Machinery Vibration Quick Look Report (T04)

Company:	ABC	**Class:**	ABS
Ship:	M/T SHIP 3	**Last Inspected:**	09 November 2014
Location:	PORT B	**Status:**	Anchorage
		Vessel Condition	
Machinery Load:	Normal Operation	*Sea State:-*	*Shaft RPM:-*
		Draft Fwd:-	*Draft Aft:-*

Date:13/11/2014

Machinery List	Findings	Recommendations	Rating
No 2 M/E Jacket Cooling	**Unbalance**	Inspect pump impeller. Check/ confirm rotors trueness. Motor balancing job should be examined based on results.	**UNACCEPTABLE**
No 2 M/E Aux Blower	Bearing **6212ZZC3** looseness in housing. Bearing **6212ZZC3** fault	Schedule bearing 6212ZZC3 condition and positioning inspection (check for cocked shaft bearing issue). Schedule bearing housing condition inspection. Schedule bearing replacement and housing repair if required.	**MARGINAL**
No 1 Fire & GS Pump	Pump **Cavitation**	Adjust discharge valve position until no gravel sound noise exists. Pump impeller is recommended to be inspected in case no improvement can be succeeded with valve adjustment.	**MARGINAL**
GS & Bilge Pump	Pump **Cavitation**	Adjust discharge valve position until no gravel sound noise exists. Pump impeller is recommended to be	**MARGINAL**

Notes:

Complete Machinery Condition Report which will be submitted within the following 3 days.

Unacceptable rating machine require actions as soon as possible**.** Machines rated unacceptable are normally considered to have a severe problem. Generally the machine should not operate until inspection or remedy action performed.

Marginal rating machine require actions to be schedule. Machines rated marginal are normally considered unsatisfactory for long-term continuous operation. Generally, the machine may be operated for a limited period in this condition until a suitable opportunity arises for remedial action.

Broadband (rms vibration energy power) and narrowband (spectrum, time waveform, demodulation and phase) analysis was performed. The following standards was used:

- ISO 10816-3 “Mechanical vibration — Evaluation of machine vibration by measurements on non-rotating parts — Part 3: Industrial machines with nominal power above 15 kW and nominal speeds between 120 r/min and 15 000 r/min when measured in situ
- ISO 10816-7 “Mechanical vibration — Evaluation of machine vibration by measurements on non-rotating parts —Part 7:Rotodynamic pumps for industrial applications, including measurements o
- ISO 10816-8 “ M chanical vib ation — Eval atio of ma hine vib ration y measurements on non-rotating part — art 8: Re iproca ing c mp essor s ystems”
- ANSI/ASA S2.28 2009 “Guide for the Measurement and Evaluation of B oadband Vibration of Surface Ship Aux