



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO EC210C 110262
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0003411	VCE237749	---
Sample Date		Client Info		06 Feb 2024	04 Dec 2019	---
Machine Age	hrs	Client Info		8533	6990	---
Oil Age	hrs	Client Info		8000	500	---
Filter Age	hrs	Client Info		8000	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	19	15	---
Chromium	ppm	ASTM D5185m	>10	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	2	4	---
Lead	ppm	ASTM D5185m	>20	<1	5	---
Copper	ppm	ASTM D5185m	>15	1	11	---
Tin	ppm	ASTM D5185m	>10	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

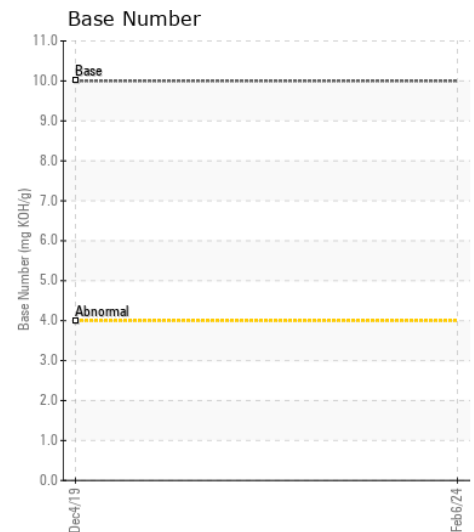
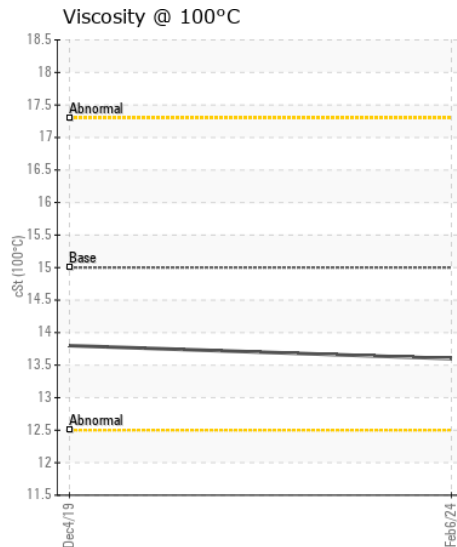
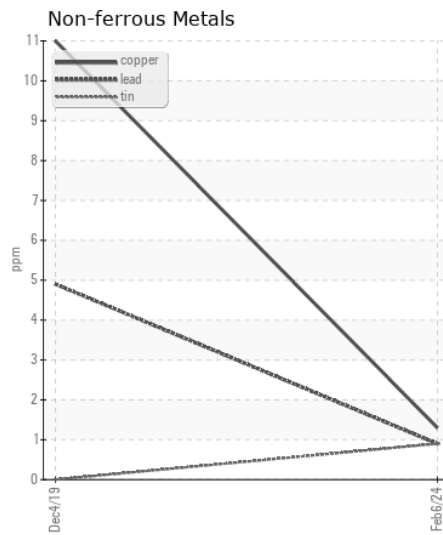
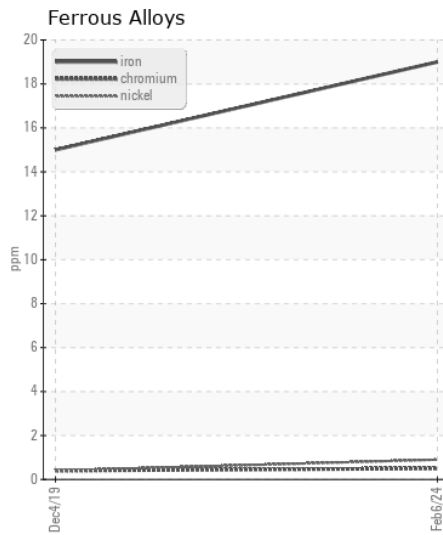
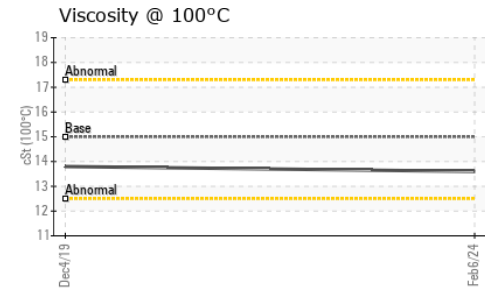
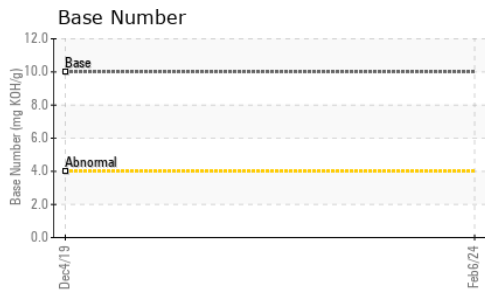
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	7	---
Potassium	ppm	ASTM D5185m	>20	3	4	---
Fuel		WC Method	>6.0	<1.0	<1.0	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.9	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	8.1	6.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	22.2	---
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	3	---
Boron	ppm	ASTM D5185m	2.5	37	43	---
Barium	ppm	ASTM D5185m	0.0	13	0	---
Molybdenum	ppm	ASTM D5185m	0.7	45	40	---
Manganese	ppm	ASTM D5185m	0.0	<1	1	---
Magnesium	ppm	ASTM D5185m	256	523	521	---
Calcium	ppm	ASTM D5185m	2057	1628	1744	---
Phosphorus	ppm	ASTM D5185m	935	958	670	---
Zinc	ppm	ASTM D5185m	1223	1102	850	---
Sulfur	ppm	ASTM D5185m	4079	3098	1972	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.1	20.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.9	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	13.6	13.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ASC0003411

Lab Number : 06085698

Unique Number : 10873143

Test Package : CONST (Additional Tests: TBN)

Received : 12 Feb 2024

Tested : 12 Feb 2024

Diagnosed : 12 Feb 2024 - Wes Davis

160 - ASCENDUM MACHINERY INC - MILLS RIVER

215 FANNING FIELDS RD

MILLS RIVER, NC

US 28759

Contact: BRANDON DRAKE

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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)