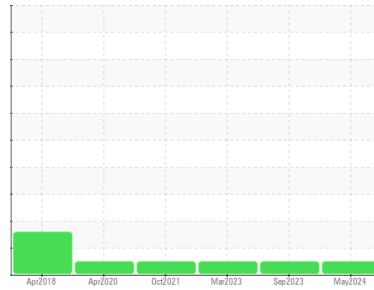


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**VOLVO A40G 340455**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- 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 suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>ML0001768</b>	VCP414686	VCP402987
Sample Date	Client Info		<b>22 May 2024</b>	20 Sep 2023	13 Mar 2023
Machine Age	hrs	Client Info	<b>5148</b>	5148	4097
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<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>14</b>	14	23
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	1	3
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	2	8
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	1	2
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	3
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	<b>37</b>	98	38
Barium	ppm	ASTM D5185m 10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 100	<b>52</b>	59	59
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 450	<b>696</b>	518	301
Calcium	ppm	ASTM D5185m 3000	<b>1444</b>	1766	1683
Phosphorus	ppm	ASTM D5185m 1150	<b>780</b>	969	856
Zinc	ppm	ASTM D5185m 1350	<b>930</b>	1192	1011
Sulfur	ppm	ASTM D5185m 4250	<b>2851</b>	3807	2485

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>7</b>	8	19
Sodium	ppm	ASTM D5185m >158	<b>3</b>	2	<1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	2

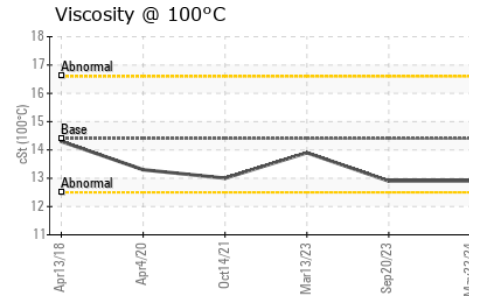
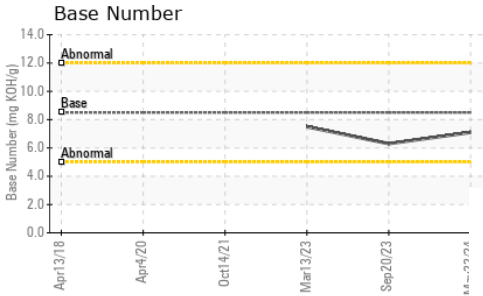
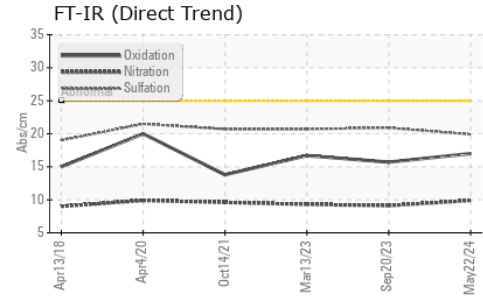
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.9</b>	9.1	9.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.9</b>	20.9	20.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.0</b>	15.7	16.7
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>7.1</b>	6.3	7.5

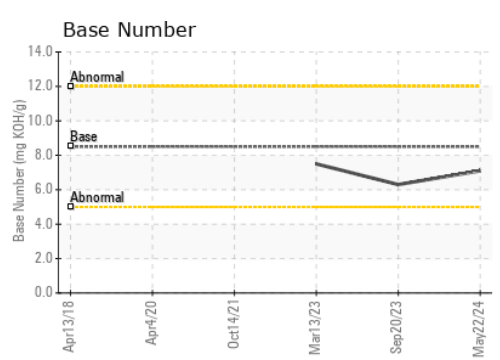
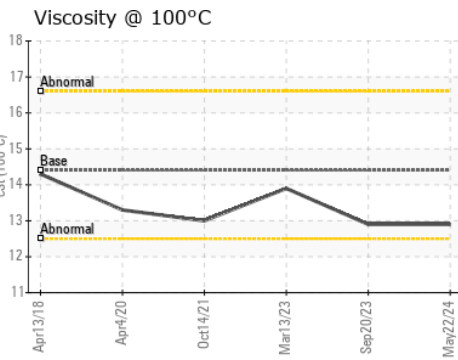
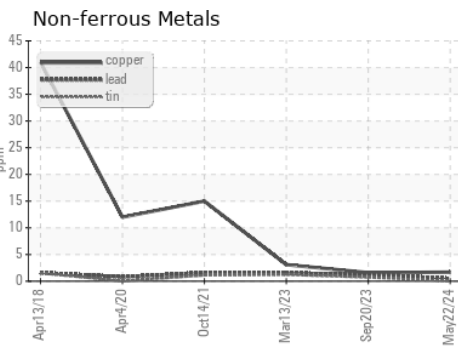
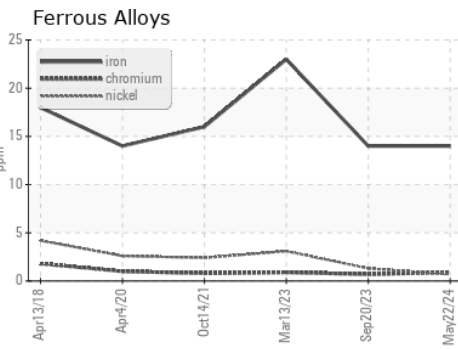
# OIL ANALYSIS REPORT



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	14.4	<b>12.9</b>	12.9	13.9

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ML0001768      **Received** : 29 May 2024  
**Lab Number** : 06193496      **Tested** : 30 May 2024  
**Unique Number** : 11050248      **Diagnosed** : 30 May 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: TBN )

**McCLUNG-LOGAN EQUIPMENT CO - RICHMOND**  
 1345 MOUNTAIN ROAD  
 GLEN ALLEN, VA  
 US 23060  
 Contact: KYLE RATLIFFE  
 KRATLIFFE@McCLUNG-LOGAN.COM

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: (804)266-1611