Date: 2023-03-09 Mooring File Name: moor001.mat Mooring Name: moor001.mat

#	Mooring Element	Length[m]	Buoy[kg]	Height[m] (middle)	dZ[m]	dX[m]	dY[m]	Tension[kg] Top	Tension[kg] Bottom	Angle[deg] Top	Angle[deg] Bottom
1	37in ORE	0.94	300.00	88.59	6.0	32.4	0.0	0.0	306.1	5.7	11.5
2	1/2 shackle	0.08	-0.30	88.08	6.0	32.3	0.0	306.1	305.8	11.5	11.5
3	3/8 wire rope	80.03	-0.33					305.8	281.0	11.5	24.5
4	1/2 shac+3/8shac	0.12	-0.42	12.67	1.3	5.8	0.0	281.0	280.7	24.5	24.6
5	Trpl 16 in Viny	1.50	56.00	11.93	1.2	5.4	0.0	280.7	333.6	24.6	21.1
6	1/2 shac+3/8shac	0.12	-0.42	11.19	1.2	5.1	0.0	333.6	333.2	21.1	21.1
7	Aanderaa RCM-7	0.55	-18.30	10.88	1.1	5.0	0.0	333.2	316.3	21.1	22.6
8	1/2 shackle	0.08	-0.30	10.59	1.1	4.9	0.0	316.3	316.0	22.6	22.6
9	3/8 wire rope	5.00	-0.33					316.0	314.5	22.6	22.9
10	1/2 shackle	0.08	-0.30	5.90	0.7	2.9	0.0	314.5	314.2	22.9	22.9
11	1/2 swivel	0.14	-0.65	5.80	0.7	2.8	0.0	314.2	313.6	22.9	23.0
12	1/2 shackle	0.08	-0.30	5.70	0.7	2.8	0.0	313.6	313.3	23.0	23.0
13	EG&G 8242	0.94	-28.00	5.23	0.7	2.6	0.0	313.3	287.8	23.0	25.3
14	5/8 shackle	0.07	-0.65	4.77	0.6	2.4	0.0	287.8	287.2	25.3	25.4
15	1 chain SL	5.00	-13.00					287.2	230.2	25.4	32.3
16	2 Railway Wheels	0.35	915.00	0.17	0.0	0.0	0.0	230.2		32.3	

Height[m]	U [m/s]	V [m/s]	W [m/s]	Density [kg/m^3]
120.00	2.00	0.00	0.00	1025.00
10.00	0.60	0.00	0.00	1025.00
0.00	0.00	0.00	0.00	1025.00

This is a sub-surface solution.
Total Tension on Anchor [kg] = 230.2
Vertical load [kg] = 195.0 Horizontal load [kg] = 122.4
Safe wet anchor mass = 598.5 [kg] = 1316.8 [lb]
Safe dry steel anchor mass = 688.0 [kg] = 1513.5 [lb]
Safe dry concrete anchor mass = 920.8 [kg] = 2025.8 [lb]
Weight under anchor = 1145.2 [kg] (negative is down)