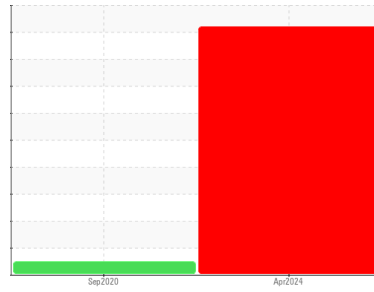


PROBLEM SUMMARY

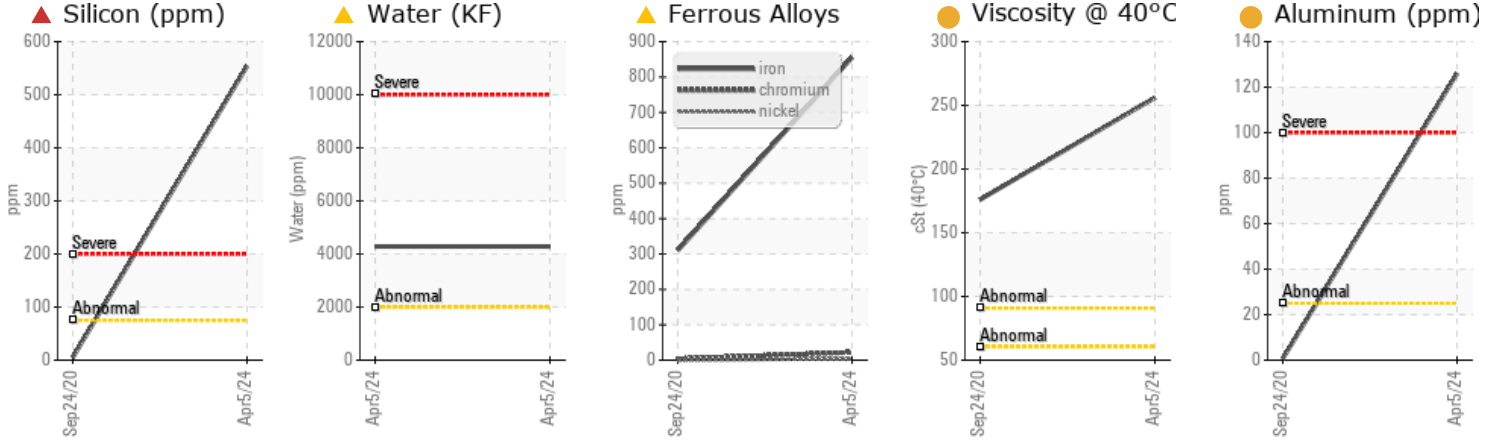


Machine Id
VOLVO EC160EL 310125
 Component
Rear Right Final Drive
 Fluid
VOLVO SUPER GEAR OIL 75W-80-GO102 (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. (Customer Sample Comment: 85w-140. Changed to GO102 75w-80)

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	---
Iron	ppm	ASTM D5185m	>500	▲ 855	310	---
Chromium	ppm	ASTM D5185m	>10	▲ 22	4	---
Silicon	ppm	ASTM D5185m	>75	▲ 554	5	---
Water	%	ASTM D6304	>0.2	▲ 0.428	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 4280	---	---
Emulsified Water	scalar	*Visual	>0.2	▲ 0.2%	NEG	---

Customer Id: VOLVO8882
 Sample No.: ML0001449
 Lab Number: 06150729
 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
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

NORMAL



24 Sep 2020 Diag: Don Baldrige

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

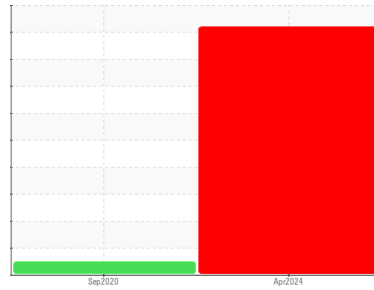


OIL ANALYSIS REPORT



Machine Id
VOLVO EC160EL 310125
 Component
Rear Right Final Drive
 Fluid
VOLVO SUPER GEAR OIL 75W-80-GO102 (--- GAL)

Sample Rating Trend



DIAGNOSIS

▲ Recommendation

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. (Customer Sample Comment: 85w-140. Changed to GO102 75w-80)

▲ Wear

Gear wear is indicated.

▲ Contamination

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		ML0001449	VCP293406	---
Sample Date	Client Info		05 Apr 2024	24 Sep 2020	---
Machine Age	hrs	Client Info	2260	1019	---
Oil Age	hrs	Client Info	1000	0	---
Oil Changed	Client Info		Changed	N/A	---
Sample Status			SEVERE	NORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>500	▲ 855	310	---
Chromium	ppm	ASTM D5185m	>10	▲ 22	4	---
Nickel	ppm	ASTM D5185m	>10	3	0	---
Titanium	ppm	ASTM D5185m		8	0	---
Silver	ppm	ASTM D5185m		<1	<1	---
Aluminum	ppm	ASTM D5185m	>25	● 126	<1	---
Lead	ppm	ASTM D5185m	>25	2	0	---
Copper	ppm	ASTM D5185m	>50	2	<1	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Antimony	ppm	ASTM D5185m	>5	---	0	---
Vanadium	ppm	ASTM D5185m		1	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		100	14	---
Barium	ppm	ASTM D5185m		3	0	---
Molybdenum	ppm	ASTM D5185m		2	<1	---
Manganese	ppm	ASTM D5185m		12	3	---
Magnesium	ppm	ASTM D5185m		18	2	---
Calcium	ppm	ASTM D5185m		94	34	---
Phosphorus	ppm	ASTM D5185m		987	413	---
Zinc	ppm	ASTM D5185m		38	26	---
Sulfur	ppm	ASTM D5185m		37178	15793	---

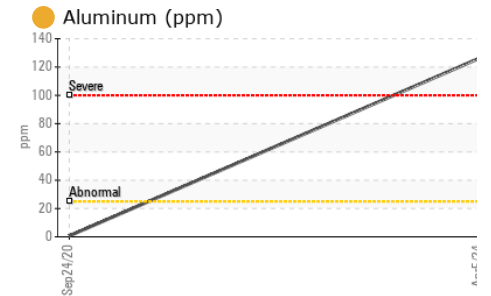
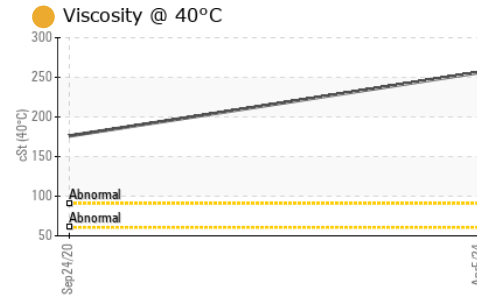
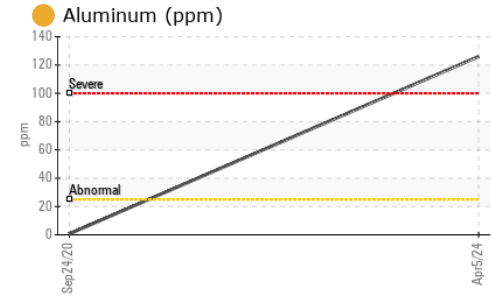
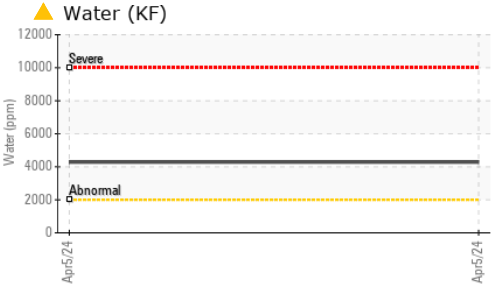
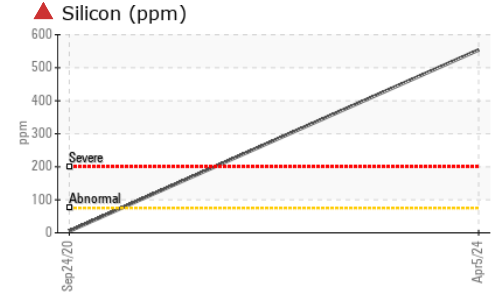
CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>75	▲ 554	5	---
Sodium	ppm	ASTM D5185m		26	2	---
Potassium	ppm	ASTM D5185m	>20	51	2	---
Water	%	ASTM D6304	>0.2	▲ 0.428	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 4280	---	---

VISUAL

	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	MODER	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT	---
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	▲ 0.2%	NEG	---
Free Water	scalar	*Visual		NEG	NEG	---

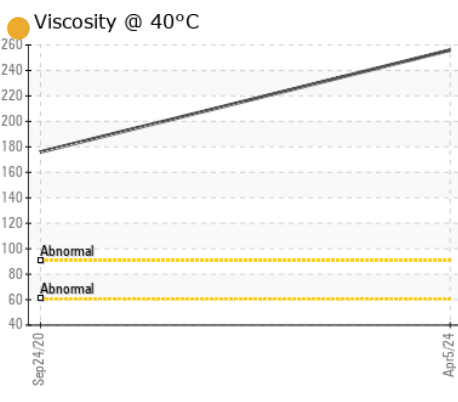
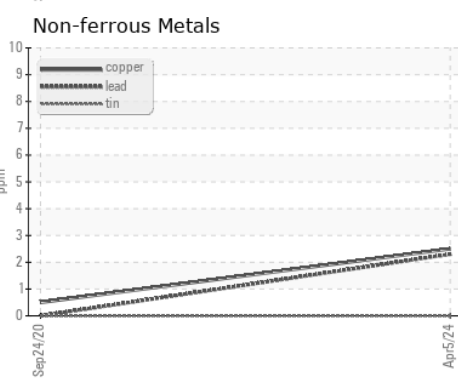
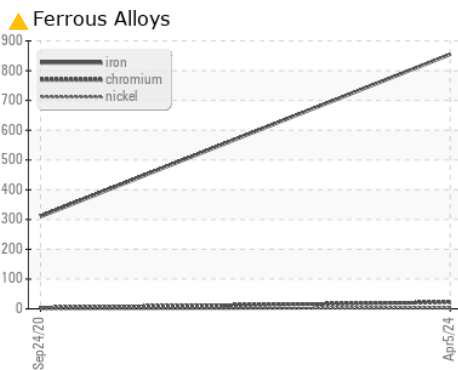
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	● 256	176	---

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. : ML0001449 **Received** : 16 Apr 2024
Lab Number : 06150729 **Tested** : 18 Apr 2024
Unique Number : 10980807 **Diagnosed** : 18 Apr 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF)

MCCLUNG-LOGAN EQUIPMENT CO - RICHMOND
 1345 MOUNTAIN ROAD
 GLEN ALLEN, VA
 US 23060
 Contact: Alex Anderson
 aanderson@mcclung-logan.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) F: (804)266-1611