



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO A40G 353408

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0009006	ASC0008784	---
Sample Date		Client Info		03 Jul 2024	27 Feb 2024	---
Machine Age	hrs	Client Info		2099	1450	---
Oil Age	hrs	Client Info		649	1450	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	11	10	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>2	2	2	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>2	<1	0	---
Aluminum	ppm	ASTM D5185m	>25	2	3	---
Lead	ppm	ASTM D5185m	>40	<1	<1	---
Copper	ppm	ASTM D5185m	>330	45	50	---
Tin	ppm	ASTM D5185m	>15	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.

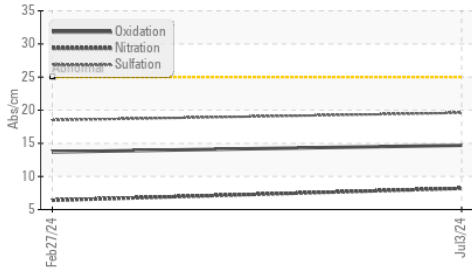
Silicon	ppm	ASTM D5185m	>25	5	8	---
Potassium	ppm	ASTM D5185m	>20	2	<1	---
Fuel		WC Method	>6.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	8.2	6.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	18.5	---
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

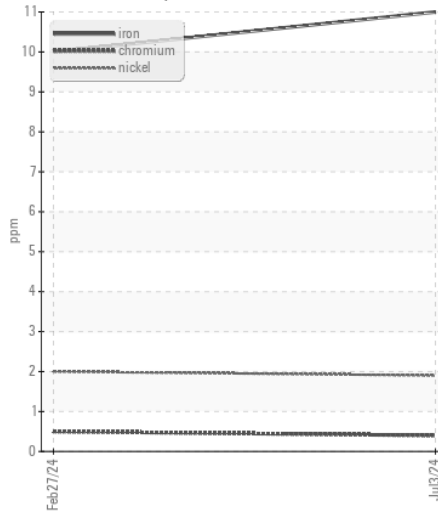
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	0	2	---
Boron	ppm	ASTM D5185m	250	<1	4	---
Barium	ppm	ASTM D5185m	10	<1	0	---
Molybdenum	ppm	ASTM D5185m	100	62	66	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	450	969	892	---
Calcium	ppm	ASTM D5185m	3000	1139	1238	---
Phosphorus	ppm	ASTM D5185m	1150	1146	1098	---
Zinc	ppm	ASTM D5185m	1350	1269	1255	---
Sulfur	ppm	ASTM D5185m	4250	3000	3557	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.7	13.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.9	8.1	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.6	13.0	---

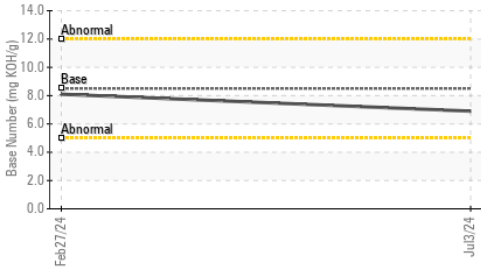
FT-IR (Direct Trend)



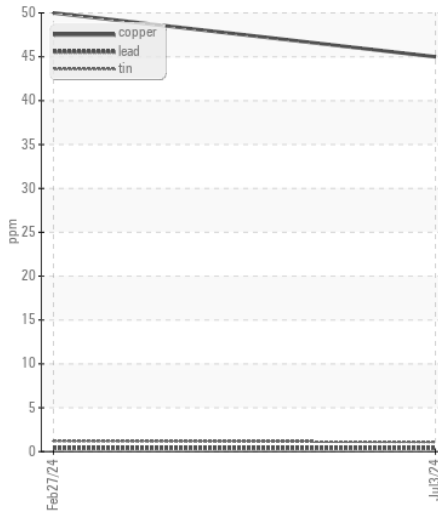
Ferrous Alloys



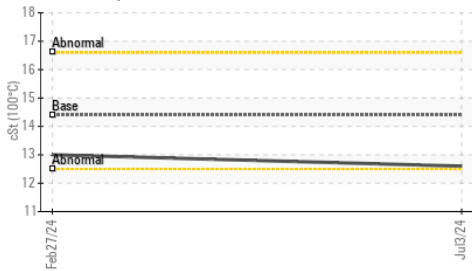
Base Number



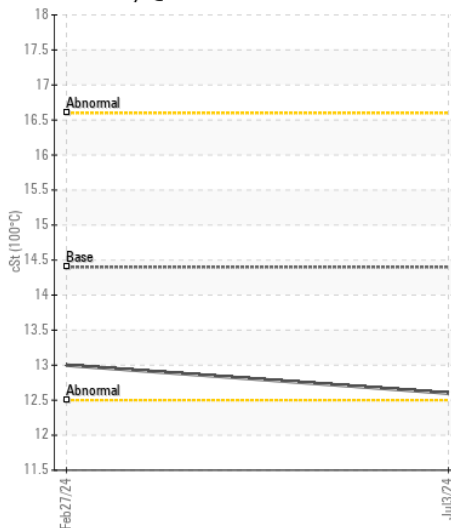
Non-ferrous Metals



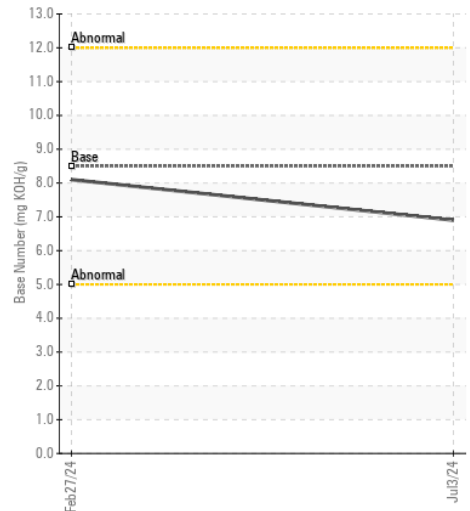
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : ASC0009006

Lab Number : 06238652

Unique Number : 11127486

Test Package : CONST (Additional Tests: TBN)

Received : 16 Jul 2024

Tested : 17 Jul 2024

Diagnosed : 17 Jul 2024 - Wes Davis

117 - ASCENDUM MACHINERY INC - GREENVILLE

2002 N GREENE ST

GREENVILLE, NC

US 27834

Contact: ALLEN WILLIAMS

allen.williams@ascendummachinery.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: (704)494-8197