



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery
Machine Id
VOLVO EC380E 314130
Component
Diesel Engine
Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP0005199	VCP348339	---
Sample Date		Client Info		28 Nov 2022	03 Mar 2022	---
Machine Age	hrs	Client Info		4178	2979	---
Oil Age	hrs	Client Info		1199	0	---
Filter Age	hrs	Client Info		1199	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	5	7	---
Chromium	ppm	ASTM D5185m	>10	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	<1	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	0	1	---
Lead	ppm	ASTM D5185m	>20	<1	2	---
Copper	ppm	ASTM D5185m	>15	4	▲ 99	---
Tin	ppm	ASTM D5185m	>10	<1	1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

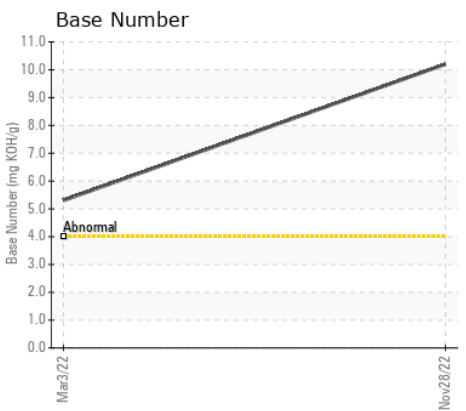
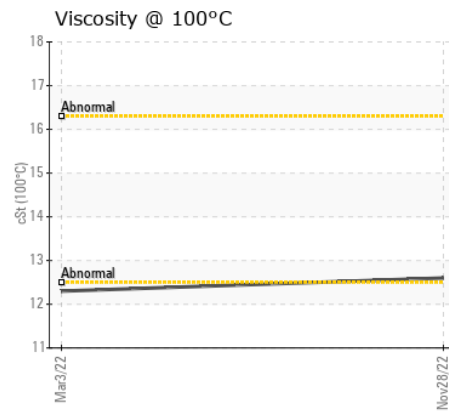
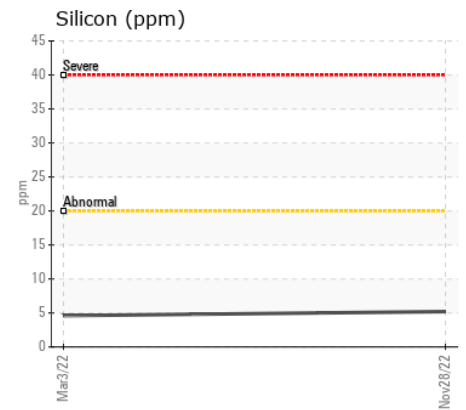
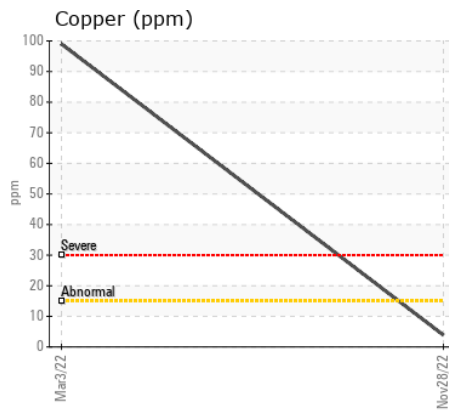
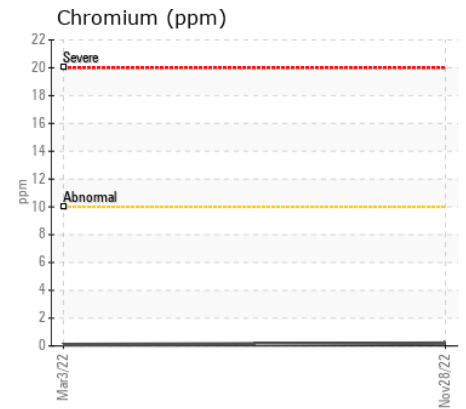
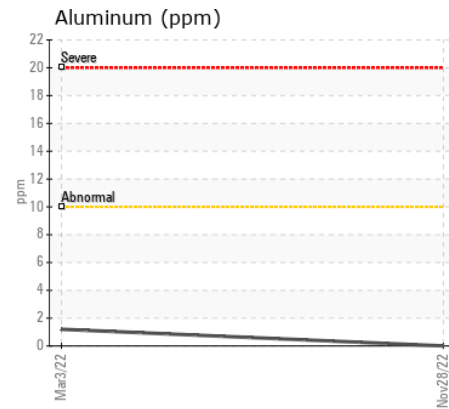
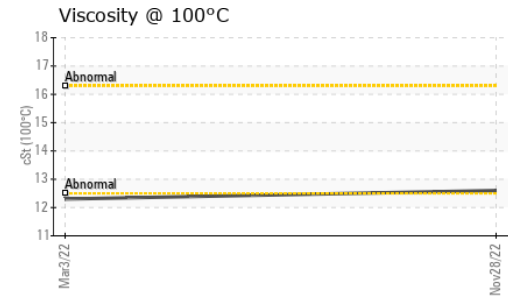
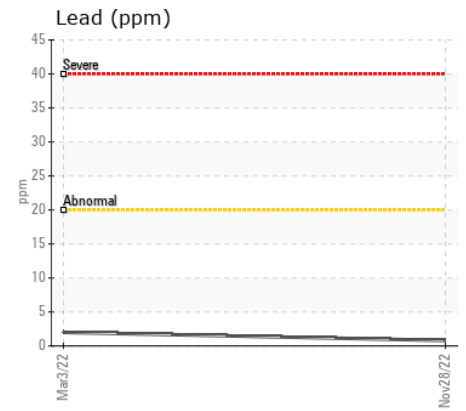
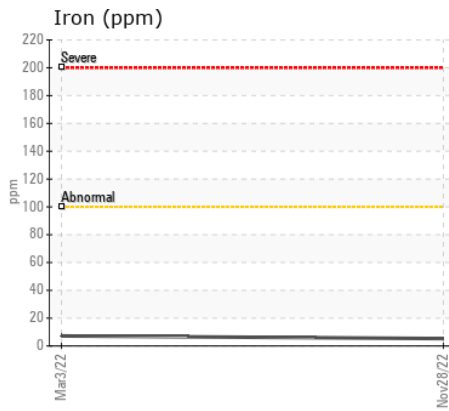
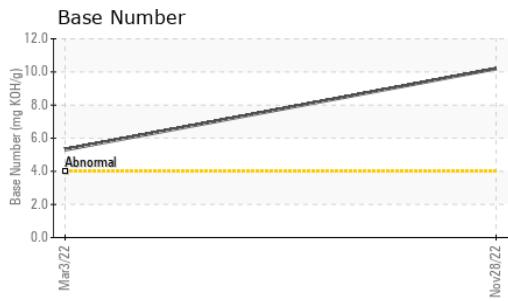
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	5	---
Potassium	ppm	ASTM D5185m	>20	<1	<1	---
Fuel		WC Method	>5	<1.0	0.3	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	8.9	9.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	22.6	---
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		2	2	---
Boron	ppm	ASTM D5185m		24	15	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		44	20	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		565	605	---
Calcium	ppm	ASTM D5185m		1637	1519	---
Phosphorus	ppm	ASTM D5185m		933	740	---
Zinc	ppm	ASTM D5185m		1160	902	---
Sulfur	ppm	ASTM D5185m		3404	2393	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.2	17.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		10.2	5.3	---
Visc @ 100°C	cSt	ASTM D445		12.6	12.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP0005199 **Received** : 01 Dec 2022
Lab Number : 05705749 **Diagnosed** : 02 Dec 2022
Unique Number : 10240324 **Diagnostician** : Wes Davis
Test Package : MOBCE (Additional Tests: TBN)

ENVIRONMENTAL HOLDINGS GROUP LLC
 4000 TRIANGLE LANE SUITE 160
 EXPORT, PA
 US 15632
 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: