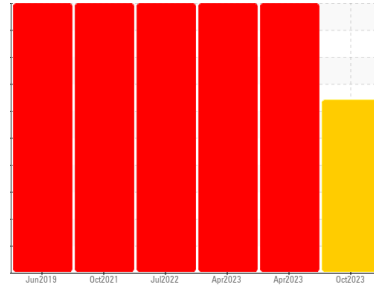
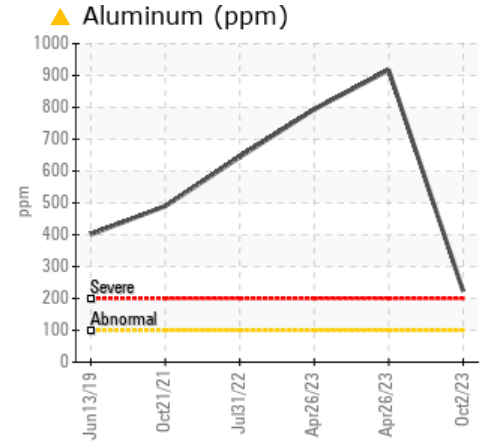
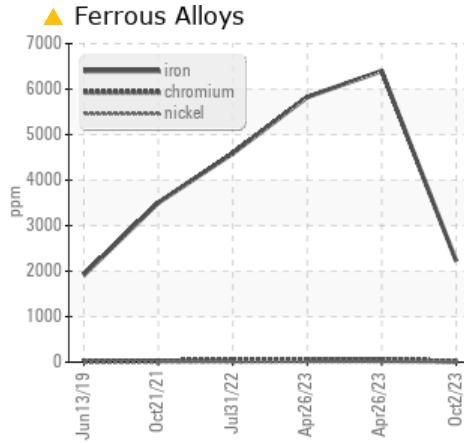
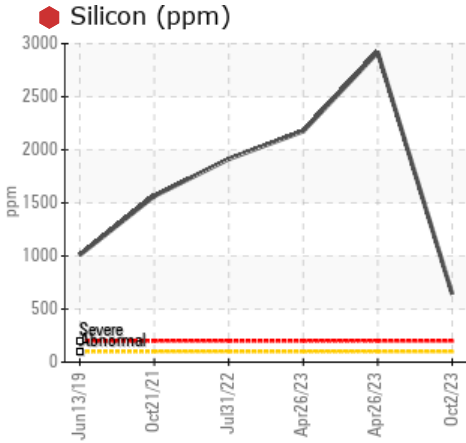




Area
Ascendum Machinery/500 Hour CSA
 Machine Id
VOLVO EC300E 1741 (S/N 311070)
 Component
Left Travel
 Fluid
VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)



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 recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>1200	▲ 2222	● 5827	● 6400
Aluminum	ppm	ASTM D5185m	>100	▲ 223	▲ 794	▲ 917
Silicon	ppm	ASTM D5185m	>100	● 642	● 2176	● 2919

Customer Id: TRIBUR
 Sample No.: ASC0000724
 Lab Number: 05968076
 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

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
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

26 Apr 2023 Diag: Jonathan Hester

WEAR



We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. 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. There is a moderate concentration of water present in the oil. The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

view report



26 Apr 2023 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. The iron and chrome levels are severe. Gear wear is indicated. There is a light concentration of water present in the oil. 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



31 Jul 2022 Diag: Don Baldrige

WEAR



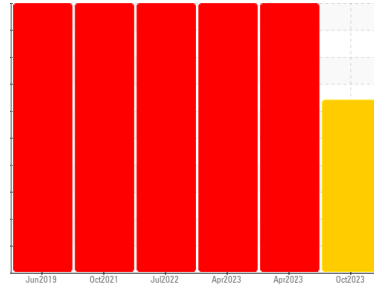
We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. The iron and chrome levels are 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





Area
Ascendum Machinery/500 Hour CSA
 Machine Id
VOLVO EC300E 1741 (S/N 311070)
 Component
Left 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 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		ASC0000724	VCP407019	VCP421178
Sample Date	Client Info		02 Oct 2023	26 Apr 2023	26 Apr 2023
Machine Age	hrs	Client Info	7994	7509	7509
Oil Age	hrs	Client Info	485	551	551
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			SEVERE	SEVERE	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >1200	2222	5827	6400
Chromium	ppm	ASTM D5185m >20	17	51	65
Nickel	ppm	ASTM D5185m >5	2	9	11
Titanium	ppm	ASTM D5185m	18	61	78
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >100	223	794	917
Lead	ppm	ASTM D5185m >50	0	1	1
Copper	ppm	ASTM D5185m >50	5	12	16
Tin	ppm	ASTM D5185m >5	0	2	0
Vanadium	ppm	ASTM D5185m	<1	3	3
Cadmium	ppm	ASTM D5185m	0	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 111	175	143	148
Barium	ppm	ASTM D5185m 0.0	0	0	0
Molybdenum	ppm	ASTM D5185m 0.9	2	6	8
Manganese	ppm	ASTM D5185m 0.0	16	45	52
Magnesium	ppm	ASTM D5185m 39	43	157	146
Calcium	ppm	ASTM D5185m 93	82	288	331
Phosphorus	ppm	ASTM D5185m 920	1004	1047	994
Zinc	ppm	ASTM D5185m 104	8	65	56
Sulfur	ppm	ASTM D5185m 20179	30578	25056	48395

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	642	2176	2919
Sodium	ppm	ASTM D5185m	37	123	149
Potassium	ppm	ASTM D5185m >20	13	47	53

VISUAL

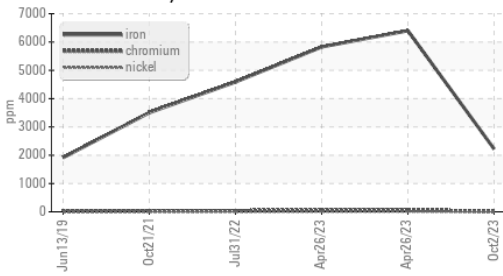
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >0.25	NEG	0.2%	0.2%
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 333	345	572	620

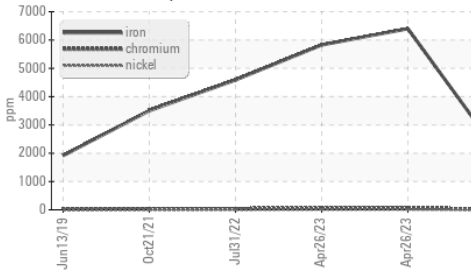
OIL ANALYSIS REPORT

▲ Ferrous Alloys

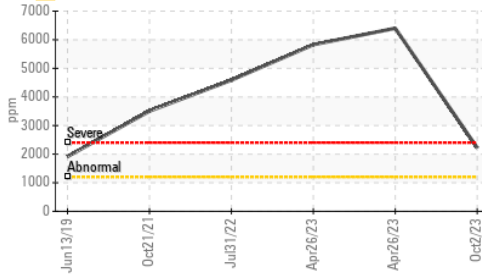


SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

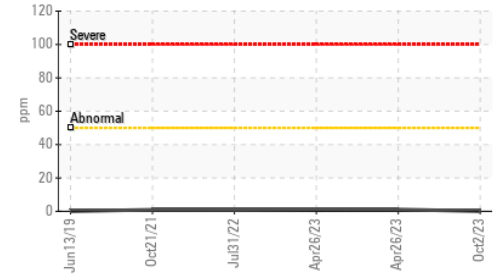
▲ Ferrous Alloys



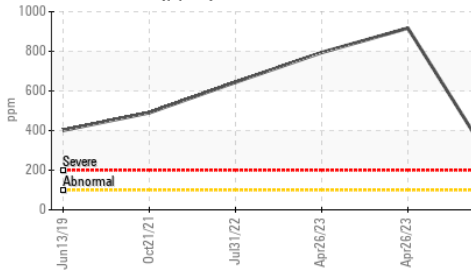
▲ Iron (ppm)



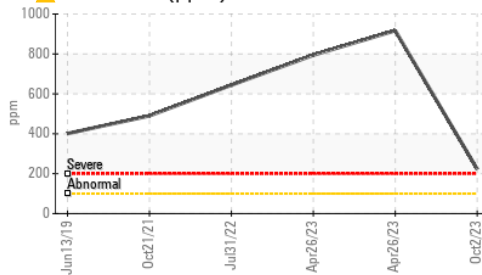
Lead (ppm)



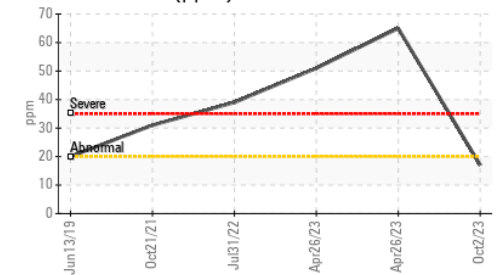
▲ Aluminum (ppm)



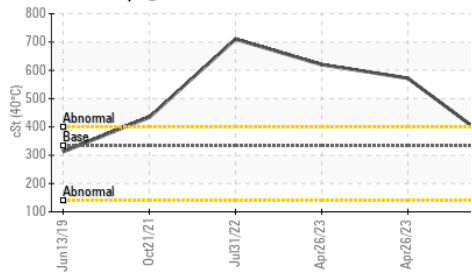
▲ Aluminum (ppm)



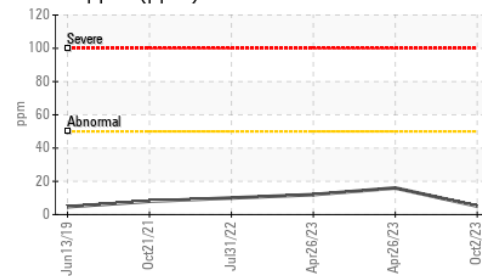
Chromium (ppm)



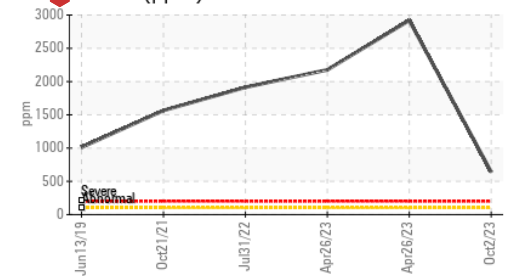
Viscosity @ 40°C



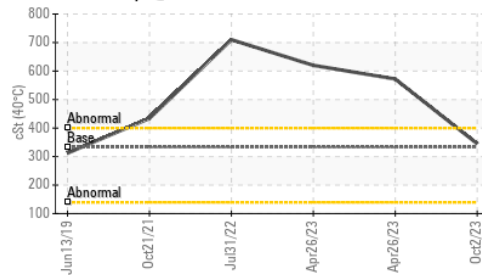
Copper (ppm)



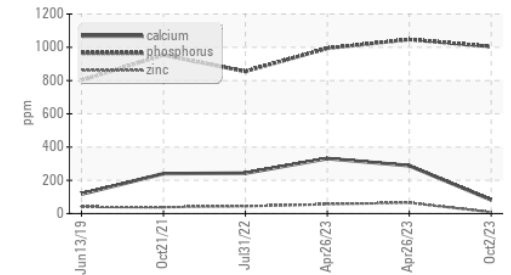
● Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0000724 **Received** : 03 Oct 2023
Lab Number : 05968076 **Diagnosed** : 05 Oct 2023
Unique Number : 10674627 **Diagnostician** : Jonathan Hester
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)