



# OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO A40G 341245**  
Component  
**Wet Disc Brake**  
Fluid  
**VOLVO SUPER WET BRAKE TRANSAXLE OIL WB102 (--- GAL)**

## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ML0002745</b>	VCP423653	VCP252575
Sample Date		Client Info		<b>26 Jun 2024</b>	21 Jul 2023	27 Jul 2019
Machine Age	hrs	Client Info		<b>7738</b>	7168	4096
Oil Age	hrs	Client Info		<b>570</b>	2000	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>SEVERE</b>	ABNORMAL	ABNORMAL

## WEAR

The copper level is abnormal. A sharp increase in the iron level is noted.

Iron	ppm	ASTM D5185m	>20	<b>▲ 101</b>	32	37
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>3</b>	2	5
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>● 5</b>	<1	1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	4	0
Copper	ppm	ASTM D5185m	>75	<b>▲ 309</b>	▲ 224	▲ 320
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</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

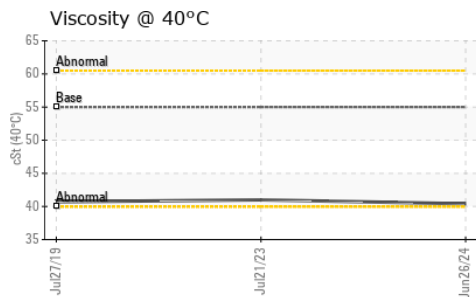
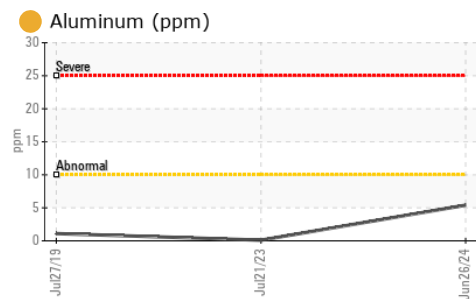
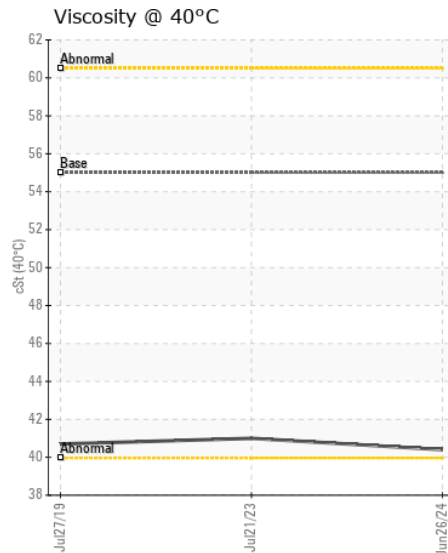
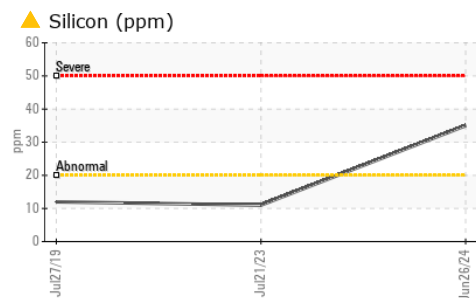
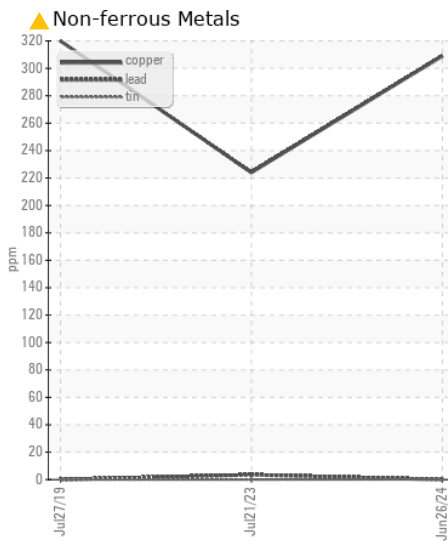
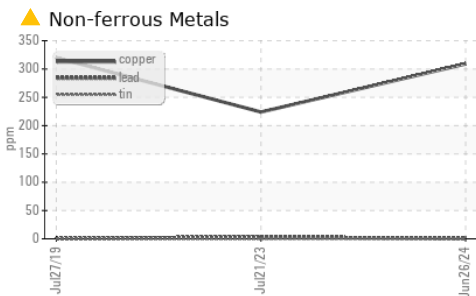
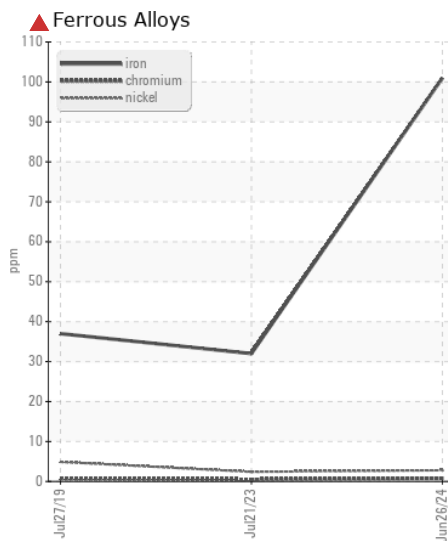
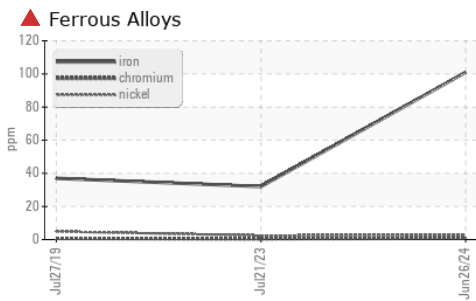
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>20	<b>▲ 35</b>	11	12
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Water		WC Method	>0.1	<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	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>6</b>	3	6
Boron	ppm	ASTM D5185m		<b>110</b>	133	104
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>3</b>	2	2
Magnesium	ppm	ASTM D5185m		<b>13</b>	9	5
Calcium	ppm	ASTM D5185m		<b>3670</b>	3589	3635
Phosphorus	ppm	ASTM D5185m		<b>1348</b>	1219	1278
Zinc	ppm	ASTM D5185m		<b>1565</b>	1510	1505
Sulfur	ppm	ASTM D5185m		<b>5417</b>	4554	4509
Visc @ 40°C	cSt	ASTM D445	55	<b>40.4</b>	41.0	40.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ML0002745  
**Lab Number** : 06226836  
**Unique Number** : 11110329  
**Test Package** : CONST

**Received** : 02 Jul 2024  
**Tested** : 03 Jul 2024  
**Diagnosed** : 05 Jul 2024 - Don Baldrige

**MCCLUNG-LOGAN EQUIPMENT CO - RICHMOND**  
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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)