



# VOLVO

## OIL ANALYSIS REPORT

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



Area

**[GENERAL RV]**

Machine Id

**VOLVO L20H 1220371**

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>VCP451202</b>	VCP420235	VCP385377
Sample Date		Client Info		<b>29 Apr 2024</b>	20 Apr 2023	20 Sep 2022
Machine Age	hrs	Client Info		<b>2478</b>	1557	1077
Oil Age	hrs	Client Info		<b>0</b>	480	500
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	>100	<b>5</b>	3	6
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>1</b>	<1	3
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>15	<b>2</b>	1	4
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

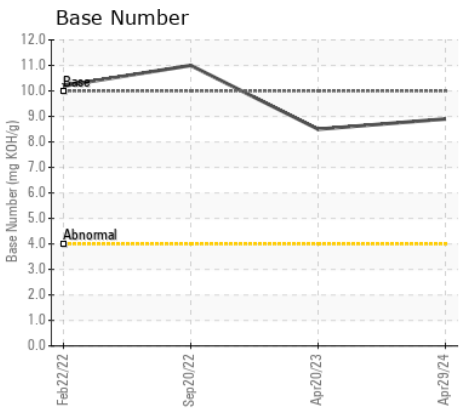
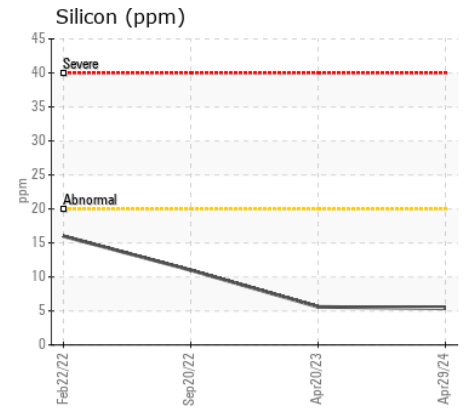
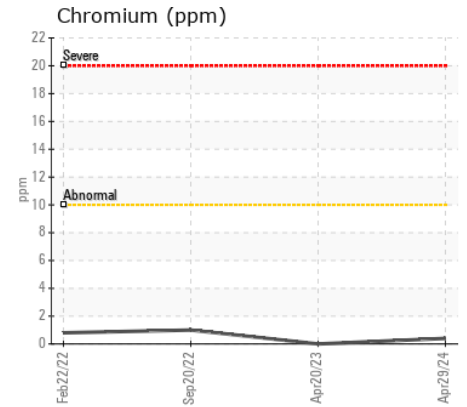
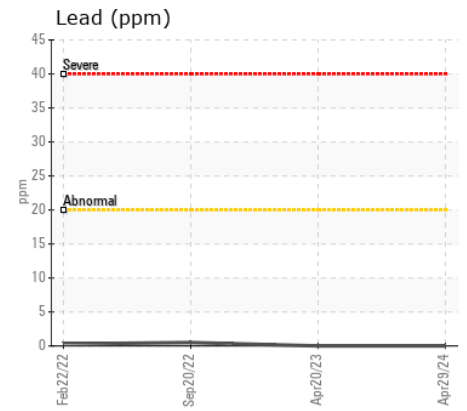
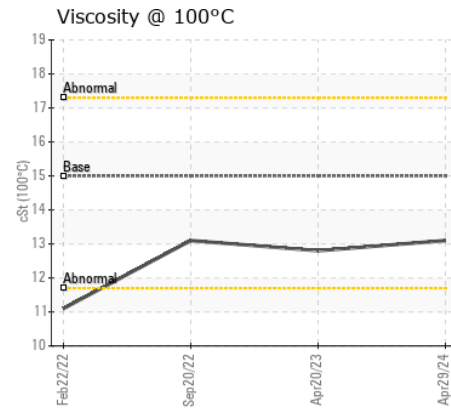
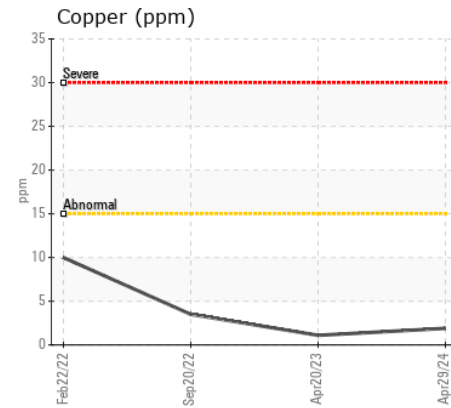
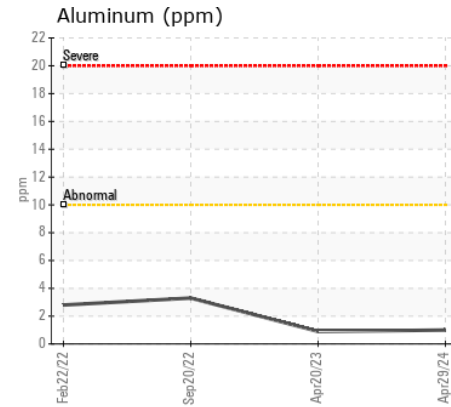
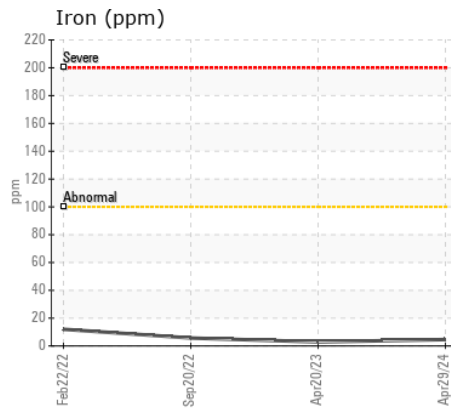
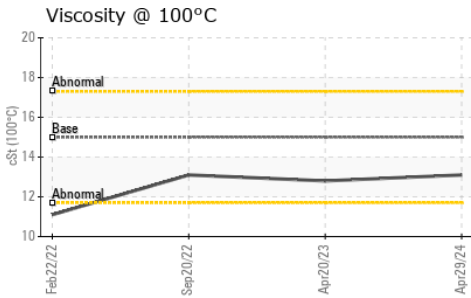
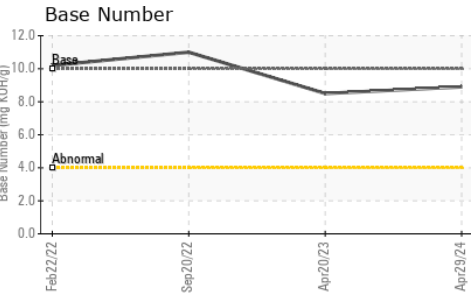
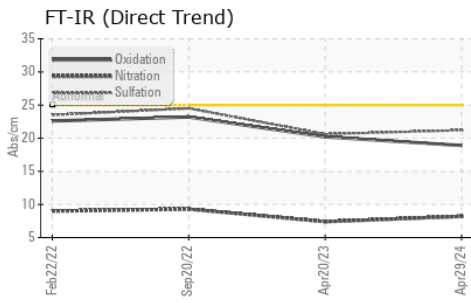
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	6	11
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	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.2</b>	7.4	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.2</b>	20.6	24.5
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	5
Boron	ppm	ASTM D5185m	2.5	<b>51</b>	36	28
Barium	ppm	ASTM D5185m	0.0	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>43</b>	35	39
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	256	<b>501</b>	439	520
Calcium	ppm	ASTM D5185m	2057	<b>1620</b>	1387	1701
Phosphorus	ppm	ASTM D5185m	935	<b>1005</b>	726	948
Zinc	ppm	ASTM D5185m	1223	<b>1104</b>	886	1143
Sulfur	ppm	ASTM D5185m	4079	<b>2920</b>	2262	3287
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.9</b>	20.2	23.2
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>8.9</b>	8.5	11.0
Visc @ 100°C	cSt	ASTM D445	15.0	<b>13.1</b>	12.8	13.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP451202 **Received** : 30 May 2024  
**Lab Number** : 06194967 **Tested** : 31 May 2024  
**Unique Number** : 11057090 **Diagnosed** : 31 May 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC**  
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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)