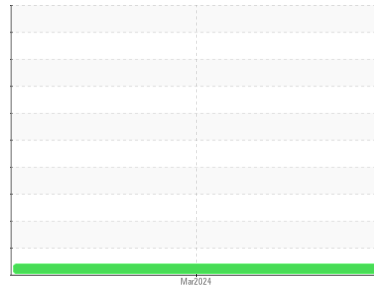


OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
B15
Machine Id
LIEBHERR 310701
Component
Hydraulic System
Fluid
FUCHS RENOLIN ZAF B 46 HT ZINC FREE (40 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		FCH0000016	---	---
Sample Date	Client Info		27 Mar 2024	---	---
Machine Age	Client Info		0	---	---
Oil Age	Client Info		0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ATTENTION	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>20	1	---	---
Chromium	ppm ASTM D5185m	>10	<1	---	---
Nickel	ppm ASTM D5185m	>10	<1	---	---
Titanium	ppm ASTM D5185m		<1	---	---
Silver	ppm ASTM D5185m		0	---	---
Aluminum	ppm ASTM D5185m	>10	2	---	---
Lead	ppm ASTM D5185m	>10	<1	---	---
Copper	ppm ASTM D5185m	>75	4	---	---
Tin	ppm ASTM D5185m	>10	3	---	---
Vanadium	ppm ASTM D5185m		<1	---	---
Cadmium	ppm ASTM D5185m		<1	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m		0	---	---
Barium	ppm ASTM D5185m		0	---	---
Molybdenum	ppm ASTM D5185m		<1	---	---
Manganese	ppm ASTM D5185m		<1	---	---
Magnesium	ppm ASTM D5185m		<1	---	---
Calcium	ppm ASTM D5185m		0	---	---
Phosphorus	ppm ASTM D5185m		394	---	---
Zinc	ppm ASTM D5185m		1	---	---
Sulfur	ppm ASTM D5185m		44	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>20	<1	---	---
Sodium	ppm ASTM D5185m		0	---	---
Potassium	ppm ASTM D5185m	>20	<1	---	---
Water	% ASTM D6304	>0.1	NEG	---	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	505	---	---
Particles >6µm	ASTM D7647	>5000	275	---	---
Particles >14µm	ASTM D7647	>640	47	---	---
Particles >21µm	ASTM D7647	>160	16	---	---
Particles >38µm	ASTM D7647	>40	2	---	---
Particles >71µm	ASTM D7647	>10	0	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	16/15/13	---	---

FLUID DEGRADATION



	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045		0.54	---	---

OIL ANALYSIS REPORT

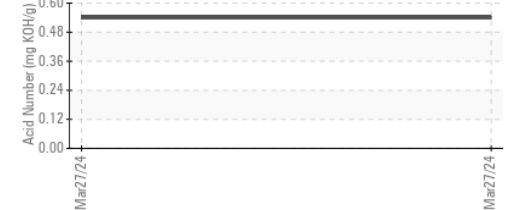
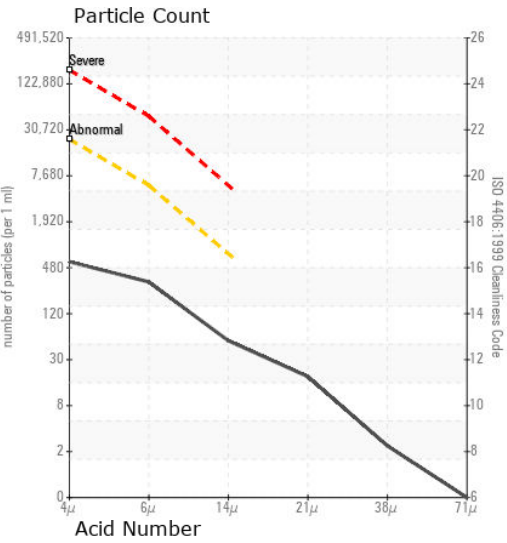
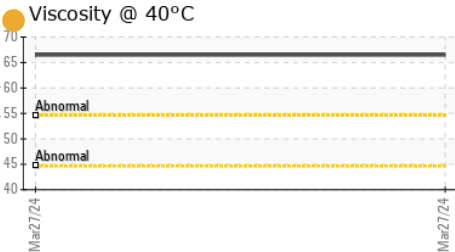
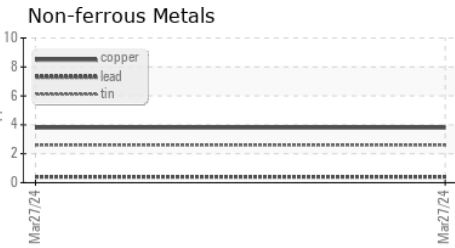
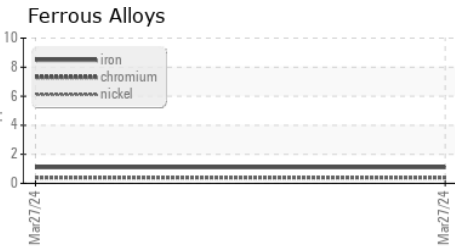
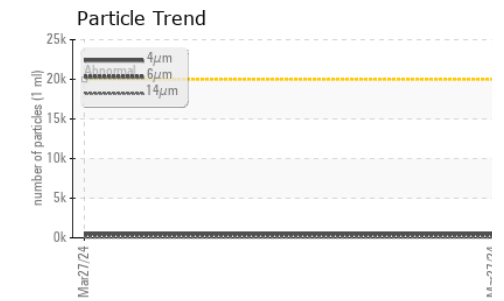
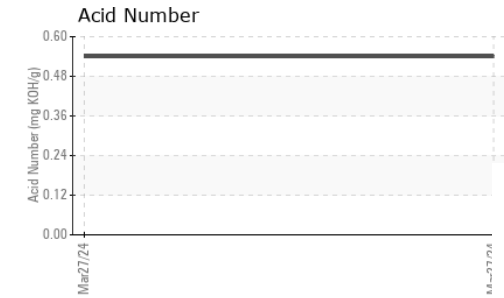
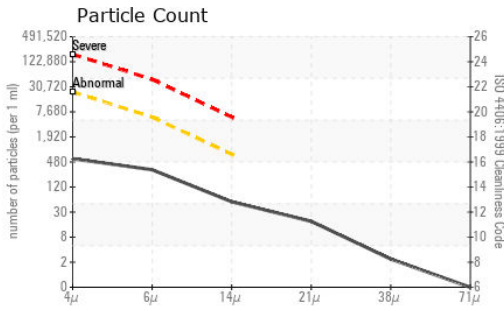
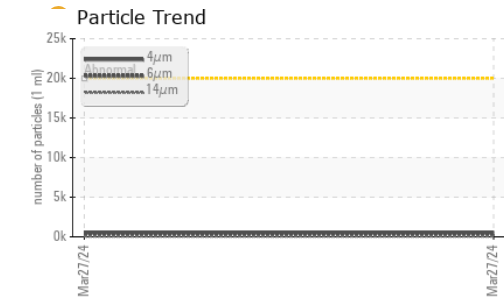
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	● 66.49	---	---

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : FCH0000016
Lab Number : 06141236
Unique Number : 10966044
Test Package : PLANT

Received : 08 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 15 Apr 2024 - Doug Bogart

DANA - FAIRFIELD CUSTOM GEARS AND DRIVES
 2400 SAGAMORE PKWY S #2400
 LAFAYETTE, IN
 US 47905

Contact: Service Manager
 Jeffrey.Alexander@fuchs.com

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)