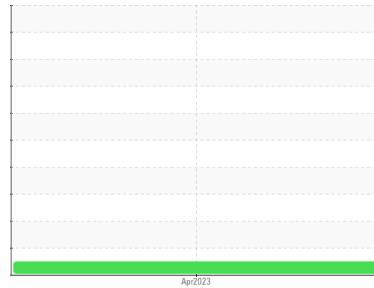




Machine Id
LIEBHERR 24459
 Component
Diesel Fuel
 Fluid
{not provided} (--- LTR)



DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Corrosion

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

Contaminants

The water content is negligible. There is no indication of any contamination in the fuel.

Fuel Condition

The condition of the fuel is acceptable for the time in service.

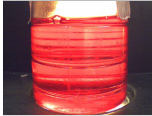

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			LH0220489	---	---
Sample Date	Client Info			25 Apr 2023	---	---
Machine Age	hrs	Client Info		897	---	---
Sample Status				NORMAL	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		2.88	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m		0	---	---

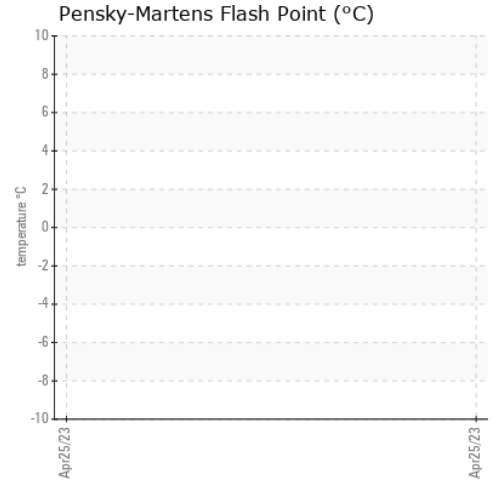
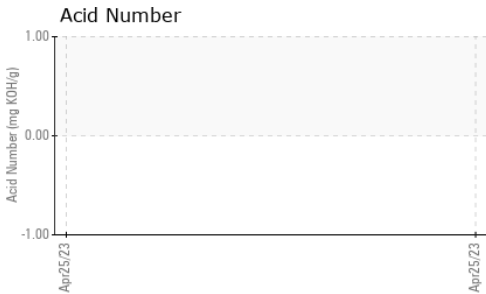
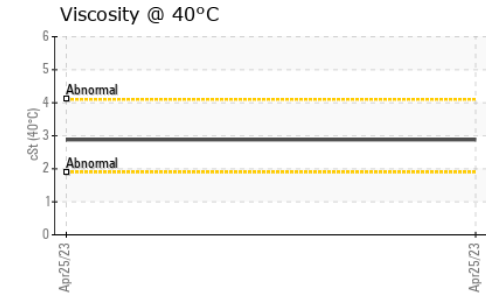
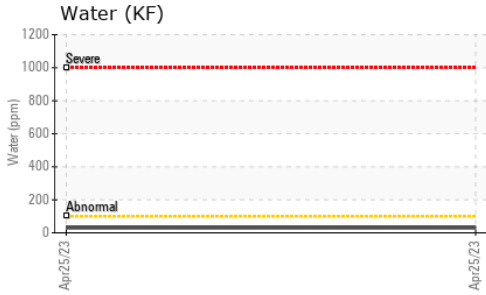
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	---	---
Sodium	ppm	ASTM D5185m	<0.1	0	---	---
Potassium	ppm	ASTM D5185m	<0.1	<1	---	---
Water	%	ASTM D6304	<0.05	0.003	---	---
ppm Water	ppm	ASTM D6304	<500	30.0	---	---

HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0	---	---
Nickel	ppm	ASTM D5185m	<0.1	0	---	---
Lead	ppm	ASTM D5185m	<0.1	0	---	---
Vanadium	ppm	ASTM D5185m	<0.1	0	---	---
Iron	ppm	ASTM D5185m	<0.1	0	---	---
Calcium	ppm	ASTM D5185m	<0.1	0	---	---
Magnesium	ppm	ASTM D5185m	<0.1	<1	---	---
Phosphorus	ppm	ASTM D5185m	<0.1	0	---	---
Zinc	ppm	ASTM D5185m	<0.1	0	---	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image

FUEL REPORT

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0220489 **Received** : 05 May 2023
Lab Number : 05840167 **Tested** : 10 May 2023
Unique Number : 10458970 **Diagnosed** : 10 May 2023 - Jonathan Hester
Test Package : MOBCE (Additional Tests: KF)

LIEBHERR MINING EQUIPMENT CO
 5800 S DOUGLAS HWY
 GILLETTE, WY
 US 82718
 Contact: TED PILZ
 ted.pilz@liebherr.com
 T: (775)388-0663
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)