



# LIEBHERR

## OIL ANALYSIS REPORT

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



Area  
**(344091)**  
Machine Id  
**LIEBHERR LH40M 120553-1215**  
Component  
**Front Left Wheel Hub**  
Fluid  
**PETRO CANADA TRAXON 75W90 SYNTHETIC (--- GAL)**

### RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA TRAXON 75W90 SYNTHETIC, however, a fluid match indicates that this fluid is SAE 75W90 Gear Oil. Please confirm the oil type and grade on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0193879</b>	LH0193865	LH0193851
Sample Date		Client Info		<b>13 Feb 2024</b>	21 Feb 2023	11 Oct 2021
Machine Age	hrs	Client Info		<b>4086</b>	2835	1021
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>None</b>	None	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>650	<b>110</b>	83	40
Chromium	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>1</b>	1	2
Lead	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>60	<b>15</b>	24	19
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	VLITE	LIGHT
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

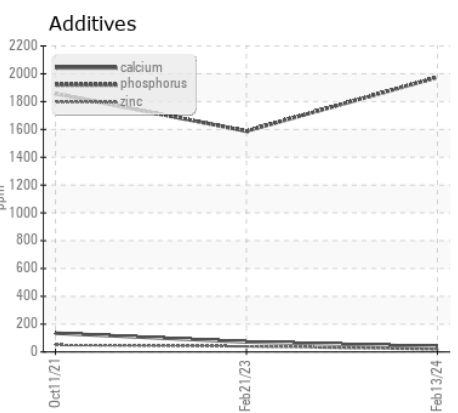
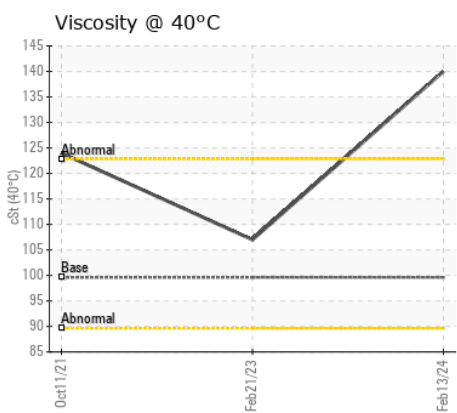
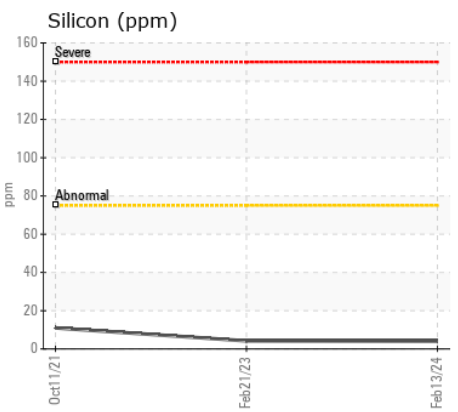
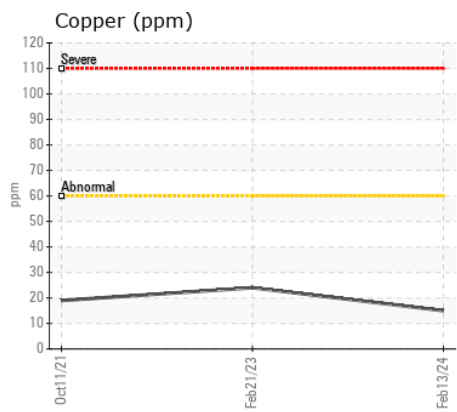
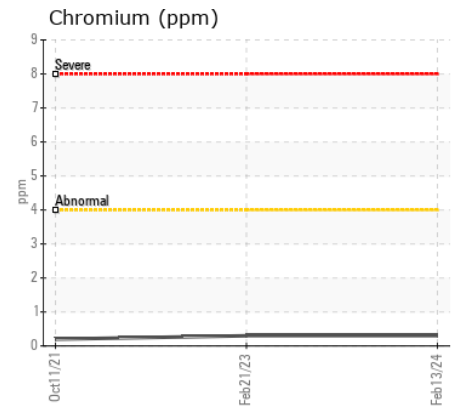
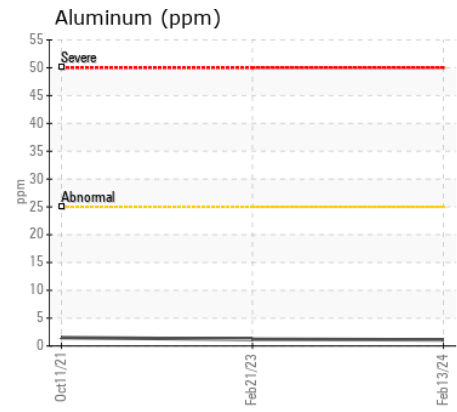
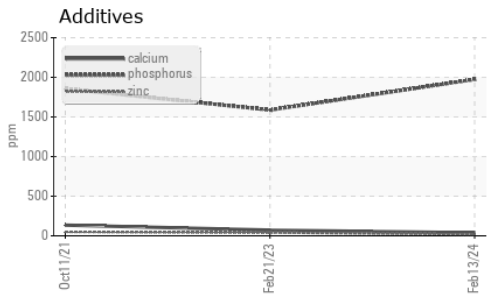
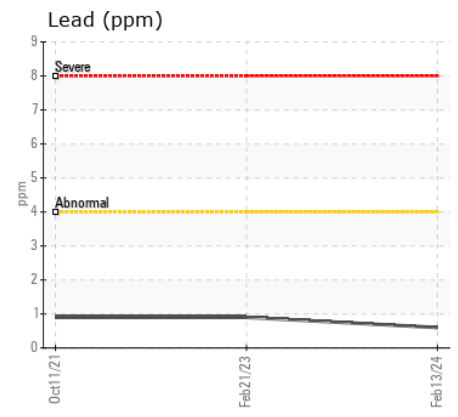
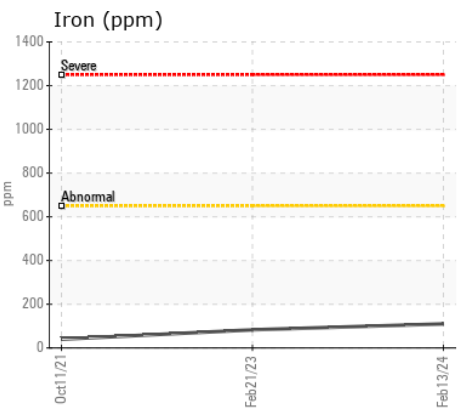
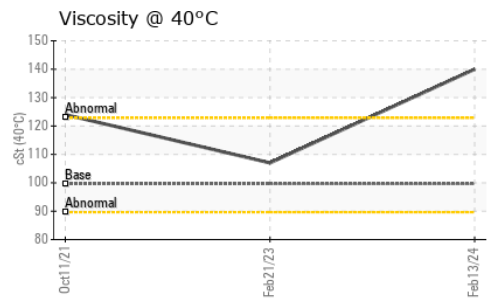
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>75	<b>4</b>	4	11
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	1	2
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>8</b>	12	9
Boron	ppm	ASTM D5185(m)	328	<b>50</b>	179	81
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	1	2
Manganese	ppm	ASTM D5185(m)		<b>2</b>	3	3
Magnesium	ppm	ASTM D5185(m)	1	<b>2</b>	3	3
Calcium	ppm	ASTM D5185(m)	7	<b>38</b>	72	135
Phosphorus	ppm	ASTM D5185(m)	1145	<b>1974</b>	1588	1857
Zinc	ppm	ASTM D5185(m)	3	<b>18</b>	40	50
Sulfur	ppm	ASTM D5185(m)	17909	<b>23586</b>	22461	22881
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	<b>140</b>	107	124



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0193879 **Received** : 16 Feb 2024  
**Lab Number** : 02616385 **Tested** : 20 Feb 2024  
**Unique Number** : 5733495 **Diagnosed** : 20 Feb 2024 - Kevin Marson  
**Test Package** : MOBCE ( Additional Tests: Visual )

**Goodies Trading Ltd.**  
 8150 Aitken Road  
 Chilliwack, BC  
 CA V2R 4H5  
 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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