



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[49139 SUWANNEE]**

Machine Id  
**VOLVO L180H 5496**

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>VCP453948</b>	VCP438161	VCP412811
Sample Date		Client Info		<b>11 Mar 2024</b>	18 Jan 2024	18 Jul 2023
Machine Age	hrs	Client Info		<b>14089</b>	13222	11082
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	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>4</b>	<1	3
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	2	<1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>20	<b>2</b>	2	1
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<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

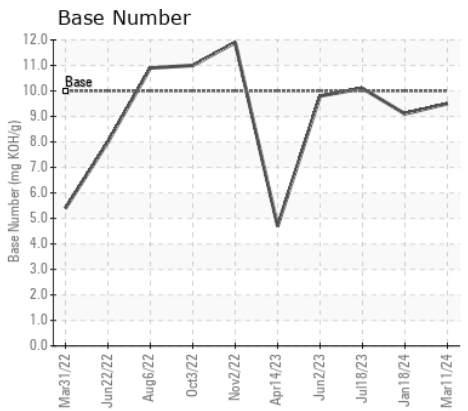
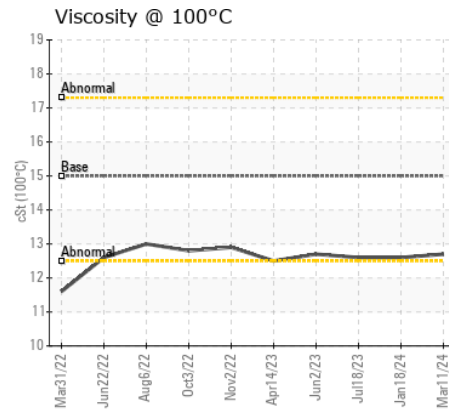
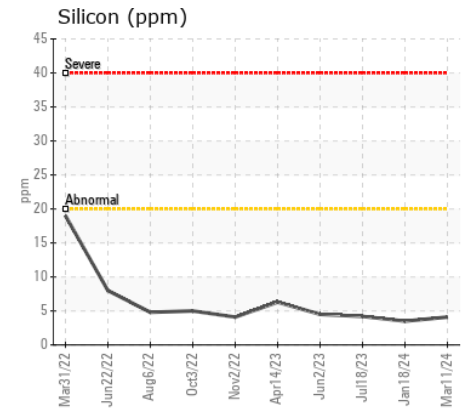
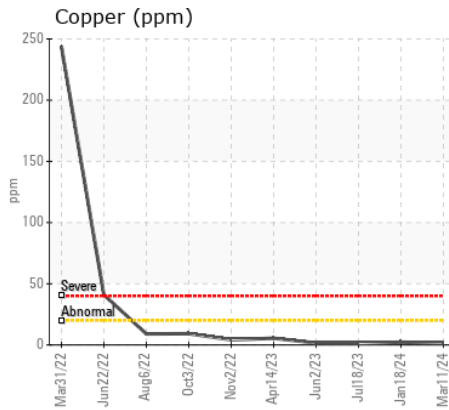
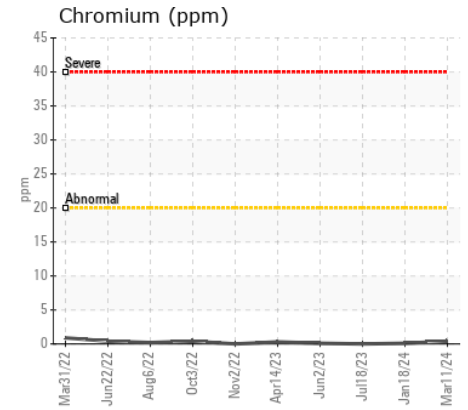
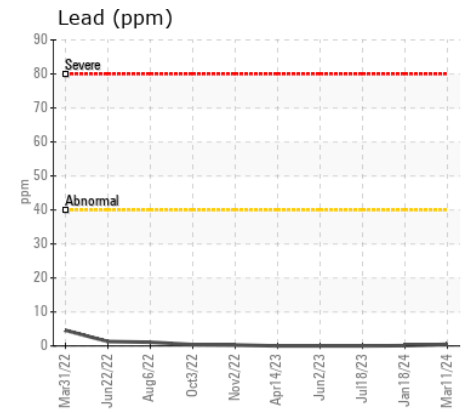
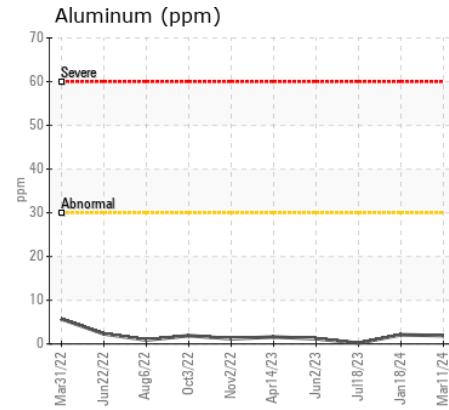
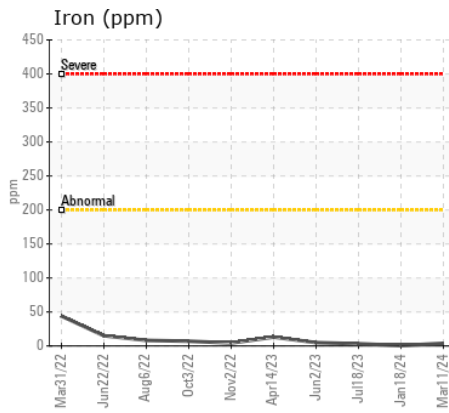
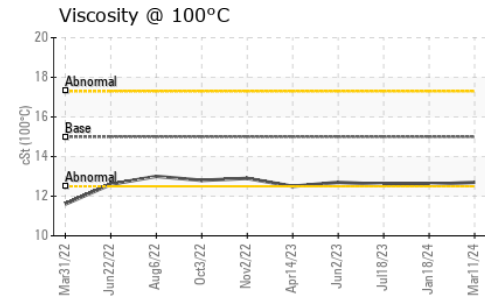
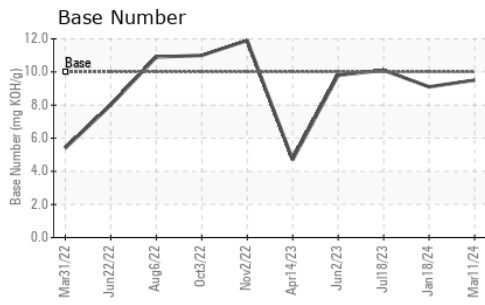
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	0
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>0.2</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	7.8	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.6</b>	21.1	21.6
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>2</b>	0	3
Boron	ppm	ASTM D5185m	2.5	<b>21</b>	33	39
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>43</b>	39	43
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	256	<b>599</b>	484	527
Calcium	ppm	ASTM D5185m	2057	<b>1470</b>	1581	1778
Phosphorus	ppm	ASTM D5185m	935	<b>965</b>	884	952
Zinc	ppm	ASTM D5185m	1223	<b>1131</b>	1055	1128
Sulfur	ppm	ASTM D5185m	4079	<b>3268</b>	2641	3494
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.3</b>	19.7	20.0
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>9.5</b>	9.1	10.1
Visc @ 100°C	cSt	ASTM D445	15.0	<b>12.7</b>	12.6	12.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP453948 **Received** : 20 Mar 2024  
**Lab Number** : 06123455 **Tested** : 21 Mar 2024  
**Unique Number** : 10937606 **Diagnosed** : 21 Mar 2024 - Wes Davis  
**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)