

Company: HRM RESOURCES, LLC
WellName: BINDER #23-20
Location: 20-4N-67W

Vertical Section calculated on an Azimuth of: 0.0000

Survey Calculation Method: Minimum Curvature

FileName: F:\WELL REPORTS\HRM Resources LLC\Binder 23-20\Binder #23-20 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	221.31	0.00	4919.00	0.00	0.00	0.00	0.00	0.00	0.00	
1	100.00	0.00	221.31	100.00	4819.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	221.31	200.00	4719.00	0.00	0.00	0.00	0.00	0.00	0.00	
3	300.00	0.00	221.31	300.00	4619.00	0.00	0.00	0.00	0.00	0.00	0.00	
4	400.00	0.00	221.31	400.00	4519.00	0.00	0.00	0.00	0.00	0.00	0.00	
5	500.00	0.00	221.31	500.00	4419.00	0.00	0.00	0.00	0.00	0.00	0.00	
6	600.00	0.00	221.31	600.00	4319.00	0.00	0.00	0.00	0.00	0.00	0.00	
7	700.00	0.00	221.31	700.00	4219.00	0.00	0.00	0.00	0.00	0.00	0.00	
8	800.00	0.00	221.31	800.00	4119.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	900.00	0.00	221.31	900.00	4019.00	0.00	0.00	0.00	0.00	0.00	0.00	
10	1000.00	0.00	221.31	1000.00	3919.00	0.00	0.00	0.00	0.00	0.00	0.00	
11	1100.00	0.00	221.31	1100.00	3819.00	0.00	0.00	0.00	0.00	0.00	0.00	
12	1200.00	0.00	221.31	1200.00	3719.00	0.00	0.00	0.00	0.00	0.00	0.00	
13	1250.00	0.00	221.31	1250.00	3669.00	0.00	0.00	0.00	0.00	0.00	0.00	
14	1300.00	0.50	221.31	1300.00	3619.00	-0.16	-0.14	-0.16	1.00	1.00	0.00	
15	1400.00	1.50	221.31	1399.98	3519.02	-1.47	-1.30	-1.47	1.00	1.00	0.00	
16	1500.00	2.50	221.31	1499.92	3419.08	-4.10	-3.60	-4.10	1.00	1.00	0.00	
17	1600.00	3.50	221.31	1599.78	3319.22	-8.03	-7.06	-8.03	1.00	1.00	0.00	
18	1700.00	4.50	221.31	1699.54	3219.46	-13.27	-11.66	-13.27	1.00	1.00	0.00	
19	1800.00	5.50	221.31	1799.16	3119.84	-19.81	-17.41	-19.81	1.00	1.00	0.00	
20	1900.00	6.50	221.31	1898.61	3020.39	-27.66	-24.32	-27.66	1.00	1.00	0.00	
21	2000.00	7.50	221.31	1997.86	2921.14	-36.82	-32.36	-36.82	1.00	1.00	0.00	
22	2050.00	8.00	221.31	2047.40	2871.60	-41.88	-36.81	-41.88	1.00	1.00	0.00	
23	2100.00	8.00	221.31	2096.92	2822.08	-47.11	-41.41	-47.11	0.00	0.00	0.00	
24	2200.00	8.00	221.31	2195.94	2723.06	-57.56	-50.59	-57.56	0.00	0.00	0.00	
25	2300.00	8.00	221.31	2294.97	2624.03	-68.01	-59.78	-68.01	0.00	0.00	0.00	
26	2400.00	8.00	221.31	2394.00	2525.00	-78.47	-68.97	-78.47	0.00	0.00	0.00	
27	2500.00	8.00	221.31	2493.02	2425.98	-88.92	-78.16	-88.92	0.00	0.00	0.00	
28	2600.00	8.00	221.31	2592.05	2326.95	-99.37	-87.35	-99.37	0.00	0.00	0.00	
29	2700.00	8.00	221.31	2691.08	2227.92	-109.83	-96.53	-109.83	0.00	0.00	0.00	
30	2800.00	8.00	221.31	2790.10	2128.90	-120.28	-105.72	-120.28	0.00	0.00	0.00	
31	2900.00	8.00	221.31	2889.13	2029.87	-130.73	-114.91	-130.73	0.00	0.00	0.00	
32	3000.00	8.00	221.31	2988.16	1930.84	-141.19	-124.10	-141.19	0.00	0.00	0.00	
33	3100.00	8.00	221.31	3087.19	1831.81	-151.64	-133.29	-151.64	0.00	0.00	0.00	
34	3200.00	8.00	221.31	3186.21	1732.79	-162.09	-142.48	-162.09	0.00	0.00	0.00	
35	3300.00	8.00	221.31	3285.24	1633.76	-172.55	-151.66	-172.55	0.00	0.00	0.00	
36	3400.00	8.00	221.31	3384.27	1534.73	-183.00	-160.85	-183.00	0.00	0.00	0.00	
37	3500.00	8.00	221.31	3483.29	1435.71	-193.45	-170.04	-193.45	0.00	0.00	0.00	
38	3600.00	8.00	221.31	3582.32	1336.68	-203.91	-179.23	-203.91	0.00	0.00	0.00	
39	3700.00	8.00	221.31	3681.35	1237.65	-214.36	-188.42	-214.36	0.00	0.00	0.00	
40	3800.00	8.00	221.31	3780.37	1138.63	-224.81	-197.60	-224.81	0.00	0.00	0.00	
41	3900.00	8.00	221.31	3879.40	1039.60	-235.27	-206.79	-235.27	0.00	0.00	0.00	

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Vertical Section calculated on an Azimuth of: 0.0000

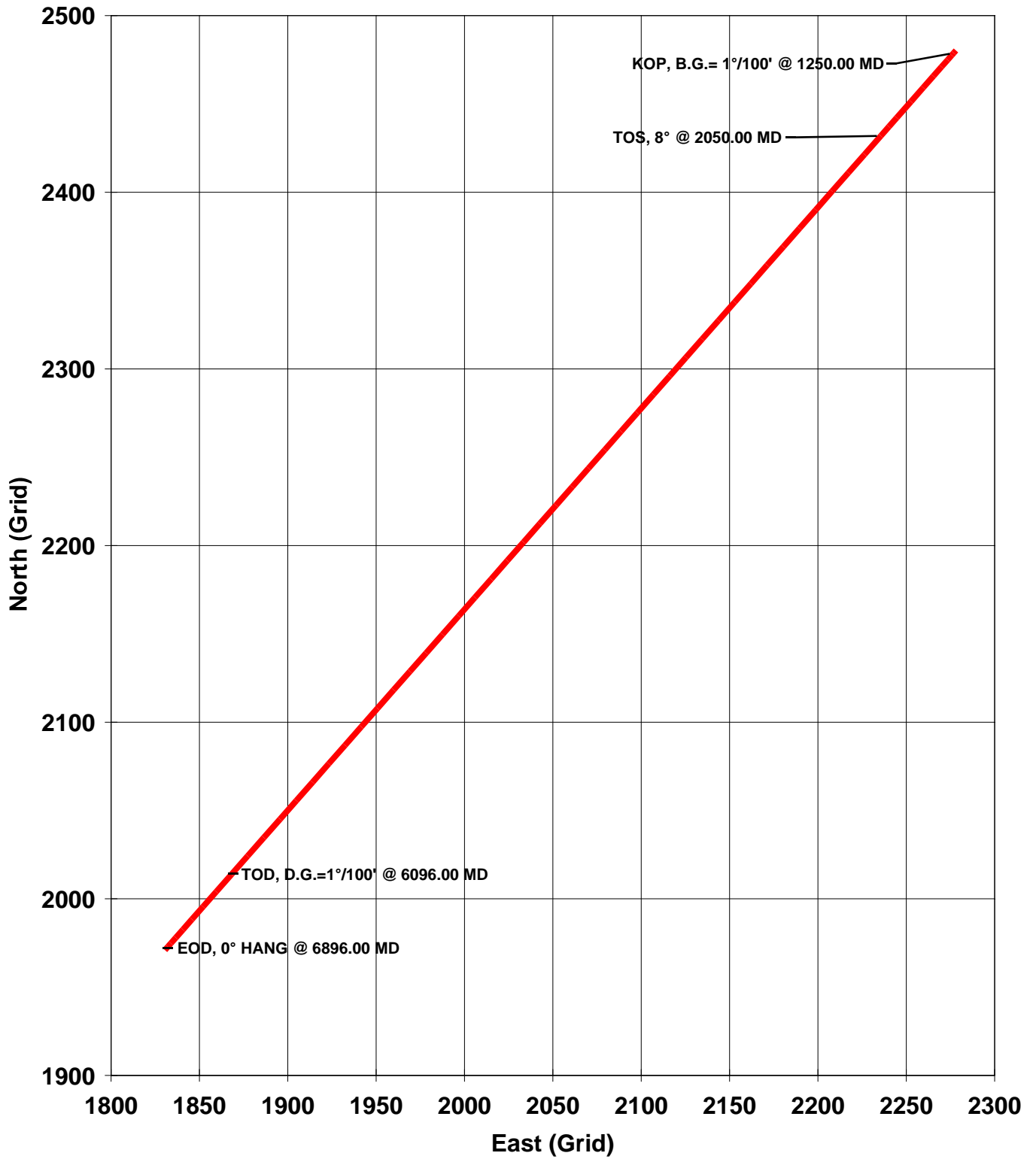
Survey Calculation Method: Minimum Curvature

FileName: F:\WELL REPORTS\HRM Resources LLC\Binder 23-20\Binder #23-20 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	8.00	221.31	3978.43	940.57	-245.72	-215.98	-245.72	0.00	0.00	0.00	
43	4100.00	8.00	221.31	4077.45	841.55	-256.17	-225.17	-256.17	0.00	0.00	0.00	
44	4200.00	8.00	221.31	4176.48	742.52	-266.63	-234.36	-266.63	0.00	0.00	0.00	
45	4300.00	8.00	221.31	4275.51	643.49	-277.08	-243.54	-277.08	0.00	0.00	0.00	
46	4400.00	8.00	221.31	4374.53	544.47	-287.53	-252.73	-287.53	0.00	0.00	0.00	
47	4500.00	8.00	221.31	4473.56	445.44	-297.99	-261.92	-297.99	0.00	0.00	0.00	
48	4600.00	8.00	221.31	4572.59	346.41	-308.44	-271.11	-308.44	0.00	0.00	0.00	
49	4700.00	8.00	221.31	4671.61	247.39	-318.89	-280.30	-318.89	0.00	0.00	0.00	
50	4800.00	8.00	221.31	4770.64	148.36	-329.35	-289.48	-329.35	0.00	0.00	0.00	
51	4900.00	8.00	221.31	4869.67	49.33	-339.80	-298.67	-339.80	0.00	0.00	0.00	
52	5000.00	8.00	221.31	4968.70	-49.70	-350.25	-307.86	-350.25	0.00	0.00	0.00	
53	5100.00	8.00	221.31	5067.72	-148.72	-360.71	-317.05	-360.71	0.00	0.00	0.00	
54	5200.00	8.00	221.31	5166.75	-247.75	-371.16	-326.24	-371.16	0.00	0.00	0.00	
55	5300.00	8.00	221.31	5265.78	-346.78	-381.61	-335.42	-381.61	0.00	0.00	0.00	
56	5400.00	8.00	221.31	5364.80	-445.80	-392.07	-344.61	-392.07	0.00	0.00	0.00	
57	5500.00	8.00	221.31	5463.83	-544.83	-402.52	-353.80	-402.52	0.00	0.00	0.00	
58	5600.00	8.00	221.31	5562.86	-643.86	-412.97	-362.99	-412.97	0.00	0.00	0.00	
59	5700.00	8.00	221.31	5661.88	-742.88	-423.42	-372.18	-423.42	0.00	0.00	0.00	
60	5800.00	8.00	221.31	5760.91	-841.91	-433.88	-381.37	-433.88	0.00	0.00	0.00	
61	5900.00	8.00	221.31	5859.94	-940.94	-444.33	-390.55	-444.33	0.00	0.00	0.00	
62	6000.00	8.00	221.31	5958.96	-1039.96	-454.78	-399.74	-454.78	0.00	0.00	0.00	
63	6096.30	8.00	221.31	6054.33	-1135.33	-464.85	-408.59	-464.85	0.00	0.00	0.00	
64	6100.00	7.96	221.31	6057.99	-1138.99	-465.24	-408.93	-465.24	1.00	1.00	0.00	
65	6200.00	6.96	221.31	6157.14	-1238.14	-474.99	-417.50	-474.99	1.00	1.00	0.00	
66	6300.00	5.96	221.31	6256.51	-1337.51	-483.45	-424.93	-483.45	1.00	1.00	0.00	
67	6400.00	4.96	221.31	6356.05	-1437.05	-490.60	-431.22	-490.60	1.00	1.00	0.00	
68	6500.00	3.96	221.31	6455.75	-1536.75	-496.44	-436.36	-496.44	1.00	1.00	0.00	
69	6600.00	2.96	221.31	6555.56	-1636.56	-500.98	-440.34	-500.98	1.00	1.00	0.00	
70	6700.00	1.96	221.31	6655.47	-1736.47	-504.21	-443.18	-504.21	1.00	1.00	0.00	
71	6800.00	0.96	221.31	6755.43	-1836.43	-506.12	-444.87	-506.12	1.00	1.00	0.00	
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72	6896.30	0.00	221.31	6851.73	-1932.73	-506.73	-445.40	-506.73	1.00	1.00	0.00	
73	6900.00	0.00	221.31	6855.43	-1936.43	-506.73	-445.40	-506.73	0.00	0.00	0.00	
74	7000.00	0.00	221.31	6955.43	-2036.43	-506.73	-445.40	-506.73	0.00	0.00	0.00	
75	7100.00	0.00	221.31	7055.43	-2136.43	-506.73	-445.40	-506.73	0.00	0.00	0.00	
76	7200.00	0.00	221.31	7155.43	-2236.43	-506.73	-445.40	-506.73	0.00	0.00	0.00	
77	7300.00	0.00	221.31	7255.43	-2336.43	-506.73	-445.40	-506.73	0.00	0.00	0.00	
78	7400.00	0.00	221.31	7355.43	-2436.43	-506.73	-445.40	-506.73	0.00	0.00	0.00	
79	7500.00	0.00	221.31	7455.43	-2536.43	-506.73	-445.40	-506.73	0.00	0.00	0.00	

Closure is 674.6556 feet on an Azimuth of 221.3144

Plan View
BINDER #23-20



**Section View
BINDER #23-20**

