



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR  
CONTAMINATION  
FLUID CONDITION

**ATTENTION**  
**ABNORMAL**  
**NORMAL**

Area

**Ascendum Machinery**

Machine Id

**VOLVO EC350E EX-08 (S/N 314211)**

Component

**Right Travel**

Fluid

**VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- 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. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0009518</b>	ASC0000968	ASC0000402
Sample Date		Client Info		<b>18 Jun 2024</b>	15 Mar 2024	27 Apr 2023
Machine Age	hrs	Client Info		<b>5062</b>	5062	3501
Oil Age	hrs	Client Info		<b>3501</b>	1561	485
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>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1200	<b>888</b>	618	216
Chromium	ppm	ASTM D5185m	>20	<b>13</b>	10	6
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>6</b>	4	1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>100	<b>60</b>	44	16
Lead	ppm	ASTM D5185m	>50	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

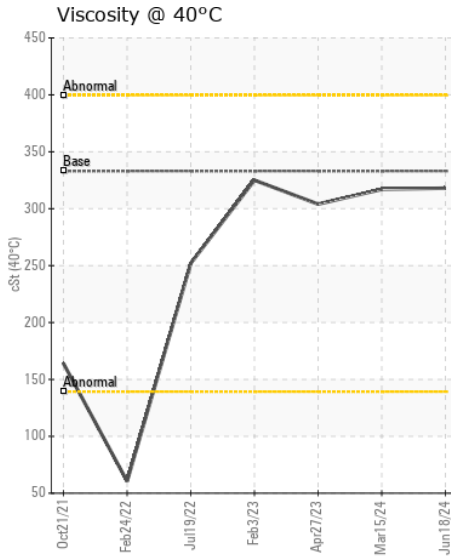
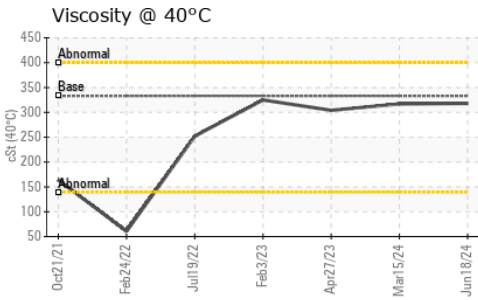
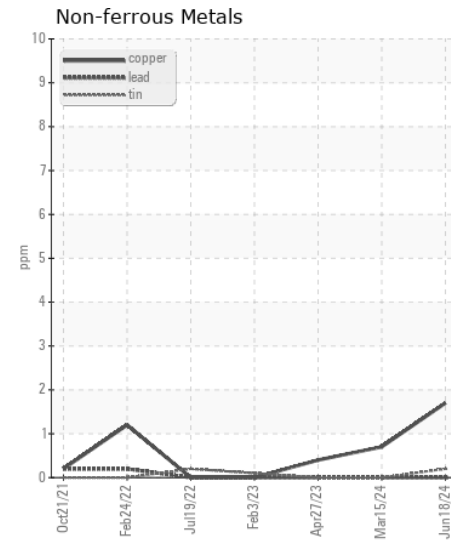
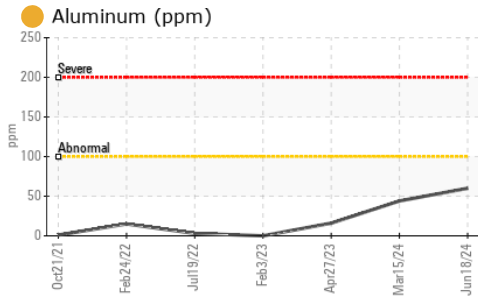
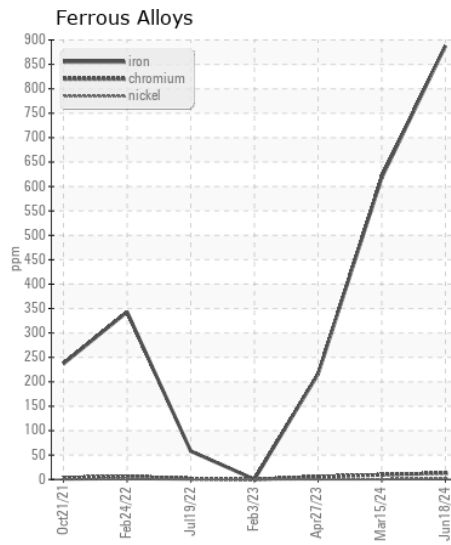
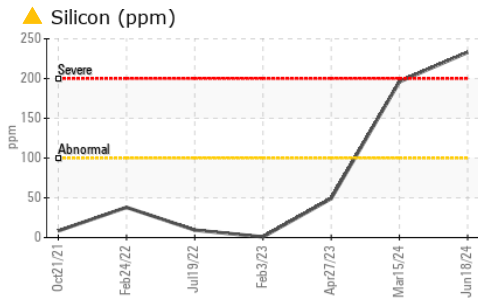
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>100	<b>▲ 233</b>	▲ 196	49
Potassium	ppm	ASTM D5185m	>20	<b>13</b>	6	3
Water		WC Method	>0.25	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>LIGHT</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	>0.25	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>6</b>	4	<1
Boron	ppm	ASTM D5185m	111	<b>173</b>	177	203
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.9	<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m	0.0	<b>7</b>	4	2
Magnesium	ppm	ASTM D5185m	39	<b>6</b>	3	2
Calcium	ppm	ASTM D5185m	93	<b>13</b>	17	11
Phosphorus	ppm	ASTM D5185m	920	<b>1106</b>	1102	1054
Zinc	ppm	ASTM D5185m	104	<b>7</b>	7	7
Sulfur	ppm	ASTM D5185m	20179	<b>36096</b>	34995	36337
Visc @ 40°C	cSt	ASTM D445	333	<b>318</b>	317	304



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0009518  
**Lab Number** : 06217165  
**Unique Number** : 11090029  
**Test Package** : CONST

**Received** : 21 Jun 2024  
**Tested** : 24 Jun 2024  
**Diagnosed** : 24 Jun 2024 - Sean Felton

**CAROLINA EXCAVATING**  
 1036 BRANCHVIEW DR, SUITE 106  
 CONCORD, NC  
 US 28025  
 Contact: KEVIN LADGERWOOD  
 kevin@carlinaexcavation.com

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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F: