

Company: HRM RESOURCES, LLC
WellName: BINDER #4-6-20
Location: 20-4N-67W

Vertical Section calculated on an Azimuth of: 174.1908

Survey Calculation Method: Minimum Curvature

FileName: F:\WELL REPORTS\HRM Resources LLC\Binder 4-6-20\Binder #4-6-20 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	174.19	0.00	4920.00	0.00	0.00	0.00	0.00	0.00	0.00	
1	100.00	0.00	174.19	100.00	4820.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	174.19	200.00	4720.00	0.00	0.00	0.00	0.00	0.00	0.00	
3	300.00	0.00	174.19	300.00	4620.00	0.00	0.00	0.00	0.00	0.00	0.00	
4	400.00	0.00	174.19	400.00	4520.00	0.00	0.00	0.00	0.00	0.00	0.00	
5	500.00	0.00	174.19	500.00	4420.00	0.00	0.00	0.00	0.00	0.00	0.00	
6	600.00	0.00	174.19	600.00	4320.00	0.00	0.00	0.00	0.00	0.00	0.00	
7	700.00	0.00	174.19	700.00	4220.00	0.00	0.00	0.00	0.00	0.00	0.00	
8	800.00	0.00	174.19	800.00	4120.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	850.00	0.00	174.19	850.00	4070.00	0.00	0.00	0.00	0.00	0.00	0.00	
10	900.00	1.00	174.19	900.00	4020.00	-0.43	0.04	0.44	2.00	2.00	0.00	
11	1000.00	3.00	174.19	999.93	3920.07	-3.91	0.40	3.93	2.00	2.00	0.00	
12	1100.00	5.00	174.19	1099.68	3820.32	-10.85	1.10	10.90	2.00	2.00	0.00	
13	1200.00	7.00	174.19	1199.13	3720.87	-21.24	2.16	21.35	2.00	2.00	0.00	
14	1300.00	9.00	174.19	1298.15	3621.85	-35.09	3.57	35.27	2.00	2.00	0.00	
15	1400.00	11.00	174.19	1396.63	3523.37	-52.36	5.33	52.63	2.00	2.00	0.00	
16	1456.50	12.13	174.19	1451.98	3468.02	-63.63	6.47	63.96	2.00	2.00	0.00	
17	1500.00	12.13	174.19	1494.51	3425.49	-72.73	7.40	73.10	0.00	0.00	0.00	
18	1600.00	12.13	174.19	1592.28	3327.72	-93.63	9.53	94.11	0.00	0.00	0.00	
19	1700.00	12.13	174.19	1690.04	3229.96	-114.54	11.65	115.13	0.00	0.00	0.00	
20	1800.00	12.13	174.19	1787.81	3132.19	-135.44	13.78	136.14	0.00	0.00	0.00	
21	1900.00	12.13	174.19	1885.58	3034.42	-156.35	15.91	157.15	0.00	0.00	0.00	
22	2000.00	12.13	174.19	1983.35	2936.65	-177.25	18.03	178.17	0.00	0.00	0.00	
23	2100.00	12.13	174.19	2081.11	2838.89	-198.16	20.16	199.18	0.00	0.00	0.00	
24	2200.00	12.13	174.19	2178.88	2741.12	-219.06	22.29	220.19	0.00	0.00	0.00	
25	2300.00	12.13	174.19	2276.65	2643.35	-239.97	24.41	241.21	0.00	0.00	0.00	
26	2400.00	12.13	174.19	2374.41	2545.59	-260.87	26.54	262.22	0.00	0.00	0.00	
27	2500.00	12.13	174.19	2472.18	2447.82	-281.78	28.67	283.23	0.00	0.00	0.00	
28	2600.00	12.13	174.19	2569.95	2350.05	-302.68	30.79	304.25	0.00	0.00	0.00	
29	2700.00	12.13	174.19	2667.72	2252.28	-323.59	32.92	325.26	0.00	0.00	0.00	
30	2800.00	12.13	174.19	2765.48	2154.52	-344.49	35.05	346.27	0.00	0.00	0.00	
31	2900.00	12.13	174.19	2863.25	2056.75	-365.40	37.18	367.28	0.00	0.00	0.00	
32	3000.00	12.13	174.19	2961.02	1958.98	-386.30	39.30	388.30	0.00	0.00	0.00	
33	3100.00	12.13	174.19	3058.79	1861.21	-407.21	41.43	409.31	0.00	0.00	0.00	
34	3200.00	12.13	174.19	3156.55	1763.45	-428.11	43.56	430.32	0.00	0.00	0.00	
35	3300.00	12.13	174.19	3254.32	1665.68	-449.02	45.68	451.34	0.00	0.00	0.00	
36	3400.00	12.13	174.19	3352.09	1567.91	-469.92	47.81	472.35	0.00	0.00	0.00	
37	3500.00	12.13	174.19	3449.85	1470.15	-490.83	49.94	493.36	0.00	0.00	0.00	
38	3600.00	12.13	174.19	3547.62	1372.38	-511.73	52.06	514.38	0.00	0.00	0.00	
39	3700.00	12.13	174.19	3645.39	1274.61	-532.64	54.19	535.39	0.00	0.00	0.00	
40	3800.00	12.13	174.19	3743.16	1176.84	-553.54	56.32	556.40	0.00	0.00	0.00	
41	3900.00	12.13	174.19	3840.92	1079.08	-574.45	58.44	577.42	0.00	0.00	0.00	

Company: HRM RESOURCES, LLC
WellName: BINDER #4-6-20
Location: 20-4N-67W

Vertical Section calculated on an Azimuth of: 174.1908

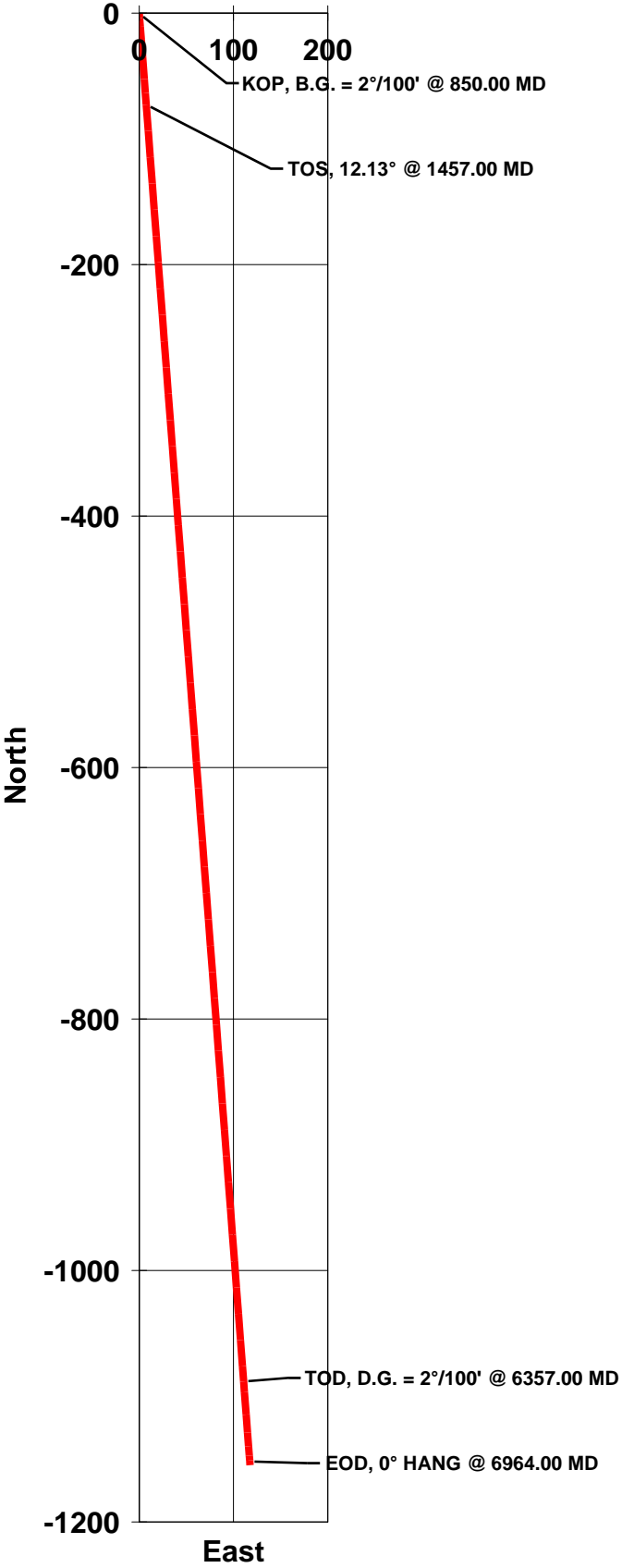
Survey Calculation Method: Minimum Curvature

FileName: F:\WELL REPORTS\HRM Resources LLC\Binder 4-6-20\Binder #4-6-20 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	12.13	174.19	3938.69	981.31	-595.36	60.57	598.43	0.00	0.00	0.00	
43	4100.00	12.13	174.19	4036.46	883.54	-616.26	62.70	619.44	0.00	0.00	0.00	
44	4200.00	12.13	174.19	4134.23	785.77	-637.17	64.82	640.45	0.00	0.00	0.00	
45	4300.00	12.13	174.19	4231.99	688.01	-658.07	66.95	661.47	0.00	0.00	0.00	
46	4400.00	12.13	174.19	4329.76	590.24	-678.98	69.08	682.48	0.00	0.00	0.00	
47	4500.00	12.13	174.19	4427.53	492.47	-699.88	71.21	703.49	0.00	0.00	0.00	
48	4600.00	12.13	174.19	4525.30	394.70	-720.79	73.33	724.51	0.00	0.00	0.00	
49	4700.00	12.13	174.19	4623.06	296.94	-741.69	75.46	745.52	0.00	0.00	0.00	
50	4800.00	12.13	174.19	4720.83	199.17	-762.60	77.59	766.53	0.00	0.00	0.00	
51	4900.00	12.13	174.19	4818.60	101.40	-783.50	79.71	787.55	0.00	0.00	0.00	
52	5000.00	12.13	174.19	4916.37	3.63	-804.41	81.84	808.56	0.00	0.00	0.00	
53	5100.00	12.13	174.19	5014.13	-94.13	-825.31	83.97	829.57	0.00	0.00	0.00	
54	5200.00	12.13	174.19	5111.90	-191.90	-846.22	86.09	850.59	0.00	0.00	0.00	
55	5300.00	12.13	174.19	5209.67	-289.67	-867.12	88.22	871.60	0.00	0.00	0.00	
56	5400.00	12.13	174.19	5307.44	-387.44	-888.03	90.35	892.61	0.00	0.00	0.00	
57	5500.00	12.13	174.19	5405.21	-485.21	-908.93	92.47	913.62	0.00	0.00	0.00	
58	5600.00	12.13	174.19	5502.97	-582.97	-929.84	94.60	934.64	0.00	0.00	0.00	
59	5700.00	12.13	174.19	5600.74	-680.74	-950.74	96.73	955.65	0.00	0.00	0.00	
60	5800.00	12.13	174.19	5698.51	-778.51	-971.65	98.85	976.66	0.00	0.00	0.00	
61	5900.00	12.13	174.19	5796.28	-876.28	-992.55	100.98	997.68	0.00	0.00	0.00	
62	6000.00	12.13	174.19	5894.04	-974.04	-1013.46	103.11	1018.69	0.00	0.00	0.00	
63	6100.00	12.13	174.19	5991.81	-1071.81	-1034.36	105.24	1039.70	0.00	0.00	0.00	
64	6200.00	12.13	174.19	6089.58	-1169.58	-1055.27	107.36	1060.72	0.00	0.00	0.00	
65	6300.00	12.13	174.19	6187.35	-1267.35	-1076.17	109.49	1081.73	0.00	0.00	0.00	
TOD, D.G. = 2°/100'												
66	6357.70	12.13	174.19	6243.76	-1323.76	-1088.24	110.72	1093.85	0.00	0.00	0.00	
67	6400.00	11.28	174.19	6285.18	-1365.18	-1096.77	111.58	1102.44	2.00	2.00	0.00	
68	6500.00	9.28	174.19	6383.57	-1463.57	-1114.53	113.39	1120.29	2.00	2.00	0.00	
69	6600.00	7.28	174.19	6482.52	-1562.52	-1128.87	114.85	1134.70	2.00	2.00	0.00	
70	6700.00	5.28	174.19	6581.91	-1661.91	-1139.76	115.96	1145.64	2.00	2.00	0.00	
71	6800.00	3.28	174.19	6681.63	-1761.63	-1147.19	116.71	1153.11	2.00	2.00	0.00	
72	6900.00	1.28	174.19	6781.54	-1861.54	-1151.15	117.12	1157.10	2.00	2.00	0.00	
EOD, 0° HANG												
73	6964.20	0.00	174.19	6845.74	-1925.74	-1151.87	117.19	1157.81	2.00	2.00	0.00	
74	7000.00	0.00	174.19	6881.54	-1961.54	-1151.87	117.19	1157.81	0.00	0.00	0.00	
75	7100.00	0.00	174.19	6981.54	-2061.54	-1151.87	117.19	1157.81	0.00	0.00	0.00	
76	7200.00	0.00	174.19	7081.54	-2161.54	-1151.87	117.19	1157.81	0.00	0.00	0.00	
77	7300.00	0.00	174.19	7181.54	-2261.54	-1151.87	117.19	1157.81	0.00	0.00	0.00	
78	7400.00	0.00	174.19	7281.54	-2361.54	-1151.87	117.19	1157.81	0.00	0.00	0.00	
79	7500.00	0.00	174.19	7381.54	-2461.54	-1151.87	117.19	1157.81	0.00	0.00	0.00	
80	7585.00	0.00	174.19	7466.54	-2546.54	-1151.87	117.19	1157.81	0.00	0.00	0.00	

Closure is 1157.8145 feet on an Azimuth of 174.1908

Plan View
BINDER #4-6-20



Section View
BINDER #4-6-20

