



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[634566]**  
Machine Id  
**VOLVO SD115B 236662**  
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>VCP433436</b>	VCP306431	VCP269712
Sample Date		Client Info		<b>28 Nov 2023</b>	04 Feb 2021	17 Mar 2020
Machine Age	hrs	Client Info		<b>4274</b>	1597	577
Oil Age	hrs	Client Info		<b>500</b>	500	577
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>28</b>	38	34
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	5	3
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	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>6</b>	4	12
Lead	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185m	>15	<b>2</b>	5	35
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	2	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

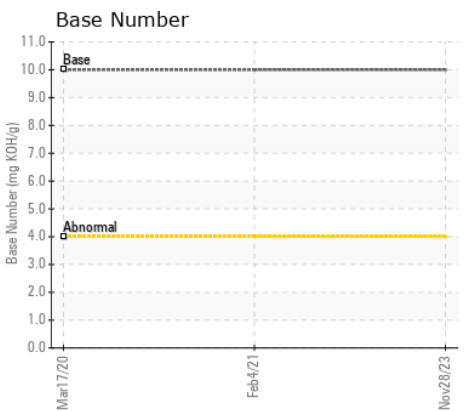
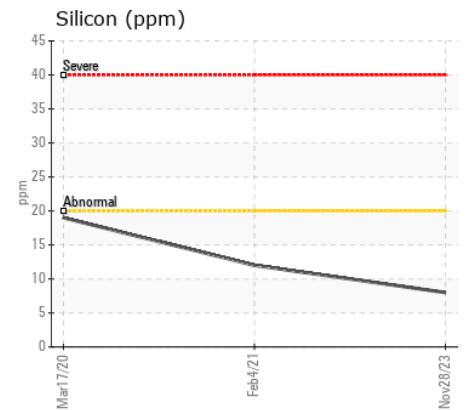
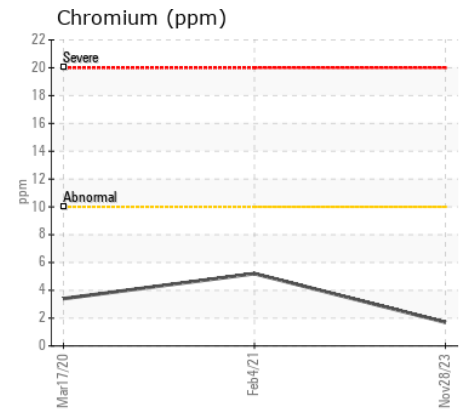
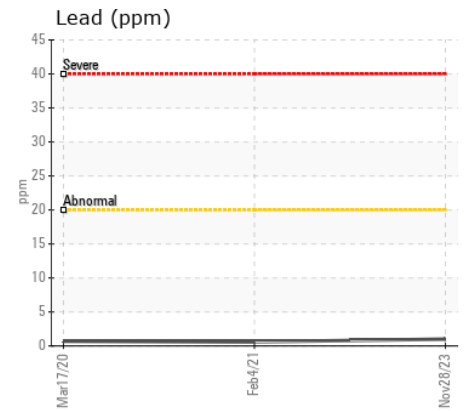
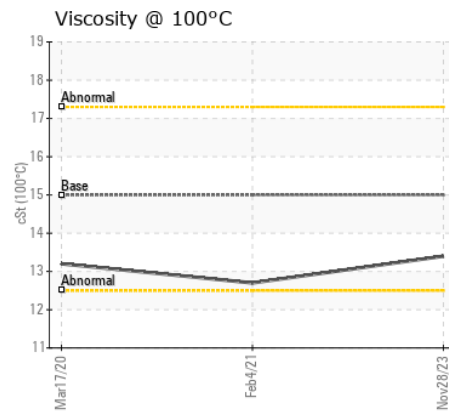
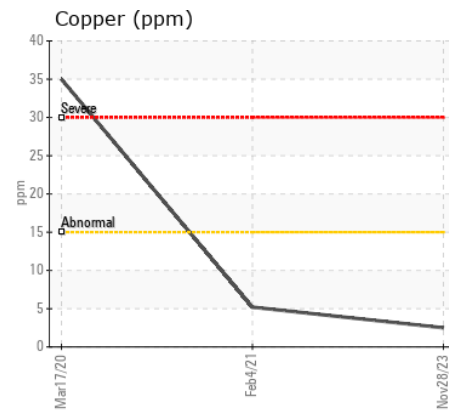
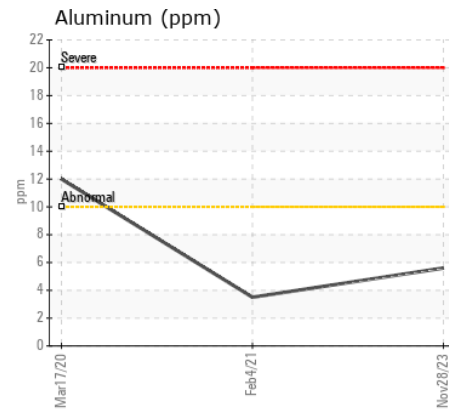
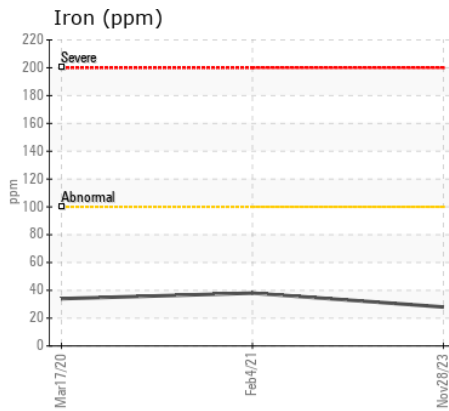
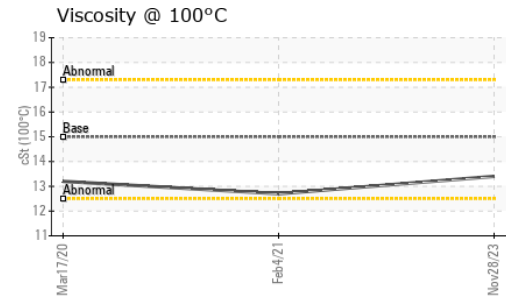
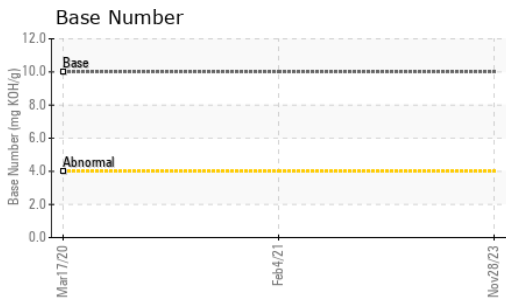
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>8</b>	12	19
Potassium	ppm	ASTM D5185m	>20	<b>4</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>1.2</b>	0.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.9</b>	10.8	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.0</b>	22	20.3
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>	0	4
Boron	ppm	ASTM D5185m	2.5	<b>35</b>	13	23
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>53</b>	54	24
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	1	3
Magnesium	ppm	ASTM D5185m	256	<b>451</b>	679	711
Calcium	ppm	ASTM D5185m	2057	<b>1757</b>	1653	1282
Phosphorus	ppm	ASTM D5185m	935	<b>975</b>	1056	731
Zinc	ppm	ASTM D5185m	1223	<b>1182</b>	1186	849
Sulfur	ppm	ASTM D5185m	4079	<b>3000</b>	2606	2390
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.1</b>	20.6	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>9.8</b>	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	<b>13.4</b>	12.7	13.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP433436 **Received** : 17 Jan 2024  
**Lab Number** : 06062306 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10833688 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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)

**RIPA AND ASSOCIATES**  
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