# Condition Survey Report- Barges- Liquid Cargo/ Tank

Score	0 / 205 (0%)	Flagged items	Actions	0			
Site conducted				Unanswered			
Condition survey							
Type of report:							
Barge name:							
IMO No.:							
Business Group							
Date survey completed							
Location- survey port							
Surveyor's name:							
Survey company:							
Surveyor's ref. no.:							
Order club:				American Club			
Club ref. no.:							

## **Disclaimer**

The assessors believe the information contained within this risk assessment report to be correct at the time of printing. The assessors do not accept responsibility for any consequences arising from the use of the information herein. The report is based on matters which were observed or came to the attention of the assessors during the day of the assessment and should not be relied upon as an exhaustive record of all possible risks or hazards that may exist or potential improvements that can be made.

Information on the latest workers compensation and OHS / WHS laws can be found at the relevant State WorkCover / WorkSafe Authority.

Inspection
1.1 PARTICULARS
1.1.1 Barge name:
1.1.2 Ex. names:
1.1.3 IMO No:
1.1.4 Flag state:
1.1.5 Builder:
1.1.6 Year built:
1.1.7 Class society:
1.1.8 Class notations:
1.1.9 Ship type & brief description:
1.1.10 GT:
1.1.11 DWT:
1.1.12 Last docking:
1.1.13 Last Class Renewal:
1.1.14 Date of last Special Survey (if applicable):
1.1.15 Place (port, country) of last Special Survey
CREW MATRIX
Crew list
Add rank
2. CIRCUMSTANCES OF SURVEY
Describe in brief the circumstances under which the survey was carried out, such as, but not limited to, the date and the time the for the Club
* Not Applicable (NA) items and Not Inspected (NI) items (giving details of item number)

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Details

2.1 Trading pattern:
2.2 Cargo onboard and last three cargoes
2.3 Master's name:
2.4 Company name on the ISM DOC:
2.5 Name of owner's representative:
2.6 Time under present management
2.7 Ballast tanks inspected (representative number of tanks to be inspected)*:
If no, state reason tanks not inspected and include your comments - whether the copies of reports and photos of previous most recent inspection of the tanks carried out by crew or Class / Vetting surveyors /or ESP records were provided to surveyor for review and what were the observations / condition of the tanks based on those evidence?
2.8 Cargo tanks inspected (representative number of tanks to be inspected)*:
If no, state reason tanks not inspected and include your comments - whether the copies of reports and photos of previous most recent inspection of the tanks carried out by crew or Class / Vetting surveyors /or ESP records were provided to surveyor for review and what were the observations / condition of the tanks based on those evidence? The surveyor shall provide comments on condition of the cargo tanks.  *The representative number of tanks are to be inspected every 6 months as typical for SIRE Inspections or at intervals specified in SMS.

3.1 Survey summary 0 / 55 (0%)

Following the completion of the survey, and based on the surveyor's overall impression of the vessel, the surveyor is requested to rate the following areas (1=excellent 2=good 3=fair 4=poor 5=very poor) and provide remarks if rated Fair, Poor or Very Poor on the reason/s why

Shipboard management:	
Safety:	
Fire safety:	
Life saving appliances:	

Pollution and environmental awareness:	
Navigation:	
Apparent structural condition:	
Machinery:	
Cargo worthiness:	
Shipboard Security and Cyber Security	
Maintenance and housekeeping:	
* If performing a hatch cover only survey, or "Follow-up survey", please complete this see only for those areas that were inspected, but other items are to be marked "N/A".	ction 3.1
3.2 Surveyor's summary	
Advise on the subject(s) which give rise to the most concern regarding safety of creor cargo:	w, vessel
Surveyor's general comments and summary	
Survey report enclosures- please upload survey images including pictures of relevandocuments.	nt
4.1 Class and Statutory Certificates	0 / 3 (0%)
4.1.1 Are the relevant class and statutory certificates valid?	
4.1.2 Are certificates without any conditions, recommendations, exemptions or memoranda affecting safety of life, ship, cargo or environment? Attach a copy of the current Class Status Survey, SMC and DOC (if applicable).	
4.1.3 Are the latest UTG results available?	
Additional information	
4.2 Shipboard management (Section to be completed taking into consideration time under present management)	0 / 14 (0%)
4.2.1 Is a Planned Maintenance System implemented and kept up to date?	
4.2.2 Are there contingency plans onboard to deal with	

- 4.2.3 Is there a stability manual available and are all relevant personnel familiar with the limitations imposed by it?
- 4.2.4 Are stability records maintained by responsible person?
- 4.2.5 Is the Planned Maintenance System (PMS) ship specific and is it implemented and kept up to date? Does it cover machinery, deck equipment, lifting equipment, navigation equipment, critical equipment, critical spares, etc., without overdue maintenance jobs?
- 4.2.6 Is a Cargo Securing Manual or Cargo Loading Manual available onboard?
- 4.2.7 Are accidents or incident reports raised and handled in a satisfactory manner?
- 4.2.8 Are suitable diagrams available for all piping systems onboard?
- 4.2.9 Are relevant cargo carriage guidelines/regulations available onboard?
- **4.2.10** Are procedures in place for handling dangerous goods?
- 4.2.11 Are fire control plans posted, properly maintained and also available externally together with current crew list?
- 4.2.12 Are the DPA, CSO, and IT emergency contact details posted in the common areas and known by crew and officers on board? Are Crew Members familiar with function of DPA and know his Name + email / telephone number?
- 4.2.12-(a) Provide contact details (Name, Title, Tel, email) of Designated Person Ashore (DPA).
- 4.2.13 Has the vessel been visited by ship's shore superintendent regularly, at intervals not exceeding 6 to 12 months? Provide date of last two visits of technical superintendents and marine superintendent.
- 4.2.14 Are Deck logbook, cargo logs, and other logs records adequate?

#### **Additional information**

4.3 Safe Working 0 / 20 (0%)

4.3.1 As observed, are safe working practices, including enclosed space entry followed onboard?

- 4.3.2 Are portable oxygen and gas detection meters, appropriate to the vessel type, provided and regularly calibrated?
- 4.3.3 Are relevant personal protective equipment and clothing provided and in use?
- 4.3.4 Is there a suitable safe means of access to the barge?
- 4.3.5 Are there suitable guard rails provided and in use?
- 4.3.6 Are "No Smoking" areas clearly marked, and were these regulations observed during visit?
- 4.3.7 Is CO2 installation, if fitted, protected against unauthorized release?
- 4.3.8 Are emergency procedures in place and available/displayed onboard?
- 4.3.9 Are the following Loss Prevention publications present onboard; Four (4) comic pamphlets and six (6) "Man Overboard!" comic safety posters?
- 4.3.10 Are familiarization records available (new joiners) filled out and complete? Are new joiners familiarized within ISM stipulated time frame of joining (typically 48 hours)?
- 4.3.11 Can ship's Officers demonstrate their knowledge on the procedural requirements for enclosed space entry based on their safety management system and calibration / checking of portable gas detection equipment?
- 4.3.12 Can ship's Officers demonstrate their knowledge on the procedural actions when a fire alarm is triggered?
- 4.3.13 Can ship's Officers demonstrate their knowledge on a randomly selected operational check list? This should be briefly described by officers as is applicable to the SMS on board. Please list rank of examined personnel.
- 4.3.14 Can ship's Officers and crewmember demonstrate their knowledge on the permit to work system and the procedural requirements for working aloft based on their safety management system? Are hot work permits and working aloft records kept?

Note: Work permit system compliance include Work permits covering Cold Work Permits, Work Aloft / Overside, Enclosed Space Entry permit, Pressurized systems, Electrical Work Permits, and JHA (Job Hazard Assessment, if applicable for mooring /unmooring) as well as Risk Assessment for high risk operations such as STS etc. Hot work policy on tankers required the shore management office to be informed by email and when authorization is granted only then the vessel may

proceed, with the work.

4.3.15 Is Risk Assessment undertaken onboard for various operational situations or crew assignments? Are relevant records kept and in order?

4.3.16 Is clearly visible cautionary signage posted / displayed at the entrances to mooring decks, including midships winches to warn those involved in mooring operations that the entire area should be considered a potentially hazardous snap-back zone?

Note for surveyor: Owing to the design of mooring decks, the entire area should be considered a potential snap-back zone and all crew working in mooring operations should be made aware of this by clear visible signage. The painting of localized snap-back zones on mooring decks should be avoided because they may give a false sense of security at these entire zones of potential danger.

- 4.3.17 Are trips, falls and overhead hazards identified and highlighted appropriately? Are the mooring work-areas non-slip and orderly?
- 4.3.18 Are emergency response drills carried out frequently on board in accordance with SMS, and the records maintained, including drill matrix and detailed log for each drill with comments, evaluation of performance and conducted scenarios? Can crew /officers explain- their last drill scenario and what they learned?
- 4.3.19 Is there evidence that safety meetings and/or pre-mooring toolbox talks or Job Hazardous Assessment / Analysis (JHA) are carried out prior to each mooring / unmooring operation?

Note for surveyor: Evidence may be documented by Risk Assessment carried out on board prior to arrival / departure at port, JHA document, Log book entry, where it will state that mooring and approach procedure was discussed, or a Pre-arrival check list where moorings are checked / evaluated on a case by case scenario and in accordance with specific mooring operations, including but not limited to mooring by side, by stern, or SBM, or STS static (one vessel anchored), or during slow-speed sailing, double banking mooring, etc.

4.3.20 Are there training records and evidence that suitable training for mooring / unmooring operations is incorporated into training matrix based on vessel's type and applicable specific mooring operations?

## **Additional information**

4.4 Hygienic Standard and House Keeping

0 / 4 (0%)

4.4.1 If fitted, are crew galley and pantries clean and tidy? Is fitted equipment in apparent satisfactory condition? Are

# suitable food handling procedures in place?

- 4.4.2 If fitted, are provision and cold stores clean, tidy and maintained to correct temperature?
- 4.4.3 Is the general house-keeping standard of the accommodation, including sanitation, clean and habitable and well lit? Is ventilation, heating and air conditioning adequate? Is AC for accommodation in re-circulation mode avoiding sucking outside air which would have flammable vapors?
- 4.4.4 Are first aid kits available at key locations and expiry date is valid (not to be expired)?

#### **Additional information**

4.5 Fire Safety

0 / 9 (0%)

- 4.5.1 Are fire extinguishers of approved type, properly stowed, regularly serviced and sufficient in numbers?
- 4.5.2 Are oxygen and acetylene bottles fitted with flashback arrestors and stored in well ventilated designated places?
- 4.5.3 Are suitable means of isolating machinery spaces available and in apparent suitable condition?
- 4.5.4 Is the fire detection system in satisfactory condition?
- 4.5.5 Are combustible and hazardous materials stored in designated spaces and provided with Material Safety Data Sheets?
- 4.5.6 Are main and emergency exits unobstructed?
- 4.5.7 Is the fire integrity, including fire doors, fire dampers and shutters throughout the vessel in apparent satisfactory condition?
- 4.5.8 Are the machinery rooms and other spaces free from temporary flexible hoses for liquid's transfer?
- 4.5.9 Are all flexible pipes, hoses and hose assembly installed as designed by original manufacturer only when necessary to accommodate relative movement between fixed piping and machinery parts, and shorter than 1.5 meters, free of sharp bends and not over-twisted?

#### **Additional information**

- 4.6.1 Are lifebuoys of approved type, properly stowed and sufficient in numbers?
- 4.6.2 Are life vests of approved type, properly stowed and sufficient in numbers?
- 4.6.3 Are life rafts and hydrostatic releases properly secured / fitted and in apparent satisfactory condition?
- 4.6.4 Are immersion suits of approved type, properly stowed and sufficient in numbers?
- 4.6.5 Are sufficient first aid boxes / medical stores available onboard?
- 4.6.6 Are signs for safety equipment in place marked with IMO symbols and instructions written in the working language of the vessel?
- 4.6.7 Are the machinery rooms and other spaces free from temporary flexible hoses for liquid's transfer?
- 4.6.8 Are all flexible pipes, hoses and hose assembly installed as designed by original manufacturer only when necessary to accommodate relative movement between fixed piping and machinery parts, and shorter than 1.5 meters, free of sharp bends and not over-twisted?

## **Additional information**

4.7 Pollution Control

0 / 10 (0%)

- 4.7.1 Are there suitable means available for containing any spillage on deck?
- 4.7.2 If save-alls are fitted, are these in apparent satisfactory condition?
- 4.7.3 Is oil spill clean-up equipment available onboard?
- 4.7.4 Is there suitable means for storing and segregating waste onboard?
- 4.7.5 Is the barge apparently free from any hull, bulkhead, valve or pipeline leakage, including hydraulic lines, liable to cause pollution or affect safe operations?
- 4.7.6 Are there procedures in place for transferring bunkers, oil or contaminated bilges?

4.7.7 Are measures in place to prevent overboard release of oil, sludge or sewage? 4.7.8 Is the Oil Record Book Part I properly filled out and up to date? 4.7.9 Is the Garbage Record Book up to date? 4.7.10 Are bunkering / oil transfer procedures in place, and if observed, adhered to? Is the bunkering gauging system operational? (if fitted / applicable) **Additional information** 4.8 Hull and Deck 0 / 13 (0%) 4.8.1 Is the visible condition of the external shell plating apparently satisfactory? 4.8.2 Is the visible condition of the weather deck apparently satisfactory? 4.8.3.(a) Is the condition of the superstructure apparently satisfactory? 4.8.3.(b) If sighted does the thickness gauging report show areas with steel diminution all below 20%? 4.8.3.(c) If available – provide date of the last UT thickness measurement report and the average (percentage) diminution of shell, deck, bottom and hold/tank bulkhead plating thickness. 4.8.4 Is the condition of the coatings apparently satisfactory? 4.8.5 Are all hull markings clearly legible? 4.8.6 Are boarding ladders, gangways, accommodation ladders and platforms in apparent satisfactory condition? 4.8.7 Are towing points, bollards, fairleads, windlasses, capstans, tow bridle, mooring ropes and wires in apparent satisfactory condition? 4.8.8 Are anchors and visible sections of anchor chain in apparent satisfactory condition? 4.8.9 Are weathertight/watertight doors and hatches fully

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operational and providing effective sealing?

- 4.8.10 Are vents and air/sounding pipes on deck in satisfactory condition with efficient closing devices and clearly marked with the compartment they serve?
- 4.8.11 Is there sufficient lighting fitted and operational including navigation lights and signals? Are navigation shapes readily available?
- 4.8.12 Are derricks, cranes and other lifting equipment properly maintained/marked? Has periodical inspections and testing been carried out? Are crane wires and sheaves in apparent satisfactory condition, regularly inspected by crew with relevant records kept?

### **Additional information**

4.9 Ballast Tanks and Void Spaces

0 / 10 (0%)

- 4.9.1 Are manhole covers in apparent satisfactory condition?
- 4.9.2 Is the means of access and internal access ladders apparently free from significant wastage, pitting and scale?
- 4.9.3 Are the internal bulkheads, frames, stringers, brackets and stiffeners apparently free from structural damage?
- 4.9.4 Is the internal plating and structure apparently free from significant wastage, pitting and scale, including bottom plating and protective striker plate(s) under sounding pipe(s)?
- 4.9.5 Is the internal coating in apparently satisfactory condition?
- 4.9.6 Are anodes fitted and in apparent satisfactory condition?
- 4.9.7 Are the inspected tanks / void spaces free from any sign of oil contamination?
- 4.9.8 Is pipework passing through tanks / void spaces in apparent satisfactory condition?
- 4.9.9 Does the crew conduct ballast tank inspections in accordance with SMS and, if so, at what frequency? Are condition reports maintained onboard and sent to the ship's management office or logged in PMS?
- 4.9.10 Do the Class records indicate that water ballast tanks and / or voids require re-inspection at annual survey?

### **Additional information**

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4.10.16 Are reefer power sockets in satisfactory condition?

4.10.17 Does there appear to be sufficient spare parts? Are

the spares properly stored and secured?

# 4.10.18 Is machinery guarded where appropriate (including coupling guards)?

# 4.10.19 Are Engine Logbook records adequate? (if applicable)

#### **Additional information**

Part C: 5. Survey Questionnaire - Barges Liquid Cargo

0 / 39 (0%)

5.1.1 Are cargo tanks suitable for the carriage of nominated cargoes? Is tank coating in apparent satisfactory condition and free from defects which could impair cargo worthiness? (Not applicable for dedicated crude oil carriers, as the tank walls get coated with wax from crude oil)

Note: If the COTs are pressurized or cargo operations are in progress, which is usually the case (except DD) the surveyor should determine condition of COTs / Ballast Tanks by checking Executive Summary, notations, if any on SS Report issued by Class (as COTs are checked during SS, and if there is no mention, that would mean that the COTs and Ballast Tanks are in acceptable condition). Tanks of 15 years or more of age have CAP rating and the surveyor can determine condition of COTs / Ballast Tanks from the CAP report. The Oil Majors require CAP rating and the SIRE inspectors always check it. The vessel's SMS may specify period of inspection of the COT / WBT by crew and those reports shall be available for surveyor as well. This approach would avoid the surveyor simply mentioning that COTs could not be examined as access was restricted.

- 5.1.2 Is the structure in cargo tanks apparently free from significant corrosion, pitting, scaling, buckling, dents, fractures, wastage, doublers, temporary repairs etc.?
- 5.1.3 Is the plating under suction bell mouths in apparent satisfactory condition?
- 5.1.4 Are cargo pumps, ballast pumps and stripping arrangements (stripping pumps and/or eductors) fully operational, including associated monitoring alarms, instrumentation, and controls? Is there a fixed pumping arrangement available on main deck near the aftermost scupper to drain rainwater or spilled cargo on deck, into slop or retention tank? Is the fixed pumping arrangement available for immediate use?
- Note 1:- The Surveyor should ask an officer to operate the air-driven or hydraulically driven pump)
- Note 2: Tankers are also equipped with dump valves, which cannot be operated if the Slop tank is not de-pressurized, in view that during testing there is no liquid above the dump valve.
- 5.1.5 Are cargo pump emergency stops properly located and regularly tested?
- 5.1.6 Is the condition of pipe work in tanks or passing through in apparent satisfactory condition? Dates of last testing by shore and by crew.

5.1.7 Are deck cargo piping and vapor lines clearly marked and are in apparent satisfactory condition? Are relevant lines lagged effectively? Have the deck cargo lines been pressure tested and marked with date of pressure test? Are P/V (Pressure/Vacuum) valves and / or vapor return lines fitted, operational and in apparent satisfactory condition? Are the P/V valves regularly tested and are all flame screens apparently intact and free from debris? Date last test P/V valves? (Including IG)

Note: Vapor lines and P/V (Pressure / Vacuum) breakers are to be tested annually. Usually the companies provide instrument and the C/O tests the PV Breakers on the ship itself, rather than to have a workshop come in for testing (which is unnecessary and expensive). During annual survey of IOPP, the class surveyor would randomly check the PV valves, but not all. Cargo lines are tested prior cargo operations. This is not a regulation as such but the SIRE inspector recommends and they place notation on SIRE report. Oil Majors are usually careful and just have their additional precautions. Otherwise, regulations require 1 yearly pressure testing of cargo lines / bunker lines.

- 5.1.8 Are reducers, removable U-bends and cargo hoses in apparent satisfactory condition?
- 5.1.9 Are spill trays and save-alls at cargo-manifold in apparent satisfactory condition and free from cargo? Is drainage arrangements in good condition and where does the oil drain into?
- 5.1.10 Is portable testing equipment provided as required and are records kept of recent calibration?
- 5.1.11 Are all electrical appliances suitable for use in hazardous areas?
- 5.1.12 Are pumps and shaft bearings in apparent satisfactory condition and free from leaks?
- 5.1.13 Is pump control area clean, tidy and free from cargo?
- 5.1.14 Is pump control area suitably ventilated? Are pumproom rounds routinely taken and logged? Are temperatures for the bearing monitored-records being reviewed and logged by crew?
- 5.1.15 Is the cargo heating system apparently fully operational and well maintained? Are the heating pipe lines and coils successfully pressure-tested every 6 months and reportedly free of leaks and relevant records maintained onboard?
- 5.1.16 Are manifolds fitted with drain lines and purge points with valve and cap?
- 5.1.17 Has a SIRE and / or CDI vetting inspection been carried

## out recently?

- 5.1.18 Are safe pump room procedures identified and complied with? Is the emergency communication between pump room and cargo control room in working condition?
- 5.1.19 If fitted, is inert gas system (IGS) fully operational and in apparent satisfactory condition, including instrumentation, alarms, trips, and pressure and oxygen recorder apparently operational and calibration records maintained? Is the crew aware of the IG sampling point? Is IG oxygen analyzer calibrated prior to cargo operations? Is IG sample tested for oxygen level at break of accommodation and is in conformity with oxygen level remote gauge in cargo control room? Is this logged?
- 5.1.20 Have all cargo hoses, reducers and couplings been pressure tested recently and marked with date?
- 5.1.21 Are fans, scrubber, deck seals, PV breakers and non-return valves in apparent satisfactory condition? When were these equipment last inspected / tested? When was deck seal internally examined?

#### **Additional information**

- 5.2.1 Is the tank cleaning system in apparent satisfactory condition and fully operational?
- 5.2.2 Are suitable procedures and plans provided and followed for tank cleaning?

## **Additional information**

- 5.3.1 Are closing devices, associated gaskets and securing arrangements on the freeboard deck in apparent satisfactory condition?
- 5.3.2 Are vapor locks fitted, calibrated and operational?
- 5.3.3 Are air locks, if applicable, operational and in apparent satisfactory condition?

## Additional information

- 5.4.1 Are cargo monitoring indicators, controls and panels in apparent satisfactory condition?
- 5.4.2 Are records kept of cargo operations?
- 5.4.3 Is the tank gauging system, including temperature reading if fitted, apparently operational and cross checked

with manual readings and regularly tested? Are ullage gauges, vapor locks and UTI tapes in apparent good order? Are UTI Tapes routinely tested / calibrated ashore and testing procedure followed?

- 5.4.4 Are procedures in place for regular gas detection and monitoring?
- 5.4.5 Are safety guidelines regarding static hazards in place and strictly adhered to?
- 5.4.6 Is oil discharge monitoring equipment fitted and apparently operational?
- 5.4.7 Are suitable arrangements in place for cargo sampling?
- 5.4.8 Is suitable cargo information available?
- 5.4.9 Are plans / procedures in place for loading and discharging of cargo?
- 5.4.10 Are there procedures in place for barge / shore information exchange including emergency shutdown procedures?

**Additional information** 

- 5.5.1 Relevant cargo high level alarms
- 5.5.2 Remote cargo pump stops and shutdowns
- 5.5.3 Decontamination showers and eye baths on deck (operational under all ambient weather conditions?)

# **Additional information**

Signatures 0 / 1 (0%)

Master's signature: (For receipt only)

Surveyor's signature

Are you done inspecting and reporting, and the report is considered to be completed? (email will be sent to the Club if report is completed)