



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L586 L-2 (S/N 033041)
Component
Diesel Engine
Fluid
15W40 SUPER FLEET (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0001192	LP0000488	WC0542496
Sample Date		Client Info		12 Apr 2024	05 Jun 2023	09 Nov 2021
Machine Age	hrs	Client Info		13581	13315	13025
Oil Age	hrs	Client Info		266	290	94
Filter Age	hrs	Client Info		266	290	94
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	5	5	3
Chromium	ppm	ASTM D5185m	>5	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>15	2	2	<1
Lead	ppm	ASTM D5185m	>30	1	0	<1
Copper	ppm	ASTM D5185m	>125	2	<1	<1
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

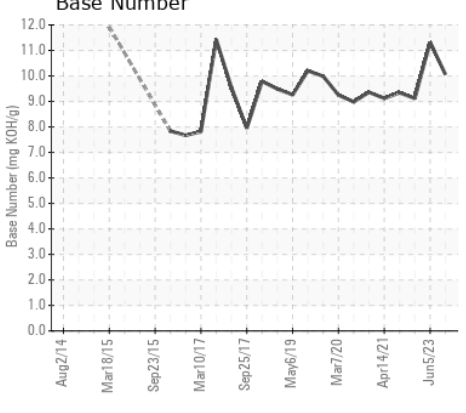
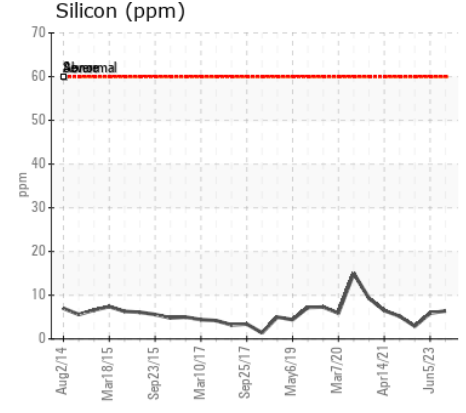
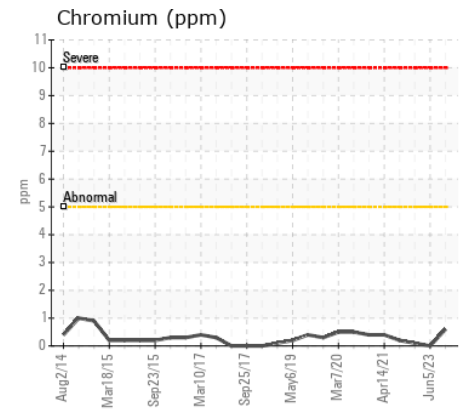
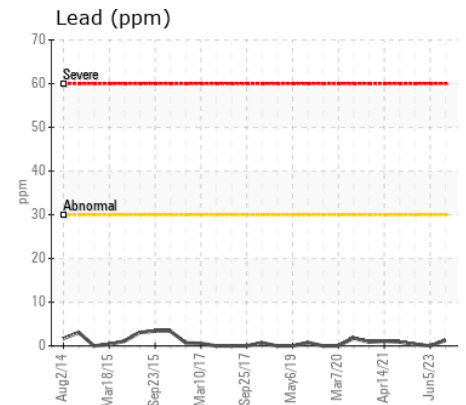
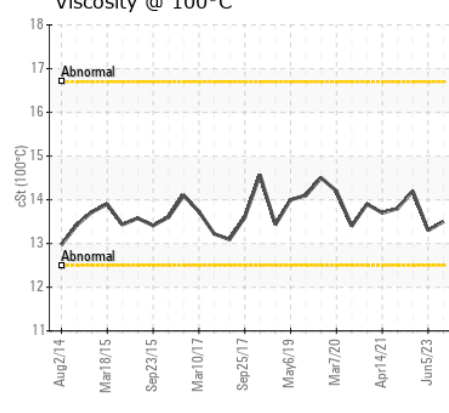
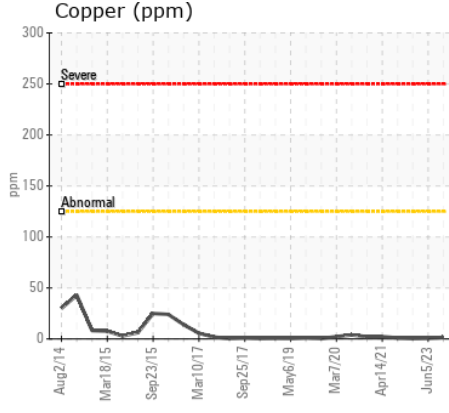
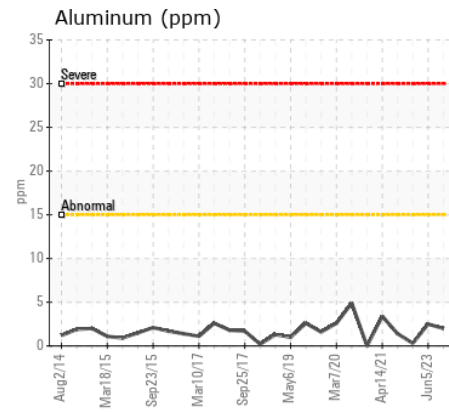
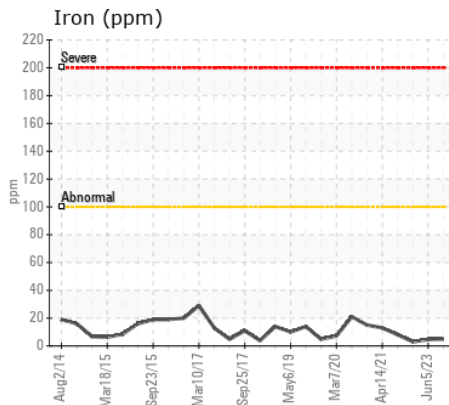
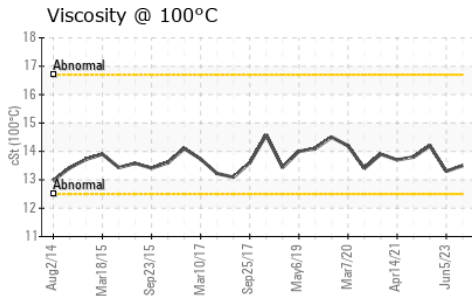
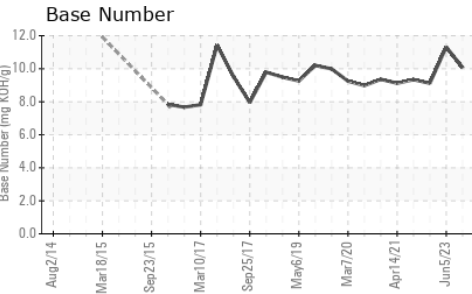
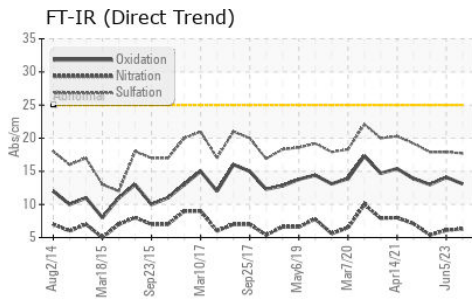
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>60	6	6	3
Potassium	ppm	ASTM D5185m	>20	2	1	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.3	6.1	5.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.7	17.9	17.9
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	1	<1
Boron	ppm	ASTM D5185m		20	10	12
Barium	ppm	ASTM D5185m		2	5	0
Molybdenum	ppm	ASTM D5185m		62	49	60
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		754	734	947
Calcium	ppm	ASTM D5185m		1231	996	1227
Phosphorus	ppm	ASTM D5185m		1045	855	1040
Zinc	ppm	ASTM D5185m		1210	1064	1294
Sulfur	ppm	ASTM D5185m		3583	3160	3007
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.1	14.1	13
Base Number (BN)	mg KOH/g	ASTM D2896		10.06	11.32	9.12
Visc @ 100°C	cSt	ASTM D445		13.5	13.3	14.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0001192
Lab Number : 06153824
Unique Number : 10989247
Test Package : MOB 2

Received : 18 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 22 Apr 2024 - Wes Davis

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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)