



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH50M 094197-1216**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA 10W40 (28 LTR)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0261135</b>	LH0260825	LH0251211
Sample Date		Client Info		<b>29 Dec 2023</b>	31 May 2023	13 Mar 2023
Machine Age	hrs	Client Info		<b>24211</b>	22824	22266
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>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>5</b>	2	3
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>1</b>	1	1
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m)	>125	<b>4</b>	<1	1
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

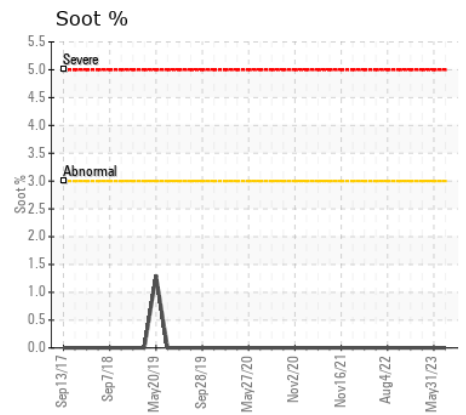
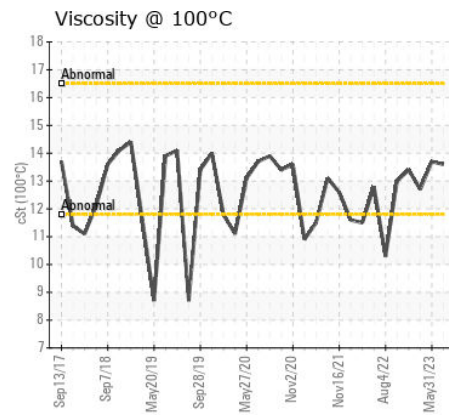
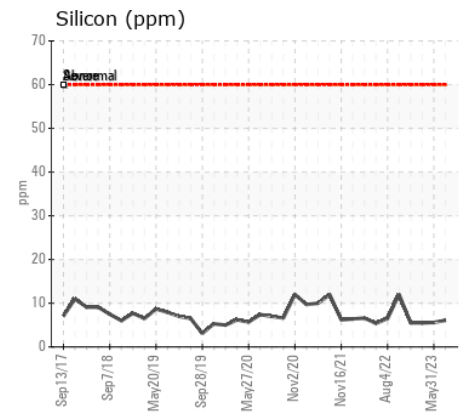
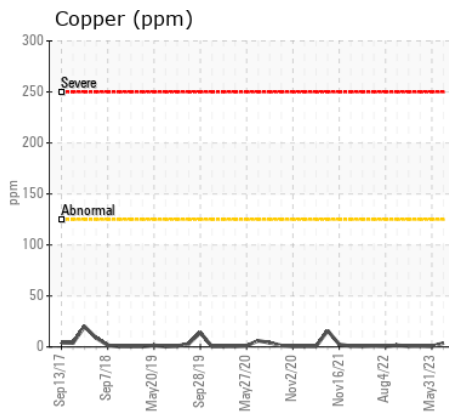
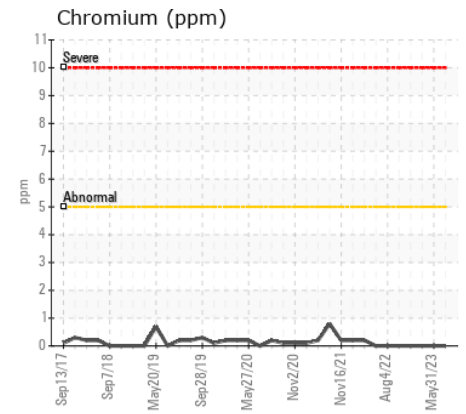
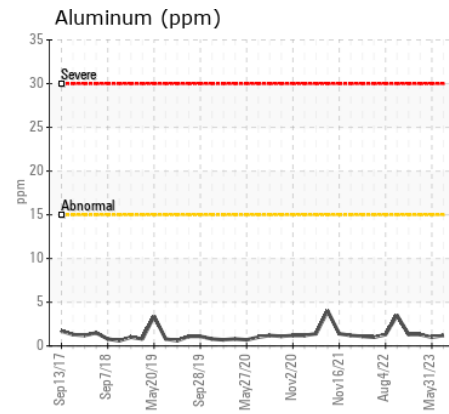
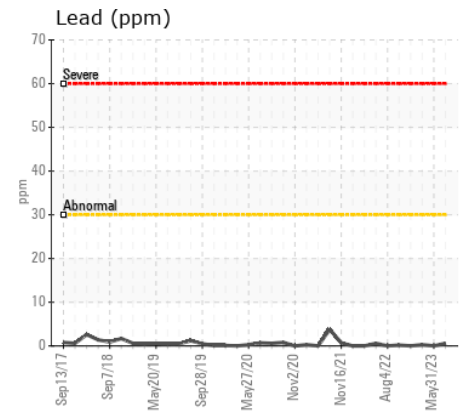
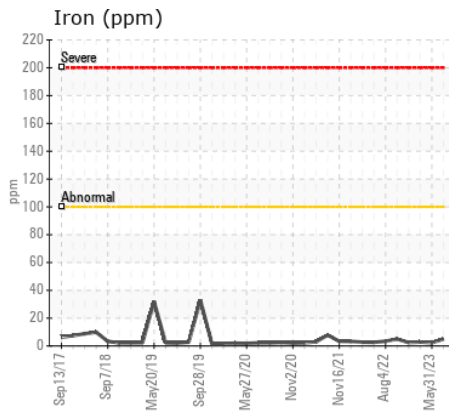
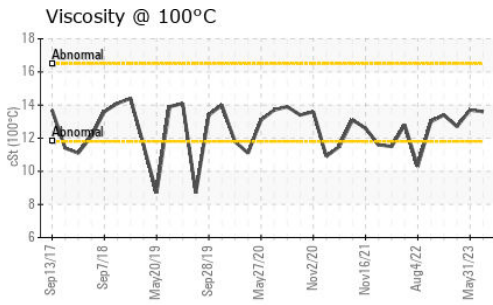
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	<b>6</b>	6	6
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	0
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>6.4</b>	7.9	10.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.2</b>	18.6	21.6
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)	>20	<b>2</b>	<1	1
Boron	ppm	ASTM D5185(m)		<b>3</b>	<1	<1
Barium	ppm	ASTM D5185(m)		<b>3</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>55</b>	59	59
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>934</b>	965	970
Calcium	ppm	ASTM D5185(m)		<b>1050</b>	1119	1130
Phosphorus	ppm	ASTM D5185(m)		<b>989</b>	1064	1076
Zinc	ppm	ASTM D5185(m)		<b>1163</b>	1185	1199
Sulfur	ppm	ASTM D5185(m)		<b>2789</b>	2604	2657
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.4</b>	15.3	17.2
Visc @ 100°C	cSt	ASTM D7279(m)		<b>13.6</b>	13.7	12.7



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0261135 **Received** : 08 Jan 2024  
**Lab Number** : 02606890 **Diagnosed** : 08 Jan 2024  
**Unique Number** : 5707976 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1

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.

**INDUSTRIES GDS INC.**  
 207 ROUTE 295  
 VILLE-DEGELIS, QC  
 CA G5T 1R1  
 Contact: Martin Deschenes  
 mdeschenes@groupgds.com  
 T: (418)853-2566  
 F: