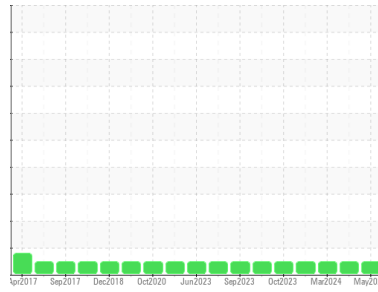




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

[W/O 10763]

Machine Id

**VOLVO A40G 341427**

Component

**Diesel Engine**

Fluid

**MOBIL 15W40 (15 GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>ML0001314</b>	ML0000447	ML0000396
Sample Date	Client Info		<b>07 May 2024</b>	16 Apr 2024	19 Mar 2024
Machine Age	hrs	Client Info	<b>11597</b>	11524	11295
Oil Age	hrs	Client Info	<b>73</b>	250	250
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<b>&lt;1.0</b>	0.2	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>1</b>	4	2
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	2	3
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>70</b>	220	323
Barium	ppm	ASTM D5185m	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>67</b>	83	122
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	<b>686</b>	545	668
Calcium	ppm	ASTM D5185m	<b>1277</b>	1535	1495
Phosphorus	ppm	ASTM D5185m	<b>958</b>	879	737
Zinc	ppm	ASTM D5185m	<b>1057</b>	947	852
Sulfur	ppm	ASTM D5185m	<b>3141</b>	3022	2916

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	5	4
Sodium	ppm	ASTM D5185m >118	<b>0</b>	2	4
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	2

## INFRA-RED

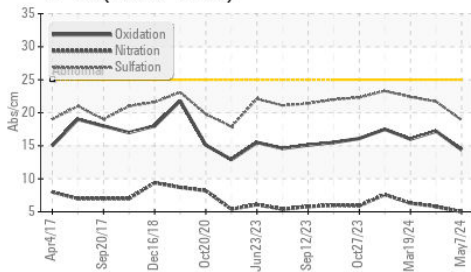
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>5.0</b>	5.8	6.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.9</b>	21.7	22.4

## FLUID DEGRADATION

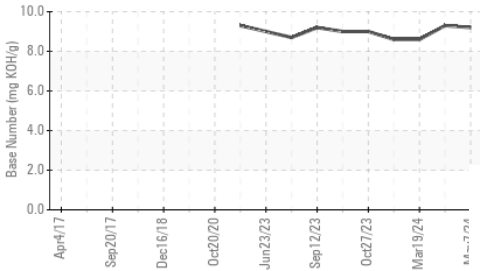
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.4</b>	17.2	16.0
Base Number (BN)	mg KOH/g	ASTM D2896	<b>9.2</b>	9.3	8.6

# OIL ANALYSIS REPORT

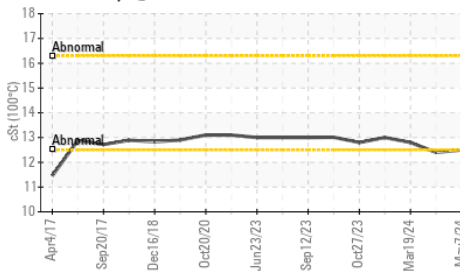
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

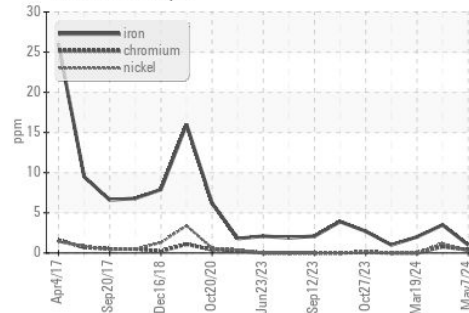


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

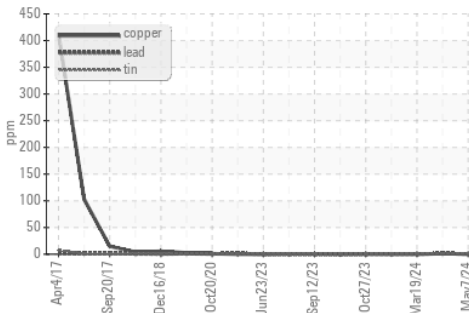
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.5	12.4	12.8

## GRAPHS

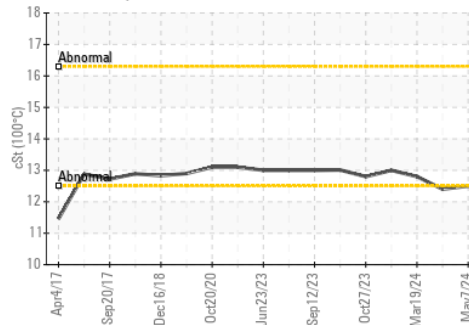
Ferrous Alloys



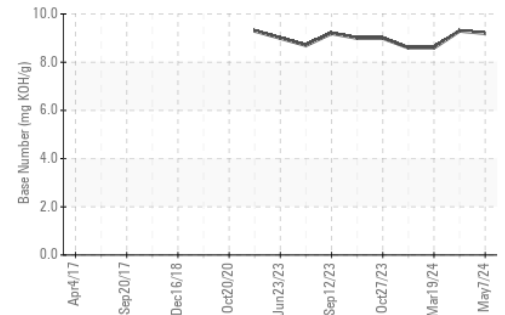
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : ML0001314

Lab Number : 06176444

Unique Number : 11022497

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)

Received : 10 May 2024

Tested : 13 May 2024

Diagnosed : 14 May 2024 - Sean Felton

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