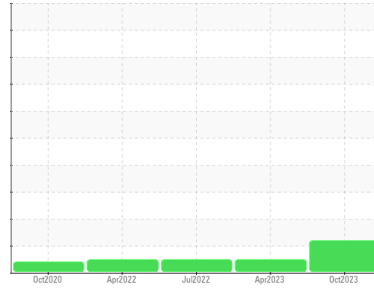




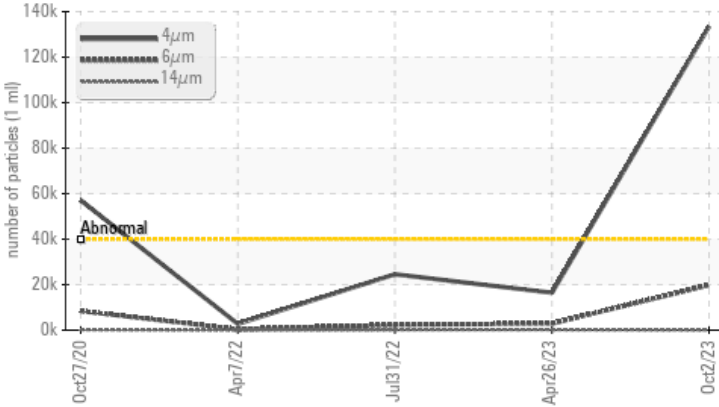
Area  
**Ascendum Machinery/500 Hour CSA**  
 Machine Id  
**VOLVO EC300E 1741 (S/N 311070)**  
 Component  
**Hydraulic System**  
 Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

Sample Rating Trend



**COMPONENT CONDITION SUMMARY**

▲ Particle Trend



**RECOMMENDATION**

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

**PROBLEMATIC TEST RESULTS**

Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL
Particles >4µm	ASTM D7647	>40000	▲ <b>133494</b>	16444	24559
Particles >6µm	ASTM D7647	>10000	▲ <b>19848</b>	2890	2293
Oil Cleanliness	ISO 4406 (c)	>22/20/18	▲ <b>24/21/11</b>	21/19/14	22/18/14

Customer Id: TRIBUR  
 Sample No.: ASC0000722  
 Lab Number: 05967715  
 Test Package: MOBCE



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

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
Resample	---	---	?	We recommend an early resample to monitor this condition.

## HISTORICAL DIAGNOSIS

**26 Apr 2023 Diag: Wes Davis**

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



**31 Jul 2022 Diag: Don Baldrige**

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



**07 Apr 2022 Diag: Doug Bogart**

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

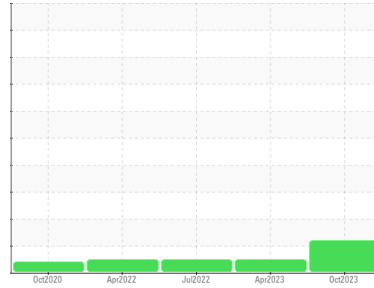
view report





Area  
**Ascendum Machinery/500 Hour CSA**  
 Machine Id  
**VOLVO EC300E 1741 (S/N 311070)**  
 Component  
**Hydraulic System**  
 Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

Sample Rating Trend



**DIAGNOSIS**

**Recommendation**

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

**Wear**

All component wear rates are normal.

**Contamination**

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

**Fluid Condition**

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

**SAMPLE INFORMATION**

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>ASC0000722</b>	VCP407012	VCP386818
Sample Date	Client Info	<b>02 Oct 2023</b>	26 Apr 2023	31 Jul 2022
Machine Age	hrs	<b>7994</b>	7509	6958
Oil Age	hrs	<b>2883</b>	1380	0
Oil Changed	Client Info	<b>Changed</b>	Not Changd	Not Changd
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

**WEAR METALS**

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >25	<b>11</b>	8	7
Chromium ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Nickel ppm	ASTM D5185m >10	<b>0</b>	<1	1
Titanium ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum ppm	ASTM D5185m >20	<b>2</b>	3	4
Lead ppm	ASTM D5185m >20	<b>0</b>	2	<1
Copper ppm	ASTM D5185m >150	<b>25</b>	20	24
Tin ppm	ASTM D5185m >10	<b>0</b>	0	1
Vanadium ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium ppm	ASTM D5185m	<b>0</b>	0	0

**ADDITIVES**

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m 14	<b>0</b>	<1	1
Barium ppm	ASTM D5185m 0.0	<b>0</b>	0	0
Molybdenum ppm	ASTM D5185m 0.0	<b>&lt;1</b>	<1	<1
Manganese ppm	ASTM D5185m 0.0	<b>0</b>	<1	0
Magnesium ppm	ASTM D5185m 2.6	<b>35</b>	28	35
Calcium ppm	ASTM D5185m 49	<b>97</b>	100	123
Phosphorus ppm	ASTM D5185m 354	<b>359</b>	405	413
Zinc ppm	ASTM D5185m 419	<b>443</b>	464	480
Sulfur ppm	ASTM D5185m 3719	<b>1546</b>	1548	2084

**CONTAMINANTS**

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >50	<b>7</b>	6	5
Sodium ppm	ASTM D5185m	<b>0</b>	2	<1
Potassium ppm	ASTM D5185m >20	<b>&lt;1</b>	3	0

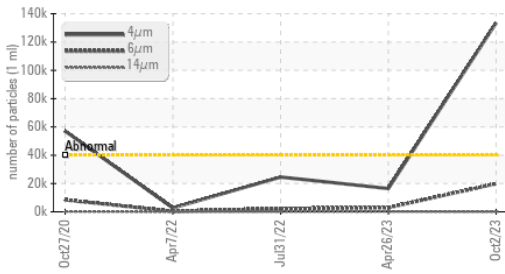
**FLUID CLEANLINESS**

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >40000	<b>▲ 133494</b>	16444	24559
Particles >6µm	ASTM D7647 >10000	<b>▲ 19848</b>	2890	2293
Particles >14µm	ASTM D7647 >2500	<b>19</b>	157	82
Particles >21µm	ASTM D7647 >640	<b>2</b>	33	18
Particles >38µm	ASTM D7647 >160	<b>0</b>	1	1
Particles >71µm	ASTM D7647 >40	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >22/20/18	<b>▲ 24/21/11</b>	21/19/14	22/18/14

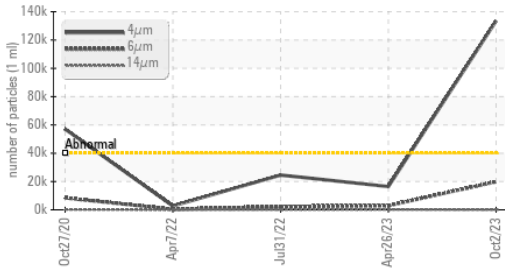
**FLUID DEGRADATION**

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D8045	<b>0.44</b>	0.40	0.53

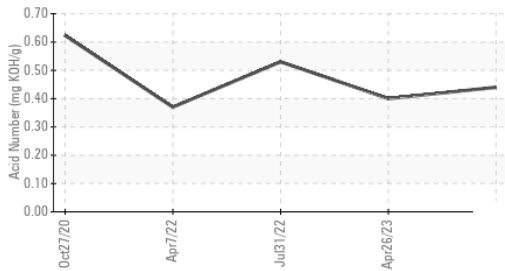
### ▲ Particle Trend



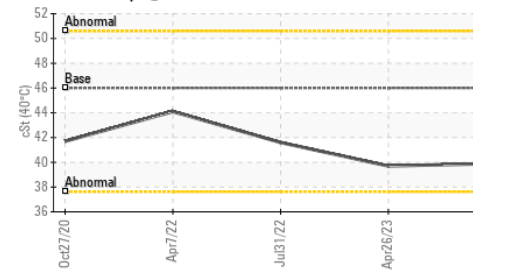
### ▲ Particle Trend



### Acid Number



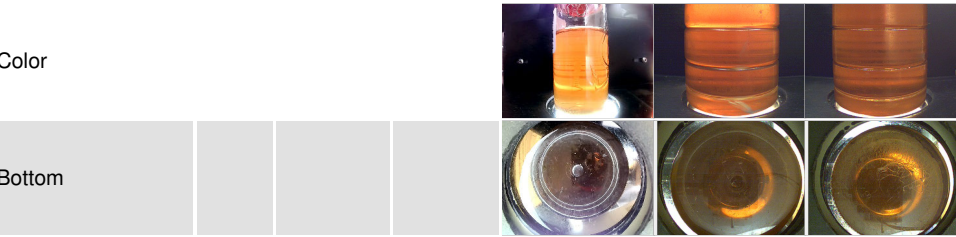
### Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

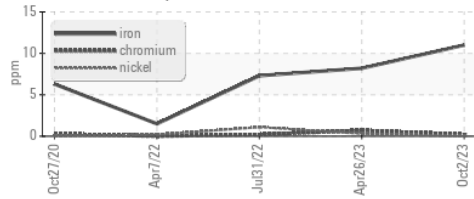
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	39.9	39.7	41.6

### SAMPLE IMAGES

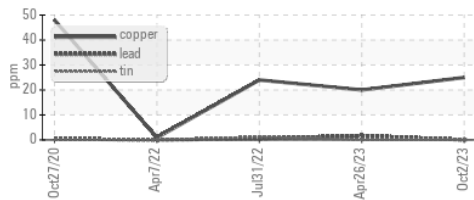


### GRAPHS

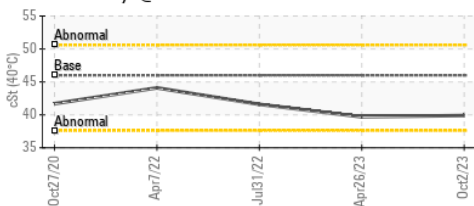
#### Ferrous Alloys



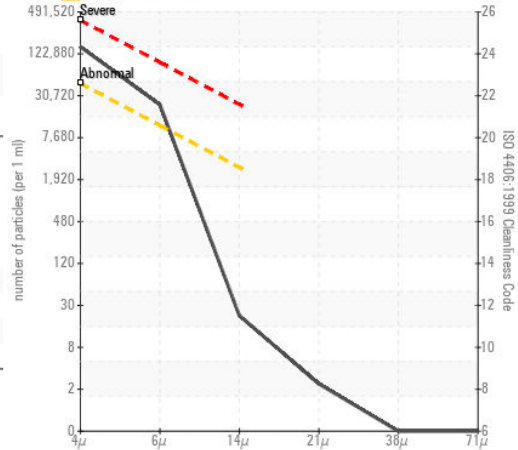
#### Non-ferrous Metals



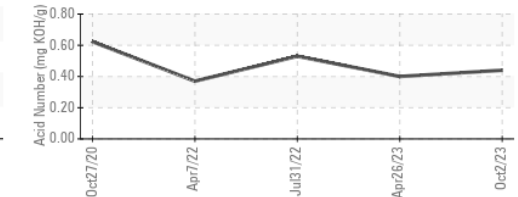
#### Viscosity @ 40°C



#### ▲ Particle Count



#### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : ASC0000722 Received : 03 Oct 2023  
 Lab Number : 05967715 Diagnosed : 04 Oct 2023  
 Unique Number : 10674266 Diagnostician : Wes Davis  
 Test Package : MOBCE

**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

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)