

Company: HRM RESOURCES, LLC  
WellName: BINDER #2-4-20  
Location: 20-4N-67W

Vertical Section calculated on an Azimuth of: 276.0632

Survey Calculation Method: Minimum Curvature

FileName: F:\WELL REPORTS\HRM Resources LLC\Binder 2-4-20\Binder #2-4-20 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	276.06	0.00	4918.00	0.00	0.00	0.00	0.00	0.00	0.00	
1	100.00	0.00	276.06	100.00	4818.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	276.06	200.00	4718.00	0.00	0.00	0.00	0.00	0.00	0.00	
3	300.00	0.00	276.06	300.00	4618.00	0.00	0.00	0.00	0.00	0.00	0.00	
4	400.00	0.00	276.06	400.00	4518.00	0.00	0.00	0.00	0.00	0.00	0.00	
5	500.00	0.00	276.06	500.00	4418.00	0.00	0.00	0.00	0.00	0.00	0.00	
6	600.00	0.00	276.06	600.00	4318.00	0.00	0.00	0.00	0.00	0.00	0.00	
7	700.00	0.00	276.06	700.00	4218.00	0.00	0.00	0.00	0.00	0.00	0.00	
8	800.00	0.00	276.06	800.00	4118.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	880.00	0.00	276.06	880.00	4038.00	0.00	0.00	0.00	0.00	0.00	0.00	
10	900.00	0.40	276.06	900.00	4018.00	0.01	-0.07	0.07	2.00	2.00	0.00	
11	1000.00	2.40	276.06	999.96	3918.04	0.27	-2.50	2.51	2.00	2.00	0.00	
12	1100.00	4.40	276.06	1099.78	3818.22	0.89	-8.40	8.44	2.00	2.00	0.00	
13	1200.00	6.40	276.06	1199.33	3718.67	1.89	-17.75	17.85	2.00	2.00	0.00	
14	1300.00	8.40	276.06	1298.50	3619.50	3.25	-30.56	30.73	2.00	2.00	0.00	
15	1400.00	10.40	276.06	1397.15	3520.85	4.97	-46.80	47.06	2.00	2.00	0.00	
16	1430.00	11.00	276.06	1426.63	3491.37	5.56	-52.34	52.63	2.00	2.00	0.00	
17	1500.00	11.00	276.06	1495.34	3422.66	6.97	-65.62	65.99	0.00	0.00	0.00	
18	1600.00	11.00	276.06	1593.50	3324.50	8.99	-84.60	85.07	0.00	0.00	0.00	
19	1700.00	11.00	276.06	1691.67	3226.33	11.00	-103.57	104.15	0.00	0.00	0.00	
20	1800.00	11.00	276.06	1789.83	3128.17	13.02	-122.54	123.23	0.00	0.00	0.00	
21	1900.00	11.00	276.06	1887.99	3030.01	15.03	-141.52	142.31	0.00	0.00	0.00	
22	2000.00	11.00	276.06	1986.16	2931.84	17.05	-160.49	161.40	0.00	0.00	0.00	
23	2100.00	11.00	276.06	2084.32	2833.68	19.06	-179.47	180.48	0.00	0.00	0.00	
24	2200.00	11.00	276.06	2182.48	2735.52	21.08	-198.44	199.56	0.00	0.00	0.00	
25	2300.00	11.00	276.06	2280.64	2637.36	23.09	-217.41	218.64	0.00	0.00	0.00	
26	2400.00	11.00	276.06	2378.81	2539.19	25.11	-236.39	237.72	0.00	0.00	0.00	
27	2500.00	11.00	276.06	2476.97	2441.03	27.12	-255.36	256.80	0.00	0.00	0.00	
28	2600.00	11.00	276.06	2575.13	2342.87	29.14	-274.34	275.88	0.00	0.00	0.00	
29	2700.00	11.00	276.06	2673.29	2244.71	31.16	-293.31	294.96	0.00	0.00	0.00	
30	2800.00	11.00	276.06	2771.46	2146.54	33.17	-312.29	314.04	0.00	0.00	0.00	
31	2900.00	11.00	276.06	2869.62	2048.38	35.19	-331.26	333.12	0.00	0.00	0.00	
32	3000.00	11.00	276.06	2967.78	1950.22	37.20	-350.23	352.20	0.00	0.00	0.00	
33	3100.00	11.00	276.06	3065.94	1852.06	39.22	-369.21	371.29	0.00	0.00	0.00	
34	3200.00	11.00	276.06	3164.11	1753.89	41.23	-388.18	390.37	0.00	0.00	0.00	
35	3300.00	11.00	276.06	3262.27	1655.73	43.25	-407.16	409.45	0.00	0.00	0.00	
36	3400.00	11.00	276.06	3360.43	1557.57	45.26	-426.13	428.53	0.00	0.00	0.00	
37	3500.00	11.00	276.06	3458.59	1459.41	47.28	-445.10	447.61	0.00	0.00	0.00	
38	3600.00	11.00	276.06	3556.76	1361.24	49.29	-464.08	466.69	0.00	0.00	0.00	
39	3700.00	11.00	276.06	3654.92	1263.08	51.31	-483.05	485.77	0.00	0.00	0.00	
40	3800.00	11.00	276.06	3753.08	1164.92	53.33	-502.03	504.85	0.00	0.00	0.00	
41	3900.00	11.00	276.06	3851.24	1066.76	55.34	-521.00	523.93	0.00	0.00	0.00	

Company: HRM RESOURCES, LLC  
WellName: BINDER #2-4-20  
Location: 20-4N-67W

Vertical Section calculated on an Azimuth of: 276.0632

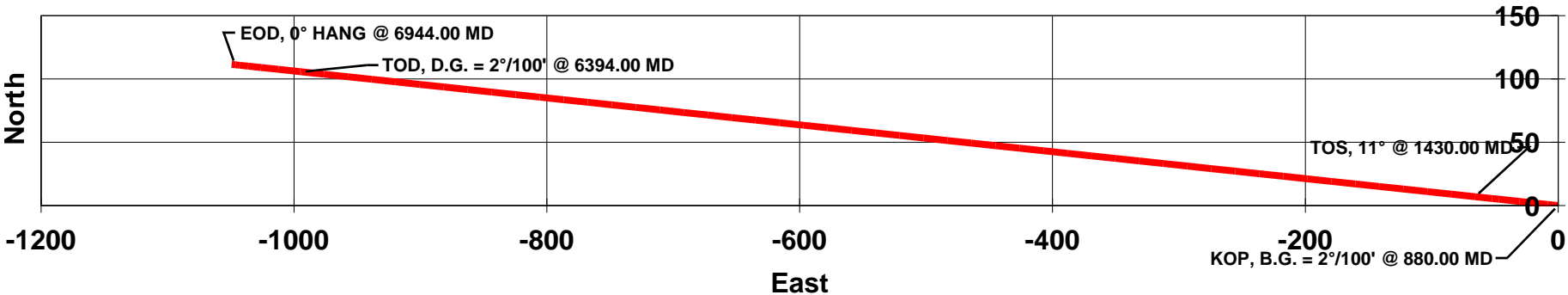
Survey Calculation Method: Minimum Curvature

FileName: F:\WELL REPORTS\HRM Resources LLC\Binder 2-4-20\Binder #2-4-20 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	11.00	276.06	3949.41	968.59	57.36	-539.98	543.01	0.00	0.00	0.00	
43	4100.00	11.00	276.06	4047.57	870.43	59.37	-558.95	562.09	0.00	0.00	0.00	
44	4200.00	11.00	276.06	4145.73	772.27	61.39	-577.92	581.18	0.00	0.00	0.00	
45	4300.00	11.00	276.06	4243.90	674.10	63.40	-596.90	600.26	0.00	0.00	0.00	
46	4400.00	11.00	276.06	4342.06	575.94	65.42	-615.87	619.34	0.00	0.00	0.00	
47	4500.00	11.00	276.06	4440.22	477.78	67.43	-634.85	638.42	0.00	0.00	0.00	
48	4600.00	11.00	276.06	4538.38	379.62	69.45	-653.82	657.50	0.00	0.00	0.00	
49	4700.00	11.00	276.06	4636.55	281.45	71.46	-672.79	676.58	0.00	0.00	0.00	
50	4800.00	11.00	276.06	4734.71	183.29	73.48	-691.77	695.66	0.00	0.00	0.00	
51	4900.00	11.00	276.06	4832.87	85.13	75.50	-710.74	714.74	0.00	0.00	0.00	
52	5000.00	11.00	276.06	4931.03	-13.03	77.51	-729.72	733.82	0.00	0.00	0.00	
53	5100.00	11.00	276.06	5029.20	-111.20	79.53	-748.69	752.90	0.00	0.00	0.00	
54	5200.00	11.00	276.06	5127.36	-209.36	81.54	-767.67	771.98	0.00	0.00	0.00	
55	5300.00	11.00	276.06	5225.52	-307.52	83.56	-786.64	791.07	0.00	0.00	0.00	
56	5400.00	11.00	276.06	5323.68	-405.68	85.57	-805.61	810.15	0.00	0.00	0.00	
57	5500.00	11.00	276.06	5421.85	-503.85	87.59	-824.59	829.23	0.00	0.00	0.00	
58	5600.00	11.00	276.06	5520.01	-602.01	89.60	-843.56	848.31	0.00	0.00	0.00	
59	5700.00	11.00	276.06	5618.17	-700.17	91.62	-862.54	867.39	0.00	0.00	0.00	
60	5800.00	11.00	276.06	5716.33	-798.33	93.63	-881.51	886.47	0.00	0.00	0.00	
61	5900.00	11.00	276.06	5814.50	-896.50	95.65	-900.49	905.55	0.00	0.00	0.00	
62	6000.00	11.00	276.06	5912.66	-994.66	97.67	-919.46	924.63	0.00	0.00	0.00	
63	6100.00	11.00	276.06	6010.82	-1092.82	99.68	-938.43	943.71	0.00	0.00	0.00	
64	6200.00	11.00	276.06	6108.98	-1190.98	101.70	-957.41	962.79	0.00	0.00	0.00	
65	6300.00	11.00	276.06	6207.15	-1289.15	103.71	-976.38	981.87	0.00	0.00	0.00	
TOD, D.G. = 2°/100'												
66	6394.40	11.00	276.06	6299.81	-1381.81	105.61	-994.29	999.89	0.00	0.00	0.00	
67	6400.00	10.89	276.06	6305.31	-1387.31	105.73	-995.35	1000.95	2.00	2.00	0.00	
68	6500.00	8.89	276.06	6403.82	-1485.82	107.54	-1012.43	1018.12	2.00	2.00	0.00	
69	6600.00	6.89	276.06	6502.87	-1584.87	108.99	-1026.07	1031.84	2.00	2.00	0.00	
70	6700.00	4.89	276.06	6602.34	-1684.34	110.07	-1036.27	1042.10	2.00	2.00	0.00	
71	6800.00	2.89	276.06	6702.10	-1784.10	110.79	-1043.02	1048.88	2.00	2.00	0.00	
72	6900.00	0.89	276.06	6802.04	-1884.04	111.14	-1046.29	1052.18	2.00	2.00	0.00	
EOD, 0° HANG												
73	6944.40	0.00	276.06	6846.44	-1928.44	111.17	-1046.63	1052.52	2.00	2.00	0.00	
74	7000.00	0.00	276.06	6902.04	-1984.04	111.17	-1046.63	1052.52	0.00	0.00	0.00	
75	7100.00	0.00	276.06	7002.04	-2084.04	111.17	-1046.63	1052.52	0.00	0.00	0.00	
76	7200.00	0.00	276.06	7102.04	-2184.04	111.17	-1046.63	1052.52	0.00	0.00	0.00	
77	7300.00	0.00	276.06	7202.04	-2284.04	111.17	-1046.63	1052.52	0.00	0.00	0.00	
78	7400.00	0.00	276.06	7302.04	-2384.04	111.17	-1046.63	1052.52	0.00	0.00	0.00	
79	7500.00	0.00	276.06	7402.04	-2484.04	111.17	-1046.63	1052.52	0.00	0.00	0.00	
80	7560.00	0.00	276.06	7462.04	-2544.04	111.17	-1046.63	1052.52	0.00	0.00	0.00	

Closure is 1052.5211 feet on an Azimuth of 276.0632

Plan View  
BINDER #2-4-20



Section View  
BINDER #2-4-20

