



# LIEBHERR

## OIL ANALYSIS REPORT

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



Area

**(351146)**

Machine Id

**LIEBHERR A918 131283-1508**

Component

**Front Right 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0286698</b>	LH0274415	LH0242424
Sample Date		Client Info		<b>23 Jun 2024</b>	18 Aug 2023	01 Nov 2022
Machine Age	hrs	Client Info		<b>3983</b>	2990	2002
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	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>650	<b>59</b>	72	122
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>	<1	<1
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185(m)	>4	<b>2</b>	1	3
Copper	ppm	ASTM D5185(m)	>60	<b>36</b>	53	▲ 101
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	2
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	LIGHT	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

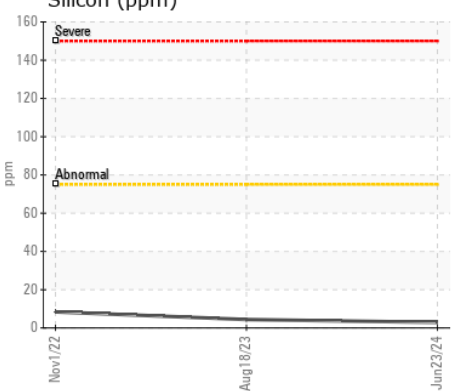
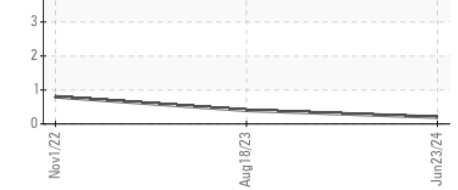
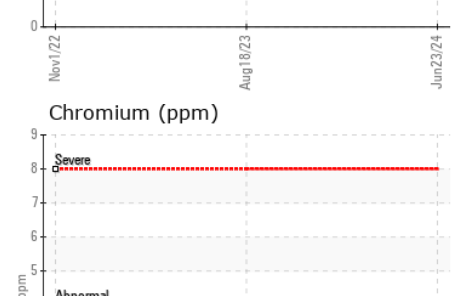
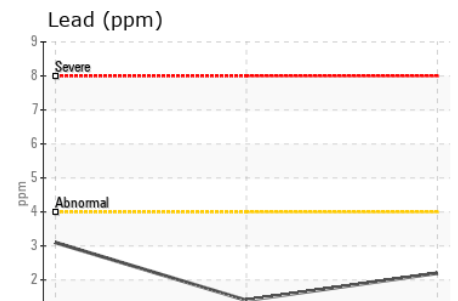
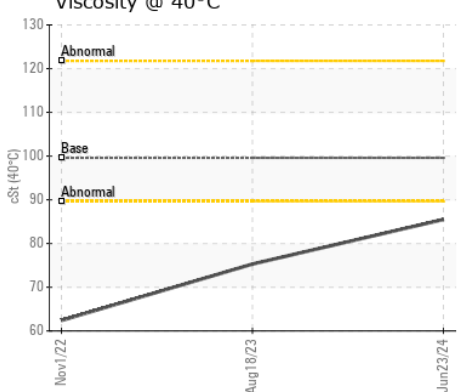
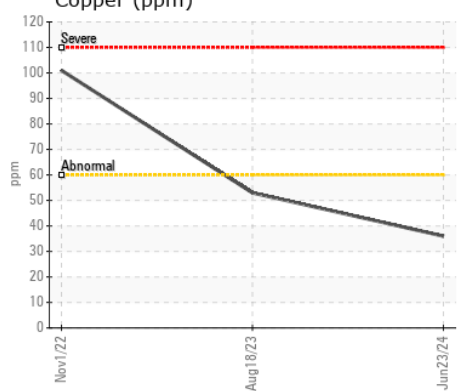
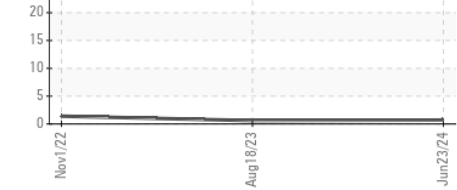
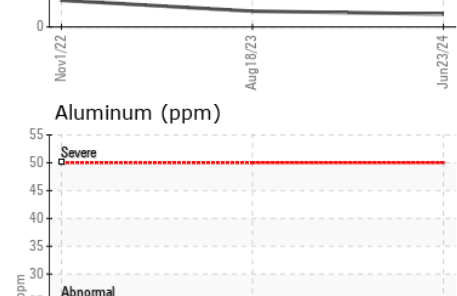
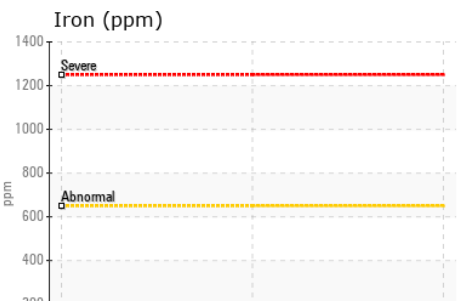
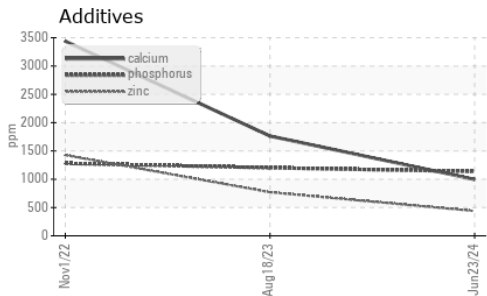
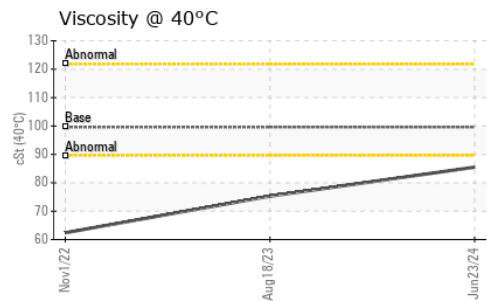
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>75	<b>3</b>	4	8
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	VLITE	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>11</b>	16	22
Boron	ppm	ASTM D5185(m)	328	<b>193</b>	159	94
Barium	ppm	ASTM D5185(m)	1	<b>4</b>	4	9
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185(m)	1	<b>5</b>	8	11
Calcium	ppm	ASTM D5185(m)	7	<b>996</b>	1763	3438
Phosphorus	ppm	ASTM D5185(m)	1145	<b>1137</b>	1202	1280
Zinc	ppm	ASTM D5185(m)	3	<b>438</b>	770	1426
Sulfur	ppm	ASTM D5185(m)	17909	<b>14452</b>	10650	3217
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	<b>85.5</b>	75.3	62.4



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0286698  
**Lab Number** : 02644224  
**Unique Number** : 5801763  
**Test Package** : MOB 1  
**Received** : 26 Jun 2024  
**Tested** : 26 Jun 2024  
**Diagnosed** : 27 Jun 2024 - Kevin Marson

**THOMAS CAVANAGH CONSTRUCTION LTD**  
 RR # 2, 9094 CAVANAGH ROAD  
 ASHTON, ON  
 CA K0A 1B0  
 Contact: Keith

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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