



# VOLVO

## OIL ANALYSIS REPORT

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



Area

**[701268 IAA RITCHI]**

Machine Id

**VOLVO L90H 625797**

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>VCP443729</b>	VCP408619	VCP367209
Sample Date		Client Info		<b>09 Apr 2024</b>	12 Jun 2023	16 Dec 2022
Machine Age	hrs	Client Info		<b>2757</b>	2085	1676
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>8</b>	11	23
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	0	2
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	10	9
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	<1
Copper	ppm	ASTM D5185m	>20	<b>2</b>	0	2
Tin	ppm	ASTM D5185m	>20	<b>2</b>	0	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

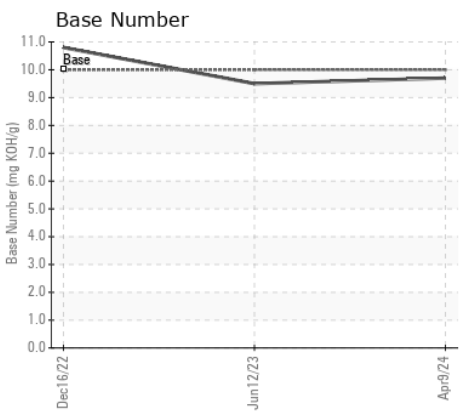
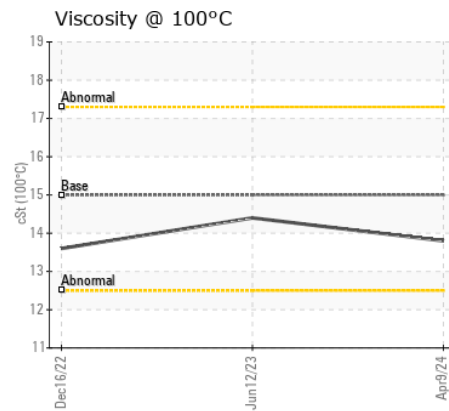
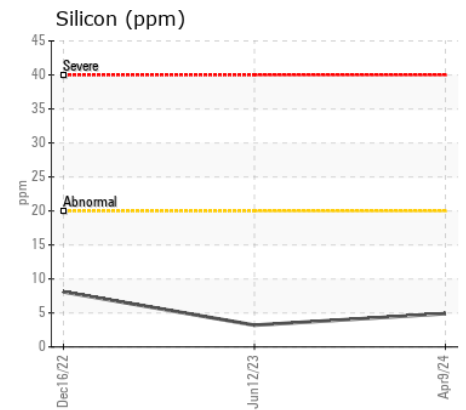
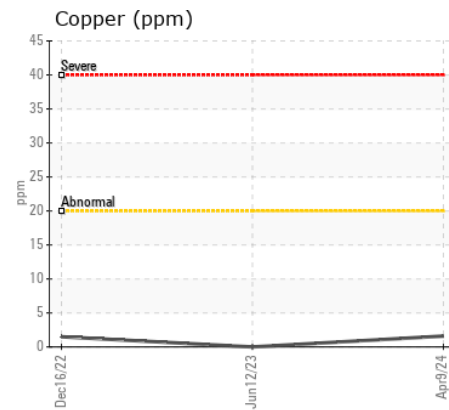
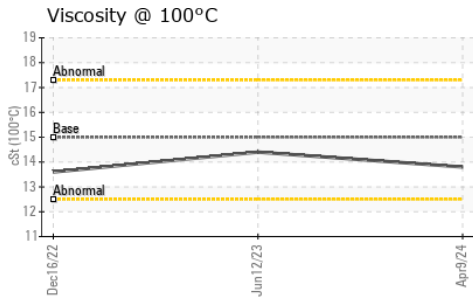
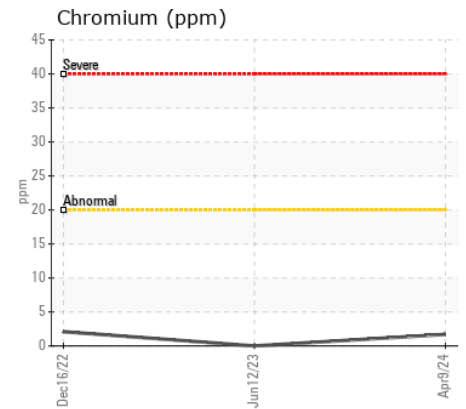
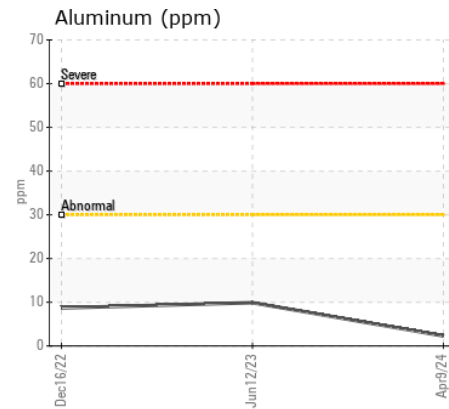
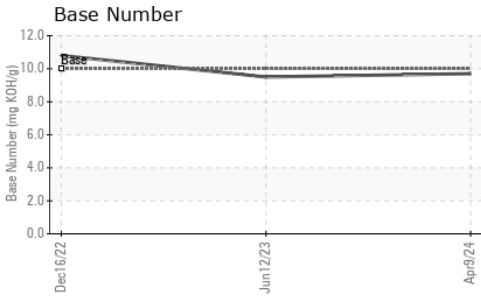
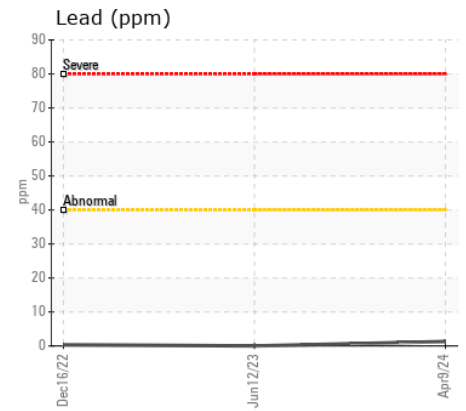
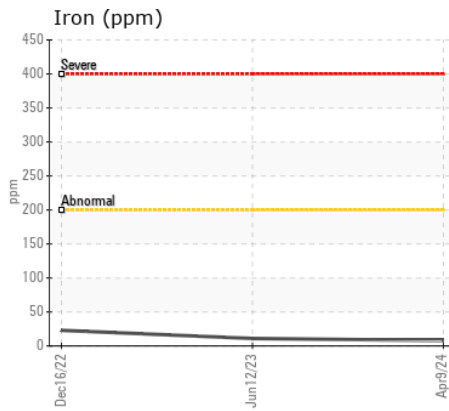
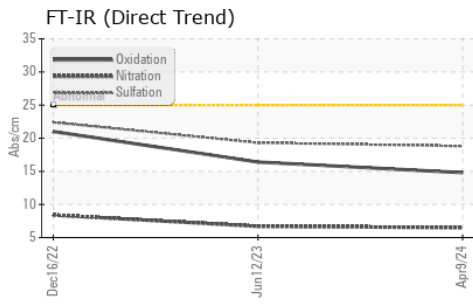
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	3	8
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	1	1
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>0.1</b>	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.5</b>	6.7	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.8</b>	19.3	22.4
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	>0.2	<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>1</b>	1	3
Boron	ppm	ASTM D5185m	2.5	<b>4</b>	2	27
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	0.7	<b>61</b>	57	43
Manganese	ppm	ASTM D5185m	0.0	<b>1</b>	0	<1
Magnesium	ppm	ASTM D5185m	256	<b>917</b>	939	523
Calcium	ppm	ASTM D5185m	2057	<b>1152</b>	1227	1741
Phosphorus	ppm	ASTM D5185m	935	<b>1127</b>	1044	981
Zinc	ppm	ASTM D5185m	1223	<b>1241</b>	1320	1187
Sulfur	ppm	ASTM D5185m	4079	<b>3527</b>	3577	2941
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.8</b>	16.4	21.0
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>9.7</b>	9.5	10.8
Visc @ 100°C	cSt	ASTM D445	15.0	<b>13.8</b>	14.4	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP443729 **Received** : 18 Apr 2024  
**Lab Number** : 06152712 **Tested** : 18 Apr 2024  
**Unique Number** : 10982790 **Diagnosed** : 22 Apr 2024 - Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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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)