



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH30M 090077**  
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		<b>LH0276289</b>	LH0230737	LH
Sample Date		Client Info		<b>16 Apr 2024</b>	06 Jun 2022	05 Jan 2022
Machine Age	hrs	Client Info		<b>6756</b>	5519	5072
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>66	<b>6</b>	3	4
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>8	<b>1</b>	1	2
Lead	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>74	<b>3</b>	2	4
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

### CONTAMINATION

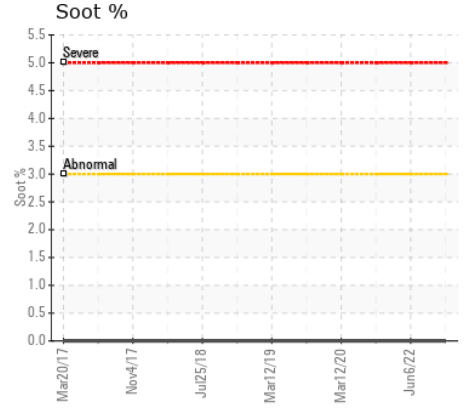
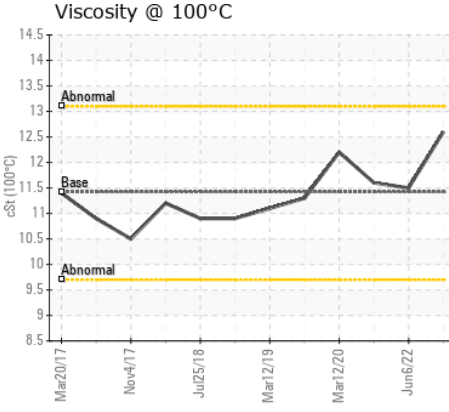
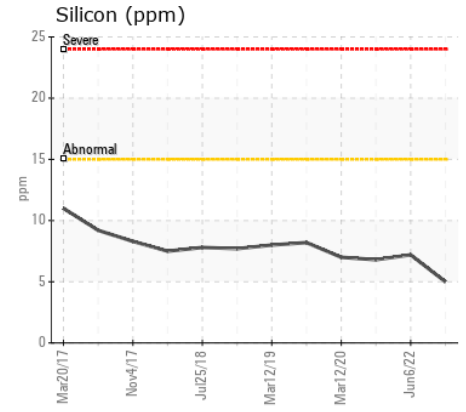
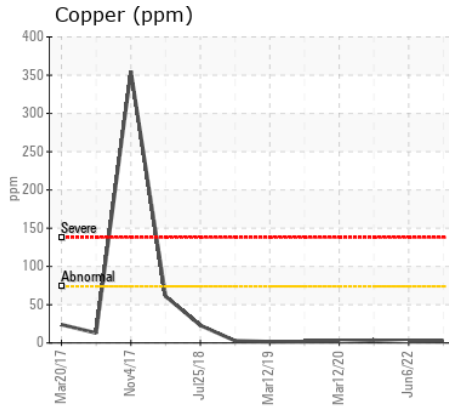
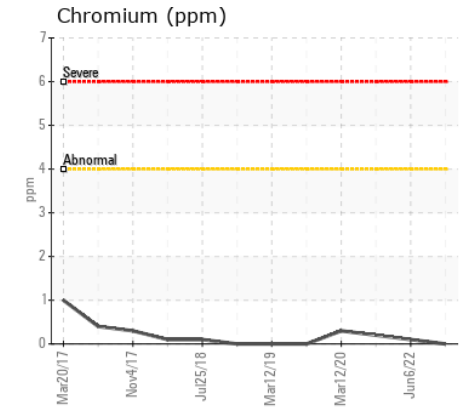
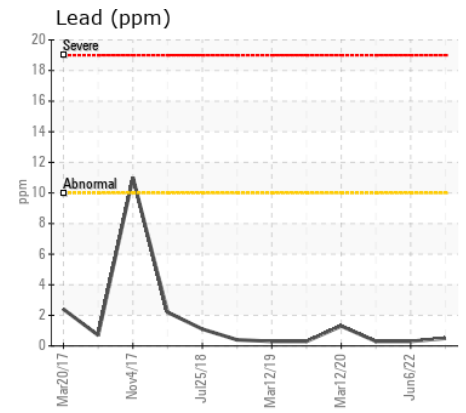
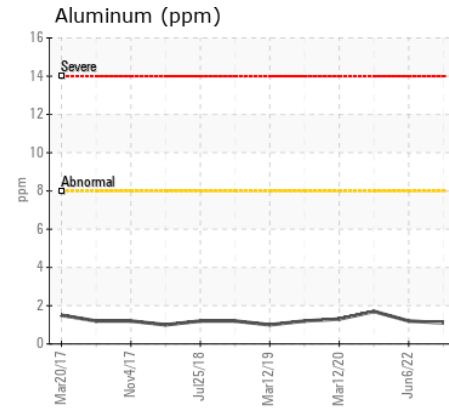
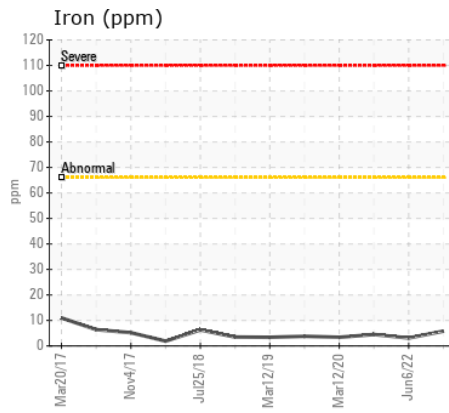
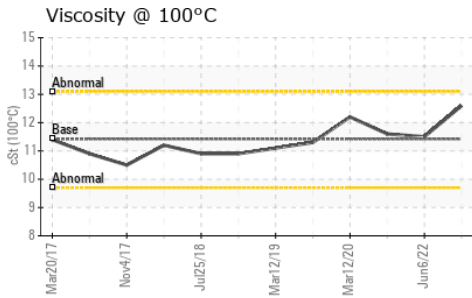
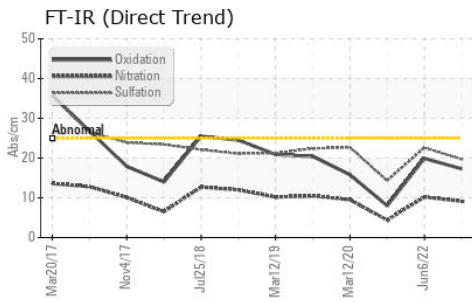
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>5</b>	7	7
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	3	1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.1</b>	10.2	4.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.7</b>	22.6	14.3
Silt	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Debris	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>2</b>	5	3
Boron	ppm	ASTM D5185(m)	186	<b>9</b>	31	22
Barium	ppm	ASTM D5185(m)	<1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	79	<b>56</b>	59	64
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	578	<b>979</b>	1187	1177
Calcium	ppm	ASTM D5185(m)	1002	<b>1046</b>	834	908
Phosphorus	ppm	ASTM D5185(m)	745	<b>972</b>	1109	1056
Zinc	ppm	ASTM D5185(m)	837	<b>1147</b>	1265	1219
Sulfur	ppm	ASTM D5185(m)	2502	<b>2593</b>	2938	2971
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.3</b>	19.9	8.0
Visc @ 100°C	cSt	ASTM D7279(m)	11.42	<b>12.6</b>	11.5	11.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0276289 **Received** : 17 Apr 2024  
**Lab Number** : 02629509 **Tested** : 17 Apr 2024  
**Unique Number** : 5762641 **Diagnosed** : 17 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**ELG Canada**  
 4375 CORPORATE DRIVE  
 BURLINGTON, ON  
 CA L7L 5P7  
 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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