



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**[SWO-070331]**  
 Machine Id  
**VOLVO A40F 11843**  
 Component  
**Bogie/Center Axle**  
 Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP452420</b>	VCP431889	VCP416729
Sample Date		Client Info		<b>12 Mar 2024</b>	01 Nov 2023	02 Aug 2023
Machine Age	hrs	Client Info		<b>7075</b>	6592	6103
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Changed
Filter Changed		Client Info		<b>Not Chngd</b>	N/A	Not Chngd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>30</b>	10	56
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	3
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

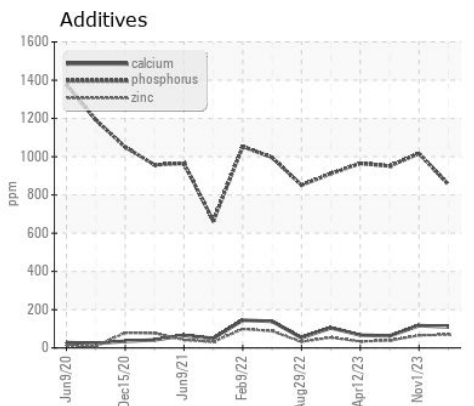
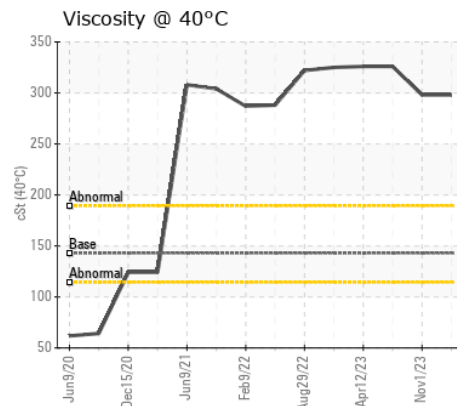
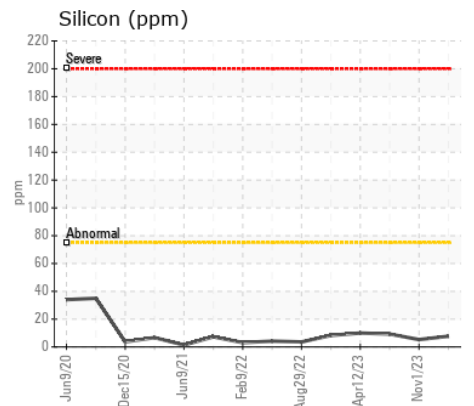
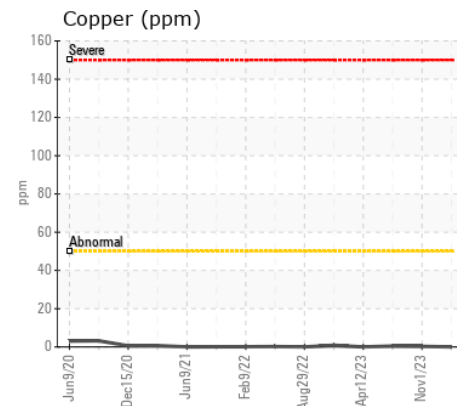
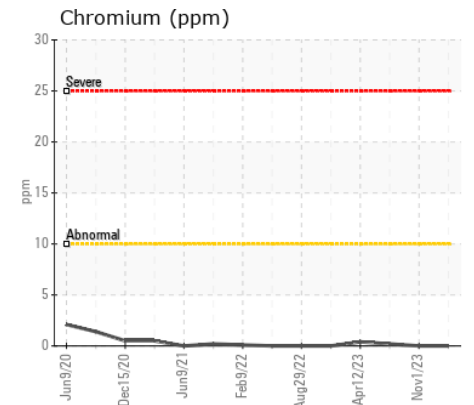
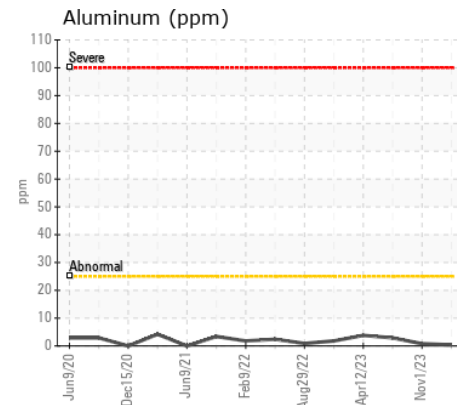
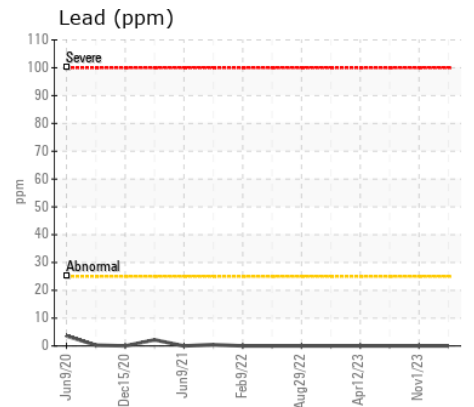
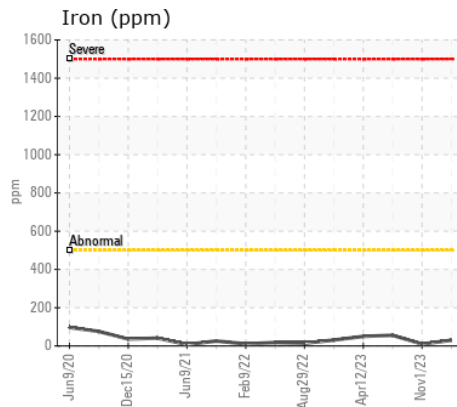
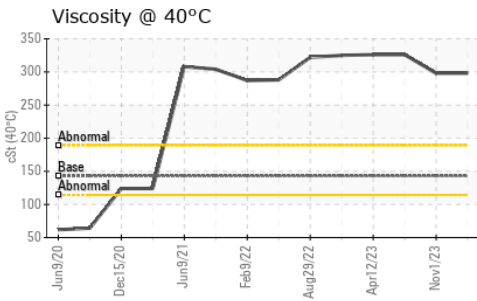
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>8</b>	5	9
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	2
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>170	<b>&lt;1</b>	<1	0
Boron	ppm	ASTM D5185m	400	<b>171</b>	192	184
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	12	<b>17</b>	19	2
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185m	12	<b>24</b>	31	13
Calcium	ppm	ASTM D5185m	150	<b>110</b>	117	63
Phosphorus	ppm	ASTM D5185m	1650	<b>855</b>	1017	951
Zinc	ppm	ASTM D5185m	125	<b>69</b>	66	39
Sulfur	ppm	ASTM D5185m	22500	<b>22263</b>	21660	22074
Visc @ 40°C	cSt	ASTM D445	143	<b>298</b>	298	326



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP452420  
**Lab Number** : 06121181  
**Unique Number** : 10930014  
**Test Package** : MOB 1  
**Received** : 18 Mar 2024  
**Tested** : 19 Mar 2024  
**Diagnosed** : 20 Mar 2024 - Don Baldrige

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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)