



# VOLVO

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**[388974]**

Machine Id  
**633387**

Component  
**Diesel Engine**

Fluid  
**VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP394323</b>	VCP393149	VCP391585
Sample Date		Client Info		<b>19 Dec 2023</b>	10 Oct 2023	19 Jul 2023
Machine Age	hrs	Client Info		<b>1503</b>	1045	510
Oil Age	hrs	Client Info		<b>500</b>	0	510
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	<b>16</b>	37	25
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	4	4
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	1	<1
Aluminum	ppm	ASTM D5185(m)	>30	<b>12</b>	46	48
Lead	ppm	ASTM D5185(m)	>40	<b>1</b>	4	3
Copper	ppm	ASTM D5185(m)	>20	<b>6</b>	18	12
Tin	ppm	ASTM D5185(m)	>20	<b>2</b>	4	3
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

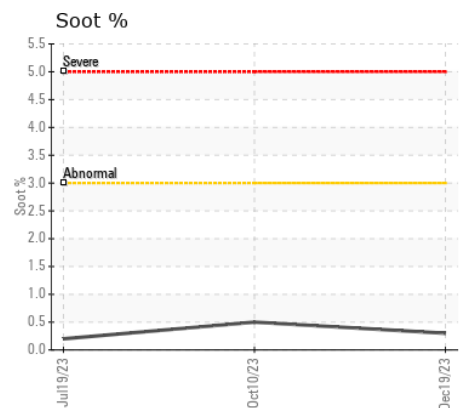
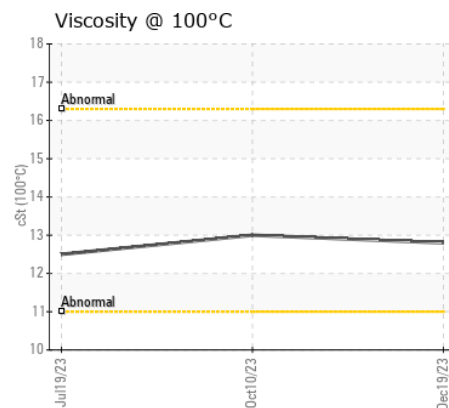
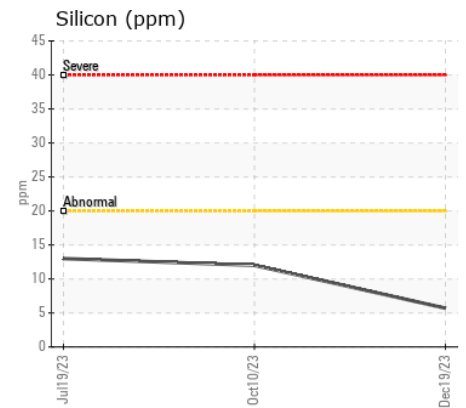
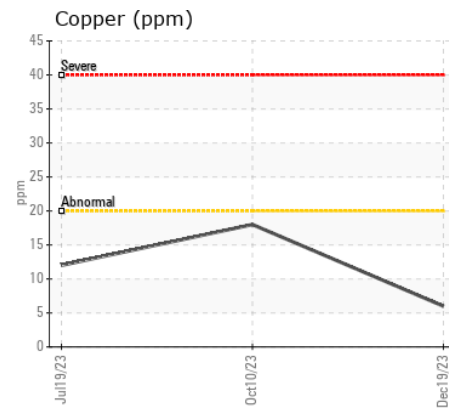
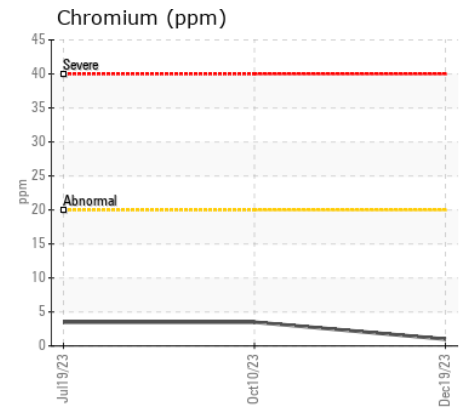
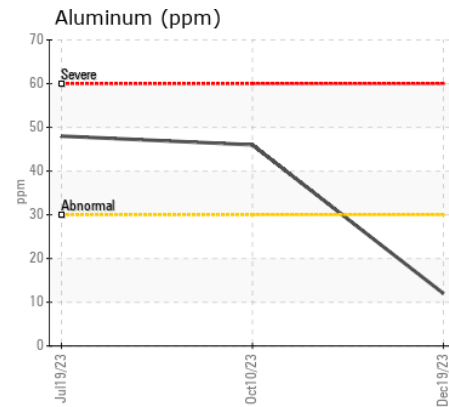
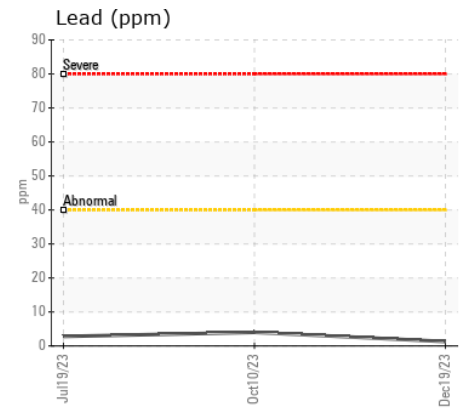
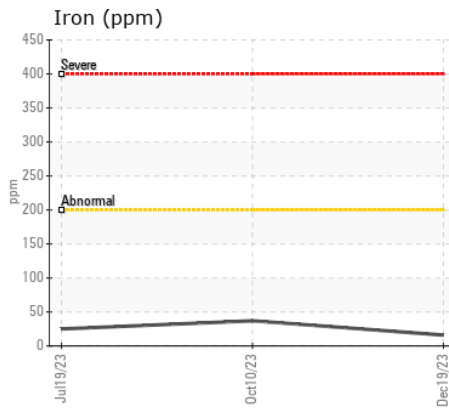
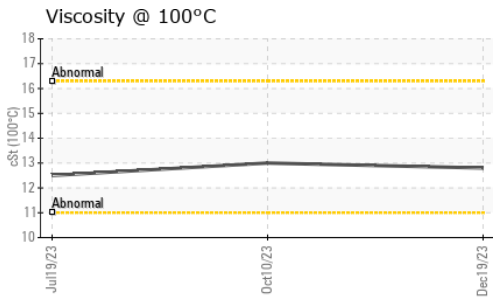
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>6</b>	12	13
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	2
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
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0.5	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.9</b>	8.1	6.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.1</b>	22.2	22.2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>2</b>	5	5
Boron	ppm	ASTM D5185(m)		<b>34</b>	26	43
Barium	ppm	ASTM D5185(m)		<b>2</b>	12	14
Molybdenum	ppm	ASTM D5185(m)		<b>39</b>	44	39
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	3
Magnesium	ppm	ASTM D5185(m)		<b>520</b>	665	600
Calcium	ppm	ASTM D5185(m)		<b>1659</b>	1474	1509
Phosphorus	ppm	ASTM D5185(m)		<b>909</b>	938	978
Zinc	ppm	ASTM D5185(m)		<b>1046</b>	1120	1076
Sulfur	ppm	ASTM D5185(m)		<b>2537</b>	2703	2839
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>20.2</b>	18.8	18.5
Visc @ 100°C	cSt	ASTM D7279(m)		<b>12.8</b>	13.0	12.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : VCP394323 **Received** : 22 Jan 2024  
**Lab Number** : 02610171 **Diagnosed** : 22 Jan 2024  
**Unique Number** : 5711257 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

**CRH CANADA GROUP INC.**  
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 CONCORD, ON  
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 Contact: Tim Visser  
 tvisser@strongco.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.