



VOLVO

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[5520DR KINSLEY]
Machine Id
VOLVO A40E 13563
Component
Drop Box
Fluid
VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- 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		VCP431873	VCP146015	---
Sample Date		Client Info		03 May 2024	21 Jun 2013	---
Machine Age	hrs	Client Info		13358	2149	---
Oil Age	hrs	Client Info		1000	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

The iron level is abnormal. Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	▲ 547	38	---
Chromium	ppm	ASTM D5185m	>20	9	1	---
Nickel	ppm	ASTM D5185m	>10	4	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>30	5	3	---
Lead	ppm	ASTM D5185m	>30	<1	1	---
Copper	ppm	ASTM D5185m	>30	1	<1	---
Tin	ppm	ASTM D5185m	>20	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

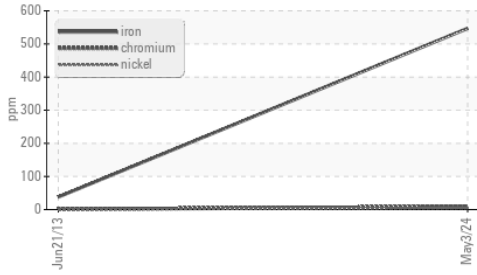
Silicon	ppm	ASTM D5185m	>50	43	6	---
Potassium	ppm	ASTM D5185m	>20	1	0	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	1	---
Boron	ppm	ASTM D5185m	111	128	55	---
Barium	ppm	ASTM D5185m	0.0	2	0	---
Molybdenum	ppm	ASTM D5185m	0.9	45	2	---
Manganese	ppm	ASTM D5185m	0.0	7	1	---
Magnesium	ppm	ASTM D5185m	39	8	5	---
Calcium	ppm	ASTM D5185m	93	158	64	---
Phosphorus	ppm	ASTM D5185m	920	1239	992	---
Zinc	ppm	ASTM D5185m	104	144	73	---
Sulfur	ppm	ASTM D5185m	20179	24764	27582	---
Visc @ 40°C	cSt	ASTM D445	333	268	300.6	---

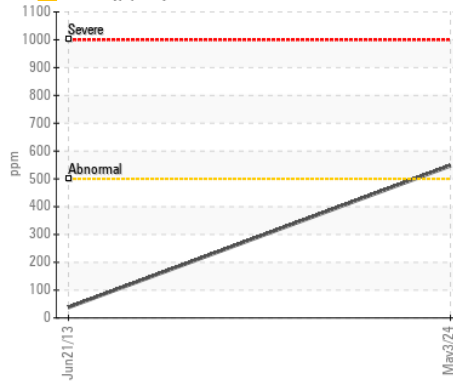
▲ Ferrous Alloys



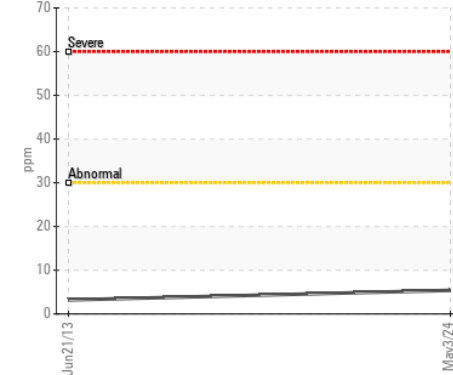
Viscosity @ 40°C



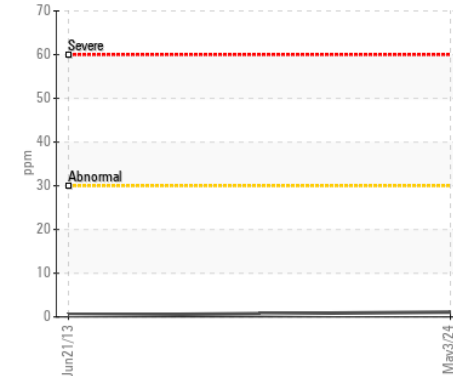
▲ Iron (ppm)



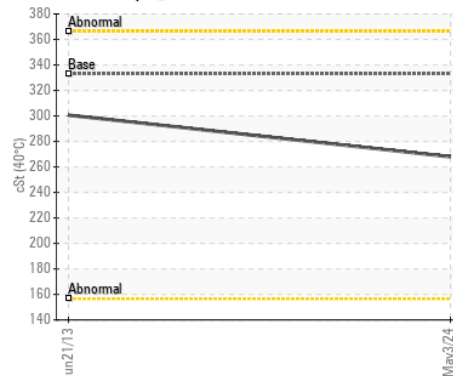
Aluminum (ppm)



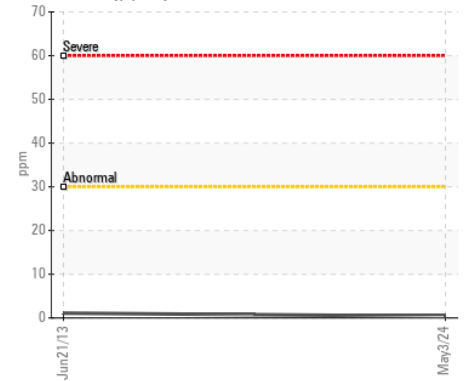
Copper (ppm)



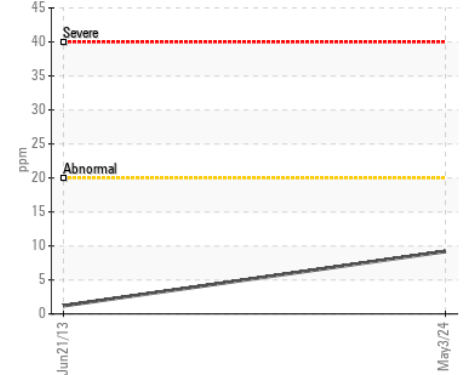
Viscosity @ 40°C



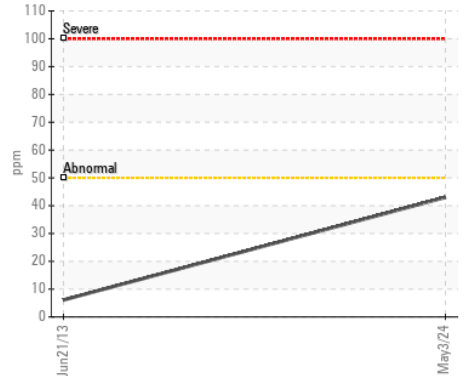
Lead (ppm)



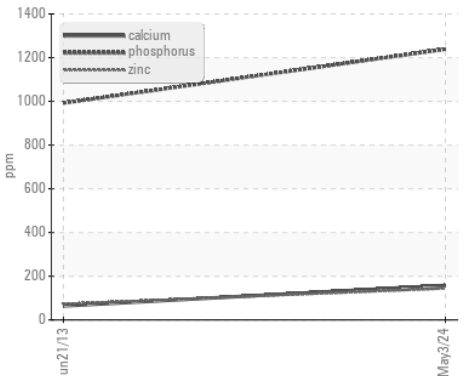
Chromium (ppm)



Silicon (ppm)



Additives



Certificate L2367

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

Sample No. : VCP431873

Lab Number : 06174267

Unique Number : 11020320

Test Package : MOB 1

Received : 09 May 2024

Tested : 10 May 2024

Diagnosed : 13 May 2024 - Angela Borella

HIGHWAY EQUIPMENT & SUPPLY CO

PO BOX 127

DRUMS, PA

US 18222

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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)