



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
[SWA535999]
 Machine Id
VOLVO A40G 353385
 Component
Diesel Engine
 Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

The oil 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		VCP455206	VCP436594	---
Sample Date		Client Info		22 Apr 2024	08 Dec 2023	---
Machine Age	hrs	Client Info		1588	1012	---
Oil Age	hrs	Client Info		500	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				ATTENTION	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	11	27	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>2	<1	3	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	2	3	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	76	194	---
Tin	ppm	ASTM D5185m	>15	2	4	---
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.

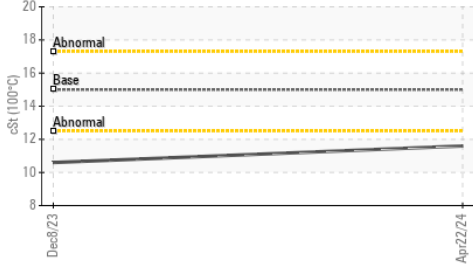
Silicon	ppm	ASTM D5185m	>25	8	▲ 28	---
Potassium	ppm	ASTM D5185m	>20	0	4	---
Fuel	%	ASTM D3524	>6.0	<1.0	0.5	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	8.6	9.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	23.0	---
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

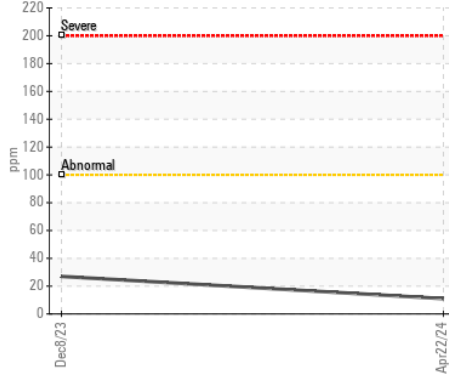
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		2	3	---
Boron	ppm	ASTM D5185m	2.5	16	14	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.7	54	80	---
Manganese	ppm	ASTM D5185m	0.0	1	3	---
Magnesium	ppm	ASTM D5185m	256	606	81	---
Calcium	ppm	ASTM D5185m	2057	1528	2008	---
Phosphorus	ppm	ASTM D5185m	935	945	973	---
Zinc	ppm	ASTM D5185m	1223	1122	1189	---
Sulfur	ppm	ASTM D5185m	4079	3176	3368	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	16.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	7.3	4.5	---
Visc @ 100°C	cSt	ASTM D445	15.0	● 11.6	▲ 10.6	---

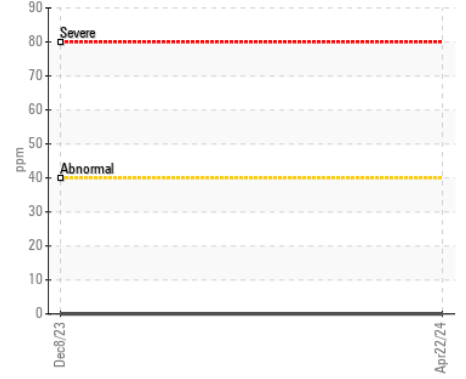
● Viscosity @ 100°C



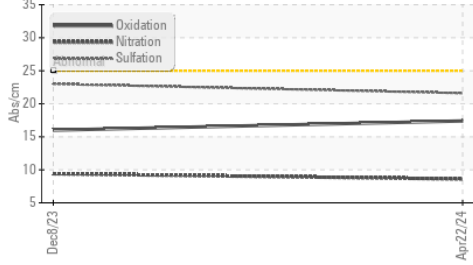
Iron (ppm)



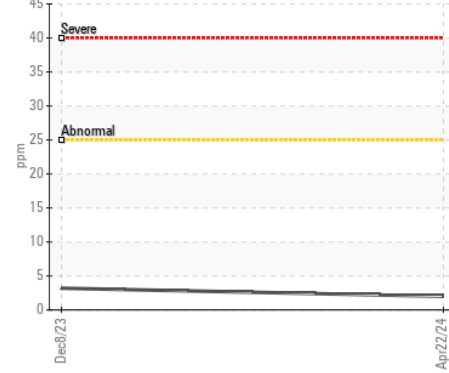
Lead (ppm)



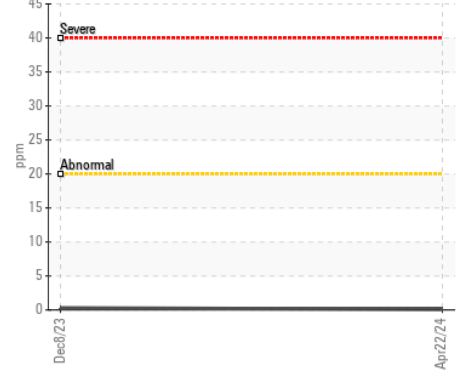
FT-IR (Direct Trend)



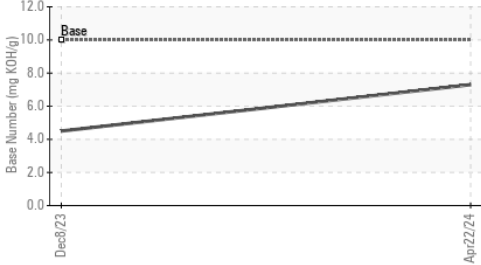
Aluminum (ppm)



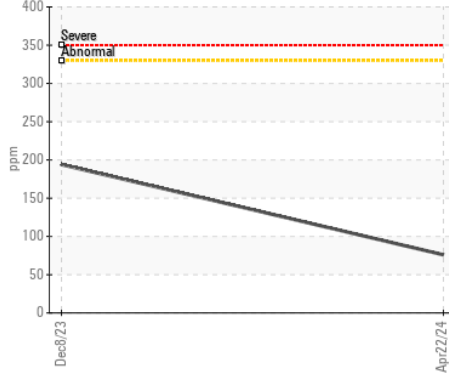
Chromium (ppm)



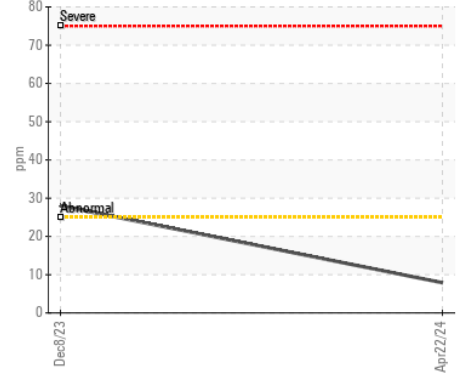
Base Number



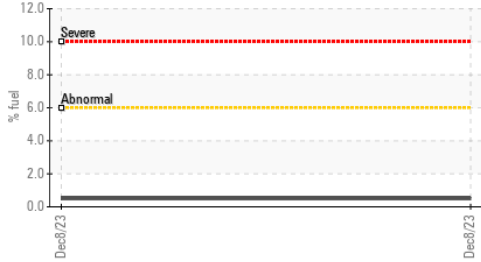
Copper (ppm)



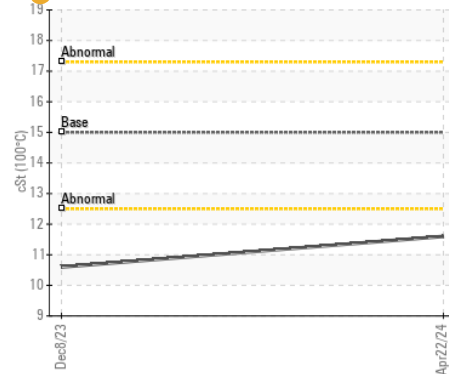
Silicon (ppm)



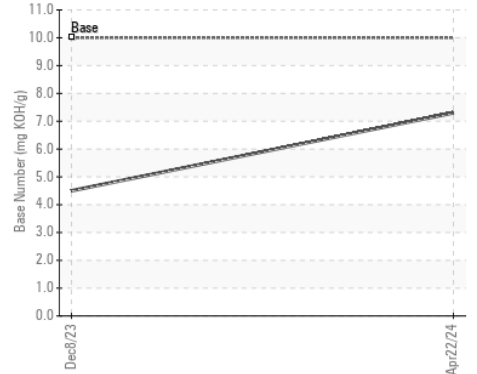
Fuel Dilution



● Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : VCP455206

Lab Number : 06157355

Unique Number : 10992778

Test Package : MOB 1 (Additional Tests: FuelDilution, TBN)

Received : 23 Apr 2024

Tested : 24 Apr 2024

Diagnosed : 25 Apr 2024 - Jonathan Hester

ALTA EQUIPMENT COMPANY

5151 DR MARTIN LUTHER KING BLVD

FORT MYERS, FL

US 33905

Contact: TODD LARK

tlark@altaequipfl.com

T:

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)

F: (239)481-3302