



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**LIEBHERR LH22 157673-1525**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA 10W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0288024</b>	---	---
Sample Date		Client Info		<b>02 May 2024</b>	---	---
Machine Age	hrs	Client Info		<b>515</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>66	<b>25</b>	---	---
Chromium	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>8	<b>6</b>	---	---
Lead	ppm	ASTM D5185(m)	>10	<b>1</b>	---	---
Copper	ppm	ASTM D5185(m)	>74	<b>39</b>	---	---
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---

### CONTAMINATION

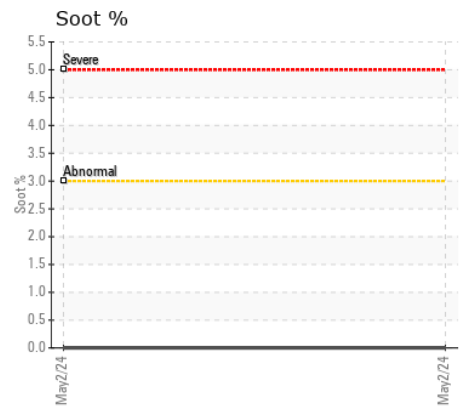
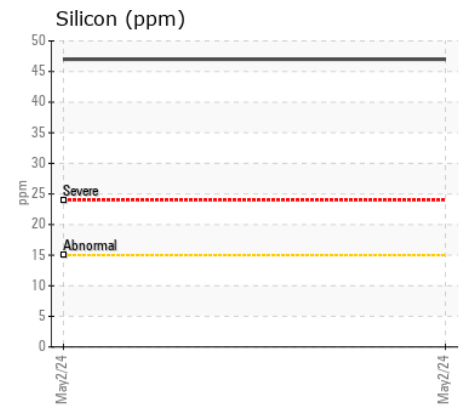
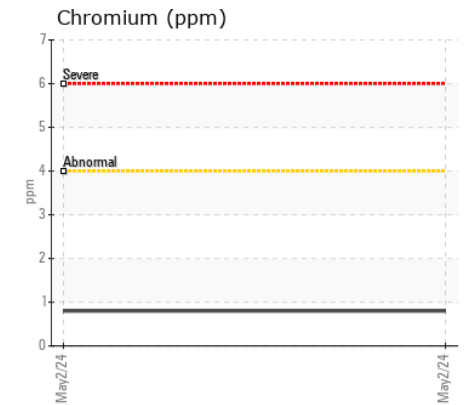
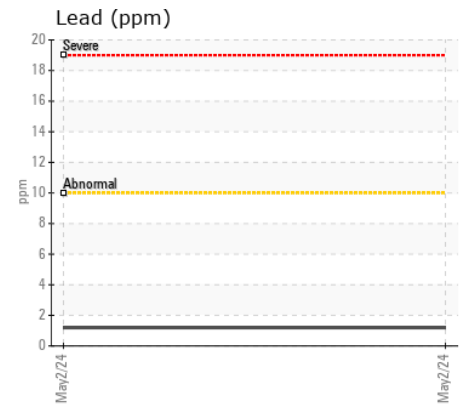
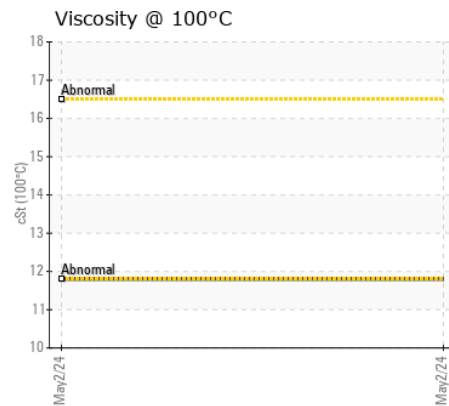
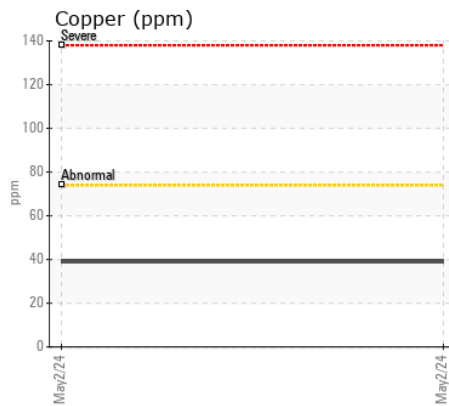
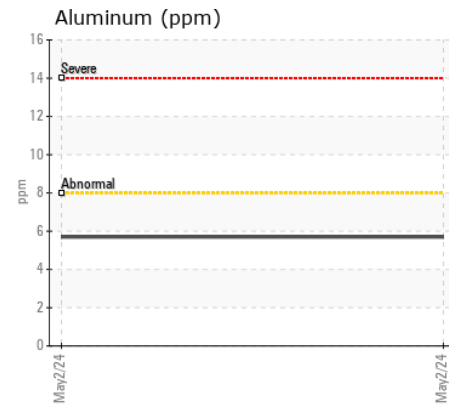
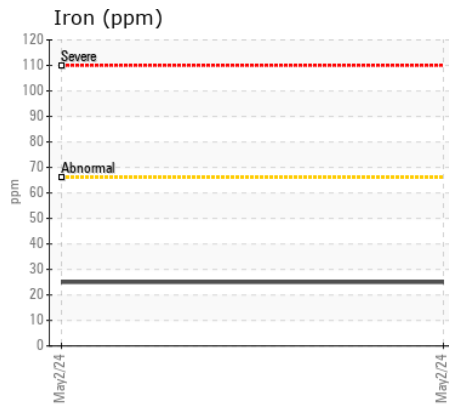
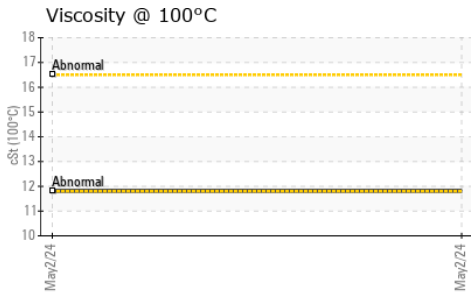
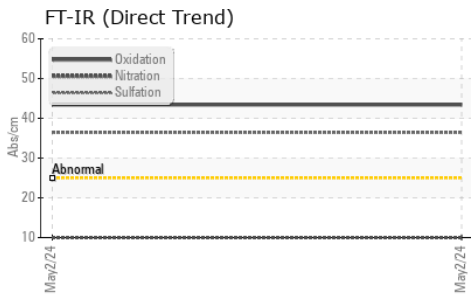
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>47</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	ASTM D7844*	>3	<b>0</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.0</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>36.4</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>20	<b>5</b>	---	---
Boron	ppm	ASTM D5185(m)		<b>93</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>9</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>45</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>9</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>772</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>1781</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>743</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>887</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>2001</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>43.4</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		<b>11.8</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0288024 **Received** : 10 May 2024  
**Lab Number** : 02634472 **Tested** : 10 May 2024  
**Unique Number** : 5775625 **Diagnosed** : 10 May 2024 - Kevin Marson  
**Test Package** : MOB 1

**ECOWASTE INDUSTRIES LTD.**  
 15111 WILLIAMS ROAD  
 RICHMOND, BC  
 CA V6W 1G9  
 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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