MOB

LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(353864)
Machine Id
LIEBHERR L546 062410-1755
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (20 LTR)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

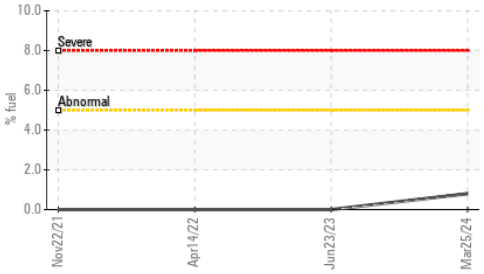
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

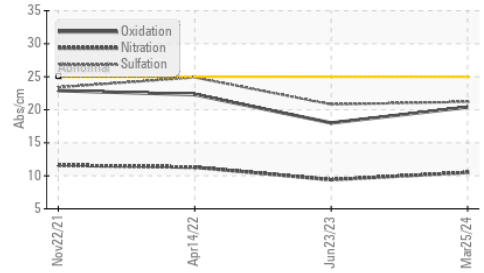
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH	LH0260965	LH0226859
Sample Date		Client Info		25 Mar 2024	23 Jun 2023	14 Apr 2022
Machine Age	hrs	Client Info		3420	2406	1028
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>100	19	17	29
Chromium	ppm	ASTM D5185(m)	>5	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>15	2	1	1
Lead	ppm	ASTM D5185(m)	>30	0	<1	2
Copper	ppm	ASTM D5185(m)	>125	2	1	43
Tin	ppm	ASTM D5185(m)	>5	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>60	6	3	5
Potassium	ppm	ASTM D5185(m)	>20	<1	12	2
Fuel	%	ASTM D7593*	>5	0.8	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	0.0	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	10.5	9.4	11.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.2	20.8	24.9
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>216	5	7	6
Boron	ppm	ASTM D5185(m)	250	34	24	34
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	63	46	56
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	1132	762	943
Calcium	ppm	ASTM D5185(m)	3000	880	1429	1228
Phosphorus	ppm	ASTM D5185(m)	1150	1009	1056	988
Zinc	ppm	ASTM D5185(m)	1350	1256	1227	1221
Sulfur	ppm	ASTM D5185(m)	4250	2638	2540	2540
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.4	18.0	22.3
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	11.9	14.3	12.7

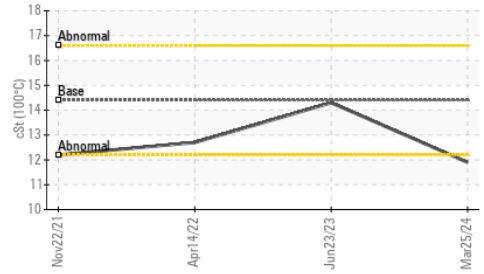
Fuel Dilution



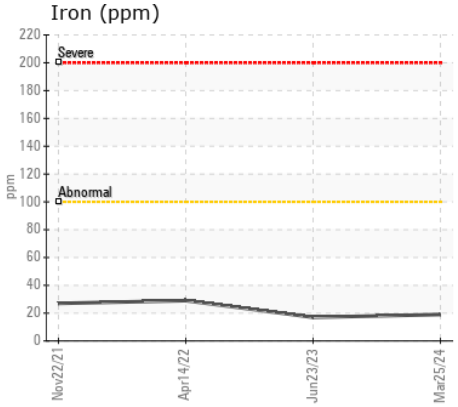
FT-IR (Direct Trend)



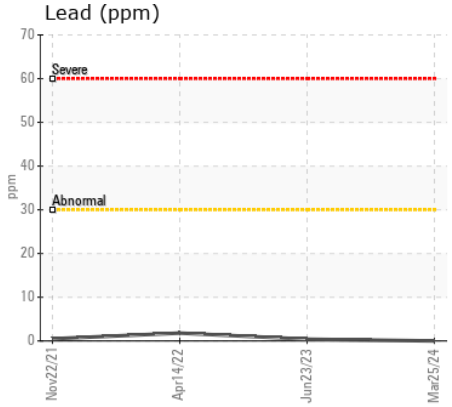
Viscosity @ 100°C



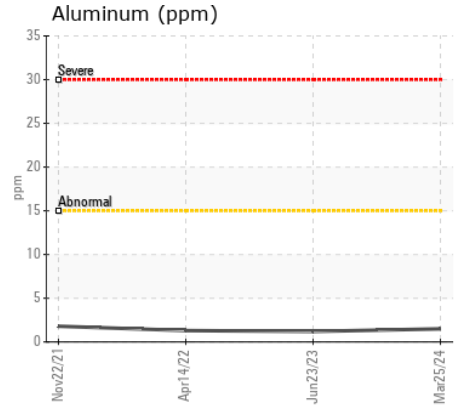
Iron (ppm)



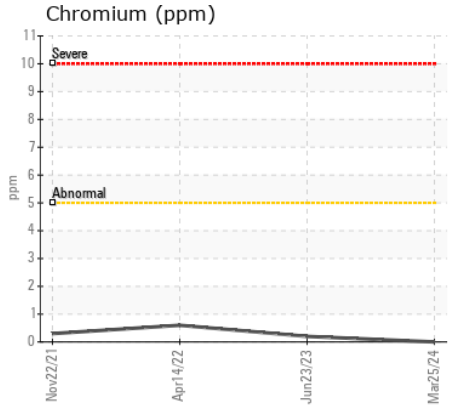
Lead (ppm)



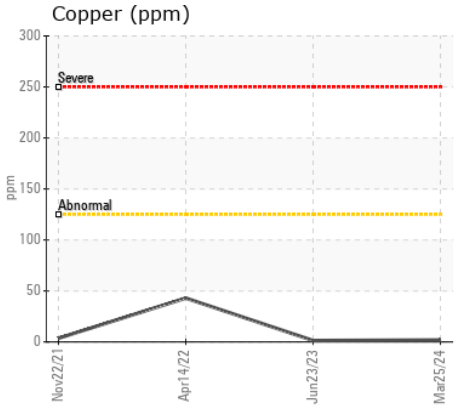
Aluminum (ppm)



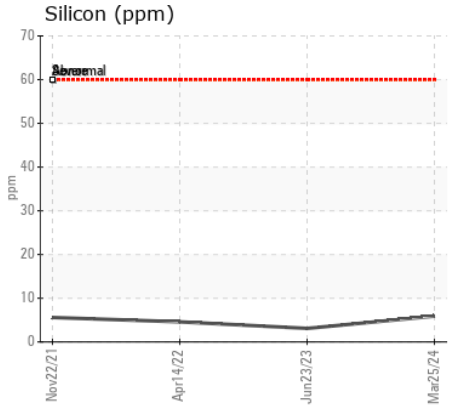
Chromium (ppm)



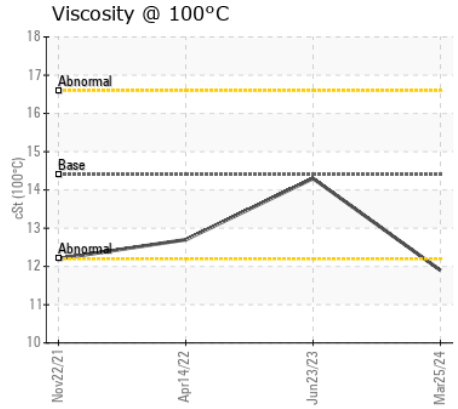
Copper (ppm)



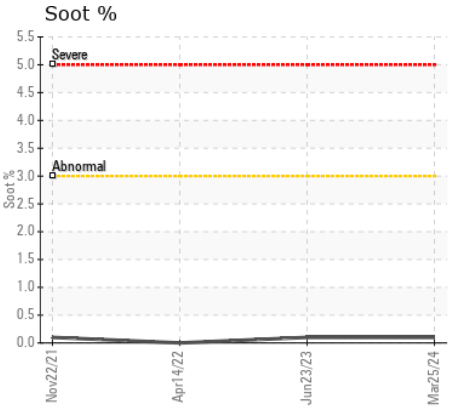
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH
Lab Number : 02627180
Unique Number : 5760312
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

Received : 08 Apr 2024
Tested : 10 Apr 2024
Diagnosed : 10 Apr 2024 - Wes Davis

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.

METAUX 139 INC.
86 RTE MARIE-VICTORIN
PIERREVILLE, QC
CA J0G 1J0
Contact: Service Manager

T:
F:

Report Id: MET126WIC [WCAMIS] 02627180 (Generated: 04/10/2024 08:32:37) Rev: 1

Submitted By: Eric Leblond