

QKI Emulsion, Inc. (QTC:QKIE)
370 Lexington Ave
Suite 2001
New York, NY 10017
info@qkiemulsion.com

Company:	Al Maha Trading LLC
Address:	476P+7R4 - Al Hayl Industrial
ZIP code:	Fujairah
Country:	United Arab Emirates (UAE)

Date: 05-04-2023

Patient rights are now the property of QKI Emulsion

SUBJECT: AL MAHA TRADING PILOT PROJECT SUMMARY

REPORT:



For the execution of the project QK Innovation Ltd has delivered a blending Technology Machine QKE380 that produces superior results when blending liquid to liquid in a patented device as well as patented additive NanoQuantum 100.

QK Innovation Ltd Blending Machine is a patented technology using cavitation resonance and nanobubbles generating valve is a unique pressurizing centrifugal pump that entrains gas, and valves to generate nanobubbles and a liquid circulation system. An innovative emulsifier technology that has successfully overcome the problem of conventional emulsifiers by featuring unique capabilities and a higher level of emulsification.

The purpose of this pilot project was to test and demonstrate the performance of QK White Diesel Emulsion fuel on various engines and to demonstrate the cleaning effect that the Emulsion fuels have on the system. In parallel with performance testing, emulsion fuel stability tests will also be performed. In addition, we demonstrated the reduction in the amount of fossil fuels thus the impact on the environment in terms of CO2 reduction.

EQUIPMENT:

1. Sterling Generators

Model: SGN125PR
Engine: IB44.2-040
Output: 125 kVA
Year: 2013



2. Mitsubishi Canter/Fuso 3 t – Tanker

Reg. No. 33915
Engine Capacity 2998 cc
EURO IV
Year: 2009



3. Mitsubishi Canter/Fuso 3 t

Reg. No. 87216
Engine Capacity 2998 cc
EURO IV
Year: 2015



4. Nissan UD 7 t – Tanker

Reg. No. 89054
Engine Capacity 2998 cc
EURO IV
Year: 2009



DURATION:

The Pilot Project lasted from the 6th of March till the 29th of March 2023



PRODUCED EMULSION:

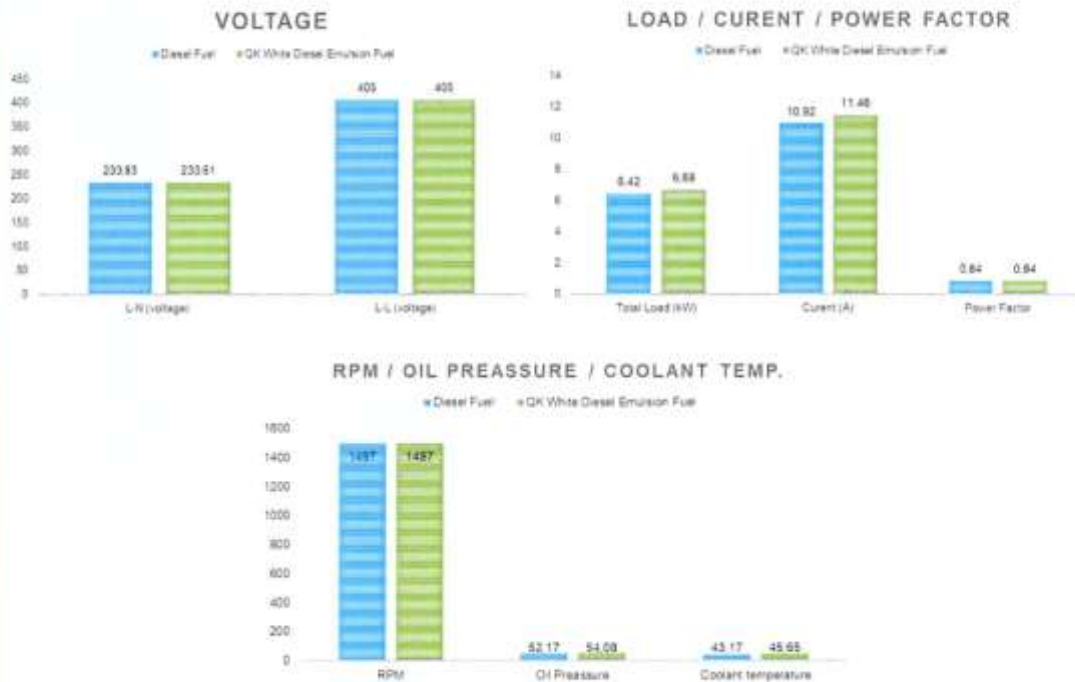
QK White Diesel E10: **1,732,74 l**

QK White Diesel E15: **1,365,16 l**

QK White Diesel E18: **550,00 l**

PERFORMANCE AND CONSUMPTION COMPARISON (Diesel vs QK White Diesel Emulsion):
1. Generator

From the 10th of March till the 28th of March 2023 the generator operated on QK White Diesel Emulsion for **171,50 h**, during which 429,00 l of E10, 352,50 l of E15 and 505,50 l of E 18 was consumed. The producer's standard consumption at the same load is between 7 to 8 l per h, our computed consumption was **6,89 l per hour**.


1. Vehicle

From the 15th of March till the 29th of March 2023 truck 33915 travelled **2.819 km** on QK White, during which 255,00 l of E10 and 258 l of E15 were consumed. The producer's standard consumption is 5,11 km per litre, our computed consumption was **5,40 km per litre**.

2. Vehicle

From the 15th of March till the 28th of March 2023 truck 87216 travelled **2.455 km** on QK White, during which 210,00 l of E10 and 135,50 l of E15 were consumed. The producer's standard consumption is 9,51 km per litre, our computed consumption was **9,54 km per litre**.

3. Vehicle

From the 17th of March till the 29th of March 2023 truck 89054 travelled **2.593 km** on QK White, during which 300,00 l of E10 and 340,00 l of E15 were consumed. The producer's standard consumption is 4,60 km per litre, our computed consumption was **4,63 km per litre**.

FUEL CONSUMPTION KM PER LITER


IMPORTANT OBSERVATIONS:

According to the vehicle operator, **no loss of power** was indicated.

Some common signs of a loss of power in a vehicle include slower acceleration, difficulty maintaining speed, a decrease in top speed, or an increase in fuel consumption. In some cases, the engine may also produce unusual noises or vibrations. None of the mentioned was observed and recorded by the operators.

The operator reported a change in the noise of the engine, stating that the **engine is running smoothly** and **without any visual black smoke** coming from the exhaust as previously common with Diesel Fuel

In the case of diesel engines, black smoke is typically caused by incomplete combustion of the fuel, which results in the formation of PM. The PM is composed of various substances, including carbon, soot, and other organic compounds, and can have negative health and environmental impacts.

When emulsion fuel is burned, it produces a cleaner combustion process than traditional fuels. This cleaner combustion process results in fewer harmful emissions, but it also means that there is less residue left behind (cleans the carbon deposits) in the engine and tank. Over time, this can lead to a cleaner and more efficient engine and help to improve engine performance, reduce fuel consumption, and extend the life of the engine.


EMISSION COMPARISON (Diesel vs QK White Diesel Emulsion):

Parallel to the sound change on all engines it was noticed there is no visible black smoke coming out of the exhaust when the engine is running. This indicates that the engine is running efficiently and cleanly and that the fuel is being burned properly.

This is generally a more desirable situation, as it indicates that the engine in comparison with Diesel Fuel is running efficiently and cleanly and is not producing as much harmful emissions as with Diesel Fuel.

In the period from the 10th of March to the 30th of March 2023 Al Maha Trading LLC contributed to an overall CO2 reduction of 954,10 kg of CO2.

For comparison in the same period Al Maha Trading LLC would consume 3,647,90 l of Diesel Fuel which would result in 9,630,46 kg of CO2 emissions. Due to the switch in fuels from Diesel to QK White Diesel Emulsion, the reduction of 361,40 l of Diesel Fuel resulted in 954,10 kg of CO2 emissions.

CONCLUSION:

Based on tests carried out under real-time conditions, we can summarize that QK White Diesel fuel is equivalent to Diesel fuel in terms of efficiency, with a slightly lower consumption recorded and without the loss of power while under load and yet with contributions in the area of cleaning of the system from the fuel tank to the engine itself, which in the long term contributes to the extension of the life expectancy of the engine. While a significant reduction in the consumption of fossil fuel itself was recorded which contributes to the reduction of CO2 emissions. Furthermore, even though other emissions were not measured, we can say with certainty that the use of QK White Diesel Emulsion also contributes to the reduction of NOx emissions (lower combustion temp.) and the reduction of Micro and Macro Particular matter (Sooth) emissions, which was observed already when visually comparing the black smoke emissions from the exhaust.

Patient rights are now the property of QKI Emulsion

AL MAHA TRADING LLC


Ing. Gregor Vardjan

Ciel Energy FZCO.


Peter Smith