

Company: HRM RESOURCES, LLC
WellName: BINDER #24-20
Location: 20-4N-67W

Vertical Section calculated on an Azimuth of: 193.3742

Survey Calculation Method: Minimum Curvature

FileName: F:\WELL REPORTS\HRM Resources LLC\Binder 24-20\Binder #24-20 Directional Surveys.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	193.37	0.00	4931.00	0.00	0.00	0.00	0.00	0.00	0.00	
1	100.00	0.00	193.37	100.00	4831.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	193.37	200.00	4731.00	0.00	0.00	0.00	0.00	0.00	0.00	
3	300.00	0.00	193.37	300.00	4631.00	0.00	0.00	0.00	0.00	0.00	0.00	
4	400.00	0.00	193.37	400.00	4531.00	0.00	0.00	0.00	0.00	0.00	0.00	
5	500.00	0.00	193.37	500.00	4431.00	0.00	0.00	0.00	0.00	0.00	0.00	
6	600.00	0.00	193.37	600.00	4331.00	0.00	0.00	0.00	0.00	0.00	0.00	
7	700.00	0.00	193.37	700.00	4231.00	0.00	0.00	0.00	0.00	0.00	0.00	
8	800.00	0.00	193.37	800.00	4131.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	850.00	0.00	193.37	850.00	4081.00	0.00	0.00	0.00	0.00	0.00	0.00	
10	900.00	1.00	193.37	900.00	4031.00	-0.42	-0.10	0.44	2.00	2.00	0.00	
11	1000.00	3.00	193.37	999.93	3931.07	-3.82	-0.91	3.93	2.00	2.00	0.00	
12	1100.00	5.00	193.37	1099.68	3831.32	-10.61	-2.52	10.90	2.00	2.00	0.00	
13	1200.00	7.00	193.37	1199.13	3731.87	-20.77	-4.94	21.35	2.00	2.00	0.00	
14	1300.00	9.00	193.37	1298.15	3632.85	-34.31	-8.16	35.27	2.00	2.00	0.00	
15	1400.00	11.00	193.37	1396.63	3534.37	-51.21	-12.17	52.63	2.00	2.00	0.00	
16	1500.00	13.00	193.37	1494.44	3436.56	-71.43	-16.98	73.42	2.00	2.00	0.00	
17	1600.00	15.00	193.37	1591.46	3339.54	-94.97	-22.58	97.62	2.00	2.00	0.00	
18	1700.00	17.00	193.37	1687.58	3243.42	-121.78	-28.95	125.18	2.00	2.00	0.00	
19	1735.00	17.70	193.37	1720.99	3210.01	-131.94	-31.37	135.61	2.00	2.00	0.00	
20	1800.00	17.70	193.37	1782.91	3148.09	-151.16	-35.94	155.38	0.00	0.00	0.00	
21	1900.00	17.70	193.37	1878.18	3052.82	-180.74	-42.97	185.78	0.00	0.00	0.00	
22	2000.00	17.70	193.37	1973.45	2957.55	-210.32	-50.01	216.18	0.00	0.00	0.00	
23	2100.00	17.70	193.37	2068.71	2862.29	-239.90	-57.04	246.59	0.00	0.00	0.00	
24	2200.00	17.70	193.37	2163.98	2767.02	-269.48	-64.07	276.99	0.00	0.00	0.00	
25	2300.00	17.70	193.37	2259.24	2671.76	-299.06	-71.10	307.39	0.00	0.00	0.00	
26	2400.00	17.70	193.37	2354.51	2576.49	-328.64	-78.14	337.80	0.00	0.00	0.00	
27	2500.00	17.70	193.37	2449.78	2481.22	-358.21	-85.17	368.20	0.00	0.00	0.00	
28	2600.00	17.70	193.37	2545.04	2385.96	-387.79	-92.20	398.60	0.00	0.00	0.00	
29	2700.00	17.70	193.37	2640.31	2290.69	-417.37	-99.23	429.01	0.00	0.00	0.00	
30	2800.00	17.70	193.37	2735.57	2195.43	-446.95	-106.27	459.41	0.00	0.00	0.00	
31	2900.00	17.70	193.37	2830.84	2100.16	-476.53	-113.30	489.81	0.00	0.00	0.00	
32	3000.00	17.70	193.37	2926.11	2004.89	-506.11	-120.33	520.22	0.00	0.00	0.00	
33	3100.00	17.70	193.37	3021.37	1909.63	-535.69	-127.36	550.62	0.00	0.00	0.00	
34	3200.00	17.70	193.37	3116.64	1814.36	-565.27	-134.40	581.02	0.00	0.00	0.00	
35	3300.00	17.70	193.37	3211.91	1719.09	-594.84	-141.43	611.43	0.00	0.00	0.00	
36	3400.00	17.70	193.37	3307.17	1623.83	-624.42	-148.46	641.83	0.00	0.00	0.00	
37	3500.00	17.70	193.37	3402.44	1528.56	-654.00	-155.49	672.23	0.00	0.00	0.00	
38	3600.00	17.70	193.37	3497.70	1433.30	-683.58	-162.53	702.64	0.00	0.00	0.00	
39	3700.00	17.70	193.37	3592.97	1338.03	-713.16	-169.56	733.04	0.00	0.00	0.00	
40	3800.00	17.70	193.37	3688.24	1242.76	-742.74	-176.59	763.44	0.00	0.00	0.00	
41	3900.00	17.70	193.37	3783.50	1147.50	-772.32	-183.62	793.85	0.00	0.00	0.00	

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Location: 20-4N-67W

Vertical Section calculated on an Azimuth of: 193.3742

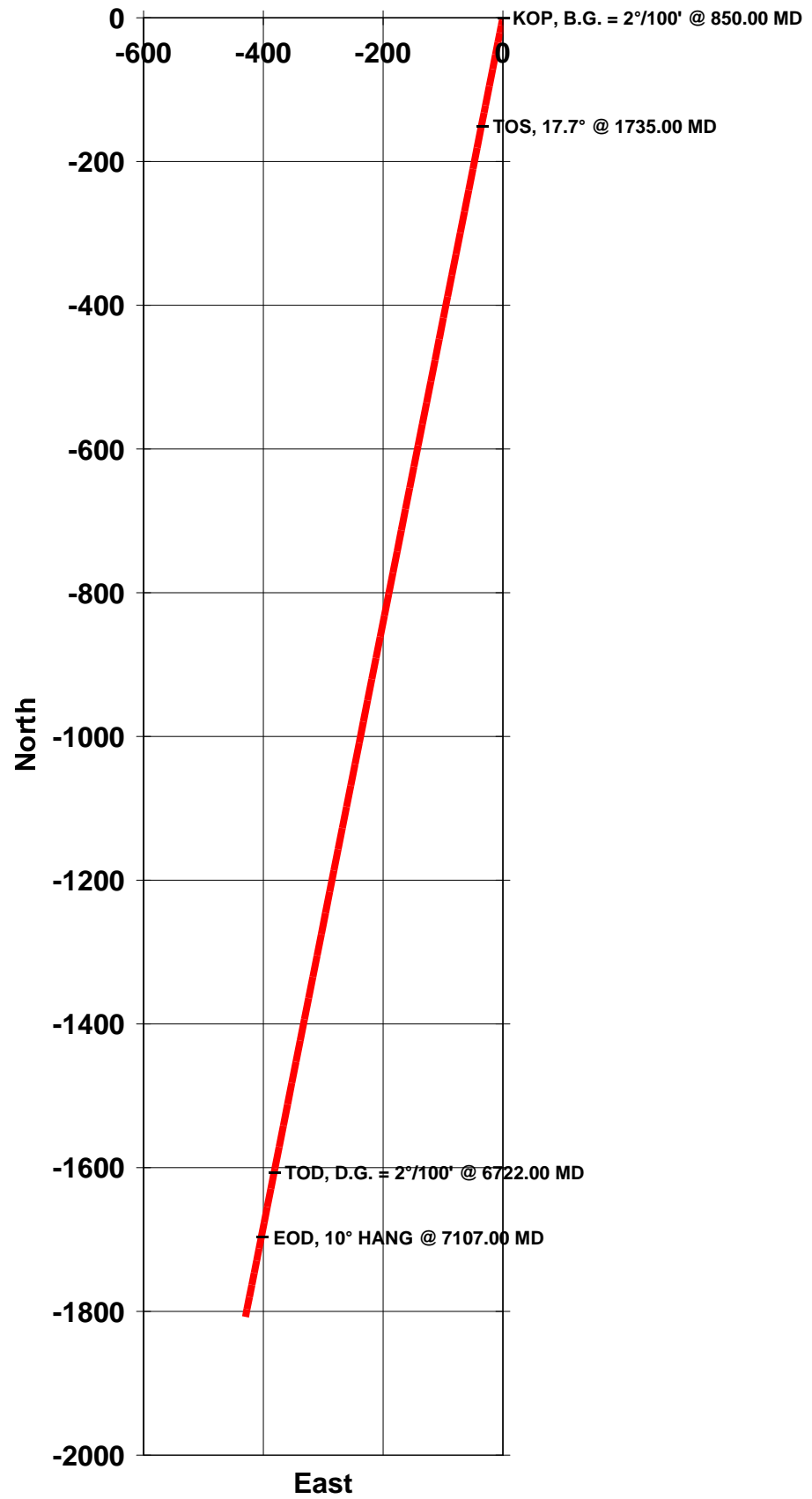
Survey Calculation Method: Minimum Curvature

FileName: F:\WELL REPORTS\HRM Resources LLC\Binder 24-20\Binder #24-20 Directional Surveys.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
42	4000.00	17.70	193.37	3878.77	1052.23	-801.90	-190.66	824.25	0.00	0.00	0.00	
43	4100.00	17.70	193.37	3974.03	956.97	-831.48	-197.69	854.65	0.00	0.00	0.00	
44	4200.00	17.70	193.37	4069.30	861.70	-861.05	-204.72	885.06	0.00	0.00	0.00	
45	4300.00	17.70	193.37	4164.57	766.43	-890.63	-211.76	915.46	0.00	0.00	0.00	
46	4400.00	17.70	193.37	4259.83	671.17	-920.21	-218.79	945.86	0.00	0.00	0.00	
47	4500.00	17.70	193.37	4355.10	575.90	-949.79	-225.82	976.27	0.00	0.00	0.00	
48	4600.00	17.70	193.37	4450.37	480.63	-979.37	-232.85	1006.67	0.00	0.00	0.00	
49	4700.00	17.70	193.37	4545.63	385.37	-1008.95	-239.89	1037.07	0.00	0.00	0.00	
50	4800.00	17.70	193.37	4640.90	290.10	-1038.53	-246.92	1067.48	0.00	0.00	0.00	
51	4900.00	17.70	193.37	4736.16	194.84	-1068.11	-253.95	1097.88	0.00	0.00	0.00	
52	5000.00	17.70	193.37	4831.43	99.57	-1097.68	-260.98	1128.28	0.00	0.00	0.00	
53	5100.00	17.70	193.37	4926.70	4.30	-1127.26	-268.02	1158.69	0.00	0.00	0.00	
54	5200.00	17.70	193.37	5021.96	-90.96	-1156.84	-275.05	1189.09	0.00	0.00	0.00	
55	5300.00	17.70	193.37	5117.23	-186.23	-1186.42	-282.08	1219.49	0.00	0.00	0.00	
56	5400.00	17.70	193.37	5212.49	-281.49	-1216.00	-289.11	1249.90	0.00	0.00	0.00	
57	5500.00	17.70	193.37	5307.76	-376.76	-1245.58	-296.15	1280.30	0.00	0.00	0.00	
58	5600.00	17.70	193.37	5403.03	-472.03	-1275.16	-303.18	1310.70	0.00	0.00	0.00	
59	5700.00	17.70	193.37	5498.29	-567.29	-1304.74	-310.21	1341.11	0.00	0.00	0.00	
60	5800.00	17.70	193.37	5593.56	-662.56	-1334.31	-317.24	1371.51	0.00	0.00	0.00	
61	5900.00	17.70	193.37	5688.82	-757.82	-1363.89	-324.28	1401.91	0.00	0.00	0.00	
62	6000.00	17.70	193.37	5784.09	-853.09	-1393.47	-331.31	1432.32	0.00	0.00	0.00	
63	6100.00	17.70	193.37	5879.36	-948.36	-1423.05	-338.34	1462.72	0.00	0.00	0.00	
64	6200.00	17.70	193.37	5974.62	-1043.62	-1452.63	-345.37	1493.12	0.00	0.00	0.00	
65	6300.00	17.70	193.37	6069.89	-1138.89	-1482.21	-352.41	1523.53	0.00	0.00	0.00	
66	6400.00	17.70	193.37	6165.16	-1234.16	-1511.79	-359.44	1553.93	0.00	0.00	0.00	
67	6500.00	17.70	193.37	6260.42	-1329.42	-1541.37	-366.47	1584.33	0.00	0.00	0.00	
68	6600.00	17.70	193.37	6355.69	-1424.69	-1570.94	-373.50	1614.74	0.00	0.00	0.00	
69	6700.00	17.70	193.37	6450.95	-1519.95	-1600.52	-380.54	1645.14	0.00	0.00	0.00	
70	6722.40	17.70	193.37	6472.29	-1541.29	TOD, D.G. = 2"/100'		1651.95	0.00	0.00	0.00	
71	6800.00	16.15	193.37	6546.53	-1615.53	-1629.12	-387.34	1674.54	2.00	2.00	0.00	
72	6900.00	14.15	193.37	6643.05	-1712.05	-1654.55	-393.38	1700.67	2.00	2.00	0.00	
73	7000.00	12.15	193.37	6740.42	-1809.42	-1676.67	-398.64	1723.41	2.00	2.00	0.00	
74	7100.00	10.15	193.37	6838.53	-1907.53	-1695.48	-403.12	1742.75	2.00	2.00	0.00	
75	7107.40	10.00	193.37	6845.82	-1914.82	EOD, 10° HANG		1744.04	2.00	2.00	0.00	
76	7200.00	10.00	193.37	6937.01	-2006.01	-1712.39	-407.13	1760.12	0.00	0.00	0.00	
77	7300.00	10.00	193.37	7035.49	-2104.49	-1729.28	-411.15	1777.49	0.00	0.00	0.00	
78	7400.00	10.00	193.37	7133.97	-2202.97	-1746.17	-415.17	1794.85	0.00	0.00	0.00	
79	7500.00	10.00	193.37	7232.45	-2301.45	-1763.07	-419.18	1812.22	0.00	0.00	0.00	
80	7600.00	10.00	193.37	7330.94	-2399.94	-1779.96	-423.20	1829.58	0.00	0.00	0.00	
81	7700.00	10.00	193.37	7429.42	-2498.42	-1796.86	-427.22	1846.95	0.00	0.00	0.00	
82	7735.00	10.00	193.37	7463.88	-2532.88	-1802.77	-428.62	1853.02	0.00	0.00	0.00	

Closure is 1853.0232 feet on an Azimuth of 193.3742

Plan View
BINDER #24-20



**Section View
BINDER #24-20**

