



ASCENDUM

OIL ANALYSIS REPORT



Area
Ascendum Machinery/500 Hour CSA
Machine Id
VOLVO EC250E 2012 (S/N 310483)
Component
Rear Right Final Drive
Fluid
VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0005334	VCP414275	ASC0000398
Sample Date		Client Info		04 Jan 2024	19 Jul 2023	26 Apr 2023
Machine Age	hrs	Client Info		6454	3633	5502
Oil Age	hrs	Client Info		500	0	486
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	▲ 761	30	▲ 664
Chromium	ppm	ASTM D5185m	>10	5	<1	5
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		3	0	4
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	▲ 48	<1	▲ 71
Lead	ppm	ASTM D5185m	>25	<1	▲ 135	0
Copper	ppm	ASTM D5185m	>50	<1	10	<1
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

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

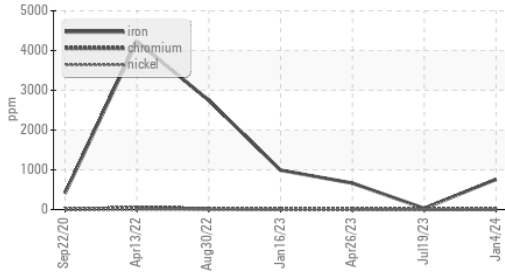
Silicon	ppm	ASTM D5185m	>75	▲ 166	2	▲ 191
Potassium	ppm	ASTM D5185m	>20	2	0	4
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

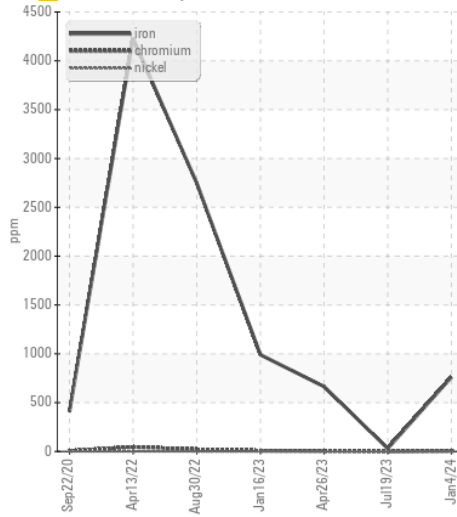
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		11	2	8
Boron	ppm	ASTM D5185m	111	163	111	197
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	0	7	<1
Manganese	ppm	ASTM D5185m	0.0	5	<1	5
Magnesium	ppm	ASTM D5185m	39	7	4	11
Calcium	ppm	ASTM D5185m	93	29	185	33
Phosphorus	ppm	ASTM D5185m	920	1047	1049	1022
Zinc	ppm	ASTM D5185m	104	0	72	8
Sulfur	ppm	ASTM D5185m	20179	27230	28403	31874
Visc @ 40°C	cSt	ASTM D445	333	314	143	305

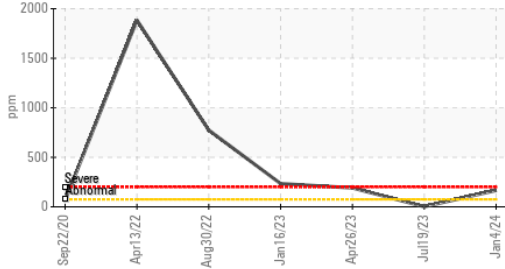
▲ Ferrous Alloys



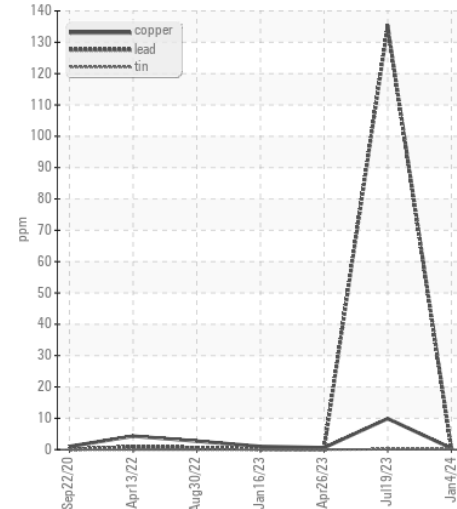
▲ Ferrous Alloys



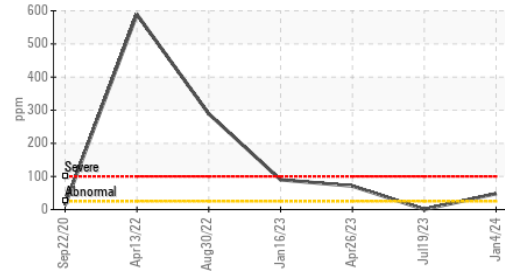
▲ Silicon (ppm)



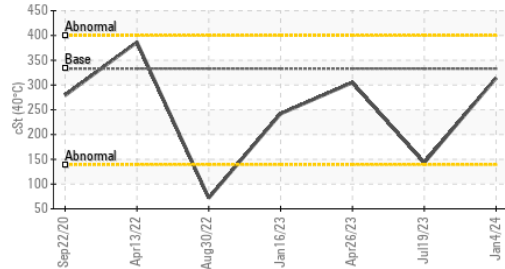
Non-ferrous Metals



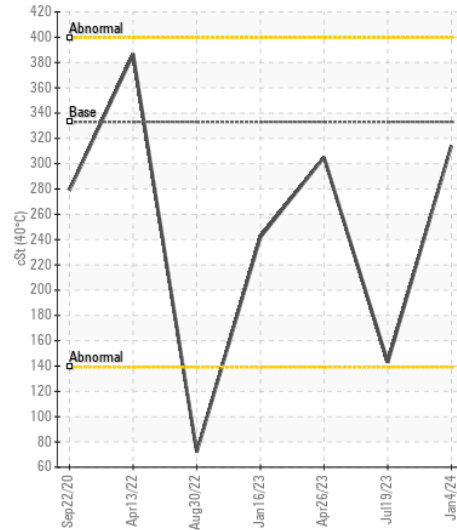
▲ Aluminum (ppm)



Viscosity @ 40°C



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0005334 **Received** : 09 Jan 2024
Lab Number : 06055643 **Diagnosed** : 10 Jan 2024
Unique Number : 10821592 **Diagnostician** : Sean Felton
Test Package : CONST

TRIANGLE GRADING AND PAVING INC
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 BURLINGTON, NC
 US 27216
 Contact: ADAM CORBETT
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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)