



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		ASC0001068	VCP0006372	VCP0004472
Sample Date		Client Info		15 Aug 2023	28 Mar 2023	01 Nov 2022
Machine Age	hrs	Client Info		4492	4024	3552
Oil Age	hrs	Client Info		468	472	3552
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	None
Sample Status				SEVERE	SEVERE	NORMAL

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>1200	▲ 1376	833	291
Chromium	ppm	ASTM D5185m	>20	7	4	2
Nickel	ppm	ASTM D5185m	>5	2	2	<1
Titanium	ppm	ASTM D5185m		8	9	2
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>100	● 129	● 110	35
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>50	3	2	<1
Tin	ppm	ASTM D5185m	>5	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

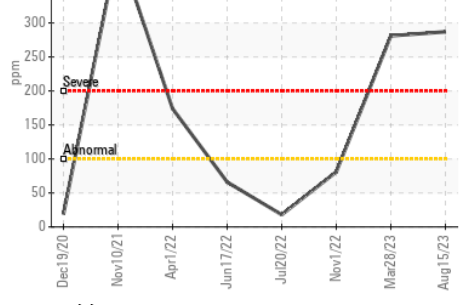
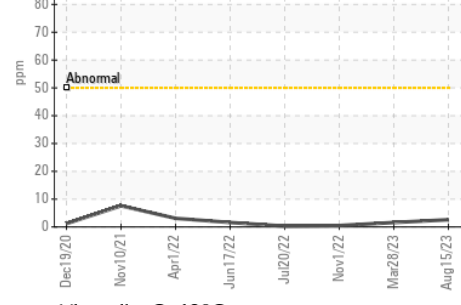
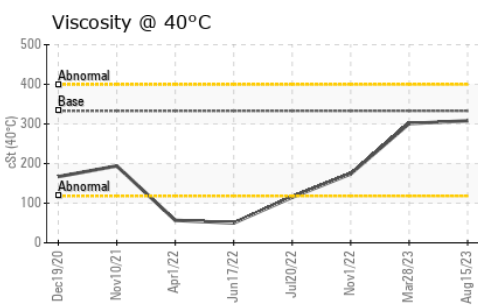
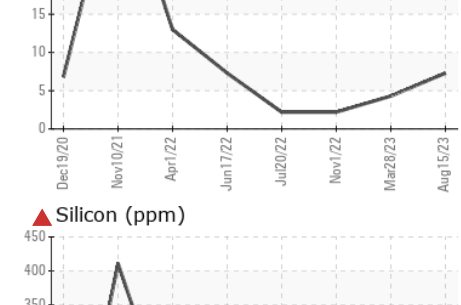
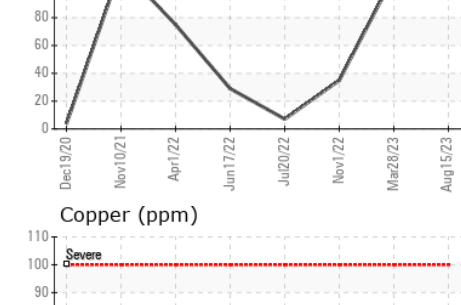
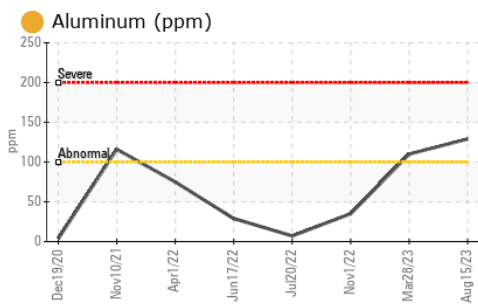
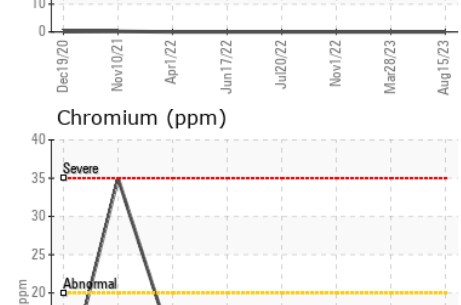
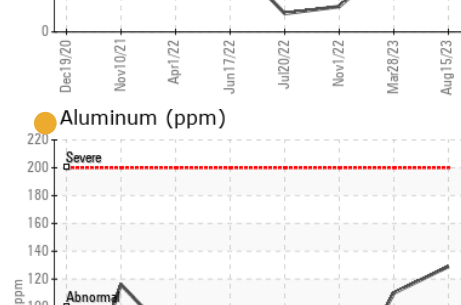
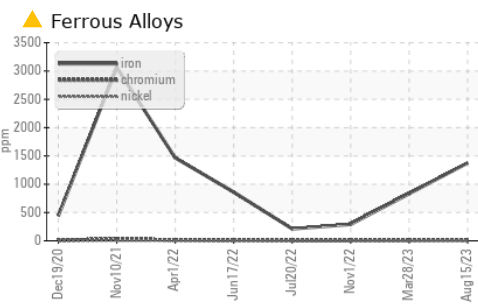
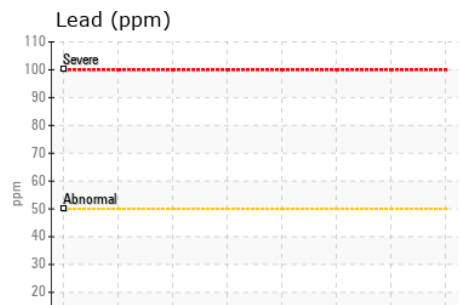
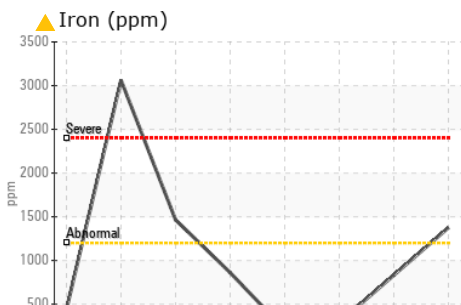
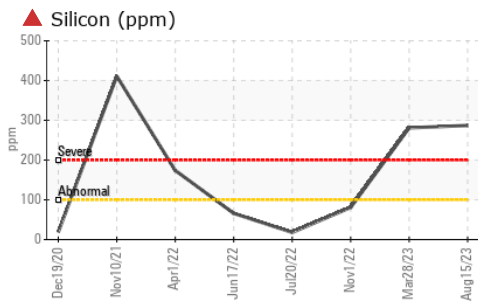
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>100	▲ 287	▲ 281	81
Potassium	ppm	ASTM D5185m	>20	12	9	3
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		3	3	2
Boron	ppm	ASTM D5185m	111	236	178	246
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	<1	1	<1
Manganese	ppm	ASTM D5185m	0.0	10	7	2
Magnesium	ppm	ASTM D5185m	39	7	5	2
Calcium	ppm	ASTM D5185m	93	15	11	12
Phosphorus	ppm	ASTM D5185m	920	1131	919	1017
Zinc	ppm	ASTM D5185m	104	0	0	3
Sulfur	ppm	ASTM D5185m	20179	34327	25056	28014
Visc @ 40°C	cSt	ASTM D445	333	308	301	174



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0001068
Lab Number : 05926452
Unique Number : 10606399
Test Package : MOBCE

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)

T:
F: