



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR LH50M 124550-1216**

Component  
**Swing Drive**

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

### RECOMMENDATION

Due to this condition we recommend the following action... Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. We advise an early resample to confirm this situation. The fluid was not specified, however, a fluid match indicates that this fluid is ISO 46 AW Hydraulic Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample. NOTE: The current sample results do not match this units historical trend, indicating the sample may not be from this component/unit.

### WEAR

All component wear rates are normal.

### CONTAMINATION

There is no indication of any contamination in the oil.

### FLUID CONDITION

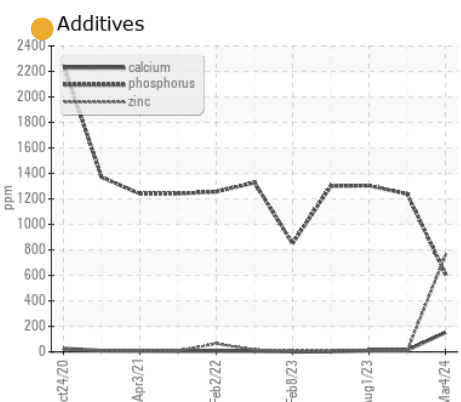
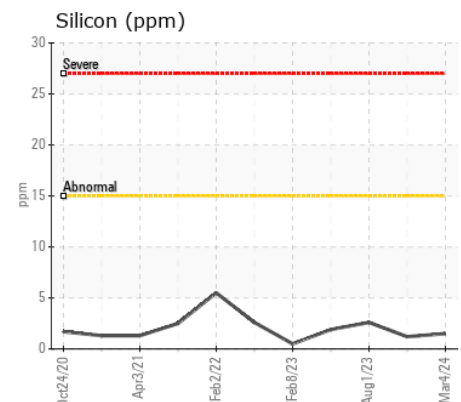
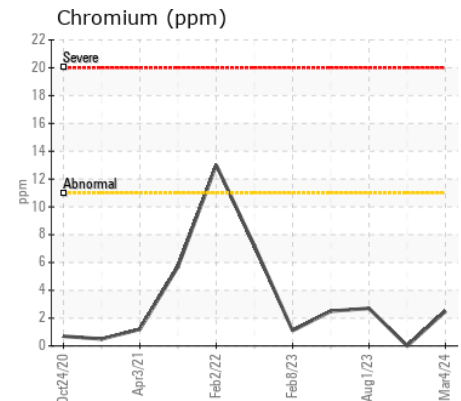
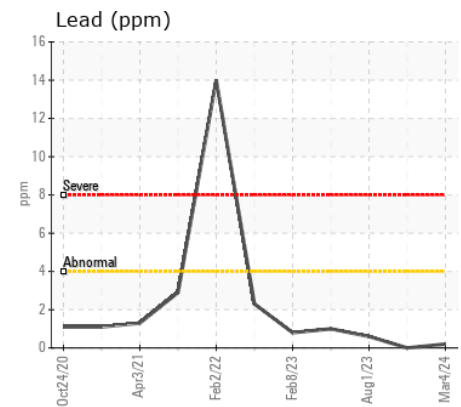
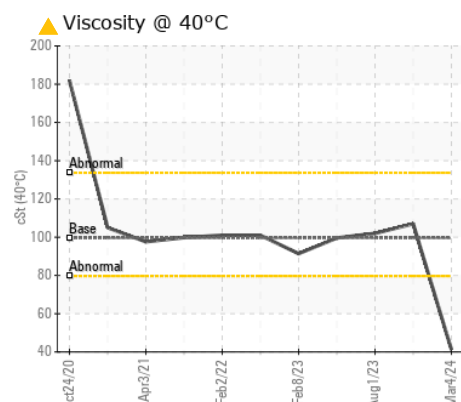
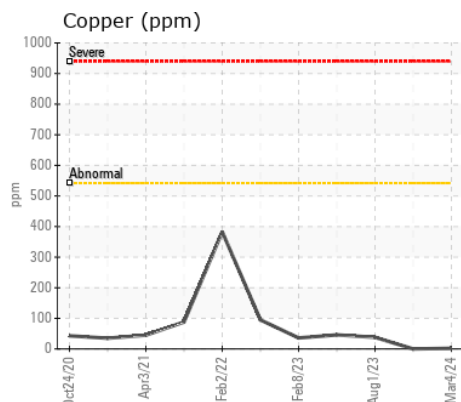
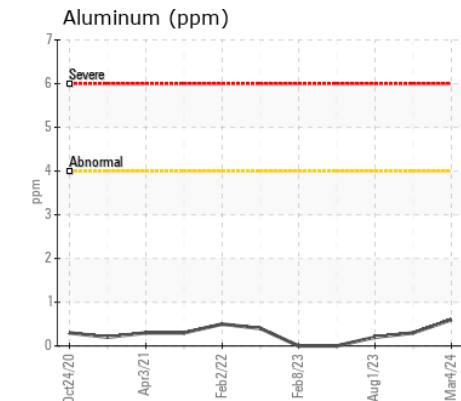
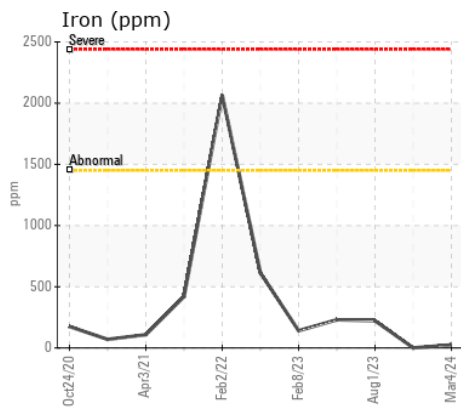
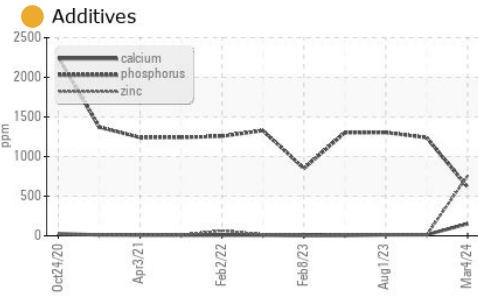
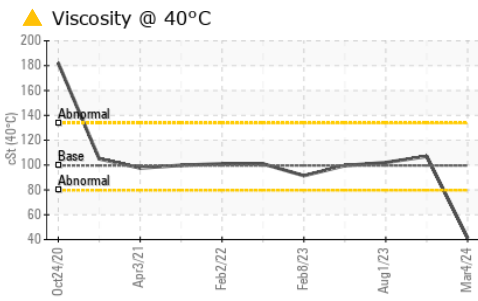
Viscosity of sample indicates oil is within ISO 46 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0278736</b>	LH0278895	LH0270581
Sample Date		Client Info		<b>04 Mar 2024</b>	09 Jan 2024	01 Aug 2023
Machine Age	hrs	Client Info		<b>14018</b>	13772	11935
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>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>None</b>	None	None
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

Iron	ppm	ASTM D5185(m)	>1450	<b>25</b>	<1	222
Chromium	ppm	ASTM D5185(m)	>11	<b>2</b>	0	3
Nickel	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m)	>542	<b>2</b>	0	38
Tin	ppm	ASTM D5185(m)	>38	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

Silicon	ppm	ASTM D5185(m)	>15	<b>2</b>	1	3
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	0	<1
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	VLITE
Sand/Dirt	scalar	Visual*	NONE	<b>VLITE</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

Sodium	ppm	ASTM D5185(m)		<b>1</b>	<1	<1
Boron	ppm	ASTM D5185(m)	328	<b>&lt;1</b>	300	302
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	2
Magnesium	ppm	ASTM D5185(m)	1	<b>4</b>	1	2
Calcium	ppm	ASTM D5185(m)	7	<b>153</b>	13	12
Phosphorus	ppm	ASTM D5185(m)	1145	<b>614</b>	1239	1304
Zinc	ppm	ASTM D5185(m)	3	<b>757</b>	9	11
Sulfur	ppm	ASTM D5185(m)	17909	<b>2101</b>	20718	20842
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	<b>41.3</b>	107	102



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0278736  
**Lab Number** : 02620654  
**Unique Number** : 5737764  
**Test Package** : MOB 1  
**Received** : 07 Mar 2024  
**Tested** : 07 Mar 2024  
**Diagnosed** : 08 Mar 2024 - Kevin Marson

**COMBINED METAL INDUSTRIES-PUBLIC YARD**  
 129 FENMAR DR  
 TORONTO, ON  
 CA M9L 1M7  
 Contact: Greg Sacher  
 gsacher@combinedmetal.com  
 T: (416)642-7262  
 F: x:

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.