|  |  |  |
| --- | --- | --- |
|  | | |
| PRELIMINARY  H&M Survey Report | |
| MV “VESSEL NAME” | |
| **INSERT PICTURE OF VESSEL / DAMAGE** | |
| **Occurrence:**  **Date/year - Fire in the engine room** | **NHC Claim Reference: xxxxxx/20xx/H&M** |
| **Our Reference.: xxxxxxxxx** |

**contents**

1 INTRODUCTION / SCOPE OF WORK 3

2 Occurrence 3

3 Attending representatives 3

4 Vessel´s particulars 3

5 VESSEL’S MOVEMENTS 4

6 AVAILABLE INFORMATION 4

7 BRIEF TECHNICAL DESCRIPTION 4

8 BACKGROUND 5

9 DAMAGE DESCRIPTION 6

10 REPAIRS 6

11 OTHER MATTERS OF RELEVANCE 7

12 Cause CONSIDERATION 7

13 REPAIR COST AND TIME 7

# 

# INTRODUCTION / SCOPE OF WORK

At the request of Norwegian Hull Club Bergen, Norway, being the Leading Hull & Machinery Underwriters of the above-mentioned vessel, the undersigned has on [*date, month, year*] and subsequent days surveyed [*Vessel Name*] whilst lying at the premises of [Name, Place].

# Occurrence

Survey was held in order to ascertain the nature and extent of damage sustained on the following occasion:

|  |  |
| --- | --- |
| **Occurrence No. 1** |  |
|  |  |
| **Date, month, year** | **On laden (*or ballast*) voyage from *Port A* to Port B.**  **Fire in the engine room.** |

# Attending representatives

The following persons were present during the survey / meetings:

|  |  |  |
| --- | --- | --- |
| ***Name*** | ***Company*** | ***Function*** |
| Name | Company | Vessel Manager / Superintendent |
| Name | Company | Chief Engineer |
| Name | Class | Class surveyor |
| Further name(s) | Further companies | Further |

# Vessel´s particulars

|  |  |  |
| --- | --- | --- |
| IMO Number | : | 123456 |
| Type | : | Ro-ro vessel |
| GT / DWT | : | xx.xxx / xx.xxx |
| Flag / Home port | : | Name / Port |
| Built | : | Shipyard / Country / Year |
| Owners | : | Name |
| Managers | : | Name |
| Class / Notation | : | DNV / 1A1 ICE-C SF COMF-V(3)C(3) |
|  |  |  |
| Certificates |  | All certificates valid at time of occurrence |
| DOC details | : | Not seen yet |
| ISM SMC details | : | Not seen yet |
| Casualty ISM reported? | : | Not yet |
| Prior related ISM reports? | : | Not seen yet |

# VESSEL’S MOVEMENTS & events

|  |  |
| --- | --- |
| ***Event*** | ***Date*** |
| Fire occurred. | Date, Year |
| Fire extinguished. | Date, Year |
| Vessel arrived at *Arriving Port*. | Date, Year |

# AVAILABLE INFORMATION

|  |  |
| --- | --- |
| ***Document*** | ***Enclosed / Available*** |
| *General Information:* |  |
| Ship particulars | Enclosed |
|  |  |
| *Logbooks:* |  |
| Copy of bridge logbook | Relevant pages enclosed |
| Copy of engine logbook | Relevant pages enclosed |
|  |  |
| *Incident reports:* |  |
| Master’s initial report | Enclosed |
|  |  |
| *Repair planning and execution of repairs:* |  |
| GA-Plan | PDF-file enclosed |
|  |  |

# BRIEF TECHNICAL DESCRIPTION

The vessel is a Ro-Ro ferry of xx xxx gross tons, built in 1985. The two main engines are of make MAN B&W, type 8L45GB, two stroke diesel engines with 8 cylinders in line, rated to   
16 965 bhp. Each cylinder has a separate fuel pump. The engines are normally running on heavy fuel oil.

Hi-Fog water mist extinguishing system is fitted in the engine room and in the machinery spaces.

# BACKGROUND

On the above date, at 15:34:30 hrs, whilst the vessel was approaching the entrance to   
[*Arrival Port*], the fire alarm was activated in the engine room. Concurrently an oil squirt from the top of the No. 1 main engine was observed on the video monitor in the engine control room. Reportedly, the oil splashed into the ceiling plates of the deck above.

Within the next 50 seconds the following sequence of events has been reported:

* 15:34:40 hrs. The bridge was contacted, and the No. 1 main engine was requested to be stopped.
* 15:34:45 hrs. Two engineers entered the engine room. They discovered a fire was starting and tried to extinguish with local fire extinguishers.
* 15:34:51 hrs. The No. 1 main engine was stopped.
* 15:34:55 hrs. The 2nd engineer arrived in the engine room but was met by an explosive fire development.
* Bridge was notified that a fire was at stake.
* 15:35:10 hrs. The fixed Hi-Fog fire extinguishing plant for No. 1 main engine was released from a panel in the engine control room.
* 15:35:30 hrs. No. 3 fire team (engine room team) commenced dressing up. Chief Engineer arrived in the engine control room.

At 15:38 hrs, the fuel to the No. 1 main engine was shut off by activating the quick closing valves.

Three fire teams, including one cooling team were now ready and the engine room team entered into the engine room and reported that the fire had been extinguished. Further checking was carried out to confirm that the fire would not re-ignite before the engine room was eventually ventilated.

In the meantime, the Owners had been informed at 15:46 hrs. and the No. 2 main engine had been stopped at 15:50 hrs. after the anchor had been dropped.

After thorough checking of the fire area it was decided that the vessel could sail to port by using the No. 2 main engine and she resumed her voyage towards [*Arrival Port*], where she arrived at 17:30 hrs.

# DAMAGE DESCRIPTION

Upon survey at [*Arrival Port*] we noted damages as follows:

* The No. 1 main engine and the adjacent areas, including equipment in way, were covered with a layer of fuel oil.
* The ceiling and bulkhead structures adjacent to No. 1 main engine, including pipes, cables, the engine room crane above No. 1 main engine, lighting armatures, fire detectors, video surveillance cameras, electric equipment, etc. were covered with soot and affected by heat.
* Water leaks were noted from cooling water piping on the engine.
* The instrumentation on the No. 1 main engine was affected by heat, involving sensors, wiring, and control/monitoring system.
* Electric cables in the area around No. 1 main engine were variously heat- and smoke affected.

|  |
| --- |
| **Insert relevant photo** |
| Photo 1: [*Text*] |

|  |  |
| --- | --- |
| **Insert relevant photo** | **Insert relevant photo** |
| Photo 2: [*Text*] | Photo 3: [*Text*] |

# REPAIRS

The permanent repairs will include as follows:

* Chloride measurements to determine the extent and spread of acid chlorides.
* Cleaning for oil and soot.
* Renewal of more than 1500 m electric cables of various sizes.
* Dismounting, cleaning and control of all affected piping, valves, pumps etc. fitted to the engine.
* Internal inspection of the main engine.
* Check of both turbochargers of No. 1 and 2 main engines.
* Renewal of the automation system fitted to the engine (sensors, wiring, control- and monitoring system).
* Checking of the engine telegraphs systems.
* Cleaning and overhaul/renewal as necessary of various electric and mechanical equipment/components.
* Testing as per makers’ and Class’ recommendation.

# OTHER MATTERS OF RELEVANCE

The Owners, in co-operation with the H&M Underwriters have started to prepare a repair specification and are investigating regarding yards and/or workshops that may quote for the repair job.

# Cause CONSIDERATION

At this early stage in the process, it is difficult to draw unambiguous conclusions about the cause of damage. However, preliminary investigation indicates that the fire may be related to a sudden oil leak from No. 1 main engine.

We will revert with further information as soon as further investigation has been carried out.

# REPAIR COST AND TIME

A rough and very preliminary estimate of the repair cost is between USD 1,5 and 2 million and will require at least 45 days to be completed.

We will follow up the case as necessary and report accordingly.

Place, day, month, year

|  |
| --- |
| Yours faithfully |
| For *[Name of the survey company]*  *Signature*  H&M Surveyor  [*name of surveyor]*  *Please include your written name in addition to the signature* |