



# ASCENDUM

## OIL ANALYSIS REPORT

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

Machine Id  
**VOLVO EC250EL 310605 - EC250EL**  
 Component  
**Hydraulic System**  
 Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0010828</b>	VCP346751	---
Sample Date		Client Info		<b>20 Jun 2024</b>	02 Feb 2023	---
Machine Age	hrs	Client Info		<b>3509</b>	2452	---
Oil Age	hrs	Client Info		<b>0</b>	2000	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Not Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

### WEAR

The iron level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	<b>▲ 39</b>	11	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	---
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>150	<b>23</b>	41	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

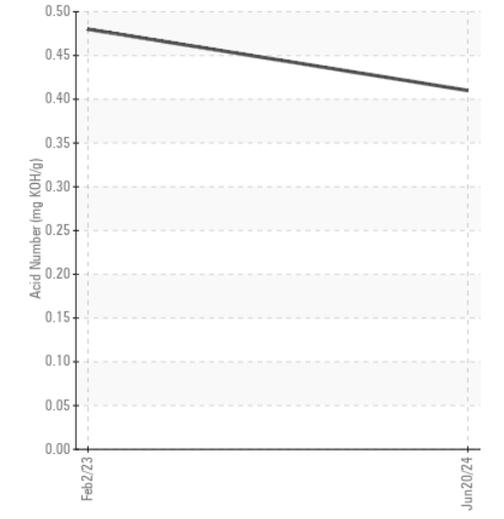
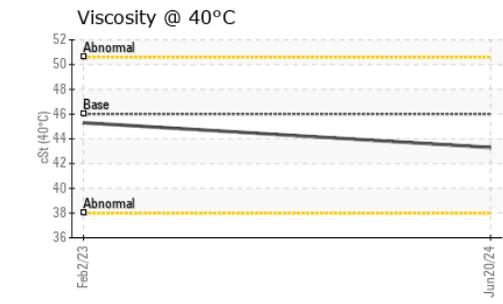
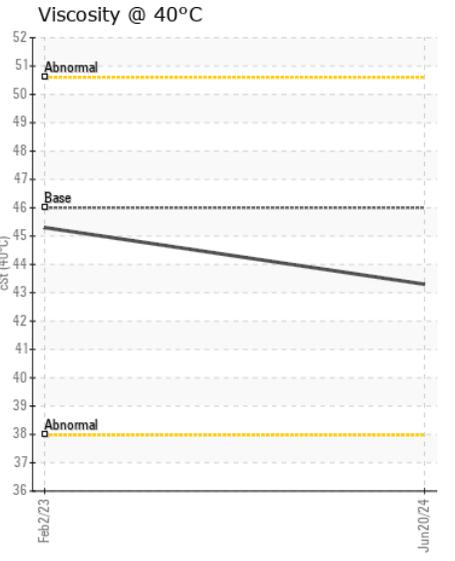
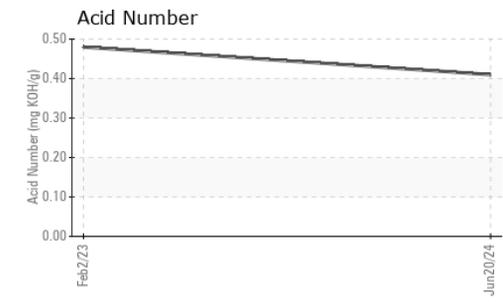
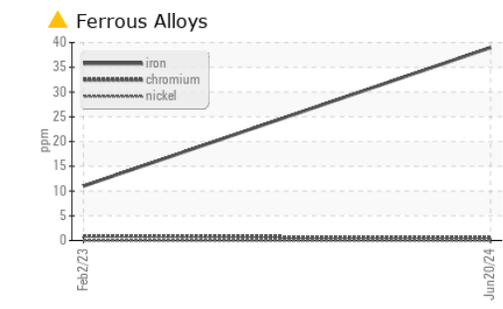
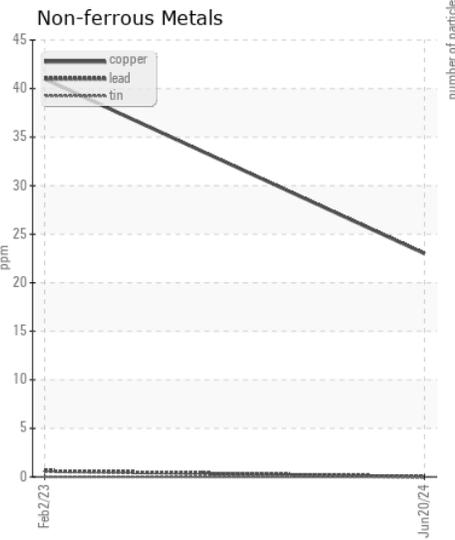
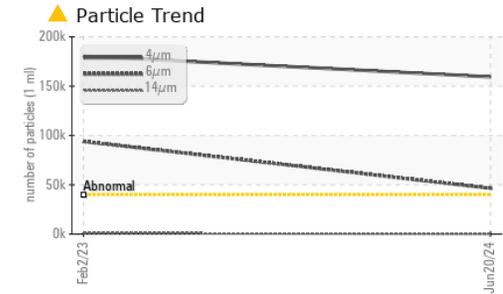
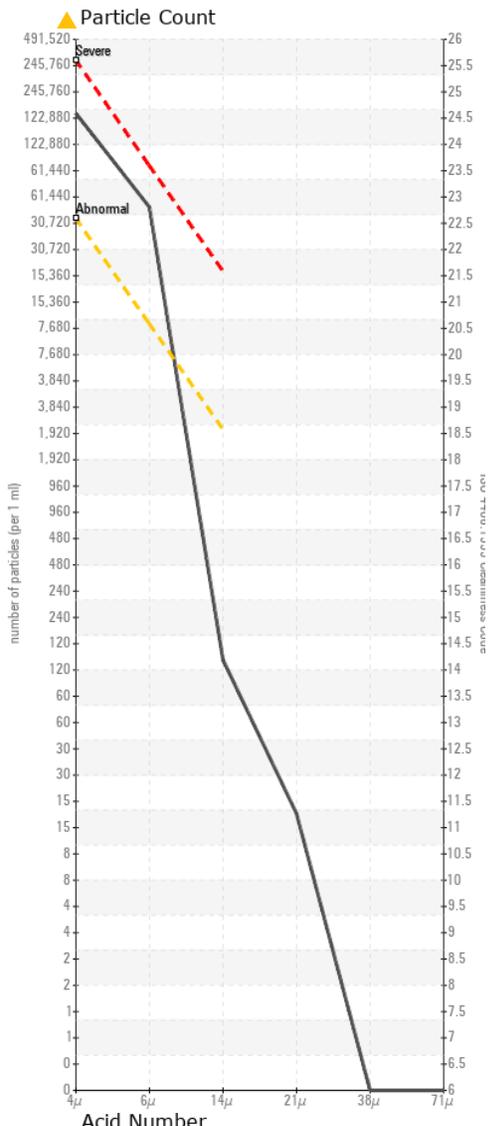
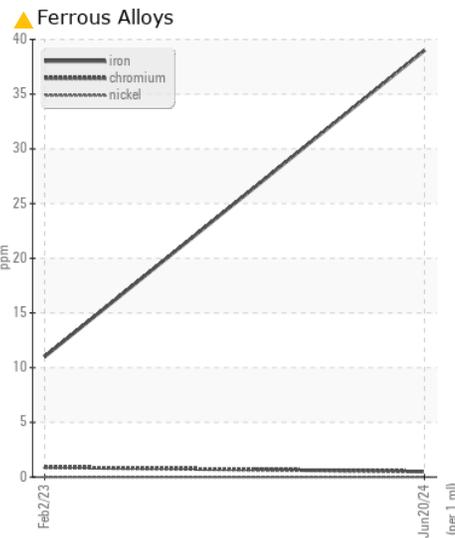
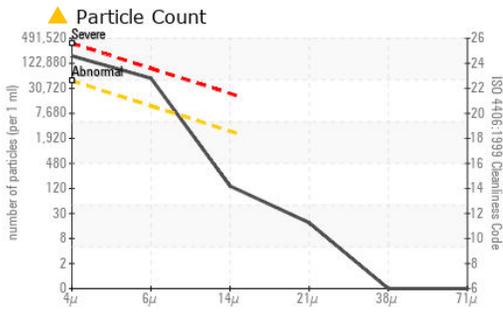
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>20</b>	6	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>40000	<b>▲ 159372</b>	▲ 180502	---
Particles >6µm		ASTM D7647	>10000	<b>▲ 46358</b>	▲ 93900	---
Particles >14µm		ASTM D7647	>2500	<b>121</b>	784	---
Particles >21µm		ASTM D7647	>640	<b>16</b>	75	---
Particles >38µm		ASTM D7647	>160	<b>0</b>	4	---
Particles >71µm		ASTM D7647	>40	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>22/20/18	<b>▲ 24/23/14</b>	▲ 25/24/17	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	LIGHT	---
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	>0.1	<b>NEG</b>	NEG	---

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	0	---
Boron	ppm	ASTM D5185m	14	<b>4</b>	8	---
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	0.0	<b>5</b>	7	---
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	2.6	<b>37</b>	59	---
Calcium	ppm	ASTM D5185m	49	<b>192</b>	306	---
Phosphorus	ppm	ASTM D5185m	354	<b>370</b>	426	---
Zinc	ppm	ASTM D5185m	419	<b>420</b>	529	---
Sulfur	ppm	ASTM D5185m	3719	<b>2966</b>	1602	---
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.41</b>	0.48	---
Visc @ 40°C	cSt	ASTM D445	46	<b>43.3</b>	45.3	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0010828  
**Lab Number** : 06222823  
**Unique Number** : 11101020  
**Test Package** : CONST

**365 - ASCENDUM MACHINERY INC - SAVANNAH**  
 54 MEDLINE DR  
 RICHMOND HILL, GA  
 US 31324  
 Contact: JESSE WILSON  
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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)

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