



ASCENDUM

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area

Ascendum Machinery

Machine Id

VOLVO EC220E 513 (S/N 314288)

Component

Right Travel

Fluid

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

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0009690	ASC0001066	VCP0002322
Sample Date		Client Info		06 Jul 2024	28 Aug 2023	20 May 2022
Machine Age	hrs	Client Info		3542	2497	1581
Oil Age	hrs	Client Info		1045	916	1581
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	NORMAL	NORMAL

WEAR

The iron and chrome levels are severe. Gear wear is indicated.

Iron	ppm	ASTM D5185m	>1200	▲ 5449	2	1368
Chromium	ppm	ASTM D5185m	>20	▲ 36	<1	19
Nickel	ppm	ASTM D5185m	>5	▲ 13	0	2
Titanium	ppm	ASTM D5185m		28	0	3
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>100	● 491	2	52
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>50	11	0	2
Tin	ppm	ASTM D5185m	>5	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

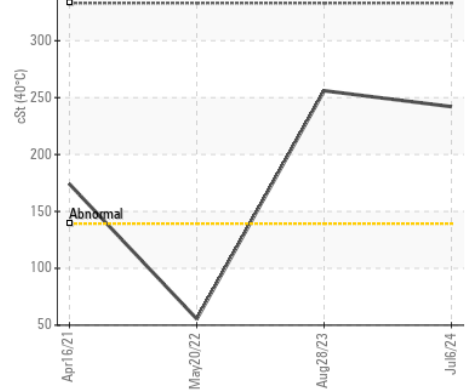
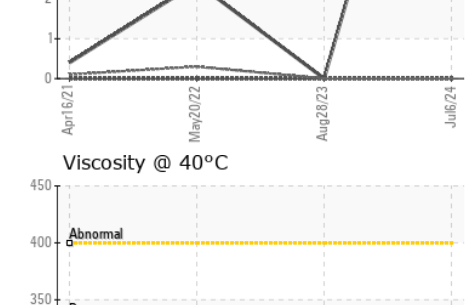
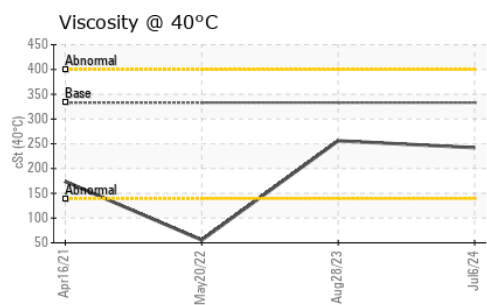
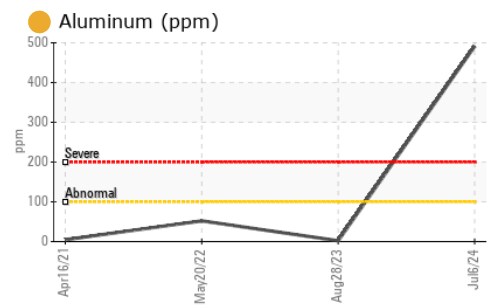
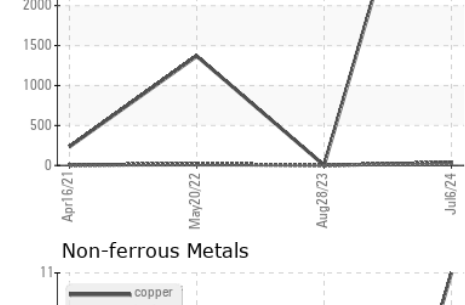
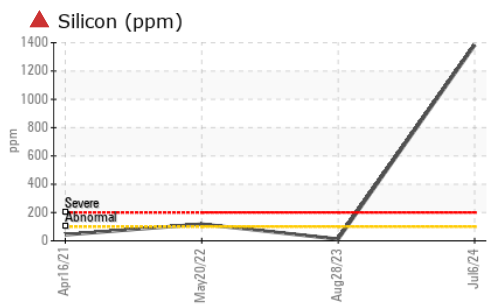
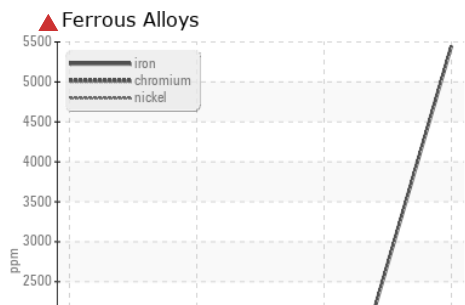
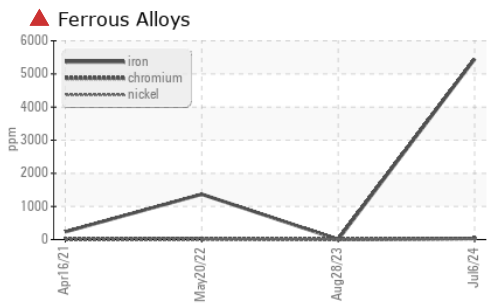
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>100	▲ 1382	12	118
Potassium	ppm	ASTM D5185m	>20	93	<1	9
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 oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		54	0	5
Boron	ppm	ASTM D5185m	111	216	136	97
Barium	ppm	ASTM D5185m	0.0	<1	2	0
Molybdenum	ppm	ASTM D5185m	0.9	7	0	2
Manganese	ppm	ASTM D5185m	0.0	43	0	15
Magnesium	ppm	ASTM D5185m	39	33	5	4
Calcium	ppm	ASTM D5185m	93	43	1982	13
Phosphorus	ppm	ASTM D5185m	920	1305	975	2086
Zinc	ppm	ASTM D5185m	104	8	620	32
Sulfur	ppm	ASTM D5185m	20179	37474	15795	26834
Visc @ 40°C	cSt	ASTM D445	333	242	256	55.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0009690
Lab Number : 06233592
Unique Number : 11117085
Test Package : CONST
Received : 11 Jul 2024
Tested : 12 Jul 2024
Diagnosed : 13 Jul 2024 - Don Baldridge

WM WARR & SON
 3800 SMITH FARM RD
 MATTHEWS, NC
 US 28104
 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)

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