



VOLVO

OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

ATTENTION
SEVERE
NORMAL



Area
Ascendum Machinery
Machine Id
VOLVO EC220E EX-7 (S/N 310467)
Component
Swing Drive
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 recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP0006606	VCP0004383	VCP0002406
Sample Date		Client Info		23 May 2023	29 Nov 2022	29 Jul 2022
Machine Age	hrs	Client Info		4959	4503	3999
Oil Age	hrs	Client Info		456	504	3999
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	None	N/A
Sample Status				SEVERE	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1200	879	33	160
Chromium	ppm	ASTM D5185m	>10	8	<1	2
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		10	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	189	<1	<1
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>50	1	2	7
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	MODER	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

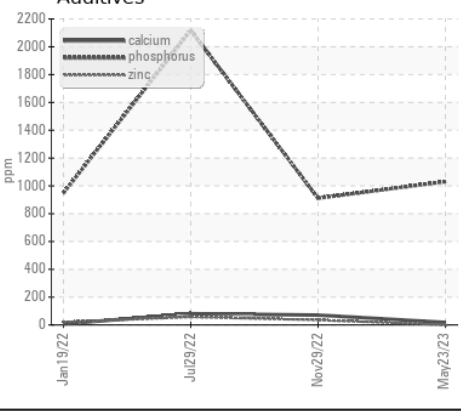
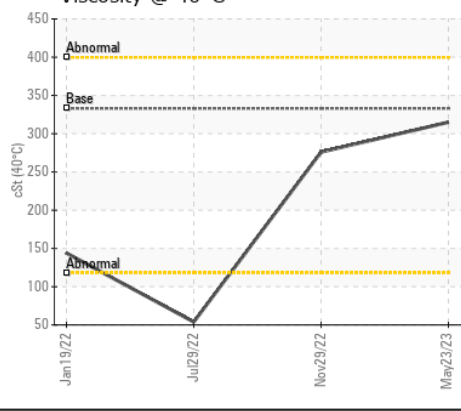
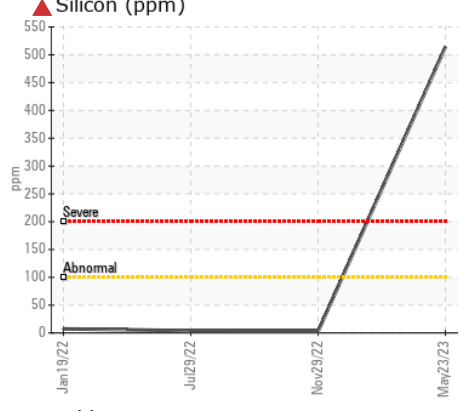
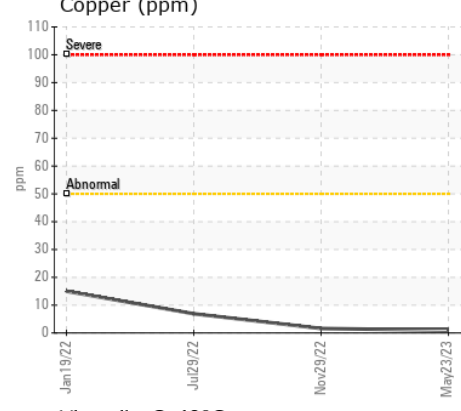
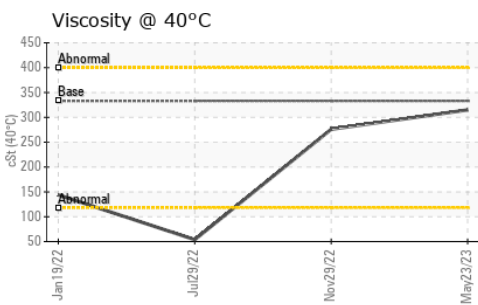
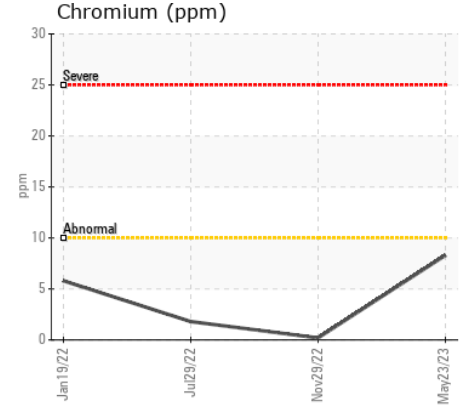
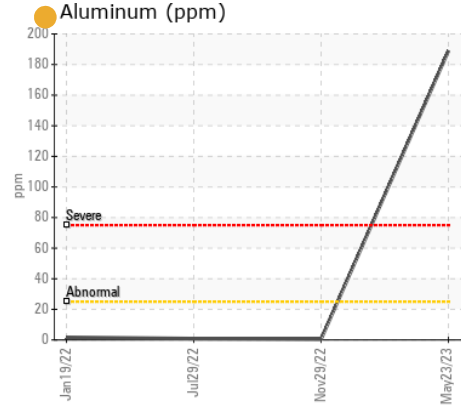
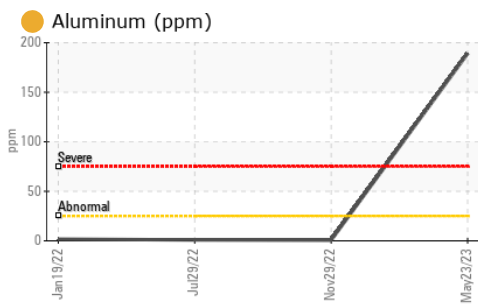
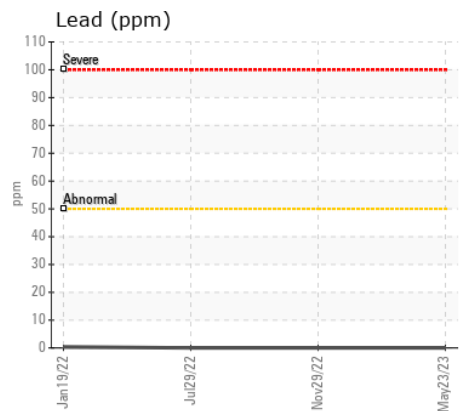
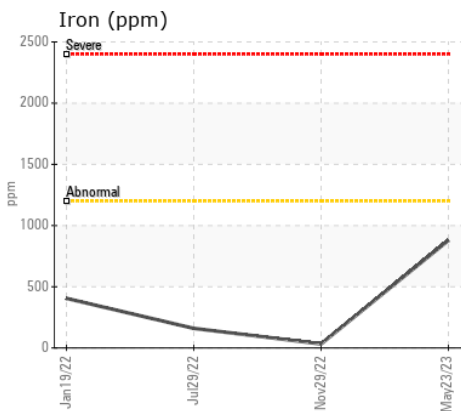
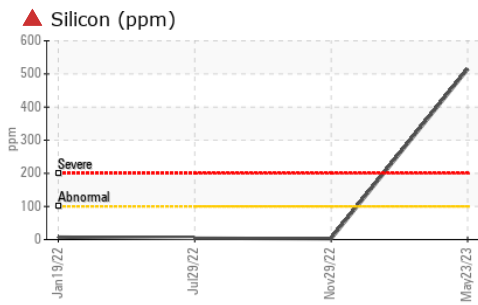
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>100	514	3	4
Potassium	ppm	ASTM D5185m	>20	17	0	0
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		3	1	0
Boron	ppm	ASTM D5185m	111	178	178	255
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	1	1	1
Manganese	ppm	ASTM D5185m	0.0	6	<1	2
Magnesium	ppm	ASTM D5185m	39	9	6	0
Calcium	ppm	ASTM D5185m	93	18	71	81
Phosphorus	ppm	ASTM D5185m	920	1030	911	2118
Zinc	ppm	ASTM D5185m	104	0	35	57
Sulfur	ppm	ASTM D5185m	20179	35609	28778	25056
Visc @ 40°C	cSt	ASTM D445	333	315	276	53.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP0006606
Lab Number : 05856394
Unique Number : 10485749
Test Package : MOBCE

Received : 24 May 2023
Tested : 25 May 2023
Diagnosed : 26 May 2023 - 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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