



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L566 1484-60217

Component
Diesel Engine

Fluid
{not provided} (--- 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		LH0263746	LH0263724	---
Sample Date		Client Info		11 Jan 2024	18 Apr 2023	---
Machine Age	hrs	Client Info		5070	3000	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

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

CONTAMINATION

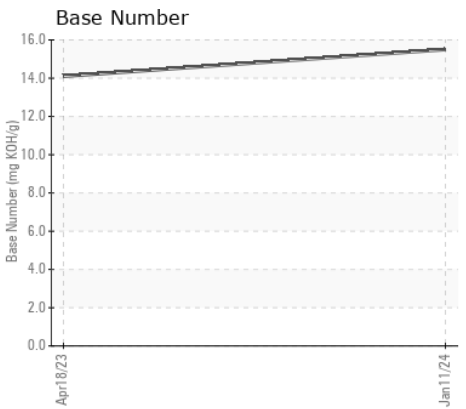
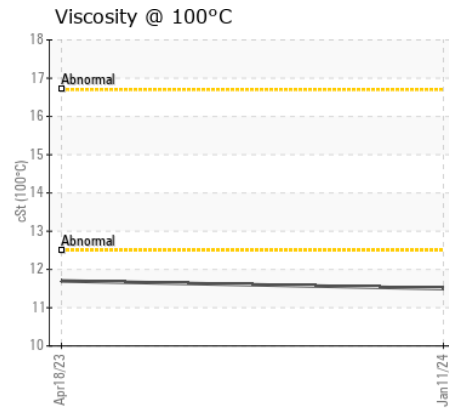
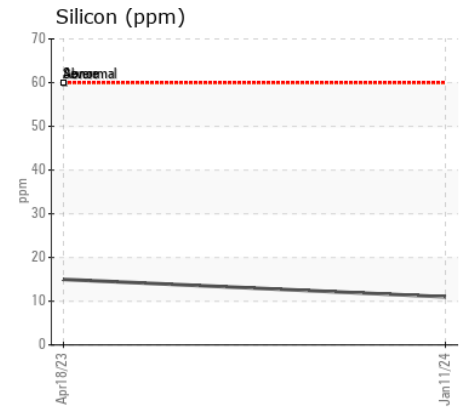
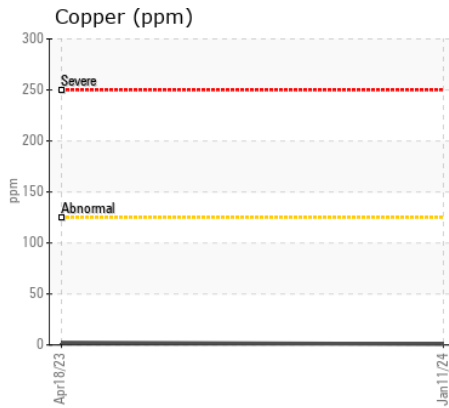
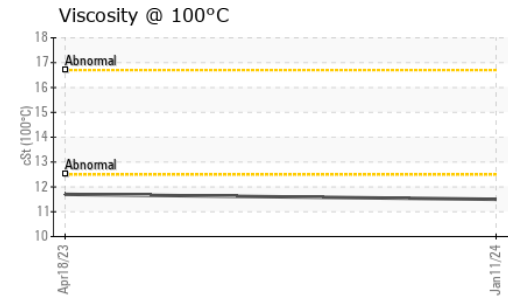
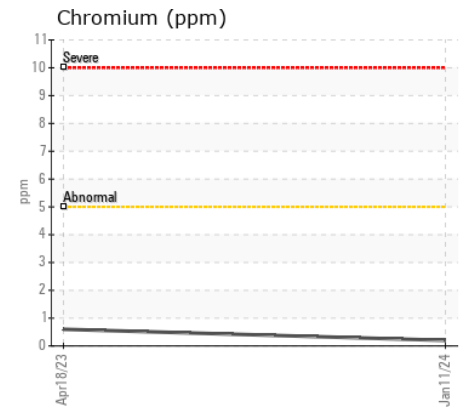
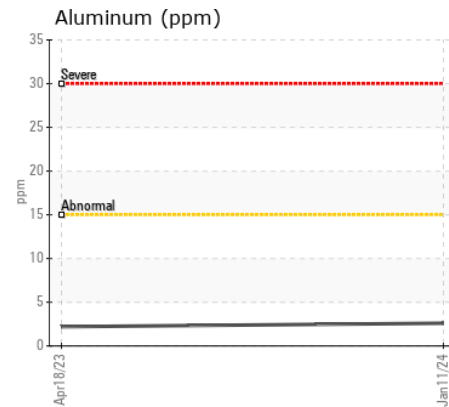
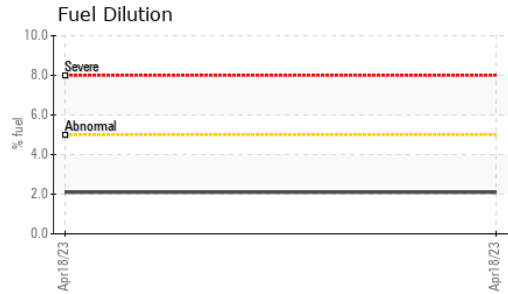
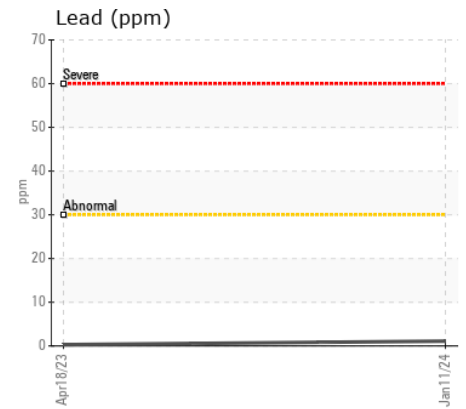
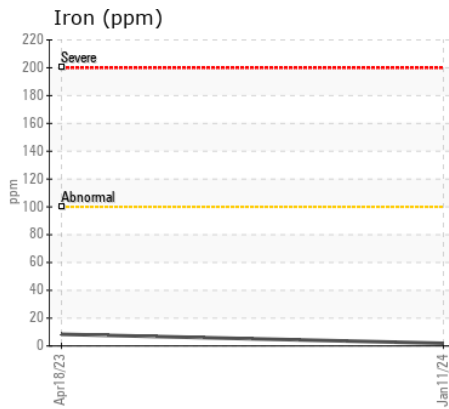
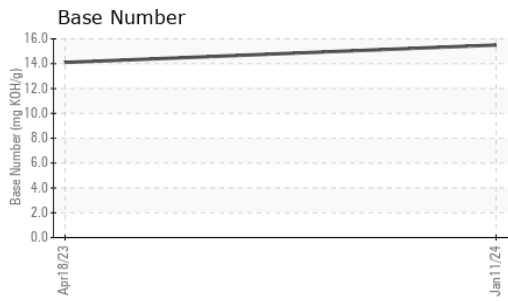
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>60	11	15	---
Potassium	ppm	ASTM D5185m	>20	0	1	---
Fuel	%	ASTM D3524	>5	<1.0	▲ 2.1	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	11.5	12.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.1	16.1	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	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	4	---
Boron	ppm	ASTM D5185m		239	259	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	5	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		35	89	---
Calcium	ppm	ASTM D5185m		4138	4252	---
Phosphorus	ppm	ASTM D5185m		1029	1031	---
Zinc	ppm	ASTM D5185m		1253	1208	---
Sulfur	ppm	ASTM D5185m		3094	3363	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.1	11.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		15.5	14.1	---
Visc @ 100°C	cSt	ASTM D445		11.5	▲ 11.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0263746 **Received** : 12 Jan 2024
Lab Number : 06059127 **Diagnosed** : 16 Jan 2024
Unique Number : 10830509 **Diagnostician** : Jonathan Hester
Test Package : MOBCE (Additional Tests: FuelDilution, PercentFuel, TBN)

MR BULTS INC
 2627 E 139TH ST
 BURNHAM, IL
 US 60633
 Contact: SERVICE MANAGER

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)

T: (708)868-0059

F: