



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[473409 TITAN]**  
Machine Id  
**VOLVO L90H 626595**  
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>VCP439294</b>	---	---
Sample Date		Client Info		<b>01 Feb 2024</b>	---	---
Machine Age	hrs	Client Info		<b>807</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>34</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>3</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m	>10	<b>28</b>	---	---
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>15	<b>9</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>3</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

### CONTAMINATION

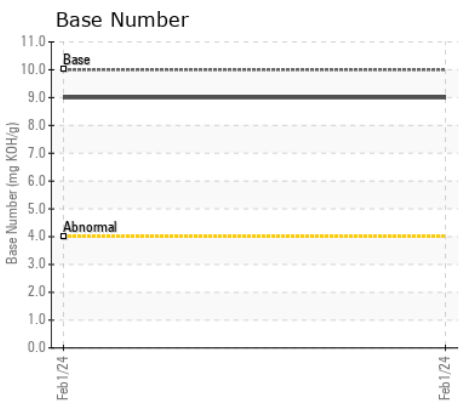
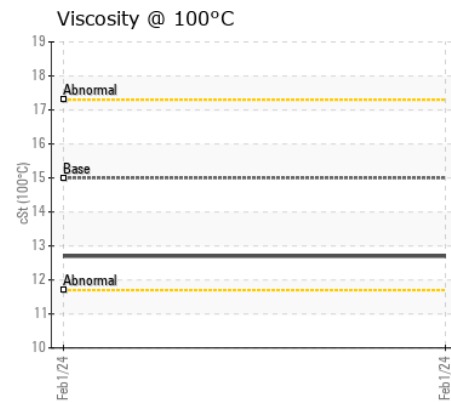
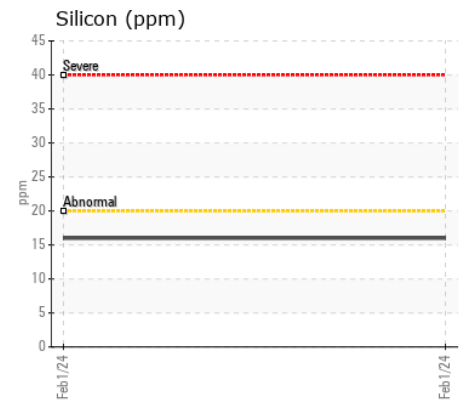
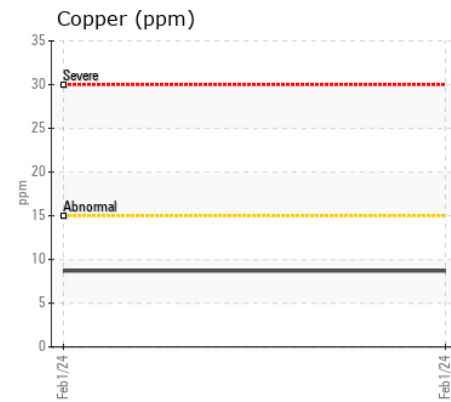
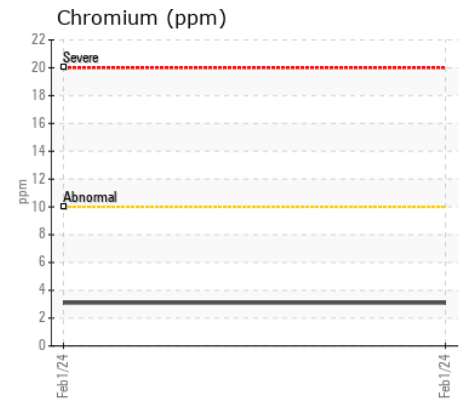
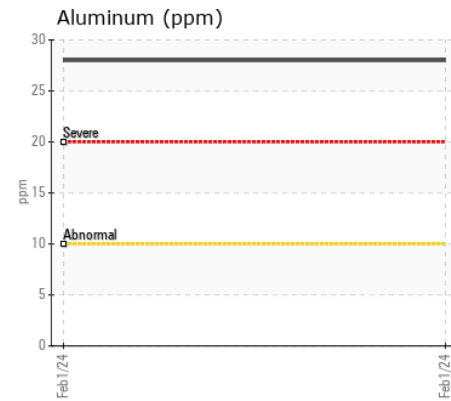
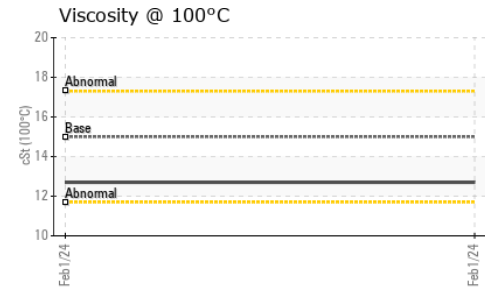
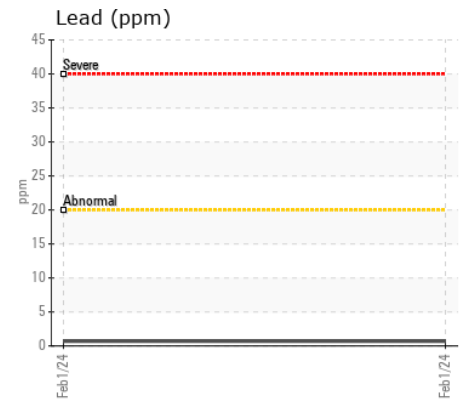
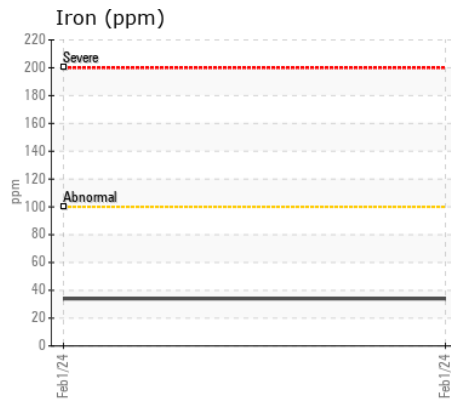
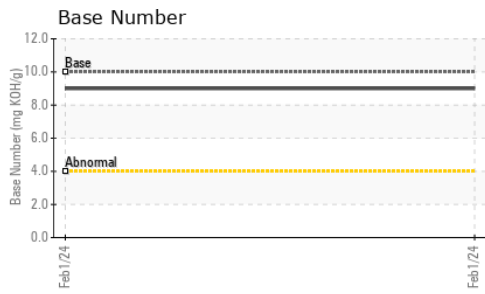
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>16</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	---	---
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.1	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.0</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	---	---

### 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>0</b>	---	---
Boron	ppm	ASTM D5185m	2.5	<b>43</b>	---	---
Barium	ppm	ASTM D5185m	0.0	<b>27</b>	---	---
Molybdenum	ppm	ASTM D5185m	0.7	<b>47</b>	---	---
Manganese	ppm	ASTM D5185m	0.0	<b>3</b>	---	---
Magnesium	ppm	ASTM D5185m	256	<b>566</b>	---	---
Calcium	ppm	ASTM D5185m	2057	<b>1526</b>	---	---
Phosphorus	ppm	ASTM D5185m	935	<b>1006</b>	---	---
Zinc	ppm	ASTM D5185m	1223	<b>1119</b>	---	---
Sulfur	ppm	ASTM D5185m	4079	<b>3492</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.5</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>9.0</b>	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	<b>12.7</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP439294  
**Lab Number** : 06084569  
**Unique Number** : 10872014  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 09 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Wes Davis

**ALTA EQUIPMENT/FLAGLER EQUIPMENT LLC**  
 9601 BOGGY CREEK RD  
 ORLANDO, FL  
 US 32824

Contact: Robert LaPlante  
 robert.laplante@altg.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)

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