



ASCENDUM

OIL ANALYSIS REPORT

WEAR

ABNORMAL

CONTAMINATION

SEVERE

FLUID CONDITION

NORMAL

Area

Ascendum Machinery

Machine Id

VOLVO EC350E EX-11 (S/N 314238)

Component

Right 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 recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0000518	ASC0000623	VCP0006532
Sample Date		Client Info		24 Jun 2024	07 Nov 2023	25 Apr 2023
Machine Age	hrs	Client Info		3995	2993	2492
Oil Age	hrs	Client Info		1002	501	938
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	NORMAL	NORMAL

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>1200	▲ 2247	192	108
Chromium	ppm	ASTM D5185m	>20	▲ 24	4	2
Nickel	ppm	ASTM D5185m	>5	4	0	0
Titanium	ppm	ASTM D5185m		24	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>100	● 324	12	10
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>50	4	0	<1
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

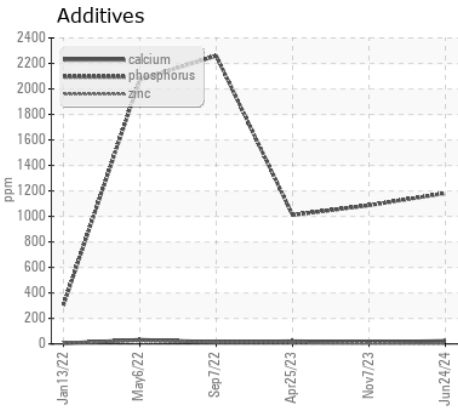
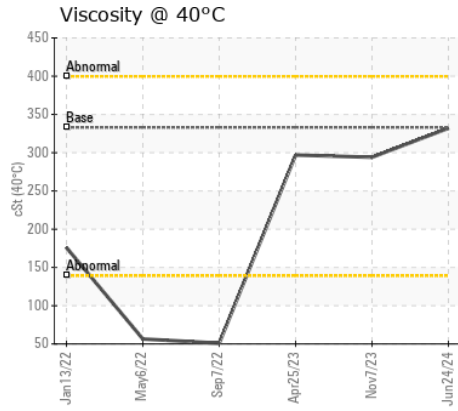
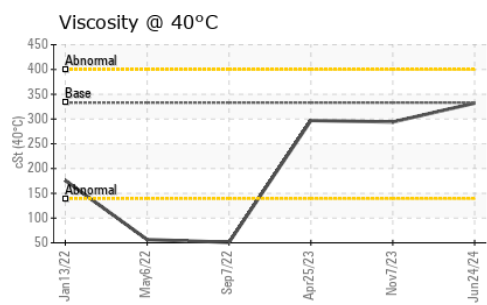
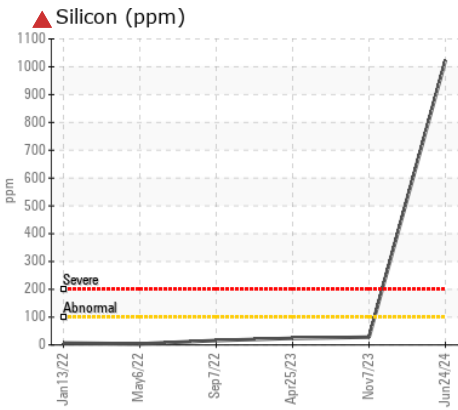
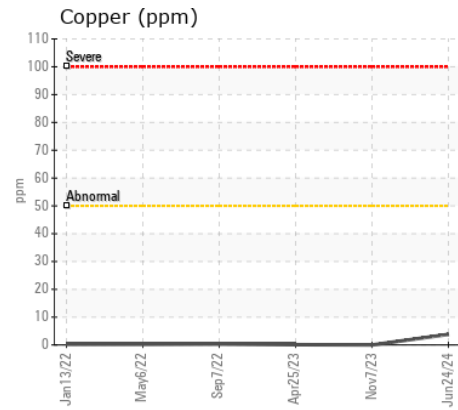
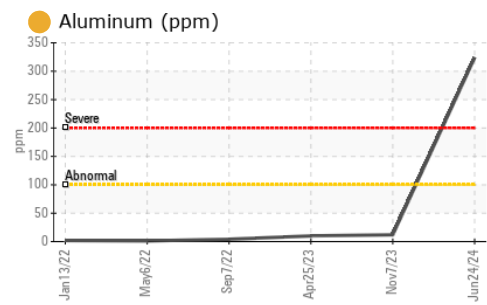
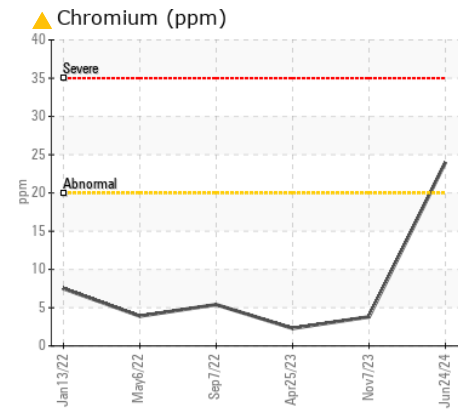
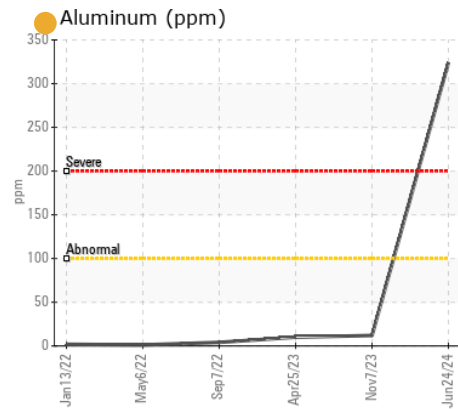
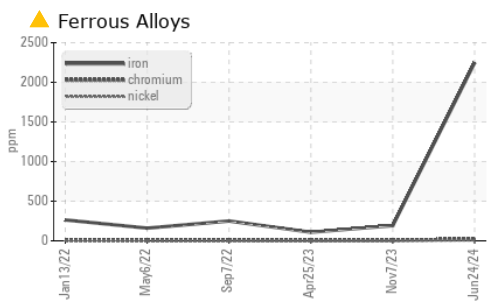
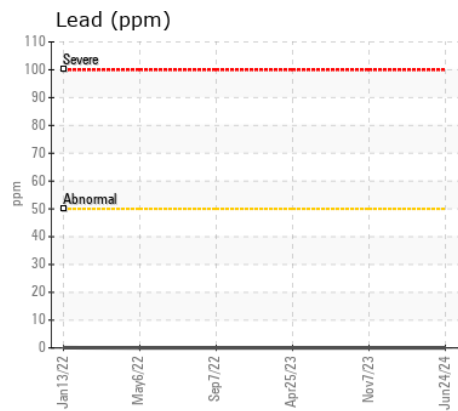
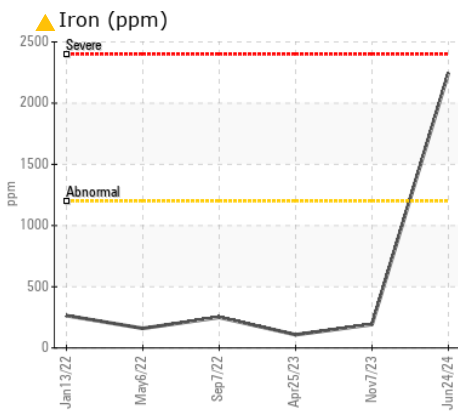
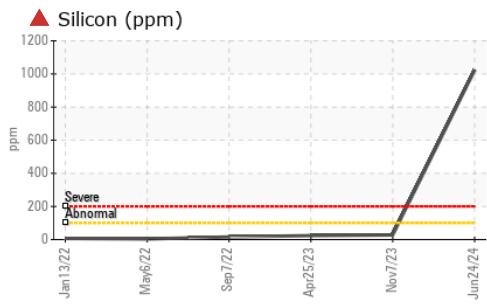
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>100	▲ 1023	28	24
Potassium	ppm	ASTM D5185m	>20	40	2	0
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 oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		24	1	<1
Boron	ppm	ASTM D5185m	111	182	216	205
Barium	ppm	ASTM D5185m	0.0	2	0	0
Molybdenum	ppm	ASTM D5185m	0.9	3	<1	<1
Manganese	ppm	ASTM D5185m	0.0	20	2	2
Magnesium	ppm	ASTM D5185m	39	37	<1	1
Calcium	ppm	ASTM D5185m	93	24	14	22
Phosphorus	ppm	ASTM D5185m	920	1182	1087	1011
Zinc	ppm	ASTM D5185m	104	4	5	7
Sulfur	ppm	ASTM D5185m	20179	35448	29044	31794
Visc @ 40°C	cSt	ASTM D445	333	332	294	297



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0000518 **Received** : 05 Jul 2024
Lab Number : 06228991 **Tested** : 08 Jul 2024
Unique Number : 11112484 **Diagnosed** : 08 Jul 2024 - Don Baldrige
Test Package : MOBCE

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Certificate L2367
 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)