



# VOLVO

## OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO A45G 353131**  
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>VCP437318</b>	VCP395878	VCP423310
Sample Date		Client Info		<b>16 Apr 2024</b>	28 Sep 2023	23 May 2023
Machine Age	hrs	Client Info		<b>3526</b>	2371	1667
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>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>10</b>	11	18
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>2</b>	3	▲ 9
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	1	1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	2	<1
Copper	ppm	ASTM D5185m	>330	<b>3</b>	25	75
Tin	ppm	ASTM D5185m	>15	<b>1</b>	1	1
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

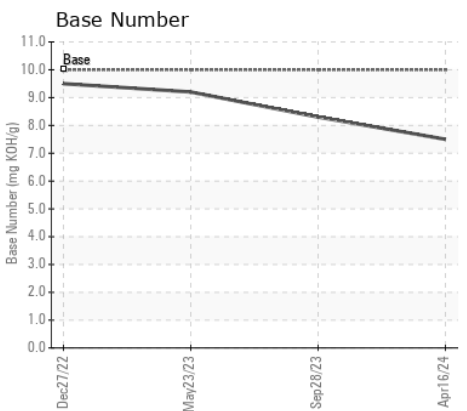
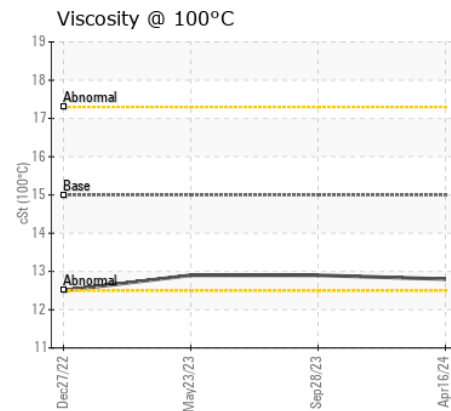
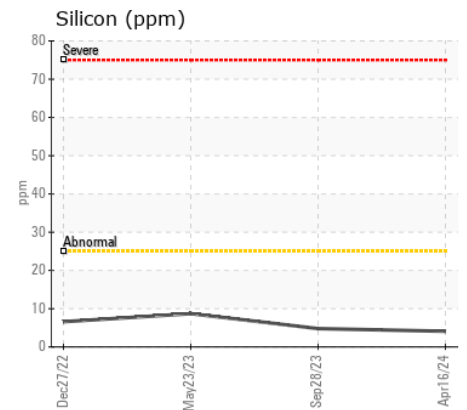
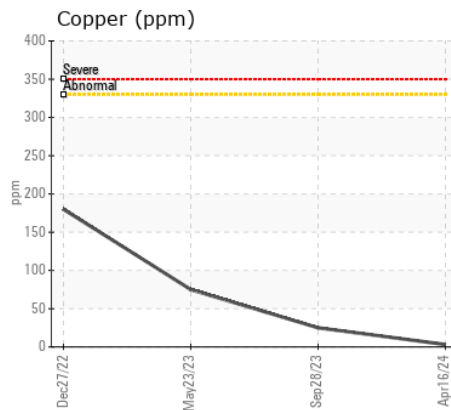
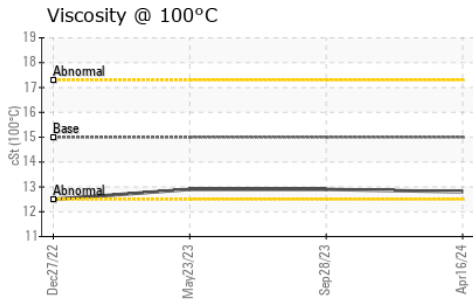
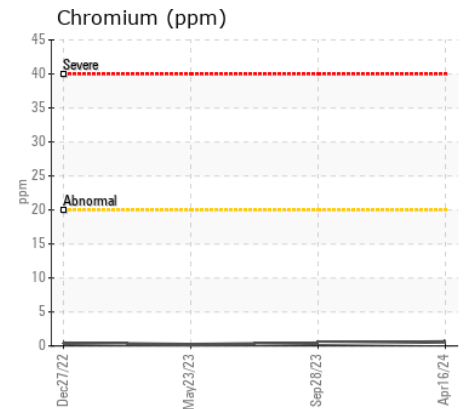
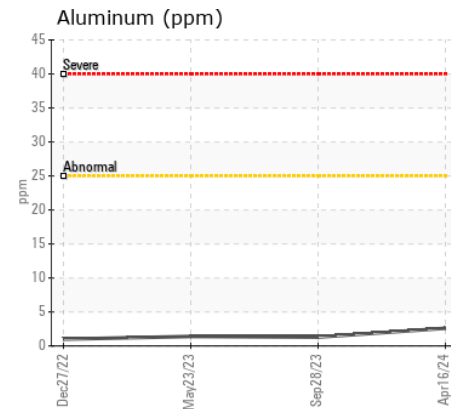
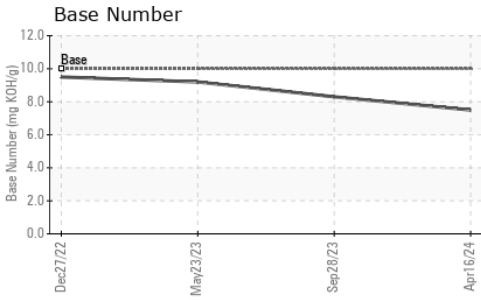
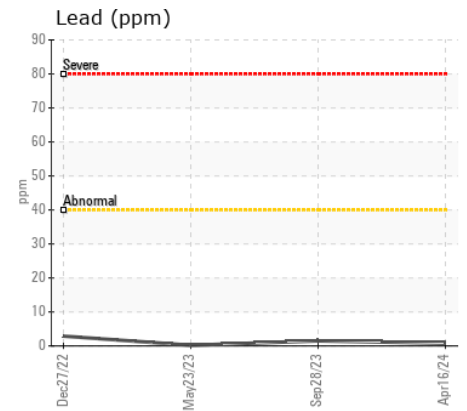
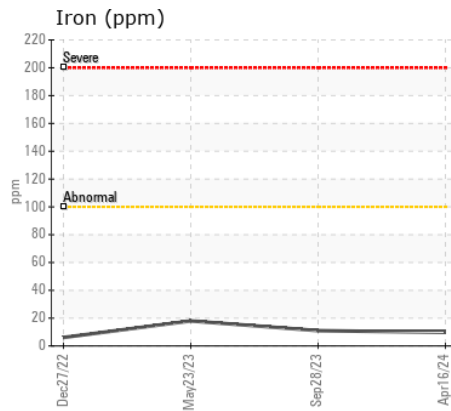
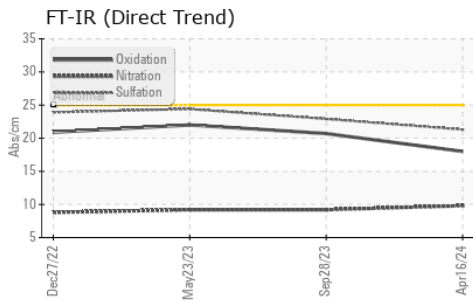
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	5	9
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	0
Fuel		WC Method	>6.0	<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>0.5</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	9.2	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.3</b>	22.9	24.4
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>2</b>	5	3
Boron	ppm	ASTM D5185m	2.5	<b>7</b>	13	26
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>57</b>	38	50
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	256	<b>748</b>	440	538
Calcium	ppm	ASTM D5185m	2057	<b>1299</b>	1294	1803
Phosphorus	ppm	ASTM D5185m	935	<b>1056</b>	748	925
Zinc	ppm	ASTM D5185m	1223	<b>1215</b>	882	1137
Sulfur	ppm	ASTM D5185m	4079	<b>3131</b>	2223	3289
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.0</b>	20.7	22.0
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>7.5</b>	8.3	9.2
Visc @ 100°C	cSt	ASTM D445	15.0	<b>12.8</b>	12.9	12.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP437318  
**Lab Number** : 06154045  
**Unique Number** : 10989468  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 19 Apr 2024  
**Tested** : 22 Apr 2024  
**Diagnosed** : 22 Apr 2024 - Wes Davis

**ALTA EQUIPMENT COMPANY**  
 5151 DR MARTIN LUTHER KING BLVD  
 FORT MYERS, FL  
 US 33905  
 Contact: TODD LARK  
 tlark@altaequipfl.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)

T:  
 F: (239)481-3302