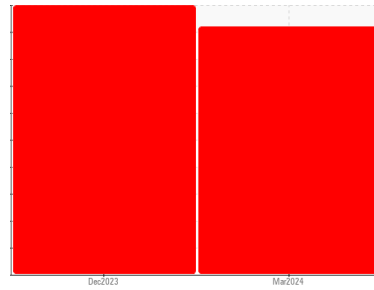




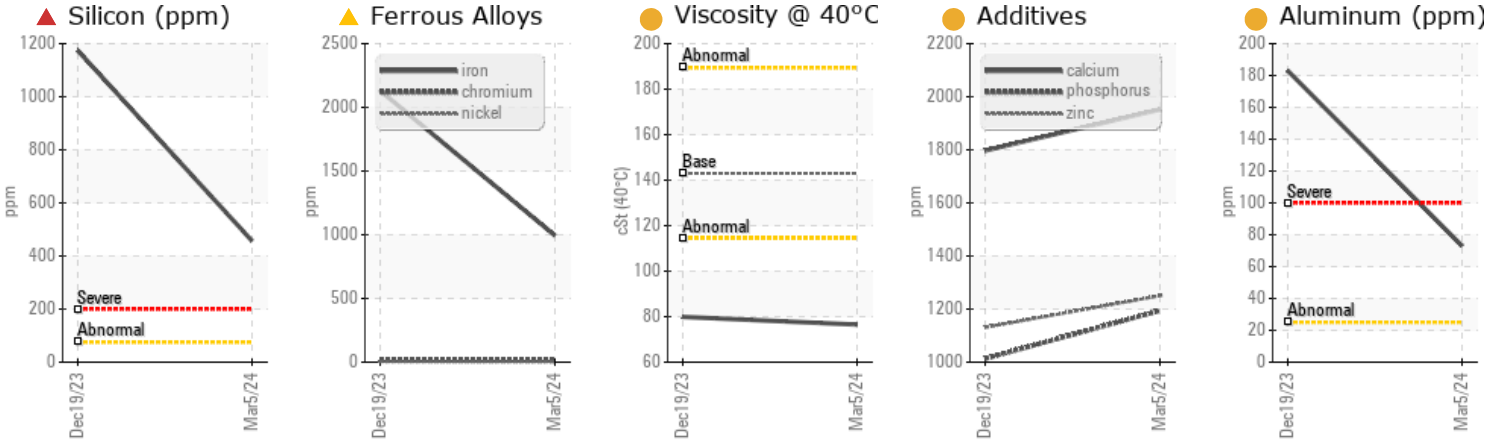
PROBLEM SUMMARY

Sample Rating Trend



Machine Id
30-67
 Component
Right Final Drive
 Fluid
GEAR OIL SAE 80W90 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	---
Iron	ppm	ASTM D5185m	>500	▲ 994	▲ 2131	---
Chromium	ppm	ASTM D5185m	>10	▲ 12	▲ 21	---
Silicon	ppm	ASTM D5185m	>75	▲ 457	▲ 1174	---

Customer Id: MANTUL
 Sample No.: WC0936964
 Lab Number: 06174347
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

WEAR



19 Dec 2023 Diag: Jonathan Hester

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable due to the presence of contaminants.

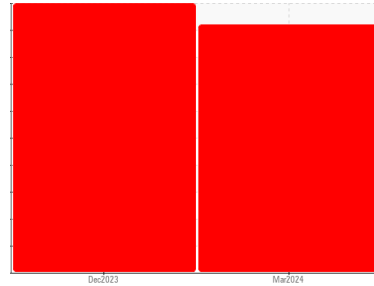
view report





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
30-67
 Component
Right Final Drive
 Fluid
GEAR OIL SAE 80W90 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

Gear wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0936964	WC0838004	---
Sample Date	Client Info		05 Mar 2024	19 Dec 2023	---
Machine Age	hrs	Client Info	2640	2619	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Not Changed	Not Changed	---
Sample Status			SEVERE	SEVERE	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	▲ 994	▲ 2131
Chromium	ppm	ASTM D5185m	>10	▲ 12	▲ 21
Nickel	ppm	ASTM D5185m	>10	3	4
Titanium	ppm	ASTM D5185m		7	15
Silver	ppm	ASTM D5185m		0	0
Aluminum	ppm	ASTM D5185m	>25	● 73	● 183
Lead	ppm	ASTM D5185m	>25	<1	0
Copper	ppm	ASTM D5185m	>50	33	18
Tin	ppm	ASTM D5185m	>10	0	<1
Vanadium	ppm	ASTM D5185m		1	2
Cadmium	ppm	ASTM D5185m		<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	400	169	114
Barium	ppm	ASTM D5185m	200	<1	<1
Molybdenum	ppm	ASTM D5185m	12	61	57
Manganese	ppm	ASTM D5185m		11	● 23
Magnesium	ppm	ASTM D5185m	12	● 346	● 309
Calcium	ppm	ASTM D5185m	150	● 1952	● 1797
Phosphorus	ppm	ASTM D5185m	1650	1194	1013
Zinc	ppm	ASTM D5185m	125	● 1250	● 1131
Sulfur	ppm	ASTM D5185m	22500	● 4078	● 3399

CONTAMINANTS

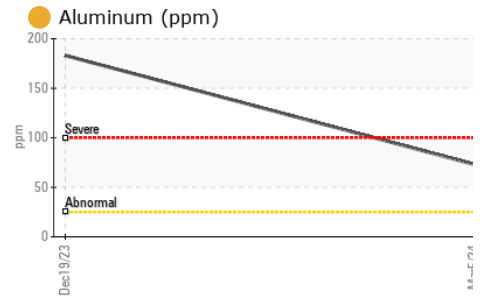
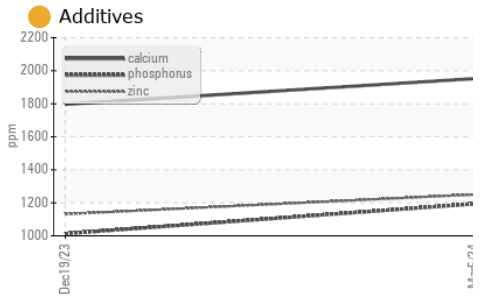
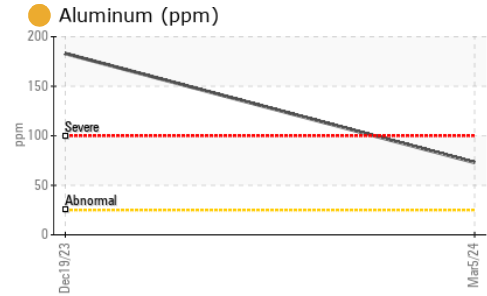
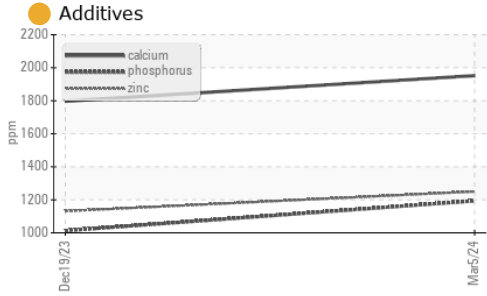
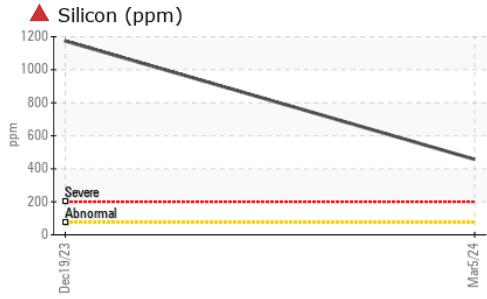
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	▲ 457	▲ 1174
Sodium	ppm	ASTM D5185m	>170	6	9
Potassium	ppm	ASTM D5185m	>20	23	45

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG



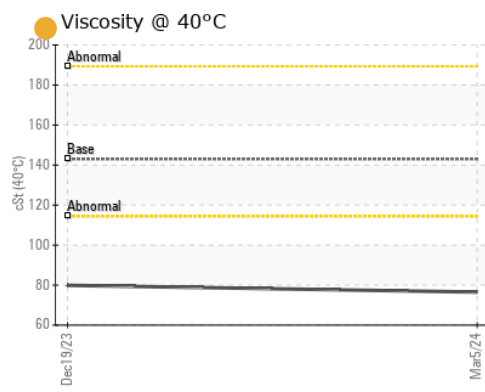
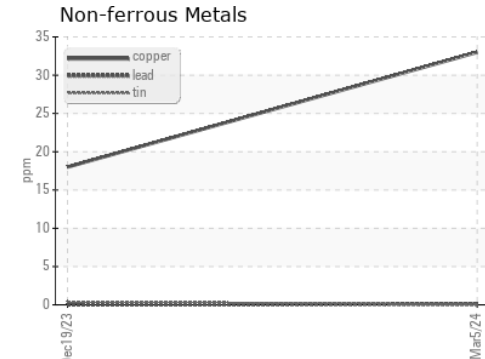
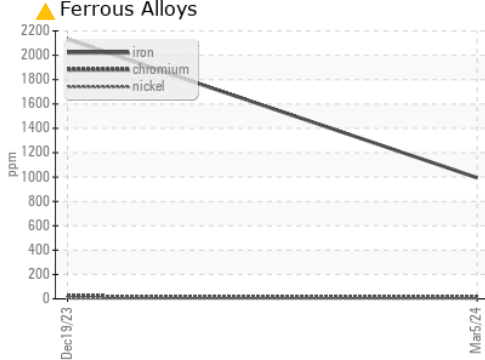
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	143	● 76.5	● 79.9	---

SAMPLE IMAGES	method	limit/base	current	history1	history2	
Color				no image	no image	no image
Bottom				no image	no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0936964
Lab Number : 06174347
Unique Number : 11020400
Test Package : CONST
Received : 09 May 2024
Tested : 10 May 2024
Diagnosed : 13 May 2024 - Don Baldrige

MANHATTAN ROAD AND BRIDGE
 5601 S 122ND E AVE
 TULSA, OK
 US 74146
 Contact: BEN CALDWELL
 kevin.marson@wearcheck.com
 T: (918)728-5749
 F:

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)