

Company: HRM RESOURCES, LLC
WellName: BINDER #14-20
Location: 20-4N-67W

Vertical Section calculated on an Azimuth of: 222.4198
Survey Calculation Method: Minimum Curvature
FileName: F:\WELL REPORTS\HRM Resources LLC\Binder 14-20\Binder #14-20 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	222.42	0.00	4918.00	0.00	0.00	0.00	0.00	0.00	0.00	
1	100.00	0.00	222.42	100.00	4818.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	222.42	200.00	4718.00	0.00	0.00	0.00	0.00	0.00	0.00	
3	300.00	0.00	222.42	300.00	4618.00	0.00	0.00	0.00	0.00	0.00	0.00	
KOP, B.G. = 2°/100'												
4	400.00	0.00	222.42	400.00	4518.00	0.00	0.00	0.00	0.00	0.00	0.00	
5	500.00	2.00	222.42	499.98	4418.02	-1.29	-1.18	1.75	2.00	2.00	0.00	
6	600.00	4.00	222.42	599.84	4318.16	-5.15	-4.71	6.98	2.00	2.00	0.00	
7	700.00	6.00	222.42	699.45	4218.55	-11.59	-10.59	15.69	2.00	2.00	0.00	
8	800.00	8.00	222.42	798.70	4119.30	-20.58	-18.81	27.88	2.00	2.00	0.00	
9	900.00	10.00	222.42	897.47	4020.53	-32.13	-29.36	43.52	2.00	2.00	0.00	
10	1000.00	12.00	222.42	995.62	3922.38	-46.21	-42.23	62.60	2.00	2.00	0.00	
11	1100.00	14.00	222.42	1093.06	3824.94	-62.82	-57.40	85.10	2.00	2.00	0.00	
12	1200.00	16.00	222.42	1189.64	3728.36	-81.93	-74.86	110.98	2.00	2.00	0.00	
13	1300.00	18.00	222.42	1285.27	3632.73	-103.51	-94.58	140.21	2.00	2.00	0.00	
14	1400.00	20.00	222.42	1379.82	3538.18	-127.54	-116.54	172.77	2.00	2.00	0.00	
TOS, 22°												
15	1500.00	22.00	222.42	1473.17	3444.83	-154.00	-140.71	208.60	2.00	2.00	0.00	
16	1600.00	22.00	222.42	1565.89	3352.11	-181.65	-165.98	246.06	0.00	0.00	0.00	
17	1700.00	22.00	222.42	1658.61	3259.39	-209.30	-191.25	283.52	0.00	0.00	0.00	
18	1800.00	22.00	222.42	1751.32	3166.68	-236.96	-216.52	320.98	0.00	0.00	0.00	
19	1900.00	22.00	222.42	1844.04	3073.96	-264.61	-241.79	358.45	0.00	0.00	0.00	
20	2000.00	22.00	222.42	1936.76	2981.24	-292.27	-267.06	395.91	0.00	0.00	0.00	
21	2100.00	22.00	222.42	2029.48	2888.52	-319.92	-292.33	433.37	0.00	0.00	0.00	
22	2200.00	22.00	222.42	2122.20	2795.80	-347.58	-317.60	470.83	0.00	0.00	0.00	
23	2300.00	22.00	222.42	2214.92	2703.08	-375.23	-342.87	508.29	0.00	0.00	0.00	
24	2400.00	22.00	222.42	2307.63	2610.37	-402.88	-368.14	545.75	0.00	0.00	0.00	
25	2500.00	22.00	222.42	2400.35	2517.65	-430.54	-393.41	583.21	0.00	0.00	0.00	
26	2600.00	22.00	222.42	2493.07	2424.93	-458.19	-418.68	620.67	0.00	0.00	0.00	
27	2700.00	22.00	222.42	2585.79	2332.21	-485.85	-443.95	658.13	0.00	0.00	0.00	
28	2800.00	22.00	222.42	2678.51	2239.49	-513.50	-469.22	695.59	0.00	0.00	0.00	
29	2900.00	22.00	222.42	2771.23	2146.77	-541.16	-494.49	733.05	0.00	0.00	0.00	
30	3000.00	22.00	222.42	2863.94	2054.06	-568.81	-519.75	770.51	0.00	0.00	0.00	
31	3100.00	22.00	222.42	2956.66	1961.34	-596.46	-545.02	807.97	0.00	0.00	0.00	
32	3200.00	22.00	222.42	3049.38	1868.62	-624.12	-570.29	845.43	0.00	0.00	0.00	
33	3300.00	22.00	222.42	3142.10	1775.90	-651.77	-595.56	882.89	0.00	0.00	0.00	
34	3400.00	22.00	222.42	3234.82	1683.18	-679.43	-620.83	920.36	0.00	0.00	0.00	
35	3500.00	22.00	222.42	3327.53	1590.47	-707.08	-646.10	957.82	0.00	0.00	0.00	
36	3600.00	22.00	222.42	3420.25	1497.75	-734.74	-671.37	995.28	0.00	0.00	0.00	
37	3700.00	22.00	222.42	3512.97	1405.03	-762.39	-696.64	1032.74	0.00	0.00	0.00	
38	3800.00	22.00	222.42	3605.69	1312.31	-790.04	-721.91	1070.20	0.00	0.00	0.00	
39	3900.00	22.00	222.42	3698.41	1219.59	-817.70	-747.18	1107.66	0.00	0.00	0.00	
40	4000.00	22.00	222.42	3791.13	1126.87	-845.35	-772.45	1145.12	0.00	0.00	0.00	
41	4100.00	22.00	222.42	3883.84	1034.16	-873.01	-797.72	1182.58	0.00	0.00	0.00	

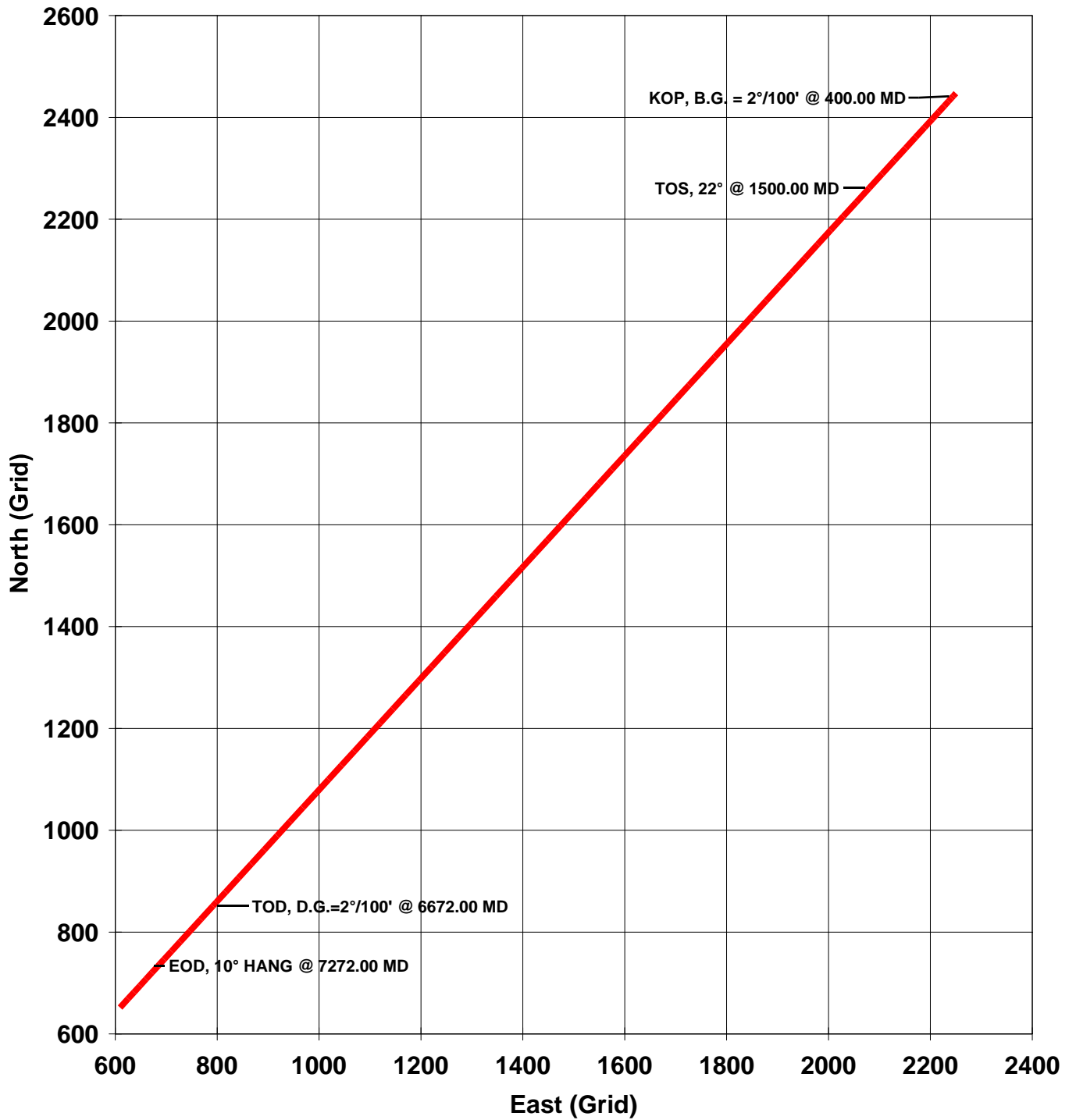
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Vertical Section calculated on an Azimuth of: 222.4198
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#	Depth Feet	Inc Degrees	Azimuth Degrees	TVD Feet	SubSea Feet	North Feet	East Feet	Section Feet	Dogleg /100 ft	BldRate /100 ft	Trnrate /100 ft	Comment
42	4200.00	22.00	222.42	3976.56	941.44	-900.66	-822.99	1220.04	0.00	0.00	0.00	
43	4300.00	22.00	222.42	4069.28	848.72	-928.32	-848.26	1257.50	0.00	0.00	0.00	
44	4400.00	22.00	222.42	4162.00	756.00	-955.97	-873.53	1294.96	0.00	0.00	0.00	
45	4500.00	22.00	222.42	4254.72	663.28	-983.62	-898.79	1332.42	0.00	0.00	0.00	
46	4600.00	22.00	222.42	4347.44	570.56	-1011.28	-924.06	1369.88	0.00	0.00	0.00	
47	4700.00	22.00	222.42	4440.15	477.85	-1038.93	-949.33	1407.34	0.00	0.00	0.00	
48	4800.00	22.00	222.42	4532.87	385.13	-1066.59	-974.60	1444.80	0.00	0.00	0.00	
49	4900.00	22.00	222.42	4625.59	292.41	-1094.24	-999.87	1482.27	0.00	0.00	0.00	
50	5000.00	22.00	222.42	4718.31	199.69	-1121.90	-1025.14	1519.73	0.00	0.00	0.00	
51	5100.00	22.00	222.42	4811.03	106.97	-1149.55	-1050.41	1557.19	0.00	0.00	0.00	
52	5200.00	22.00	222.42	4903.75	14.25	-1177.20	-1075.68	1594.65	0.00	0.00	0.00	
53	5300.00	22.00	222.42	4996.46	-78.46	-1204.86	-1100.95	1632.11	0.00	0.00	0.00	
54	5400.00	22.00	222.42	5089.18	-171.18	-1232.51	-1126.22	1669.57	0.00	0.00	0.00	
55	5500.00	22.00	222.42	5181.90	-263.90	-1260.17	-1151.49	1707.03	0.00	0.00	0.00	
56	5600.00	22.00	222.42	5274.62	-356.62	-1287.82	-1176.76	1744.49	0.00	0.00	0.00	
57	5700.00	22.00	222.42	5367.34	-449.34	-1315.48	-1202.03	1781.95	0.00	0.00	0.00	
58	5800.00	22.00	222.42	5460.05	-542.05	-1343.13	-1227.30	1819.41	0.00	0.00	0.00	
59	5900.00	22.00	222.42	5552.77	-634.77	-1370.78	-1252.57	1856.87	0.00	0.00	0.00	
60	6000.00	22.00	222.42	5645.49	-727.49	-1398.44	-1277.83	1894.33	0.00	0.00	0.00	
61	6100.00	22.00	222.42	5738.21	-820.21	-1426.09	-1303.10	1931.79	0.00	0.00	0.00	
62	6200.00	22.00	222.42	5830.93	-912.93	-1453.75	-1328.37	1969.25	0.00	0.00	0.00	
63	6300.00	22.00	222.42	5923.65	-1005.65	-1481.40	-1353.64	2006.71	0.00	0.00	0.00	
64	6400.00	22.00	222.42	6016.36	-1098.36	-1509.06	-1378.91	2044.17	0.00	0.00	0.00	
65	6500.00	22.00	222.42	6109.08	-1191.08	-1536.71	-1404.18	2081.64	0.00	0.00	0.00	
66	6600.00	22.00	222.42	6201.80	-1283.80	-1564.36	-1429.45	2119.10	0.00	0.00	0.00	
67	6672.00	22.00	222.42	6268.56	-1350.56	-1584.28	-1447.64	2146.07	0.00	0.00	0.00	
68	6700.00	21.44	222.42	6294.57	-1376.57	-1591.93	-1454.63	2156.43	2.00	2.00	0.00	
69	6800.00	19.44	222.42	6388.27	-1470.27	-1617.70	-1478.19	2191.35	2.00	2.00	0.00	
70	6900.00	17.44	222.42	6483.13	-1565.13	-1641.05	-1499.53	2222.98	2.00	2.00	0.00	
71	7000.00	15.44	222.42	6579.04	-1661.04	-1661.95	-1518.62	2251.28	2.00	2.00	0.00	
72	7100.00	13.44	222.42	6675.87	-1757.87	-1680.35	-1535.44	2276.21	2.00	2.00	0.00	
73	7200.00	11.44	222.42	6773.52	-1855.52	-1696.26	-1549.97	2297.76	2.00	2.00	0.00	
74	7272.00	10.00	222.42	6844.26	-1926.26	-1706.14	-1559.00	2311.15	2.00	2.00	0.00	
75	7300.00	10.00	222.42	6871.84	-1953.84	-1709.73	-1562.28	2316.01	0.00	0.00	0.00	
76	7400.00	10.00	222.42	6970.32	-2052.32	-1722.55	-1573.99	2333.37	0.00	0.00	0.00	
77	7500.00	10.00	222.42	7068.80	-2150.80	-1735.37	-1585.71	2350.74	0.00	0.00	0.00	
78	7600.00	10.00	222.42	7167.28	-2249.28	-1748.19	-1597.42	2368.10	0.00	0.00	0.00	
79	7700.00	10.00	222.42	7265.76	-2347.76	-1761.01	-1609.13	2385.47	0.00	0.00	0.00	
80	7800.00	10.00	222.42	7364.24	-2446.24	-1773.83	-1620.85	2402.83	0.00	0.00	0.00	
81	7900.00	10.00	222.42	7462.72	-2544.72	-1786.65	-1632.56	2420.20	0.00	0.00	0.00	

Closure is 2420.1984 feet on an Azimuth of 222.4197

Plan View
BINDER #14-20



Section View BINDER #14-20

