



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

Project Technical Due Diligence Report

March 27th, 2022

Field test:

QK White Diesel blending machine (QK CAVITEH 500) and QK White Diesel Emulsion Fuel for Industrial Usage

Technical Due Diligence is performed at the request of **Qatar Building Company**, 306 Airport Road, Doha, Qatar, E: info@qbcqatar.com.qa as a final and a continuation of previous testing in Qatar.

Date of Field test:

from the 9th of March till 16th of March 2022

TECHNOLOGY:

QK has developed a breakthrough patented New Blending Technology Machine **QK CAVITEH** that produces superior results when blending liquid to liquid in a patented device as well as patented additive **NanoQuantum 100**.

The controlled Cavitation Resonance is being considered a paradigm shift in the mixing industry where process intensification, process acceleration, and back processing are necessary to compete in a global economy. QK Blending Technology Machine represents a new and innovative way to apply energy to liquids.

QK Blending Machine 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 overall emulsification system of QK as well as the patented NanoQuantum 100 additive is distinctly superior to conventional systems.

TEST:

QK produced 7 batches of QK White Diesel fuel with different content of demineralized water ranging from 15% to 20%.

BATCH NO.:	1	2	3	4	5	6	7
DATE:	14.03.2022	14.03.2022	15.03.2022	16.03.2022	16.03.2022	16.03.2022	17.03.2022
EMULSION TYPE	E15	E17	E20	E15	E17	E20	E20
VOLUME (l)	938	944	850	872	923	907	907

Each produced QK White Diesel Emulsion batch was tested by **SGS Qatar W.L.L.** The quality of the QK White Diesel Emulsion has been proven by the laboratory test statement issued by SGS Qatar W.L.L, **SGS reference: 30007680**

Test Machinery	GEN PRAMA C	BULLDOZER CATERPILLA R DR9R	EXCEVATO R HYUNDAI 480	GRADER CATERPILLA R 14M	TRENCHER TH24 TESMEC 1675 B	TRENCHER TH20 TESMEC 1675 B	GEN CAT - 1000kVA
Engine type	Volvo TAD 731 GE	CAT 3408	Cummins QS M11	CAT C9	Cummins OKS 19	Cummins OKS 19	Caterpillar C32
Consumption (l/h)	8	22	32	12	120	120	70
QK White Diesel E15	180	200	180	160	450	232	/
QK White Diesel E17	160	180	360	244	/	450	/
QK White Diesel E20	1240	/	/	/	/	/	1055

As shown in the tested equipment table QK White Diesel Emulsion Fuel with a lower % of demineralized water was first introduced to the engines of Construction Machines and Generators to prevent any unnecessary blockage of the Diesel filter due to the cleaning effect of the QK White Diesel Emulsion Fuels and gradually filled with the maximum recommended water % content.

The Duration of testing on each engine was up to 200 working hours.

Qatar Building Company Construction Machines were filled with QK White Diesel with added demineralized water up to 17%. The field test has proven all parameters during the daily working load of tested Construction Machines were in the standard.

Generators were filled with QK White Diesel with added demineralized water up to 20%. The field test has proved all parameters during the daily load of testing Generators were in the standard.

During the test with Construction Machines as well as with the Generators, the focus was on monitoring of two important parameters – **consumption and performance**. Both parameters remained unchanged during the use of QK White Diesel, which means that no loss of power /performance or increased consumption was recorded.

CONSUMPTION:

No loss of power/performance or increased consumption during the Test was recorded. Both parameters remained unchanged during the use of the QK White Diesel Emulsion for both the Construction Machinery (demineralized water content of up to 17%) and the Generators (demineralized water content of up to 20%).

RESULTS:

No loss of power/performance or increased consumption during the Test was recorded.

Economic calculations based on these facts showed considerable annual savings in the use of QK White Diesel Emulsion Fuels on an Industrial scale.

CONCLUSION:

QK White Diesel E15/E17/E20 for Industrial Usage in Qatar in March 2022 proved that QK White Diesel Emulsion Fuels can be used in Construction Machinery with added demineralized water up to 17% and in Generators with added Demineralized Water up to 20% without any interference in the performance of the engines and with considerable annual savings.

Patient rights are now the property of QKI Emulsion.com

Doha, March 27th 2022


Mr. Ali Mustafawi
Qatar Building Company


Mr. Enrico Fumagalli
Inventor