Survey Report Of
O. S. V. "JHW Amethyst"

Overview of JHW Amethyst

JHW Amethyst

- JHW Amethyst is all steel welded or constructed Offshore Supply Vessel, fitted with a single deck, a raised forecastle deck, racked stem and transom stern, accommodation or navigation spaces forward and machinery spaces with a clear deck space aft, built in 2009 by Boustead Naval Yard, Lumut, Malaysia.
- Main propulsion machinery is by twin Caterpillar 3606, 6 cylinders, in-line, turbocharged, diesel engines, developing a total of 5444HP at 1000rpm and geared to drive twin screw shafts end fitted with CP Propellers, housed in fixed kort nozzles.
- The Vessel is also fitted with an electric motor driven bow thrusters rated 699HP and giving an 8 tons thrust.

Vessel Specification

- The principal particulars of the vessel is tabulated below :

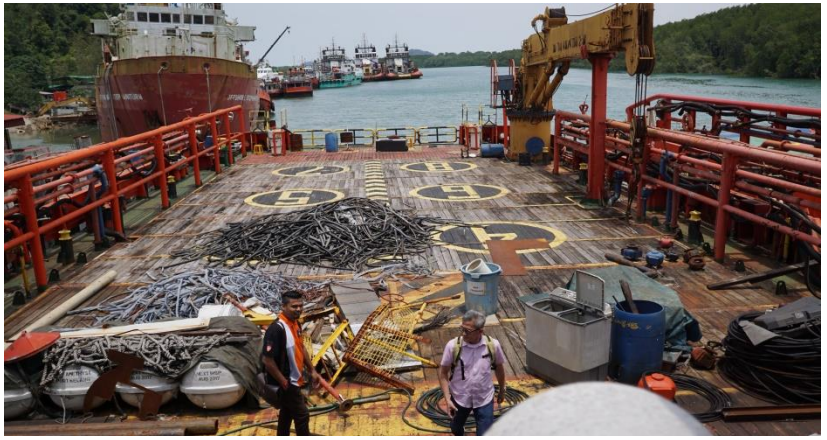
Particulars	Description
Type of vessel	Offshore Supply Vessel
Length (O.A)	60.50metres
Depth (Reg.)	5.75metres
Gross tonnage	1536T
Net tonnage	461T
Official no.	333909
Call sign	9MIC4
IMO	9528689
Built	2009, Boustead Penang Shipyard Sdn Bhd, Lumut,Malaysia
Main engines	Two (2) units of Caterpillar 3606, developing a total of 5444 HP at 1000rpm fitted with CP propellers
Generators	Three (3) units of Caterpillar 3412, each developing 400kw to drive Leroy Somer ARCB 594, A.C. alternators each rated at 415V x 50HV x 3 phase One (1) unit of Caterpillar 44 rated 85 kw to drive A.C. alternator rated 415V x 50 Hz x 3 phase (Emergency Generator) Two (2) units of Leroy Somer LSAM 501S4, each rated at 675 kw x 415V x 50Hz x 3 phase
Accommodation	60men
Capacities	Fuel Oil: 462 m3 Portable Water: 307m3 Ballast Water: 162 m3 Foam:10 m3 Sewage Holding: 9.9 m3 Dirty oil: 6.6 m3 Bilge: 6.6 m3 Mud: 86 m3 Acid: 98 m3 Clear Deck Space: 360 m3 design load 5t/m2

Overview of JHW Amethyst (Cont'd)

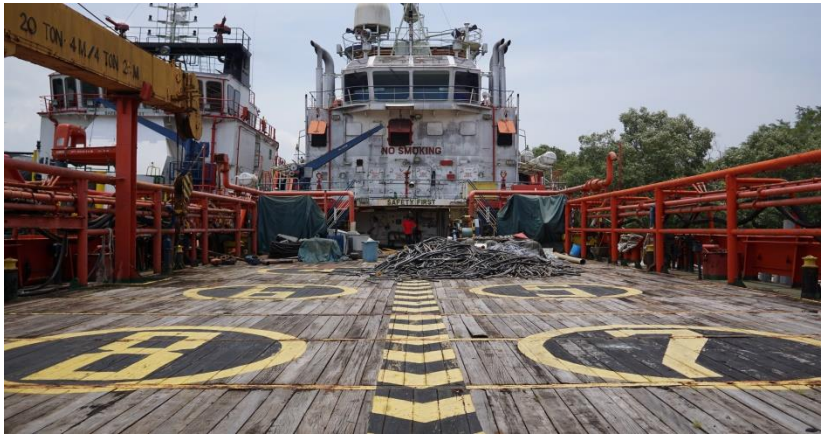
- Kindly refer to **Section 3** for the commentary on the current condition of the Vessel or Amethyst during our visitation period.
- We hereby enclose with the recent photographs of the Vessel below :

Vessel berthed alongside Asian Jetty, Kemaman, Malaysia

Portside Hull



General View of Deck



Forward View of Superstructure

Overview of JHW Amethyst (Cont'd)

- We hereby enclose with the recent photographs of the Vessel below : (Cont'd)

Mess Room

Recreation Room

Cold Room

2-men Cabin

Overview of JHW Amethyst (Cont'd)

- We hereby enclose with the recent photographs of the Vessel below : (Cont'd)

Aft Manoeuvring Console

GMDSS Radio Terminal

Chart Table and Navigational Aids

Forward Navigation Console and Navigational Aids

Overview of JHW Amethyst (Cont'd)

- We hereby enclose with the recent photographs of the Vessel below : (Cont'd)

Portside Main Engine

Diesel Generator

F.W Manifolds and Pumps

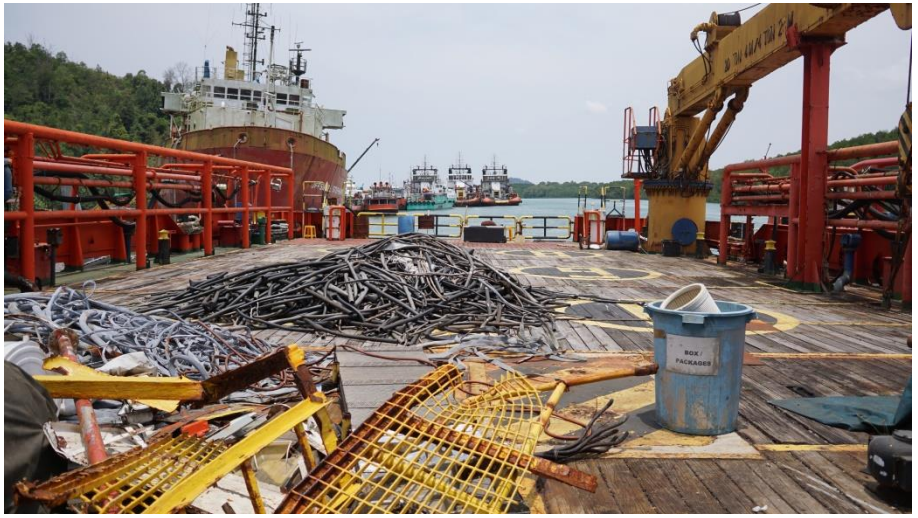
Sewage Treatment Plant

Engagement of Ship Manager

Feedback from SMSB

- We have engaged the ship management company, SMSB to safeguard and manage the Vessel throughout the period of tender sale.

Vessel Exterior



- The exterior of the Vessel is in a deteriorating condition due to lack of maintenance for a long period, however, the hull plating of the Vessel appeared to be free from major damages. The paintwork of the Vessel painting is fading and coating is filled with rusty patches.
- At the forward section of the main deck, several foreign items and piles of wire insulation were scattered and found on the main deck looking aft of the Vessel.
- In addition, the emergency rescue boats and life rafts were removed from forecastle deck and boat deck of the Vessel,

Condition Commentary of The Vessel

Vessel Interior

Main Engines & Engine Room

- From visual inspection, the two (2) main engines units (Caterpillar 3606) fitted with CP Propellers were noted to be intact and free from any major fuel or lube leakages.
- It was sighted that the chequered floor boards were loose due to attempts for removal of mechanical parts underneath.
- The engine control room (“E.C.R”) is in a messy condition with engine control consoles covered with dispersed documents and furniture.
- The ship control panel in the E.C.R was found damaged and it has to be repaired to become functional in order for the engineers to monitor the critical equipment to ensure the stability of the Vessel.

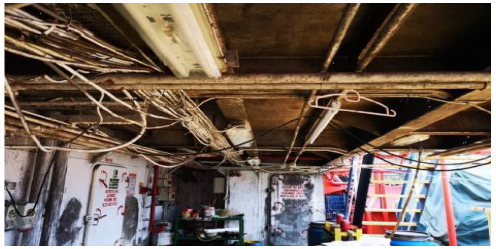
Generators

- There are three (3) units of main generators (Caterpillar 3412) to drive their respective alternators (Leroy Somer ARCB 594, A.C.). It was noted that there were missing key electrical components from the alternators.
- The is also one (1) unit of Caterpillar C44 and two (2) units of shaft alternators (Leroy Somer LSAM 501S4) which appeared to be out of service with panels opened and some parts removed from the alternators.
- The alternators need to be rewound and all missing electrical parts need to be reinstalled in order for the alternators to be in operational condition. The aforementioned problem must be rectified as the Vessel is required to generate electricity to power up the auxiliary machineries.

Condition Commentary of The Vessel (Cont'd)

Vessel Interior

Electric Cabling



- Resulting from our inspection of the engine room spaces, electrical cables were found missing, and panel covers were disassembled from the ship control panel. The electrical switchboards, distribution panels and their auxiliary installations were partially stripped and left on the ground.
- As such, cabling work must be fixed and certified by the surveyors society.

Fire Fighting Equipment – Fire Pumps

- In accordance to the Certified Fire Fighting requirements, the Vessel is fitted with fire fighting equipment, i.e. foam monitors, fire pumps and fire detective system and CO2 flooding system.
- There are two (2) units of water foam monitors powered by Fi- Fi fire pumps, two (2) units of GS/ fire pumps, one (1) unit of emergency fire pump, and one (1) set of thorn fire detection system.
- From visual examination, it was noted that the built in fire pumps are intact with no significant damage.

Condition Commentary of The Vessel (Cont'd)

Vessel Interior

Valve and Piping

- Three are three (3) units of hydraulic power pack and hydraulic oil coolers where electrical wirings and piping were found cut and damaged during our inspection.
- The hydraulic system must be fixed and replaced to enable the pressurized fluid to power the engines through hydraulic valves.

Moving Forward with JHW Amethyst

- Our commentary of the Vessel are based on the results of our visual inspection and survey only and does not constitute to any representations of facts.
- Most mechanical parts of the Vessel appeared intact and in satisfactory condition. However, the actual condition of the machinery of the Vessel could not be identified due to the engines and equipment could not be tested as there was no power on board.
- In accordance to the update from SMSB, the cosmetics of the Vessel is at a worsened condition where the rusted parts must be chipped and painted over again. Also, the manuals of the Vessel is found missing and to be replaced and provided with new manuals.
- Hence, the cost of refurbishment is generally unidentifiable, only until the electrical drawings to be found and further test run for the machineries is required to conclude an indicative cost of refurbishment.