



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[700466 GLE]**  
Machine Id  
**VOLVO EC380 314125**  
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>VCP447338</b>	VCP431415	VCP366136
Sample Date		Client Info		<b>16 Apr 2024</b>	07 Dec 2023	19 Sep 2022
Machine Age	hrs	Client Info		<b>4941</b>	4377	2888
Oil Age	hrs	Client Info		<b>500</b>	500	500
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	Changed
Sample Status				<b>NORMAL</b>	MARGINAL	ATTENTION

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>8</b>	4	15
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>3</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	2	3
Lead	ppm	ASTM D5185m	>20	<b>2</b>	<1	<1
Copper	ppm	ASTM D5185m	>15	<b>2</b>	5	8
Tin	ppm	ASTM D5185m	>10	<b>1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

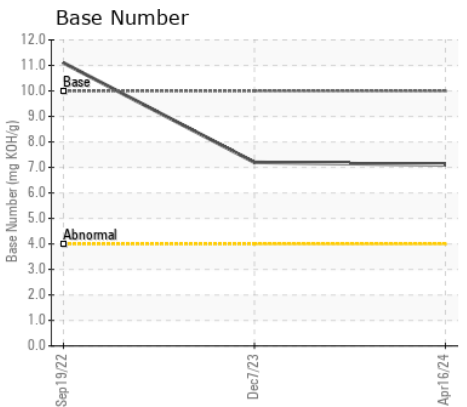
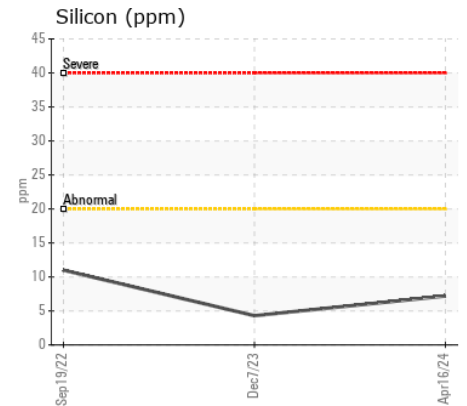
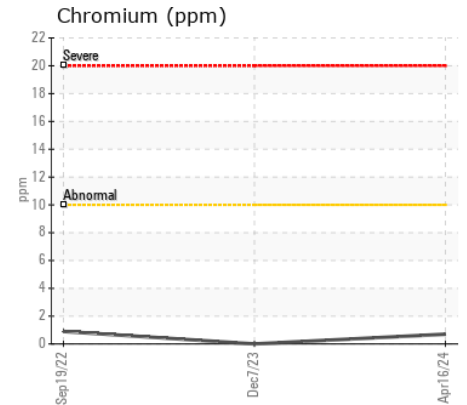
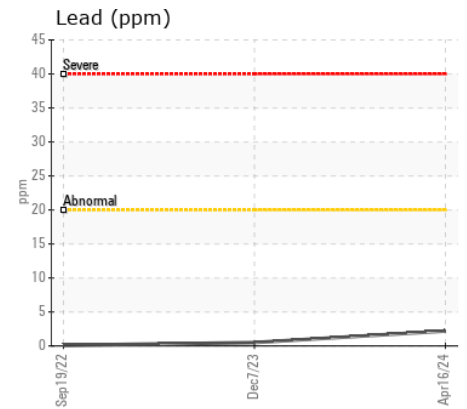
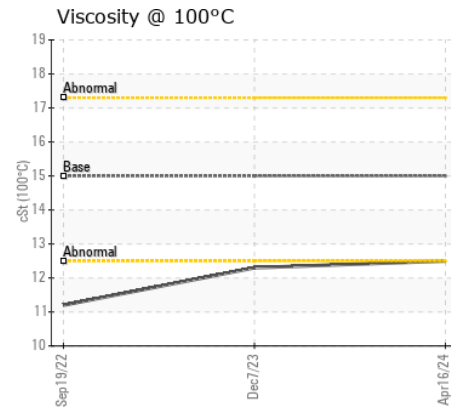
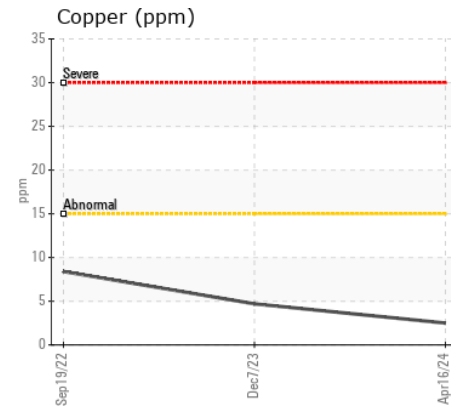
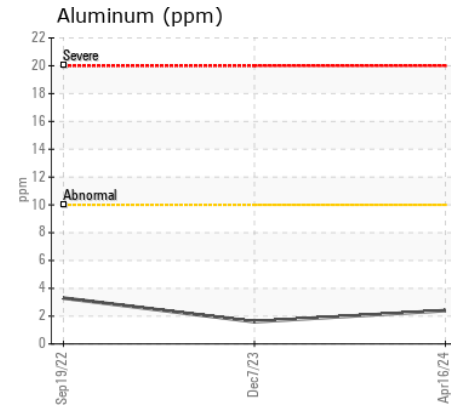
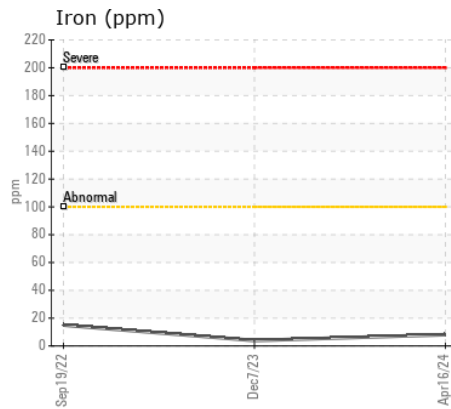
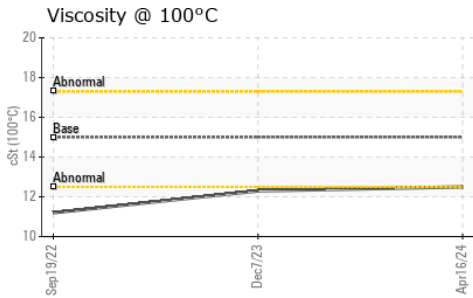
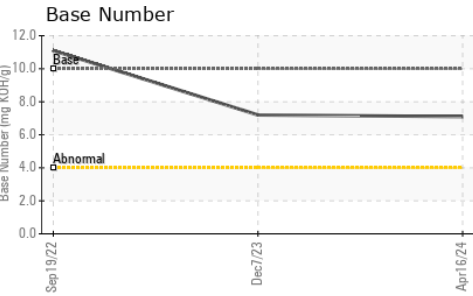
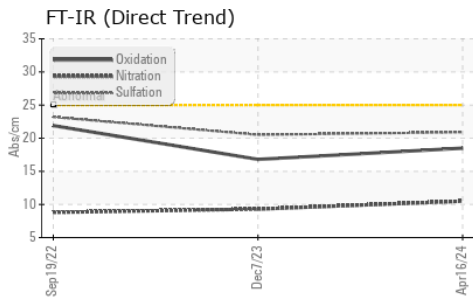
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>7</b>	4	11
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	0.5
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.5</b>	9.3	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.9</b>	20.5	23.2
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	>0.1	<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>&lt;1</b>	1	3
Boron	ppm	ASTM D5185m	2.5	<b>2</b>	10	41
Barium	ppm	ASTM D5185m	0.0	<b>2</b>	<1	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>62</b>	62	37
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m	256	<b>929</b>	921	406
Calcium	ppm	ASTM D5185m	2057	<b>1132</b>	1091	1825
Phosphorus	ppm	ASTM D5185m	935	<b>988</b>	1033	864
Zinc	ppm	ASTM D5185m	1223	<b>1217</b>	1276	1030
Sulfur	ppm	ASTM D5185m	4079	<b>3081</b>	3049	3939
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.5</b>	16.8	21.9
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>7.1</b>	7.2	11.1
Visc @ 100°C	cSt	ASTM D445	15.0	<b>12.5</b>	▲ 12.3	● 11.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP447338 **Received** : 26 Apr 2024  
**Lab Number** : 06161263 **Tested** : 29 Apr 2024  
**Unique Number** : 10996686 **Diagnosed** : 29 Apr 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**ALTA EQUIPMENT COMPANY - METRO WEST**  
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Certificate L2367  
 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)