

LOAD TEST OF GANGWAY ONBOARD THE "SAFE BRITANNIA" 9TH JUNE 1994

THE LOAD TEST WAS CARRIED OUT WITH A 9,5 LOAD, CONNECTED TO WIRE ON BOTH SIDES OF OUTER END OF INNER/FIXED PART OF GANGWAY (27 M FROM CENTER OF PEDESTAL).

THE GANGWAY WAS SWUNG ABOUT 90 DEGREES FROM PARKING POSITION.

THE GANGWAY WAS LIFTED INTO HORIZONTAL POSITION, AND THE WIRE WAS CONNECTED TO THE LOAD.

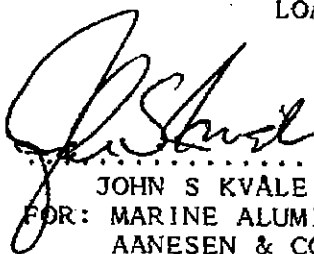
THE GANGWAY WAS LIFTED UP, AND THE LOAD WAS NOW FREE FROM DECK.

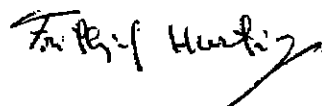
THE GANGWAY WAS NOW EXTENDED COMPLETELY, AND AFTERWARDS THE MANOUVERING HANDLES WERE PLACED IN NEUTRAL POSITION.

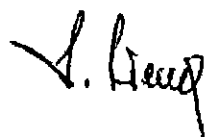
THERE WAS NO LEAKAGE IN THE LIFTING SYSTEM AND THE GANGWAY REMAINED IN ITS LIFTED POSITION FOR ABOUT 5 MINUTES.

THE GANGWAY WAS CONTRACTED COMPLETELY, AND THE LOAD WAS DISCONNECTED.

LOAD TEST WITNESSED:

  
.....  
JOHN S KVALE  
FOR: MARINE ALUMINIUM  
AANESEN & CO A/S

.....  


 SKIPSKONTROLLEN  
HÅDGEUND.



Your ref: LEB

Det Norske Veritas Classification AS  
L E Blikom  
Veritasveien 1

Our ref: TF/AK

Date: 1994-06-29

N-1322 HÖVIK  
Norge

DET NORSKE VERITAS CLASSIFICATION AS

TO:	Bli		
SIGN:	Ah		
DSO	1994-07-05		
NO:	258-9402998		
FILE:	12253		
CCM:			

14/7-94

## SAFE BRITANNIA

We refer to previous communication regarding replacement of gangway and pedistal onboard Safe Britannia in Ölen last months.

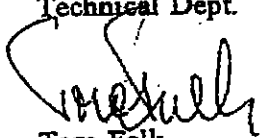
Please find enclosed three copies each of the following drawings:

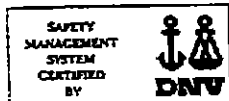
A1-398 DWG - Pedistal for 42 m Gangway  
12-4700-600  
12-3120-900 sheet 5

We look forward to receiving one copy duly signed.

Yours faithfully,

SAFE SERVICE AB  
Technical Dept.

  
Tore Falk  
Technical Superintendent



Mailing address  
Safe Service AB  
P.O. Box 11450  
S-404 29 Göteborg  
Sweden

Telephone  
Nat 031-10 67 30  
Int +46-31-10 67 30

Teletax  
Nat 031-13 59 62  
Int +46-31-13 59 62

Telex  
27444 SAFEGO S





Extent of non-destructive testing of welds is to comply with the above mention Rules Pt. 3, Ch. 1, Sec. 10, table B1, structural category primary.

Yours faithfully  
for DET NORSKE VERITAS CLASSIFICATION AS

*Erling Abrahamisen*  
Erling Abrahamisen  
Head of Section

*Leif Erik Blikom*  
Leif Erik Blikom

Enclosure

258-0708.LTR

It is agreed that save as provided below Det Norske Veritas, its subsidiaries, bodies, officers, directors, employees and agents shall have no liability for any loss, damage or expense allegedly caused directly or indirectly by their mistake or negligence, breach of warranty, or any other act, omission or error by them, including gross negligence or willful misconduct by any such person with the exception of gross negligence or willful misconduct by the governing bodies or senior executive officers of Det Norske Veritas. This applies regardless of whether the loss, damage or expense has affected anyone with whom Det Norske Veritas has a contract or a third party who has acted or relied on decisions made or information given by or on behalf of Det Norske Veritas. \* However, if any person owes the services of Det Norske Veritas or its subsidiaries or relies on any decision made or information given by or on behalf of them and in consequence suffers a loss, damage or expense proved to be due to their negligence, omission or default, then Det Norske Veritas will pay by way of compensation to such person a sum representing his proved loss. \* In the event Det Norske Veritas or its subsidiaries may be held liable in accordance with the sections above, the amount of compensation shall under no circumstances exceed the amount of the fee, if any, charged for that particular service, decision, advice or information. \* Under no circumstances whatsoever shall the individual or individuals who have personally caused the loss, damage or expense be held liable. \* In the event that any provision in this section shall be invalid under the law of any jurisdiction, the validity of the remaining provisions shall not in any way be affected.



Det Norske Veritas Classification A/S  
Stord

SAKS	MHE		
BEH.			210
SIGN.			
14 JULI 1994			
KOPI			
TIL :			
ARKIV:			
BSSV :			
DATO:			

Division Ship and Offshore

Vestasveien 1,  
N-1522 Hovik, Norway  
Tel. +47 67 57 99 00  
Fax. +47 67 57 99 11  
Reg.No. 945748931

Att.: B. Skaar/M. Helland

Your ref.

Our ref.  
DSO258-0708/BLI

Date  
11 July, 1994

**SUBJ.: "SAFE BRITANNIA" - ID.NO.: 12253, GANGWAY PEDESTAL.**

Reference is made to letter from Safe Service AB dated 29th June 1994 and earlier correspondence.

Please find enclosed stamped approved two (2) copies of the following drawings:

Drawing No.: A1 - 398.DWG      Rev. A  
                  > 12-3120-900  
                  12-4700-600

The drawings have been evaluated with respect to structural strength and material qualities according to relevant parts of DNV "Rules for Classification of Mobile Offshore Units".

The approval cover the support of the pedestal and the connection of the pedestal to existing structure, for additional parts of the pedestal we will our approval letter dated 6th May 1994.

The approval is based on weight of a Marine Aluminium gangway with length of 42.5 m.

In addition we have the following comments and requirements:

Grade of materials are to comply with as stated on the drawings, and the materials to be delivered with relevant certificates.

It is assumed that welds to main deck from both under and over side are full penetrated.

All welding is to be carried out by approved welders and according to welding procedure acceptable to the surveyor.

Id.No.: 12253  
258-0708.LTR

It is agreed that save as provided below Det Norske Veritas, its subsidiaries, bodies, officers, directors, employees and agents shall have no liability for any loss, damage or expense allegedly caused directly or indirectly by their mistakes or negligence, breach of warranty, or any other act, omission or error by them, including gross negligence or willful misconduct by any such person with the exception of gross negligence or willful misconduct by the governing bodies or senior executive officers of Det Norske Veritas. This applies regardless of whether the loss, damage or expense has affected anyone with whom Det Norske Veritas has a contract or a third party who has acted or relied on decisions made or information given by or on behalf of Det Norske Veritas. However, if any person uses the services of Det Norske Veritas or its subsidiaries or relies on any decision made or information given by or on behalf of them and in consequence suffers a loss, damage or expense proved to be due to their negligence, omission or default, then Det Norske Veritas will pay by way of compensation to such person a sum representing his proved loss. In the event Det Norske Veritas or its subsidiaries may be held liable in accordance with the sections above, the amount of compensation shall under no circumstances exceed the amount of the fee, if any, charged for that particular service, decision, advice or information. Under no circumstances whatsoever shall the individual or individuals who have personally caused the loss, damage or expense be held liable. In the event that any provision in this section shall be invalid under the law of any jurisdiction, the validity of the remaining provisions shall not in any way be affected.

**MARINE ALUMINIUM AS.**

**LOWERING OF CONE  
CONNECTION.**

**SAFE BRITANNIA GANGWAY.**

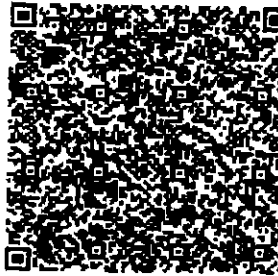
**DRAWINGS**

**DESIGN CALCULATIONS.**

**NDT-EXAMINATION REPORT.**

DRAWINGS OVER TABLE  
DRAWER 303  
BLUE MANUAL #3

February 1995  
JM Consult AS.  
R46901  
Rev.1

**INTERPRETACIÓN DE LA INFORMACIÓN DEL SÍMBOLO QR EN LOS INFORMES DE CALIBRACIÓN ELECTRÓNICOS**

Para la interpretación de este código QR, se requiere de un software que esté diseñado para la traducción o interpretación de este código, los cuales pueden ser encontrados gratuitamente como una aplicación para la gama Smart Phone y otro tipo de aparatos electrónicos.

MetroLab S.A. de C.V. no proporciona este software al cliente, ni recomienda ningún tipo de software. El cliente deberá seleccionar y adquirirlo el software más conveniente por su cuenta.

**INTERPRETACIÓN DE LA INFORMACIÓN DENTRO DEL CÓDIGO QR**

**FECHA DE CALIBRACIÓN:** Es la fecha en que se calibró el equipo o instrumento.

**EMISOR:** Persona autorizada por MetroLab S.A. de C.V. que realiza el servicio y elaborar un informe, realiza la calibración del equipo en mención.

**PRIMER AUTORIZADOR:** Persona autorizada por MetroLab S.A. de C.V. la cual tiene las competencias necesarias para revisar y aprobar un informe de calibración. En el informe viene como REVISÓ Y APROBÓ.

**MESA DE CONTROL:** Persona autorizada por MetroLab, S.A. de C.V. que interviene en la revisión de la información del cliente en los informes de calibración.

**CLAVE DEL INFORME:** Identificación única del informe o documento.

**NOMBRE DEL INFORME:** Descripción breve del equipo calibrado.

**NOMBRE DE LA EMPRESA:** Razón Social de nuestro cliente a la cual se le emite el informe de calibración.

**CLIENTE:** Nombre del contacto de la empresa.

Atentamente  
**METROLAB S.A. DE C.V.**

Monterrey Ave. San Nicolás No. 118 Col. Arboledas de San Jorge, San Nicolás de los Garza, Nuevo León, CP 66465  
Querétaro Acceso "C" No. 106 Parque Industrial Jurica, Querétaro, Querétaro, CP 76100  
México Marsella No. 12-B Fracc. Valle Dorado, Tlahuepantla, Edo. de México, CP 54020  
Guadalajara Ave. Lapiztatl No. 2920-A Col. Residencial Victoria, Zapopan, Jalisco, CP 44560  
Saltillo Periférico Luis Echeverría No. 1285, Col. Guanjuato Cre., Saltillo, Coahuila, CP25280  
Chihuahua C. William Shakespeare No. 159-A, Complejo Industrial Chihuahua, Chihuahua, Chihuahua, CP 31136

ANEXO INFORME DE CALIBRACIÓN

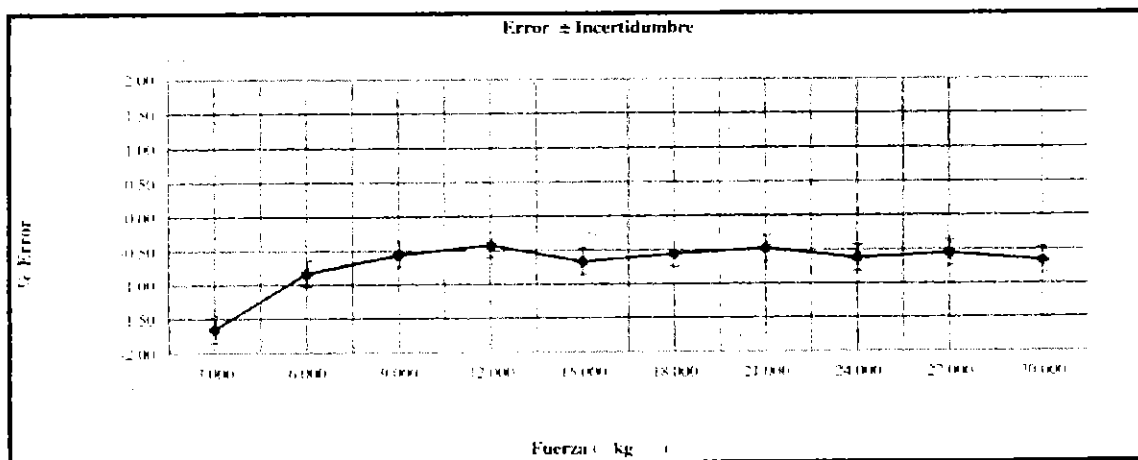
No. F - 280 - 2015

RESULTADOS DE LA CALIBRACIÓN

INTERVALO MÁXIMO: 496.32 kN 50 000 kg

LECTURA DEL INSTRUMENTO		LECTURAS DEL PATRON			LECTURA PROMEDIO	q	b	**Uc ±
kg	kN	1	2	3	kg	%	%	% L
3 000	29.42	3 050.3	3 050.1	3 050.7	3 050.4	-1.65	0.02	0.19
6 000	58.84	6 050.3	6 050.6	6 050.8	6 050.6	-0.84	0.01	0.19
9 000	88.26	9 050.7	9 050.2	9 050.1	9 050.3	-0.56	0.01	0.19
12 000	117.68	12 050.3	12 050.8	12 050.2	12 050.4	-0.42	0.00	0.19
15 000	147.10	15 100.5	15 100.7	15 100.4	15 100.5	-0.67	0.00	0.19
18 000	176.52	18 100.3	18 100.2	18 100.5	18 100.3	-0.55	0.00	0.19
21 000	205.94	21 100.5	21 100.7	21 100.2	21 100.5	-0.48	0.00	0.19
24 000	235.36	24 150.6	24 150.3	24 150.6	24 150.5	-0.62	0.00	0.19
27 000	264.78	27 150.1	27 150.8	27 150.3	27 150.4	-0.55	0.00	0.19
30 000	294.20	30 200.4	30 200.1	30 200.5	30 200.3	-0.66	0.00	0.19
LECTURA DE CERO IBC		1	1	1	1			

ERROR MÁXIMO: -1.65 %



- q: ERROR RELATIVO DE MEDICIÓN
- b: ERROR RELATIVO DE REPETIBILIDAD
- L: RESOLUCIÓN IBC
- IBC: INSTRUMENTO BAJO CALIBRACIÓN

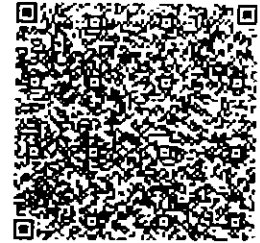
COMENTARIOS:

1, 2 Y 3 SERIES DE REPETICIONES

\* EL INCERTECIMIENTO EXPANDIDO A LA CALIDAD DE ACCREDITACIÓN SE APLICÓ DE ACUERDO CON LA NORMA NMN-CH-146:2002 (INCLUYENDO UN FACTOR DE COBERTURA K=2)

ESTE INFORME AMPARA LOS RESULTADOS BAJO LAS CONDICIONES Y CARACTERÍSTICAS PRESENTES EN EL MOMENTO DE LA CALIBRACIÓN. EL USUARIO DETERMINARÁ SU USO DE ACUERDO A LAS ESPECIFICACIONES DE SU PROCESO.

METROLAB, S.A. DE C.V.



HOJA 1 DE 1  
No. F - 280 - 2015

**INFORME DE CALIBRACION**

COMPANIA: FERRERES INTEGRALES Y ESPECIALIZADOS DE MEX S.A. DE C.V.  
 DOMICILIO: CALLE 11 # 1209 COL. AEROPUERTO, CD. DEL CARMEN CAMPECHE, MEXICO  
 ATENCION: CARLOS GONZALEZ L.C. TEL: 9982 25 1998


INSTRUMENTO: DINAMOMETRO DILLON CALIBRACION REALIZADA EN: METROLAB QUERETARO  
 MODELO: ED XTREME FECHA DE RECEPCION: 2015-04-15  
 No. DE CONTROL: DEDX2800223 FECHA DE CALIBRACION: 2015-04-15  
 MODO: TRACCION FECHA DE EMISION: 2015-04-16  
 No. DE SERIE: DEDX2800223 VIGENCIA ACORDADA: SEGUN PROGRAMA

LA CALIBRACION DEL INSTRUMENTO SE REALIZO CON PATRONES DE FUERZA AL SISTEMA INTERNACIONAL DE UNIDADES CON TRAZABILIDAD AL PATRON NACIONAL DE FUERZA VIA CENTRO NACIONAL DE METROLOGIA

CONDICIONES DEL INSTRUMENTO: EL INSTRUMENTO SE ENCUENTRA OPERANDO CORRECTAMENTE EN CONDICIONES NORMALES DE USO RECOMENDADAS POR EL FABRICANTE.

PATRONES DE REFERENCIA					
NOMBRE	MARCA	SERIE	ALCANCE DE MEDICION	$\pm$ De $\pm$ y U k=2	FECHA DE CALIBRACION
CELDA DE CARGA	STRAINSENSE	080620	204 20 KN	$\pm$ 0.19 Trac	2015-05-07

METODO UTILIZADO: COMPARACION DIRECTA  
 RESULTADOS DE LA CALIBRACION: VER HOJAS DE ANEXOS  
 INCERTIDUMBRE: VER HOJAS DE ANEXOS

 NUMERO DE ACREDITACION N. 146 VIGENCIA DE ACREDITACION A PARTIR DE 2011-06-30  
 ACREDITACION OTORGADA BAJO LA NORMA NMX-EC-17025-IMNC-2006 (ISO/IEC 17025:2005)  
 NORMA DE REFERENCIA: NMX-CH-75006-IMNC-2006  
 PROCEDIMIENTO: COP-ME-06

entidad mexicana de acreditacion, s.c.

TEMPERATURA: INICIAL: 20.5 °C FINAL: 20.7 °C HUMEDAD RELATIVA: 27 %

LA SIGUIENTE INFORMACION ES EL RESULTADO DE LOS RESULTADOS DE LA CALIBRACION COMPLETA DE LOS INSTRUMENTOS DE MEDICION DE FUERZA EN EL MOMENTO DE LA CALIBRACION EN EL CENTRO DE CALIBRACION EN MEXICO.

ESTE INFORME, SOLO COMPARA LAS MEDICIONES REPORTADAS EN EL MOMENTO Y CONDICIONES AMBIENTALES Y DE USO EN QUE SE REALIZO ESTA CALIBRACION.

ESTE INFORME DE CALIBRACION PUEDE SER REPRODUCIDO SIN SU AUTORIZACION EXPRESA DE METROLAB S.A. DE C.V. Y NO SERA VALIDO SI PRESENTA ALGUN TIPO DE MODIFICACIONES Y/O SINTAS CORRESPONDIENTES DEBIDAS A TORNAS QUE CODIFICAN

CALIBRO: ILIUS NUSTON ORTIZ LOPEZ REVISO Y APROBO: GERARDO MONDRAGON  
 TECNICO METROLOGO RESPONSABLE TECNICO

NOTA: METROLAB S.A. DE C.V. SE ENCUENTRA ACREDITADA EN EL REGISTRO NACIONAL DE ENTIDADES ACREDITADAS (RNEA) CON EL NÚMERO 146 EN LA CATEGORÍA DE CALIBRACION DE FUERZA EN EL MOMENTO DE LA CALIBRACION EN MEXICO.

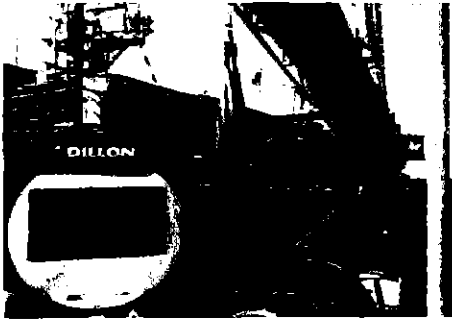
T (442) 218 8260      T (81) 8151 6351      T (55) 5379 5347  
 ventas@metrolab.com.mx      ventas@metrolab.com.mx      ventas@metrolab.com.mx

T (614) 414 8203      T (844) 416 8549      T (33) 3687 0025  
 ventas@metrolab.com.mx      ventas@metrolab.com.mx      ventas@metrolab.com.mx

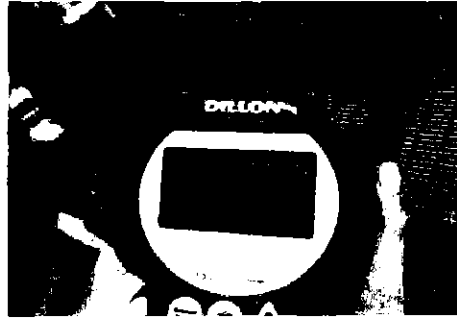


LOAD TEST ON PORT-CENTER MAIN GANGWAY PICTURES  
PORT-CENTER MAIN DECK ONBOARD PSS-BRITANNIA

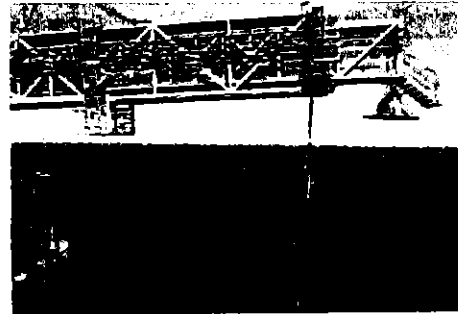
Start filling water



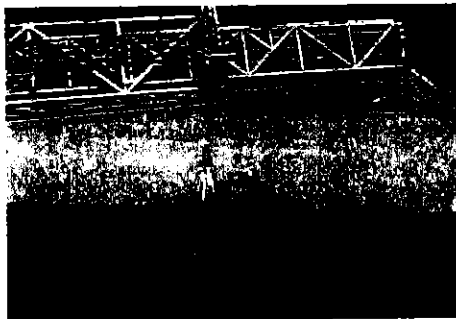
Stopped filling water



One water bag (35 tons.) were deployed for the load test and  
One calibrated Dillon load cell 50 tons.



Full load 6.7 tons. (sea water)



LIFTING GEAR INSPECTOR: ARMANDO PACHECO HERNANDEZ  
BAY OF CAMPECHE: 2016-02-03

*Armando Pacheco Hernandez*

●CEAN OIL CONSTRUCTION AND SERVICES  
Company Lifting Equipment Surveyor  
12 RUE PORTAGER  
L-2346 LUXEMBOURG



OCEAN OIL CONSTRUCTION AND SERVICES  
Company Lifting Equipment Surveyor  
12 Rue Portager  
L-2346 LUXEMBOURG  
Tel: (+352) 26432460 Fax: (+352) 26 43 24 61  
Email: corp@oceanoilcs.com

## PSS BRITANNIA MAIN GANGWAY (PORT-SIDE CENTER) REPORT ON DYNAMIC OVERLOAD TEST

Report N°: PSS-BRITANNIA: AP 03022016-87

Main Gangway Port Side Center, Main deck  
12:00hrs. Start rigging water bag. One 35 ton water bag was deployed for the load test.  
A one calibrated load cell.

**Dillon Load cell details:** Date of Calibration 2015-04-15  
Serial N° DEDX2800223 Dillon Model: ED XTRME 50 Ton. (100,000 lbs.)

The 35 tons water bag connected on two pad eyes  
One on the left hand side and the other on the right hand side on the inner part of the gangway.  
A load of **6.7 tons** were used for the test.  
The load test was commenced at 13:42hrs.  
Water bag was filled until **6.7 tons** load was reached at 14:06hrs.  
At this time the main gangway was lifted into horizontal position and swung  
Out to 90° from parking position.  
The main gangway was now extended completely, and maneuvering handles  
Placed in neutral position. The hydraulic system was checked for leaks.  
The main gangway remained in lifting position for 10 minutes.  
The main gangway was contracted completely, the water released from the bag.  
The main gangway was swung back to the rest.  
Test completed at 14:16hrs.

See accompanying digital photographs as supporting evidence for the above over load test.

The relevant certification was then issued.  
Lifting Inspector: Armando Pacheco Hernandez  
Date: February 03rd, 2016.

● OCEAN OIL CONSTRUCTION AND SERVICES  
Company Lifting Equipment Surveyor  
12 RUE PORTAGER  
L-2346 LUXEMBOURG