

Yes. Michael
47665834

Dokumentnavn Oppankringsrapport		Dok. nr. KSC-9.2.5	Sign RS
Utgiver DAGLIG LEDER	Utgitt 14.08.06	Utgave 1	Side 1

Oppankringsrapport

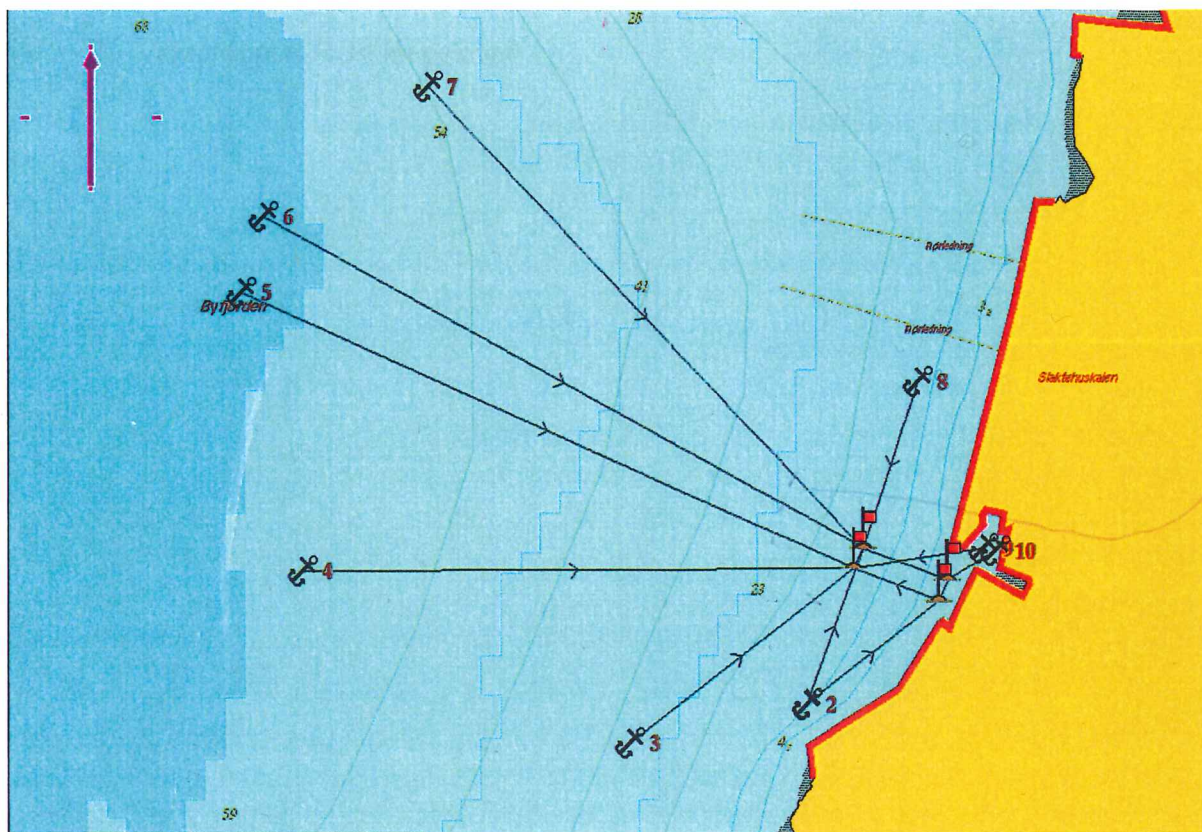
Kundenavn: Norges Miljøvernforbund

Dato: 02.01.2007

Kontaktperson: Kurt Oddekallv
Posisjon: 60°24,310N 05°19,200Ø

Lokalitetsnavn: Byfjorden Bergen

Beskrivelse av flåte: Backer flytebrygge 26m x 6 m x 2,55, depl.=285 tonn



Utarbeidet av: Roald Sandstad

Kontroll: Jon-Terje Lepsøy

Godkjent:

For konstruksjon	1	02.01.07	RS	JTL	JTL
For kommentar					
Revisjon	Nr.	Dato	Utarbeid.	Kontroll	Godkj.

Side 1. Kunde og lokalitet.

Side 2. Denne side.

Side 3. Rapport for utført oppankring

Side 4. Linebeskrivelse inkl. komponenter. Koordinater på oppankringspunkt

2 vedlegg til rapporten

1. Komponent sertifikater

2. Videorapport ROV inspeksjon

Rapport for utført oppankring

Levering:

Noomas Sjøtjenester AS har foretatt levering av alle komponenter i fortøyningslinene til Norges Miljøvernforbund

Oppankring:

Noomas Sjøtjenester AS måtte grunnet mangel på festepunkter i bunn mot land gjøre endringer i forhold til opprinnelig fortøyningsplan. Ny fortøyningsrapport må gjøres for å kontrollere at endringene gir tilfredsstillende holdekraft.

Vi ble bedt om å oppgi dybde på liner hvor Miljødronningen skal ligge.

Dybde på line 8 line mot brygge er 4 meter og dybde på line 9 mot brygge er 3,2 meter.

Analyser:

Noomas Sertifisering har utført fortøyningsrapport med miljølaster fra fjord (nord-sør og vest) og land (øst)

Inspeksjon/Oppstramming:

Noomas Sjøtjenester foretok ROV inspeksjon av alle fortøyningsliner den 15.1.2007.

Det ble funnet følgende avvik:

Line 7: Kjetting lå rundt klo på anker

Line 8: Anker lå oppe på bunn.

Line 10: Line var slakk og lå på bunn.

Følgende tiltak ble gjort den 17.1.2007:

Line 7: Tok opp anker og rettet kjetting. Satt ut igjen anker og forstrammet fortøyning med 2 tonn

Line 8: Tok opp anker. Satt ut anker og forstrammet fortøyning med 2 tonn.

Line 10: Strammet opp line 1 slik at line 10 ble stram og brygge kom i riktig posisjon.

DVD med videorapport ligger vedlagt



SJØTJENESTER

Roald Sandstad



Skuteviksboder 1 - 5035 Bergen
Tlf.: 555 44 555 - Fax: 555 44 551
Org.nr.: NO 987 097 892 MVA

Daglig leder
Noomas Sjøtjenester

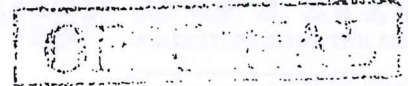
Informasjon fortøyning Backer flytebrygge

Line nr	Kjetting	Dim.	Tau	Dim	Kjetting	Dim	Bunnfeste
1	15	19mm	30m	56mm	15m	30mm	2000 kg patentanker
2	20	19mm	30m	56mm	15m	19mm	2000 kg patentanker
3	25	19mm	60m	56mm	25m	30mm	2000 kg patentanker
4	25	19mm	85m	56mm	25m	30mm	2000 kg patentanker
5	25	19mm	100m	56mm	25m	30mm	2000 kg patentanker
6	25	19mm	100m	56mm	25m	30mm	2000 kg patentanker
7	25	19mm	85m	56mm	25m	30mm	2000 kg patentanker
8	25	19mm	50m	56mm	25m	30mm	2000 kg patentanker
9	25	19mm	15m	56mm	15m	30mm	1000 kg sandanker
10	15	19mm	10m	56mm	10m	19mm	500 kg sandankerr

Koordinater på fortøyning

Line nr	Nord	Øst
1	60° 24,279	005° 19,236
2	60° 24,279	005° 19,236
3	60° 24,284	005° 19,178
4	60° 24,309	005° 19,077
5	60° 24,350	005° 19,058
6	60° 24,361	005° 19,065
7	60° 24,380	005° 19,116
8	60° 24,340	005° 19,251
9	60° 24,310	005° 19,286
10	60° 24,310	005° 19,290

Se sertifikatliste for komponenter for nærmere beskrivelse

DSR DSR CORP

SALES OFFICE: Woosin Bldg. 7F, 646-15, Yeoksam-Dong, Gangnam-Gu, Seoul, 135-911, Korea

TEL: 82-2-3420-3500, FAX: 82-2-3420-3600, E-mail: sales@dsrcorp.com, http://www.dsrcorp.com

FACTORY: TEL: 82-51-979-0500, FAX: 82-51-979-0606

CERTIFICATE OF INSPECTION

Cert. No.	: ZMC1216	Date	: 03/2/27
Purchaser	: CARL STAHL A.S.	Order No.	: ZF3006
B/No.	: 197- 198 (1 COIL/EA)	I/C No.	: ILU410126

1. TYPE

Name of Rope	: PP DAN ROPE	Construction	: 3-STRAND
Diameter	: 56MM	Lay	: ===
Length	: 220 Mtrs	Twist	: Z-TWIST
Net Weight	: 273.20 kgs/ea	Specification	: MILL SPEC.
Gross Weight	: 274.20 kgs/ea		
Color	: GREEN		

2. TEST RESULTS

	Nominal or specified	Actual
Diameter	56MM	56MM
Breaking Strength	40,500 kgs	41,710 kgs

* Tested according to ISO standards

3. ORDER CONDITIONS

Surface Conditions GOOD
Workmanship GOOD

4. MATERIAL

Name of Material POLYPROPYLENE RESIN
Name of supplier SK CORPORATION

DO KYOUN, KIM
QUALITY MANAGEMENT TEAM

Comment : Manufactured in accordance with Quality Management System approved to ISO 9002 : 1994

Form No. 4 Test Certificate No. SMP-06-087, 2006

This Certificate is based on the standard international form of certificate approved by the International Labour Office for the test and examination of lifting machinery and gear used in the loading and unloading of ships.

Certificate of Test and Examination of Chains, Rings, Hooks, Shackles, Swivels and Pulley Blocks before being taken into use, and of such Gear after it has been Lengthened, Overstrained, Altered or Repaired by Welding.

Serial no (1)	Description of gear (2)	Quantity (3)	Date of test (4)	Breaking load (5)	Proof test load (6)
HH/P-3046 851~875	50 mtr studless chain dia 30 mm, grade 2 Length of link: 180 mm Bredht of link: 105 mm	25 lengths	25.06.2006	kN 467,5	kN 234,2
Taken from certificate no: HH/P-3046 851~875 from test house dated 25.06.06					

(7) Were the items described herein tested and thereafter examined and found to be free from cracks, flaws or other defects.

YES

(8) Name and address of makers or suppliers.

SOTRA MARINE PRODUKTER AS

(9) Name and address of public service, association, company or firm performing the test and examination

FACTORY TESTHOUSE

(10) Position of signatory of public service, association, company or firm.

SURVEYOR

I certify on behalf of Sotra Marine Produkter AS that the above particulars are correct.

_____, the 08.08.2006

Age Vindenes
 Signature

Form No. 4 Test Certificate No. SMP-06-075, 2006

This Certificate is based on the standard international form of certificate approved by the International Labour Office for the test and examination of lifting machinery and gear used in the loading and unloading of ships.

Certificate of Test and Examination of Chains, Rings, Hooks, Shackles, Swivels and Pulley Blocks before being taken into use, and of such Gear after it has been Lengthened, Overstrained, Altered or Repaired by Welding.

Order no (1)	Description of gear (2)	Quantity (3)	Date of test (4)	Breaking load (5)	Proof test load (6)
HH/P-3039-3	Safety Bow alloy steel shackles with bolt and nut, type G-2140. (MBL 60) Dia body: 25 mm Dia bolt: 30 mm Opening: 62 mm	500 pcs	25.05.2006	ton 60	
Taken from certificate no: JM60 1-500 from test house dated 25.05.06					

(7) Were the items described herein tested and thereafter examined and found to be free from cracks, flaws or other defects.

YES

(8) Name and address of makers or suppliers.

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(9) Name and address of public service, association, company or firm performing the test and examination

FACTORY TESTHOUSE

(10) Position of signatory of public service, association, company or firm.

SURVEYOR

I certify on behalf of Sotra Marine Produkter AS that the above particulars are correct.

Ågotnes, the 03.08.2006

Age Vindenes
 Signature

Anchor-sertificate Nr.: SMP-06-057, 2006

Identification marks	Description of gear	Quantity	Weight	Proofload applied	Date of test
			Kgs	kN	
06-DH1000-1 to 06-DH1000-20	Plough-anchors type Sandig III, weight of 1000 kgs each.	20 pcs	1000 kgs	199kN	17.03.06

Name and address of makers or suppliers.

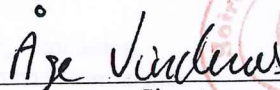
SOTRA MARINE PRODUKTER AS

Name of association/person performing the test and examination.

FACTORY TESTHOUSE

 I certify on behalf of Sotra Marine Produkter AS
 that the above particulars are correct.

Agotnes, the 16.05.2006


 Signature

Form No. 4 Test Certificate No. SMP-06-050, 2006

This Certificate is based on the standard international form of certificate approved by the International Labour Office for the test and examination of lifting machinery and gear used in the loading and unloading of ships.

Certificate of Test and Examination of Chains, Rings, Hooks, Shackles, Swivels and Pulley Blocks before being taken into use, and of such Gear after it has been Lengthened, Overstrained, Altered or Repaired by Welding.

Serial no (1)	Description of gear (2)	Quantity (3)	Date of test (4)	Minimum Breaking load (5)	Proof test load (6)
-----	50 mtr studless chain dia 19 mm, grade 70. Inside length of link: 76 mm Inside breadth of link: 38 mm	60 lengths	20.03.06	Ton 39,70	Ton 19,85
Taken from certificate no: JM19 01-60 From test house dated: March 20 th , 2006					

(7) Were the items described herein tested and thereafter examined and found to be free from cracks, flaws or other defects.

YES

(8) Name and address of makers or suppliers.

SOTRA MARINE PRODUKTER AS

(9) Name and address of public service, association, company or firm performing the test and examination

FACTORY TESTHOUSE

(10) Position of signatory of public service, association, company or firm.

SURVEYOR

I certify on behalf of Sotra Marine Produkter AS that the above particulars are correct.

Ågotnes, the 04.05.2006
Age Vindenes
 Signature

Form No. 4 Test Certificate No. SMP-06-034 , 2006

This Certificate is based on the standard international form of certificate approved by the International Labour Office for the test and examination of lifting machinery and gear used in the loading and unloading of ships.

Certificate of Test and Examination of Chains, Rings, Hooks, Shackles, Swivels and Pulley Blocks before being taken into use, and of such Gear after it has been Lengthened, Overstrained, Altered or Repaired by Welding.

Serial no (1)	Description of gear (2)	Quantity (3)	Date of test (4)	Minimum Breaking load (5)	Proof test load (6)
				kN	kN
	Safety Bow alloy steel shackles with bolt and nut, type G-2140.				
	Size: 3/4" (MBL 28)	500	16.02.06	300	110
	Size: 7/8" (MBL 35)	500	16.02.06	400	140
	Size: 1" (MBL 60)	750	16.02.06	610	216
	Size: 1 1/8" (MBL 75)	750	16.02.06	760	270
	Size: 1 1/4" (MBL 90)	500	16.02.06	908	320
Taken from certificate no: P-3039-2 From test house dated: 2006/02/16					

(7) Were the items described herein tested and thereafter examined and found to be free from cracks, flaws or other defects.

YES

(8) Name and address of makers or suppliers.

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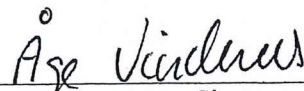
FACTORY TESTHOUSE

(10) Position of signatory of public service, association, company or firm.

SURVEYOR

I certify on behalf of Sotra Marine Produkter AS that the above particulars are correct.

_____, the 29.03.2006



 Signature



SOTRA
MARINE PRODUKTER A.S.

- a member of the SOTRA GROUP

Anchor-sertificate Nr.: SMP-06-013 , 2006

Serial No	Description of gear	Quantity	Weight	Test load	Date of test
			Kgs	kN	
060111	Anchor type HHP AC-14, 2000 kgs	1 pc	2012 kgs	434kN	08.01.06
060112	Anchor type HHP AC-14, 2000 kgs	1 pc	2010 kgs	434kN	08.01.06
060113	Anchor type HHP AC-14, 2000 kgs	1 pc	2015 kgs	434kN	08.01.06
060114	Anchor type HHP AC-14, 2000 kgs	1 pc	2015 kgs	434kN	08.01.06
060115	Anchor type HHP AC-14, 2000 kgs	1 pc	2020 kgs	434kN	08.01.06
060116	Anchor type HHP AC-14, 2000 kgs	1 pc	2015 kgs	434kN	08.01.06
060117	Anchor type HHP AC-14, 2000 kgs	1 pc	2016 kgs	434kN	08.01.06
060118	Anchor type HHP AC-14, 2000 kgs	1 pc	2015 kgs	434kN	08.01.06
060119	Anchor type HHP AC-14, 2000 kgs	1 pc	2016 kgs	434kN	08.01.06
060120	Anchor type HHP AC-14, 2000 kgs	1 pc	2020 kgs	434kN	08.01.06

Name and address of makers or suppliers.

SOTRA MARINE PRODUKTER AS

Name of association/person performing the test and examination.

FACTORY TESTHOUSE

I certify on behalf of Sotra Marine Produkter AS
that the above particulars are correct.

Aagotnes , the 08.02.2006

Age Vindenes
Signature



SOTRA
MARINE PRODUKTER A.S.

- a member of the SOTRA GROUP

Form No. 4 Test Certificate No. SMP-05-004 , 2005

This Certificate is based on the standard international form of certificate approved by the International Labour Office for the test and examination of lifting machinery and gear used in the loading and unloading of ships.

Certificate of Test and Examination of Chains, Rings, Hooks, Shackles, Swivels and Pulley Blocks before being taken into use, and of such Gear after it has been Lengthened, Overstrained, Altered or Repaired by Welding.

Serial no (1)	Description of gear (2)	Number tested (3)	Date of test (4)	Minimum breaking load (5)	Proof test load (6)
				kN	kN
-----	Safety Bow alloy steel shackles with bolt and nut, type G-2140.				
	Size: 3/4" (MBL 28)	500	05.05.2005	302	124
	Size: 7/8" (MBL 35)	500	05.05.2005	400	154
	Size 1 1/8" (MBL 75)	500	05.05.2005	760	324
	Size 1 1/4" (MBL 90)	500	05.05.2005	910	389
Taken from certificate no: P-3037/P-3039 From test house dated 05.05.2005					

(7) Were the items described herein tested and thereafter examined and found to be free from cracks, flaws or other defects.

YES

(8) Name and address of makers or suppliers.

SOTRA MARINE PRODUKTER AS

(9) Name and address of public service, association, company or firm performing the test and examination

FACTORY TESTHOUSE

(10) Position of signatory of public service, association, company or firm.

SURVEYOR

I certify on behalf of Sotra Marine Produkter AS that the above particulars are correct.

_____, the 17.06.05.

Age Vincken
Signature

SOTRA MARINE PRODUKTER AS
Vindenes, 5363 Aagotnes
Norway

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