



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area

[41487]

Machine Id

VOLVO A60H 350231

Component

Diesel Engine

Fluid

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP449925	VCP415528	---
Sample Date		Client Info		12 Apr 2024	20 Mar 2024	---
Machine Age	hrs	Client Info		613	612	---
Oil Age	hrs	Client Info		1	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				ABNORMAL	SEVERE	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	4	7	---
Chromium	ppm	ASTM D5185m	>20	0	<1	---
Nickel	ppm	ASTM D5185m	>2	2	8	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	<1	1	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	<1	2	---
Tin	ppm	ASTM D5185m	>15	<1	0	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

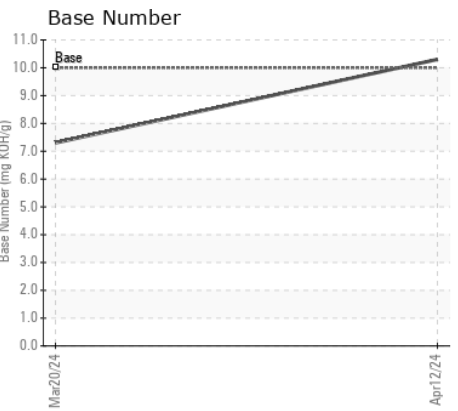
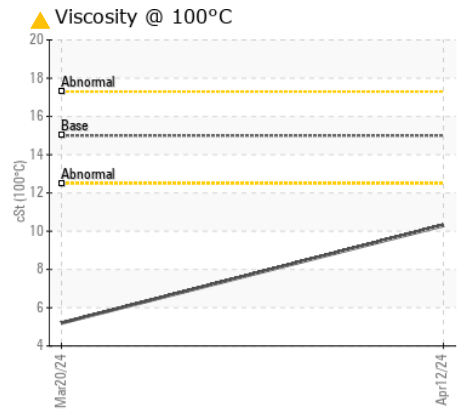
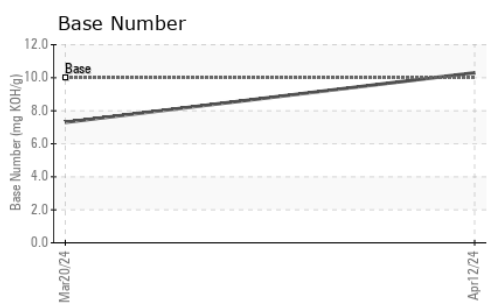
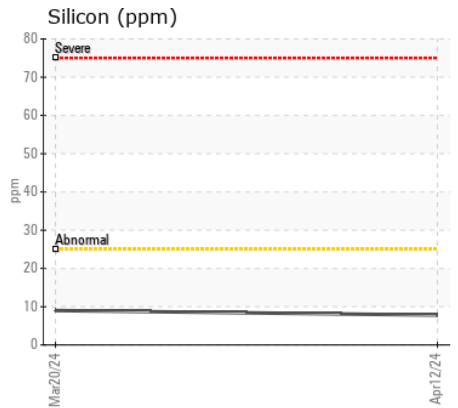
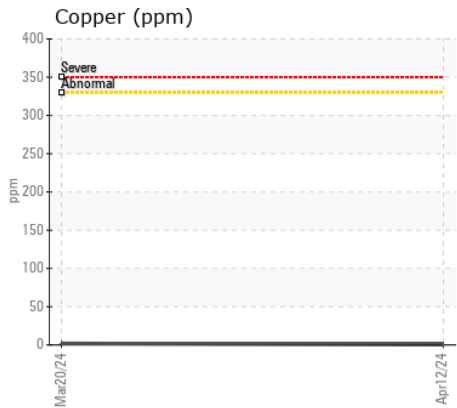
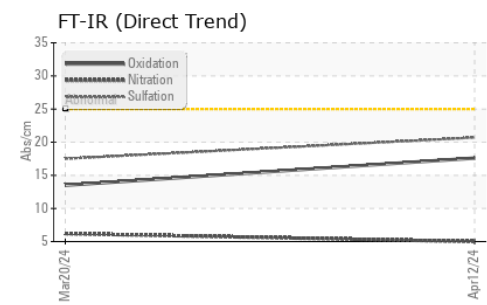
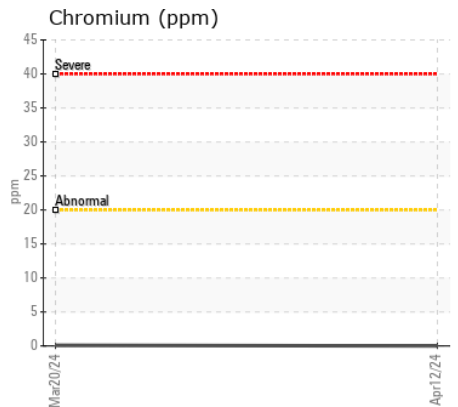
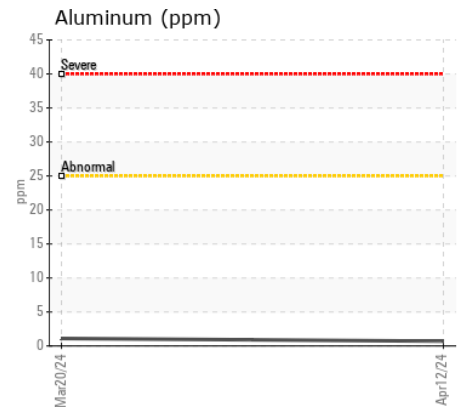
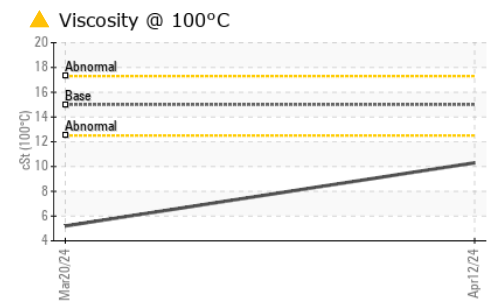
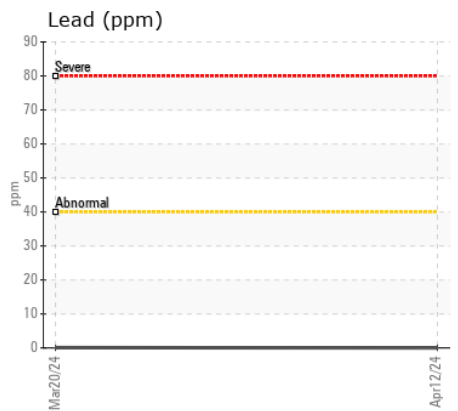
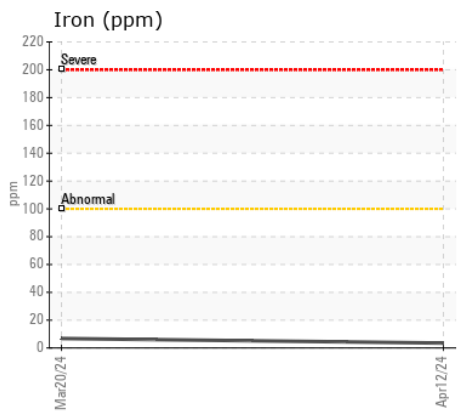
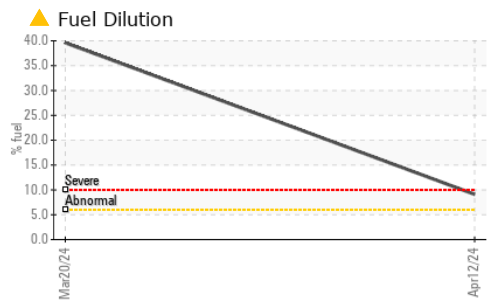
There is a high amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	8	9	---
Potassium	ppm	ASTM D5185m	>20	<1	0	---
Fuel	%	ASTM D3524	>6.0	▲ 9.1	▲ 39.6	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	5.0	6.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	17.5	---
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	>0.2	NEG	NEG	---

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		2	1	---
Boron	ppm	ASTM D5185m	2.5	60	35	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.7	32	24	---
Manganese	ppm	ASTM D5185m	0.0	<1	<1	---
Magnesium	ppm	ASTM D5185m	256	438	297	---
Calcium	ppm	ASTM D5185m	2057	1507	1045	---
Phosphorus	ppm	ASTM D5185m	935	803	555	---
Zinc	ppm	ASTM D5185m	1223	989	632	---
Sulfur	ppm	ASTM D5185m	4079	3094	2045	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.6	13.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	10.3	7.3	---
Visc @ 100°C	cSt	ASTM D445	15.0	▲ 10.3	▲ 5.2	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP449925 **Received** : 16 Apr 2024
Lab Number : 06150148 **Tested** : 22 Apr 2024
Unique Number : 10980226 **Diagnosed** : 22 Apr 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)

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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)