



# VOLVO

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area  
**TMR-Rockledge [75200]**  
Machine Id  
**94142 VOLVO L90G 3184**  
Component  
**Hydraulic System**  
Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP446583	VCP411579	VCP385407
Sample Date		Client Info		21 Feb 2024	31 May 2023	10 Oct 2022
Machine Age	hrs	Client Info		10646	10091	9559
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ABNORMAL	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	2	5	3
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	<1	0
Lead	ppm	ASTM D5185m	>20	2	<1	0
Copper	ppm	ASTM D5185m	>20	5	3	1
Tin	ppm	ASTM D5185m	>20	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

### CONTAMINATION

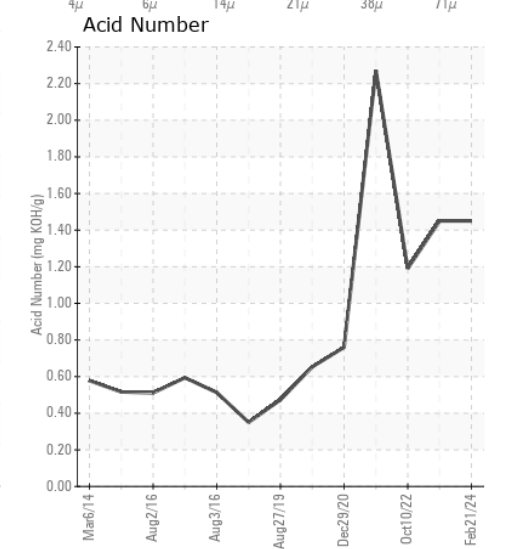
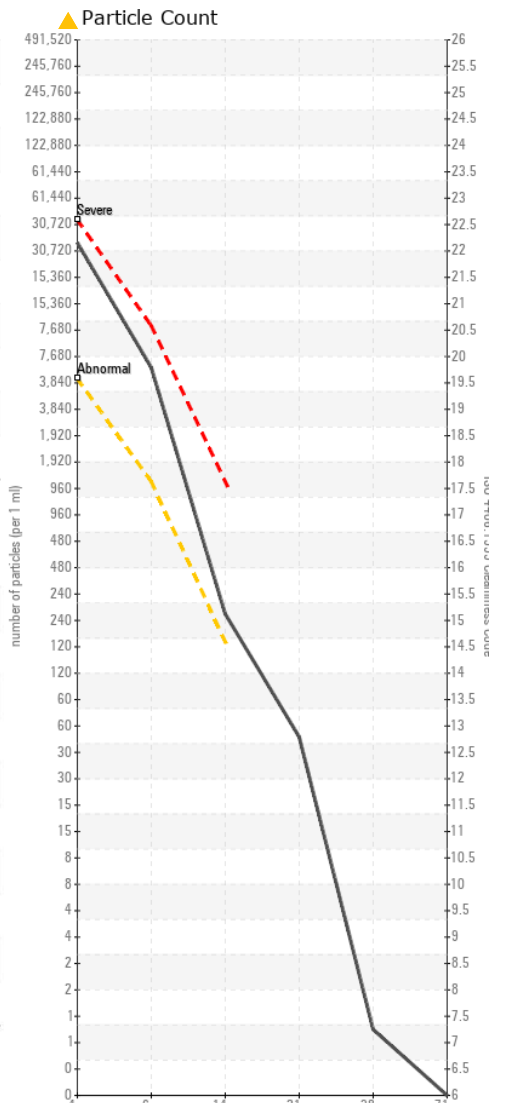
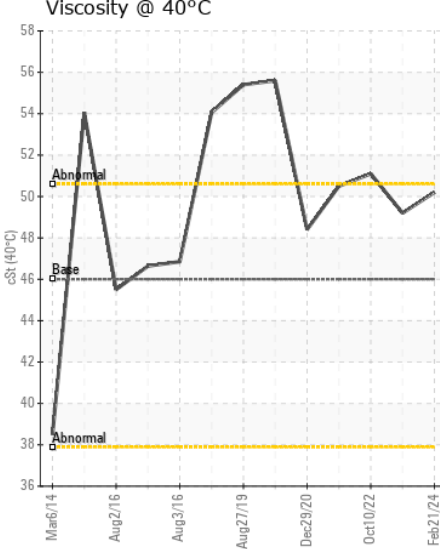
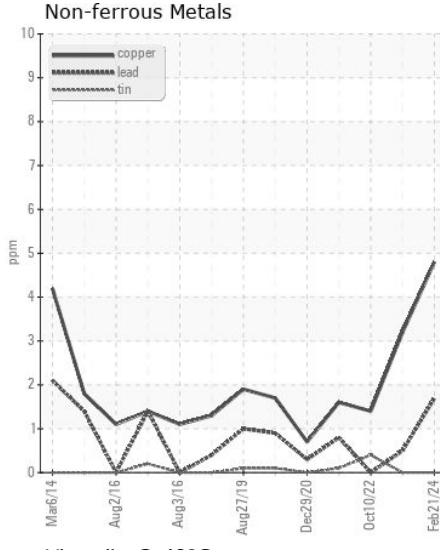
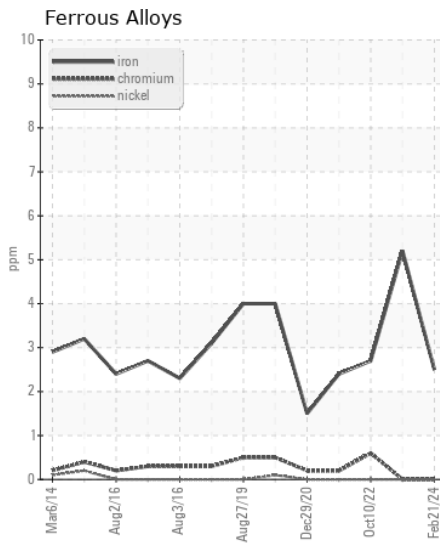
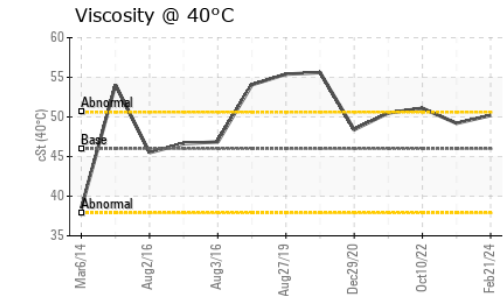
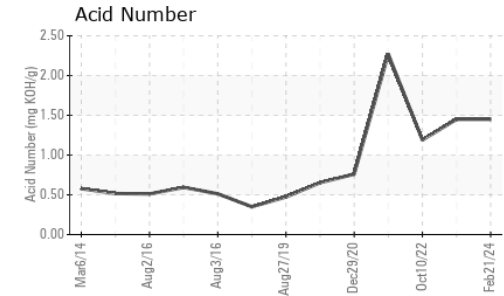
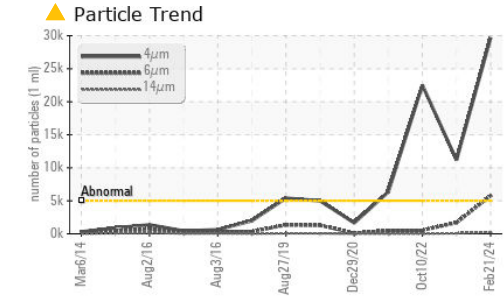
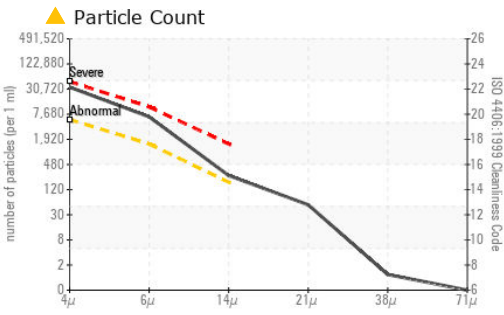
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	6	9	10
Potassium	ppm	ASTM D5185m	>20	1	2	0
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 29671	▲ 11180	22514
Particles >6µm		ASTM D7647	>1300	▲ 5783	● 1684	529
Particles >14µm		ASTM D7647	>160	▲ 230	78	21
Particles >21µm		ASTM D7647	>40	▲ 46	14	5
Particles >38µm		ASTM D7647	>10	1	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/20/15	▲ 21/18/13	22/16/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		4	0	1
Boron	ppm	ASTM D5185m	14	2	<1	0
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	<1	3	3
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	11	12	18
Calcium	ppm	ASTM D5185m	49	2371	2657	2670
Phosphorus	ppm	ASTM D5185m	354	922	932	920
Zinc	ppm	ASTM D5185m	419	1123	1158	1192
Sulfur	ppm	ASTM D5185m	3719	3183	3694	3828
Acid Number (AN)	mg KOH/g	ASTM D8045		1.45	1.45	1.19
Visc @ 40°C	cSt	ASTM D445	46	50.2	49.2	51.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP446583  
**Lab Number** : 06102900  
**Unique Number** : 10901130  
**Test Package** : MOB 2  
**Received** : 28 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 01 Mar 2024 - Don Baldrige

**TRADEMARK METALS RECYCLING - COCOA BEACH**  
 490 ANSIA ROAD  
 ROCKLEDGE, FL  
 US 32955  
 Contact: RYAN BOWDEN

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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