



# LIEBHERR

## OIL ANALYSIS REPORT



Area

(360376)

Machine Id

LIEBHERR LH40M 134365-1215

Component

Front Right Wheel Hub

Fluid

PETRO CANADA TRAXON SYNTHETIC 75W90 (--- GAL)

WEAR  
CONTAMINATION  
FLUID CONDITION

ABNORMAL

NORMAL

NORMAL

### RECOMMENDATION

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

### WEAR

Copper and lead ppm levels are abnormal. Bearing and/or bushing wear is indicated.

### CONTAMINATION

There is no indication of any contamination in the oil.

### FLUID CONDITION

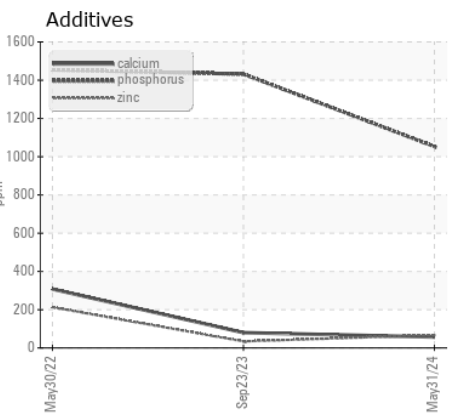
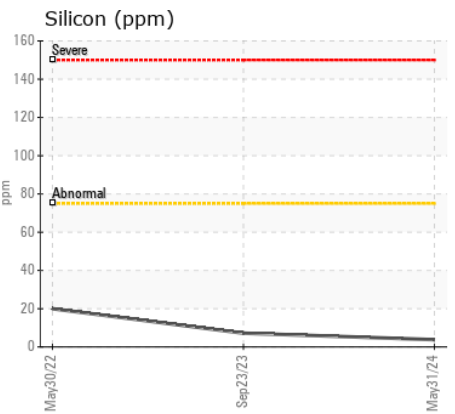
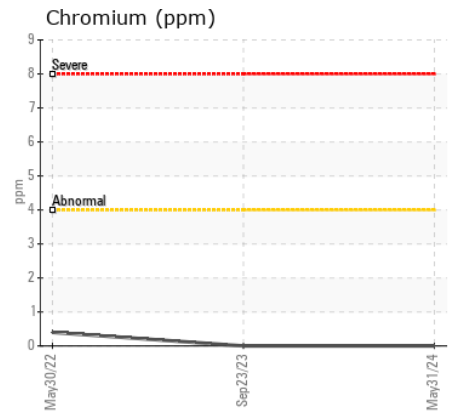
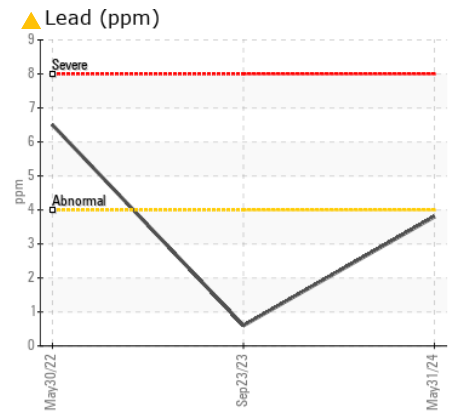
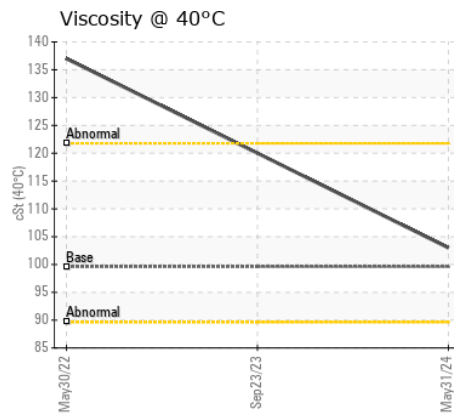
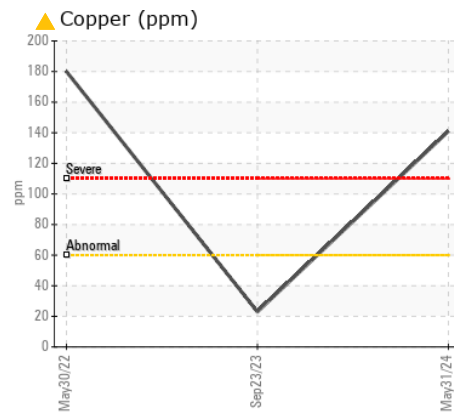
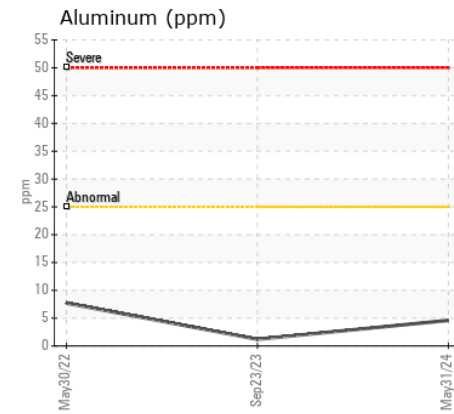
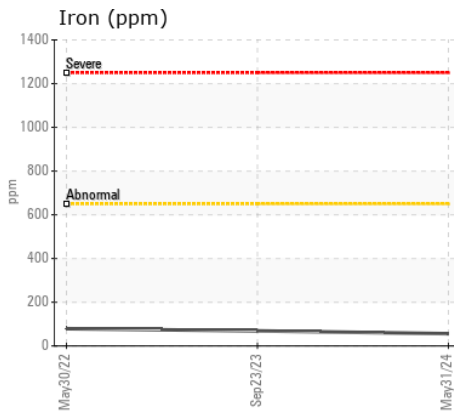
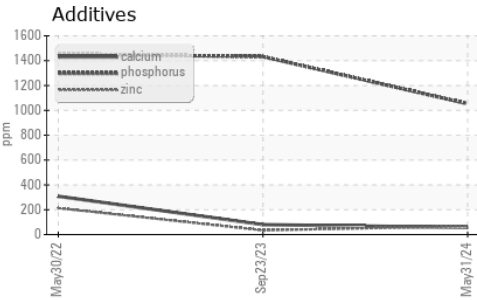
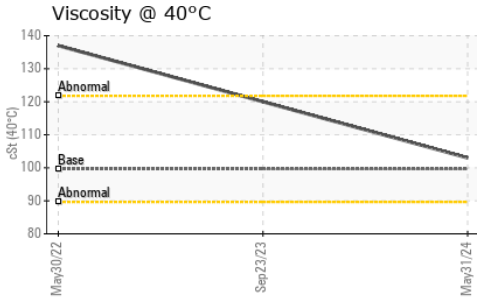
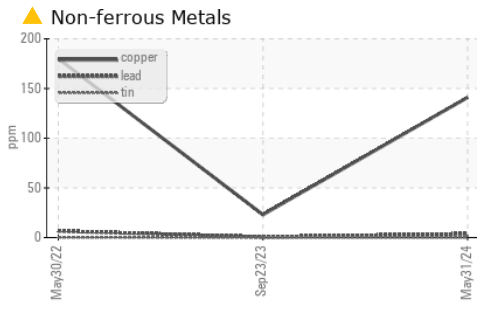
Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0178388	LH0276897	LH0195688
Sample Date		Client Info		31 May 2024	23 Sep 2023	30 May 2022
Machine Age	hrs	Client Info		4811	3785	1166
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	ABNORMAL

Iron	ppm	ASTM D5185(m)	>650	56	69	79
Chromium	ppm	ASTM D5185(m)	>4	0	0	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)	>4	0	0	<1
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	5	1	8
Lead	ppm	ASTM D5185(m)	>4	▲ 4	<1	▲ 6
Copper	ppm	ASTM D5185(m)	>60	▲ 141	23	▲ 180
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	▲ MODER

Silicon	ppm	ASTM D5185(m)	>75	4	7	20
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	4
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	LIGHT	LIGHT	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

Sodium	ppm	ASTM D5185(m)		3	5	9
Boron	ppm	ASTM D5185(m)	328	66	108	4
Barium	ppm	ASTM D5185(m)	1	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)		0	1	7
Manganese	ppm	ASTM D5185(m)		4	1	9
Magnesium	ppm	ASTM D5185(m)	1	2	2	2
Calcium	ppm	ASTM D5185(m)	7	57	80	308
Phosphorus	ppm	ASTM D5185(m)	1145	1053	1432	1454
Zinc	ppm	ASTM D5185(m)	3	67	34	213
Sulfur	ppm	ASTM D5185(m)	17909	19224	22461	18641
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	103	120	137



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0178388  
**Lab Number** : 02639693  
**Unique Number** : 5788855  
**Test Package** : MOB 1

**Received** : 04 Jun 2024  
**Tested** : 05 Jun 2024  
**Diagnosed** : 06 Jun 2024 - Kevin Marson

**American Iron and Metal**  
 997 CARPIN BEACH RD  
 SAULT ST MARIE, ON  
 CA P6A 6K4  
 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.

T:  
F: