



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[716821 MOSAIC]**  
 Machine Id  
**VOLVO EC480EL 315147**  
 Component  
**Hydraulic System**  
 Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

### RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP454994</b>	VCP454177	VCP455362
Sample Date		Client Info		<b>24 May 2024</b>	13 Jan 2024	02 Jan 2024
Machine Age	hrs	Client Info		<b>2182</b>	1647	1748
Oil Age	hrs	Client Info		<b>2182</b>	1647	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	<b>3</b>	2	0
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	<1	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>150	<b>15</b>	16	16
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	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

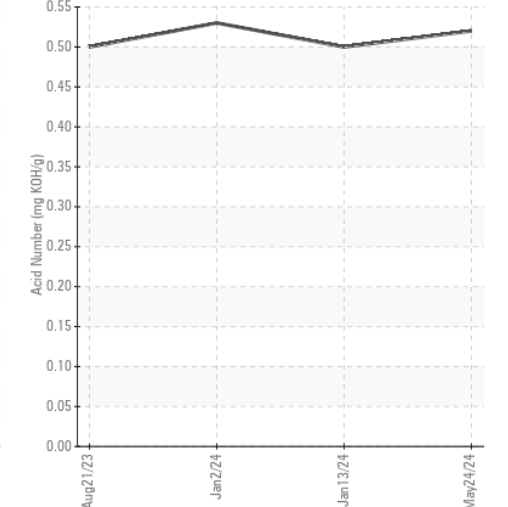
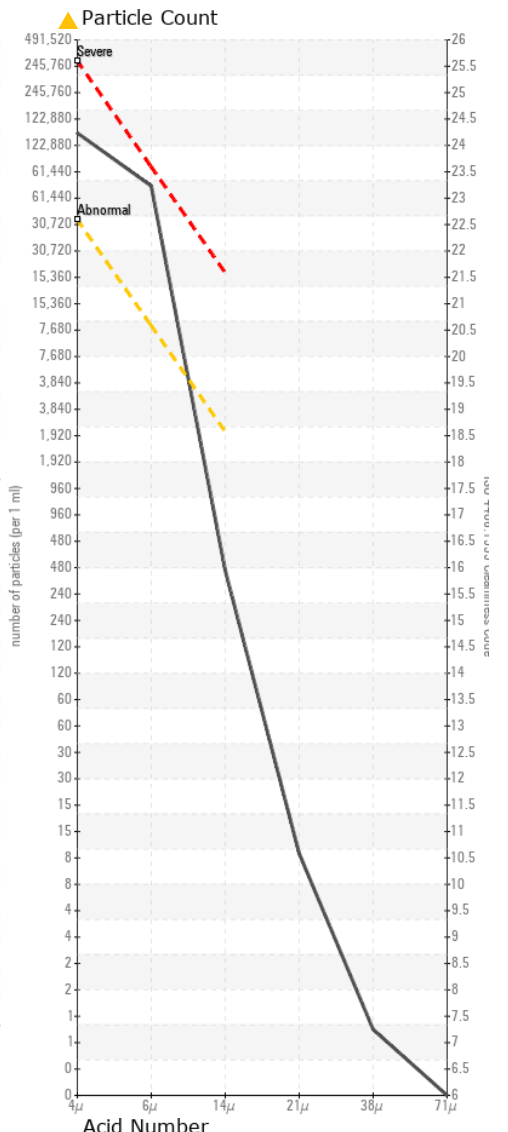
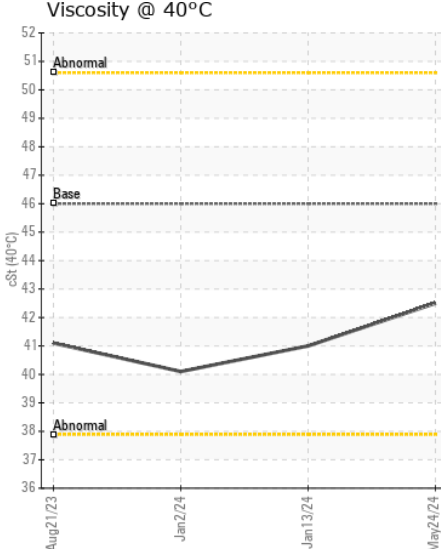
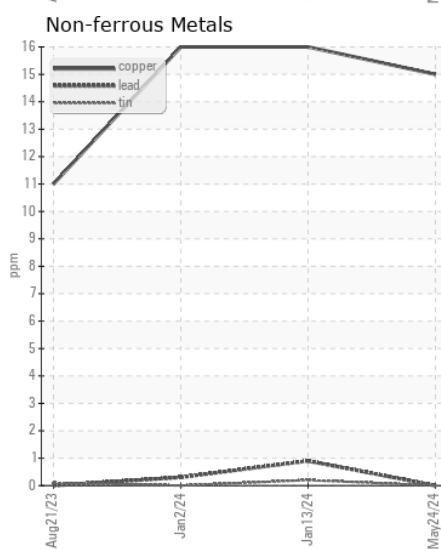
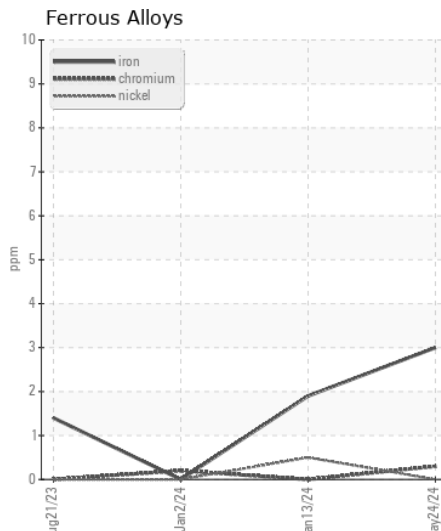
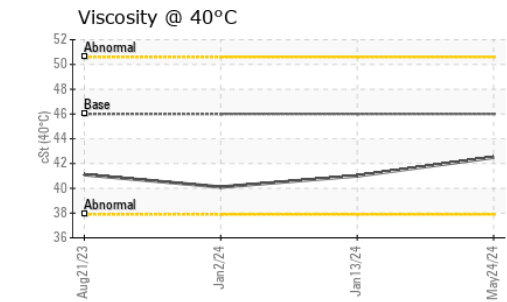
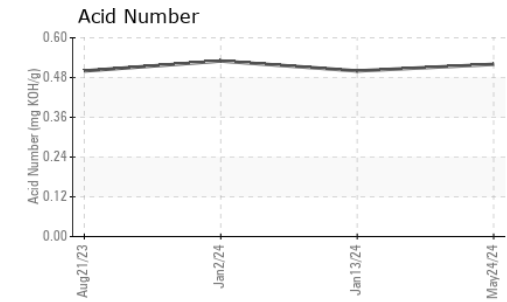
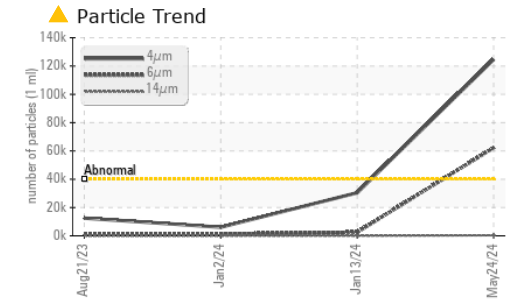
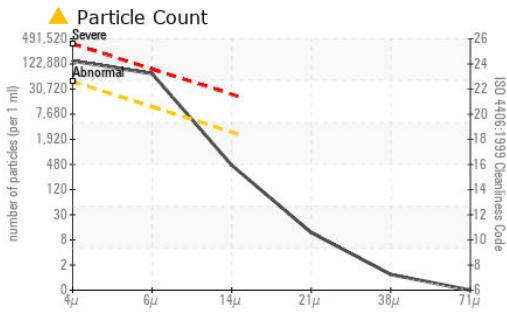
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>3</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>40000	<b>▲ 124608</b>	30424	6061
Particles >6µm		ASTM D7647	>10000	<b>▲ 62241</b>	2582	1325
Particles >14µm		ASTM D7647	>2500	<b>407</b>	28	81
Particles >21µm		ASTM D7647	>640	<b>10</b>	5	19
Particles >38µm		ASTM D7647	>160	<b>1</b>	0	0
Particles >71µm		ASTM D7647	>40	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	<b>▲ 24/23/16</b>	22/19/12	20/18/14
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 AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		<b>0</b>	2	0
Boron	ppm	ASTM D5185m	14	<b>5</b>	0	0
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.0	<b>2</b>	0	0
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	2.6	<b>16</b>	2	0
Calcium	ppm	ASTM D5185m	49	<b>294</b>	68	71
Phosphorus	ppm	ASTM D5185m	354	<b>408</b>	396	362
Zinc	ppm	ASTM D5185m	419	<b>542</b>	484	488
Sulfur	ppm	ASTM D5185m	3719	<b>1760</b>	1188	1145
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.52</b>	0.50	0.53
Visc @ 40°C	cSt	ASTM D445	46	<b>42.5</b>	41.0	40.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP454994  
**Lab Number** : 06214587  
**Unique Number** : 11087451  
**Test Package** : MOB 2

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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)