



# VOLVO

## OIL ANALYSIS REPORT

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



Area

[SWA532551]

Machine Id

**VOLVO A40G 352345**

Component

**Diesel Engine**

Fluid

**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP451357</b>	VCP323365	VCP298535
Sample Date		Client Info		<b>20 May 2024</b>	28 Jun 2021	06 Mar 2021
Machine Age	hrs	Client Info		<b>4742</b>	1838	1133
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>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>44</b>	12	13
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>4</b>	3	7
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>30	<b>12</b>	0	2
Lead	ppm	ASTM D5185m	>40	<b>2</b>	<1	3
Copper	ppm	ASTM D5185m	>20	<b>17</b>	6	21
Tin	ppm	ASTM D5185m	>20	<b>2</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

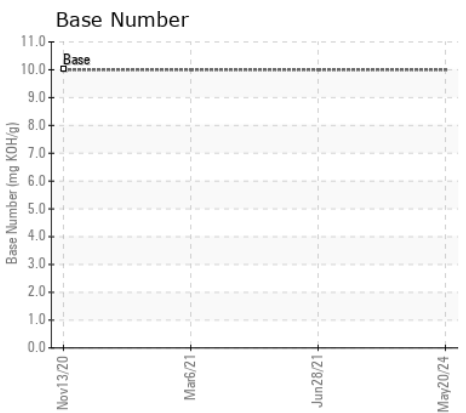
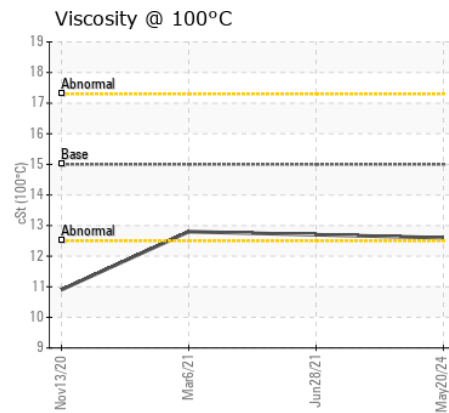
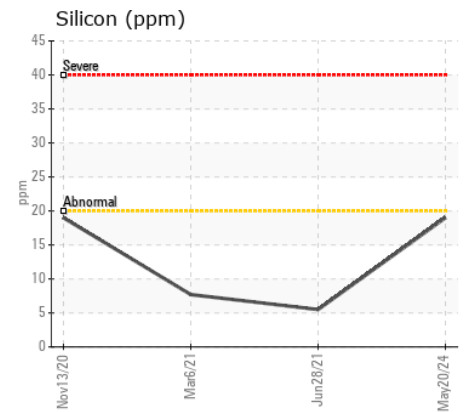
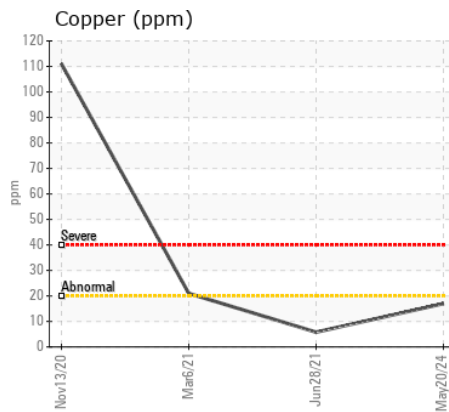
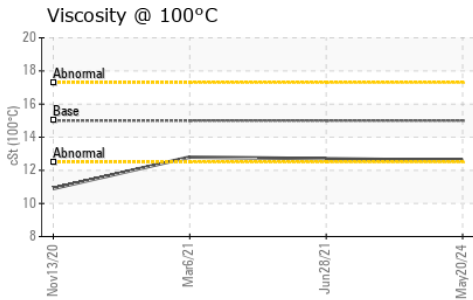
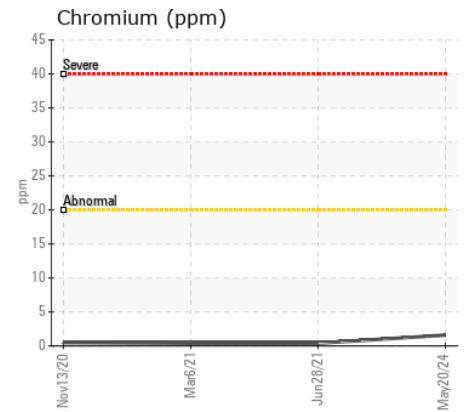
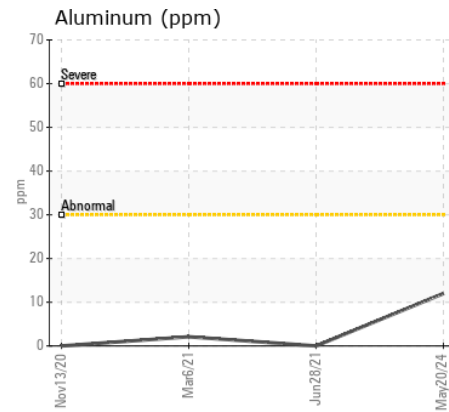
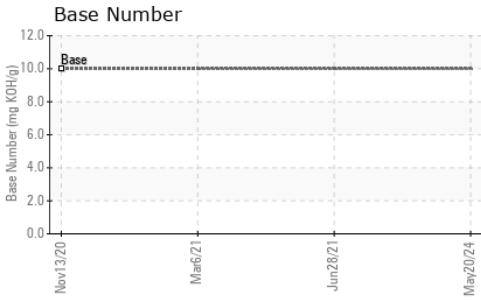
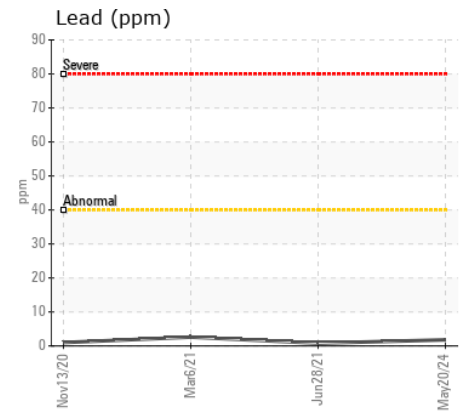
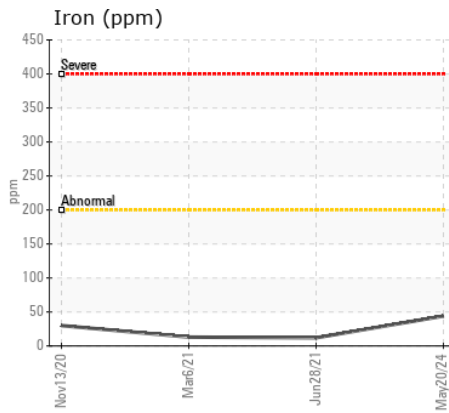
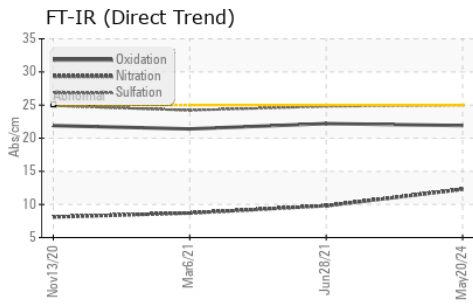
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>19</b>	6	8
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	<1	0
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.3</b>	9.8	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.0</b>	24.8	24.2
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>15</b>	2	2
Boron	ppm	ASTM D5185m	2.5	<b>10</b>	41	25
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>59</b>	44	37
Manganese	ppm	ASTM D5185m	0.0	<b>2</b>	<1	1
Magnesium	ppm	ASTM D5185m	256	<b>520</b>	508	464
Calcium	ppm	ASTM D5185m	2057	<b>1654</b>	1664	1597
Phosphorus	ppm	ASTM D5185m	935	<b>939</b>	924	871
Zinc	ppm	ASTM D5185m	1223	<b>1116</b>	1101	1015
Sulfur	ppm	ASTM D5185m	4079	<b>3320</b>	2505	2448
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.9</b>	22.2	21.4
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>6.3</b>	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	<b>12.6</b>	12.7	12.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP451357 **Received** : 29 May 2024  
**Lab Number** : 06193674 **Tested** : 30 May 2024  
**Unique Number** : 11050426 **Diagnosed** : 30 May 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**ALTA EQUIPMENT COMPANY**  
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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)