



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**(341437)**  
Machine Id  
**LIEBHERR LH50M 128335-1216**  
Component  
**Diesel Engine**  
Fluid  
**SAE 10W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0274731</b>	LH0277480	LH0270146
Sample Date		Client Info		<b>03 Mar 2024</b>	20 Nov 2023	27 Sep 2023
Machine Age	hrs	Client Info		<b>12359</b>	11104	10573
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>66	<b>4</b>	3	3
Chromium	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>8	<b>1</b>	1	<1
Lead	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>74	<b>2</b>	2	1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

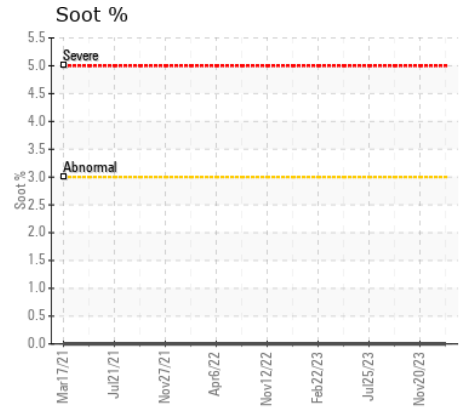
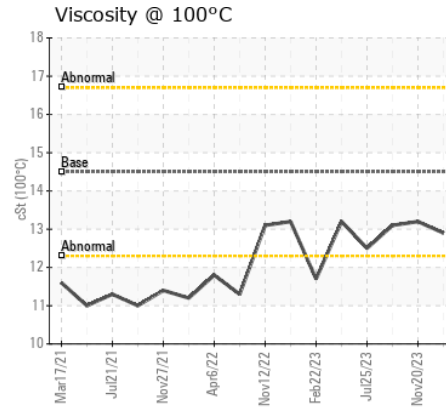
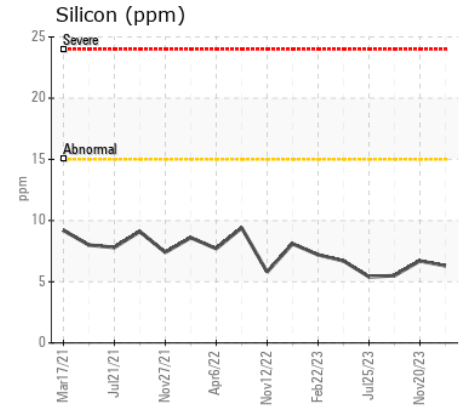
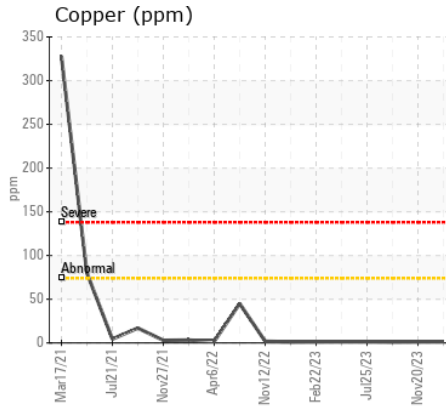
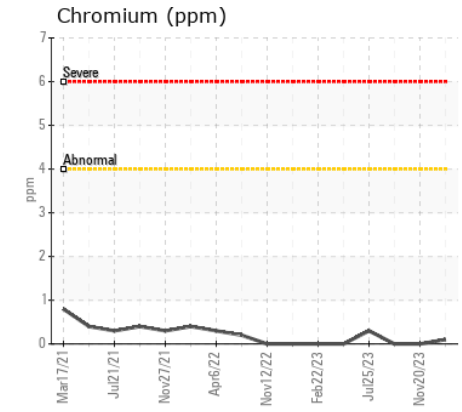
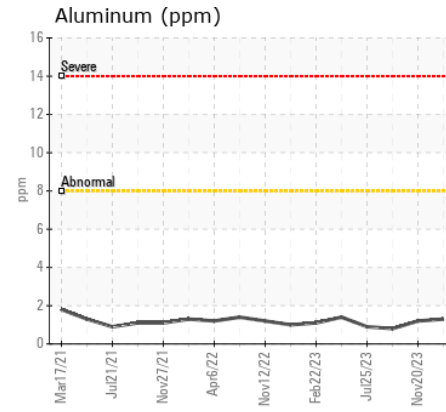
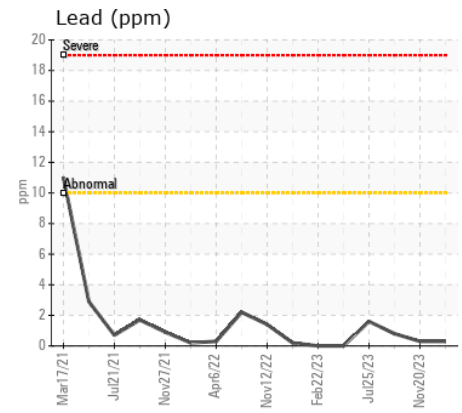
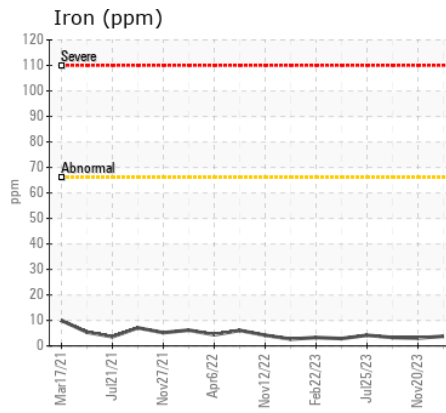
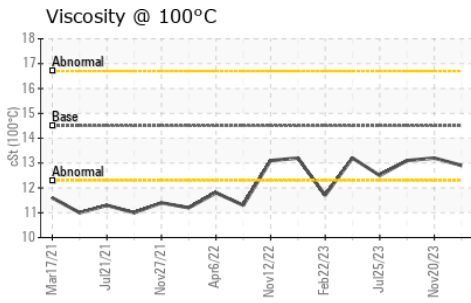
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>6</b>	7	6
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.1</b>	8.3	8.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.9</b>	19.4	20.3
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>401	<b>1</b>	2	2
Boron	ppm	ASTM D5185(m)		<b>3</b>	3	1
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)		<b>58</b>	56	59
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>966</b>	922	982
Calcium	ppm	ASTM D5185(m)		<b>1116</b>	1155	1056
Phosphorus	ppm	ASTM D5185(m)		<b>1020</b>	976	994
Zinc	ppm	ASTM D5185(m)		<b>1210</b>	1173	1197
Sulfur	ppm	ASTM D5185(m)		<b>2712</b>	2482	2463
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.4</b>	17.1	18.7
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	<b>12.9</b>	13.2	13.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0274731  
**Lab Number** : 02619519  
**Unique Number** : 5736629  
**Test Package** : MOB 1  
**Received** : 04 Mar 2024  
**Tested** : 04 Mar 2024  
**Diagnosed** : 04 Mar 2024 - Wes Davis

**COMBINED METAL INDUSTRIES-PUBLIC YARD**  
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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.