



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[S50403254]**  
 Machine Id  
**VOLVO L90H 626333**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

### RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP440875</b>	VCP403561	VCP400409
Sample Date		Client Info		<b>09 Apr 2024</b>	15 Aug 2023	28 Feb 2023
Machine Age	hrs	Client Info		<b>4565</b>	2851	1718
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>6</b>	26	51
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	4
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	11	18
Lead	ppm	ASTM D5185m	>40	<b>2</b>	0	2
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	10
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	3
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

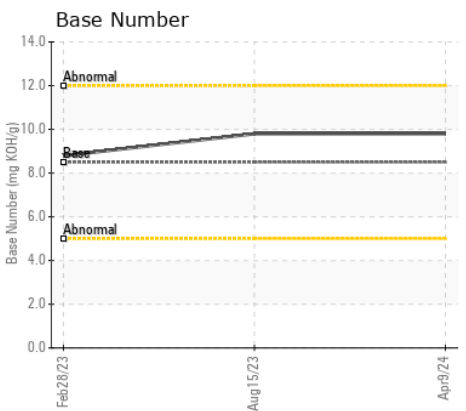
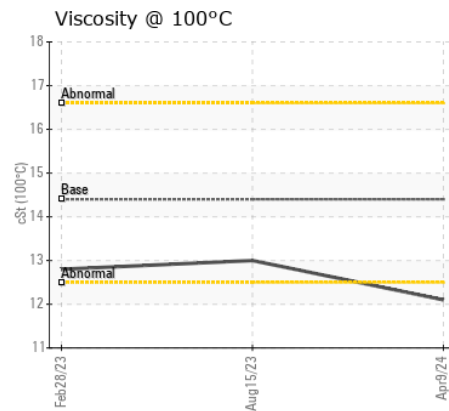
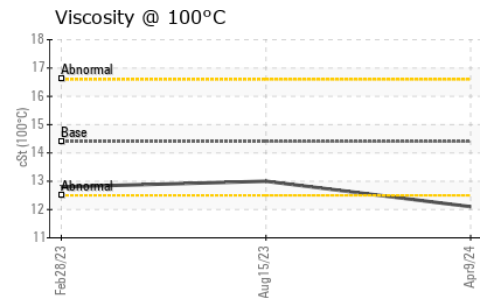
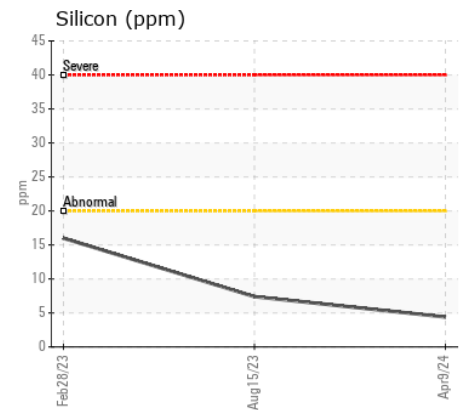
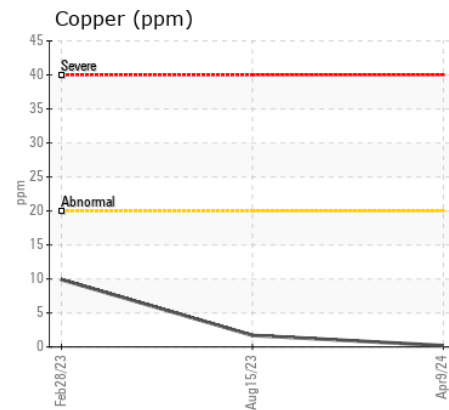
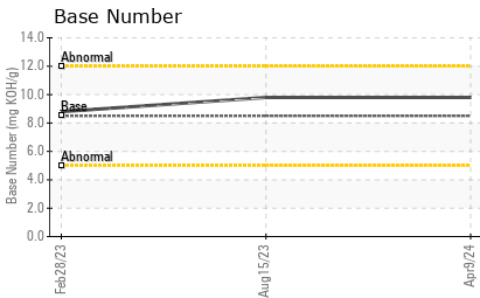
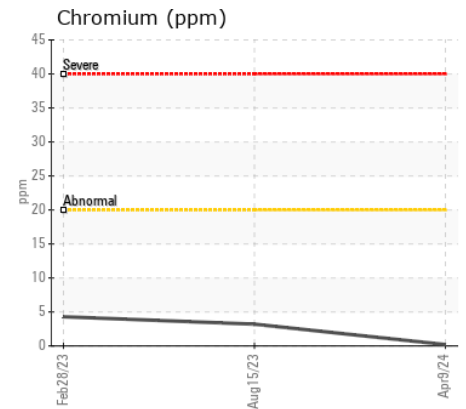
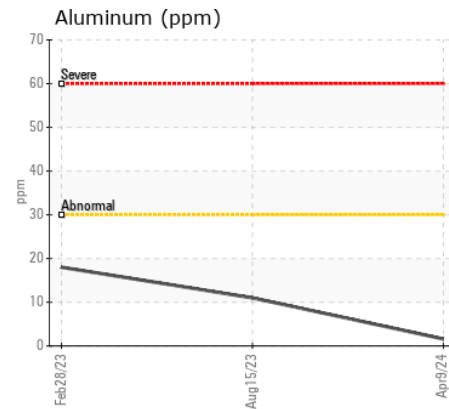
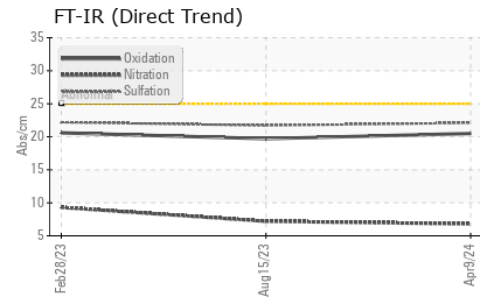
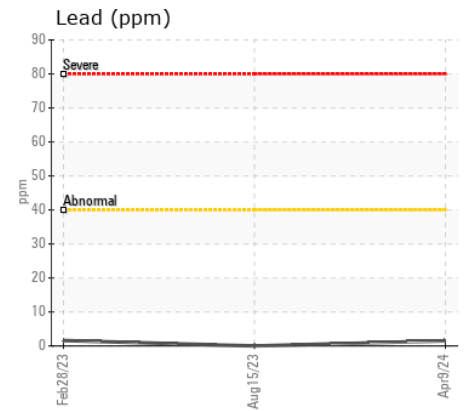
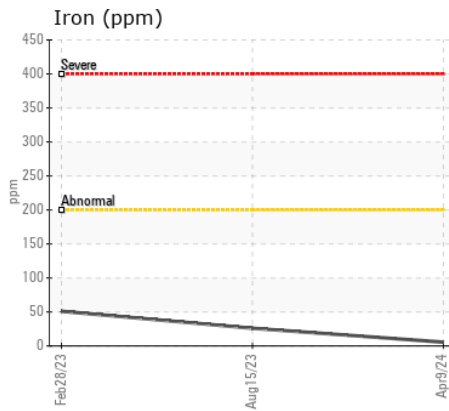
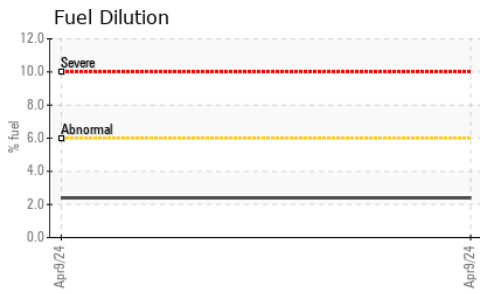
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	7	16
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	0
Fuel	%	ASTM D3524	>6.0	<b>2.4</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>0.1</b>	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.8</b>	7.2	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.1</b>	21.7	22.2
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	>158	<b>2</b>	2	4
Boron	ppm	ASTM D5185m	250	<b>35</b>	25	21
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>40</b>	41	42
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	5
Magnesium	ppm	ASTM D5185m	450	<b>524</b>	564	567
Calcium	ppm	ASTM D5185m	3000	<b>1776</b>	1773	1628
Phosphorus	ppm	ASTM D5185m	1150	<b>948</b>	968	876
Zinc	ppm	ASTM D5185m	1350	<b>1083</b>	1218	1098
Sulfur	ppm	ASTM D5185m	4250	<b>3298</b>	3560	3108
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.5</b>	19.7	20.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.8</b>	9.8	8.8
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.1</b>	13.0	12.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP440875  
**Lab Number** : 06154127  
**Unique Number** : 10989550  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, TBN )

**Received** : 19 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Wes Davis

**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: