



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area

### Ascendum Machinery

Machine Id

### VOLVO EC380E EX-02 (S/N 310020)

Component

### Left 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		ASC0009773	ASC0001423	VCP0004479
Sample Date		Client Info		18 Jun 2024	26 Sep 2023	02 Nov 2022
Machine Age	hrs	Client Info		11997	11014	10493
Oil Age	hrs	Client Info		983	521	555
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	NORMAL	NORMAL

#### WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>1200	▲ 3814	240	311
Chromium	ppm	ASTM D5185m	>20	▲ 32	4	4
Nickel	ppm	ASTM D5185m	>5	3	1	1
Titanium	ppm	ASTM D5185m		19	2	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>100	● 183	40	<1
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>50	7	<1	2
Tin	ppm	ASTM D5185m	>5	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

#### CONTAMINATION

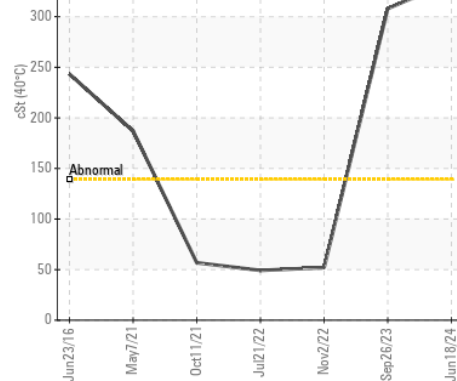
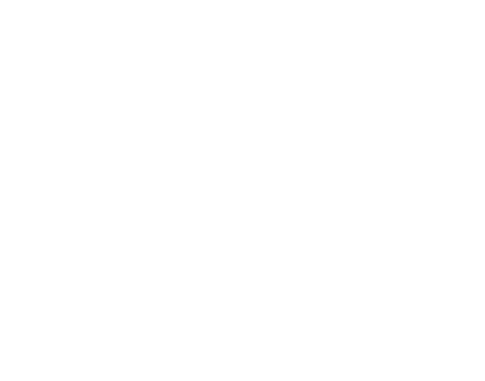
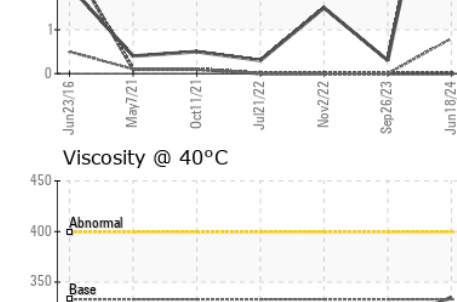
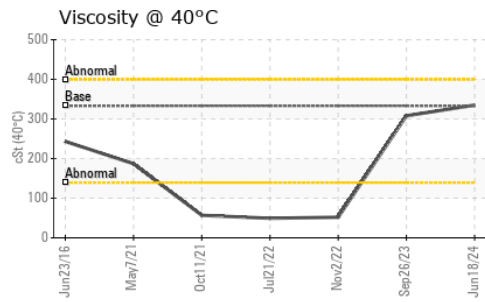
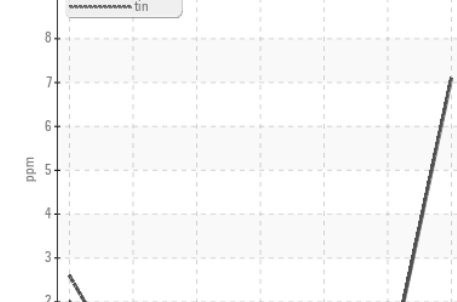
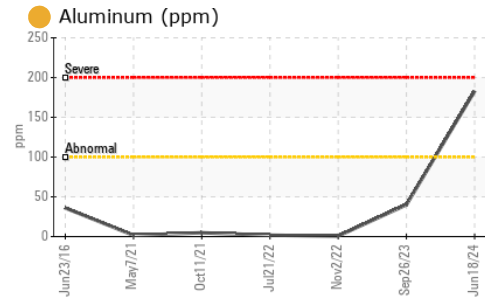
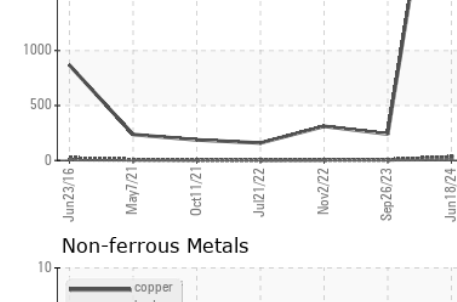
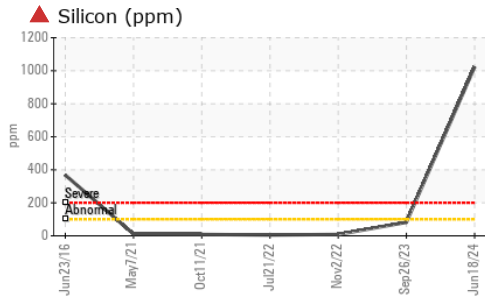
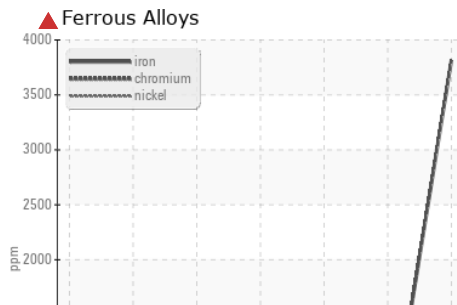
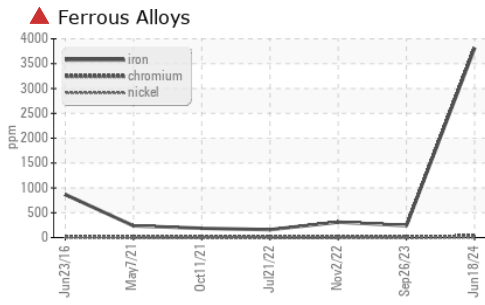
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>100	▲ 1023	82	8
Potassium	ppm	ASTM D5185m	>20	29	2	1
Water		WC Method	>0.25	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	LIGHT
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		16	2	4
Boron	ppm	ASTM D5185m	111	219	212	187
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	4	<1	2
Manganese	ppm	ASTM D5185m	0.0	26	3	7
Magnesium	ppm	ASTM D5185m	39	19	6	<1
Calcium	ppm	ASTM D5185m	93	102	30	62
Phosphorus	ppm	ASTM D5185m	920	1118	1055	2322
Zinc	ppm	ASTM D5185m	104	33	7	24
Sulfur	ppm	ASTM D5185m	20179	35381	30726	32511
Visc @ 40°C	cSt	ASTM D445	333	335	308	52.0



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0009773  
**Lab Number** : 06217160  
**Unique Number** : 11090024  
**Test Package** : CONST  
**Received** : 21 Jun 2024  
**Tested** : 24 Jun 2024  
**Diagnosed** : 24 Jun 2024 - Sean Felton

**CAROLINA EXCAVATING**  
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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)