



FUEL REPORT

CORROSION	NORMAL
CONTAMINANTS	ABNORMAL
FUEL CONDITION	NORMAL

Machine Id
2101760
 Component
Diesel Fuel
 Fluid
No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)

RECOMMENDATION

We advise that you filter this fluid before use. All laboratory tests indicate that this sample meets specifications for No.2 low-sulfur diesel fuel.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0036938	DC0036941	DCM1040052
Sample Date		Client Info		30 May 2024	29 May 2024	24 Aug 2017
Machine Age	hrs	Client Info		636	576	0
Sample Status				ABNORMAL	ABNORMAL	NORMAL

CORROSION

All metal levels are normal indicating no corrosion in the system.

Aluminum	ppm	ASTM D5185m	<0.1	0	0	0
Nickel	ppm	ASTM D5185m	<0.1	0	0	0
Lead	ppm	ASTM D5185m	<0.1	0	0	<1
Vanadium	ppm	ASTM D5185m	<0.1	<1	<1	0
Iron	ppm	ASTM D5185m	<0.1	0	0	0

CONTAMINANTS

There is a high amount of particulates present in the fuel. The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample. There is no indication of any contamination in the fuel.

Silicon	ppm	ASTM D5185m	<1.0	<1	<1	<1
Sodium	ppm	ASTM D5185m	<0.1	1	1	0
Potassium	ppm	ASTM D5185m	<0.1	<1	<1	0
Water	%	ASTM D6304	<0.05	0.005	0.004	0.005
ppm Water	ppm	ASTM D6304	<500	51	45	50
Particles >4µm		ASTM D7647	>2500	▲ 25651	▲ 11585	---
Particles >6µm		ASTM D7647	>640	▲ 8621	▲ 4600	---
Particles >14µm		ASTM D7647	>80	▲ 588	▲ 367	---
Particles >21µm		ASTM D7647	>20	▲ 75	▲ 52	---
Particles >38µm		ASTM D7647	>4	2	2	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ 22/20/16	▲ 21/19/16	---
% Gasoline	%	*In-House	<0.50	0.0	0.0	0.0
% Biodiesel	%	*In-House	<20.0	1.6	1.7	2.7
Calcium	ppm	ASTM D5185m	<0.1	2	<1	13
Magnesium	ppm	ASTM D5185m	<0.1	0	0	<1
Phosphorus	ppm	ASTM D5185m	<0.1	2	2	2
Zinc	ppm	ASTM D5185m	<0.1	0	0	3

FUEL CONDITION

Sulfur value derived by ASTM D5453 method for ULSD validation.

ASTM Color	scalar	*ASTM D1500		L4.0	L4.0	L4.0
Visc @ 40°C	cSt	ASTM D445	3.0	2.5	2.46	2.5
Sulfur	ppm	ASTM D5185m	10	24	19	245
Sulfur (UVF)	ppm	ASTM D5453		34	24	---
API Gravity		ASTM D7777	37.7	36.4	36.4	36.2

