

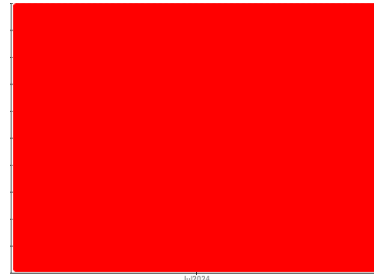
PROBLEM SUMMARY

Sample Rating Trend

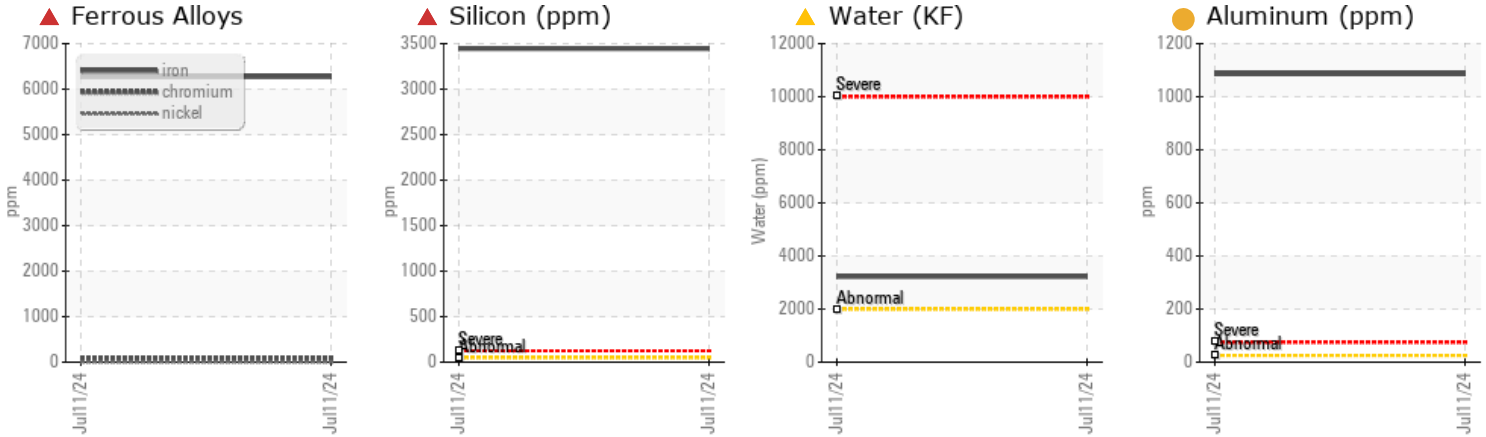
WEAR



Area
[W02008458]
 Machine Id
VOLVO ECR355 310021
 Component
Left Gearbox
 Fluid
GEAR OIL SAE 85W140 (--- 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 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 >200	▲ 6272	---	---
Chromium ppm ASTM D5185m >10	▲ 72	---	---
Silicon ppm ASTM D5185m >50	▲ 3444	---	---
Water % ASTM D6304 >0.2	▲ 0.322	---	---
ppm Water ppm ASTM D6304 >2000	▲ 3220	---	---
Emulsified Water scalar *Visual >0.2	▲ 0.2%	---	---

Customer Id: VOLVO0002
 Sample No.: ML0002414
 Lab Number: 06237203
 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
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.

HISTORICAL DIAGNOSIS

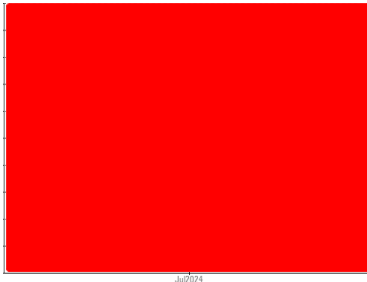
OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
[W02008458]
 Machine Id
VOLVO ECR355 310021
 Component
Left Gearbox
 Fluid
GEAR OIL SAE 85W140 (--- 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 advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

▲ Wear

The iron and chrome levels are severe. Gear wear is indicated.

▲ Contamination

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

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		ML0002414	---	---
Sample Date	Client Info		11 Jul 2024	---	---
Machine Age	hrs	Client Info	5994	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			SEVERE	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	▲ 6272	---	---
Chromium	ppm	ASTM D5185m >10	▲ 72	---	---
Nickel	ppm	ASTM D5185m >10	5	---	---
Titanium	ppm	ASTM D5185m	81	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >25	● 1086	---	---
Lead	ppm	ASTM D5185m >50	2	---	---
Copper	ppm	ASTM D5185m >200	11	---	---
Tin	ppm	ASTM D5185m >10	2	---	---
Vanadium	ppm	ASTM D5185m	3	---	---
Cadmium	ppm	ASTM D5185m	<1	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 400	22	---	---
Barium	ppm	ASTM D5185m 200	6	---	---
Molybdenum	ppm	ASTM D5185m 12	8	---	---
Manganese	ppm	ASTM D5185m	57	---	---
Magnesium	ppm	ASTM D5185m 12	172	---	---
Calcium	ppm	ASTM D5185m 150	2233	---	---
Phosphorus	ppm	ASTM D5185m 1650	912	---	---
Zinc	ppm	ASTM D5185m 125	956	---	---
Sulfur	ppm	ASTM D5185m 22500	24427	---	---

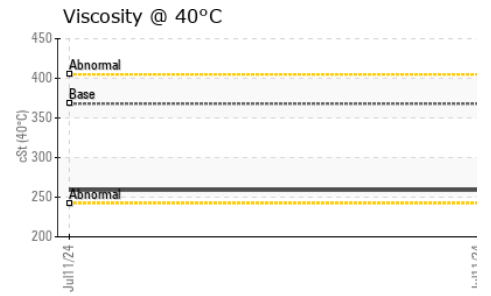
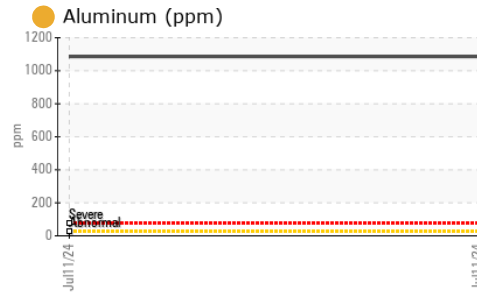
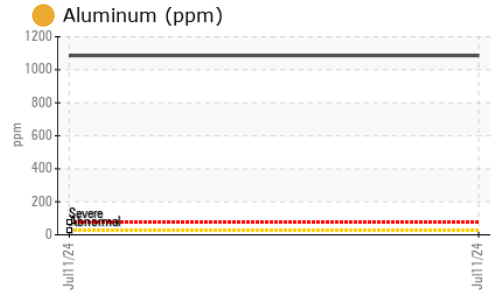
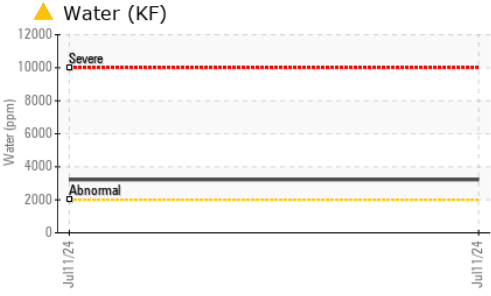
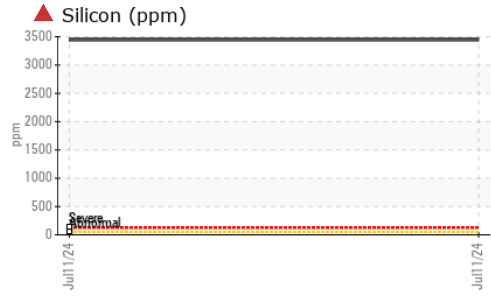
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	▲ 3444	---	---
Sodium	ppm	ASTM D5185m	82	---	---
Potassium	ppm	ASTM D5185m >20	297	---	---
Water	%	ASTM D6304 >0.2	▲ 0.322	---	---
ppm Water	ppm	ASTM D6304 >2000	▲ 3220	---	---

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	---	---
Yellow Metal	scalar	*Visual NONE	NONE	---	---
Precipitate	scalar	*Visual NONE	NONE	---	---
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%	---	---
Free Water	scalar	*Visual	NEG	---	---

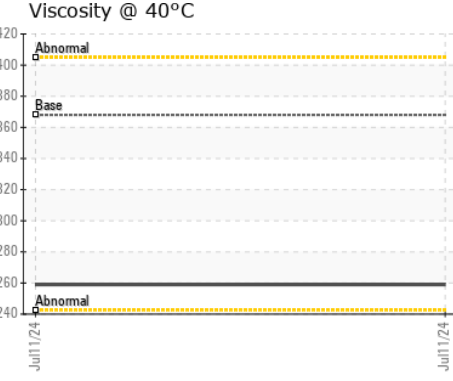
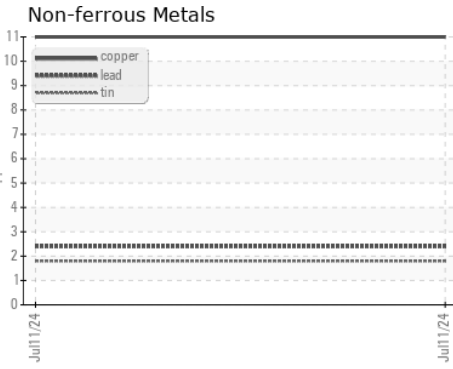
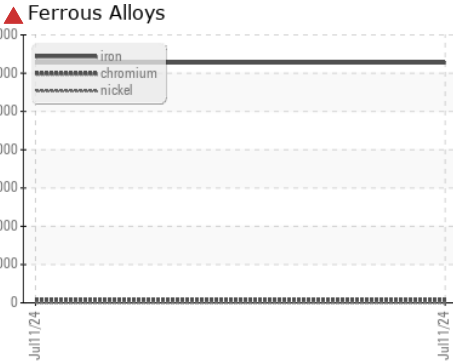
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	368	259	---	---

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002414 **Received** : 15 Jul 2024
Lab Number : **06237203** **Tested** : 17 Jul 2024
Unique Number : 11126037 **Diagnosed** : 17 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF)

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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)