



ASCENDUM

OIL ANALYSIS REPORT

Area

Ascendum Machinery

Machine Id

310511 VOLVO EC220E 310511

Component

Swing Drive

Fluid

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

WEAR

ATTENTION

CONTAMINATION

ABNORMAL

FLUID CONDITION

NORMAL

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. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0000588	ASC0005460	VCP0006601
Sample Date		Client Info		07 Jun 2024	05 Oct 2023	23 May 2023
Machine Age	hrs	Client Info		5967	4852	4852
Oil Age	hrs	Client Info		5967	4852	1019
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1200	244	<1	268
Chromium	ppm	ASTM D5185m	>10	2	0	3
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		4	0	<1
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	52	<1	2
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	<1	7
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

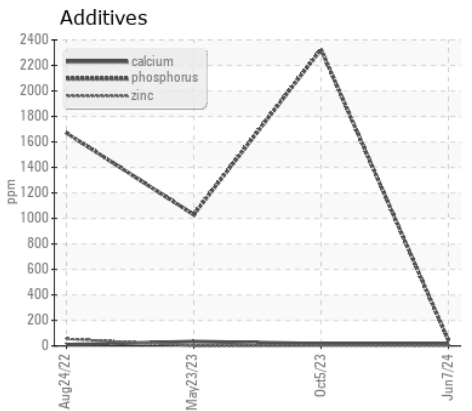
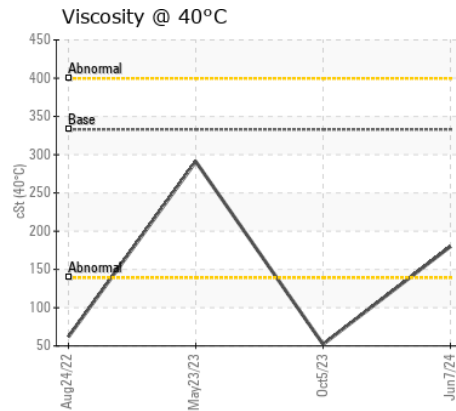
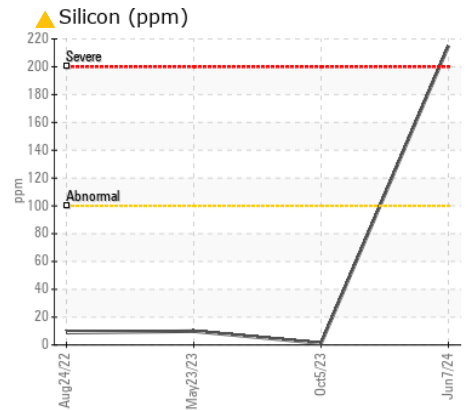
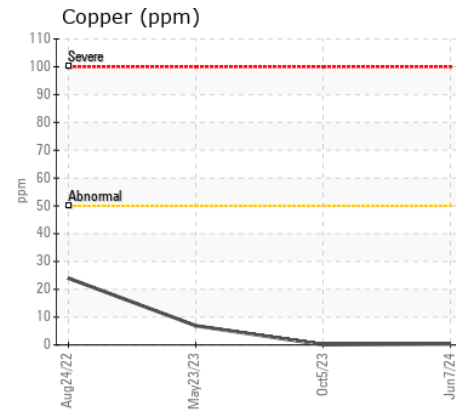
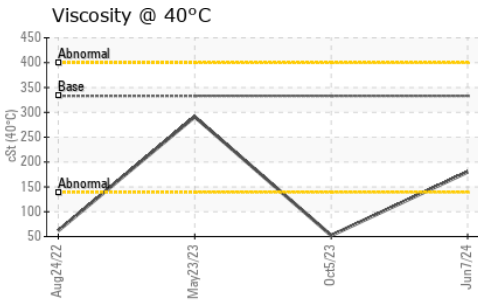
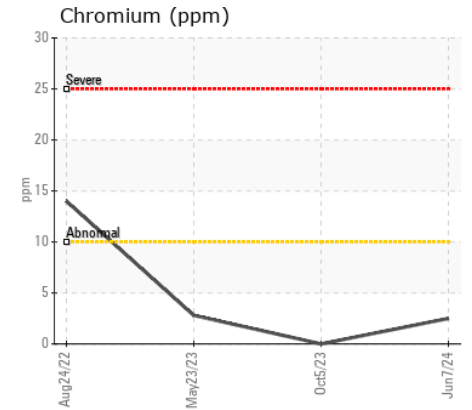
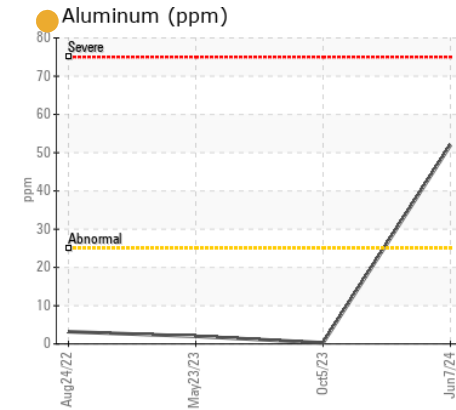
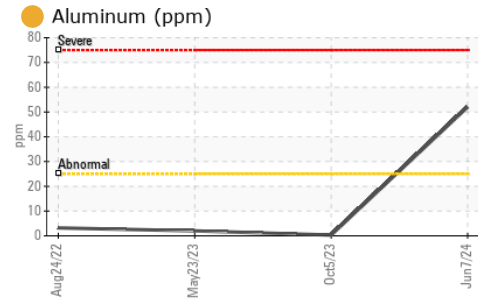
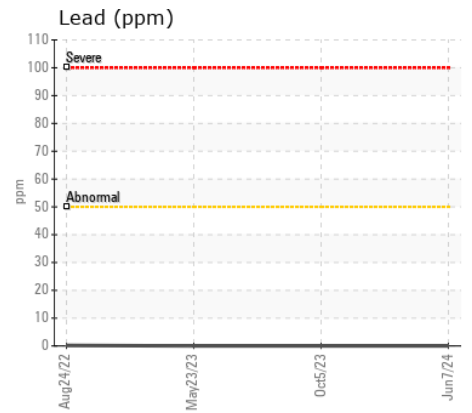
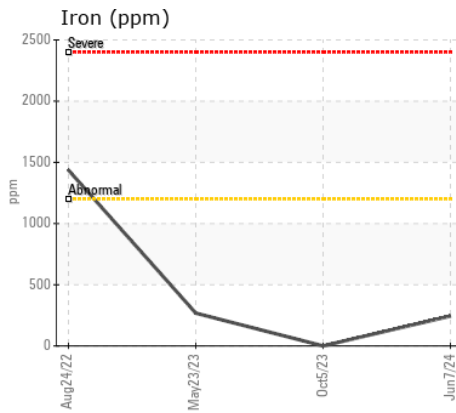
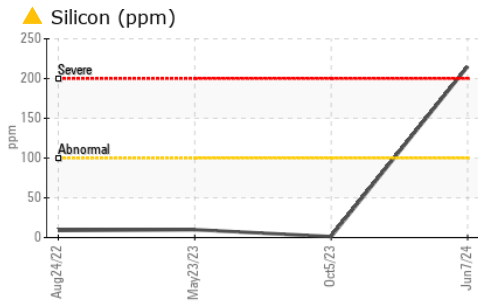
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>100	215	1	10
Potassium	ppm	ASTM D5185m	>20	13	1	<1
Water		WC Method	>0.25	NEG	NEG	NEG
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	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		31	2	<1
Boron	ppm	ASTM D5185m	111	4	316	207
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	<1	0	<1
Manganese	ppm	ASTM D5185m	0.0	1	<1	3
Magnesium	ppm	ASTM D5185m	39	6	6	0
Calcium	ppm	ASTM D5185m	93	20	18	35
Phosphorus	ppm	ASTM D5185m	920	44	2326	1030
Zinc	ppm	ASTM D5185m	104	3	5	1
Sulfur	ppm	ASTM D5185m	20179	6527	25863	32124
Visc @ 40°C	cSt	ASTM D445	333	180	52.2	291



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0000588
Lab Number : 06210561
Unique Number : 11083425
Test Package : MOBCE

Received : 14 Jun 2024
Tested : 17 Jun 2024
Diagnosed : 18 Jun 2024 - Sean Felton

METAL RECYCLING SERVICES - GASTONIA
 5401 S YORK HWY
 GASTONIA, NC
 US 28052
 Contact: RYAN BOWDEN

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)

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