



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH22M 137772-1525
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0232644	---	---
Sample Date		Client Info		27 May 2024	---	---
Machine Age	hrs	Client Info		3213	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	16	---	---
Chromium	ppm	ASTM D5185(m)	>5	0	---	---
Nickel	ppm	ASTM D5185(m)	>5	0	---	---
Titanium	ppm	ASTM D5185(m)		<1	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>15	2	---	---
Lead	ppm	ASTM D5185(m)	>30	0	---	---
Copper	ppm	ASTM D5185(m)	>125	4	---	---
Tin	ppm	ASTM D5185(m)	>5	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

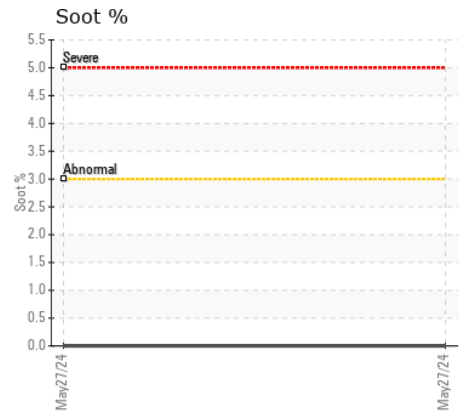
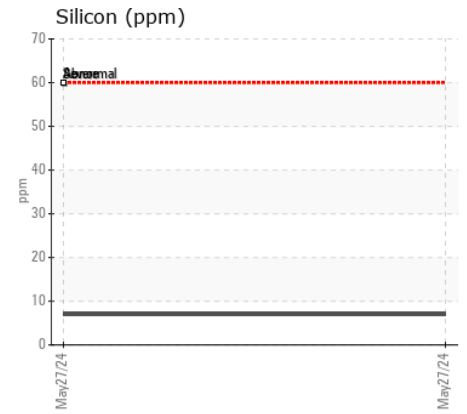
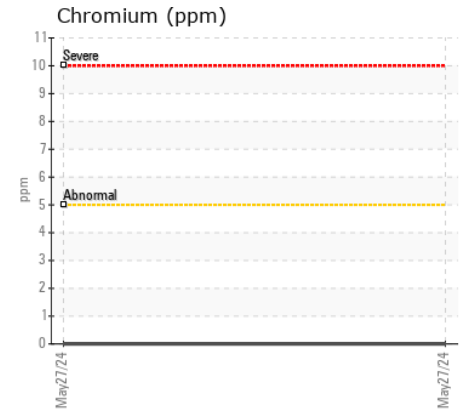
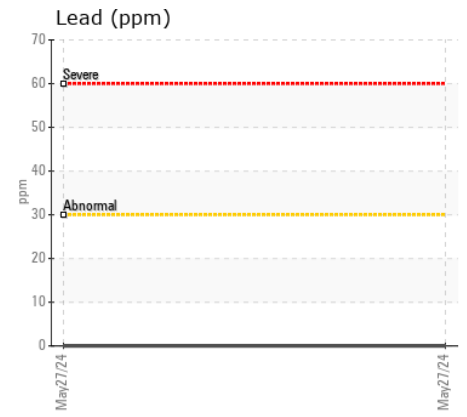
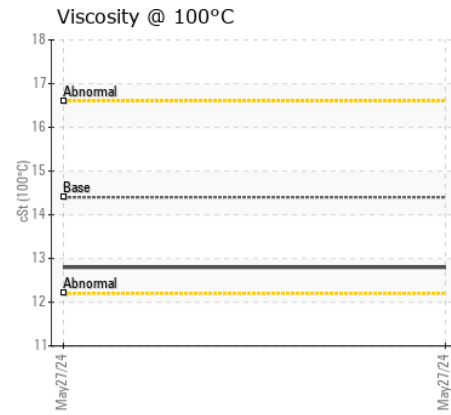
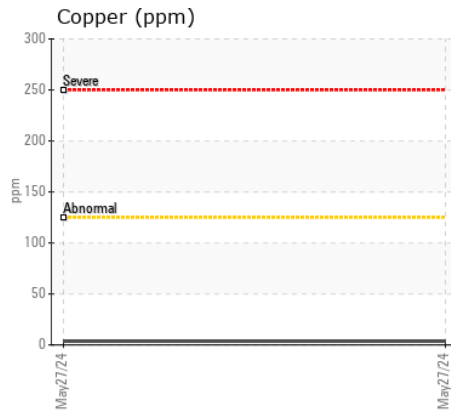
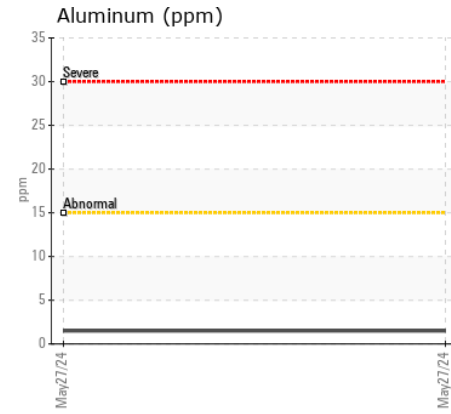
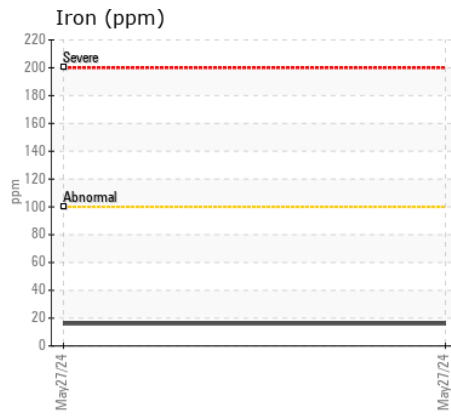
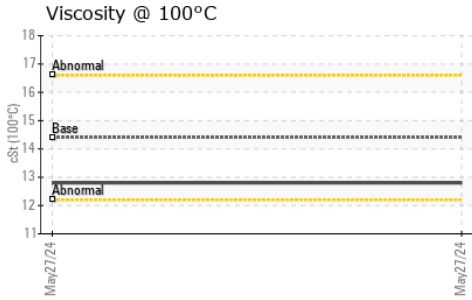
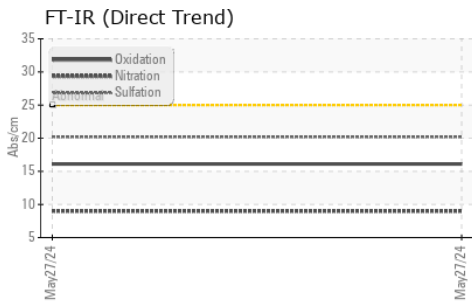
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	7	---	---
Potassium	ppm	ASTM D5185(m)	>20	1	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	9.0	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.2	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>216	3	---	---
Boron	ppm	ASTM D5185(m)	250	77	---	---
Barium	ppm	ASTM D5185(m)	10	0	---	---
Molybdenum	ppm	ASTM D5185(m)	100	36	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)	450	791	---	---
Calcium	ppm	ASTM D5185(m)	3000	1380	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	984	---	---
Zinc	ppm	ASTM D5185(m)	1350	1176	---	---
Sulfur	ppm	ASTM D5185(m)	4250	2719	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.1	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.8	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0232644 **Received** : 03 Jun 2024
Lab Number : 02639354 **Tested** : 03 Jun 2024
Unique Number : 5788516 **Diagnosed** : 03 Jun 2024 - Wes Davis
Test Package : MOBCE (Additional Tests: Visual)

Excavation Dolbeau Inc.
 493 - 2ieme Avenue
 Dolbeau-Mistassini, QC
 CA G8L 1V3
 Contact: Service Manager

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.

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F: