



# VOLVO

## OIL ANALYSIS REPORT

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



Area

[S50403270]

Machine Id

**VOLVO L90H 625153**

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>VCP440876</b>	VCP406284	VCP375054
Sample Date		Client Info		<b>09 Apr 2024</b>	18 May 2023	19 Jan 2023
Machine Age	hrs	Client Info		<b>6500</b>	5514	5001
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>11</b>	11	12
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	1
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>30	<b>4</b>	3	4
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	1
Copper	ppm	ASTM D5185m	>20	<b>2</b>	1	<1
Tin	ppm	ASTM D5185m	>20	<b>2</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

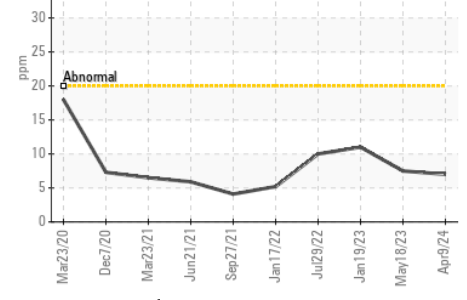
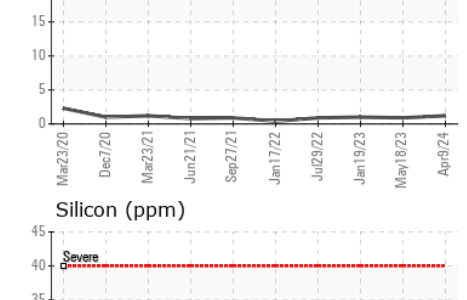
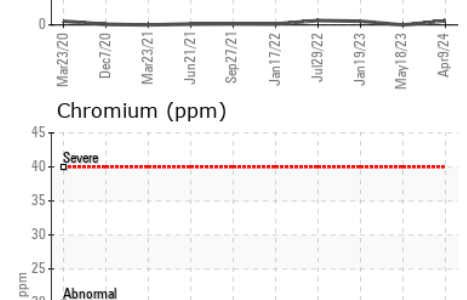
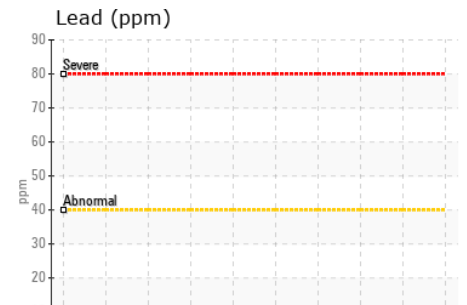
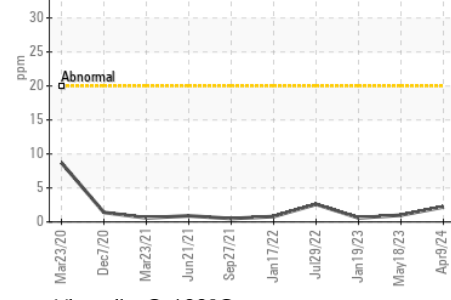
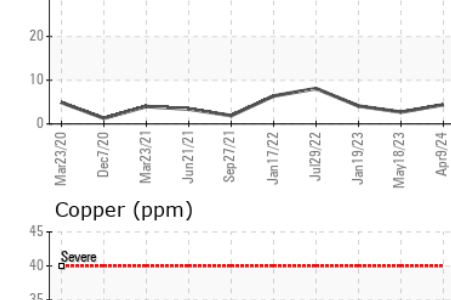
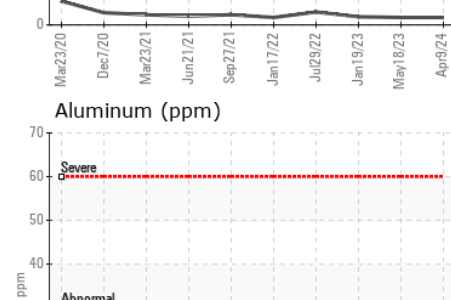
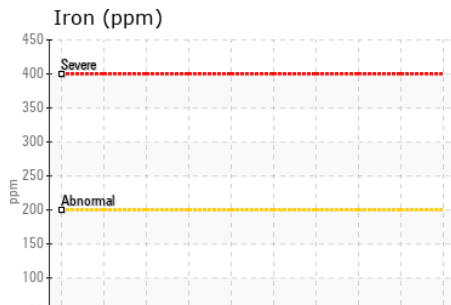
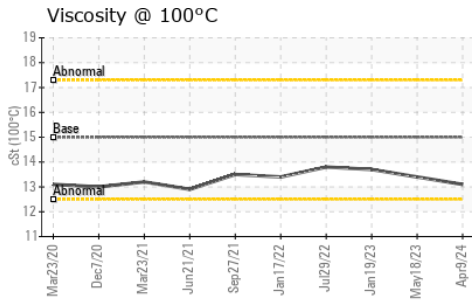
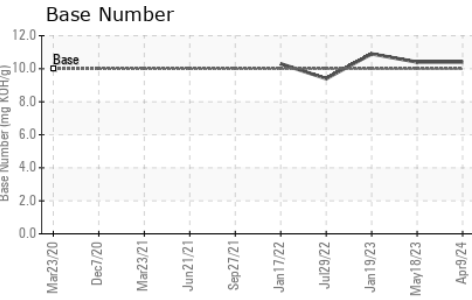
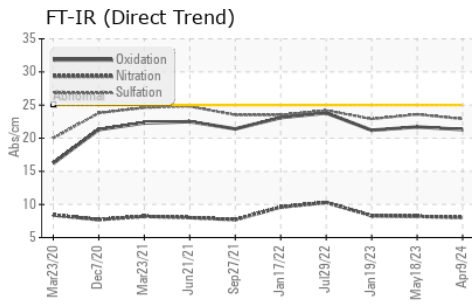
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>7</b>	8	11
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
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>0.5</b>	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.0</b>	8.2	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.9</b>	23.6	22.9
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>	4	2
Boron	ppm	ASTM D5185m	2.5	<b>34</b>	38	34
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>42</b>	42	44
Manganese	ppm	ASTM D5185m	0.0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	256	<b>490</b>	551	545
Calcium	ppm	ASTM D5185m	2057	<b>1733</b>	1805	1848
Phosphorus	ppm	ASTM D5185m	935	<b>1021</b>	989	1023
Zinc	ppm	ASTM D5185m	1223	<b>1133</b>	1223	1244
Sulfur	ppm	ASTM D5185m	4079	<b>3230</b>	3325	3683
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.3</b>	21.7	21.2
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>10.4</b>	10.4	10.9
Visc @ 100°C	cSt	ASTM D445	15.0	<b>13.1</b>	13.4	13.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP440876  
**Lab Number** : 06152853  
**Unique Number** : 10982931  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**IAA - INSURANCE AUTO AUCTIONS - WESTCHESTER VC**  
 2 WESTBROOK CORPORATE CENTER STE. 5  
 WESTCHESTER, IL  
 US 60154  
 Contact: BILLY BUTLER

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)

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F: