

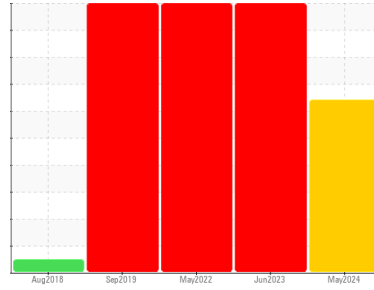
Area

Ascendum Machinery
Machine Id
VOLVO EC220E 310380

Component
Right Travel

Fluid
VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

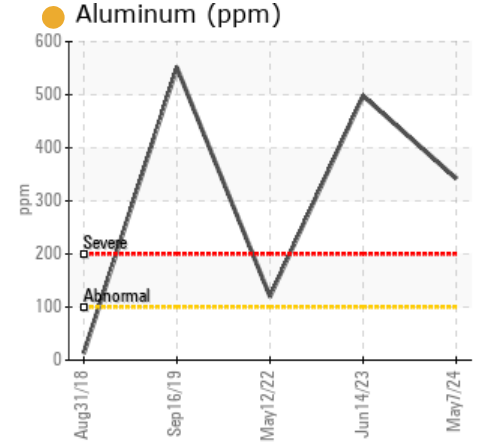
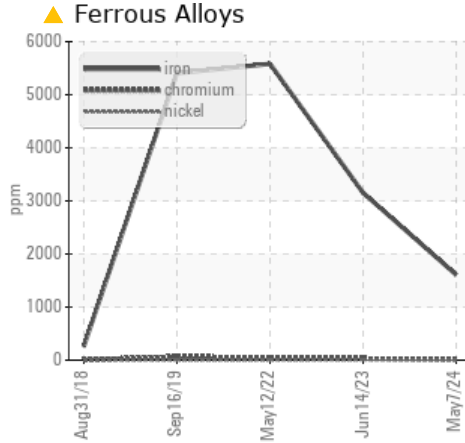
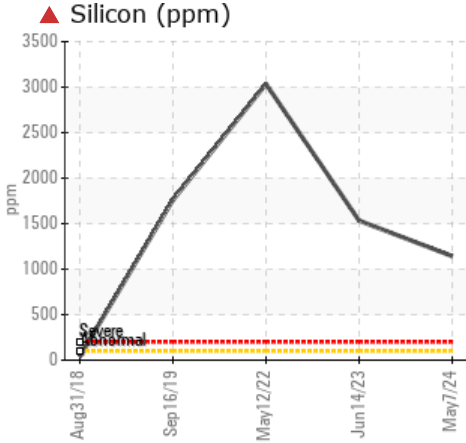
Sample Rating Trend



DIRT



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	▲ 1608	▲ 3152	▲ 5582
Silicon	ppm	ASTM D5185m	>100	▲ 1143	▲ 1533	▲ 3035

Customer Id: BRSRICNC
Sample No.: ASC0009950
Lab Number: 06177602
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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

WEAR



14 Jun 2023 Diag: Don Baldrige

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](#)



WEAR



12 May 2022 Diag: Don Baldrige

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. There is a light 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](#)



WEAR



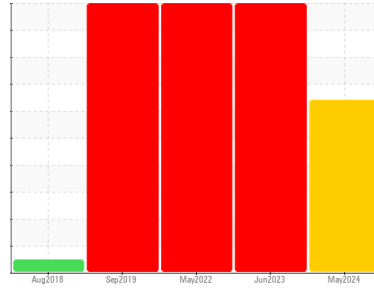
16 Sep 2019 Diag: Don Baldrige

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](#)



Sample Rating Trend



DIRT



Area
Ascendum Machinery
 Machine Id
VOLVO EC220E 310380

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 recommend an early resample to monitor this condition.

▲ Wear
 The iron level has decreased, but is still abnormal. 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		ASC0009950	ASC0000222	VCP377021
Sample Date	Client Info		07 May 2024	14 Jun 2023	12 May 2022
Machine Age	hrs	Client Info	4432	4052	3458
Oil Age	hrs	Client Info	380	594	0
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	▲ 1608	▲ 3152	▲ 5582
Chromium	ppm	ASTM D5185m >20	▲ 17	▲ 29	▲ 49
Nickel	ppm	ASTM D5185m >5	<1	▲ 7	4
Titanium	ppm	ASTM D5185m	22	25	61
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >100	● 342	● 498	● 120
Lead	ppm	ASTM D5185m >50	0	<1	2
Copper	ppm	ASTM D5185m >50	2	6	12
Tin	ppm	ASTM D5185m >5	<1	0	1
Antimony	ppm	ASTM D5185m >5	---	---	---
Vanadium	ppm	ASTM D5185m	<1	1	2
Cadmium	ppm	ASTM D5185m	<1	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 111	173	157	113
Barium	ppm	ASTM D5185m 0.0	3	2	6
Molybdenum	ppm	ASTM D5185m 0.9	0	4	6
Manganese	ppm	ASTM D5185m 0.0	12	19	36
Magnesium	ppm	ASTM D5185m 39	29	51	142
Calcium	ppm	ASTM D5185m 93	62	153	258
Phosphorus	ppm	ASTM D5185m 920	1107	1034	881
Zinc	ppm	ASTM D5185m 104	5	30	25
Sulfur	ppm	ASTM D5185m 20179	34334	32315	31259

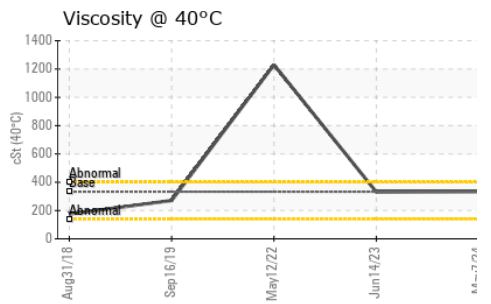
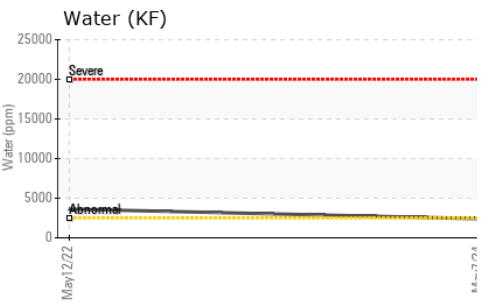
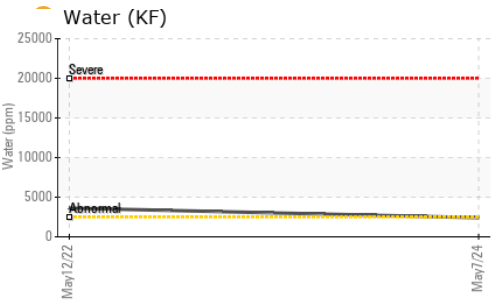
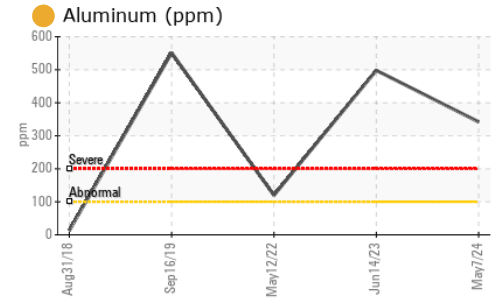
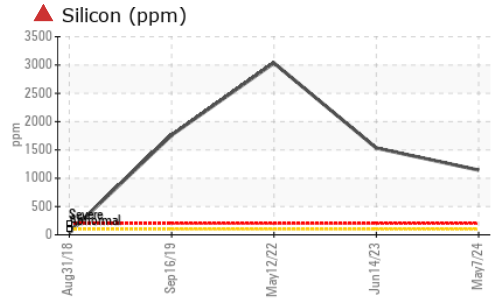
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	▲ 1143	▲ 1533	▲ 3035
Sodium	ppm	ASTM D5185m	34	47	135
Potassium	ppm	ASTM D5185m >20	52	85	173
Water	%	ASTM D6304 >0.25	0.241	---	▲ 0.363
ppm Water	ppm	ASTM D6304 >2500	2410	---	▲ 3630

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	MODER	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	0.2%	NEG	0.2%
Free Water	scalar	*Visual	NEG	NEG	NEG

OIL ANALYSIS REPORT

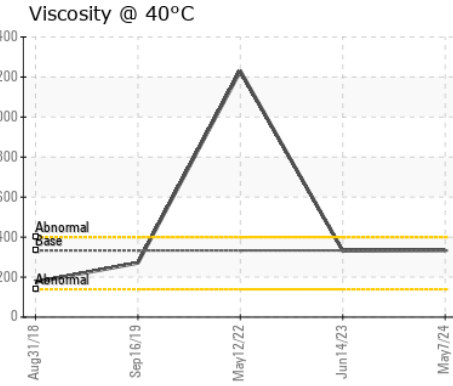
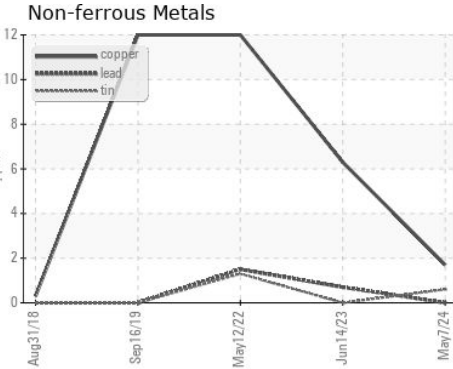
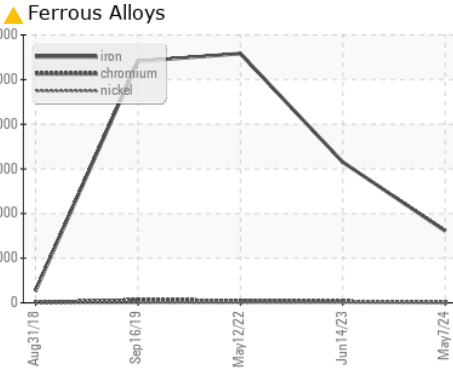


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	333	334	331	1230

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0009950 **Received** : 13 May 2024
Lab Number : 06177602 **Tested** : 15 May 2024
Unique Number : 11023655 **Diagnosed** : 15 May 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF)

BRS INC
 208 STATE HWY 49
 RICHFIELD, NC
 US 28137
 Contact: Service Manager

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)

T:
F: (704)463-1700