



ASCENDUM

OIL ANALYSIS REPORT



Area
Ascendum Machinery
Machine Id
VOLVO EC220E EX-6 (S/N 314304)
Component
Right Travel
Fluid
VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

WEAR	ABNORMAL
CONTAMINATION	SEVERE
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. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007785	ASC0001068	VCP0006372
Sample Date		Client Info		19 Mar 2024	15 Aug 2023	28 Mar 2023
Machine Age	hrs	Client Info		4992	4492	4024
Oil Age	hrs	Client Info		500	468	472
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	SEVERE	SEVERE

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>1200	▲ 2367	▲ 1376	833
Chromium	ppm	ASTM D5185m	>20	11	7	4
Nickel	ppm	ASTM D5185m	>5	7	2	2
Titanium	ppm	ASTM D5185m		16	8	9
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>100	● 249	● 129	● 110
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>50	3	3	2
Tin	ppm	ASTM D5185m	>5	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

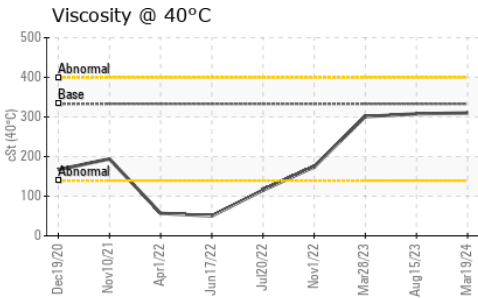
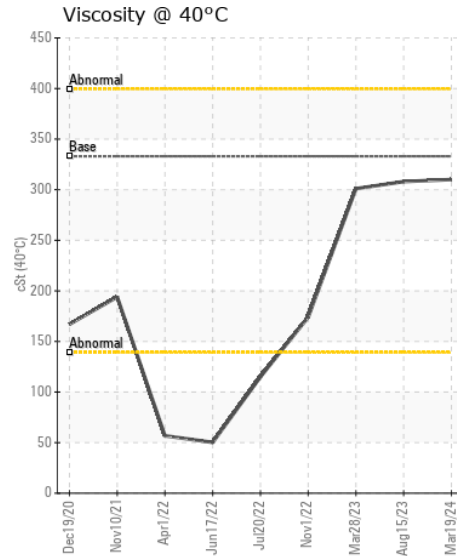
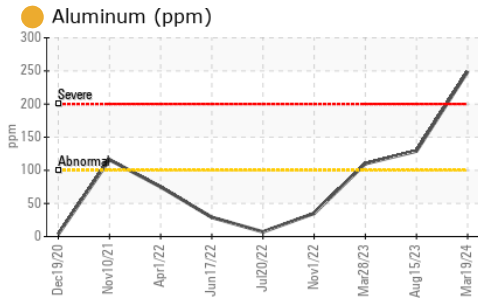
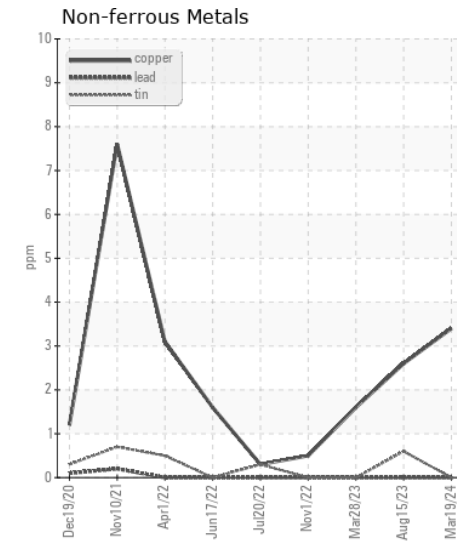
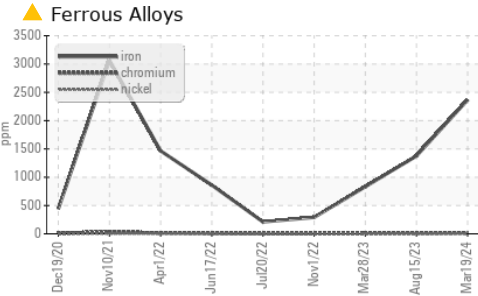
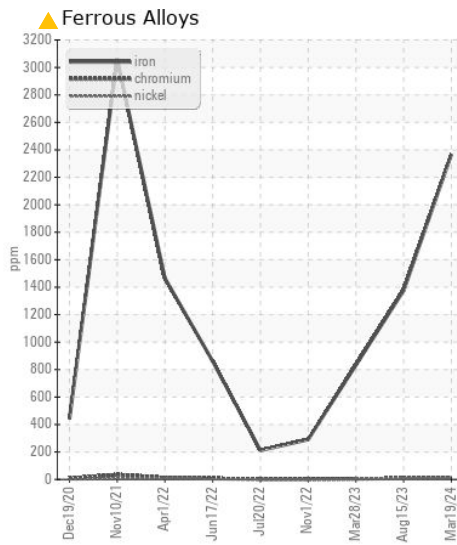
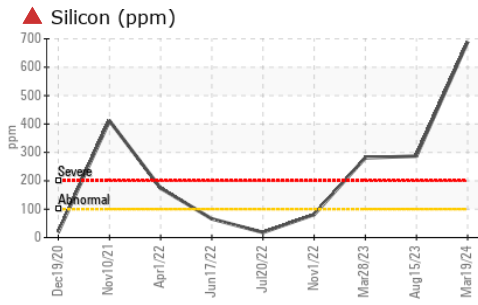
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>100	▲ 689	▲ 287	▲ 281
Potassium	ppm	ASTM D5185m	>20	29	12	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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		23	3	3
Boron	ppm	ASTM D5185m	111	201	236	178
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	1	<1	1
Manganese	ppm	ASTM D5185m	0.0	16	10	7
Magnesium	ppm	ASTM D5185m	39	21	7	5
Calcium	ppm	ASTM D5185m	93	40	15	11
Phosphorus	ppm	ASTM D5185m	920	1007	1131	919
Zinc	ppm	ASTM D5185m	104	6	0	0
Sulfur	ppm	ASTM D5185m	20179	29148	34327	25056
Visc @ 40°C	cSt	ASTM D445	333	310	308	301



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007785
Lab Number : 06125211
Unique Number : 10939362
Test Package : CONST

Received : 21 Mar 2024
Tested : 25 Mar 2024
Diagnosed : 25 Mar 2024 - Don Baldrige

CAROLINA EXCAVATING
 1036 BRANCHVIEW DR, SUITE 106
 CONCORD, NC
 US 28025
 Contact: KEVIN LADGERWOOD
 kevin@carlinaexcavation.com

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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