



LIEBHERR

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL



Machine Id
LIEBHERR LH60 096587

Component
Swing Drive

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

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0284787	---	---
Sample Date		Client Info		24 Feb 2024	---	---
Machine Age	hrs	Client Info		11676	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

Chromium, copper, iron, nickel and lead ppm levels are abnormal. Bearing and/or bushing wear is indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

PQ		ASTM D8184*		14	---	---
Iron	ppm	ASTM D5185(m)	>350	▲ 1963	---	---
Chromium	ppm	ASTM D5185(m)	>15	▲ 25	---	---
Nickel	ppm	ASTM D5185(m)	>5	▲ 8	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>5	1	---	---
Lead	ppm	ASTM D5185(m)	>10	▲ 12	---	---
Copper	ppm	ASTM D5185(m)	>300	▲ 422	---	---
Tin	ppm	ASTM D5185(m)	>15	2	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

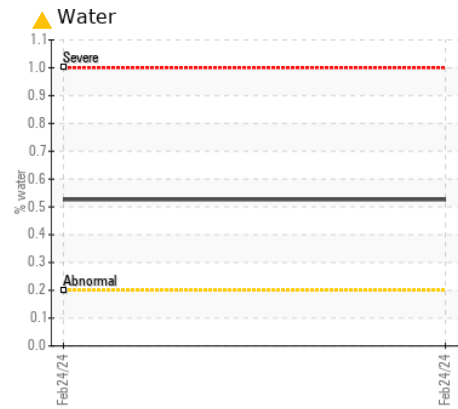
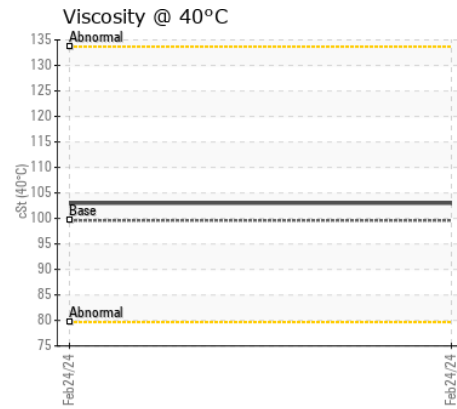
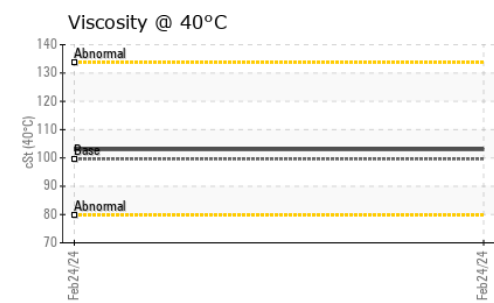
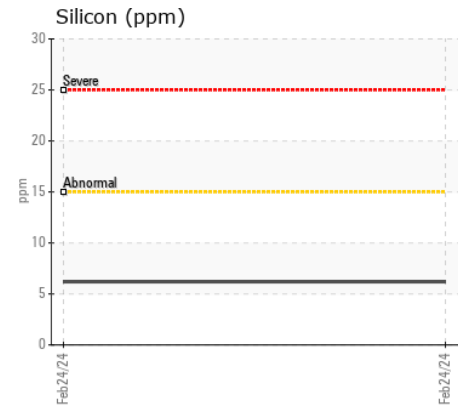
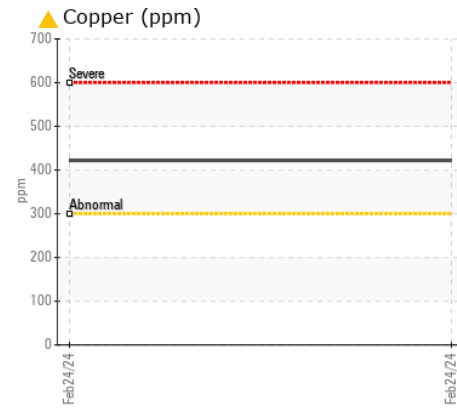
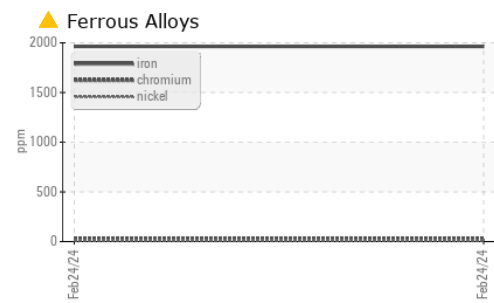
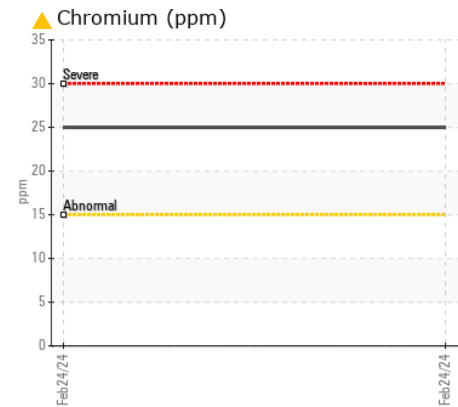
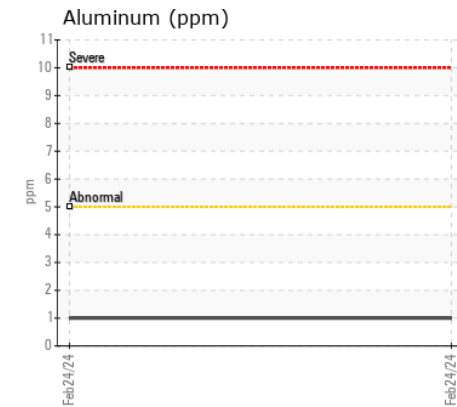
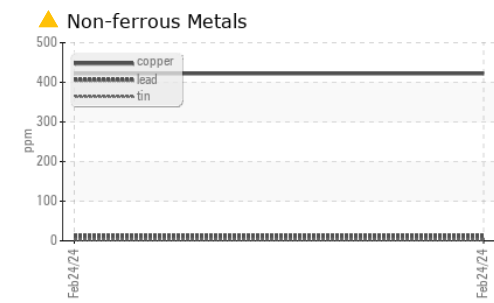
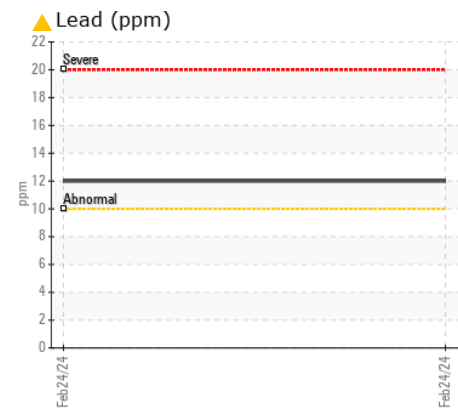
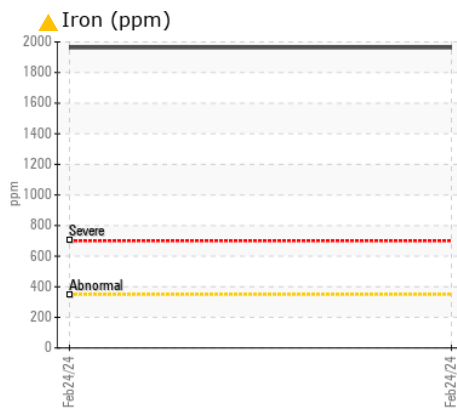
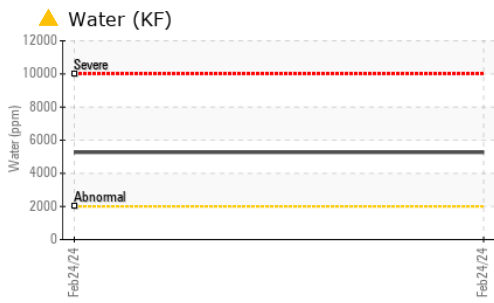
There is a moderate concentration of water present in the oil.

Silicon	ppm	ASTM D5185(m)	>15	6	---	---
Potassium	ppm	ASTM D5185(m)	>20	2	---	---
Water	%	ASTM D6304*	>0.2	▲ 0.526	---	---
ppm Water	ppm	ASTM D6304*	>2000	▲ 5267	---	---
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	▲ .2%	---	---

FLUID CONDITION

The white residue present in the sample is oil additive precipitate. 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	81	---	---
Barium	ppm	ASTM D5185(m)	1	0	---	---
Molybdenum	ppm	ASTM D5185(m)		1	---	---
Manganese	ppm	ASTM D5185(m)		11	---	---
Magnesium	ppm	ASTM D5185(m)	1	<1	---	---
Calcium	ppm	ASTM D5185(m)	7	6	---	---
Phosphorus	ppm	ASTM D5185(m)	1145	965	---	---
Zinc	ppm	ASTM D5185(m)	3	16	---	---
Sulfur	ppm	ASTM D5185(m)	17909	20424	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	103	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0284787 **Received** : 05 Mar 2024
Lab Number : 02620016 **Tested** : 07 Mar 2024
Unique Number : 5737126 **Diagnosed** : 07 Mar 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Bottom, KF, PQ)

American Iron and Metal
 131 Toombs St
 Moncton, NB
 CA E1A 3A5
 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: