



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[3]**  
Machine Id  
**VOLVO L220F 6263**  
Component  
**Diesel Engine**  
Fluid  
**GOLF 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VC367068</b>	VC457210	VCE74487
Sample Date		Client Info		<b>23 Jan 2024</b>	13 Sep 2023	06 Apr 2023
Machine Age	hrs	Client Info		<b>6847</b>	6374	5614
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>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>30	<b>6</b>	7	8
Chromium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	15	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>5	<b>2</b>	1	<1
Lead	ppm	ASTM D5185m	>8	<b>2</b>	<1	1
Copper	ppm	ASTM D5185m	>85	<b>1</b>	8	<1
Tin	ppm	ASTM D5185m	>4	<b>1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

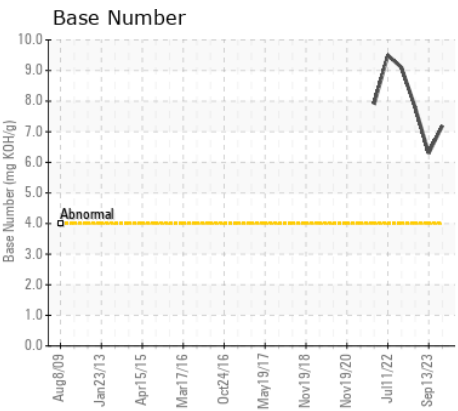
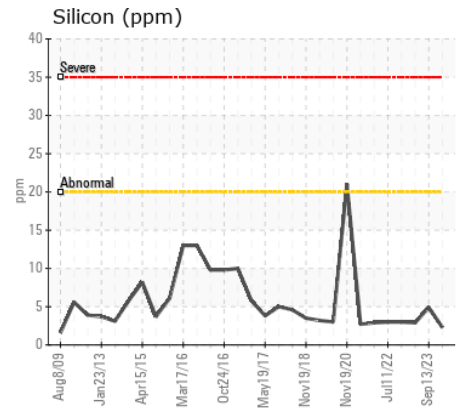
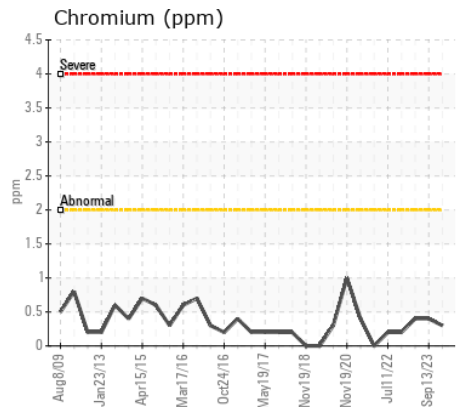
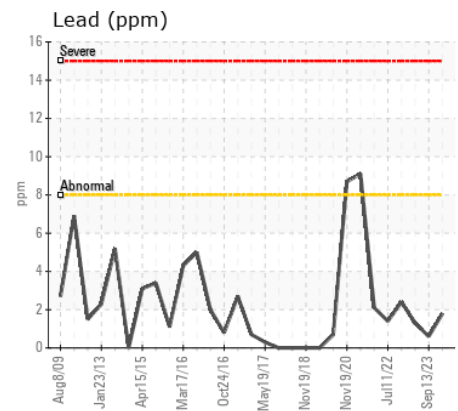
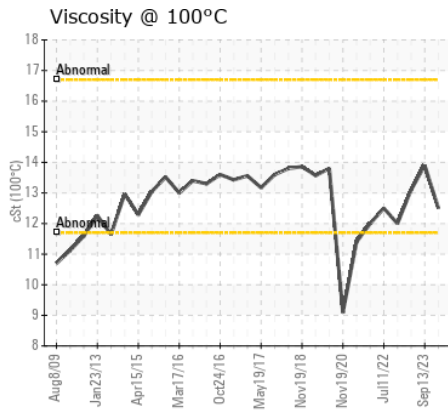
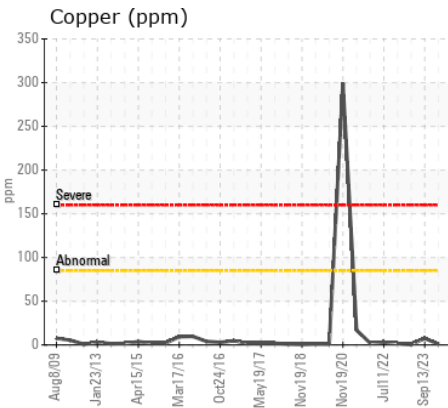
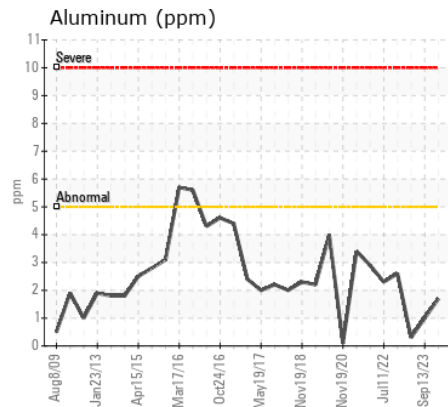
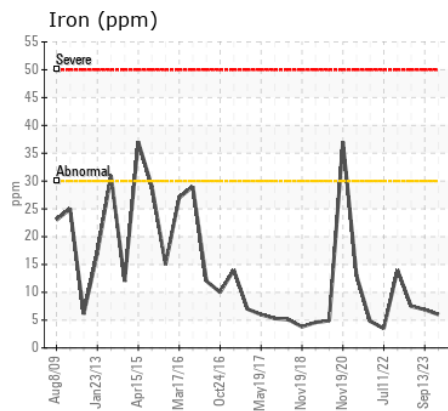
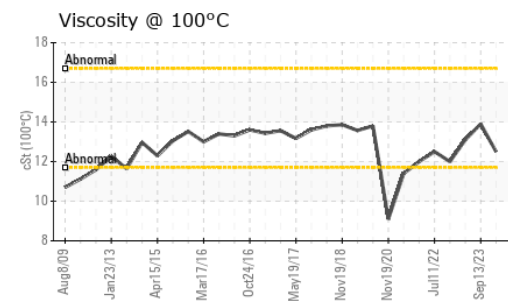
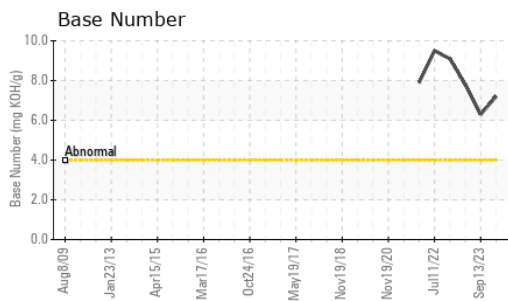
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	5	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	5	<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>0.4</b>	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.3</b>	9.2	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.7</b>	18.8	16.7
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>0</b>	5	<1
Boron	ppm	ASTM D5185m		<b>5</b>	86	13
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>14</b>	32	60
Manganese	ppm	ASTM D5185m		<b>0</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>36</b>	785	748
Calcium	ppm	ASTM D5185m		<b>2166</b>	1552	1149
Phosphorus	ppm	ASTM D5185m		<b>809</b>	716	965
Zinc	ppm	ASTM D5185m		<b>1046</b>	842	1154
Sulfur	ppm	ASTM D5185m		<b>3682</b>	3138	3115
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>10.8</b>	13.6	13.0
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.2</b>	6.3	7.8
Visc @ 100°C	cSt	ASTM D445		<b>12.5</b>	13.9	13.1



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VC367068 **Received** : 30 Jan 2024  
**Lab Number** : 06073784 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10855875 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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Certificate L2367  
 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)