



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[495]**  
Machine Id  
**VOLVO L90H 624946**  
Component  
**Diesel Engine**  
Fluid  
**GULF 10W30 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP391406</b>	VCP263721	VCP281763
Sample Date		Client Info		<b>08 Feb 2024</b>	09 Mar 2021	22 Oct 2020
Machine Age	hrs	Client Info		<b>4775</b>	1528	2023
Oil Age	hrs	Client Info		<b>781</b>	590	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>31</b>	31	13
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	3	1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>16</b>	22	8
Lead	ppm	ASTM D5185m	>40	<b>0</b>	1	0
Copper	ppm	ASTM D5185m	>20	<b>2</b>	3	<1
Tin	ppm	ASTM D5185m	>20	<b>1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

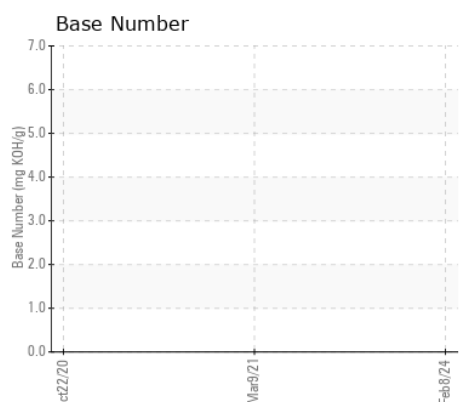
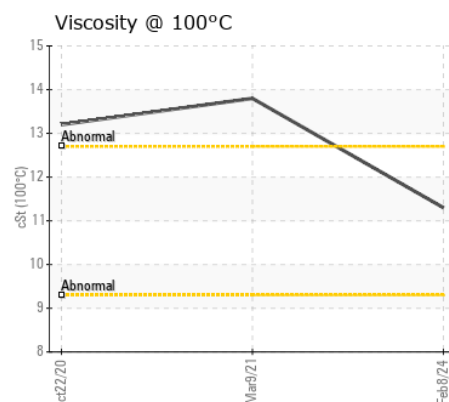
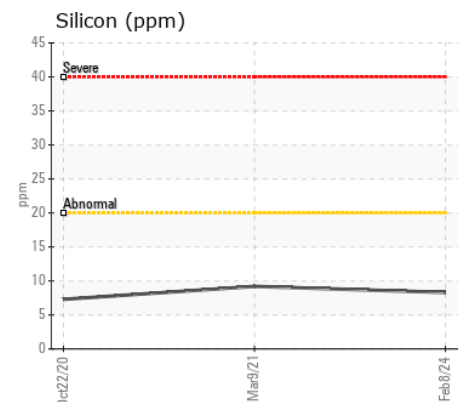
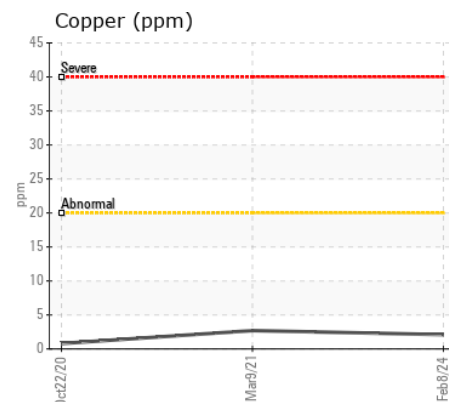
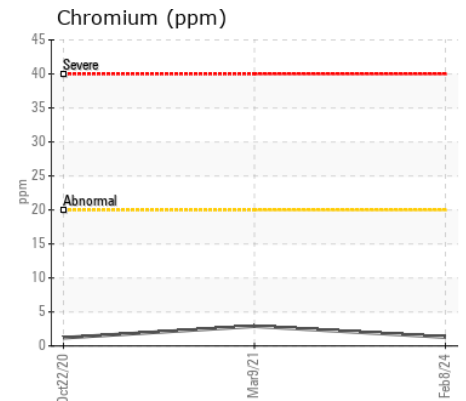
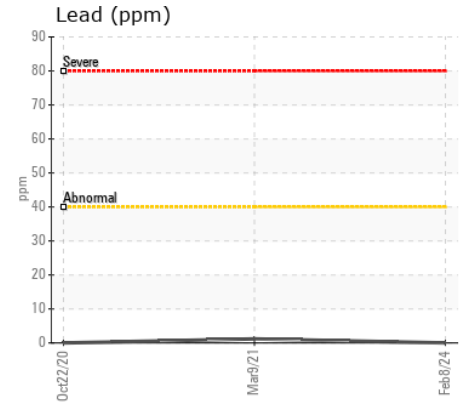
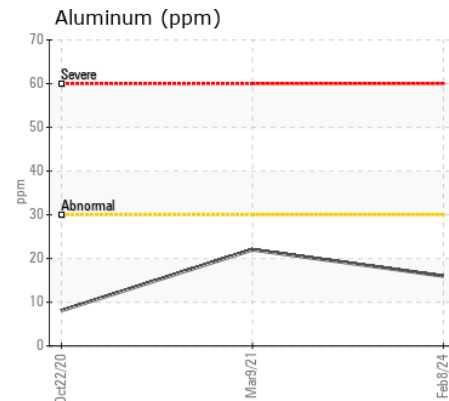
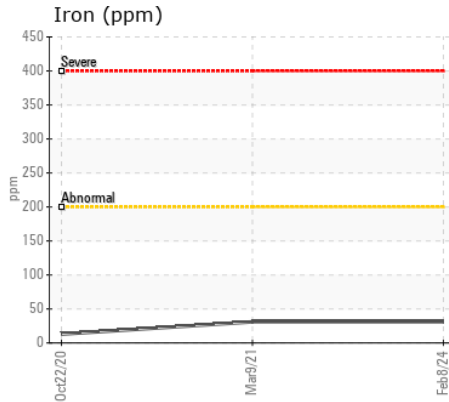
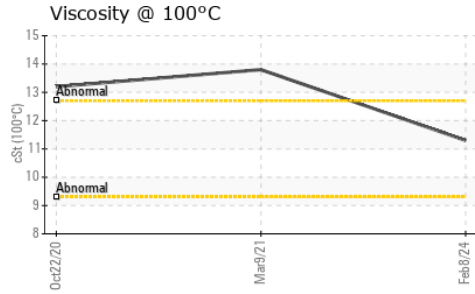
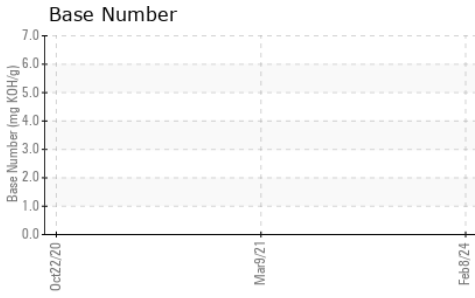
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>8</b>	9	7
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	4
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>0.7</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.3</b>	10.1	8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.8</b>	22	22.1
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>4</b>	4	3
Boron	ppm	ASTM D5185m		<b>28</b>	26	31
Barium	ppm	ASTM D5185m		<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m		<b>75</b>	35	39
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>49</b>	644	572
Calcium	ppm	ASTM D5185m		<b>2225</b>	1780	1715
Phosphorus	ppm	ASTM D5185m		<b>920</b>	819	767
Zinc	ppm	ASTM D5185m		<b>1048</b>	942	850
Sulfur	ppm	ASTM D5185m		<b>3376</b>	2179	2204
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.9</b>	20.3	19.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.6</b>	---	---
Visc @ 100°C	cSt	ASTM D445		<b>11.3</b>	13.8	13.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP391406 **Received** : 23 Feb 2024  
**Lab Number** : 06098198 **Tested** : 25 Feb 2024  
**Unique Number** : 10896428 **Diagnosed** : 25 Feb 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**SODERBERG CONSTRUCTION**  
 460 YORK STREET  
 CARIBOU, ME  
 US 04736  
 Contact: GREG LANDEEN  
 glandeen@mf.net  
 T: (207)498-6300  
 F: (207)498-6535

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)