



ASCENDUM

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
VOLVO EC550E 550E310264
Component
Diesel Engine
Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0008322	ASC0007657	---
Sample Date		Client Info		09 Jul 2024	23 Feb 2024	---
Machine Age	hrs	Client Info		941	488	---
Oil Age	hrs	Client Info		453	488	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

The copper level has decreased, but is still abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	7	13	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m	>10	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	<1	2	---
Lead	ppm	ASTM D5185m	>20	0	3	---
Copper	ppm	ASTM D5185m	>15	▲ 92	▲ 335	---
Tin	ppm	ASTM D5185m	>10	0	2	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

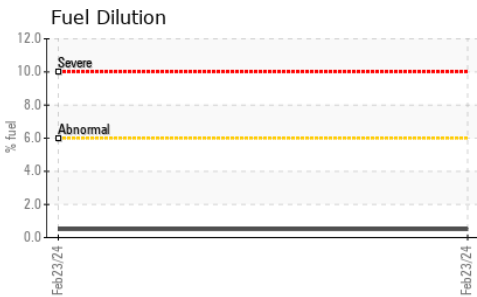
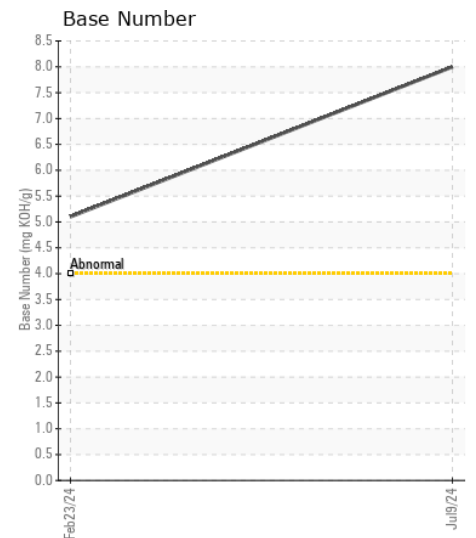
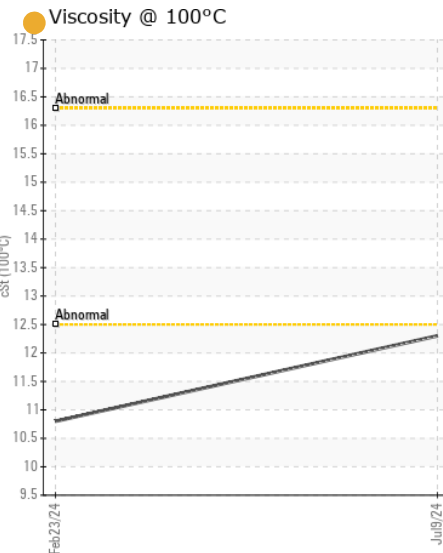
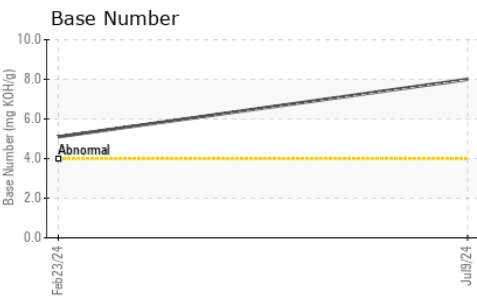
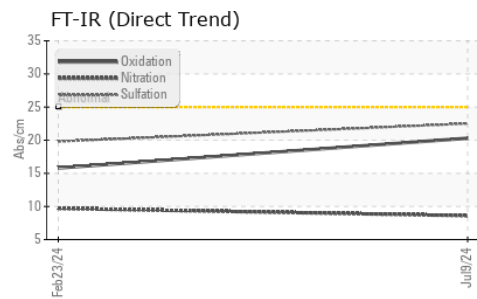
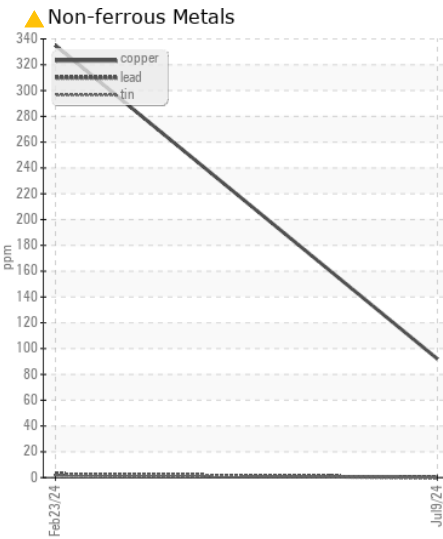
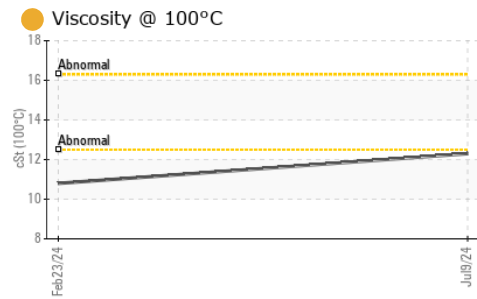
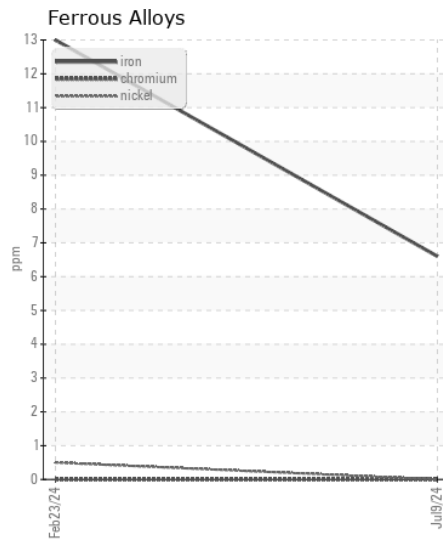
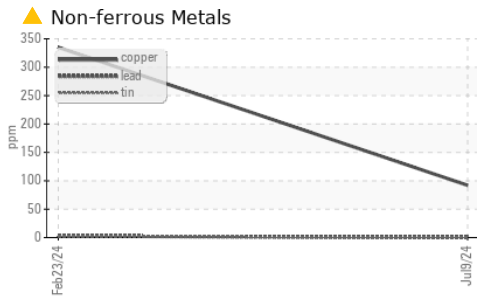
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	11	27	---
Potassium	ppm	ASTM D5185m	>20	0	2	---
Fuel	%	ASTM D3524	>6.0	<1.0	0.5	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	8.6	9.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	19.8	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	---

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		2	2	---
Boron	ppm	ASTM D5185m		21	33	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		45	78	---
Manganese	ppm	ASTM D5185m		0	2	---
Magnesium	ppm	ASTM D5185m		489	55	---
Calcium	ppm	ASTM D5185m		1795	2179	---
Phosphorus	ppm	ASTM D5185m		995	1011	---
Zinc	ppm	ASTM D5185m		1202	1162	---
Sulfur	ppm	ASTM D5185m		3529	3749	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.3	15.8	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.0	5.1	---
Visc @ 100°C	cSt	ASTM D445		● 12.3	● 10.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0008322 **Received** : 11 Jul 2024
Lab Number : 06232905 **Tested** : 11 Jul 2024
Unique Number : 11116398 **Diagnosed** : 13 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: FuelDilution, TBN)

PARAGON SITE SOLUTIONS LLC
 665 SEWARD AVE NW #301
 CHARLOTTE, NC
 US 28273
 Contact: Service Manager

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: