



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[601598-10240867]
 Machine Id
LIEBHERR LH30M 112545-1253
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0274831	LH	LH0270116
Sample Date		Client Info		04 Mar 2024	07 Dec 2023	27 Sep 2023
Machine Age	hrs	Client Info		0	13530	1297
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

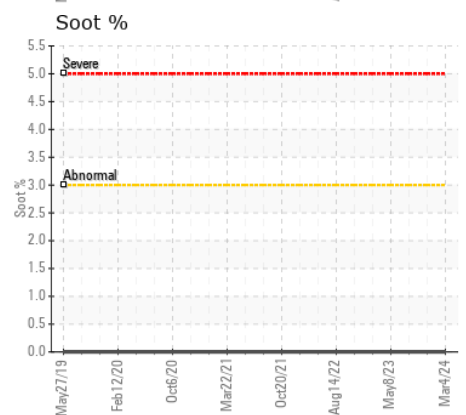
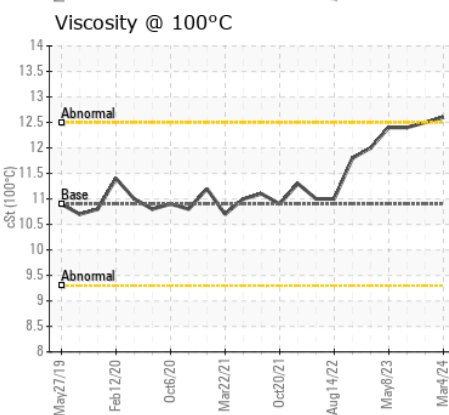
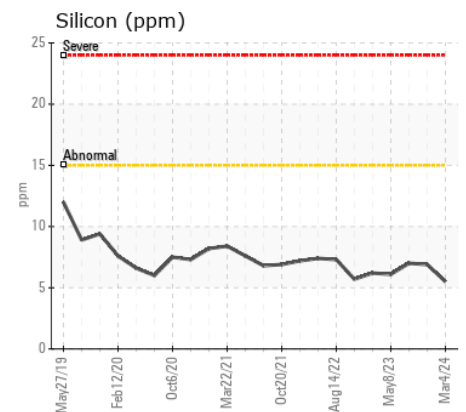
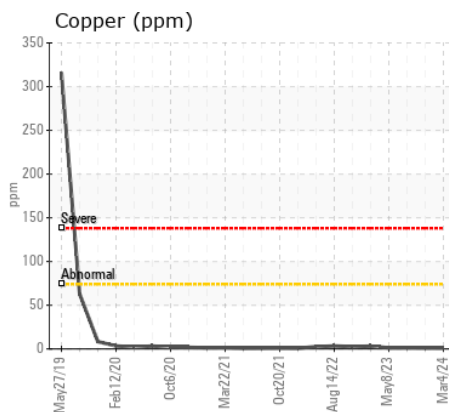
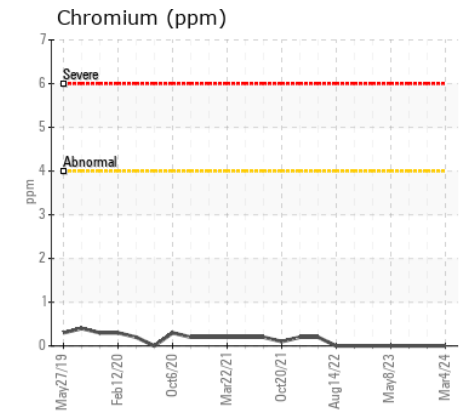
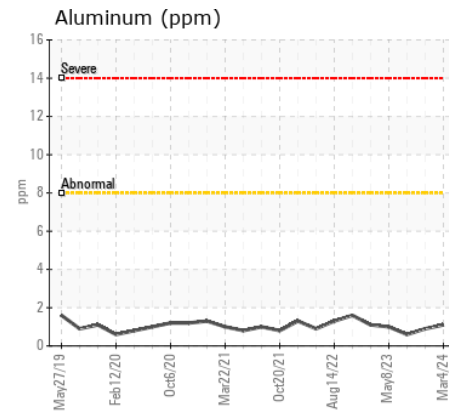
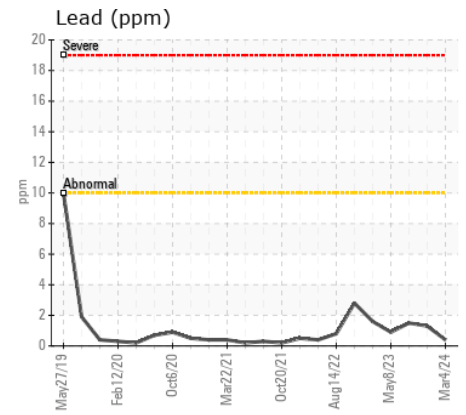
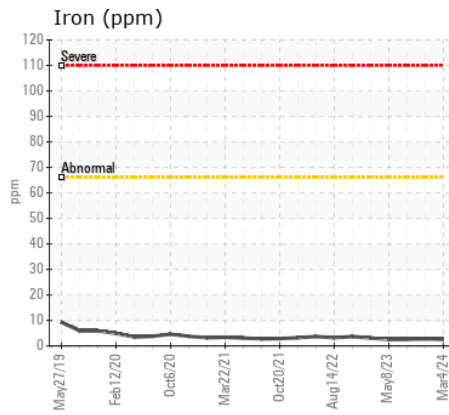
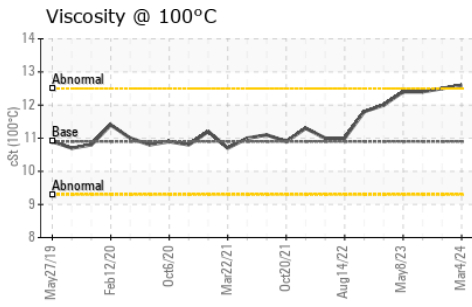
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	6	7	7
Potassium	ppm	ASTM D5185(m)	>20	1	0	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	0	0
Nitration	Abs/cm	ASTM D7624*	>20	8.4	8.9	9.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.8	19.5	19.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>75	1	2	2
Boron	ppm	ASTM D5185(m)	250	4	3	3
Barium	ppm	ASTM D5185(m)	10	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	100	58	59	61
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	450	982	949	1009
Calcium	ppm	ASTM D5185(m)	3000	1106	1189	1085
Phosphorus	ppm	ASTM D5185(m)	1150	1018	984	1027
Zinc	ppm	ASTM D5185(m)	1350	1199	1209	1233
Sulfur	ppm	ASTM D5185(m)	4250	2774	2569	2588
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.8	17.6	17.7
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	12.6	12.5	12.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0274831 **Received** : 07 Mar 2024
Lab Number : 02620419 **Tested** : 07 Mar 2024
Unique Number : 5737529 **Diagnosed** : 07 Mar 2024 - Wes Davis
Test Package : MOB 1

GREEN METALS CANADA
 224 BEARDS LANE
 WOODSTOCK, ON
 CA N4S 7W3
 Contact: Jamie Depotie
 jdepotie@gmcan.ca
 T: (519)539-1313
 F: (519)539-5130

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.