

## **Statements and World Wide References**











Dear Paul,

Thank you for the work carried out onboard the Discoverer Luanda, this involved applying a fire resistant coating to all electrical cables in the main and emergency generator rooms and purifier rooms. This work was done safely, efficiently and to a high quality of workmanship.

Based on the work performed on this ship I have no problem recommending Fire Security a.s for future work of a similar nature.

Regards

Stuart Lundie

Stuart Lundie Maintenance Supervisor Discoverer Luanda

**Transocean** Transocean's mission is to be the premier offshore drilling company by providing worldwide, rig-based well construction services to their customers through the integration of motivated people, quality equipment, and innovative technology, with a particular focus on technically demanding environments.



# FIRE SECURITY



Presented in this folder is a selection of statements received from our customers. They demonstrate our extensive client base both on and offshore, including rigs, fleets, industry and civil engineering projects.

Our clients each have their own unique requirements for high quality products and a professional turnkey delivery with a minimum of interruption to their operations.

Fire Security's coating and repair systems have obtained type approval certificates from the world's leading international classification societies.

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**Ole Tom Eidjord** Principal, CEO and President

Stuart Landie Maintenance Supervisor Discoverer Lurada Transcenan 001 832 587 4304



M M MOTT MACDONALD

Mr. Rana Tariq - Project Manager Siemens Company P.O. Box 47015 Kingdom of Bahrain Tel. No.: +973 1710 2777 Fax No.: +973 1722 4065

Our Reference IP/SA/ad/336548/2018/ 1895

T +973 1757 6400 F +973 1791 0087

moltimac.com

400kV TRANSMISSION DEVELOPMENT (2009-2013) 400kV SUBSTATION SWITCHGEAR & CIVIL WORKS (PACKAGE A) CONTRACT NO. 4663/2013/3100

Al Moayed House PO Box 10471, Subject: Approval of Subcontractor for Fire Retardant coating of HVMV Al Seef District cables - Ms. Fire Security Kingdom of Bahrain

21 November 2018

Dear Sir,

This is further reference to Siemens proposal for approving M/s. Fire Security Inc. as vendor for coating of HV and MV cables inside the basement with Fire Retardant Coating, submitted through DTS 3219 & presentation made at EWA in this regard.

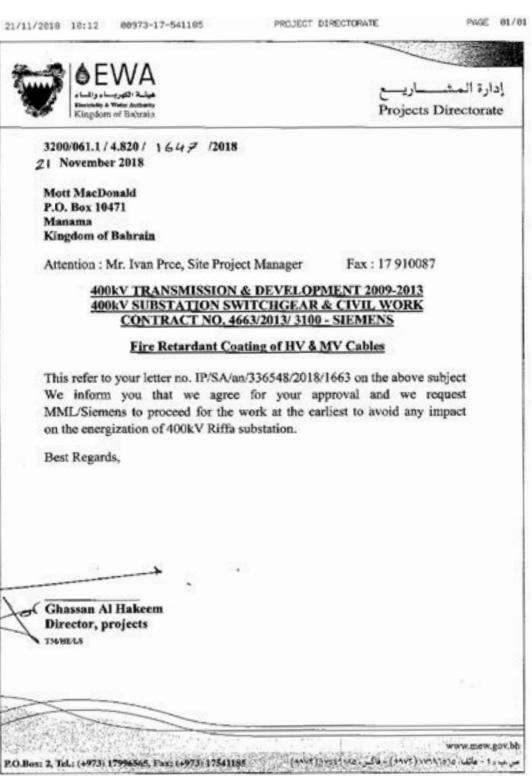
Please find in this regard EWA letter ref. 3200/061.1/4.820/1647/2018 dated 21# November 2018, which is self-explanatory.

You are instructed to take immediate action to commence with the cable coating work in order not to jeopardize energization of Riffa'a Substation.



Mott MacDonald is a uniquely diverse range of consultants delivering engineering, management, and development in extremely high profile projects across the world, working to meet some of the world's most significant challenges within sectors like energy, industry, transportation, and the environment.





Electricity and Water Authority in the Kingdom of Bahrain provides electricity and water services at the highest level of quality and reliability to ensure sustainable development and uninterrupted services.





MOL LNG Transport (Europe) Ltd. 3, Thomas More Square, London E1W 1WY

Mr. Jesper Rexen Fire Security Middle East F.Z.E. Office 1216, Building C1 Ajman Free Zone United Arab Emirates. Tel: +971 6 7478843

September 20, 2018.

MOL Ref: Electrical Cable Fire Protection Project

Dear Mr. Rexen,

RE: Passive fire protection of electrical cables in high risk areas onboard MOL LNG Carriers by way of cable coating.

This is to confirm that MOL Fleet Team 1 & Fleet Team 2 have utilized Fire Security Middle East for passive fire protection of electrical cables within high risk areas on several of our LNG vessels.

These applications have enhanced the fire protective properties of our electrical cables by utilizing Fire Security's FS1 intumescent coating system.

The projects have been safely completed with riding crew rope access application teams, ensuring no disturbance to our operations.

We are hereby pleased to give Fire Security our best recommendation based on their smooth deliveries to MOL LNG since 2016.

Yours sincerely,

Euan McIntyre Fleet Manager MOLLNG (Europe)



Telephone: +44 20 3764 8000 Registered Office: 3, Thomas More Square, London ETW 1WY Registered in England No. 5954129

MOL LNG Transport (Europe) Ltd is a London based ship management company 100% owned by Mitsui O.S.K Lines, managing 14 LNG carriers and 1 FSRU for MOL and joint venture owners. The company achieved a British Safety Council 5 Star Award and Sword of Honour in 2017 and Investors in People (IIP6) Silver Award in 2016.

Date: 21/02/2016

Ref: Ops/056/15

To : Jesper Rexen

Fire Security Middle East

Office 1216, Building C1 - Ajman Free Zone

Subject : Life Extension Repairs And Fireproofing of Cargo Electrical Cables Onboard ADNATCO NGSCO LNG Fleet.

This letter has been issued to Fire Security Middle East . Ajman, UAE, in recognition for their technical contribution and outstanding works carried out to improve the condition of the electrical cabling protection for cargo system on-board ADNATCO NGSCO LNG fleet vessels.

extension repair, and fireproofing of brittle electrical cables on our 08 LNG fleet vessels :

LNG / C Mubaraz

LNG / C Mraweh

LNG / C Al Hamrah

LNG / C Umm Al Ashtan

LNG / C Al Khaznah

LNG / C Shahamah LNG / C Ghasha

LNG / C Ish

Work was conducted safely and efficiently under passage by riding application squad certified in rope access with no interruption to ship's operations.

FS5 repair and coating system was applied on live electrical cables and intrusive repairs on expansion joints were carried out in the following areas:

dome tops - Manifold areas - Port and Starboard Compressor House.



Sr. Technical Superintendent - LNG Fleet

Abu Dhabi National Tanker Company (ADNATCO), established in 1975 for the transport of crude oil & petroleum products, is a wholly-owned subsidiary of Abu Dhabi National Oil Company (ADNOC). ADNATCO vessels trade worldwide for international customers, including major oil companies. ADNATCO currently operate as ADNOC Logistics & Services.



### **REFERENCE LETTER**

Fire Security Middle East has successfully completed life

Deck level main cable trays - Cable trays running full length above all

Ahmed al Muhairi LNG Fleet Manager









Date: 29-September-2020

Place: Dubai Expo2020 Project, DIP Dubai

Jesper Rexen

Fire Security Middle East FZE

PO Box 40068

Ajman, UAE.

BERKSAN MÜHENDISLIK İNŞAAT VE SANAYİ A.Ş MEP has used FS1 Hydrocarbon Rated DNV GL Certified Coating services of Fire Security Middle East on Route 2020 Metro Rail project for Expo 2020 Stations RT 74, RT76 and Traction Power Station 7 to protect the electrical power emergency cables against fire without any operational shutdown in live conditions.

Fire Security's activities have contributed towards our successful delivery of this project.



Berksan The Route 2020 Metro Link project from Dubai Roads and Transport Authority is an extension of the Dubai metro service, connecting the interchange at Jebel Ali with the flagship metro station at the Expo 2020 site. Consisting of a 15km extension - of which approximately 12km is above ground and 3km underground it features seven stations and branches from the existing Red Line.

## بي کي جلف ذم م **BK Gulf LLC**

Ref: L/AK8301/SA/ts/001

Date: 30<sup>th</sup> August 2017

M/s Fire Security Middle East PO Box 40068 Ajman, United Arah Emirates

Attn: Mr. Jesper Reven

#### TO WHOM IT MAY CONCERN

BK Gulf LLC has used Fire Security Middle East in a number of projects within the United Arab Emirates and we are happy to validate FSME's efficiency and professionalism in the field of Passive Fire Protection by way of cable coating. Apart from previous projects at Dubai Aluminium on our behalf Fire Security Middle East has from 2008 to 2017 safely and efficiently delivered passive fire protection on live electrical cables on two occasions as part of BK Gulf MEP activities in both Burj Khalifa and the Dubai Mall Expansion. Areas worked on include: 11 KV Diversion Cables Fire Security Middle East's activities contribute towards BK Gulf's commitment and ability to deliver projects to the standards that our clients including EMARR and DEWA Yours faithfully for BK GULF LLC



SHAJU ANTHONY Project Manuger



Established in 1978, BK Gulf LLC is a leading contractor in electrical, mechanical, instrumentation and building services within the UAE & Middle East markets. Providing integrated engineering solutions which encompass design, procurement, construction, project management, commissioning, and facilities management tailored to clients' requirements.







WTC 5, 11<sup>th</sup> Floor, J. Jend. Sucliman Kay 29-31, Jakarta, Indonesia – 12920 Phone: +62-21-525-6353, +62-21-525-0709, Fax: +62-21-525-4327

Jakarta, 27th April 2015

### To Whom It May Concern

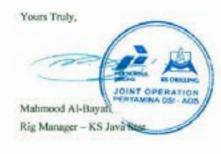
This is to confirm that Fire Security has delivered a successful turnkey project in repairing and technically upgrading damaged cables inside the generator room onboard our Jack Up rig KS Java Star.

The work done by Fire Security effectively prevented extensive rig downtime as all cables were repaired while energized. No electricity shutdown was required during the work or as a result of their work. The repaired cables has been checked and approved by ABS, the rig's class body.

This has greatly extended the lifetime of the cables and they are now functioning as they were before the fire incident. The work was performed in a cost effective and timely manner.

The work was performed professionally and safe, the correct quality of repair was maintained and no lost time incident was recorded during the project.

We are pleased to give Paal Mathisen, his team in Indonesia and Fire Security our best recommendations.



**PT Pertamina Drilling Services Indonesia** (PDSI) is a subsidiary of PERTAMINA and has been operating for more than 10 years. PDSI is engaged in exploration drilling services, exploitation drilling and workover of oil, gas and geothermal wells. PDSI also provides integrated drilling solutions (one-stop drilling services). PDSI conducts drilling activity in both onshore and offshore locations.

 Fra:
 Atkinson, Neil (WGPSN) < Neil Atkinson(Pwoodgroup.com>

 Sendt:
 26. juni 2014 08:09

 Tilt:
 Leif Harald Tveitnes; Tone Blier; headquarter

 Kopi:
 Jim Søllesvik; Hallur Simonsen (Shell); Zaur Sødikhov (Shell)

 Emne:
 RE: Fire Security

Good morning gentlemen.

As you will be aware we in Sheil / WGPSN have recently contracted your team to carry out work on Brent Charlie sub-main generation heat damaged cables. This work was essential to sustain the integrity of the existing equipment and to allow the recent turnaround to go ahead and conclude.

Your team acted with extreme professionalism, they worked in very safe manner and were commended by the platform team for their attitude, competence and commitment. They were also commended on their ability to outline the scope at the minimal risks involved.

Thank you for your support and please pass on my personal thanks to those involved. Your engineers are a credit to your company.

Best regards. Nell

Neil Atkinson Principal Electrical Engineer - Stiell Brent Field

Wood Group PSN C/O Shell UK Ltd 1 Attens Farm Road Nigg, Aberdeen, AB12 3FV

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Website: www.woodbroup-psin.com



A leading international energy services company, **Wood Group** comprises Wood Group Engineering and Wood Group PSN. Wood Group currently operates in 50 countries worldwide and earns around \$7bn in sales. Wood Group PSN employ over 40,000 people, and have 5,000 more in our joint ventures.



Jesper Rexen **Fire Security Middle East Ajman Free Zone** Building C1, Office 1216 United Arab Emirates

تنتركة الحفرافعمية EGYPTIAN DRILLING COMPANY

Tel: +971 6 7478842 Fax: +971 6 7478842

March 18, 2013

Subject: Extension of lifetime & UV protection of electrical cables utilizing Fire Security FS 5 coating system.

Dear Mr. Rexen,

We hereby confirm that Fire Security Middle East have delivered two successful turn key projects for EDC where electrical cables have been repaired and upgraded in a very effective manner contributing to significant cost savings and has extended the life time of the cables operation by more than 5 years.

The first project was delivered in 2004 on our previously owned EDC rig Kamose and at point of sale in 2012 the coating was still functioning as it should.

The second project was delivered in 2013 onboard EDC rig Senusret and was completed in a safe, professional and timely manner in accordance with EDC's urgent requirement.

Both of the above-mentioned projects specifically focused on the drag chain and the cables prior to FS applications, were in a very poor condition due to longterm exposure to UV and the operational environment.

We are pleased to give Fire Security our best recommendation and confirm our intention to upgrade further installations in order to protect and extend the lifetime of our operations.

Yours truly,

Al dale

**Reinier** Pedersen Engineering and Maintenance Manager Egyptian Drilling Company

الكيار ج. ١٢ طريق القامرة السويس المسمراري القامرة ع مِ ع من بـ: ١٠٨ مساكن مدينة تصر ١٧٢٧ ... من ٢٢ ٢٠ ١ ٢٢ ... فكني: ٢٠ ٢٠ ١١ ما EDFLG UN -، الكبي ٢٠ ٢٢ Km 17.5 Cairol Susz Desen Road Calo - A.R.E. P.O. Box 8071 NASR CITY HOUSING 11371 - TEL : 2406 2222 - TELEX : 20122 EDRLG UN - FAX : 2406 2300

Egyptian Drilling Company - EDC, is one of the leading drilling contractors in Egypt and the MENA region. Established in 1976 in partnership with Maersk Drilling, EDC is now 100% owned by Egyptian General Petroleum Corporation (EGPC) and other shareholders from the Egyptian petroleum sector. EDC owns and operates over 70 rigs, including six jack-ups, two offshore platform rigs, with the rest being onshore rigs with a variety of drilling, workover and pulling units.



Mr. Jesper Rexon Fire Security Olice 1216, Bldg C1 Ajmon Free Zone UAE Tel. no. +4795488800 Fox. no. +4738021531

24<sup>k</sup> Jon. 2013

Our Rel: QSGTLOLENG.2013.001.001

Dear Mr Kexen,

RE: Coating of HV cables using Fire Security FS5

This is to confirm that the HV cables used in Qatar Shell Pearl GTL with outer sheath HDPE which had been shown cracks have been repaired by coating with FS5 in a very professional way, maintaining the specified quality and to a very high safety standard.

The cobles affected where 33, 11 and 6.6IV around 100 circuits where coated wherever the cables are not underground.

The work was completed in December 2012 and we are satisfied with Fire Security coating system.

Kind regards, Henk F. J. Kommers

Electrical Engineering Manager / Senior Electrical Authority Gatar Shell GT, United

**Gost Shall GR. Letted** incorporated in Barmuch Regional Marsher RC 14579. Registered Office: 4th Phote, Codite Harris, 41 Codite Average, Humilton HM 12, Bernardia

Qatar Shell Pearl Gas to Liquid is the largest project ever launched in Qatar. It will be the world's largest GTL plant and will cement Qatar's place as the GTL capital of the world. The Qatargas 4 LNG project is being developed by Qatargas on behalf of shareholders QP and Shell (30 per cent). The project combines Shell's global leadership amongst private energy companies in LNG with Qatar's vision to become the world's largest LNG supplier.

Qatar Shell GIL CR No. 28051 Al Mirgob Tower, 14 Floor P.O. Box 3747 Doha, State of Qatar internet http://www.shell.com Tel: +974 6600 5743 Fax: +974 4403 2267





17 February 2012

To Whom It May Concern:

This to advise that Fire Security, Norway, acting via its subsidiaries Skytech Safety (Singapore) and Fire Security Indenesia, performed two projects at the Pailon II Power Station related to the fire-proof coating of electrical cables at the Flant.

The Contractor provided materials & labour, and applied the coating to critical cables located at the following areas:

- Plant cable tunnels
- Stacker Reclaimere (2 units)
- Ship Unloaders (2 units)
   Transformer areas
- Turbine Oil Room
- Turbine area
- At various motors located in hazardous areas
- On various cable trays

Material arrival and coating application were performed on schedule.

The Contractor's application was inspected by the Plant Operator and the work met the required technical specifications and standards of quality.

Discrepancies were minor and immediately addressed by the Contractor and suitably rectified.

The cost of the work, materials & labour, met the project budget.

If any additional information is required please contact me



Sud Sheek Maracser, Procurement & Contracts Patten II Power Station PT VTL, Jawa Timur (on benaff of PT Jawa Power) East Jawa Indonesia Jali 52 330 773100 (X 4030) fax 69 335 773153 e-mail: sid sheps@yttl:com

YTL Power International Berhad is an international multi-utility group active across key segments of the utility industry. Headquartered in Malaysia and listed on Bursa Malaysia, YTL operate in Malaysia, the United Kingdom, Singapore, Australia and Indonesia.



#### **TECHNIP UK LIMITED**

To Whom It May Concern

During the through life extension of Diving Support Vessel (DSV) Wellservicer, Technip UK employed the services of Fire Safety AS to attend the vessel at A&P Tyne dry docks in order to apply the patented FS1 cable protection product in all major machinery spaces onboard the vessel. The purpose of the exercise was to provide a Classification Society and Norwegian Authorities approved, first class insurance against major cable damage in the event of a serious fire whilst also providing excellent cable insulation protection.

Fire Security AS completed their scope of work in a safe conscientious manner within the agreed time frame and budget, whilst causing minimum disruption to the vessel staff and the equipment upgrade works taking place at the time. Fire Security AS provided a comprehensive and complete QA documentation package on completion of the works.

Technip UK can confirm that Security AS are a professional organisation and the FS1 product is extremely effective at protecting cabling from the effects of fire damage. Technip are currently considering the application of the FS1 product to more vessels in their fleet.

#### Kind Regards,

Ryan J Hutton

Vessel Superintendent

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Technip UK Umited - Engryptics Drive - Westfull - Abandeenshine - A832 6302 - UK - www.technip.com Tet. 1 - 64 (2) 1024 27 1020 - Fax - - 64 (0) 1224 27 1271 Replaced Office, 382 Mpt Hollows - Uniter Work/Tet. UK Replaced in Ingland No. 20026

**Technip** is a listed industrial company headquartered in Paris. The firm is among the largest in the world in oil service with more than 40,000 employees and sales of 9.3 billion Euro.







Fire Security Middle East

PO Box 40068

Ajman, United Arab Emirates.

Attn: Mr. Jesper Rexen

#### To Whom It May Concern

Fire Security Middle East has safely and efficiently delivered turnkey projects of cable coating fire proofing on live electrical cables to Emirates Global Aluminium.

Fire Security has successfully completed in a safe and professional manner the following contracts:

- CE 4702 Fire protection of critical cables plant wide
- E16 / 038 Power Area Fire Coating Of Critical Cables
- E15 / 025 Carbon Area Fire Coating Of Critical Cables
- E10 / 012 Fire Coating Of Critical Cables for Cast House Substations
- E10 / 105 Fire Coating of Critical Cables for Power Area
- Thermal protection of electrical cables in panels in pot rooms CE 5069
- T17 / 061 Thermal protection of potline cables
- T19 / 039 Fire protection coating for new cables installed in Power Area

Based on the above we are pleased to confirm that the quality of the delivery and applications were to the highest standard and in accordance with FM Global certification.

Ahmad Matar Khalifa Alsuwaidi Manager - Energy

**CAPEX** Projects

CC: Contracts

Emirates Global Aluminium is the world's largest 'premium aluminium' producer and the biggest industrial company in the United Arab Emirates outside oil and gas. They operate aluminium smelters in Abu Dhabi and Dubai, an alumina refinery in Abu Dhabi, and a bauxite mine and associated export facilities in the Republic of Guinea.



22 March 2021

Aluminium Bahrain B.S.C ('Alba') Line 6 Expansion Project

Fire Security Middle East FZE P.O Box 40068 - Aiman - UAE Attn: Mr. Jesper Rexen

We here by confirm that M/s Fire Security Middle East FZE supplied the majority of Alba's cable coating and penetration solutions across the Line 6 Smelter Expansion Project ('Line 6 Project') throughout 2018 and 2019.

Fire Security's turnkey applications were delivered pursuant to various subcontracts with Alba's contractors, across the carbon, cast house and reduction area facilities during the Line 6 Project.

Alba acknowledges the services and technical applications provided by Fire Services, which were in accordance with its required specifications and complied with FM Global certification requirements.

Yours sincerely

**Jordan Screen** 

Manager - Commercial & Contracts

Starting as a 120,000 tonnes per annum smelter in 1971, Alba, today, is the world's largest aluminium smelter ex-China with a production of more than 1.561 million metric tonnes per annum (2021). Its diverse product portfolio of Standard and Value-Added Products (VAP)s are exported to more than 240 global customers through its sales offices in Europe (Zurich), Asia (Hong Kong & Singapore) and subsidiary office in the U.S.



TO WHOM IT MAY CONCERN





Fra:	Minihan, Paul (paul.minihan@exxonmobil.com)
Sendt:	30. oktober 2011 09:53
Til:	headquarter
Kopi:	Gunn, John; Weston, Martin C
Emne:	Letter of thanks.

#### Terje,

I would just like to pass on my thanks and praises to yourself. Ketil and his team, they worked in a professional and safe manner whilst being efficient and productive even though the British weather tried to stop us most of the time, in fact we lost 2.5 days due to torrential rain that was unavoidable. The coating is quick and easy to apply with minimal overspray which I will be keen to show to our Project team and I will also be recommending your system/coating for future Projects.

#### John, Martin,

Worth passing this on to all in the project team for possible further use, Fire-Security have been OIMS approved. The system is not only cost effective but is also quick to do which has a huge schedule saving, the guys are also rope access trained, although we did not use that option on this occasion, another potential for install cost savings.

Regards,

### Paul

Paul Minihan Field Engineer

## E**∦**onMobil

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Over the last 125 years, ExxonMobil has evolved from a regional marketer of kerosene in the U.S. to the largest publicly traded petroleum and petrochemical enterprise in the world. ExxonMobil operates in most of the countries in the world.

To whom it may concern:

This letter is to confirm that on Thursday, Pebruary 11, 2010, the passive fire protection coating materials FS-1 and FS-5 from Fire Security have withstood an actual fire on board our platform Borgny Dolphin. This engine room fire was caused by a faulty fuel filter and was very intense, which even resulted in the evacuation of the platform in the ship yard. Luckly there were no injuries and the equipment damage was minimal.

The Pire Security team had just finished to apply the coating two days before the incident and the coatings, even though they were far from fully cured, performed exactly as described by Fire Security's documentation. All cables that had the coatings remained intact, did not need any repair and are in perfect working condition. Without a doubt, we believe that the cables would have suffered extensive damage and would have meeded to be replaced, if they did not have the protective coatings from Fire Security. This would have caused great delays and large costs to our operation.

We give our highest recommendations to Fire Security for its products and the professionalism of their team.

Sinderely

The oil platform Borgny Dolphin is owned by **Dolphin Drilling**, one of the North Sea's longest established drilling contractors, tracing its roots back to the 1960s.



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VERMILION OB & Ges	LEVEL 5 30 THE ESPLANADE
Australia Pty. Ltd.	PERTH, WESTERN AUSTRALIA 6000
	TEL: 08 9215 0300 FAX: 08 9215 0333 ABN: 29 113 023 5
	12 August 2021
To Whom it May Concern,	
RE: Cable LX on Wandoo B using Fire Security FS5	
Vermilion Oil & Gas Australia Pty Ltd (VOGA) owns and operates the Wa off the coast of Karratha, situated in northern Western Australia. It has be review from VOGA's asset integrity team, a management plan prioritised up to an additional 10 years.	en operational since 1996. After a thorough
VOGA contracted the services of Fire Security to restore and extend the lin LV, and HV electrical cables.	è of all UV exposed and ageing instrument,
VOGA identified Fire Security's FS5 DNV Class Approved coating syst restoration while providing a fire resistant barrier to the Wandoo B cable shown an impressive track record of delivering turnkey solutions in conjun	s till the end of field life. Fire Security has
Many of the cable trays on Wandoo B were in difficult to access areas, we cable coating. Fire Security's offshore crew were all IRATA rope access of coating application in a cost effective, efficient and safe way during their 2021. All applications were performed on live cables and did not requi operations.	certified and their technicians performed the three week maintenance campaign in June
We are very pleased with the result and happy to endorse Fire Security's c	able repair and life extension solutions.
Yours sincerely,	
Uninter .	
Naveed Yapa	
Lead Engineer on Cable LX Project	
lion entered Australia in 2005 by acquiring a	60% operated interest in the
po field, located approximately 80 km off the	-

DC

JAPAN DRILLING CO., LTD. 日本海洋掘削株式会社 The Parkrex Asakusabashi 7F, 〒111-0052 1-4-5 Yanagibashi, Taito-ku, 東京都台東区柳橋1-4-5 Tokyo 111-0052, Japan ザ・パークレックス浅草橋7F

#### To Whom It May Concern

In November 2017 JDC contracted Fire Security to repair and extend the lifetime of electrical cables on our Hakuryu-10 Jack up rig. All cables located high up on the Jacking Legs were UV exposed and showed signs of early aging. Some cables had already cracked outer sheaths.

The work was carried out at Keppel Shipyard in Singapore whilst Hakuryu-10 was being reactivated for its next drilling contract. Fire Security's cable repair solutions and UV protection was executed by their specialist team on schedule, cost efficiently and in a safely and professional manner.

All UV affected cables were repaired and coated to withstand high UV levels operating in tropical climates, utilizing Fire Security's proprietary and well documented long-term solutions.

We are very pleased with the result and JDC will consider Fire Security's cable repair and life extension solutions for other rigs in our fleet when required.

We are pleased to recommend Fire Security and their services.

On Behalf of Japan Drilling Co., Ltd.

Chikashi Takan Deputy General Manager (Electric) of TEC Dept. Japan Drilling Co., Ltd.

Japan Drilling Co., Ltd. (JDC) is Japan's sole offshore drilling contractor, and has been providing quality drilling services for more than 50 years. In addition to offshore drilling services, JDC provides Engineering Services, and R&D in relation to offshore drilling as well as oil and gas exploration and development.

Verm Wand 2007, they acquired the remaining 40% interest. Production is from two operated offshore platforms, one of which (Wandoo B) is permanently manned.



Tel: 03-6858-0937 Fax: 03-6679-3103

Date: 31st Jan. 2022 Ref. No. LTEC-0308-22-005





Centrica Storage Ltd Woodland House Woodland Park Hessle East Yorkshire HU13 OFA 31st August 2021

Good Afternoon Leif

I am very pleased to provide the endorsement below following the successful application of the cable life extension coating at the Rough 47/3B gas platform.

Centrica Storage Ltd had previously engaged Fire Security for cable coating application in 2006 and following inspection in 2020 the coating is still in good condition with a few minor areas identified for touch up re-spray.

Fire Security AS was contracted to restore and extend the life of additional ageing LV/MV electrical and instrument cables and to include the existing coated cable touch ups on 47/3 Bravo - CSL's main manned complex located on UK's Rough gas field.

Fire Security's offshore crew are IRATA rope access certified and the technicians performed the coating application in a cost effective, efficient, environmentally compliant and safe manner during August 2021. All Applications were made on live cables after extensive cleaning and removal of moss.

We are very pleased with the result and happy to endorse Fire Security's FS5 cable repair & life extension coating solution

**Richard Stokes** Offshore Maintenance Support Engineer - Electrical

Centrica Storage (CSL) have two offshore platforms located on the Rough gas field - 47/3 Bravo and 47/8 Alpha (the figures refer to the North Sea licensing block numbers which identify where the fields are located). 47/3 Bravo is CSL's main manned complex. It is split into three separate bridge-linked platforms and operates 24 wells. It is manned all year round. 47/3 Bravo withdraws gas from the wells as a vapour and it is then piped through a 900 mm (36inch) subsea pipeline to its Easington Terminal where the gas undergoes several separation processes before being sent into the National Transmission System (NTS)



Registration No. 929350685

To Whom It May Concern

We confirm that Smedvig has used FIRE SECURITY A/S to do fire protection of cables in high fire risk areas onboard our rigs:

- West Alpha
- West Vanguard
- West Epsilon

Due to a fire we had on West Alpha in 1992, we experienced problems due to the fact that some of the vital cables did short circuit. We experienced that flame retardant and fire resistant cables did not cope with the temperatures of an oilfire.

We have now protected all these cables with FIRE SECURITY'S coating FS1 which has granted us all necessary approvals from the authorities with regards to routing of vital cables through high risk areas.

We have also protected our cables in the mud areas of our rigs with FIRE SECURITY'S coating FS5 to make them resistant to chemicals and oilbased mud.

FIRE SECURITY A/S was chosen to perform this cable protection due to their high level of documentation and approvals granted both from authorities and classification societies.

FIRE SECURITY A/S was also chosen due to their long experience world wide.

We were very happy with the way FIRE SECURITY A/S handled their contracts with us and can certainly recommend them for any other project.

Kind regards Smedvig Offshore AS

Fir hours 0-

Geir Kenneth Sandhåland Competant Electrical Manager

Smedvik is now history; from 2006 it is known as Seadrill. Seadrill is a leading offshore deepwater drilling company, aiming to be the customers' most important partner in making oil and gas available in a safe and cost-effective manner.



ER PETROLFO BRASILEIRO S.A.

MACAÉ, June 5, 2006.

### E&P-SERV/US-SS/OP-P-XXIII 0007/2006

"Jan Braathen" <jan.braathen@detector.com.br> , "Terje Waage" <tw@fire-security.com> , DETECTOR ELECTRONICS DO BRASIL LTDA Avenida das Américas 10.200, 1° andar, S. 15 CEP 22.973-082 Rio de Janeiro, RJ, Brazil Tel. (21) 3150.4700 Fax (21) 3150.4757 Cel. (21) 8121.1380

Subject: FS1 COATING

Reference: FIRE SECURITY

To whom it may concern,

PETRÓLEO BRASILEIRO S/A - PETROBRAS has applied the well documented Fire Security coating systems on a number of oil rigs in Brazil in order to protect electrical cables in areas with high fire risks.

Onboard the SS Drilling Platform P-XXIII we recently experienced a fire in an engine room where the Fire Security protective coating had been applied. We are pleased to state that the FS-1 coating system functioned exactly how it was supposed to. The consequences of the fire were kept to a minimum and there was no need for any cable replacement after the fire thanks to Fire Security's coating system.

We are pleased to give Fire Security and their coatings our best recommendation.

Respectfully, Flávio Zimermann Mai.:021661-0 Scrente da E6P-SERVINS SSIOP-P-XXIII Flavio Zimermann Enclosure(s) : There are not enclosure(s)

**Petrobras** is the national oil company of Brazil. It is present in the exploration and production, refining, marketing, transportation, petrochemicals, oil product distribution, natural gas, electricity, chemical, gas and biofuel segments.



**Exploration & Production** 

DGEP/TDO/TEC/ELE

To whom it may concern.

Total Exploration & Production, a branch of 1 expertise in cable protection and repair on varie East to Indonesia.

Fire Security has been involved in several proj chemicals, early ageing, have been repaired an This has effectively extended the lifetime of the

It is our experience that the cables repaired i working condition, cables in some cases were 2

Among all the projects Fire Security has perfor lost time incident, nor has been any shutdown of

We are pleased to give Fire Security and their of

Best Regards

Patrick LEROUX

**Total Exploration & Production** 

Head of Electrical Department

@:patrick.leroux@total.com

Adresse postsie : 2 piece de La Dóspole - La Dófonse 6 - 32078 Paris La Dé TéL + 33 (0)1 47 44 45 46

TOTAL S.A. Booleté Anonyme au capital de 6 139 295 400 euros Biege social: 2 place de La Doupole - La Dérense 6 - 92400 Courtevoie - P 542 051 190 PCS Nanteme

As the fifth largest publicly-traded integrated oil and gas company in the world and a major player in the chemicals business, **TOTAL** has operations in more than 130 countries on five continents with approximately 97,000 employees.

Fire Security For the attention of Mr Leif Harald Tveitnes Vesterveien 150 4613 Kristiansand - NORWAY	
March 15, 2009	
TOTAL Group, has used since 1998 Fire Security sus sites ranging from the North Sea through Middle	
ects where cables already damaged by UV, oil and d upgraded fire technically. cables and contributed to significant cost savings.	
and protected 6 and 8 years ago are still in good 5 years old at the time they were repaired.	
med for us, there has never been any assident or if production required as a result of their work.	1988 Fire Security at through Middle ad by UV, oil and nt cost savings. are still in good epaired. h any accident or their work.
oating systems our best recommendation.	
efunse Cedex	
nanca	



-----Opprinnelig melding----Fra: Rig\_CAJ, Maintenance Supervisor [mailteomaintenance@caj.rig.deepwater.com]
Sendt: 20. februar 2004 13:00
Till: 'Ole Tom Eldjord'
Kopi: 'Rig\_CAJ, Olm'; 'Nygrin, Stan'
Ernne: RE: PO nr

#### Cle Tom

We here on the Cajun Express are very pleased with the cable coating job that your company has preformed for us in the sack room. The job was carried out in a very efficient and professional manor. Mr. Jan Quarsten and Mr. Keti Bjorkaas were very professional and a pleasure to work with. We had considered replacing and rerouting the cables which would have been very expensive, and all electrical equipment related to this wring would have been shut down indefinitely during this job. With the cable coating we were able to isolate only the wries that needed isolation repairs which your company preformed before coating any cables. One of Transocean's core values is finical discipline and I feel we have meet this by using your company to coat the wires instead of replacing them. I would recommend your company to any one of our rigs that may be having similar problems as we had. Again I would to thank your company for a job well done. Regards. Larry

Larry Robnett / Gerald Scoggins Maintenance Supervisor's Cajan Express Tel: (713) 232-8251 Ext:373 Fax: (206)-339-5149 Email: <maintenance@caj.rig.deepwater.com>



**Transocean**, the world's largest offshore drilling contractor, provides the most versatile fleet of mobile offshore drilling units to help customers find and develop oil and natural gas reserves. Building on more than 50 years of experience with the highest specification rigs, 18,000 employees are focused on safety and premier offshore drilling performance.

### 1 Louis Dreyfus Natural Gas

#### VIA FAX & MAIL

February 17, 1999

Mr. David Kruger Fire Security (USA), Inc. 16520 Park Ten Place Suite 590 Houston, Texas 77084

### TO WHOM IT MAY CONCERN

In the Spring of 1998, Fire Security (USA), Inc. 1 the Gulf of Mexico operated by Louis Dreyfus Na application of electric cable for repair and protect job completion, were handled in timely and profes

I would recommend Fire Security (USA), Inc.'s s

Sincerely,

LOUIS DREYFUS NATURAL GAS villo

Patrick E. Johnson Operations Manager Arkintex/Offshore District

**Louis Dreyfus** is a privately owned company incorporated and domiciled in France. The Group has expanded its expertise to a wide variety of commodities In North America, the Group is active in the merchandising, trading and storage of natural gas, natural gas liquids, refined products, coal, plastic resins and other petrochemicals.

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	Seleptune 713 754-4000
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PHILIPS

PHILLIPS PETROLEUM COMPANY UNITED KINGDOM LIMITED AREA OFFICE: BACTON GAS TERMINAL, BACTON, NORWICH, NORFICK NITE 6/6 TELEPHONE MUNCHSLEY (07263) 725765 TELEP: \$7303 EAX: (07263) 72986

23<sup>rd</sup> June 1998

#### To Whom it May Concern

SUBJECT: CABLE OUTER SHEATH CRACKING ON PHILLIPS OPERATED PLATFORMS

#### Introduction,

During the winter of 1993 / 1994, problems of cable outer sheath cracking were being reported with various multicore cables on Phillips operated platforms. Meetings were held with various parties to discuss the problems and any possible phased remedial work. The concerns were as follows:-

a. possible ingress of water invalidating the certification of Ex enclosures. b. gas ingress. Less of a problem as this could be rectified by fitting barrier glands. c. integrity of cable transits.

#### Options

An offshore survey was completed and costs evolved to replace all the faulty cables. Due to the high replacement costs, installation time and recommissioning of all the equipment, alternative proposals for sealing the cables were investigated.

Alternative options were sealing the cables by spraying with a protective coating or by scaling with a self amalgamating tape (this would only cover areas with known visible damage). Both methods would prevent water ingress but the cable spray option would also provide additional increased fire protection and safety.

#### Solution

A phased approach was adopted using Fire Security Systems to spray all field cables sized 25mm or greater. Lancelot platform would be repaired first with a three man team and reviewing there success before carrying on to Guinevere and Excalibur Platforms. Lancelot was selected because:-

- a. the cables were in the worst condition
- b. platform accommodation was available.

The timing was arranged for the summer of 1996 to coincide with the Phillips Summer Maintenance program.

Registered Office: Phillips Quadrant, 35 Guildford Road, Woking, Surrey, GU22 7QT. Rog. No: 732712 England & Wales.

As the third-largest integrated energy company in the United States, based on market capitalization, oil and natural gas reserves, the company understands its responsibility to deliver energy in a safe, environmentally and socially responsible manner.



PHILLIPS PETROLEUM COMPANY UNITED KINGDOM LIMITED AREA OFFICE: BACTON GAS TERMINAL, BACTON, NORWICH, NORFOLK HA12 0JO TELEPHONE MUNDERLEY (\$9263 729765 TELEX \$7263 FAX (\$7268 72966

#### QA/QC

The objective of the application on the platforms was to obtain a seal which would prevent water ingress (and possibly gas) from entering the cables. QA/QC would be critical to successfully achieving this. The application compounds FS-1 and FS-5 arrived premixed. QC procedures ensured that all work was completed correctly to stringent standard. After application and final inspection of the work an annual inspection was incorporated into the platform maintenance procedures to assess any future problems.

#### Conclusions

Al, the work was successfully carried out by Fire Security Personnel during the end of 1996 and the spring of 1997. All the cables sprayed with the FS-1 and FS5 application have been identified on the platform electrical cable schedules and cable tray drawings.

A three year contract has been awarded to Fire Security to monitor the system application with the first inspection being successfully completed during the spring of 1998 with no signs of deterioration or problems with the application were found

Offshore Maintenance Co-ordinator

The company upholds this responsibility in its worldwide operations, where it is the fourth-largest refiner. Philips Petroleum Company UK Limited is now known as ConocoPhillips UK.



Marathon Oil U.K., Ltd.

# 8171,368 2050

Mr Ole Tom Eldjord Fire Security a.s. Drammenaveien 200-0277 Óslo Norway

Desci Mil: 0171-286-2804 Desci Mil: 0171-286-2804 31st July 1998

Dear Mr Eidjord,

Further to our telecon, please find below an outline of the problem we faced with damaged electrical cables offshore and how we solved this with the assistance of your company. The following summary has been kindly compiled by Marathon's Instrument/Electrical Engineer, John Hollister.

#### **Case Study**

#### Repair of electrical cables damaged by synthetic gas turbine oil

Marathon Oil UK's electrical engineers were confronted with a problem when they found a large number of electrical cables on a Brae production platform had been damaged through contact with leaked synthetic oil of the type used in lubricating gas turbines.

About 1,000 cables, associated with controls, lighting, communications and other services, were contaminated throughout a number of locations outside the gas compression and power generation modules. This equated to around 1,000 metres of electrical cable tray.

The oil caused the outer cable sheath to become soft and wrinkled, lessening its mechanical strength. Tests showed that the fire retardant properties had been destroyed and the cables no longer met their design specification

The original vendor was consulted and after on-site inspection concluded that the only solution was to replace the damaged cables. But identifying each one and preparing a plan to replace it would have been a dounting task. Their replacement would involve at least a partial platform shutdown and be very costly.

Further options were considered and a novel solution was proposed by Norwegian company, Fite Security a.s. This would involve cleaning the contaminated cables using a solvent cleaner specifically formulated for use on electrical components. Both cable and tray would then be coated with a special intumescent paint to restore their fire retardant properties.

Samples of the damaged cable were treated by Fire Security a.s. and tested at an independent test facility. The results proved that the treated samples exceeded the original fire retardant properties specification.

Fire Security 8.5, was contracted to do the work which was completed within four weeks and was weather dependant. It was carried out with na disruption to production operations and without any electrical isolations. Marathon has since made equipment modifications to reduce future leakages. and provided more protection to the cables in vulnerable areas.

This solution was far less expensive than changing out the cables and resulted in no production downtime.

I understand that you will use this letter to assist other Operators with similar problems and to naturally promote your product. I am pleased to be able to help with this but would ask that you contact me should you wish to publicise this subject outside of the oil industry, i.e. news releases, advertising, etc.

Yours sincerely

heanes MC Michele Beamst Communication Representative Communication & Public Alfairs

Marathon Oil Corporation is an integrated energy company focused on value creation through the responsible development of liquid hydrocarbon and natural gas resources to help meet the world's energy needs. It is the 4th largest U.S.-based integrated oil and gas company and the 5th largest U.S. refiner, headquartered in Houston, Texas.



Fire Security's coating applicators employing rope access techniques to ensure total coverage for our clients turnkey cable maintenance operations.



# WORLD WIDE REFERENCES

ADES Egypt	Jack Up Rig Admarine 4
ADNATCO	LNG AL HAMRA
ADNATCO	LNG Al Khaznah
ADNATCO	LNG Gasha
ADNATCO	LNG Ish
ADNATCO	LNG MUBARAZ
ADNATCO	LNG MRAWEH
ADNATCO	LNG UMM AL ASHTAN
ADNATCO	LNG Shahama
ADNOC	Rig Delma
ADNOC Drilling	Jack Up Rig Al Bzoom
ADNOC Gas Processing	SHT - 2 Areas
ADNOC Offshore	West Zakum Field
Agip UK	Tiffany
Airmech – Bahrain	Alba Line 6
Alba	Bahrain Aluminium
Al Ezzel O & M	Al Dur Power Complex
Al Komed Engineering	Alba Line 6
Alliance Refining Company	Marine Terminal 3
Alliance Refining Company	Production Unit North 2
Amata Power	Amata B Grimm Power
American Exploration	Brazos 440B
American Exploration	South Marsh Island 133
Asia Cement	Jecheon Plant
Asia Pulp & Paper	DSS - Karawang I plant
Asia Pulp & Paper	Indah Kiat Perawang Mill
Asia Pulp & Paper	Lontar Papyrus Jambi Plant
Asia Pulp & Paper	Pindo Deli Karawang II Plant
Atwood Oceanics	Atwood Hunter
Azamara Club Cruises	Azamara Journey
Azamara Club Cruises	Azamara Quest
Bahrain Aluminium	Overhead Casthouse Cranes
Bahrain Gas Company Em	ergency Lube Oil Pumps on Gas Turbines
Bahrain Steel	Bahrain Substations

Bahrain Steel (GIIC)	Jetty Conveyor Belts
Bazan Refineries	Bazan Haifa
Bergesen D.Y. Offshore ASA	Berge Hus
Bergesen D.Y. Offshore ASA	Bergesen Enterprise
BK Gulf	Burj Khalifa
BK Gulf	Dubai Mall Tunnels
BK Gulf	Dubai Mall
BLNG	Brunei LNG substations
BLNG	Brunei LNG life extension phase 1
Bluewater Energy	Haewene Brim
Boskalis	Hoohee See Windfarm Platform
Britannia Oil Operator	Britannia
BP	Clair
ВР	FPSO Schiehallion
ВР	Skarv
BP	Valhall
BP/AIOC	DUQ Platform
BW Offshore	BW Catcher
Cameron LNG	Hackberry Plant train 1
Cameron LNG	Hackberry Plant train 2
Centrica	Rough 3B
Chevron Indonesia	West Attaka Platform
Chevron Indonesia	West Seno Platform
Cirebon Power	Cirebon Power Plant
CNOOC China	JX1-1B Platform
CNOOC China	LD32-2 Platform
CNOOC SES	Intan A Platform
CNOOC SES	Pabelokan
CNOOC SES	Widuri
CNOOC SES	Widuri D Platform
CNOOC SES	Zelda
Conoco Phillips	LOGGS Complex
Conoco Phillips	Murdoch Platform
Conoco Phillips	Viking B

Consorcio	Tunnel Grota Funda (Rio de Janeiro)
COSL	COSL Pioneer Semi sub drilling rig
COSL	Innovator
COSL	Promoter
Danielli – Bahrain.	Alba Line 6
Danway EME	EGA AT PSI Intergration
Danway EME	Alba Line 6
Danway Electro Mechanical S	ubstations - Phase 2 Emirates Alu Abu Dhabi
Diamond Offshore	Ocean Alliance
DML	Navigator Mars
DML	Navigator Neptun
DML	Navigator Pluto
DML	Navigator Saturn
DML	Navigator Venus
DNMC	Ling Ao NPP
Dolphin Drilling	Bideford Dolphin
Dolphin Drilling	Borgland Dolphin
Dolphin Drilling	Borgny Dolphin
Dolphin Drilling	Borgsten Dolphin
Dolphin Drilling	Bredford Dolphin
Dolphin Drilling	Byford Dolphin
Dubai Drydocks NDC	Rig Al Bzoom
Dubai Dry Docks	KOTC Vessel AL Salmi
Dubai Engineering Company	. EGA Ja
Dubai Euro Engineering	EGA JA
Dubal	Dubai Aluminium Company
EGA AT	Pot Lines
Egyptian Drilling Company	Rig Zozer
Egyptian Drilling	Rig Senusret - ASRY Bahrain
Elf	Frigg Field
Elkem	Elkem Bremanger
Elkem	Elkem Fiskaa Verk
EMAL	Emirates Aluminium Company
Emirates Aluminium Plant w	ride substations - Phase 1 - Abu Dhabi

ENGIE Abu Dhabi	Sweihat Power Complex
ENGIE Bahrain	Al Dur Power Complex
ENGIE Middle East	Um Al Nar Power
ENGIE Oman	Sohar Power
Equinor	Aasta Hansten Platform
Eurotunnel	Eurotunnel
Exmar Shipmanagement	Caribbean FLNG
ExxonMobil	Balder FPSO
ExxonMobil	Cepu, Banyu Urip Project
ExxonMobil	Fawley Refinery
ExxonMobil	Fawley Refinery, Butyl Plant
ExxonMobil	FPSO Jotun A
ExxonMobil	Jerneh A
ExxonMobil	Tabu A
Freeport LNG	Train 1
Freeport LNG	Train 2
Freeport LNG	Train 3
Frontier Drilling	Frontier Discoverer
Fugro	Fugro Saltire
Gasco	Abu Dhabi Gas Company
Global Marine	Glomar Adriatic XI
Greenfleet Ship Management	M/V QEZBAN
Grupo R Mexico	Buccaneer (SMC)
Grupo R Mexico	Garzprom II (SMC)
Grupo R Mexico	Oceanic 1 (SMC)
Grupo R. Mexico	Semi 1 (MMM)
Grupo R Mexico	Semi 2 (MMM)
Hanil Cement	Danyang Plant
Hansol Home Deco	Hansol Home Deco Korea
Holcim Cement	Cilacap Plant
Hubco Narowal Pakistan	Substations
Hyundai Cement	Hyundai Cement Korea
HYUNDAI / GASCO	Habshan 5 Refinery - Abu Dhabi
Høegh Fleet	Høegh Gandria



# WORLD WIDE REFERENCES

Høegh Fleet	Høegh Matthew
IHC Krimpen	Well Enhancer
IHC Krimpen	Toisa Pegasus
Indocement	Citeureup plant
INPEX	Inpex Japan
Japan Vietnam Petroleum Co	. Rang Dong WHP N1
Jazeera Power	EGA Jebel Ali
КЕРСО	Danjing Power Plant
KS Drilling	KS Java Star Jackup rig
KS Rigmar 301	Rigmar 301
Kumho Petrochemical	Yeosu Plant
Kuwait Tanker Company	MV Gas Tanker Al Mutlaa
Lafarge Cement	Korea
LG Chem	Daesan Plant
Lotte Chemical	Ulsan Plant Korea
Maersk Drilling	Maersk Completer
Maersk Drilling	Maersk Convincer
Maersk Drilling	Maersk Gallant
Maersk Drilling	Maersk Giant
Maersk Drilling	Maersk Guardian
Maersk Drilling	Maersk Jutlander
Maersk Oil & Gas	FPSO Gryphon
Maersk Oil & Gas	FPSO Nkossa II
Marafiq – Saudi Arabia.	Jubail Power
Marathon Oil	Brae B
McDermott	Drilling Barge DB32
MCSC – Bahrain	Alba Line 6
Methanex	Methanex Plant Trinidad
Methanex Methanex Control	Room Substations Trinidad
MDPC	FPSO Kikeh
Mobil UK	Camelot B
Mobil UK	Excalibur
Mobil UK	Guinevere
Mobil UK	Lancelot

MOL	LNG Ammariya
MOL	LNG Fraiha
MOL	LNG Fuwarit
MOL	LNG Gigira Laitebo
MOL	LNG Murwab
MOL	LNG Papua
MOL	LNG Southern Cross
MOL	LNG Spirit of Hela
MOL	LNG Kumul
Mulia Group	Bri II
Mulia Group	Menara Mulia
NagaWorld	NagaWorld Cambodia
National Drilling Company	Al Yasat
National Drilling Company	Diyina
National Drilling Company	Junana
National Drilling Company	Yemillah
Navion	Navion 84
Nexen Petroleum	Buzzard
Nexen Petroleum	Scott
Noble Drilling	Noble Al White
North Atlantic Drilling	West Navigator
Norsk Hydro	Troll B
Norsk Hydro	Visund
Ocean Rig	Eirik Raude
Ocean Rig	Leiv Eriksson
Oceania Cruises	Oceania Insignia
Oceania Cruises	Oceania Marina
Oceania Cruises	Oceania Nautica
Oceania Cruises	Oceania Regatta
Oceania Cruises	Oceania Riviera
Oceania Cruises	Oceania Sirena
Oderbrecht Brasil	Tunel Grota Funda – Transoeste
Odfjell Drilling	Deepsea Bergen
Odfjell Drilling	Deepsea Trym

Oman LNG	Sur Gas Plant	Petrobras	P-33
OMV	Navarra Pipeline	Petrobras	P-35
ONGC	Rig Sagar Uday	Petrobras	P-37
ONGC	Rig Sagar Gaurav	Petrobras	P-53
ONGC	Rig Sagar Joyti	Petrobras	RECAP, Refinery
ONGC	Rig Sagar Ratna	Petrobras	REFAP, Refinery
ONGC	Rig Sagar Shakti	Petrolia Drilling	Petrolia
ONGC	Rig Sagar Khiran	Petron Refinery	Petron Port Dickson
Osaka Steel	Osaka Steel Japan	Petronas	Baram B
Otto Candies	Kelly Ann Candies	Petronas	Baronia A
PDO	PDO Qarnalam MPS station	Petronas	BCOT, Bintulu crude oil terminal
Pemex	Akal C-7	Petronas	Erb West A
Pemex	Akal C-8	Petronas	Samarang A
Pemex	Cayo Arcas	Petronas	Temana A
Pemex	Chemul	Petronas	Temana B
Pemex	Enlace Litoral	Petronas	Tukau A
Perenco	Guinevere	Petronas	West Lutong A
Perenco	Lancelot	Petronas BASF	Gebeng Plant
Perenco	Leman 27B	Phillips Petroleum	Ekofisk Field
Pertamina	Pertamina Tambun	PLN	Asahan 1
Pertamina	Plaju Refinery	PLN	Pangkalan Susu
Pertamina	RU-II Dumai Refinery	PLN	PLTU Lontar
Pertamina UP. V	Refinery Plant Ill	PLN	PLTGU Indralaya
Petrobras	Carapeba II (PCP-2)	Pride International	Pride Venezuela
Petrobras	FAFEN, Fertilizer Plant	PT PAL	Surabaya Yard
Petrobras	P-10	Qatar Fertilizer Company	Qafco Ureah 2 Substation
Petrobras	P-16	Ray International	Sohar Power Plant
Petrobras	P-17	R&B Falcon	Deepwater Navigator
Petrobras	P-18	Reading & Bates	RB Rig 41
Petrobras	P-19	Regent Seven Seas Cruises	Seven Seas Explorer
Petrobras	P-20	Regent Seven Seas Cruises	Seven Seas Mariner
Petrobras	P-23	Regent Seven Seas Cruises	Seven Seas Navigator
Petrobras	P-25	Regent Seven Seas Cruises	Seven Seas Splendor
Petrobras	P-31	Regent Seven Seas Cruises	Seven Seas Voyager



# WORLD WIDE REFERENCES

Remontowa S.A.	IBEEV 1 & 2
Republic of Korea Navy	DDH 973 ROKS Yang Manchoon
Riau Andalan Pulp & Paper	Kerinci Plant
Safe Service AB	Safe Britannia
Saipem	Scarabeo 5
Saipem	Scarabeo 6
Saipem	Scarabeo 7
Sampyo Cement	Sampyo Cement Korea
Samsung Corporation	Emergency Pumps on Turbines – Emirates
Samsung Heavy Industry	FPSO Nexus
Samsung Heavy Industries	FPSO Skarv
Samsung Heavy Industries	Martin Linge Platform
SASOL	SASOL Secunda
SASREF Shell Saudi Arabia R	efinining Jubail
Saudi Aramco	Uthmaniya Gas Plant
Saudi Aramco	Shedgum Gas Plant
SBM	FPSO Brasil
SBM	FPSO Capixaba
SBM	FPSO Espardarte
SBM	FPSO Espirito Santo
SBM	FPSO Kuito
SBM	FPSO Ilhabela
SBM	FPSO Marlim Sul
SBM	FPSO Saquarema
Seadrill	Sea Dragon
Seadrill	West Epsilon
Sedco Forex	Sedco Explorer
Sedco Forex	Trident XIV
SEPAM	Alba Line 6
Shagang Steel	Jiangsu, China
Shell	Brent C Platform
Shell	Cormorante Alpha
Shell	Draugen Field
Shell	FPSO Fluminense

Shell	Shell Pearl GTL Refinery- Qatar
Shell Brunei	Ampa 9
Shell Brunei	Champion 7
Shell Brunei	Champion 11
Shell Brunei	TG 28
Shell Brunei	TG 31
Shell Sabah	Gumunsut Platform
Shell Sarawak	D-35
Shell Sarawak	E-11
Shell Sarawak	Jintan Platform
Shell Sarawak	M1
Siemens	EWA 400 kv Substations
SK E&C	SK E&C Korea
Smedvig	West Alpha
Smedvig	West Delta
Smedvig	West Epsilon
Smedvig	West Vanguard
Smedvig/Navion	West Navion
Sohar Aluminium	Oman Aluminium Company
S-Oil	S-Oil Korea
Statoil	Gullfaks A
Statoil	Gullfaks B
Statoil	Gullfaks B Leg HV Cable
Statoil	Gullfaks C
Statoil	Norne
Statoil	Statfjord Field
Statoil	Åsgaard A
Stena Drilling	High Seas Driller
Stena Drilling	Stena Clyde
Stena Drilling	Stena Dee
Stena Drilling	Stena Forth
Stolt Nielsen Seaways	Seaway Osprey
Stolt Parcel Tankers	Stolt Topaz
Subsea 7	Pelican

Sunchang Corporation	Sunwoon MDF Plant
Sungshin Cement	Sungshin Cement Korea
Superfast Ferries	Superfast 355
Superfast Ferries	Superfast 356
SWCC	Desalination plant
Talisman	Claymore Platform
Talisman	FPSO Bleo Holm
Technip	Deep Blue
Technip	Oryx GTL Plant- Qatar
Technip	Wellservicer
Technip-Coflexip	CSO Wellservicer
TechnipFMC	Global 1201
Teekay	Europa
Teekay	FPSO Cidade de Rio das Ostras
Teekay	FPSO Petrojarl Foinaven
Teekay	Marita
Teekay	Meridian Spirit
Teekay	Nordic Anglia
Teekay	Nordic Appolo
Teekay	Svenita
Teekay	Norvegia
TNB Janamanjung	Tenaga Nasional Berhad
Total	Total Antwerp
Total	AKPO FPSO
Total	Alwyn North
Total	Balal
Total	Brunei OPP
Total E&P Indonesie	Bekapai Platform
Total E&P Indonesie	CPU Area
Total E&P Indonesie	NPU Area
TotalFinaElf E&P Indonesie	CPA-Handil
TotalFinaElf E&P Indonesie	Senipah Terminal
Total Myanmar	Yetagun Metering Station
Transatlantic	Transpaper

Transocean	Cajun Express
Transocean	Deepwater Champion
Transocean	Deepwater Discovery
Transocean	Deepwater Expedition
Transocean	Deepwater Millennium
Transocean	Deepwater Navigator
Transocean	Discoverer Americas
Transocean	Discoverer Frontier
Transocean	Discoverer Luanda
Transocean	Discoverer Spirit
Transocean	Jack Ryan
Transocean	Polar Pioneer
Transocean	Ron Tappmeyer
Transocean	Sedco 702
Transocean	Sedco 704
Transocean	Sedco 706
Transocean	Sedco 707
Transocean	Sedco 710
Transocean	Transocean Arctic
Transocean	Transocean Explorer
Transocean	Transocean Leader
Transocean	Treasure Saga
Transocean	Transocean Seeker
Transocean	Transocean Winner
Transocean Sedco Forex	Drill Star
Vanguard SPC	Vanguard Four
Vår Energi	Ringhorne Platform
Well Ops	Seawell
Woodside	Pluto LNG Plant
Workfox	Seafox3
YTL Jawa Power	Paiton Power Plant
ZADCO	Upper Zakum Super Complex



## WORLD WIDE OFFICES AND REPRESENTATIVES

Fire Security worldwide offices:

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# Warranty Certificate

**Repair & Life Extension of Instrument** Cable/Cable Trays in PE1/PE2 Plants

# **Abu Dhabi Polymers Co Ltd Borouge - Ruwais**

Fire Security is a Norwegian company specializing in cable repair, fire protection and lifetime extension of electrical cables Our systems are available for application worldwide with specially trained personnel.

We confirm Fire Security Middle East have conducted intrusive repairs and cable coating with FS5 on cables in PE1 and PE2 Plants

Warranty Period – Five years from Date of Issue The application has been done in accordance with tendered documentation and your RFT Number: 640000684

> Work completed March 2022 Certificate valid until March 2027



Jim Sollesvik Technical Department

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Leif Harald Tveitnes Technical Director



## Certified Sustainable Cable Maintenance

FS offer certified sustainable solutions to extend cable life and avoid electrical fire, using non-toxic materials.

Save Lives / Save Costs / Save The Environment

Our products have been approved by leading classification societies and authorities including U.S. COAST GUARD, IMO MED D & IMO MED B, Lloyd's Register, Achilles, Bureau Veritas, DNV, RINA, NMA, ABS, FM and UL





## Global headquarters

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