



ASCENDUM

OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

SEVERE
SEVERE
ATTENTION



Area
[SCM]
Machine Id
VOLVO EC250E 314064
Component
Left Final Drive
Fluid
GEAR OIL SAE 90W140 (--- 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		ASC0011156	ASC0006424	VCP383446
Sample Date		Client Info		29 Jun 2024	14 Dec 2023	04 Aug 2023
Machine Age	hrs	Client Info		4554	3507	2941
Oil Age	hrs	Client Info		500	566	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Not Changed
Sample Status				SEVERE	ABNORMAL	ABNORMAL

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	▲ 2442	▲ 575	497
Chromium	ppm	ASTM D5185m	>10	▲ 30	7	9
Nickel	ppm	ASTM D5185m	>10	2	<1	1
Titanium	ppm	ASTM D5185m		5	<1	2
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	● 56	2	● 73
Lead	ppm	ASTM D5185m	>25	0	0	<1
Copper	ppm	ASTM D5185m	>50	2	2	<1
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

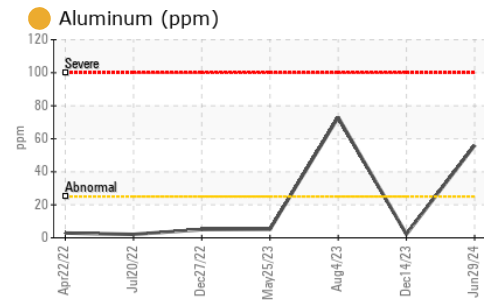
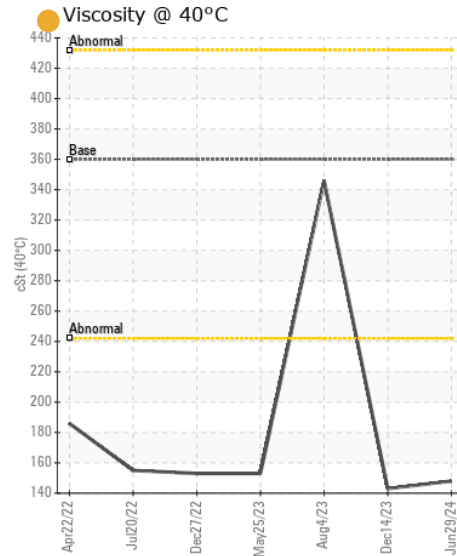
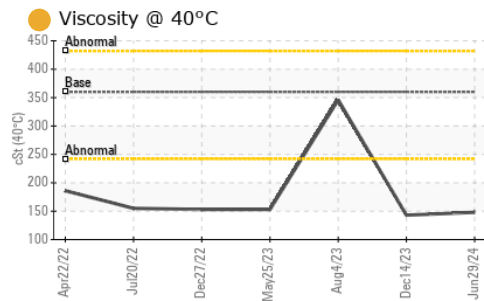
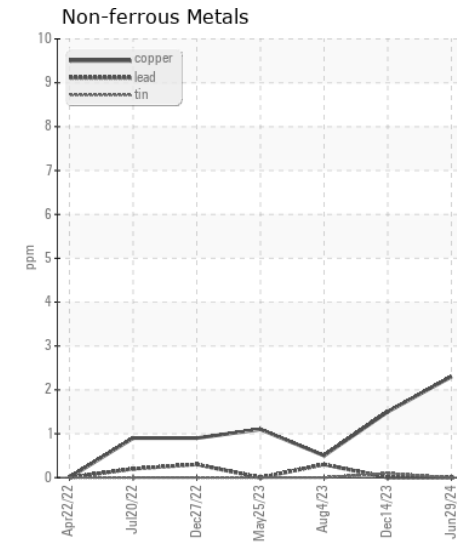
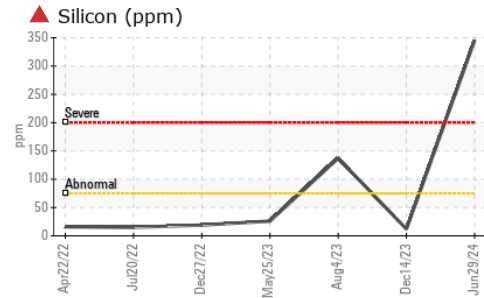
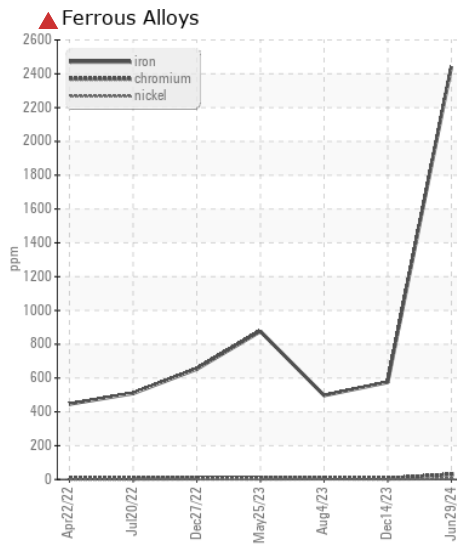
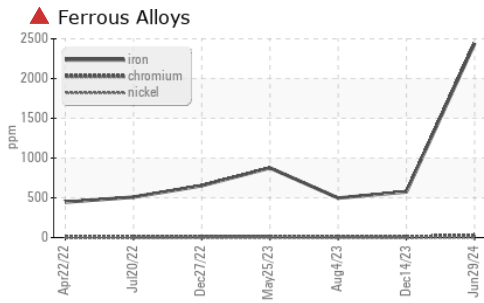
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	▲ 345	12	▲ 137
Potassium	ppm	ASTM D5185m	>20	15	1	8
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	MODER	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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. Confirm oil type. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		0	1	4
Boron	ppm	ASTM D5185m	400	149	104	188
Barium	ppm	ASTM D5185m	200	0	0	0
Molybdenum	ppm	ASTM D5185m	12	3	0	1
Manganese	ppm	ASTM D5185m		22	5	5
Magnesium	ppm	ASTM D5185m	12	0	<1	0
Calcium	ppm	ASTM D5185m	150	0	19	7
Phosphorus	ppm	ASTM D5185m	1650	992	1028	1117
Zinc	ppm	ASTM D5185m	125	4	9	10
Sulfur	ppm	ASTM D5185m	22500	26239	25721	34379
Visc @ 40°C	cSt	ASTM D445	360	● 148	● 143	346



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0011156
Lab Number : 06226641
Unique Number : 11110134
Test Package : CONST

Received : 02 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 05 Jul 2024 - Don Baldrige

113 - ASCENDUM MACHINERY INC - GARNER
 3561 JONES SAUSAGE ROAD
 GARNER, NC
 US 27529

Contact: TRENT BROADWELL
 trent.broadwell@ascendummachinery.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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