



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	ATTENTION

Machine Id
31103
 Component
Swing Drive
 Fluid
GEAR OIL LS 80W90 (--- QTS)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0905346	---	---
Sample Date		Client Info		11 Feb 2024	---	---
Machine Age	hrs	Client Info		975	---	---
Oil Age	hrs	Client Info		1000	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

WEAR

Bearing and/or gear wear is indicated.

Iron	ppm	ASTM D5185m	>400	1779	---	---
Chromium	ppm	ASTM D5185m	>10	16	---	---
Nickel	ppm	ASTM D5185m	>10	3	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	2	---	---
Lead	ppm	ASTM D5185m	>50	<1	---	---
Copper	ppm	ASTM D5185m	>200	157	---	---
Tin	ppm	ASTM D5185m	>10	11	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

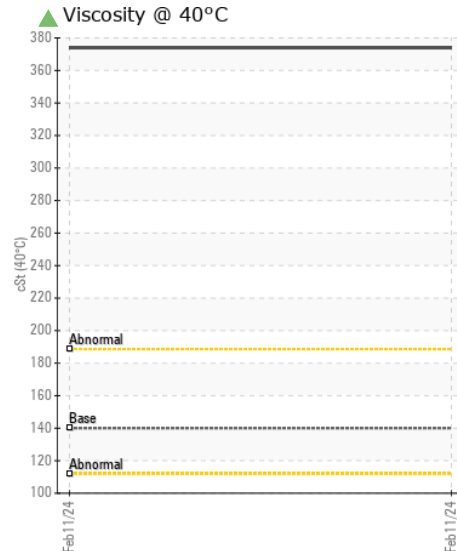
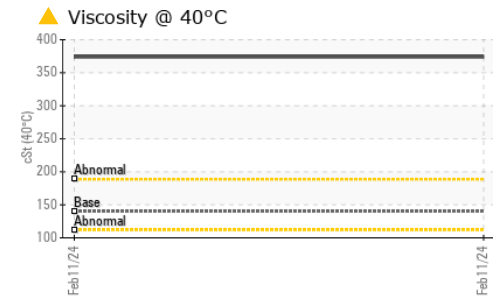
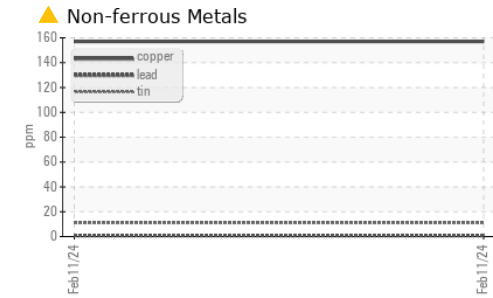
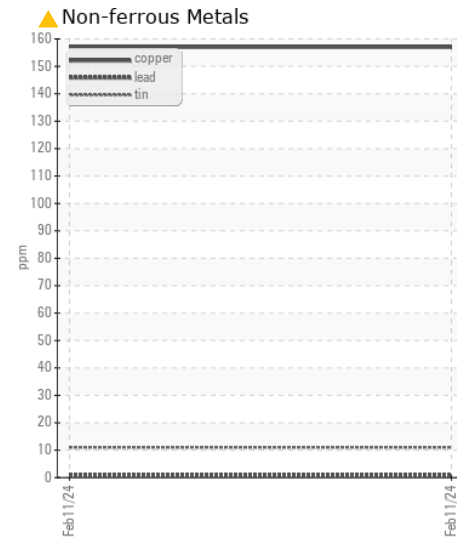
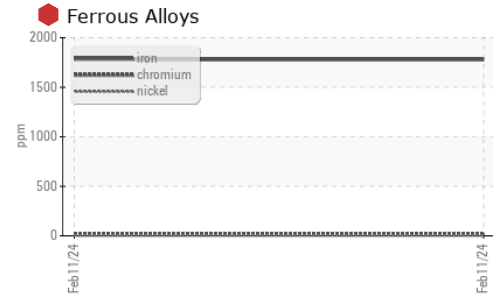
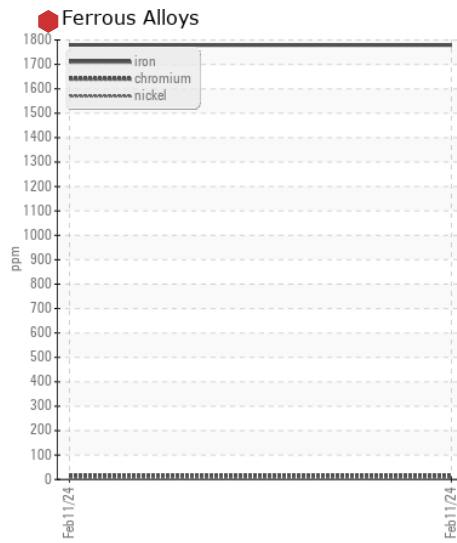
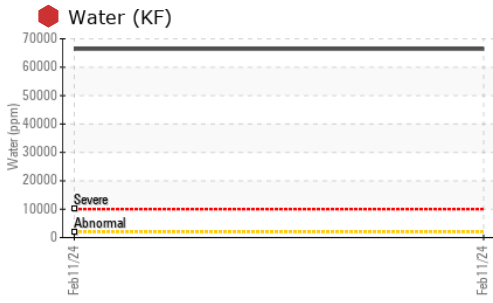
There is a high concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>50	6	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Water	%	ASTM D6304	>0.2	6.64	---	---
ppm Water	ppm	ASTM D6304	>2000	66400	---	---
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	0.2%	---	---

FLUID CONDITION

The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m	150	15	---	---
Barium	ppm	ASTM D5185m		4	---	---
Molybdenum	ppm	ASTM D5185m		<1	---	---
Manganese	ppm	ASTM D5185m		12	---	---
Magnesium	ppm	ASTM D5185m	10	15	---	---
Calcium	ppm	ASTM D5185m	70	53	---	---
Phosphorus	ppm	ASTM D5185m	2000	2252	---	---
Zinc	ppm	ASTM D5185m	50	286	---	---
Sulfur	ppm	ASTM D5185m	20000	24960	---	---
Visc @ 40°C	cSt	ASTM D445	140	374	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0905346 **Received** : 13 Feb 2024
Lab Number : 06088431 **Tested** : 15 Feb 2024
Unique Number : 10875876 **Diagnosed** : 15 Feb 2024 - Sean Felton
Test Package : CONST (Additional Tests: KF)

SULLIVAN EASTERN INC
 2860 C SLATER RD
 MORRISVILLE, NC
 US 27560

Contact: SCOTT SULLIVAN
 ssullivan@sullivan-eastern.com

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)

T: (919)484-8993
 F: (919)484-2136