



LIEBHERR

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[600286]
Machine Id
LIEBHERR HS895HD 188227
Component
Rear Right Slewing Gearbox
Fluid
PETRO CANADA TRAXON 75W90 SYNTHETIC (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0286563	---	---
Sample Date		Client Info		01 Mar 2024	---	---
Machine Age	hrs	Client Info		26121	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

Copper and tin ppm levels are abnormal.

Iron	ppm	ASTM D5185(m)	>500	21	---	---
Chromium	ppm	ASTM D5185(m)	>5	0	---	---
Nickel	ppm	ASTM D5185(m)	>5	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)		<1	---	---
Lead	ppm	ASTM D5185(m)	>5	3	---	---
Copper	ppm	ASTM D5185(m)	>35	▲ 111	---	---
Tin	ppm	ASTM D5185(m)	>5	▲ 10	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

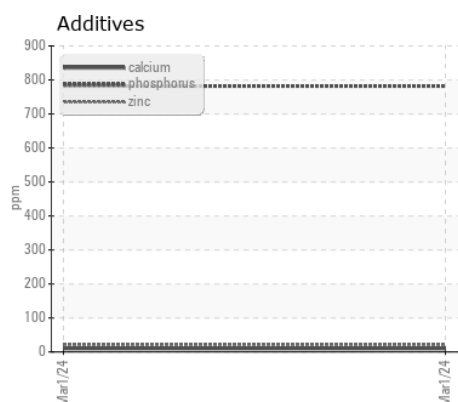
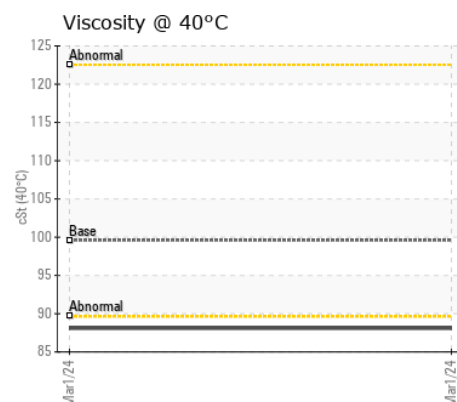
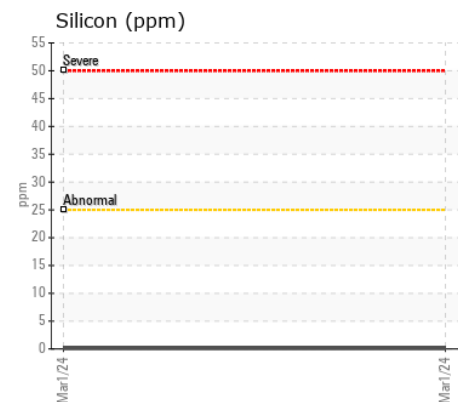
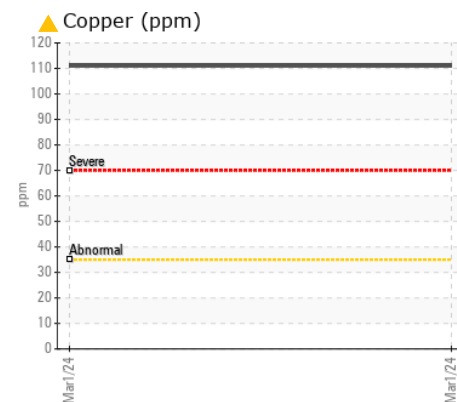
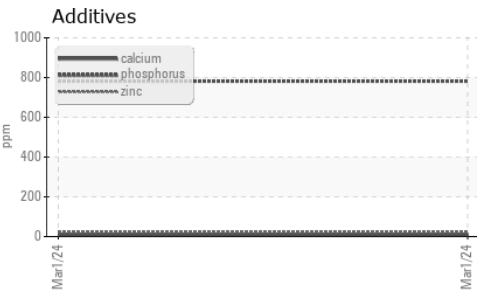
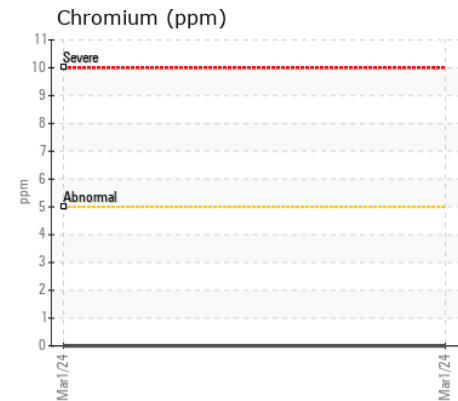
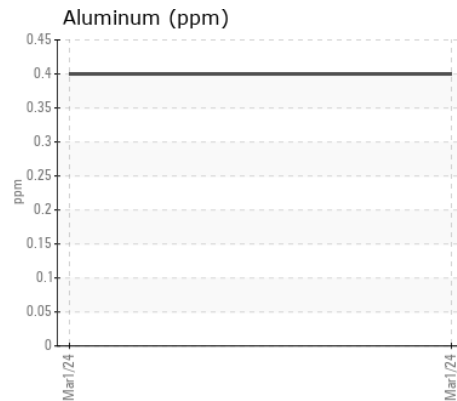
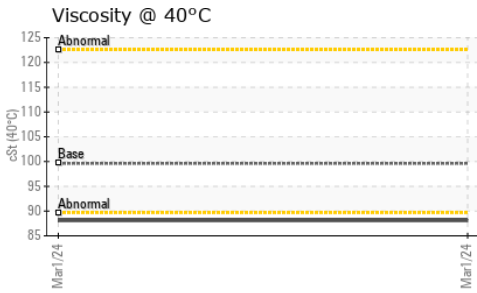
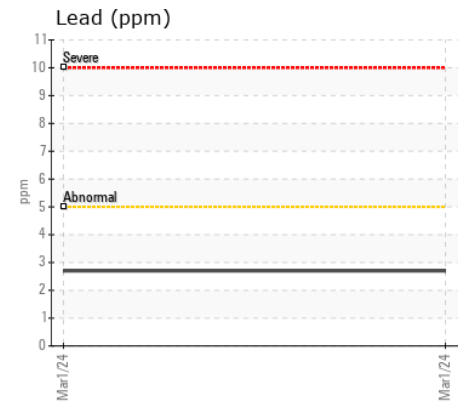
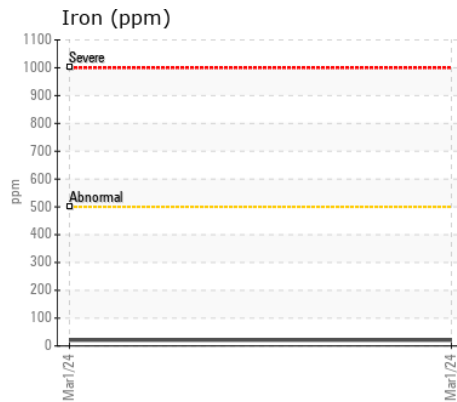
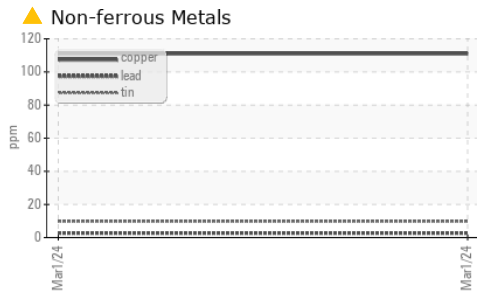
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<1	---	---
Potassium	ppm	ASTM D5185(m)	>20	4	---	---
Water		WC Method	>0.2	NEG	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

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.

Sodium	ppm	ASTM D5185(m)		<1	---	---
Boron	ppm	ASTM D5185(m)	328	30	---	---
Barium	ppm	ASTM D5185(m)	1	0	---	---
Molybdenum	ppm	ASTM D5185(m)		0	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)	1	4	---	---
Calcium	ppm	ASTM D5185(m)	7	10	---	---
Phosphorus	ppm	ASTM D5185(m)	1145	782	---	---
Zinc	ppm	ASTM D5185(m)	3	21	---	---
Sulfur	ppm	ASTM D5185(m)	17909	20598	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	88.1	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0286563
Lab Number : 02619983
Unique Number : 5737093
Test Package : MOB 1
Received : 05 Mar 2024
Tested : 05 Mar 2024
Diagnosed : 06 Mar 2024 - Kevin Marson

HIGGS & HIGGS
 RR # 4
 ST THOMAS, ON
 CA N5P 3S8
 Contact: Bernie Higgs

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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