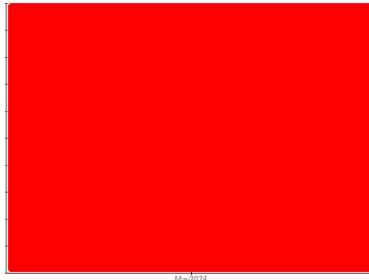


# PROBLEM SUMMARY

Sample Rating Trend

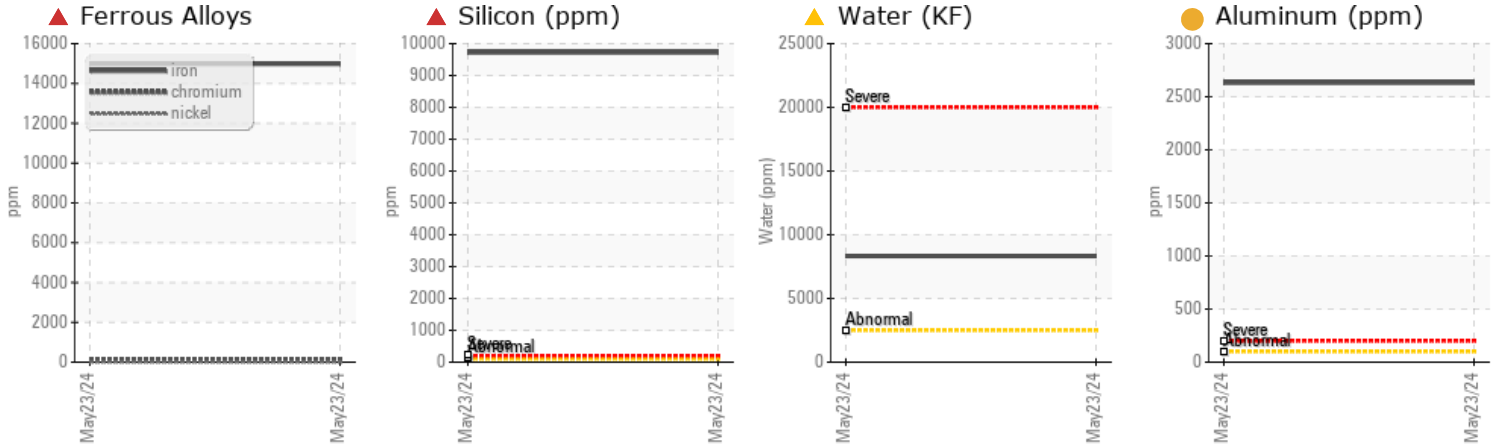


**WEAR**



Machine Id  
**VOLVO EC350E 310403**  
 Component  
**Right Travel**  
 Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. 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.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>1200	▲ 14983	---	---
Chromium	ppm	ASTM D5185m	>20	▲ 120	---	---
Nickel	ppm	ASTM D5185m	>5	▲ 13	---	---
Silicon	ppm	ASTM D5185m	>100	▲ 9723	---	---
Water	%	ASTM D6304	>0.25	▲ 0.833	---	---
ppm Water	ppm	ASTM D6304	>2500	▲ 8330	---	---
Emulsified Water	scalar	*Visual	>0.25	▲ 0.2%	---	---

Customer Id: WILCHA  
 Sample No.: ML0001960  
 Lab Number: 06194444  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Sean Felton +1 919-379-4092  
[sfelton@wearcheckusa.com](mailto:sfelton@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

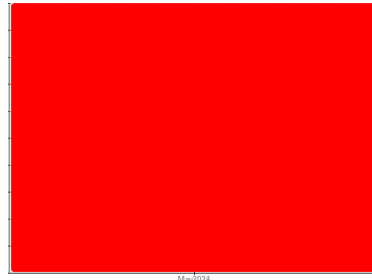
Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

## HISTORICAL DIAGNOSIS

# OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Machine Id  
**VOLVO EC350E 310403**  
 Component  
**Right Travel**  
 Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. 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.

### ▲ Wear

Gear wear is indicated.

### ▲ Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate concentration of water present in the oil.

### Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>ML0001960</b>	---	---
Sample Date	Client Info			<b>23 May 2024</b>	---	---
Machine Age	hrs	Client Info		<b>9621</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>Not Chngd</b>	---	---
Sample Status				<b>SEVERE</b>	---	---

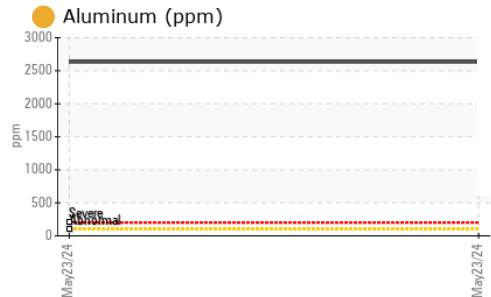
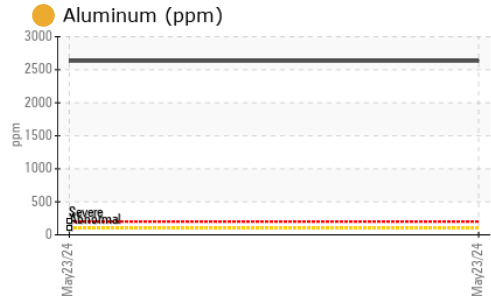
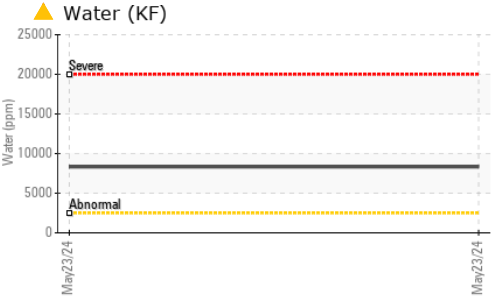
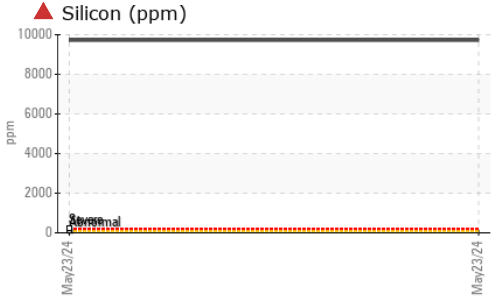
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>1200	<b>▲ 14983</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>▲ 120</b>	---	---
Nickel	ppm	ASTM D5185m	>5	<b>▲ 13</b>	---	---
Titanium	ppm	ASTM D5185m		<b>265</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>100	<b>● 2632</b>	---	---
Lead	ppm	ASTM D5185m	>50	<b>2</b>	---	---
Copper	ppm	ASTM D5185m	>50	<b>34</b>	---	---
Tin	ppm	ASTM D5185m	>5	<b>3</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>7</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>1</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	400	<b>97</b>	---	---
Barium	ppm	ASTM D5185m	200	<b>17</b>	---	---
Molybdenum	ppm	ASTM D5185m	12	<b>19</b>	---	---
Manganese	ppm	ASTM D5185m		<b>118</b>	---	---
Magnesium	ppm	ASTM D5185m	12	<b>410</b>	---	---
Calcium	ppm	ASTM D5185m	150	<b>493</b>	---	---
Phosphorus	ppm	ASTM D5185m	1650	<b>687</b>	---	---
Zinc	ppm	ASTM D5185m	125	<b>31</b>	---	---
Sulfur	ppm	ASTM D5185m	22500	<b>77716</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>100	<b>▲ 9723</b>	---	---
Sodium	ppm	ASTM D5185m	>170	<b>389</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>733</b>	---	---
Water	%	ASTM D6304	>0.25	<b>▲ 0.833</b>	---	---
ppm Water	ppm	ASTM D6304	>2500	<b>▲ 8330</b>	---	---

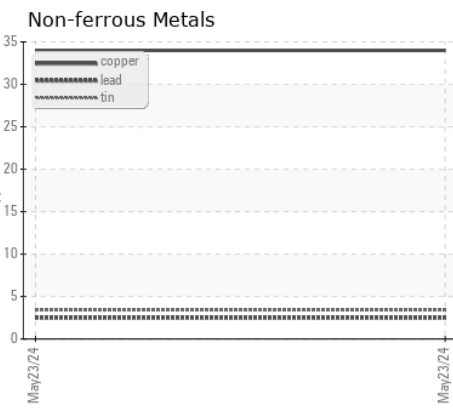
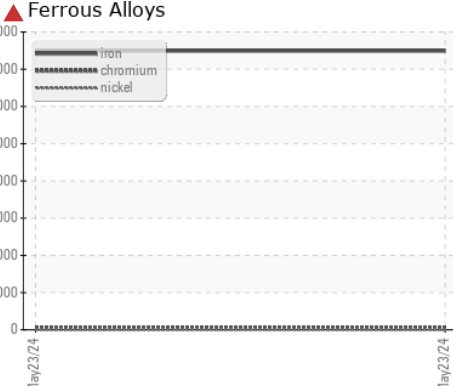
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.25	<b>▲ 0.2%</b>	---	---
Free Water	scalar	*Visual		<b>NEG</b>	---	---

# OIL ANALYSIS REPORT



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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ML0001960      **Received** : 29 May 2024  
**Lab Number** : 06194444      **Tested** : 31 May 2024  
**Unique Number** : 11056567      **Diagnosed** : 31 May 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: KF )

**WILLIAM HAZEL**  
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 CHANTILLY, VA  
 US 20153  
 Contact: SERVICE MANAGER  
 jimmy\_elswick@wahazel.com  
 T: (703)378-8300  
 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)