

To:	PSW
From:	IOS Intermoor: Inge Moy
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Copy to:	Songa Offshore
Number of pages:	4
Subject:	Cat-D Moored at Mongstad

**Introduction:**

Songa Offshore plan to install a pre-laid anchor spread near Mongstad. The pre-laid anchor spread will be hooked up to the new Cat-D rigs, and used for testing of their POSMOOR-ATA system. The spread shall not hold any environmental loads, and maximum load on rig fairlead is 100Te. See table 1 for mooring spread details.

Note that the rigs location, chain length and anchor positions given in this document are preliminary and may be subject to minor changes.



**Figure 1 Songa Endurance**

**Table 1: Line length and tension**

Water depth at rig location: approx 530m.

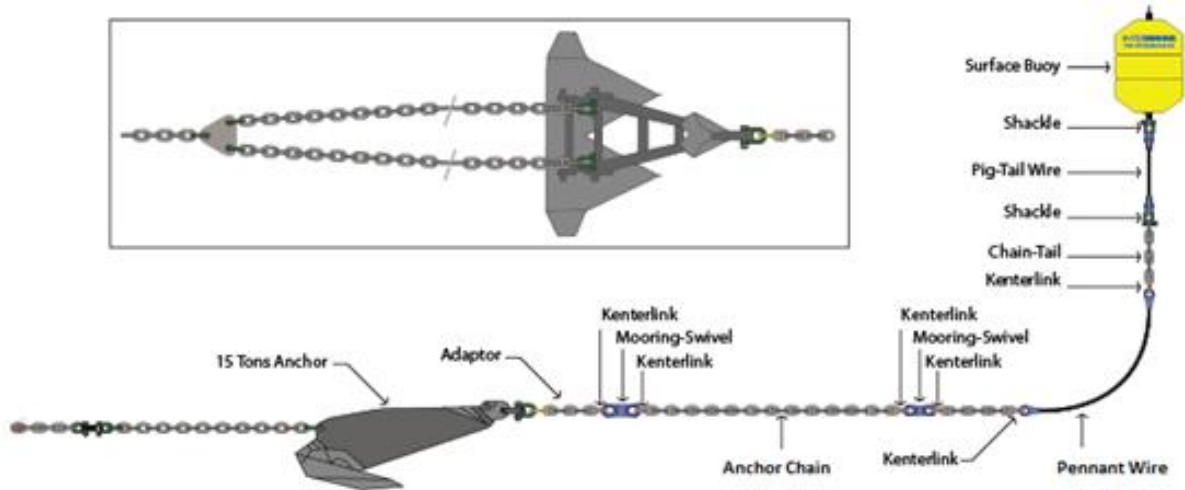
Line no	Chain Length	Chain Dimension + Anchor Size	Max Anchor Load*	Water Depth at Anchor
1	1160m	84mm + 15Te Anchor	0 Te	450m
2	1350m	84mm + 15Te Anchor	0 Te	400m
3	1250m	84mm + 15Te Anchor	0 Te	125m
4	1260m	84mm + 15Te Anchor	0 Te	150m
5	1260m	84mm + 15Te Anchor	0 Te	150m
6	1260m	84mm + 15Te Anchor	0 Te	150m
7	1250m	84mm + 15Te Anchor	0 Te	100m
8	1270m	84mm + 15Te Anchor	0 Te	200m
9	1330m	84mm + 15Te Anchor	0 Te	350m
10	1370m	84mm + 15Te Anchor	0 Te	450m
11	1330m	84mm + 15Te Anchor	0 Te	350m
12	1130m	84mm + 15Te Anchor	0 Te	400m

\* Max anchor load at 100Te fairlead tension. Due to the weight of the chain, the anchor will not experience any loads.

**Mooring line characteristics:**

Component	Diameter [mm]	Immersed weight [t/m]	Minimum Breaking Load [t]	Axial Stiffness, EA [t]
84mm R5 chain	84	0.134	858	$0.706 \cdot 10^5$

### Pre Lay Mooring Line Set Up:



## Mooring Spread at Mongstad

