



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR L586 059953-1334**

Component  
**Front Differential**

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>LH0270300</b>	LH0284946	LH0242566
Sample Date		Client Info		<b>05 Mar 2024</b>	01 Feb 2024	21 Oct 2022
Machine Age	hrs	Client Info		<b>7962</b>	4939	3002
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)	>1500	<b>93</b>	102	140
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	6	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>5	<b>2</b>	<1	2
Copper	ppm	ASTM D5185(m)	>200	<b>41</b>	29	70
Tin	ppm	ASTM D5185(m)	>10	<b>2</b>	2	4
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	LIGHT

### CONTAMINATION

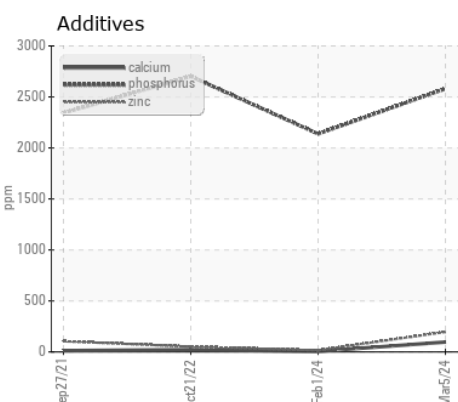
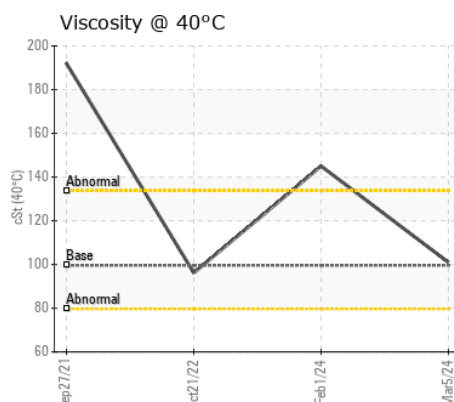
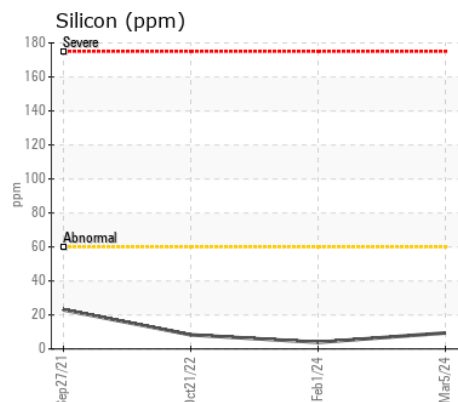
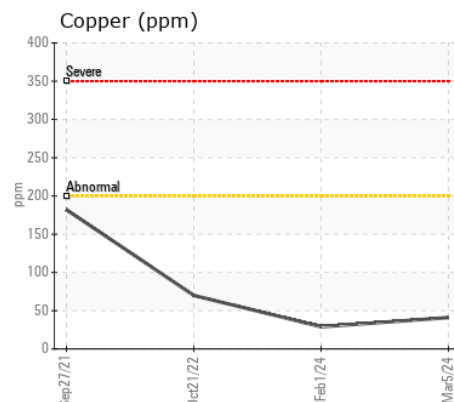
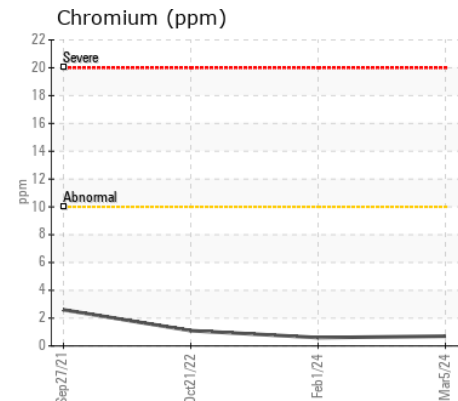
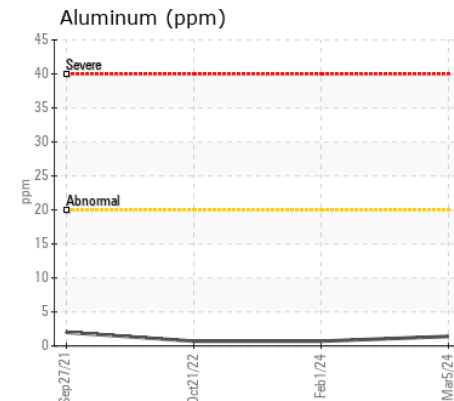
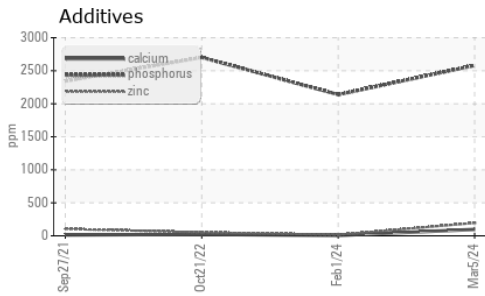
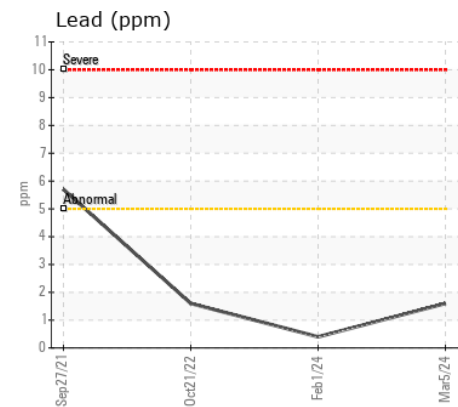
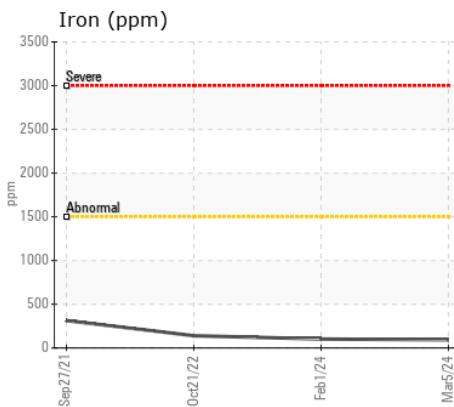
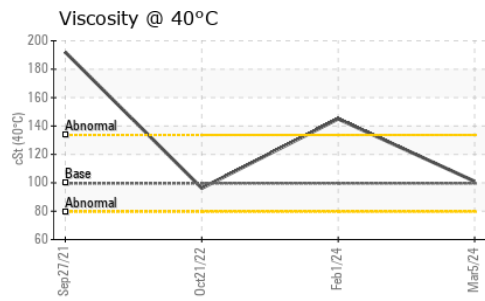
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	<b>9</b>	4	8
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Water		WC Method	>.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*	>.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>2</b>	<1	2
Boron	ppm	ASTM D5185(m)	328	<b>35</b>	95	236
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>1</b>	5	10
Magnesium	ppm	ASTM D5185(m)	1	<b>2</b>	<1	2
Calcium	ppm	ASTM D5185(m)	7	<b>97</b>	6	22
Phosphorus	ppm	ASTM D5185(m)	1145	<b>2581</b>	2138	2702
Zinc	ppm	ASTM D5185(m)	3	<b>196</b>	15	52
Sulfur	ppm	ASTM D5185(m)	17909	<b>21408</b>	24045	20106
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	<b>101</b>	145	96.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0270300  
**Lab Number** : 02620669  
**Unique Number** : 5737779  
**Test Package** : MOB 1  
**Received** : 07 Mar 2024  
**Tested** : 07 Mar 2024  
**Diagnosed** : 08 Mar 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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