



# LIEBHERR

## OIL ANALYSIS REPORT

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



Area  
**[389912]**  
Machine Id  
**VOLVO EC250E 314186**  
Component  
**Hydraulic System**  
Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH394389</b>	---	---
Sample Date		Client Info		<b>29 Dec 2023</b>	---	---
Machine Age	hrs	Client Info		<b>2000</b>	---	---
Oil Age	hrs	Client Info		<b>2000</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>25	<b>4</b>	---	---
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---
Copper	ppm	ASTM D5185(m)	>150	<b>22</b>	---	---
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

### CONTAMINATION

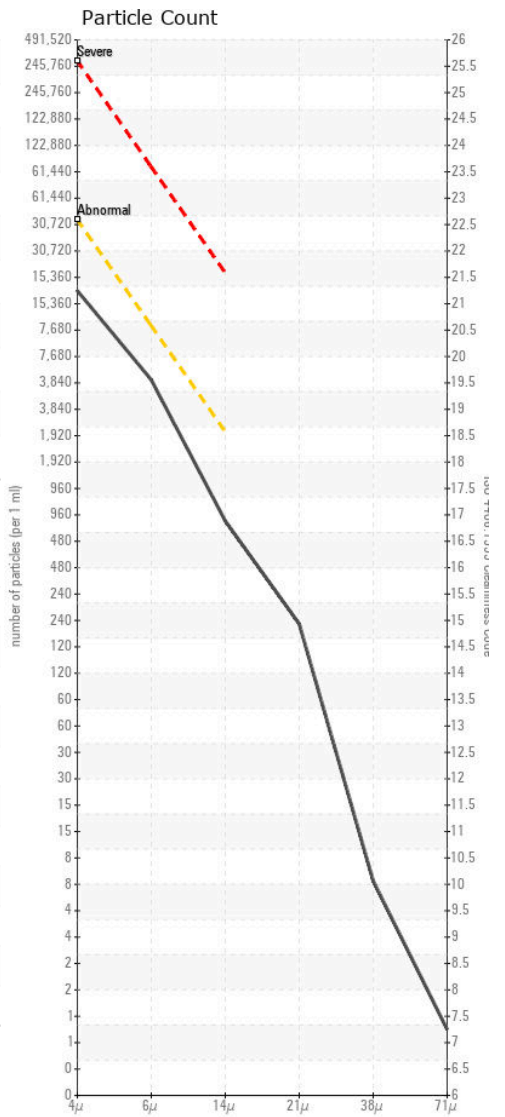
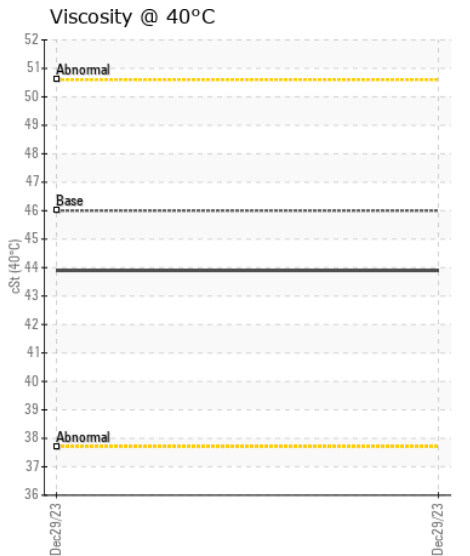
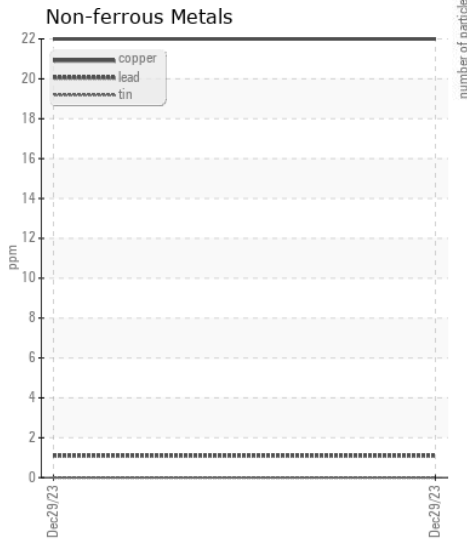
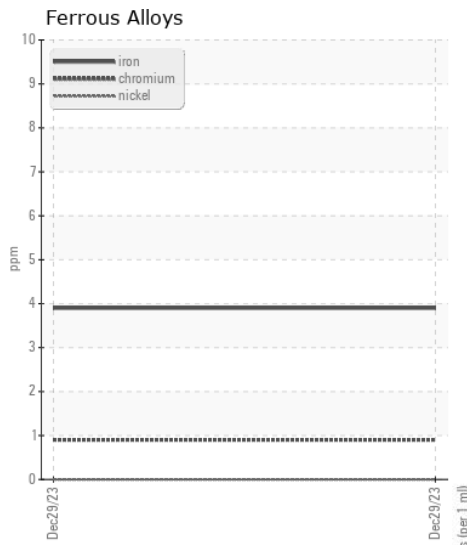
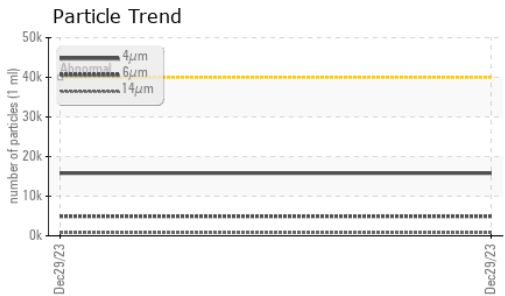
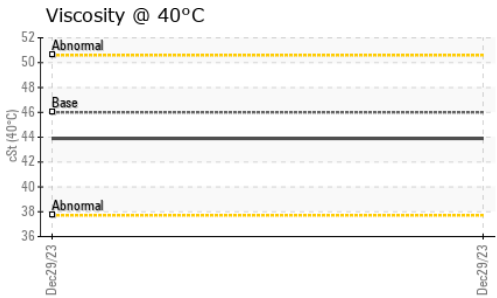
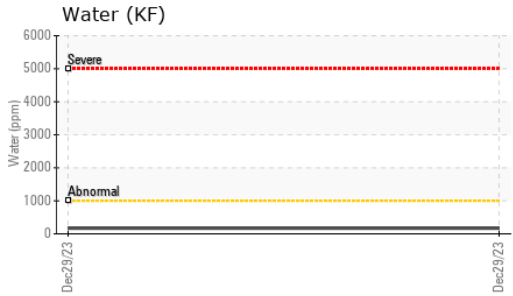
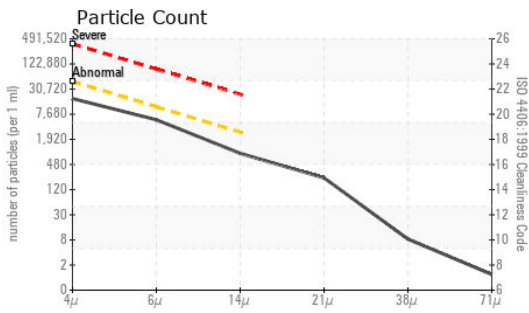
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>50	<b>4</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---
Water	%	ASTM D6304*	>0.1	<b>0.016</b>	---	---
ppm Water	ppm	ASTM D6304*	>1000	<b>169</b>	---	---
Particles >4µm		ASTM D7647	>40000	<b>15801</b>	---	---
Particles >6µm		ASTM D7647	>10000	<b>4927</b>	---	---
Particles >14µm		ASTM D7647	>2500	<b>777</b>	---	---
Particles >21µm		ASTM D7647	>640	<b>202</b>	---	---
Particles >38µm		ASTM D7647	>160	<b>7</b>	---	---
Particles >71µm		ASTM D7647	>40	<b>1</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>22/20/18	<b>21/19/17</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.1	<b>.2%</b>	---	---

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Boron	ppm	ASTM D5185(m)	14	<b>&lt;1</b>	---	---
Barium	ppm	ASTM D5185(m)	0.0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	0.0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)	0.0	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)	2.6	<b>1</b>	---	---
Calcium	ppm	ASTM D5185(m)	49	<b>118</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	354	<b>544</b>	---	---
Zinc	ppm	ASTM D5185(m)	419	<b>683</b>	---	---
Sulfur	ppm	ASTM D5185(m)	3719	<b>1302</b>	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	46	<b>43.9</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH394389 **Received** : 23 Jan 2024  
**Lab Number** : 02610627 **Diagnosed** : 24 Jan 2024  
**Unique Number** : 5711713 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KF, PrtCount )

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

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