



# ASCENDUM

## OIL ANALYSIS REPORT



Area

**Ascendum Machinery**

Machine Id

**VOLVO EC380E EX-2 (S/N 310020)**

Component

**Right Travel**

Fluid

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

WEAR  
CONTAMINATION  
FLUID CONDITION

ATTENTION

SEVERE

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		ASC0001414	VCP0004476	VCP0002385
Sample Date		Client Info		26 Sep 2023	02 Nov 2022	21 Jul 2022
Machine Age	hrs	Client Info		11014	10493	9938
Oil Age	hrs	Client Info		521	555	9938
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	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1200	828	388	1292
Chromium	ppm	ASTM D5185m	>20	11	5	12
Nickel	ppm	ASTM D5185m	>5	2	0	<1
Titanium	ppm	ASTM D5185m		8	<1	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>100	143	<1	4
Lead	ppm	ASTM D5185m	>50	0	<1	0
Copper	ppm	ASTM D5185m	>50	1	<1	2
Tin	ppm	ASTM D5185m	>5	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

### CONTAMINATION

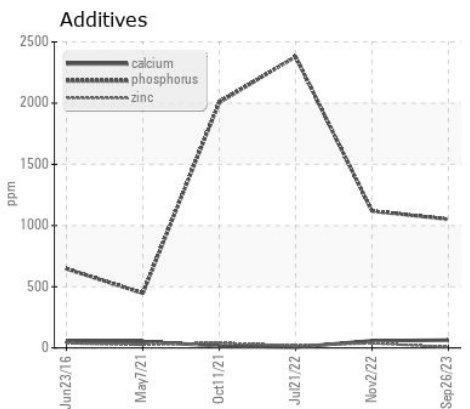
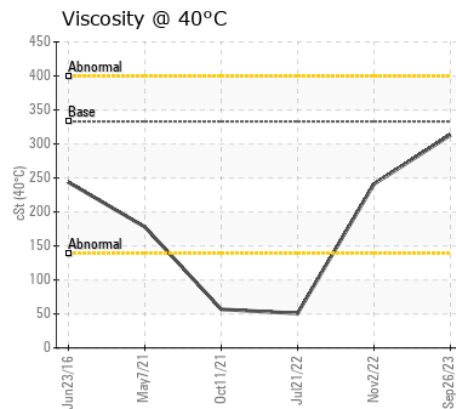
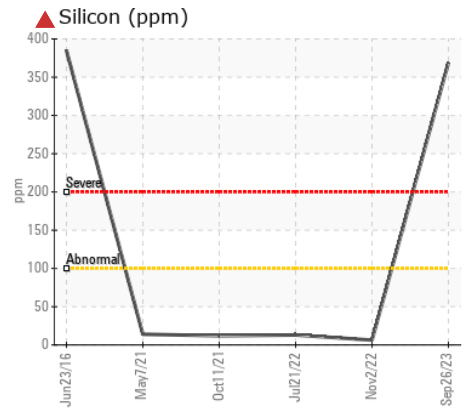
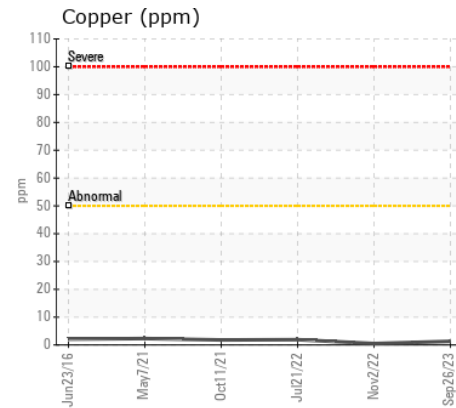
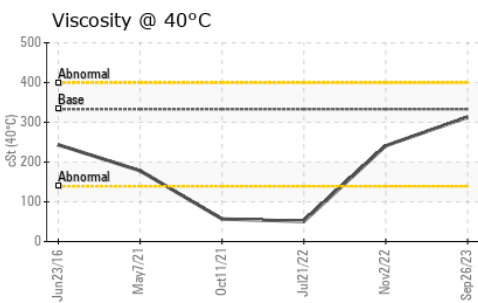
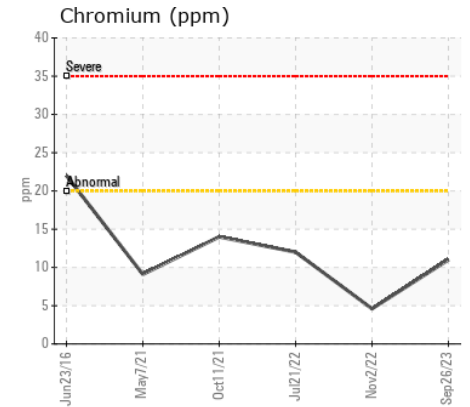
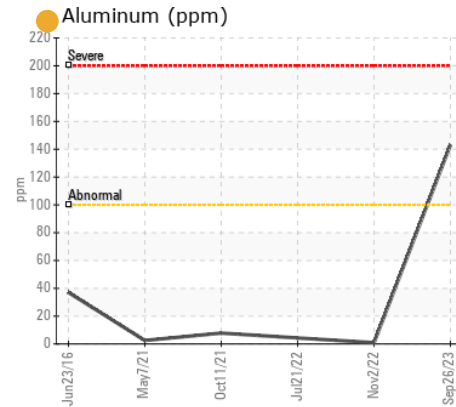
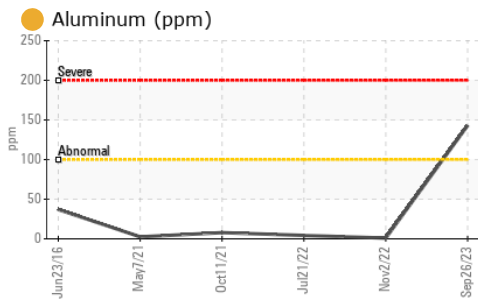
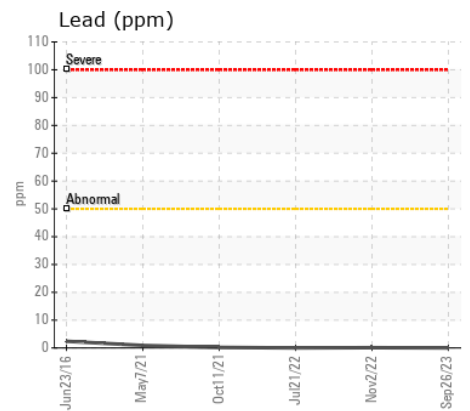
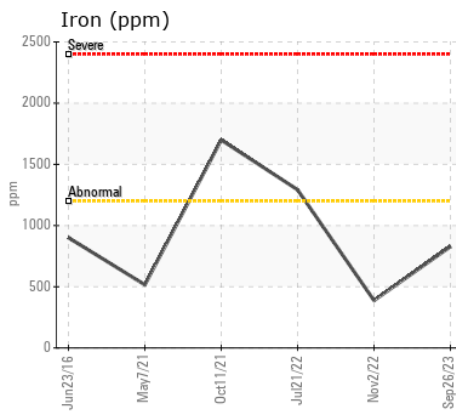
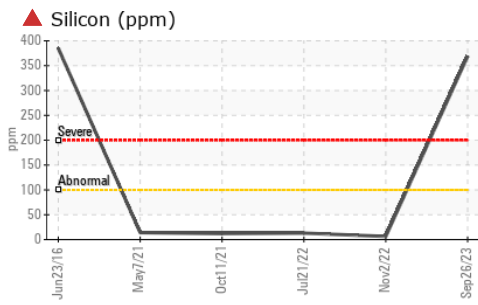
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>100	369	6	13
Potassium	ppm	ASTM D5185m	>20	8	<1	0
Water		WC Method	>0.25	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE	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		20	2	2
Boron	ppm	ASTM D5185m	111	198	170	164
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	2	2	4
Manganese	ppm	ASTM D5185m	0.0	7	3	8
Magnesium	ppm	ASTM D5185m	39	29	7	1
Calcium	ppm	ASTM D5185m	93	64	59	7
Phosphorus	ppm	ASTM D5185m	920	1051	1118	2380
Zinc	ppm	ASTM D5185m	104	7	38	17
Sulfur	ppm	ASTM D5185m	20179	29469	32233	32563
Visc @ 40°C	cSt	ASTM D445	333	313	241	50.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0001414  
**Lab Number** : 05962531  
**Unique Number** : 10669082  
**Test Package** : MOBCE  
**Received** : 27 Sep 2023  
**Tested** : 28 Sep 2023  
**Diagnosed** : 28 Sep 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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F: