



# LIEBHERR

## OIL ANALYSIS REPORT



Area  
**(344091)**  
Machine Id  
**LIEBHERR LH40M 120553-1215**  
Component  
**Rear Differential**  
Fluid  
**PETRO CANADA TRAXON 75W90 SYNTHETIC (--- GAL)**

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

### RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.  
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0193887</b>	LH0193859	LH0193845
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>	Not Changed	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>150	<b>65</b>	37	14
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>5	<b>1</b>	3	1
Copper	ppm	ASTM D5185(m)	>125	<b>25</b>	85	32
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<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

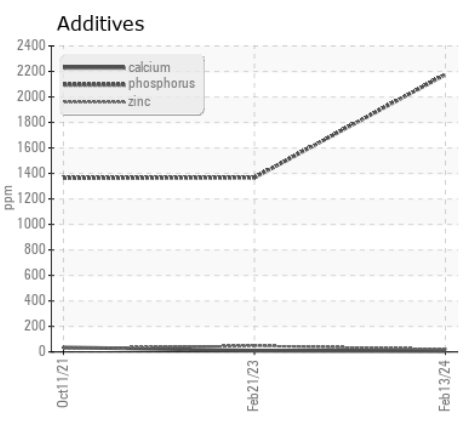
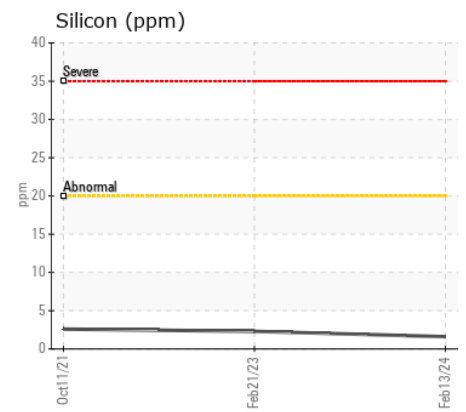
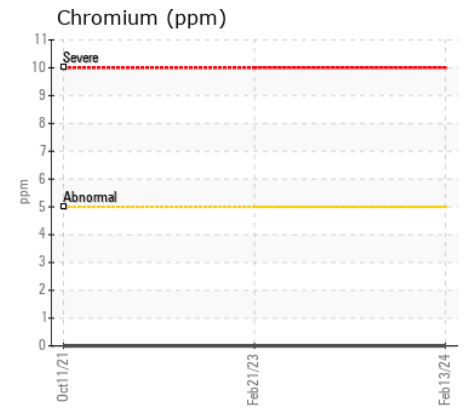
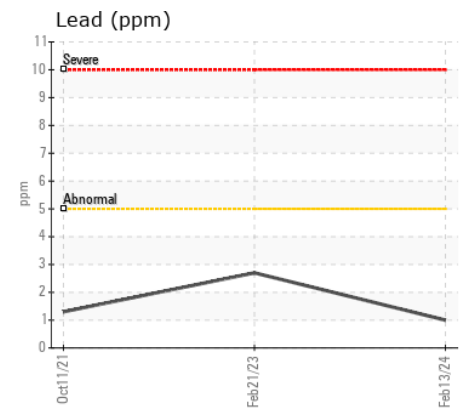
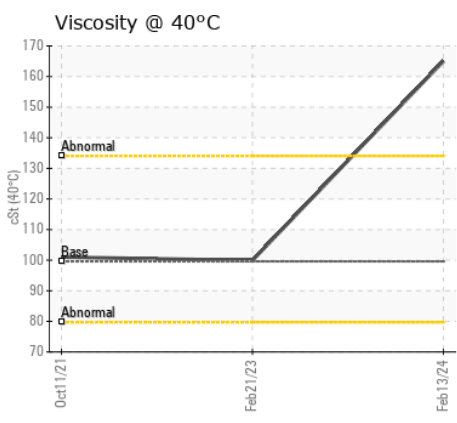
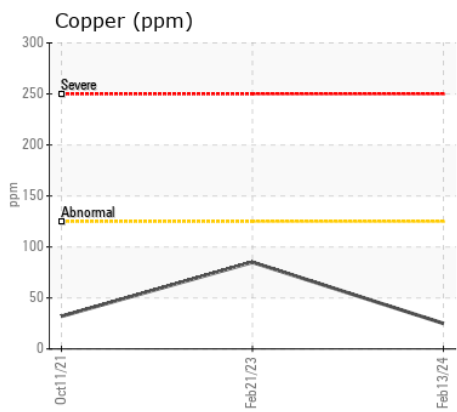
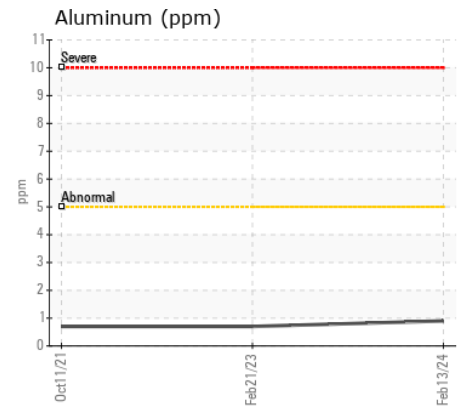
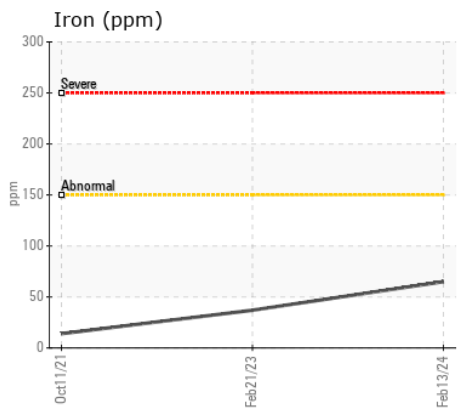
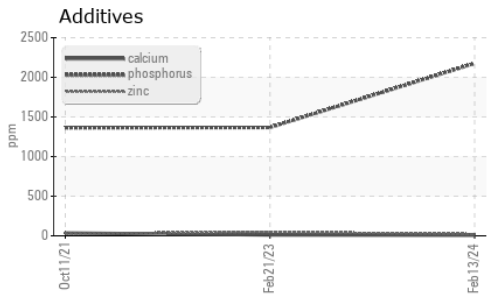
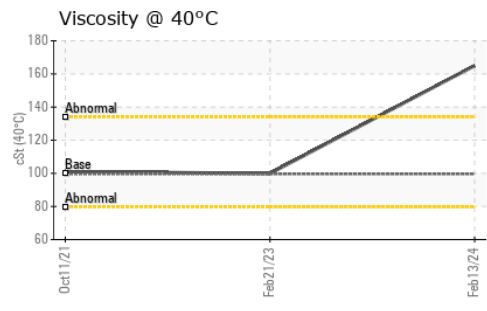
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>2</b>	2	3
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</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>3</b>	2	2
Boron	ppm	ASTM D5185(m)	328	<b>36</b>	317	245
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	<1
Magnesium	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	<1	1
Calcium	ppm	ASTM D5185(m)	7	<b>7</b>	11	36
Phosphorus	ppm	ASTM D5185(m)	1145	<b>2176</b>	1367	1364
Zinc	ppm	ASTM D5185(m)	3	<b>21</b>	48	28
Sulfur	ppm	ASTM D5185(m)	17909	<b>24385</b>	22318	20793
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	<b>165</b>	99.9	101



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0193887 **Received** : 16 Feb 2024  
**Lab Number** : 02616399 **Tested** : 16 Feb 2024  
**Unique Number** : 5733509 **Diagnosed** : 16 Feb 2024 - Wes Davis  
**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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F: