



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR A904 030904-710
Component
Diesel Engine
Fluid
SAE 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0267729	LHMC003911	LHMC007778
Sample Date		Client Info		17 Mar 2024	15 Aug 2007	31 Oct 2006
Machine Age	hrs	Client Info		8958	642	172
Oil Age	hrs	Client Info		0	142	172
Filter Age	hrs	Client Info		0	142	172
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	22	13	29
Chromium	ppm	ASTM D5185m	>5	1	1	2
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>15	4	2	2
Lead	ppm	ASTM D5185m	>30	2	0	2
Copper	ppm	ASTM D5185m	>125	2	3	8
Tin	ppm	ASTM D5185m	>5	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

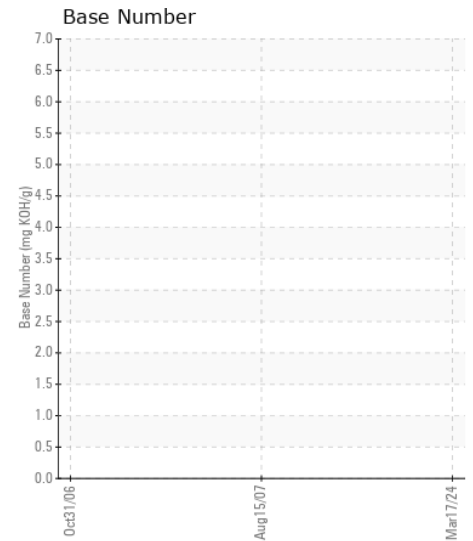
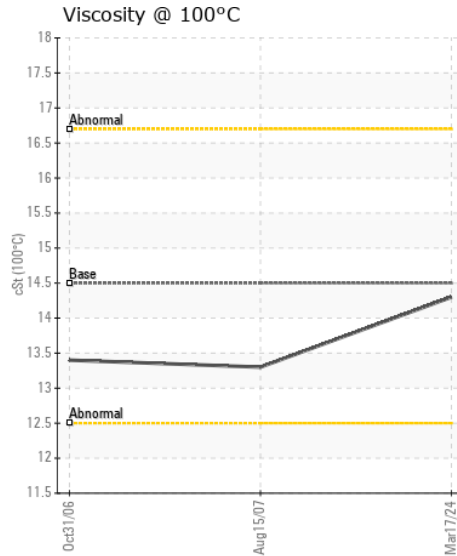
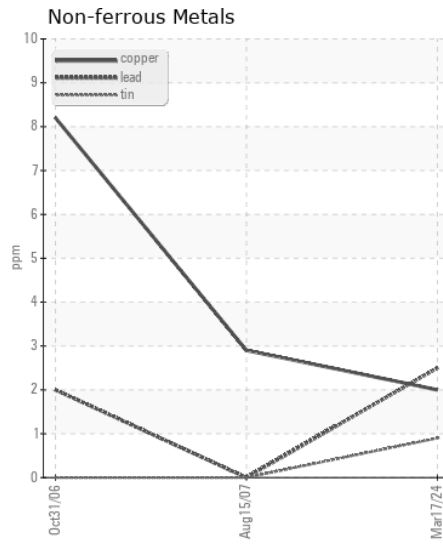
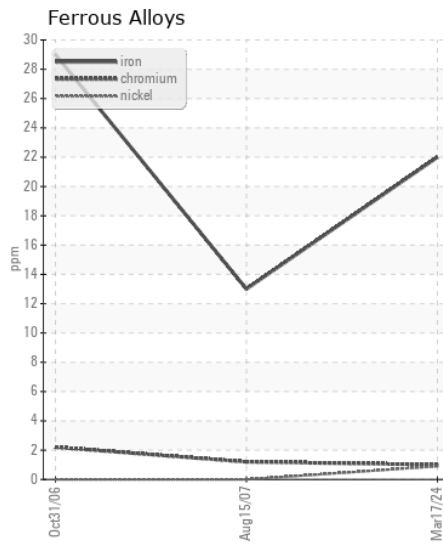
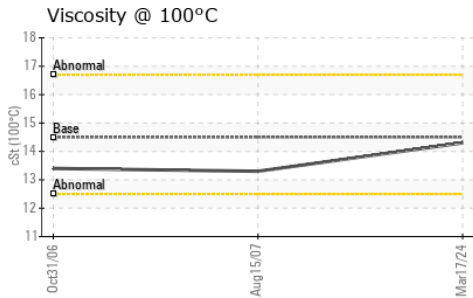
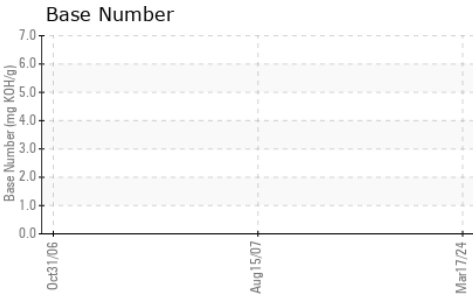
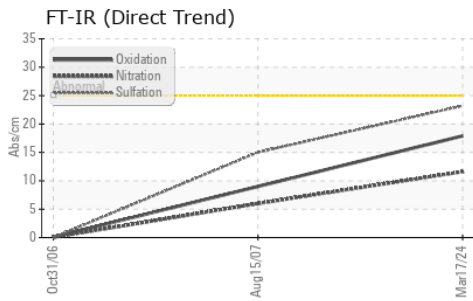
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>60	7	8	12
Potassium	ppm	ASTM D5185m	>20	2	0	2
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	1.7	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.6	6.	0.05
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	15.	0.00
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	>57	4	3	14
Boron	ppm	ASTM D5185m		66	23	221
Barium	ppm	ASTM D5185m		0	<1	3
Molybdenum	ppm	ASTM D5185m		90	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		120	291	38
Calcium	ppm	ASTM D5185m		2431	2726	3894
Phosphorus	ppm	ASTM D5185m		1264	1230	924
Zinc	ppm	ASTM D5185m		1374	1364	1045
Sulfur	ppm	ASTM D5185m		4990	3806	3606
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.9	9.	0.08
Base Number (BN)	mg KOH/g	ASTM D2896		6.7	---	---
Visc @ 100°C	cSt	ASTM D445	14.5	14.3	13.3	13.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0267729 **Received** : 25 Apr 2024
Lab Number : 06161090 **Tested** : 26 Apr 2024
Unique Number : 10996513 **Diagnosed** : 26 Apr 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

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)

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