



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH40M 159571-1215
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0287614	---	---
Sample Date		Client Info		07 Jun 2024	---	---
Machine Age	hrs	Client Info		496	---	---
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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	10	---	---
Chromium	ppm	ASTM D5185(m)	>5	1	---	---
Nickel	ppm	ASTM D5185(m)	>5	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>15	2	---	---
Lead	ppm	ASTM D5185(m)	>30	5	---	---
Copper	ppm	ASTM D5185(m)	>125	110	---	---
Tin	ppm	ASTM D5185(m)	>5	1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

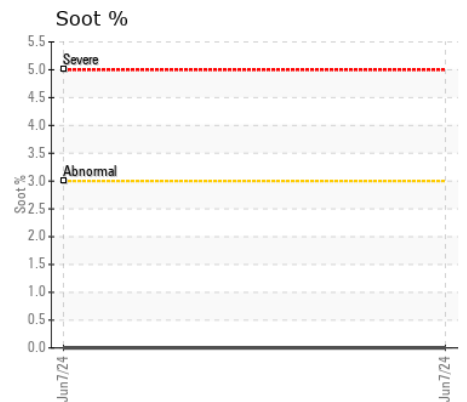
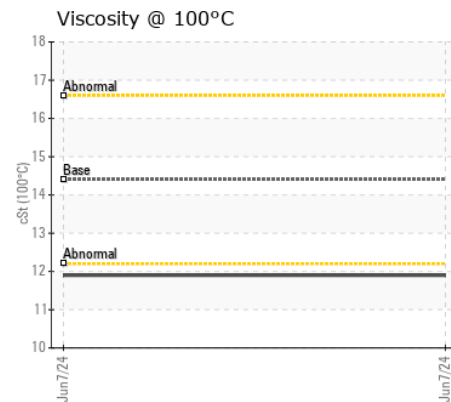
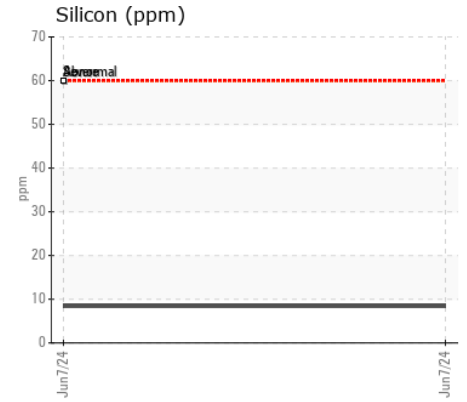
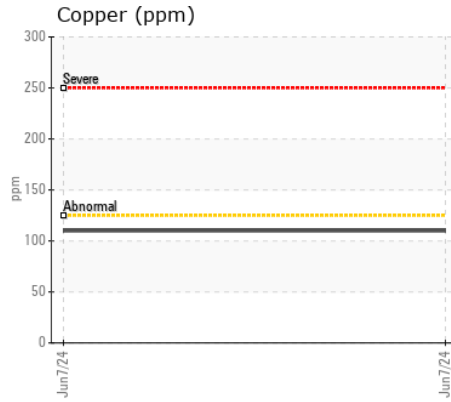
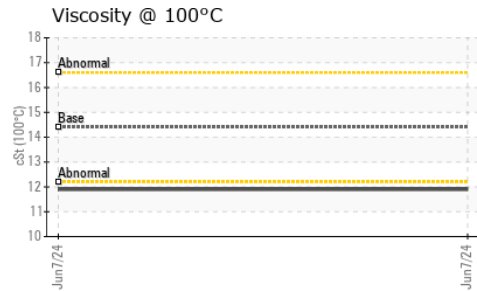
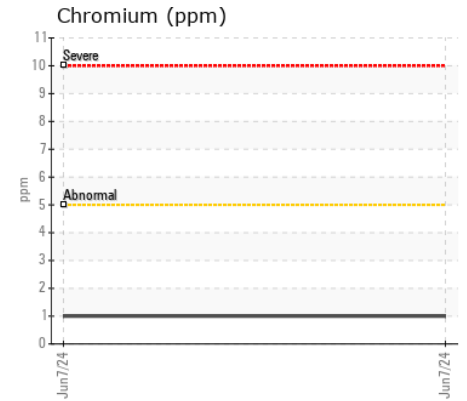
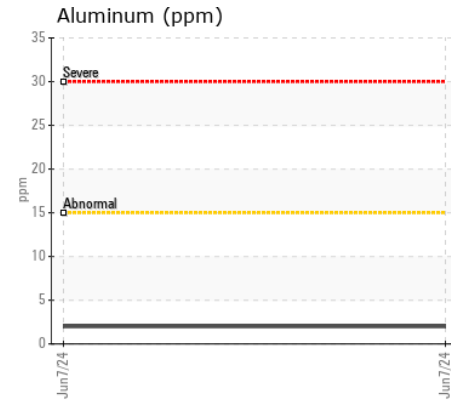
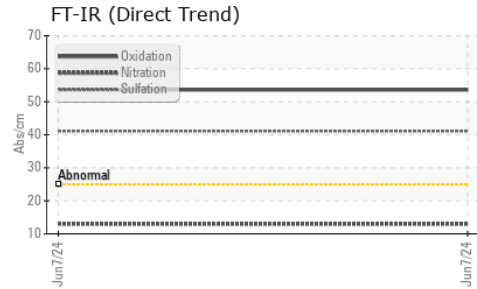
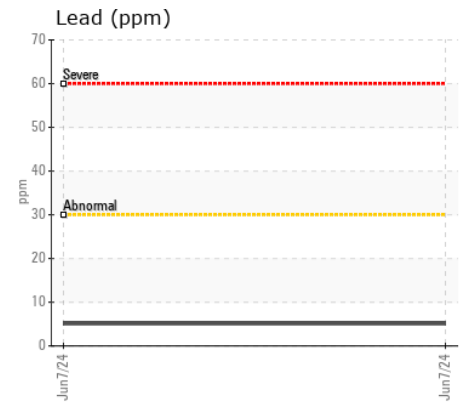
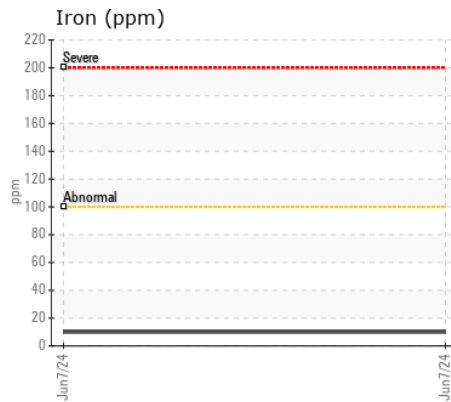
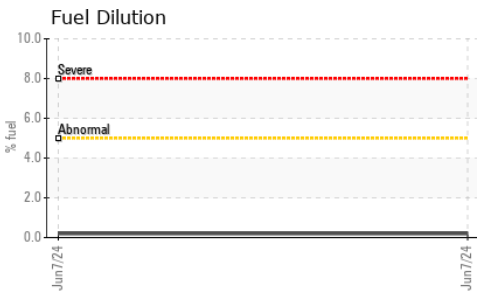
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	8	---	---
Potassium	ppm	ASTM D5185(m)	>20	3	---	---
Fuel	%	ASTM D7593*	>5	0.2	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	13.0	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	41.1	---	---
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)	>158	2	---	---
Boron	ppm	ASTM D5185(m)	250	78	---	---
Barium	ppm	ASTM D5185(m)	10	35	---	---
Molybdenum	ppm	ASTM D5185(m)	100	46	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)	450	912	---	---
Calcium	ppm	ASTM D5185(m)	3000	1359	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	636	---	---
Zinc	ppm	ASTM D5185(m)	1350	805	---	---
Sulfur	ppm	ASTM D5185(m)	4250	1748	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	53.6	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	11.9	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0287614 **Received** : 14 Jun 2024
Lab Number : 02641922 **Tested** : 17 Jun 2024
Unique Number : 5799461 **Diagnosed** : 17 Jun 2024 - Kevin Marson
Test Package : MOBCE (Additional Tests: FuelDilution, PercentFuel)

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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