



# OIL ANALYSIS REPORT

WEAR  
CONTAMINATION  
FLUID CONDITION

**ABNORMAL**

**SEVERE**

**NORMAL**



Machine Id  
**VOLVO EC350EL 310856**  
Component  
**Rear Left Final Drive**  
Fluid  
**MOBIL MOBILUBE HD 85W140 (--- GAL)**

## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. ( Customer Sample Comment: 500 hour service )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0886264</b>	VCP416198	VCP418796
Sample Date		Client Info		<b>12 Jan 2024</b>	28 Sep 2023	23 Aug 2023
Machine Age	hrs	Client Info		<b>4595</b>	4122	3993
Oil Age	hrs	Client Info		<b>500</b>	100	2000
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>None</b>	Not Changd	N/A
Sample Status				<b>SEVERE</b>	SEVERE	SEVERE

## WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	<b>▲ 601</b>	▲ 981	● 2385
Chromium	ppm	ASTM D5185m	>10	<b>4</b>	▲ 12	● 37
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	1	3
Titanium	ppm	ASTM D5185m		<b>4</b>	6	18
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>▲ 24</b>	▲ 46	▲ 165
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>1</b>	2	5
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

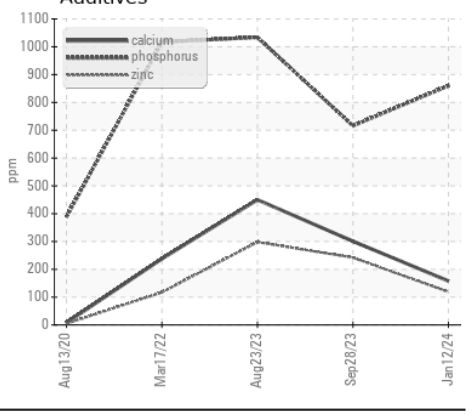
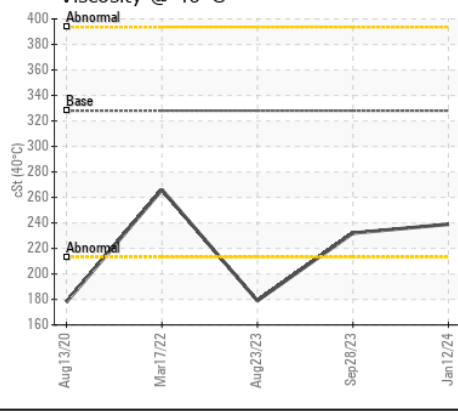
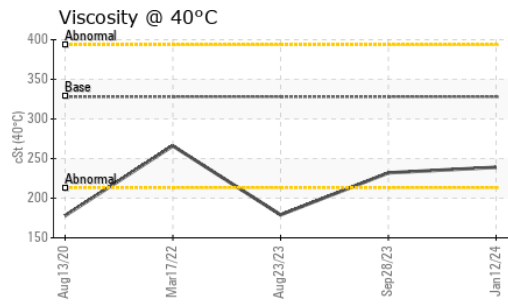
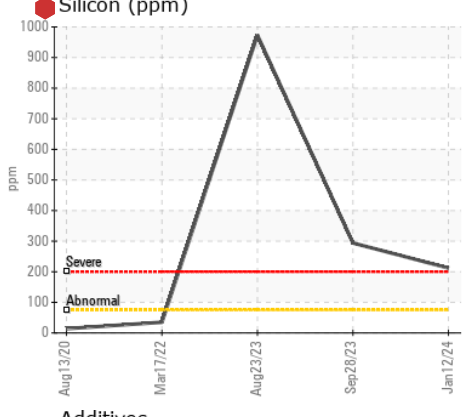
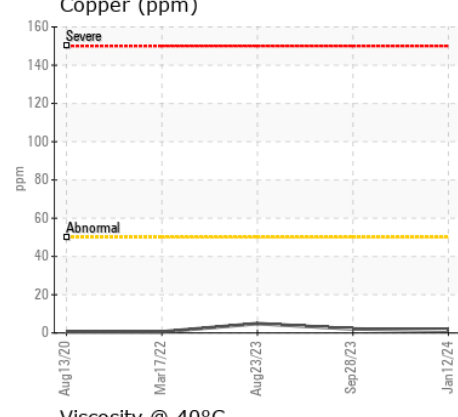
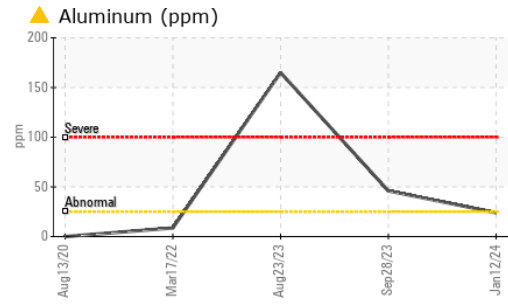
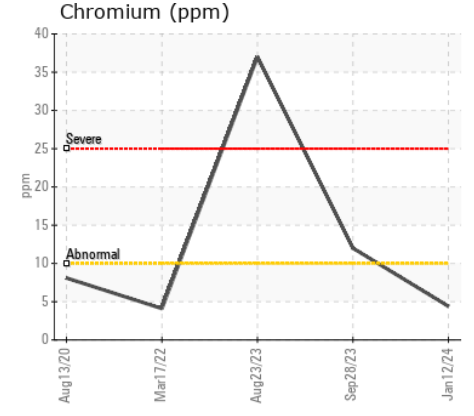
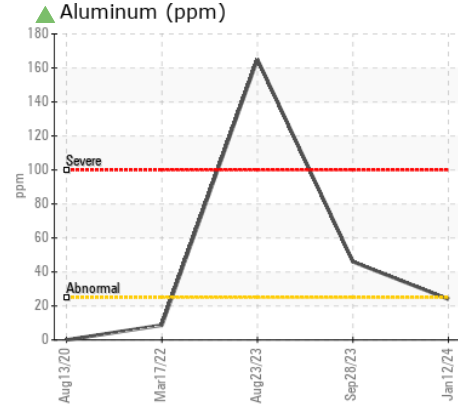
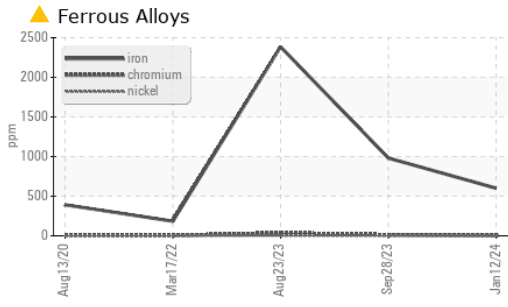
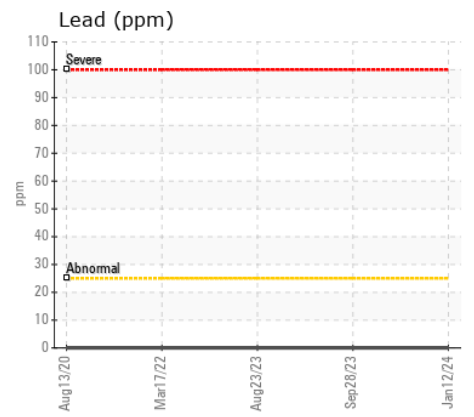
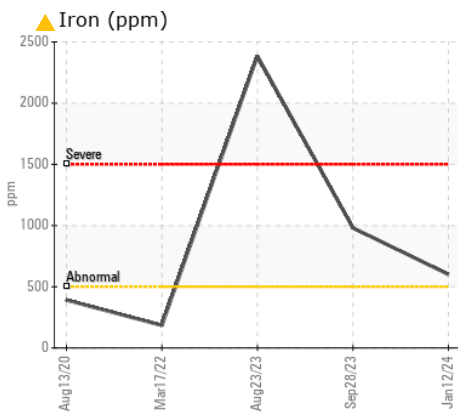
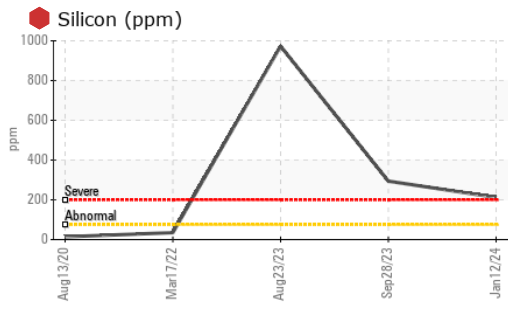
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	<b>● 212</b>	● 294	● 973
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	7	32
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
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 oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		<b>0</b>	2	6
Boron	ppm	ASTM D5185m		<b>136</b>	106	154
Barium	ppm	ASTM D5185m		<b>3</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>10</b>	14	17
Manganese	ppm	ASTM D5185m		<b>3</b>	7	19
Magnesium	ppm	ASTM D5185m		<b>63</b>	124	138
Calcium	ppm	ASTM D5185m		<b>158</b>	301	450
Phosphorus	ppm	ASTM D5185m		<b>860</b>	716	1034
Zinc	ppm	ASTM D5185m		<b>119</b>	242	298
Sulfur	ppm	ASTM D5185m		<b>29094</b>	23928	25095
Visc @ 40°C	cSt	ASTM D445	328	<b>239</b>	232	179



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0886264 **Received** : 17 Jan 2024  
**Lab Number** : 06063203 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10834585 **Diagnostician** : Don Baldrige  
**Test Package** : MOBCE

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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)