



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
SHUTTLELIFT ES40F CD2022

Component
Transmission

Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		HPL0004538	---	---
Sample Date		Client Info		27 Feb 2024	---	---
Machine Age	hrs	Client Info		42	---	---
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				SEVERE	---	---

WEAR

The copper level is severe. Clutch disc wear or oil cooler leaching indicated.

Iron	ppm	ASTM D5185m	>200	22	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m		<1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>50	<1	---	---
Lead	ppm	ASTM D5185m	>50	8	---	---
Copper	ppm	ASTM D5185m	>200	▲ 617	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

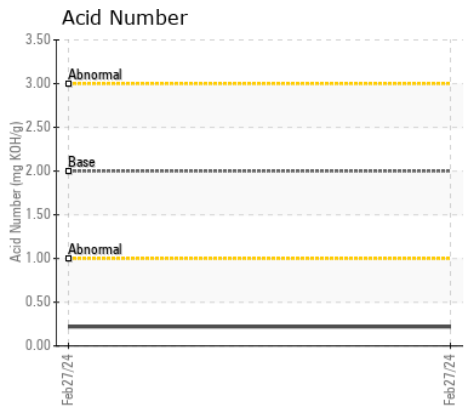
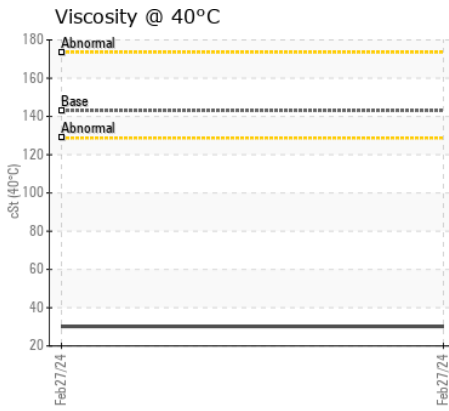
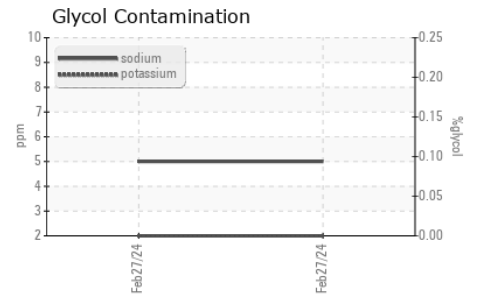
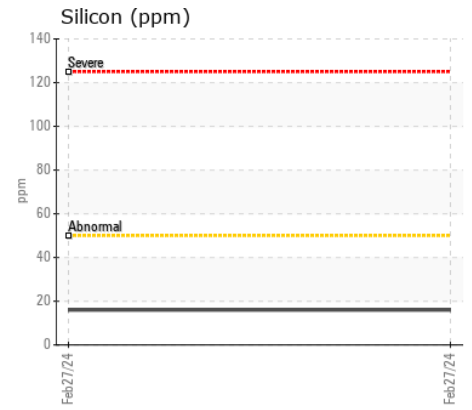
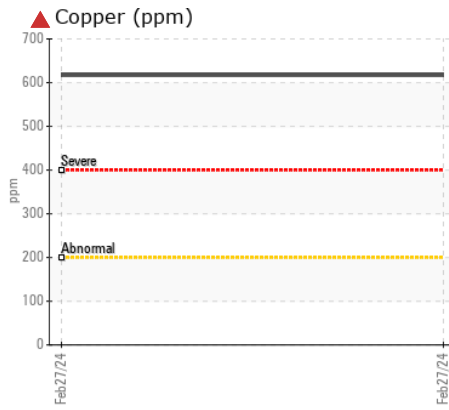
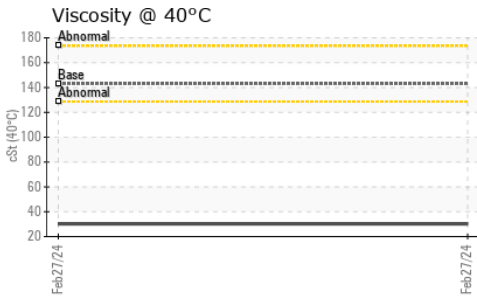
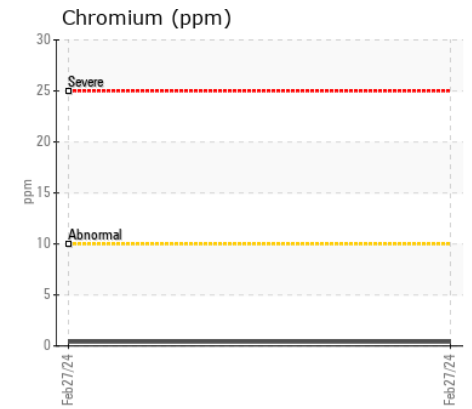
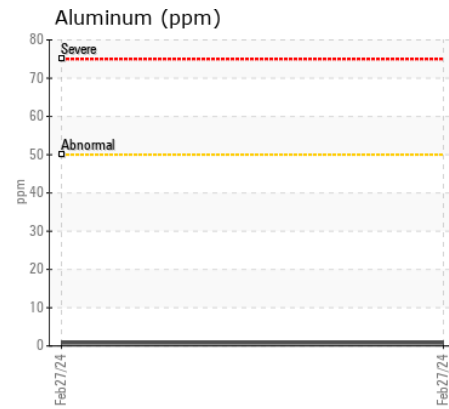
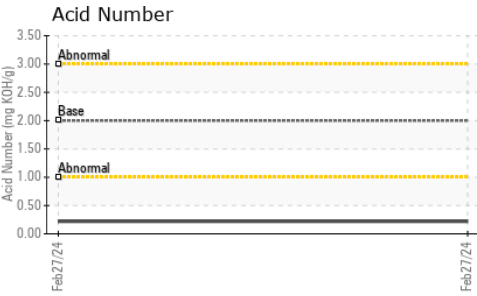
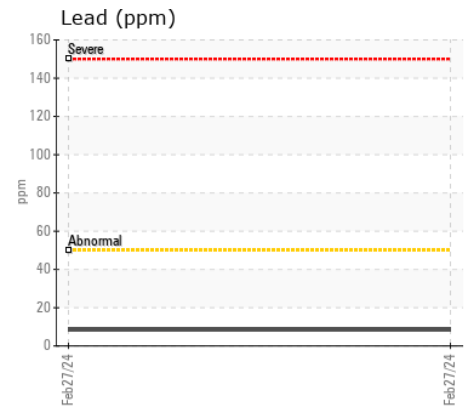
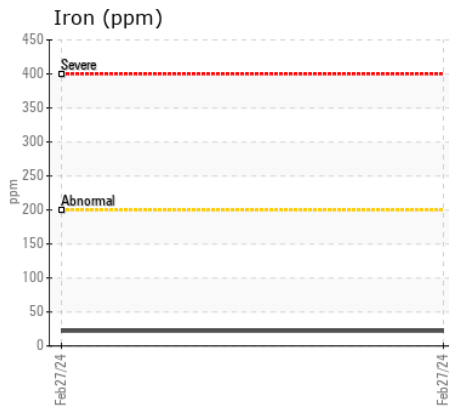
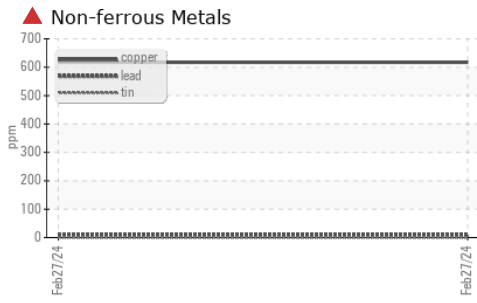
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185m	>50	16	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Water		WC Method	>0.1	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	>0.1	NEG	---	---

FLUID CONDITION

The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>170	5	---	---
Boron	ppm	ASTM D5185m	400	56	---	---
Barium	ppm	ASTM D5185m	200	6	---	---
Molybdenum	ppm	ASTM D5185m	12	2	---	---
Manganese	ppm	ASTM D5185m		4	---	---
Magnesium	ppm	ASTM D5185m	12	16	---	---
Calcium	ppm	ASTM D5185m	150	513	---	---
Phosphorus	ppm	ASTM D5185m	1650	300	---	---
Zinc	ppm	ASTM D5185m	125	228	---	---
Sulfur	ppm	ASTM D5185m	22500	1616	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	0.22	---	---
Visc @ 40°C	cSt	ASTM D445	143	30.2	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HPL0004538 **Received** : 28 Feb 2024
Lab Number : 06103165 **Tested** : 01 Mar 2024
Unique Number : 10901395 **Diagnosed** : 01 Mar 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: Glycol)

STEVENSON CRANE
 410 STEVENSON DR
 BOLINGBROOK, IL
 US 60440

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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