



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[X47197]**  
Machine Id  
**VOLVO L90H 624024**  
Component  
**Diesel Engine**  
Fluid  
**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP425051</b>	VCP351306	VCP327663
Sample Date		Client Info		<b>27 Feb 2024</b>	04 May 2022	05 Dec 2021
Machine Age	hrs	Client Info		<b>11325</b>	9990	9407
Oil Age	hrs	Client Info		<b>450</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>13</b>	9	10
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>8</b>	4	4
Lead	ppm	ASTM D5185m	>20	<b>0</b>	1	<1
Copper	ppm	ASTM D5185m	>15	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

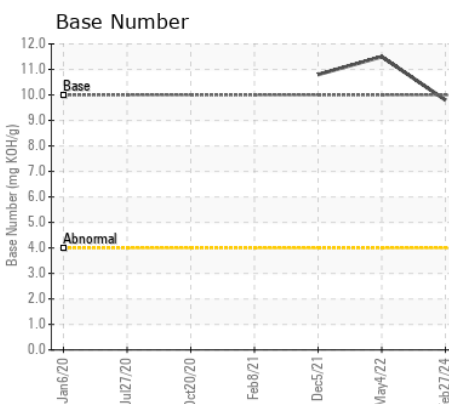
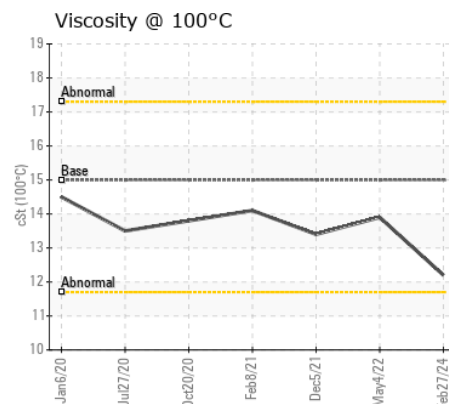
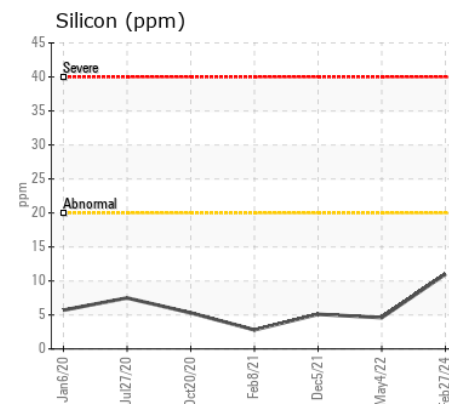
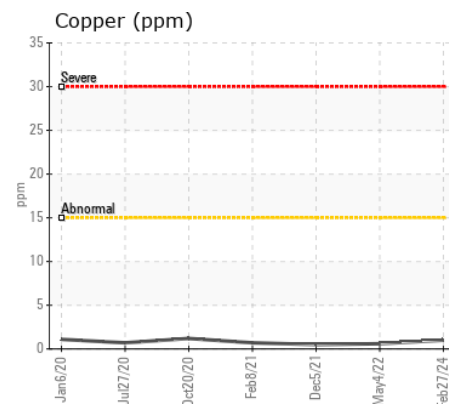
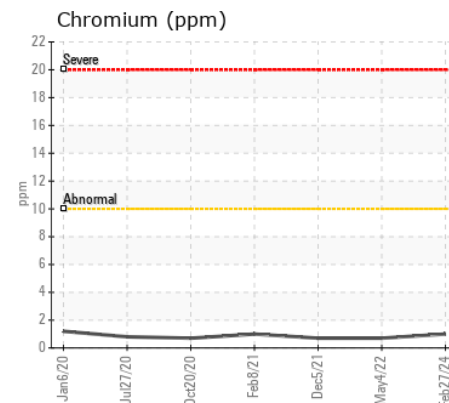
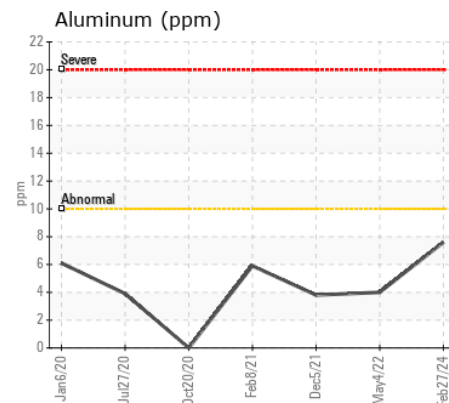
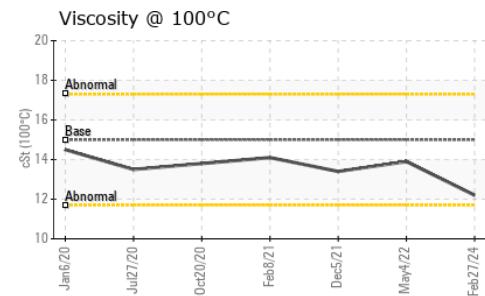
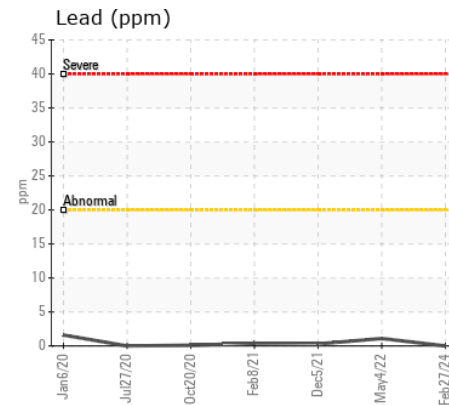
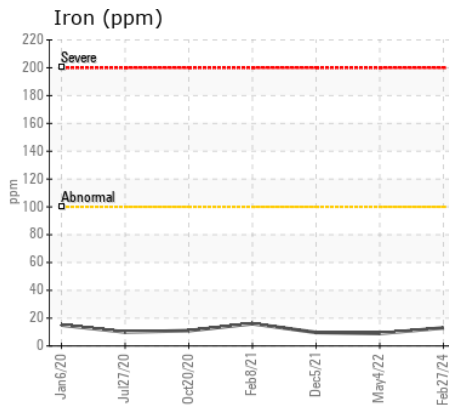
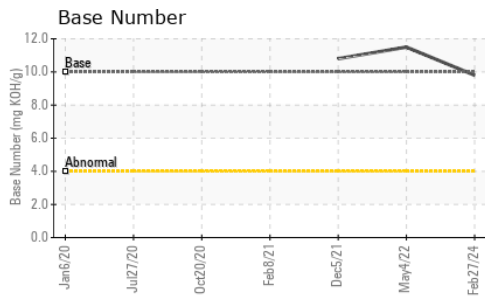
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>11</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	9.3	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.1</b>	24.1	23.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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		<b>2</b>	2	3
Boron	ppm	ASTM D5185m	2.5	<b>36</b>	37	30
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>43</b>	40	38
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	256	<b>492</b>	559	512
Calcium	ppm	ASTM D5185m	2057	<b>1559</b>	1839	1730
Phosphorus	ppm	ASTM D5185m	935	<b>954</b>	1044	923
Zinc	ppm	ASTM D5185m	1223	<b>1106</b>	1230	1137
Sulfur	ppm	ASTM D5185m	4079	<b>2847</b>	2835	2385
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.5</b>	23.2	21.7
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>9.8</b>	11.5	10.8
Visc @ 100°C	cSt	ASTM D445	15.0	<b>12.2</b>	13.9	13.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP425051 **Received** : 01 Mar 2024  
**Lab Number** : 06105689 **Tested** : 01 Mar 2024  
**Unique Number** : 10903919 **Diagnosed** : 01 Mar 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**IAA - INSURANCE AUTO AUCTIONS - NASHVILLE**  
 3896 STEWARTS LN  
 NASHVILLE, TN  
 US 37218  
 Contact: KODY

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)

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F: