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LAMPIRAN

Lampiran 1. Tabel Perhitungan Kekuatan Batas Momen Lentur Kapal FPSO Model 1 menggunakan Metode NLFEA Kondisi *Sagging* dan *Hogging*

SAGGING				***HOGGING***			
Moment	***Rotation***	***Curvature***		***Moment***	***Rotation***	***Curvature***	
0	0	0	0	0	0	0	0
-6.67E+11	-7.08E-06	-1.57E-09	-1.57E-03	6.67E+11	7.08E-06	1.57E-09	1.57E-03
-1.33E+12	-1.42E-05	-3.14E-09	-3.14E-03	1.33E+12	1.42E-05	3.14E-09	3.14E-03
-2.00E+12	-2.12E-05	-4.72E-09	-4.72E-03	2.00E+12	2.12E-05	4.72E-09	4.72E-03
-2.67E+12	-2.83E-05	-6.29E-09	-6.29E-03	2.67E+12	2.83E-05	6.29E-09	6.29E-03
-3.33E+12	-3.54E-05	-7.86E-09	-7.86E-03	3.33E+12	3.54E-05	7.86E-09	7.86E-03
-4.00E+12	-4.25E-05	-9.43E-09	-9.43E-03	4.00E+12	4.25E-05	9.43E-09	9.43E-03
-4.67E+12	-4.95E-05	-1.10E-08	-1.10E-02	4.67E+12	4.95E-05	1.10E-08	1.10E-02
-5.33E+12	-5.66E-05	-1.26E-08	-1.26E-02	5.33E+12	5.66E-05	1.26E-08	1.26E-02
-6.00E+12	-6.37E-05	-1.42E-08	-1.42E-02	6.00E+12	6.37E-05	1.42E-08	1.42E-02
-6.67E+12	-7.08E-05	-1.57E-08	-1.57E-02	6.67E+12	7.08E-05	1.57E-08	1.57E-02
-7.33E+12	-7.78E-05	-1.73E-08	-1.73E-02	7.33E+12	7.78E-05	1.73E-08	1.73E-02
-8.00E+12	-8.49E-05	-1.89E-08	-1.89E-02	8.00E+12	8.49E-05	1.89E-08	1.89E-02
-8.67E+12	-9.20E-05	-2.04E-08	-2.04E-02	8.67E+12	9.20E-05	2.04E-08	2.04E-02
-9.33E+12	-9.91E-05	-2.20E-08	-2.20E-02	9.33E+12	9.91E-05	2.20E-08	2.20E-02
-1.00E+13	-1.06E-04	-2.36E-08	-2.36E-02	1.00E+13	1.06E-04	2.36E-08	2.36E-02
-1.07E+13	-1.13E-04	-2.52E-08	-2.52E-02	1.07E+13	1.13E-04	2.52E-08	2.52E-02
-1.13E+13	-1.20E-04	-2.67E-08	-2.67E-02	1.13E+13	1.20E-04	2.67E-08	2.67E-02
-1.20E+13	-1.27E-04	-2.83E-08	-2.83E-02	1.20E+13	1.27E-04	2.83E-08	2.83E-02
-1.27E+13	-1.34E-04	-2.99E-08	-2.99E-02	1.27E+13	1.34E-04	2.99E-08	2.99E-02
-1.33E+13	-1.42E-04	-3.14E-08	-3.14E-02	1.33E+13	1.42E-04	3.14E-08	3.14E-02
-1.40E+13	-1.49E-04	-3.30E-08	-3.30E-02	1.40E+13	1.49E-04	3.30E-08	3.30E-02
-1.47E+13	-1.56E-04	-3.46E-08	-3.46E-02	1.47E+13	1.56E-04	3.46E-08	3.46E-02
-1.53E+13	-1.63E-04	-3.62E-08	-3.62E-02	1.53E+13	1.63E-04	3.62E-08	3.62E-02
-1.60E+13	-1.70E-04	-3.77E-08	-3.77E-02	1.60E+13	1.70E-04	3.77E-08	3.77E-02
-1.67E+13	-1.77E-04	-3.93E-08	-3.93E-02	1.67E+13	1.77E-04	3.93E-08	3.93E-02
-1.73E+13	-1.84E-04	-4.09E-08	-4.09E-02	1.73E+13	1.84E-04	4.09E-08	4.09E-02
-1.80E+13	-1.91E-04	-4.25E-08	-4.25E-02	1.80E+13	1.91E-04	4.25E-08	4.25E-02
-1.87E+13	-1.98E-04	-4.40E-08	-4.40E-02	1.87E+13	1.98E-04	4.40E-08	4.40E-02
-1.93E+13	-2.05E-04	-4.56E-08	-4.56E-02	1.93E+13	2.05E-04	4.56E-08	4.56E-02
-2.00E+13	-2.12E-04	-4.72E-08	-4.72E-02	2.00E+13	2.12E-04	4.72E-08	4.72E-02
-2.07E+13	-2.19E-04	-4.87E-08	-4.87E-02	2.07E+13	2.19E-04	4.87E-08	4.87E-02

-2.13E+13	-2.26E-04	-5.03E-08	-5.03E-02	2.13E+13	2.26E-04	5.03E-08	5.03E-02
-2.20E+13	-2.33E-04	-5.19E-08	-5.19E-02	2.20E+13	2.33E-04	5.19E-08	5.19E-02
-2.27E+13	-2.41E-04	-5.35E-08	-5.35E-02	2.27E+13	2.41E-04	5.35E-08	5.35E-02
-2.33E+13	-2.48E-04	-5.50E-08	-5.50E-02	2.33E+13	2.48E-04	5.50E-08	5.50E-02
-2.40E+13	-2.55E-04	-5.66E-08	-5.66E-02	2.40E+13	2.55E-04	5.66E-08	5.66E-02
-2.47E+13	-2.62E-04	-5.82E-08	-5.82E-02	2.47E+13	2.62E-04	5.82E-08	5.82E-02
-2.53E+13	-2.69E-04	-5.97E-08	-5.97E-02	2.55E+13	2.71E-04	6.02E-08	6.02E-02
-2.60E+13	-2.76E-04	-6.13E-08	-6.13E-02	2.63E+13	2.79E-04	6.19E-08	6.19E-02
-2.67E+13	-2.83E-04	-6.29E-08	-6.29E-02	2.69E+13	2.86E-04	6.35E-08	6.35E-02
-2.73E+13	-2.90E-04	-6.45E-08	-6.45E-02	2.76E+13	2.93E-04	6.51E-08	6.51E-02
-2.80E+13	-2.97E-04	-6.60E-08	-6.60E-02	2.83E+13	3.00E-04	6.67E-08	6.67E-02
-2.87E+13	-3.04E-04	-6.76E-08	-6.76E-02	2.89E+13	3.07E-04	6.82E-08	6.82E-02
-2.93E+13	-3.11E-04	-6.92E-08	-6.92E-02	2.96E+13	3.14E-04	6.98E-08	6.98E-02
-3.00E+13	-3.18E-04	-7.08E-08	-7.08E-02	3.03E+13	3.21E-04	7.14E-08	7.14E-02
-3.07E+13	-3.25E-04	-7.23E-08	-7.23E-02	3.09E+13	3.28E-04	7.29E-08	7.29E-02
-3.13E+13	-3.33E-04	-7.39E-08	-7.39E-02	3.16E+13	3.35E-04	7.45E-08	7.45E-02
-3.20E+13	-3.40E-04	-7.55E-08	-7.55E-02	3.23E+13	3.42E-04	7.61E-08	7.61E-02
-3.27E+13	-3.47E-04	-7.70E-08	-7.70E-02	3.29E+13	3.49E-04	7.77E-08	7.77E-02
-3.33E+13	-3.54E-04	-7.86E-08	-7.86E-02	3.36E+13	3.57E-04	7.92E-08	7.92E-02
-3.40E+13	-3.61E-04	-8.02E-08	-8.02E-02	3.43E+13	3.64E-04	8.08E-08	8.08E-02
-3.47E+13	-3.68E-04	-8.18E-08	-8.18E-02	3.49E+13	3.71E-04	8.24E-08	8.24E-02
-3.53E+13	-3.75E-04	-8.33E-08	-8.33E-02	3.56E+13	3.78E-04	8.40E-08	8.40E-02
-3.60E+13	-3.82E-04	-8.49E-08	-8.49E-02	3.63E+13	3.85E-04	8.55E-08	8.55E-02
-3.67E+13	-3.89E-04	-8.65E-08	-8.65E-02	3.69E+13	3.92E-04	8.71E-08	8.71E-02
-3.73E+13	-3.96E-04	-8.80E-08	-8.80E-02	3.76E+13	3.99E-04	8.87E-08	8.87E-02
-3.80E+13	-4.03E-04	-8.96E-08	-8.96E-02	3.83E+13	4.06E-04	9.02E-08	9.02E-02
-3.87E+13	-4.10E-04	-9.12E-08	-9.12E-02	3.89E+13	4.13E-04	9.18E-08	9.18E-02
-3.93E+13	-4.17E-04	-9.28E-08	-9.28E-02	3.96E+13	4.20E-04	9.34E-08	9.34E-02
-4.00E+13	-4.25E-04	-9.43E-08	-9.43E-02	4.03E+13	4.27E-04	9.50E-08	9.50E-02
-4.07E+13	-4.32E-04	-9.59E-08	-9.59E-02	4.09E+13	4.34E-04	9.65E-08	9.65E-02
-4.13E+13	-4.39E-04	-9.75E-08	-9.75E-02	4.16E+13	4.41E-04	9.81E-08	9.81E-02
-4.20E+13	-4.46E-04	-9.91E-08	-9.91E-02	4.23E+13	4.49E-04	9.97E-08	9.97E-02
-4.27E+13	-4.53E-04	-1.01E-07	-1.01E-01	4.29E+13	4.56E-04	1.01E-07	1.01E-01
-4.33E+13	-4.60E-04	-1.02E-07	-1.02E-01	4.36E+13	4.63E-04	1.03E-07	1.03E-01
-4.40E+13	-4.67E-04	-1.04E-07	-1.04E-01	4.43E+13	4.70E-04	1.04E-07	1.04E-01
-4.47E+13	-4.74E-04	-1.05E-07	-1.05E-01	4.49E+13	4.77E-04	1.06E-07	1.06E-01
-4.53E+13	-4.81E-04	-1.07E-07	-1.07E-01	4.56E+13	4.84E-04	1.08E-07	1.08E-01
-4.60E+13	-4.88E-04	-1.08E-07	-1.08E-01	4.63E+13	4.91E-04	1.09E-07	1.09E-01
-4.67E+13	-4.95E-04	-1.10E-07	-1.10E-01	4.69E+13	4.98E-04	1.11E-07	1.11E-01

-4.73E+13	-5.02E-04	-1.12E-07	-1.12E-01	4.76E+13	5.05E-04	1.12E-07	1.12E-01
-4.80E+13	-5.09E-04	-1.13E-07	-1.13E-01	4.83E+13	5.12E-04	1.14E-07	1.14E-01
-4.87E+13	-5.17E-04	-1.15E-07	-1.15E-01	4.89E+13	5.19E-04	1.15E-07	1.15E-01
-4.93E+13	-5.24E-04	-1.16E-07	-1.16E-01	4.96E+13	5.27E-04	1.17E-07	1.17E-01
-5.00E+13	-5.31E-04	-1.18E-07	-1.18E-01	5.02E+13	5.34E-04	1.19E-07	1.19E-01
-5.06E+13	-5.38E-04	-1.20E-07	-1.20E-01	5.09E+13	5.41E-04	1.20E-07	1.20E-01
-5.13E+13	-5.45E-04	-1.21E-07	-1.21E-01	5.16E+13	5.48E-04	1.22E-07	1.22E-01
-5.20E+13	-5.52E-04	-1.23E-07	-1.23E-01	5.22E+13	5.55E-04	1.23E-07	1.23E-01
-5.26E+13	-5.59E-04	-1.24E-07	-1.24E-01	5.29E+13	5.62E-04	1.25E-07	1.25E-01
-5.33E+13	-5.66E-04	-1.26E-07	-1.26E-01	5.36E+13	5.69E-04	1.26E-07	1.26E-01
-5.39E+13	-5.73E-04	-1.27E-07	-1.27E-01	5.42E+13	5.76E-04	1.28E-07	1.28E-01
-5.46E+13	-5.81E-04	-1.29E-07	-1.29E-01	5.48E+13	5.84E-04	1.30E-07	1.30E-01
-5.52E+13	-5.88E-04	-1.31E-07	-1.31E-01	5.54E+13	5.91E-04	1.31E-07	1.31E-01
-5.58E+13	-5.96E-04	-1.32E-07	-1.32E-01	5.60E+13	5.99E-04	1.33E-07	1.33E-01
-5.63E+13	-6.05E-04	-1.34E-07	-1.34E-01	5.64E+13	6.08E-04	1.35E-07	1.35E-01
-5.66E+13	-6.13E-04	-1.36E-07	-1.36E-01	5.68E+13	6.17E-04	1.37E-07	1.37E-01
-5.69E+13	-6.22E-04	-1.38E-07	-1.38E-01	5.71E+13	6.28E-04	1.40E-07	1.40E-01
-5.72E+13	-6.32E-04	-1.40E-07	-1.40E-01	5.74E+13	6.39E-04	1.42E-07	1.42E-01
-5.74E+13	-6.38E-04	-1.42E-07	-1.42E-01	5.75E+13	6.43E-04	1.43E-07	1.43E-01
-5.76E+13	-6.47E-04	-1.44E-07	-1.44E-01	5.75E+13	6.45E-04	1.43E-07	1.43E-01
-5.77E+13	-6.52E-04	-1.45E-07	-1.45E-01	5.80E+13	6.58E-04	1.46E-07	1.46E-01
-5.78E+13	-6.57E-04	-1.46E-07	-1.46E-01	5.80E+13	6.60E-04	1.47E-07	1.47E-01
-5.77E+13	-6.58E-04	-1.46E-07	-1.46E-01	5.80E+13	6.61E-04	1.47E-07	1.47E-01
-5.83E+13	-6.73E-04	-1.49E-07	-1.49E-01	5.80E+13	6.61E-04	1.47E-07	1.47E-01
-5.82E+13	-6.78E-04	-1.51E-07	-1.51E-01	5.79E+13	6.60E-04	1.47E-07	1.47E-01
-5.82E+13	-6.81E-04	-1.51E-07	-1.51E-01	5.79E+13	6.61E-04	1.47E-07	1.47E-01
-5.81E+13	-6.82E-04	-1.51E-07	-1.51E-01	5.78E+13	6.64E-04	1.47E-07	1.47E-01
-5.81E+13	-6.81E-04	-1.51E-07	-1.51E-01	5.78E+13	6.67E-04	1.48E-07	1.48E-01
-5.82E+13	-6.82E-04	-1.52E-07	-1.52E-01	5.77E+13	6.69E-04	1.49E-07	1.49E-01
-5.80E+13	-6.79E-04	-1.51E-07	-1.51E-01	5.76E+13	6.71E-04	1.49E-07	1.49E-01
-5.80E+13	-6.79E-04	-1.51E-07	-1.51E-01	5.75E+13	6.70E-04	1.49E-07	1.49E-01
				5.74E+13	6.69E-04	1.49E-07	1.49E-01
				5.75E+13	6.69E-04	1.49E-07	1.49E-01
				5.75E+13	6.70E-04	1.49E-07	1.49E-01
				5.77E+13	6.71E-04	1.49E-07	1.49E-01
				5.77E+13	6.71E-04	1.49E-07	1.49E-01
				5.75E+13	6.68E-04	1.49E-07	1.49E-01
				5.73E+13	6.67E-04	1.48E-07	1.48E-01
				5.73E+13	6.67E-04	1.48E-07	1.48E-01

				5.71E+13	6.65E-04	1.48E-07	1.48E-01
				5.70E+13	6.64E-04	1.47E-07	1.47E-01
				5.69E+13	6.63E-04	1.47E-07	1.47E-01
				5.69E+13	6.63E-04	1.47E-07	1.47E-01
				5.69E+13	6.63E-04	1.47E-07	1.47E-01
				5.69E+13	6.63E-04	1.47E-07	1.47E-01

Lampiran 2. Tabel Perhitungan Kekuatan Batas Momen Lentur Kapal FPSO Model 2 menggunakan Metode NLFEA Kondisi *Sagging* dan *Hogging*

SAGGING				***HOGGING***			
Moment	***Rotation***	***Curvature***		***Moment***	***Rotation***	***Curvature***	
0	0	0	0	0	0	0	0
-7.69E+11	-8.32E-06	-1.85E-09	-1.85E-03	8.33E+11	9.01E-06	2.00E-09	2.00E-03
-1.54E+12	-1.66E-05	-3.70E-09	-3.70E-03	1.67E+12	1.80E-05	4.00E-09	4.00E-03
-2.31E+12	-2.49E-05	-5.54E-09	-5.54E-03	2.50E+12	2.70E-05	6.01E-09	6.01E-03
-3.08E+12	-3.33E-05	-7.39E-09	-7.39E-03	3.33E+12	3.60E-05	8.01E-09	8.01E-03
-3.85E+12	-4.16E-05	-9.24E-09	-9.24E-03	4.17E+12	4.50E-05	1.00E-08	1.00E-02
-4.62E+12	-4.99E-05	-1.11E-08	-1.11E-02	5.00E+12	5.41E-05	1.20E-08	1.20E-02
-5.38E+12	-5.82E-05	-1.29E-08	-1.29E-02	5.83E+12	6.31E-05	1.40E-08	1.40E-02
-6.15E+12	-6.65E-05	-1.48E-08	-1.48E-02	6.67E+12	7.21E-05	1.60E-08	1.60E-02
-6.92E+12	-7.48E-05	-1.66E-08	-1.66E-02	7.50E+12	8.11E-05	1.80E-08	1.80E-02
-7.69E+12	-8.32E-05	-1.85E-08	-1.85E-02	8.33E+12	9.01E-05	2.00E-08	2.00E-02
-8.46E+12	-9.15E-05	-2.03E-08	-2.03E-02	9.17E+12	9.91E-05	2.20E-08	2.20E-02
-9.23E+12	-9.98E-05	-2.22E-08	-2.22E-02	1.00E+13	1.08E-04	2.40E-08	2.40E-02
-1.00E+13	-1.08E-04	-2.40E-08	-2.40E-02	1.08E+13	1.17E-04	2.60E-08	2.60E-02
-1.08E+13	-1.16E-04	-2.59E-08	-2.59E-02	1.17E+13	1.26E-04	2.80E-08	2.80E-02
-1.15E+13	-1.25E-04	-2.77E-08	-2.77E-02	1.25E+13	1.35E-04	3.00E-08	3.00E-02
-1.23E+13	-1.33E-04	-2.96E-08	-2.96E-02	1.33E+13	1.44E-04	3.20E-08	3.20E-02
-1.31E+13	-1.41E-04	-3.14E-08	-3.14E-02	1.42E+13	1.53E-04	3.40E-08	3.40E-02
-1.38E+13	-1.50E-04	-3.33E-08	-3.33E-02	1.50E+13	1.62E-04	3.60E-08	3.60E-02
-1.46E+13	-1.58E-04	-3.51E-08	-3.51E-02	1.58E+13	1.71E-04	3.80E-08	3.80E-02
-1.54E+13	-1.66E-04	-3.70E-08	-3.70E-02	1.67E+13	1.80E-04	4.00E-08	4.00E-02
-1.62E+13	-1.75E-04	-3.88E-08	-3.88E-02	1.75E+13	1.89E-04	4.20E-08	4.20E-02
-1.69E+13	-1.83E-04	-4.07E-08	-4.07E-02	1.83E+13	1.98E-04	4.40E-08	4.40E-02
-1.77E+13	-1.91E-04	-4.25E-08	-4.25E-02	1.92E+13	2.07E-04	4.60E-08	4.60E-02
-1.85E+13	-2.00E-04	-4.44E-08	-4.44E-02	2.00E+13	2.16E-04	4.81E-08	4.81E-02
-1.92E+13	-2.08E-04	-4.62E-08	-4.62E-02	2.08E+13	2.25E-04	5.01E-08	5.01E-02
-2.00E+13	-2.16E-04	-4.80E-08	-4.80E-02	2.17E+13	2.34E-04	5.21E-08	5.21E-02

-2.08E+13	-2.25E-04	-4.99E-08	-4.99E-02	2.25E+13	2.43E-04	5.41E-08	5.41E-02
-2.15E+13	-2.33E-04	-5.17E-08	-5.17E-02	2.33E+13	2.52E-04	5.61E-08	5.61E-02
-2.23E+13	-2.41E-04	-5.36E-08	-5.36E-02	2.42E+13	2.61E-04	5.81E-08	5.81E-02
-2.31E+13	-2.49E-04	-5.54E-08	-5.54E-02	2.52E+13	2.73E-04	6.06E-08	6.06E-02
-2.38E+13	-2.58E-04	-5.73E-08	-5.73E-02	2.62E+13	2.83E-04	6.29E-08	6.29E-02
-2.46E+13	-2.66E-04	-5.91E-08	-5.91E-02	2.70E+13	2.92E-04	6.49E-08	6.49E-02
-2.54E+13	-2.74E-04	-6.10E-08	-6.10E-02	2.78E+13	3.01E-04	6.69E-08	6.69E-02
-2.62E+13	-2.83E-04	-6.28E-08	-6.28E-02	2.87E+13	3.10E-04	6.89E-08	6.89E-02
-2.69E+13	-2.91E-04	-6.47E-08	-6.47E-02	2.95E+13	3.19E-04	7.09E-08	7.09E-02
-2.77E+13	-2.99E-04	-6.65E-08	-6.65E-02	3.03E+13	3.28E-04	7.29E-08	7.29E-02
-2.85E+13	-3.08E-04	-6.84E-08	-6.84E-02	3.12E+13	3.37E-04	7.49E-08	7.49E-02
-2.92E+13	-3.16E-04	-7.02E-08	-7.02E-02	3.20E+13	3.46E-04	7.69E-08	7.69E-02
-3.00E+13	-3.24E-04	-7.21E-08	-7.21E-02	3.28E+13	3.55E-04	7.89E-08	7.89E-02
-3.08E+13	-3.33E-04	-7.39E-08	-7.39E-02	3.37E+13	3.64E-04	8.09E-08	8.09E-02
-3.15E+13	-3.41E-04	-7.58E-08	-7.58E-02	3.45E+13	3.73E-04	8.29E-08	8.29E-02
-3.23E+13	-3.49E-04	-7.76E-08	-7.76E-02	3.53E+13	3.82E-04	8.49E-08	8.49E-02
-3.31E+13	-3.58E-04	-7.95E-08	-7.95E-02	3.62E+13	3.91E-04	8.69E-08	8.69E-02
-3.38E+13	-3.66E-04	-8.13E-08	-8.13E-02	3.70E+13	4.00E-04	8.89E-08	8.89E-02
-3.46E+13	-3.74E-04	-8.32E-08	-8.32E-02	3.78E+13	4.09E-04	9.09E-08	9.09E-02
-3.54E+13	-3.83E-04	-8.50E-08	-8.50E-02	3.87E+13	4.18E-04	9.29E-08	9.29E-02
-3.62E+13	-3.91E-04	-8.69E-08	-8.69E-02	3.95E+13	4.27E-04	9.49E-08	9.49E-02
-3.69E+13	-3.99E-04	-8.87E-08	-8.87E-02	4.03E+13	4.36E-04	9.69E-08	9.69E-02
-3.77E+13	-4.07E-04	-9.06E-08	-9.06E-02	4.12E+13	4.45E-04	9.89E-08	9.89E-02
-3.85E+13	-4.16E-04	-9.24E-08	-9.24E-02	4.20E+13	4.54E-04	1.01E-07	1.01E-01
-3.92E+13	-4.24E-04	-9.42E-08	-9.42E-02	4.28E+13	4.63E-04	1.03E-07	1.03E-01
-4.00E+13	-4.32E-04	-9.61E-08	-9.61E-02	4.37E+13	4.72E-04	1.05E-07	1.05E-01
-4.08E+13	-4.41E-04	-9.79E-08	-9.79E-02	4.45E+13	4.81E-04	1.07E-07	1.07E-01
-4.15E+13	-4.49E-04	-9.98E-08	-9.98E-02	4.53E+13	4.90E-04	1.09E-07	1.09E-01
-4.23E+13	-4.57E-04	-1.02E-07	-1.02E-01	4.62E+13	4.99E-04	1.11E-07	1.11E-01
-4.31E+13	-4.66E-04	-1.03E-07	-1.03E-01	4.70E+13	5.08E-04	1.13E-07	1.13E-01
-4.38E+13	-4.74E-04	-1.05E-07	-1.05E-01	4.78E+13	5.17E-04	1.15E-07	1.15E-01
-4.46E+13	-4.82E-04	-1.07E-07	-1.07E-01	4.86E+13	5.26E-04	1.17E-07	1.17E-01
-4.54E+13	-4.91E-04	-1.09E-07	-1.09E-01	4.95E+13	5.35E-04	1.19E-07	1.19E-01
-4.61E+13	-4.99E-04	-1.11E-07	-1.11E-01	5.03E+13	5.44E-04	1.21E-07	1.21E-01
-4.69E+13	-5.07E-04	-1.13E-07	-1.13E-01	5.11E+13	5.53E-04	1.23E-07	1.23E-01
-4.77E+13	-5.16E-04	-1.15E-07	-1.15E-01	5.20E+13	5.62E-04	1.25E-07	1.25E-01
-4.84E+13	-5.24E-04	-1.16E-07	-1.16E-01	5.28E+13	5.71E-04	1.27E-07	1.27E-01
-4.92E+13	-5.32E-04	-1.18E-07	-1.18E-01	5.36E+13	5.81E-04	1.29E-07	1.29E-01
-5.00E+13	-5.41E-04	-1.20E-07	-1.20E-01	5.44E+13	5.90E-04	1.31E-07	1.31E-01

-5.07E+13	-5.49E-04	-1.22E-07	-1.22E-01	5.50E+13	6.01E-04	1.33E-07	1.33E-01
-5.15E+13	-5.57E-04	-1.24E-07	-1.24E-01	5.56E+13	6.12E-04	1.36E-07	1.36E-01
-5.23E+13	-5.66E-04	-1.26E-07	-1.26E-01	5.60E+13	6.24E-04	1.39E-07	1.39E-01
-5.30E+13	-5.74E-04	-1.28E-07	-1.28E-01	5.63E+13	6.37E-04	1.42E-07	1.42E-01
-5.38E+13	-5.83E-04	-1.30E-07	-1.30E-01	5.65E+13	6.49E-04	1.44E-07	1.44E-01
-5.45E+13	-5.92E-04	-1.31E-07	-1.31E-01	5.67E+13	6.58E-04	1.46E-07	1.46E-01
-5.51E+13	-6.01E-04	-1.34E-07	-1.34E-01	5.70E+13	6.75E-04	1.50E-07	1.50E-01
-5.56E+13	-6.12E-04	-1.36E-07	-1.36E-01	5.71E+13	6.80E-04	1.51E-07	1.51E-01
-5.59E+13	-6.22E-04	-1.38E-07	-1.38E-01	5.71E+13	6.81E-04	1.51E-07	1.51E-01
-5.62E+13	-6.33E-04	-1.41E-07	-1.41E-01	5.71E+13	6.82E-04	1.52E-07	1.52E-01
-5.64E+13	-6.44E-04	-1.43E-07	-1.43E-01	5.71E+13	6.82E-04	1.52E-07	1.52E-01
-5.64E+13	-6.45E-04	-1.43E-07	-1.43E-01	5.70E+13	6.82E-04	1.52E-07	1.52E-01
-5.64E+13	-6.45E-04	-1.43E-07	-1.43E-01	5.70E+13	6.82E-04	1.52E-07	1.52E-01
-5.65E+13	-6.48E-04	-1.44E-07	-1.44E-01	5.69E+13	6.82E-04	1.51E-07	1.51E-01
-5.65E+13	-6.49E-04	-1.44E-07	-1.44E-01	5.69E+13	6.82E-04	1.51E-07	1.51E-01
-5.65E+13	-6.49E-04	-1.44E-07	-1.44E-01	5.70E+13	6.82E-04	1.52E-07	1.52E-01
-5.65E+13	-6.49E-04	-1.44E-07	-1.44E-01	5.70E+13	6.82E-04	1.52E-07	1.52E-01
-5.65E+13	-6.49E-04	-1.44E-07	-1.44E-01	5.70E+13	6.82E-04	1.52E-07	1.52E-01
-5.65E+13	-6.49E-04	-1.44E-07	-1.44E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.65E+13	-6.49E-04	-1.44E-07	-1.44E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.65E+13	-6.50E-04	-1.45E-07	-1.45E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.65E+13	-6.51E-04	-1.45E-07	-1.45E-01	5.71E+13	6.83E-04	1.52E-07	1.52E-01
-5.65E+13	-6.50E-04	-1.45E-07	-1.45E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.65E+13	-6.50E-04	-1.45E-07	-1.45E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.65E+13	-6.50E-04	-1.45E-07	-1.45E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.65E+13	-6.50E-04	-1.45E-07	-1.45E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.65E+13	-6.51E-04	-1.45E-07	-1.45E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.65E+13	-6.51E-04	-1.45E-07	-1.45E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.65E+13	-6.51E-04	-1.45E-07	-1.45E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.65E+13	-6.51E-04	-1.45E-07	-1.45E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.66E+13	-6.51E-04	-1.45E-07	-1.45E-01	5.70E+13	6.83E-04	1.52E-07	1.52E-01
-5.66E+13	-6.52E-04	-1.45E-07	-1.45E-01	5.69E+13	6.82E-04	1.52E-07	1.52E-01
-5.66E+13	-6.52E-04	-1.45E-07	-1.45E-01	5.69E+13	6.82E-04	1.52E-07	1.52E-01
-5.66E+13	-6.53E-04	-1.45E-07	-1.45E-01	5.69E+13	6.82E-04	1.52E-07	1.52E-01
-5.66E+13	-6.53E-04	-1.45E-07	-1.45E-01	5.69E+13	6.82E-04	1.52E-07	1.52E-01
-5.66E+13	-6.54E-04	-1.45E-07	-1.45E-01	5.69E+13	6.82E-04	1.52E-07	1.52E-01
-5.66E+13	-6.55E-04	-1.46E-07	-1.46E-01				
-5.67E+13	-6.57E-04	-1.46E-07	-1.46E-01				
-5.67E+13	-6.59E-04	-1.47E-07	-1.47E-01				

-5.67E+13	-6.62E-04	-1.47E-07	-1.47E-01				
-5.68E+13	-6.63E-04	-1.47E-07	-1.47E-01				
-5.68E+13	-6.63E-04	-1.47E-07	-1.47E-01				
-5.68E+13	-6.65E-04	-1.48E-07	-1.48E-01				
-5.68E+13	-6.68E-04	-1.48E-07	-1.48E-01				
-5.68E+13	-6.68E-04	-1.48E-07	-1.48E-01				
-5.69E+13	-6.68E-04	-1.48E-07	-1.48E-01				
-5.68E+13	-6.68E-04	-1.48E-07	-1.48E-01				
-5.68E+13	-6.67E-04	-1.48E-07	-1.48E-01				
-5.68E+13	-6.67E-04	-1.48E-07	-1.48E-01				

Lampiran 3. Tabel Perhitungan Kekuatan Batas Momen Lentur Kapal FPSO Model 3 menggunakan Metode NLFEA Kondisi *Sagging* dan *Hogging*

SAGGING				***HOGGING***			
Moment	***Rotation***	***Curvature***		***Moment***	***Rotation***	***Curvature***	
0	0	0	0	0	0	0	0
-6.67E+11	-7.27E-06	-1.62E-09	-1.62E-03	9.09E+11	9.92E-06	2.20E-09	2.20E-03
-1.33E+12	-1.45E-05	-3.23E-09	-3.23E-03	1.82E+12	1.98E-05	4.41E-09	4.41E-03
-2.00E+12	-2.18E-05	-4.85E-09	-4.85E-03	2.73E+12	2.97E-05	6.61E-09	6.61E-03
-2.67E+12	-2.91E-05	-6.46E-09	-6.46E-03	3.64E+12	3.97E-05	8.81E-09	8.81E-03
-3.33E+12	-3.64E-05	-8.08E-09	-8.08E-03	4.55E+12	4.96E-05	1.10E-08	1.10E-02
-4.00E+12	-4.36E-05	-9.70E-09	-9.70E-03	5.45E+12	5.95E-05	1.32E-08	1.32E-02
-4.67E+12	-5.09E-05	-1.13E-08	-1.13E-02	6.36E+12	6.94E-05	1.54E-08	1.54E-02
-5.33E+12	-5.82E-05	-1.29E-08	-1.29E-02	7.27E+12	7.93E-05	1.76E-08	1.76E-02
-6.00E+12	-6.54E-05	-1.45E-08	-1.45E-02	8.18E+12	8.92E-05	1.98E-08	1.98E-02
-6.67E+12	-7.27E-05	-1.62E-08	-1.62E-02	9.09E+12	9.92E-05	2.20E-08	2.20E-02
-7.33E+12	-8.00E-05	-1.78E-08	-1.78E-02	1.00E+13	1.09E-04	2.42E-08	2.42E-02
-8.00E+12	-8.73E-05	-1.94E-08	-1.94E-02	1.09E+13	1.19E-04	2.64E-08	2.64E-02
-8.67E+12	-9.45E-05	-2.10E-08	-2.10E-02	1.18E+13	1.29E-04	2.86E-08	2.86E-02
-9.33E+12	-1.02E-04	-2.26E-08	-2.26E-02	1.27E+13	1.39E-04	3.09E-08	3.09E-02
-1.00E+13	-1.09E-04	-2.42E-08	-2.42E-02	1.36E+13	1.49E-04	3.31E-08	3.31E-02
-1.07E+13	-1.16E-04	-2.59E-08	-2.59E-02	1.45E+13	1.59E-04	3.53E-08	3.53E-02
-1.13E+13	-1.24E-04	-2.75E-08	-2.75E-02	1.55E+13	1.69E-04	3.75E-08	3.75E-02
-1.20E+13	-1.31E-04	-2.91E-08	-2.91E-02	1.64E+13	1.78E-04	3.97E-08	3.97E-02
-1.27E+13	-1.38E-04	-3.07E-08	-3.07E-02	1.73E+13	1.88E-04	4.19E-08	4.19E-02
-1.33E+13	-1.45E-04	-3.23E-08	-3.23E-02	1.82E+13	1.98E-04	4.41E-08	4.41E-02
-1.40E+13	-1.53E-04	-3.39E-08	-3.39E-02	1.91E+13	2.08E-04	4.63E-08	4.63E-02

-1.47E+13	-1.60E-04	-3.56E-08	-3.56E-02	2.00E+13	2.18E-04	4.85E-08	4.85E-02
-1.53E+13	-1.67E-04	-3.72E-08	-3.72E-02	2.09E+13	2.28E-04	5.07E-08	5.07E-02
-1.60E+13	-1.75E-04	-3.88E-08	-3.88E-02	2.18E+13	2.38E-04	5.29E-08	5.29E-02
-1.67E+13	-1.82E-04	-4.04E-08	-4.04E-02	2.27E+13	2.48E-04	5.51E-08	5.51E-02
-1.73E+13	-1.89E-04	-4.20E-08	-4.20E-02	2.36E+13	2.58E-04	5.73E-08	5.73E-02
-1.80E+13	-1.96E-04	-4.36E-08	-4.36E-02	2.48E+13	2.70E-04	6.01E-08	6.01E-02
-1.87E+13	-2.04E-04	-4.52E-08	-4.52E-02	2.58E+13	2.82E-04	6.26E-08	6.26E-02
-1.93E+13	-2.11E-04	-4.69E-08	-4.69E-02	2.67E+13	2.91E-04	6.48E-08	6.48E-02
-2.00E+13	-2.18E-04	-4.85E-08	-4.85E-02	2.76E+13	3.01E-04	6.70E-08	6.70E-02
-2.07E+13	-2.25E-04	-5.01E-08	-5.01E-02	2.85E+13	3.11E-04	6.92E-08	6.92E-02
-2.13E+13	-2.33E-04	-5.17E-08	-5.17E-02	2.94E+13	3.21E-04	7.14E-08	7.14E-02
-2.20E+13	-2.40E-04	-5.33E-08	-5.33E-02	3.04E+13	3.31E-04	7.36E-08	7.36E-02
-2.27E+13	-2.47E-04	-5.49E-08	-5.49E-02	3.13E+13	3.41E-04	7.58E-08	7.58E-02
-2.33E+13	-2.55E-04	-5.66E-08	-5.66E-02	3.22E+13	3.51E-04	7.80E-08	7.80E-02
-2.40E+13	-2.62E-04	-5.82E-08	-5.82E-02	3.31E+13	3.61E-04	8.02E-08	8.02E-02
-2.47E+13	-2.69E-04	-5.98E-08	-5.98E-02	3.40E+13	3.71E-04	8.24E-08	8.24E-02
-2.53E+13	-2.76E-04	-6.14E-08	-6.14E-02	3.49E+13	3.81E-04	8.46E-08	8.46E-02
-2.60E+13	-2.84E-04	-6.30E-08	-6.30E-02	3.58E+13	3.91E-04	8.68E-08	8.68E-02
-2.67E+13	-2.91E-04	-6.46E-08	-6.46E-02	3.67E+13	4.01E-04	8.90E-08	8.90E-02
-2.73E+13	-2.98E-04	-6.63E-08	-6.63E-02	3.76E+13	4.11E-04	9.12E-08	9.12E-02
-2.80E+13	-3.05E-04	-6.79E-08	-6.79E-02	3.86E+13	4.21E-04	9.35E-08	9.35E-02
-2.87E+13	-3.13E-04	-6.95E-08	-6.95E-02	3.95E+13	4.31E-04	9.57E-08	9.57E-02
-2.93E+13	-3.20E-04	-7.11E-08	-7.11E-02	4.04E+13	4.41E-04	9.79E-08	9.79E-02
-3.00E+13	-3.27E-04	-7.27E-08	-7.27E-02	4.13E+13	4.51E-04	1.00E-07	1.00E-01
-3.07E+13	-3.34E-04	-7.43E-08	-7.43E-02	4.22E+13	4.61E-04	1.02E-07	1.02E-01
-3.13E+13	-3.42E-04	-7.59E-08	-7.59E-02	4.31E+13	4.70E-04	1.05E-07	1.05E-01
-3.20E+13	-3.49E-04	-7.76E-08	-7.76E-02	4.40E+13	4.80E-04	1.07E-07	1.07E-01
-3.27E+13	-3.56E-04	-7.92E-08	-7.92E-02	4.49E+13	4.90E-04	1.09E-07	1.09E-01
-3.33E+13	-3.64E-04	-8.08E-08	-8.08E-02	4.59E+13	5.00E-04	1.11E-07	1.11E-01
-3.40E+13	-3.71E-04	-8.24E-08	-8.24E-02	4.68E+13	5.10E-04	1.13E-07	1.13E-01
-3.47E+13	-3.78E-04	-8.40E-08	-8.40E-02	4.77E+13	5.20E-04	1.16E-07	1.16E-01
-3.53E+13	-3.85E-04	-8.56E-08	-8.56E-02	4.86E+13	5.30E-04	1.18E-07	1.18E-01
-3.60E+13	-3.93E-04	-8.73E-08	-8.73E-02	4.95E+13	5.40E-04	1.20E-07	1.20E-01
-3.67E+13	-4.00E-04	-8.89E-08	-8.89E-02	5.04E+13	5.50E-04	1.22E-07	1.22E-01
-3.73E+13	-4.07E-04	-9.05E-08	-9.05E-02	5.13E+13	5.60E-04	1.24E-07	1.24E-01
-3.80E+13	-4.14E-04	-9.21E-08	-9.21E-02	5.22E+13	5.70E-04	1.27E-07	1.27E-01
-3.87E+13	-4.22E-04	-9.37E-08	-9.37E-02	5.31E+13	5.80E-04	1.29E-07	1.29E-01
-3.93E+13	-4.29E-04	-9.53E-08	-9.53E-02	5.39E+13	5.91E-04	1.31E-07	1.31E-01
-4.00E+13	-4.36E-04	-9.70E-08	-9.70E-02	5.47E+13	6.02E-04	1.34E-07	1.34E-01

-4.07E+13	-4.44E-04	-9.86E-08	-9.86E-02	5.52E+13	6.15E-04	1.37E-07	1.37E-01
-4.13E+13	-4.51E-04	-1.00E-07	-1.00E-01	5.56E+13	6.28E-04	1.40E-07	1.40E-01
-4.20E+13	-4.58E-04	-1.02E-07	-1.02E-01	5.58E+13	6.42E-04	1.43E-07	1.43E-01
-4.27E+13	-4.65E-04	-1.03E-07	-1.03E-01	5.59E+13	6.48E-04	1.44E-07	1.44E-01
-4.33E+13	-4.73E-04	-1.05E-07	-1.05E-01	5.63E+13	6.62E-04	1.47E-07	1.47E-01
-4.40E+13	-4.80E-04	-1.07E-07	-1.07E-01	5.64E+13	6.68E-04	1.48E-07	1.48E-01
-4.47E+13	-4.87E-04	-1.08E-07	-1.08E-01	5.64E+13	6.70E-04	1.49E-07	1.49E-01
-4.53E+13	-4.95E-04	-1.10E-07	-1.10E-01	5.59E+13	6.65E-04	1.48E-07	1.48E-01
-4.60E+13	-5.02E-04	-1.12E-07	-1.12E-01	5.59E+13	6.65E-04	1.48E-07	1.48E-01
-4.67E+13	-5.09E-04	-1.13E-07	-1.13E-01	5.59E+13	6.65E-04	1.48E-07	1.48E-01
-4.73E+13	-5.16E-04	-1.15E-07	-1.15E-01	5.59E+13	6.65E-04	1.48E-07	1.48E-01
-4.80E+13	-5.24E-04	-1.16E-07	-1.16E-01	5.59E+13	6.65E-04	1.48E-07	1.48E-01
-4.87E+13	-5.31E-04	-1.18E-07	-1.18E-01				
-4.93E+13	-5.38E-04	-1.20E-07	-1.20E-01				
-5.00E+13	-5.46E-04	-1.21E-07	-1.21E-01				
-5.06E+13	-5.53E-04	-1.23E-07	-1.23E-01				
-5.13E+13	-5.60E-04	-1.24E-07	-1.24E-01				
-5.20E+13	-5.67E-04	-1.26E-07	-1.26E-01				
-5.26E+13	-5.75E-04	-1.28E-07	-1.28E-01				
-5.33E+13	-5.82E-04	-1.29E-07	-1.29E-01				
-5.39E+13	-5.90E-04	-1.31E-07	-1.31E-01				
-5.44E+13	-5.98E-04	-1.33E-07	-1.33E-01				
-5.49E+13	-6.07E-04	-1.35E-07	-1.35E-01				
-5.52E+13	-6.16E-04	-1.37E-07	-1.37E-01				
-5.55E+13	-6.26E-04	-1.39E-07	-1.39E-01				
-5.57E+13	-6.35E-04	-1.41E-07	-1.41E-01				
-5.58E+13	-6.40E-04	-1.42E-07	-1.42E-01				
-5.63E+13	-6.58E-04	-1.46E-07	-1.46E-01				
-5.63E+13	-6.59E-04	-1.47E-07	-1.47E-01				
-5.63E+13	-6.60E-04	-1.47E-07	-1.47E-01				
-5.62E+13	-6.63E-04	-1.47E-07	-1.47E-01				
-5.60E+13	-6.62E-04	-1.47E-07	-1.47E-01				
-5.59E+13	-6.62E-04	-1.47E-07	-1.47E-01				
-5.59E+13	-6.62E-04	-1.47E-07	-1.47E-01				
-5.59E+13	-6.62E-04	-1.47E-07	-1.47E-01				
-5.59E+13	-6.62E-04	-1.47E-07	-1.47E-01				
-5.59E+13	-6.62E-04	-1.47E-07	-1.47E-01				
-5.59E+13	-6.62E-04	-1.47E-07	-1.47E-01				