

Test Report on ProOne HFO Fuel Treatment (Heavy Fuel Oil Fuel Additive)

This test was conducted jointly by Yangzhou Fuel Additive Co, Ltd. and Yantai Sea Emergency and Salvage Bureau under Ministry of Transportation of China in “Milky Way Princess” Ferry for a period of one month. The following is a report on the test.

Main data of “Milky Way Princess” Ferry

Length: 133.74 m

Width: 20.5 m

Depth: 6.6 m

Tonnage: 8807 T

Type: Ferry for passengers and vehicles

Main engine power: 5200HPx2

Main engine R.Speed: 520 RPM

Engine Type: NIGATA 8PC2-5L

Line: Yantai – Dalian

Fuel Used: 1000 Second Fuel Oil (Bunker fuel for vessels)



Test Purpose

To seek fuel saving results of ProOne HFO Fuel Additive added into 1000 Second Bunker Fuel in “Milky Way Princess” Ferry.

Location

Sailing between Yantai and Dalian



Blend Ratio

1: 4000 for the whole process.

Test results

June 22- June 29	Weekly Fuel consumption 72.28 Tons
June 29- July 6	Weekly Fuel consumption 71.00 Tons
July 6- July 13	Weekly Fuel consumption 70.80 Tons
July 13- July 20	Weekly Fuel consumption 69.60 Tons

Based on the above figures, the **fuel savings rate is 3.7 %**

Data Analysis

After testing for 4 weeks running, we notice that fuel saving rate increases gradually with the increase of fuel test period. Due to running out of the additive; we had to stop the test temporarily. We, however, believe that the fuel saving rate would increase further if the test could continue. The Bureau hopes we will get more samples for further test. The next test is expected to begin in Mid September. The test will last for two months and consume at least 300 kilo of fuel additive. The success of this test will be vital to the market development in Bohai Bay area because the fuel consumption of vessels in this area is huge.

Scope of Preliminary Testing

Both Yangzhou Fuel Additive Co, Ltd. and Yantai Sea Emergency and Salvage Bureau have great expectation of the product supplied by ProOne Inc. We would like our supplier to adjust the fuel formula to focus on fuel savings that best suits the fuel conditions in China. We would like to know the particulars in fuel test operation such as timing, methods, and the scope of range of the products (e.g. used also in 15000-second fuel and the maximum percentage of fuel savings).

Conclusion

After one continuous month of ProOne HFO Treatment, the passenger ferry was found to be consuming 3.7% less fuel oil than on previous voyages, with all other operating parameters unchanged. Black smoke from the exhaust was visibly reduced and the engines were reported to be running more smoothly than normal.