



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
[W02008480]
Machine Id
VOLVO A30F 82318
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (11 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: W02008480)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0002365	ML0001405	---
Sample Date		Client Info		01 Jul 2024	29 Apr 2024	---
Machine Age	hrs	Client Info		13887	13496	---
Oil Age	hrs	Client Info		391	500	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ATTENTION	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	3	8	---
Chromium	ppm	ASTM D5185m	>20	0	0	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>30	2	3	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>20	0	1	---
Tin	ppm	ASTM D5185m	>20	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

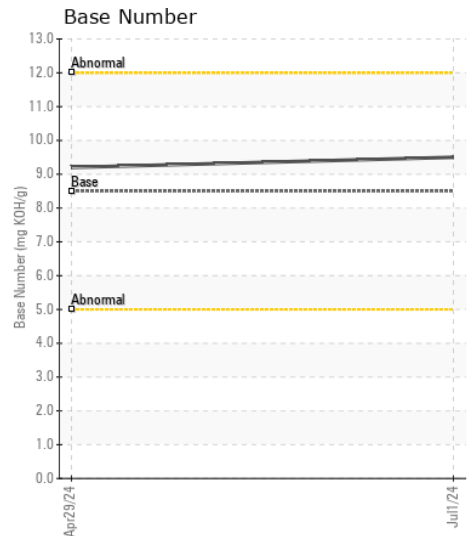
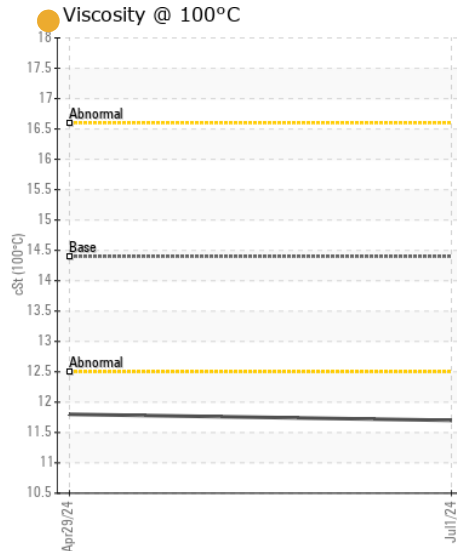
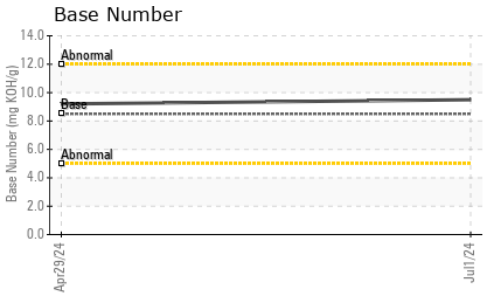
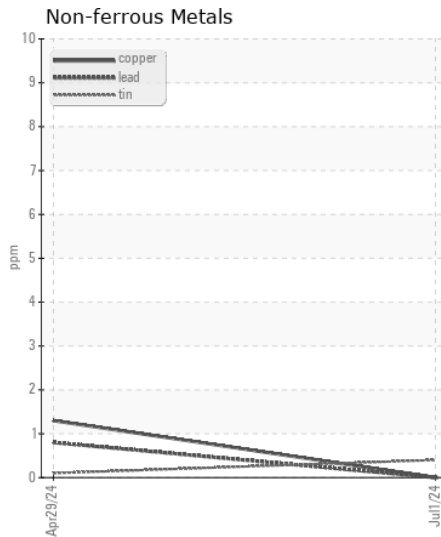
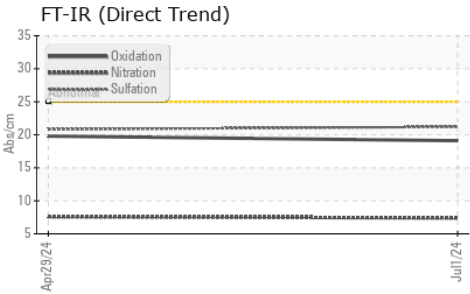
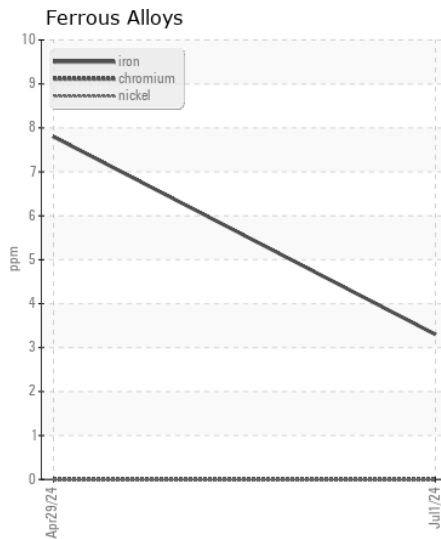
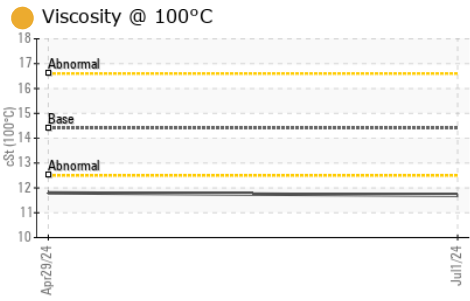
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	4	5	---
Potassium	ppm	ASTM D5185m	>20	<1	4	---
Fuel		WC Method	>3.0	<1.0	▲ 2.8	---
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	7.4	7.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2	20.8	---
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	>0.2	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	>158	3	3	---
Boron	ppm	ASTM D5185m	250	36	42	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	38	48	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	450	548	491	---
Calcium	ppm	ASTM D5185m	3000	1535	1779	---
Phosphorus	ppm	ASTM D5185m	1150	902	782	---
Zinc	ppm	ASTM D5185m	1350	1020	881	---
Sulfur	ppm	ASTM D5185m	4250	3244	2989	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	19.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.5	9.2	---
Visc @ 100°C	cSt	ASTM D445	14.4	● 11.7	● 11.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002365 **Received** : 02 Jul 2024
Lab Number : 06226861 **Tested** : 05 Jul 2024
Unique Number : 11110354 **Diagnosed** : 05 Jul 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: TBN)

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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