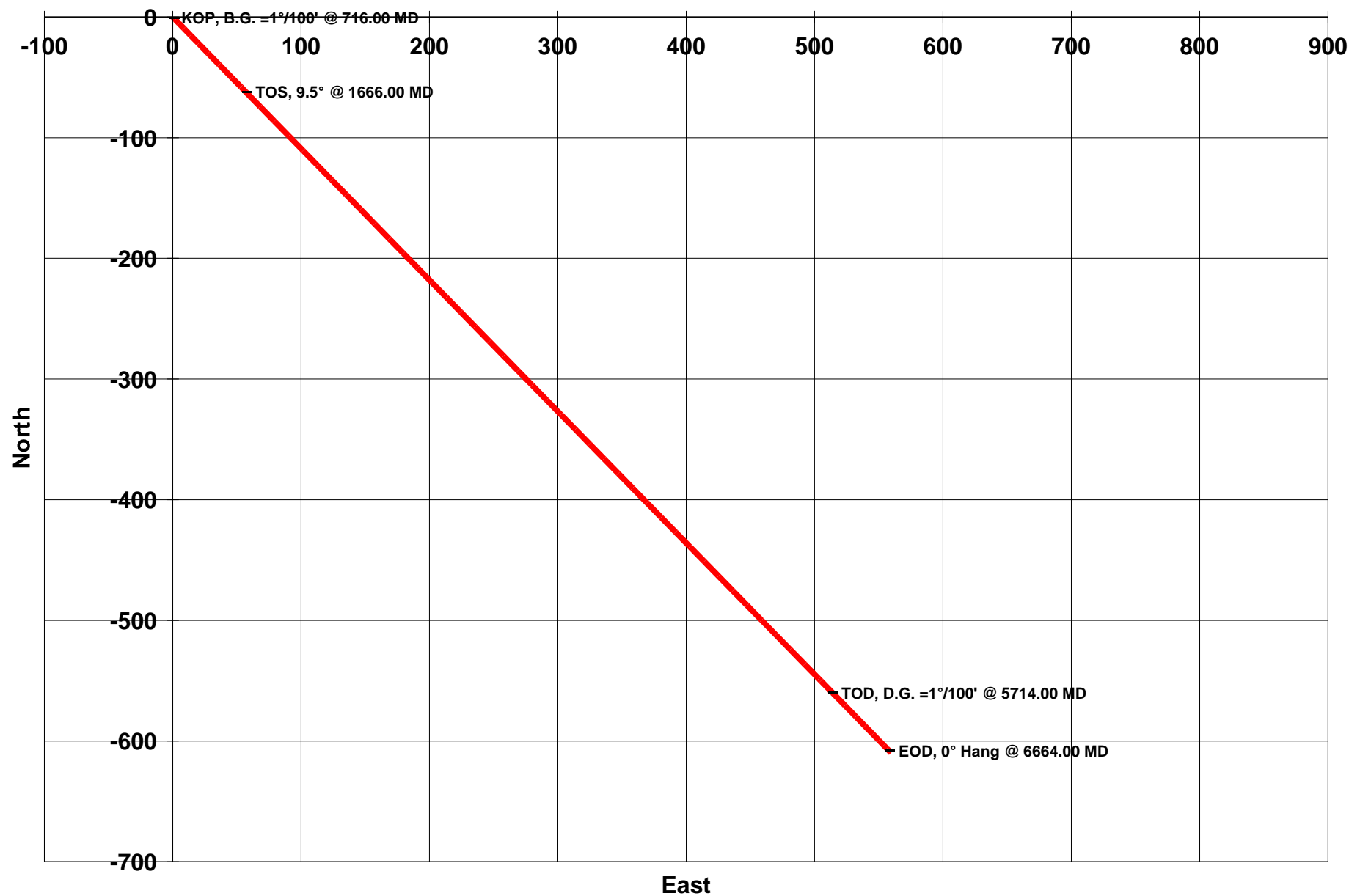
Survey Calculation Method: Minimum Curvature

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#	Depth Feet	Inc Degrees	Azimuth Degrees	TVD Feet	SubSea Feet	North Feet	East Feet	Section Feet	Dogleg /100 ft	BldRate /100 ft	Trnrate /100 ft	Comment
42	4000.00	9.50	137.46	3963.65	821.35	-341.70	313.60	463.80	0.00	0.00	0.00	
43	4100.00	9.50	137.46	4062.27	722.73	-353.86	324.76	480.30	0.00	0.00	0.00	
44	4200.00	9.50	137.46	4160.90	624.10	-366.02	335.92	496.81	0.00	0.00	0.00	
45	4300.00	9.50	137.46	4259.53	525.47	-378.18	347.08	513.31	0.00	0.00	0.00	
46	4400.00	9.50	137.46	4358.16	426.84	-390.34	358.24	529.82	0.00	0.00	0.00	
47	4500.00	9.50	137.46	4456.79	328.21	-402.50	369.40	546.32	0.00	0.00	0.00	
48	4600.00	9.50	137.46	4555.42	229.58	-414.66	380.56	562.83	0.00	0.00	0.00	
49	4700.00	9.50	137.46	4654.04	130.96	-426.82	391.72	579.33	0.00	0.00	0.00	
50	4800.00	9.50	137.46	4752.67	32.33	-438.98	402.88	595.84	0.00	0.00	0.00	
51	4900.00	9.50	137.46	4851.30	-66.30	-451.14	414.04	612.34	0.00	0.00	0.00	
52	5000.00	9.50	137.46	4949.93	-164.93	-463.30	425.20	628.85	0.00	0.00	0.00	
53	5100.00	9.50	137.46	5048.56	-263.56	-475.46	436.36	645.35	0.00	0.00	0.00	
54	5200.00	9.50	137.46	5147.19	-362.19	-487.62	447.52	661.86	0.00	0.00	0.00	
55	5300.00	9.50	137.46	5245.82	-460.82	-499.78	458.68	678.36	0.00	0.00	0.00	
56	5400.00	9.50	137.46	5344.44	-559.44	-511.94	469.84	694.87	0.00	0.00	0.00	
57	5500.00	9.50	137.46	5443.07	-658.07	-524.10	481.00	711.37	0.00	0.00	0.00	
58	5600.00	9.50	137.46	5541.70	-756.70	-536.26	492.16	727.88	0.00	0.00	0.00	
59	5700.00	9.50	137.46	5640.33	-855.33	-548.42	503.32	744.38	0.00	0.00	0.00	
60	5714.00	9.50	137.46	5654.14	-869.14	-550.13	504.88	746.69	0.00	0.00	0.00	TOD, D.G. =1°/100'
61	5800.00	8.64	137.46	5739.06	-954.06	-560.11	514.05	760.25	1.00	1.00	0.00	
62	5900.00	7.64	137.46	5838.05	-1053.05	-570.55	523.63	774.41	1.00	1.00	0.00	
63	6000.00	6.64	137.46	5937.28	-1152.28	-579.70	532.03	786.84	1.00	1.00	0.00	
64	6100.00	5.64	137.46	6036.70	-1251.70	-587.58	539.26	797.53	1.00	1.00	0.00	
65	6200.00	4.64	137.46	6136.30	-1351.30	-594.18	545.32	806.49	1.00	1.00	0.00	
66	6300.00	3.64	137.46	6236.04	-1451.04	-599.50	550.20	813.71	1.00	1.00	0.00	
67	6400.00	2.64	137.46	6335.88	-1550.88	-603.54	553.90	819.19	1.00	1.00	0.00	
68	6500.00	1.64	137.46	6435.81	-1650.81	-606.29	556.43	822.92	1.00	1.00	0.00	
69	6600.00	0.64	137.46	6535.79	-1750.79	-607.75	557.77	824.91	1.00	1.00	0.00	
70	6664.00	0.00	137.46	6599.79	-1814.79	-608.02	558.02	825.27	1.00	1.00	0.00	EOD, 0° Hang
71	6700.00	0.00	137.46	6635.79	-1850.79	-608.02	558.02	825.27	0.00	0.00	0.00	
72	6800.00	0.00	137.46	6735.79	-1950.79	-608.02	558.02	825.27	0.00	0.00	0.00	
73	6900.00	0.00	137.46	6835.79	-2050.79	-608.02	558.02	825.27	0.00	0.00	0.00	
74	7000.00	0.00	137.46	6935.79	-2150.79	-608.02	558.02	825.27	0.00	0.00	0.00	
75	7100.00	0.00	137.46	7035.79	-2250.79	-608.02	558.02	825.27	0.00	0.00	0.00	
76	7200.00	0.00	137.46	7135.79	-2350.79	-608.02	558.02	825.27	0.00	0.00	0.00	
77	7300.00	0.00	137.46	7235.79	-2450.79	-608.02	558.02	825.27	0.00	0.00	0.00	
78	7400.00	0.00	137.46	7335.79	-2550.79	-608.02	558.02	825.27	0.00	0.00	0.00	
79	7414.21	0.00	137.46	7350.00	-2565.00	-608.02	558.02	825.27	0.00	0.00	0.00	

Closure is 825.2682 feet on an Azimuth of 137.4554

Plan View
FRITZLER #8-8-17



Section View
FRITZLER #8-8-17

