

IDWAL



DESKTOP ANALYSIS
REPORT

EXAMPLE VESSEL

IMO Number: 1234567
16th December 2019



PREAMBLE

The data used for this analysis is from publicly available sources, paid-subscription services and reports provided by the client. The final evaluation should be used for guidance only. Confirmation of first-hand data, facts and condition should always be supported by inspecting at least a sample of vessels in each class, plus any sister ships that give any concern.

This desktop report is intended for the sole use of the recipient and its purpose is to offer a remote evaluation of the asset(s), inclusive of several assumptions, and has been issued prior to the conclusions of any physical inspections having been considered. The results are objectively determined, and the depth of the findings is in all respects limited to the quantity and quality of the dataset provided.

All details are given in good faith, and without guarantee.

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REFERENCES

1. Online Public Information
2. Subscription based Intelligence.
3. The Manager's inspection report of 11th January and 10th May 2019
4. Current Class Record Status Report
5. The Ship's General Arrangement and Capacity Plan.

SUMMARY

The Example Vessel is a 2008, Chinese-built, 11-years-old, 299,999 MT DWT double-hull VLCC. It appears built to a good standard by Example Shipbuilder. It has good continuity of management: no changes in Class (LR); of lesser impact three changes of Flag (Singapore-Marshall Islands- Liberia); two main changes of registered owners when sold from Example Shipowner to Example Client; and the managers changed twice, once in 2017 from Example Client's in-house management and previously in 2014 from Example Shipowner. The Example Client group is one of the largest independent crude oil tanker companies, with 71 vessels and operates them within the Example Pool LLC, from which it is a founding member. Included in Example Client's fleet are all 8 VLCC sisterships built by Example Shipbuilder.

Briefly the vessel is a conventionally built, double hull, with five sets of cargo tanks, three abreast designated COT (1-5) P, C, and S with an aft pump room. It benefits from only routine surveys due on the horizon, with the third special survey and dry-docking due by 2nd April 2023.

Two recent Manager's reports were supplied, one from technical and one from an ISM audit, thus offering a balanced view. Both reports were of a very good standard. From the high number of minor defects given compared to the sister ship analysed, one could conclude a worse condition, but this is on account that being a third-party manager, more information is given to keep Owners informed. From the data supplied, the ship appears in good cosmetic and operational condition but does require a back correction of deck maintenance that is not serious, but high in the quantity of work required, due to the sheer size of the ship. One area not photographed were the ballast tanks, but these can be assumed good, based on the recent special survey. The maintenance status of machinery, performance and condition monitoring results are reported good. Environmental and regulatory requirements shall have the biggest cost impacts: ballast water treatment system retrofit due in 2023 and the pending compliance requirements for next month's global Sulphur Cap.

In terms of incidents, there were none recorded on the subscription-based intelligence analysed.

Port state-control results are good considering the Equasis benchmark over three years, it shows 2 inspections and one

deficiency, (benchmark averaged for a tanker - 1 deficiency per inspection).

Crewing is quite conventional with Indians and Filipinos.

The Class status was analysed and showed only informative memos called asset notes by Lloyds register.

No financial OPEX data was submitted but it would be anticipated as operating close to a benchmark of 10,500 USD/day.

The vessel trades worldwide and at time of writing was going round South Africa.

PARTICULARS

Name	Example Vessel
IMO Number/Call sign	1234567 / A1D2C3
Vessel Type	VLCC
Age/built/Shipbuilder	11 years / 3rd April 2008/ Example Shipbuilder, China
Flag/ Class	Liberia / Class LR
Registered Owners/Managers /Charterer	Example Client/Example Manager/ Example Charterer
Survey Status	The last drydock was credited 15th February 2018 prior to second special survey completion on 3rd April 2018, with next docking allowed as in-water due 14th February 2021.
Crew	10 officers and 14 crew: Indian and Filipino.
Ballast Water Treatment System	As per Class asset notes appears not fitted
ECDIS	Dual ECDIS
Speed and Consumption (*)	Loaded 12.64 Knots at 91 MT/day Ballast 10.55 Knots at 45 MT/day
Dimensions	LOA - 332.93 m / Beam 58.11 m draft 22.3m
Tonnage	299,999 DWT / GRT - 159,911 / Lightship - 44,000 MT
Cargo Layout	5 sets of 3 abreast cargo tanks plus two slop tanks.
Machinery	Main Engine - Doosan Sulzer 7RT Flex 84T-D, 29,400 kW at 76 RPM. Auxiliary Engines - 3 x MAN B&W 6L28/32H, each 1200kw. Two Aalborg Mission D Boilers 55,000 kg/h steam capacity and one for normal use Aalborg AQ-2 at 2,000kg/h. There are no thrusters or shaft generators.

DESIGN AND CONDITION

The ship was constructed by Example Shipbuilder, one of the largest and best-known shipyards in China. The Yard has built a total 388 ships with an order book of another 47 ships. There are eight ships of the series considered, including two from this desktop analysis and the remainder all owned by the parent group, thus there is considerable in-house experience of this vessel-type. No outfitting list of equipment was supplied, other than that provided in the Manager's inspection report, which shows that the main equipment is from mainly global suppliers/licences.

The vessel is a traditional VLCC, double hull crude oil carrier. The cargo tanks are arranged three-abreast, numbered 1-5 P, C and S with two Slops tanks adjacent to the cargo pump-room. All tanks have steam heating coils and are coated only top and bottom, standard for a crude carrier. The cargo pumps are steam turbine driven and the piping system enables three separate grades of crude, each of the three Shinko pumps is rated at 5,500 m³/hour. There is a flue-gas inert gas system. No technical or operational issues were reported on any cargo system except for minor leakage on No2 Cargo Pump, likely rectified at time of writing.

The ballast tanks within the cargo area are shaped in an L-shaped configuration around the corresponding cargo tanks and are numbered 1 - 5 P&S. There is a Fore Peak and Aft Peak at each end of the vessel, and uniquely side ballast tanks in the engine room. All ballast tank and cargo tank coatings (upper and lower areas) were deemed good by Class at the last special survey, thus still reasonably valid. Since then, there are no first-hand superintendent records supplied, only crew reports to attest the condition of the ballast tanks are still good. Cargo tank condition is usually impossible to assess between drydockings.

The hull coating was found in good cosmetic condition. On deck, the superficial appearance is good, but on close examination, many past crew-remedial-maintenance activities have been carried out with ineffective surface preparation, with those areas having re-rusted through as one can see in the photos provided and the report details.

The vessel is propelled by a single main engine driving a single fixed pitch propeller. Three auxiliary engines provide the electrical power. No bowthruster is fitted. There is a

bulbous bow and flat transom stern to the design. There are two Aalborg Mission auxiliary water tube boilers for cargo operations (more than likely an economiser for sea use – not mentioned). The engine room looked in good condition and maintenance was reported up to date, although the reports lacked detail to compare main machinery maker's limits against actual running time. Also, from the photographs the lagging on pipelines was found needing part renewal.

Environmentally it is unclear the US VGP compliance status, and it is unknown if Environmentally acceptable oil has been used to achieve full US-trading compliance. There is no Inventory of Hazardous Materials (IHM) required for 2020 nor any Ballast Water Treatment System (BWT) fitted. BWT retrofit is due at next special survey and could possibly be required at time of writing by US authorities in absence of a successful extension to their rules in force at time of writing. Finally, there is no information on how the global sulphur cap shall be complied with (scrubber or compliant fuel).

The navigation and communications employ dual ECDIS is fitted. There is standard A1-A3 GMDSS coverage. No further details have been submitted but likely of good quality.

Lifesaving and fire-fighting arrangements would be of a typical and expected design. There are two conventional davit launched lifeboats. All equipment was reported in good condition but a repair required to the rescue boat's hydraulic accumulator.

The accommodation is of a good standard and was commented upon as being in fair condition requiring deep cleaning on the flooring and carpets.

CLASSIFICATION

The Vessel carries the following basic class notations clarified below when not self-explanatory:

+100A1 DOUBLE HULL OIL TANKER, ESP, SHIPRIGHT (FDA+, SDA, CM), SPM, *IWS, LI
+LMC, IGS, UMS

With descriptions PART HIGHER TENSILE STEEL, ETA, SHIPRIGHT, SERS, COW (LR), SHIPRIGHT SCM, SHIPRIGHT MPMS

Meanings (not self-explanatory):

100A1, LMC, UMS - Classification Character for a ship, the plans of which have been approved by the Society in accordance with the Rules, and which has been built under survey for classification of the Society's Surveyors. Applies respectively to the hull, Machinery and automation (periodically unmanned machinery space- UMS).

ESP - Enhanced survey program, standard for a tanker or bulk carrier.

CSR- Built to common structural rules for ESP vessels.

Shipright - Class LR specific rules: Construction monitoring (CM), Planned maintenance and condition monitoring for machinery (MPMS & SCM).

IWS - In water survey in lieu of intermediate drydocking.

COW - crude oil washing.

LI - approved loading instrument.

SBT - segregated ballast tanks.

IGS - Inert Gas System.

ETA - Emergency towing arrangements

SPM - Single Point Mooring.

There were no conditions of class or significant memos. The IOPP certificate has not been decoupled.

The last Special survey of 3rd April 2018 showed all cargo tanks (coated only top and bottom areas as normal for a crude oil tanker) and ballast tanks to be in good condition. No other adverse findings or concerns have been raised.

CAPEX/OPEX PROJECTIONS

Dry Dockings

The third drydocking and special survey would cost around 1.8 Million USD based upon Chinese yard prices to comply with also CAP requirements to enable effective ongoing commercial trading excluding BWT or Scrubber installation.

Ballast Water Treatment System (BWT) Retrofit

Not due for generic implementation until 2023 and would cost at today prices around 1.2 Million USD.

Intermediate drydocking

Nonmandatory until 17.5 years old.

ECDIS

Dual ECDIS fitted.

ECA Zone/Low Sulphur Fuel/Global 2020 Sulphur Cap










There is no clear picture on how compliance shall be achieved or what stage the preparations are at.

US EPA Vessel General Permit Compliance (VGP)The Stern tube is unclear if environmentally acceptable oil is used.

Projects/Upgrades

None reported.

RECOMMENDATIONS

Item	Action
 BWT system retrofit USCG approval status.	No data was supplied on the proposed action plan however generic compliance is not needed until 2023 but could be required sooner for US Approval if that trade is sought with estimated VLCC price coming in at \$1.2 million.
 With respect to the pending global sulphur-fuel cap of 2020 there is no information how this shall be achieved.	The method of compliance must be clarified, and the preparations carried out with respect to tank-cleaning for the non-compliant fuel.
 The Stern tube status with respect to US VGP (EAL) is unknown.	Managers should confirm if already carried out.
 The main deck and fittings have had in the past, ineffective crew remedial maintenance carried out resulting in re-rusting through and a high volume of spot maintenance to the deck and fittings now required.	Managers to confirm their action plan and specify clearly how they will carry out the deck maintenance and with what equipment.
 No inventory of Hazardous materials (IHM) was found.T	Required prior to December 2020 for EU port entry if required costing around \$10,000. The ship has already a Green passport but thus met earlier IHM standards that have been since then changed.
 The ballast tanks were not reported on but based on the age of the ship, they should be a low risk.	To inspect soonest.
 The company reports do not detail running hours since major overhauls for the main machinery.	The company should confirm exactly makers limits for all main and auxiliary engines along with time since overhauls.
 Managers technical findings worthy of note – the fireman condition.	Managers to confirm completed.
 Pilot rope ladder condition	Managers to confirm completed.