



# ASCENDUM

## OIL ANALYSIS REPORT

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



Area  
**Ascendum Machinery/500 Hour CSA**  
Machine Id  
**VOLVO EC300E 1848 (S/N 311167)**  
Component  
**Rear Left Final Drive**  
Fluid  
**{not provided} (--- GAL)**

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

### WEAR

Gear wear is indicated.

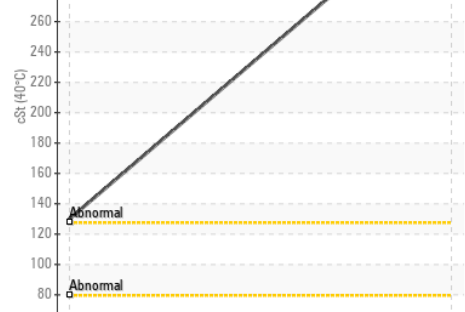
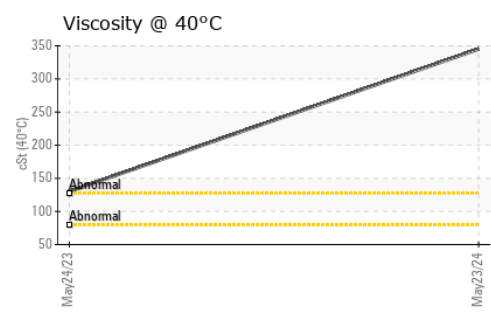
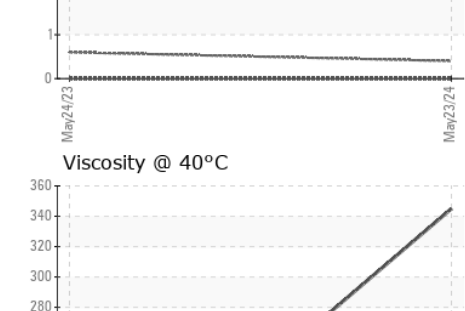
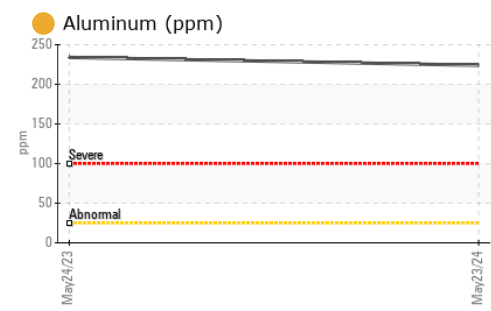
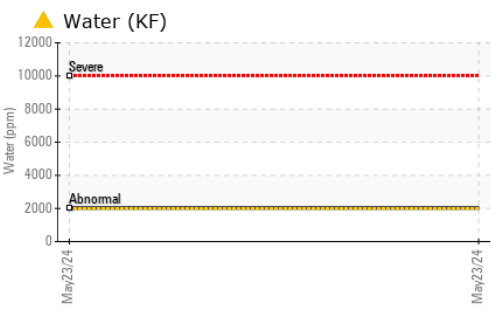
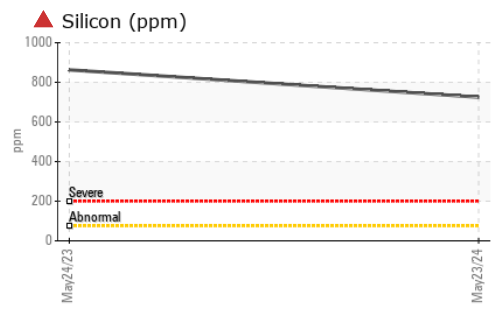
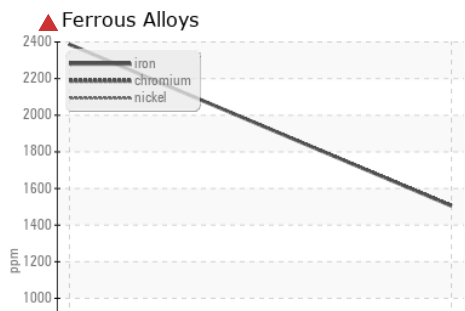
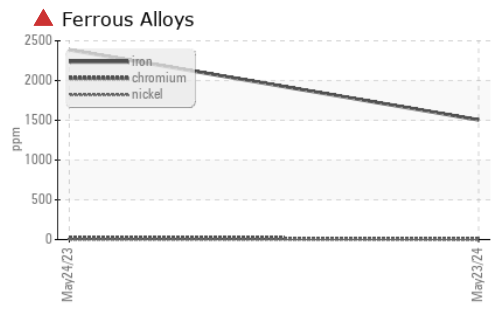
### CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a light concentration of water present in the oil.

### FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0011310</b>	VCP389686	---
Sample Date		Client Info		<b>23 May 2024</b>	24 May 2023	---
Machine Age	hrs	Client Info		<b>8414</b>	7563	---
Oil Age	hrs	Client Info		<b>851</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>SEVERE</b>	SEVERE	---
Iron	ppm	ASTM D5185m	>500	<b>▲ 1505</b>	▲ 2387	---
Chromium	ppm	ASTM D5185m	>10	<b>▲ 10</b>	▲ 20	---
Nickel	ppm	ASTM D5185m	>10	<b>2</b>	2	---
Titanium	ppm	ASTM D5185m		<b>▲ 11</b>	12	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>25	<b>● 224</b>	● 234	---
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>50	<b>4</b>	4	---
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	▲ MODER	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Silicon	ppm	ASTM D5185m	>75	<b>▲ 725</b>	▲ 863	---
Potassium	ppm	ASTM D5185m	>20	<b>44</b>	52	---
Water	%	ASTM D6304	>0.2	<b>▲ 0.202</b>	---	---
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 2020</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
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	>0.2	<b>0.2%</b>	NEG	---
Sodium	ppm	ASTM D5185m		<b>17</b>	31	---
Boron	ppm	ASTM D5185m		<b>110</b>	160	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	3	---
Manganese	ppm	ASTM D5185m		<b>10</b>	16	---
Magnesium	ppm	ASTM D5185m		<b>12</b>	25	---
Calcium	ppm	ASTM D5185m		<b>20</b>	38	---
Phosphorus	ppm	ASTM D5185m		<b>1113</b>	1250	---
Zinc	ppm	ASTM D5185m		<b>14</b>	7	---
Sulfur	ppm	ASTM D5185m		<b>37707</b>	33749	---
Visc @ 40°C	cSt	ASTM D445		<b>345</b>	130	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0011310 **Received** : 17 Jun 2024  
**Lab Number** : 06212636 **Tested** : 20 Jun 2024  
**Unique Number** : 11085500 **Diagnosed** : 20 Jun 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: KF )

**TRIANGLE GRADING AND PAVING INC**  
 1521 Huffman Mill Rd  
 BURLINGTON, NC  
 US 27216  
 Contact: KAREN HILLIARD  
 khilliard@trianglegradingpaving.com  
 T: (336)584-1745  
 F: (336)584-0145

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)