

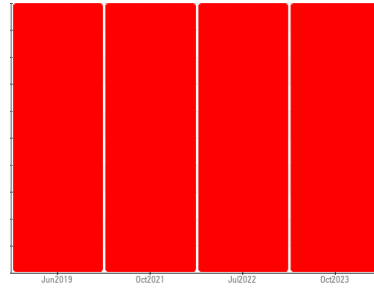
**PROBLEM SUMMARY**

Sample Rating Trend

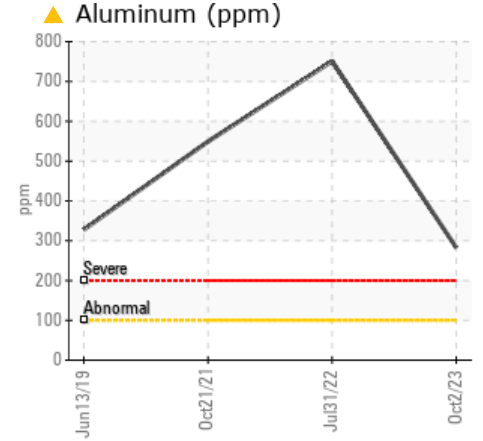
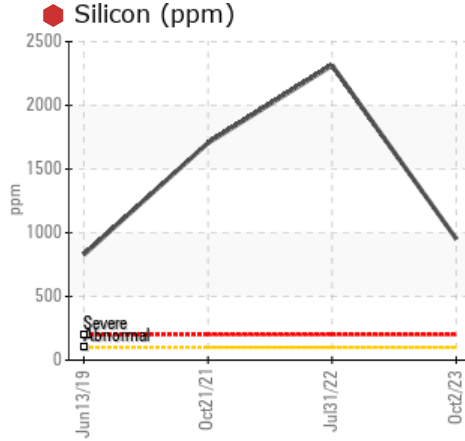
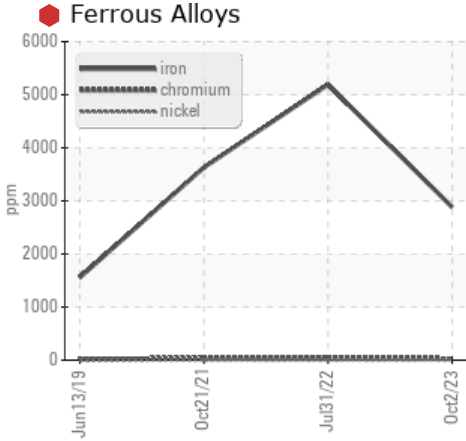
**WEAR**



Area  
**Ascendum Machinery/500 Hour CSA**  
 Machine Id  
**VOLVO EC300E 1741 (S/N 311070)**  
 Component  
**Right Travel**  
 Fluid  
**VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)**



**COMPONENT CONDITION SUMMARY**



**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 advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

**PROBLEMATIC TEST RESULTS**

Sample Status	SEVERE	SEVERE	SEVERE
Iron ppm ASTM D5185m >1200	<b>2881</b>	5191	3631
Chromium ppm ASTM D5185m >20	<b>26</b>	51	36
Aluminum ppm ASTM D5185m >100	<b>283</b>	751	549
Silicon ppm ASTM D5185m >100	<b>952</b>	2314	1705

Customer Id: TRIBUR  
 Sample No.: ASC0000717  
 Lab Number: 05968077  
 Test Package: MOBCE



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

## HISTORICAL DIAGNOSIS

### 31 Jul 2022 Diag: Don Baldrige

#### WEAR



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. The iron and chrome levels are severe. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

[view report](#)



### 21 Oct 2021 Diag: Don Baldrige

#### WEAR



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 advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

[view report](#)



### 13 Jun 2019 Diag: Jonathan Hester

#### WEAR



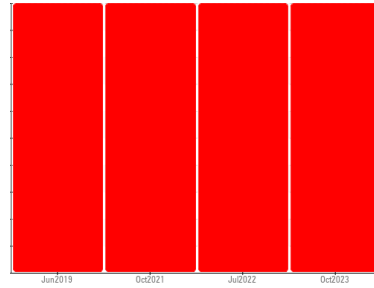
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

[view report](#)





Area  
**Ascendum Machinery/500 Hour CSA**  
 Machine Id  
**VOLVO EC300E 1741 (S/N 311070)**  
 Component  
**Right Travel**  
 Fluid  
**VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)**



DIAGNOSIS

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 advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

Gear wear is indicated.

Contamination

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

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>ASC0000717</b>	VCP386816	VCP343371
Sample Date	Client Info		<b>02 Oct 2023</b>	31 Jul 2022	21 Oct 2021
Machine Age	hrs	Client Info	<b>7994</b>	6958	6129
Oil Age	hrs	Client Info	<b>1865</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status			<b>SEVERE</b>	SEVERE	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >1200	<b>2881</b>	5191	3631
Chromium	ppm	ASTM D5185m >20	<b>26</b>	51	36
Nickel	ppm	ASTM D5185m >5	<b>4</b>	2	3
Titanium	ppm	ASTM D5185m	<b>25</b>	65	54
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >100	<b>283</b>	751	549
Lead	ppm	ASTM D5185m >50	<b>0</b>	<1	1
Copper	ppm	ASTM D5185m >50	<b>6</b>	11	8
Tin	ppm	ASTM D5185m >5	<b>0</b>	0	1
Antimony	ppm	ASTM D5185m >5	<b>---</b>	---	<1
Vanadium	ppm	ASTM D5185m	<b>1</b>	3	2
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 111	<b>196</b>	165	185
Barium	ppm	ASTM D5185m 0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0.9	<b>3</b>	6	5
Manganese	ppm	ASTM D5185m 0.0	<b>20</b>	42	29
Magnesium	ppm	ASTM D5185m 39	<b>53</b>	137	130
Calcium	ppm	ASTM D5185m 93	<b>103</b>	315	272
Phosphorus	ppm	ASTM D5185m 920	<b>1032</b>	941	1006
Zinc	ppm	ASTM D5185m 104	<b>8</b>	56	41
Sulfur	ppm	ASTM D5185m 20179	<b>32877</b>	40576	25056

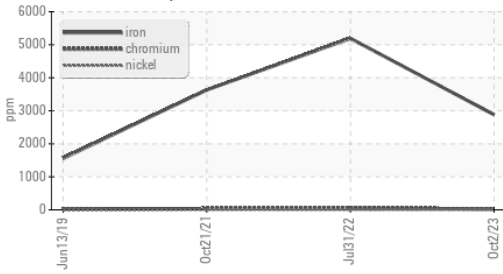
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	<b>952</b>	2314	1705
Sodium	ppm	ASTM D5185m	<b>45</b>	135	119
Potassium	ppm	ASTM D5185m >20	<b>16</b>	43	33

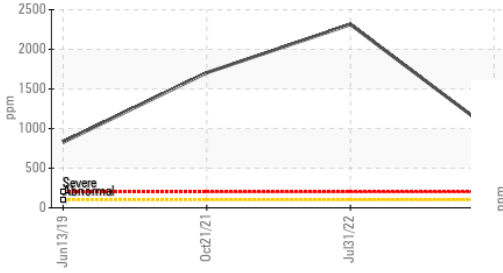
VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	VLITE
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
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 >0.25	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG

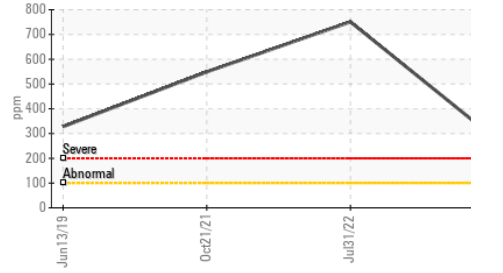
**Ferrous Alloys**



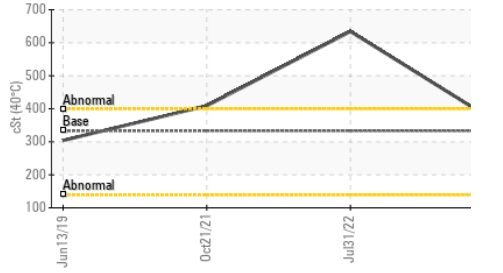
**Silicon (ppm)**



**Aluminum (ppm)**



**Viscosity @ 40°C**



**FLUID PROPERTIES**

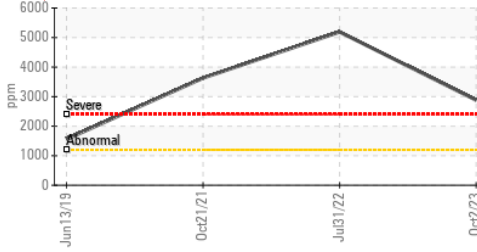
method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445 333	364	▲ 634	409

**SAMPLE IMAGES**

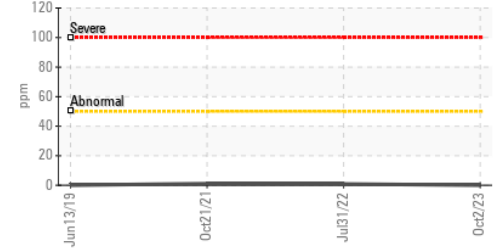
method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

**GRAPHS**

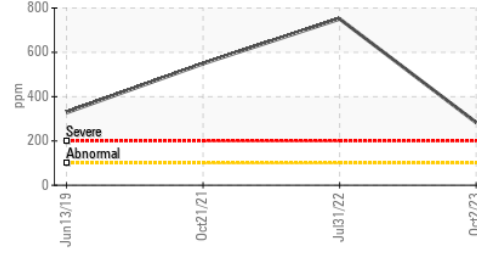
**Iron (ppm)**



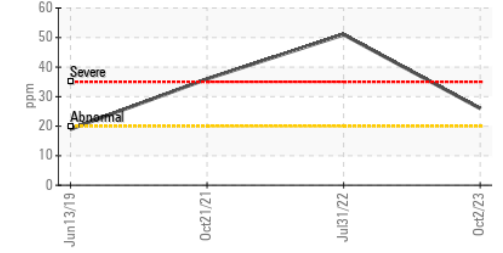
**Lead (ppm)**



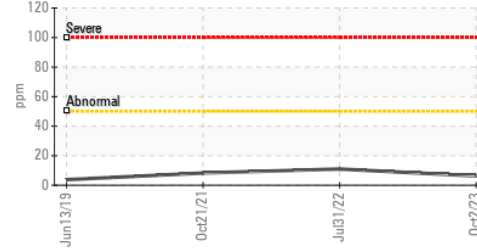
**Aluminum (ppm)**



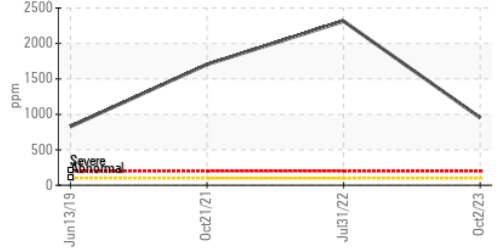
**Chromium (ppm)**



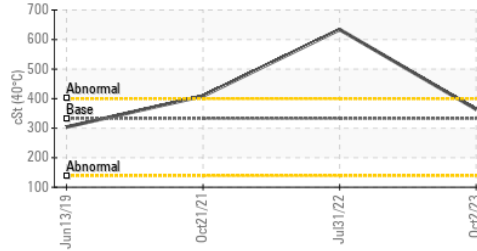
**Copper (ppm)**



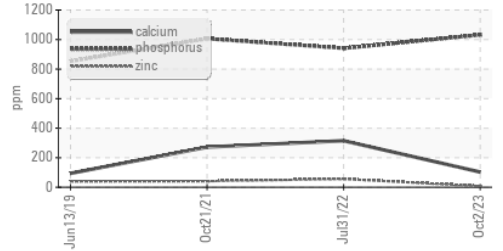
**Silicon (ppm)**



**Viscosity @ 40°C**



**Additives**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0000717 **Received** : 03 Oct 2023  
**Lab Number** : 05968077 **Diagnosed** : 05 Oct 2023  
**Unique Number** : 10674628 **Diagnostician** : Jonathan Hester  
**Test Package** : MOBCE

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

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)