



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(348279)
Machine Id
LIEBHERR LH50M 129938-1216
Component
Diesel Engine
Fluid
PETRO CANADA SUPREME 5W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0284372	LH	---
Sample Date		Client Info		15 Feb 2024	18 Jun 2023	---
Machine Age	hrs	Client Info		3030	2442	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>66	3	3	---
Chromium	ppm	ASTM D5185(m)	>4	0	0	---
Nickel	ppm	ASTM D5185(m)	>4	0	0	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>8	2	2	---
Lead	ppm	ASTM D5185(m)	>10	<1	0	---
Copper	ppm	ASTM D5185(m)	>74	2	2	---
Tin	ppm	ASTM D5185(m)	>4	<1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	VLITE	---	---

CONTAMINATION

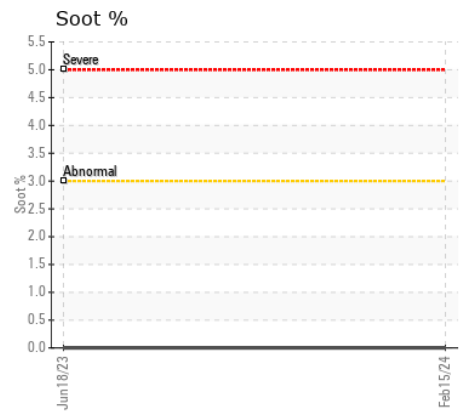
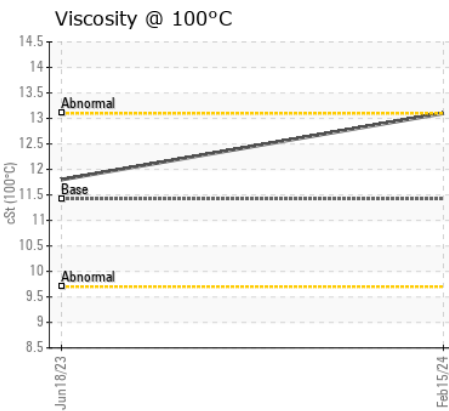
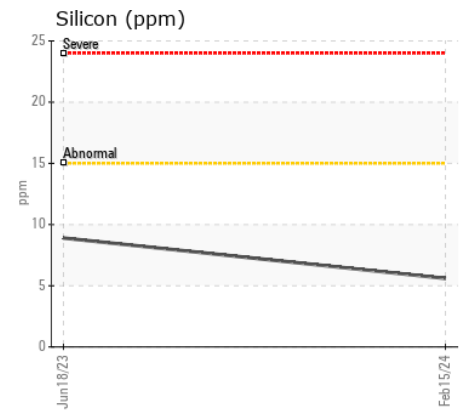
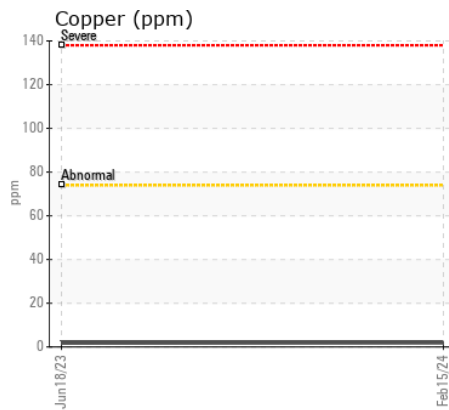
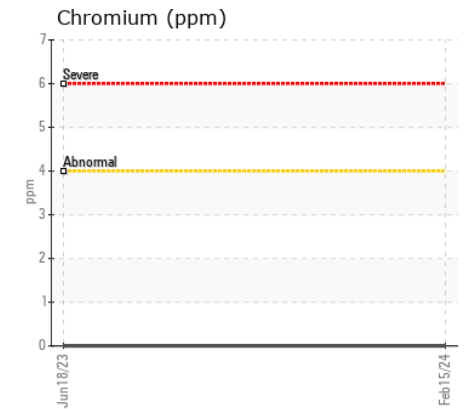
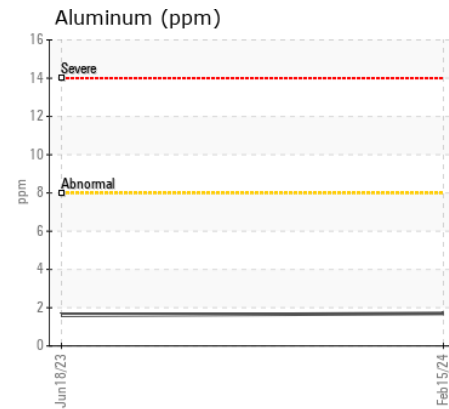
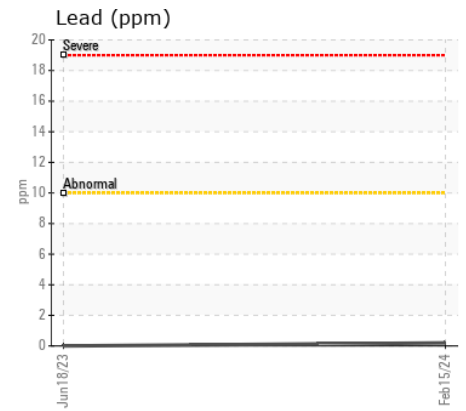
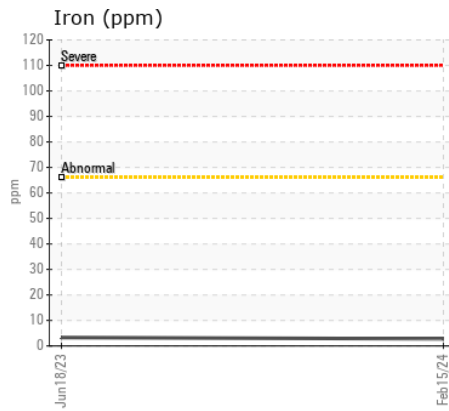
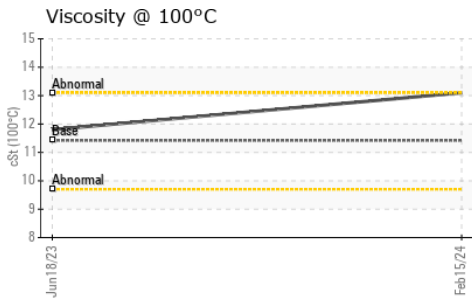
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	6	9	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Fuel		WC Method	>5	<1.0	1.4	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	8.0	9.1	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.7	19.4	---
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	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		1	4	---
Boron	ppm	ASTM D5185(m)	186	3	36	---
Barium	ppm	ASTM D5185(m)	<1	<1	0	---
Molybdenum	ppm	ASTM D5185(m)	79	57	57	---
Manganese	ppm	ASTM D5185(m)	0	0	<1	---
Magnesium	ppm	ASTM D5185(m)	578	952	1085	---
Calcium	ppm	ASTM D5185(m)	1002	1021	924	---
Phosphorus	ppm	ASTM D5185(m)	745	992	1111	---
Zinc	ppm	ASTM D5185(m)	837	1158	1256	---
Sulfur	ppm	ASTM D5185(m)	2502	2699	2926	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.7	17.9	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.42	13.1	11.8	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0284372 **Received** : 20 Feb 2024
Lab Number : 02616514 **Tested** : 23 Feb 2024
Unique Number : 5733624 **Diagnosed** : 23 Feb 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: BottomAnalysis, FILTERPATCH, Visual)

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

T:
F: