



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[SPM647180-10 RYAN]**  
Machine Id  
**VOLVO A45G 352110**  
Component  
**Diesel Engine**  
Fluid  
**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP438918</b>	VCP412321	---
Sample Date		Client Info		<b>21 Dec 2023</b>	13 Jun 2023	---
Machine Age	hrs	Client Info		<b>4640</b>	3817	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>13</b>	25	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185m	>2	<b>2</b>	4	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	4	---
Lead	ppm	ASTM D5185m	>40	<b>3</b>	2	---
Copper	ppm	ASTM D5185m	>330	<b>2</b>	8	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

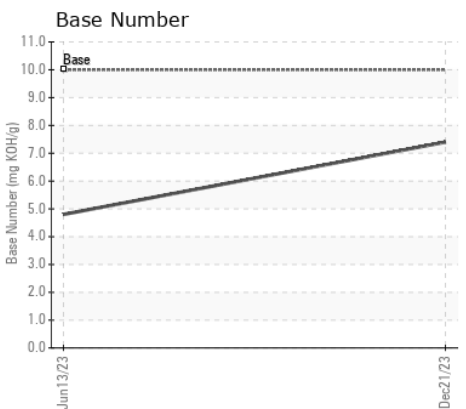
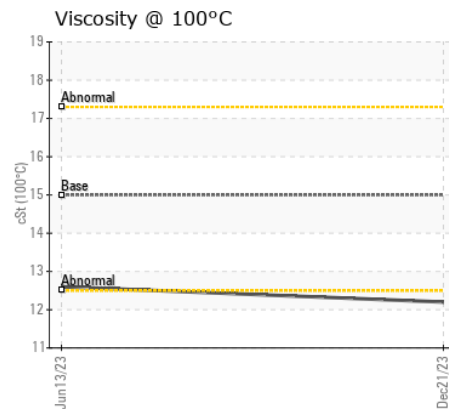
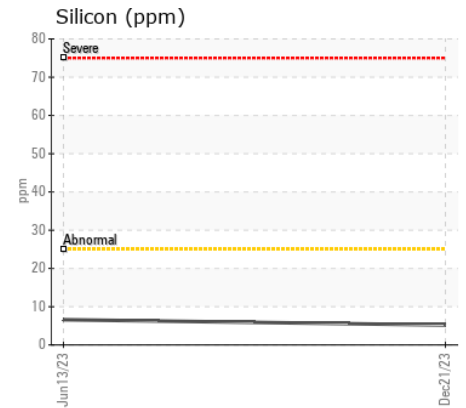
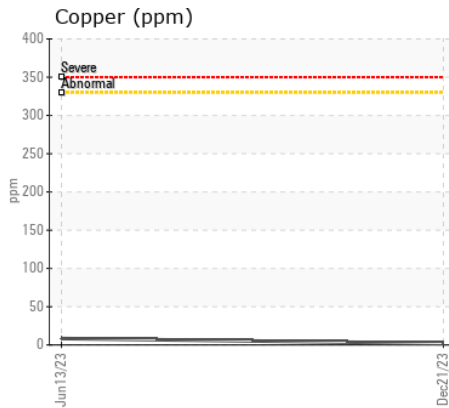
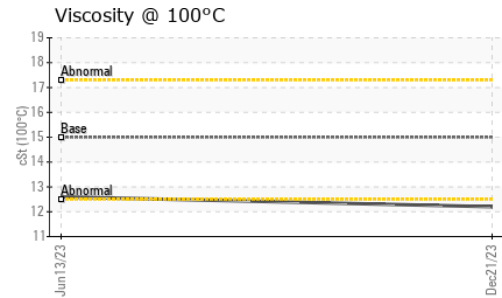
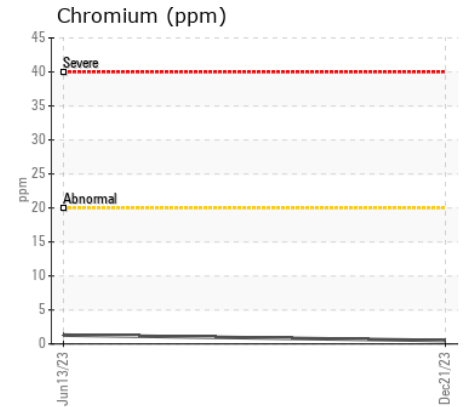
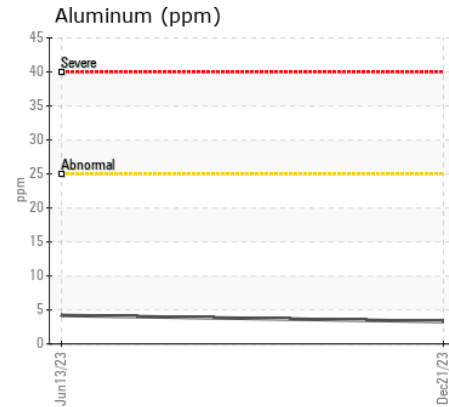
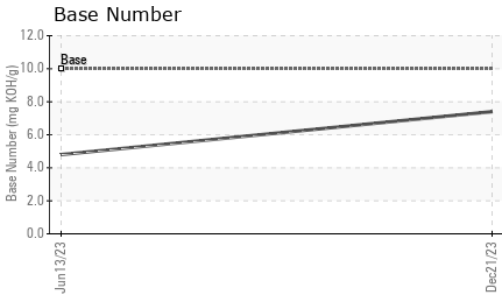
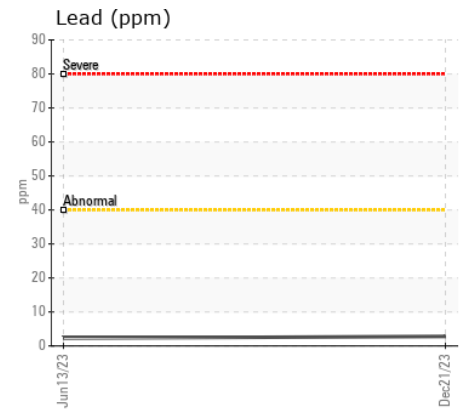
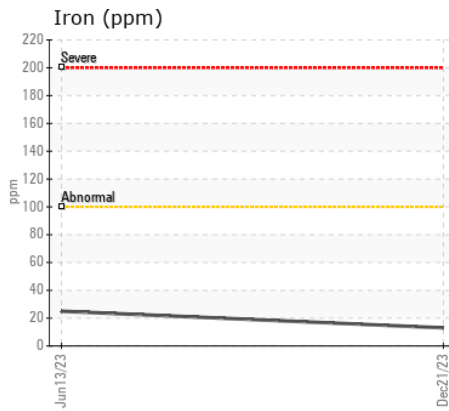
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	7	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	---
Fuel	%	ASTM D3524	>6.0	<b>1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.8	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.9</b>	10.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.2</b>	25.9	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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>3</b>	4	---
Boron	ppm	ASTM D5185m	2.5	<b>19</b>	4	---
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	0.7	<b>67</b>	64	---
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	1	---
Magnesium	ppm	ASTM D5185m	256	<b>556</b>	980	---
Calcium	ppm	ASTM D5185m	2057	<b>1511</b>	1304	---
Phosphorus	ppm	ASTM D5185m	935	<b>994</b>	1074	---
Zinc	ppm	ASTM D5185m	1223	<b>1145</b>	1418	---
Sulfur	ppm	ASTM D5185m	4079	<b>2917</b>	3646	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.5</b>	21.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>7.4</b>	4.8	---
Visc @ 100°C	cSt	ASTM D445	15.0	<b>12.2</b>	12.6	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP438918 **Received** : 31 Jan 2024  
**Lab Number** : 06075477 **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10857568 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, TBN )

**ALTA EQUIPMENT COMPANY**  
 5151 DR MARTIN LUTHER KING BLVD  
 FORT MYERS, FL  
 US 33905  
 Contact: TODD LARK  
 tlark@altaequipfl.com  
 T:  
 F: (239)481-3302

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)