



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[SWO070200 IAA ATHENS]
Machine Id
VOLVO L90H 626710
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP438035	VCP442211	---
Sample Date		Client Info		13 Mar 2024	31 Jan 2024	---
Machine Age	hrs	Client Info		1219	1053	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	8	23	---
Chromium	ppm	ASTM D5185m	>10	<1	3	---
Nickel	ppm	ASTM D5185m	>10	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	3	10	---
Lead	ppm	ASTM D5185m	>20	0	<1	---
Copper	ppm	ASTM D5185m	>15	<1	3	---
Tin	ppm	ASTM D5185m	>10	<1	2	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

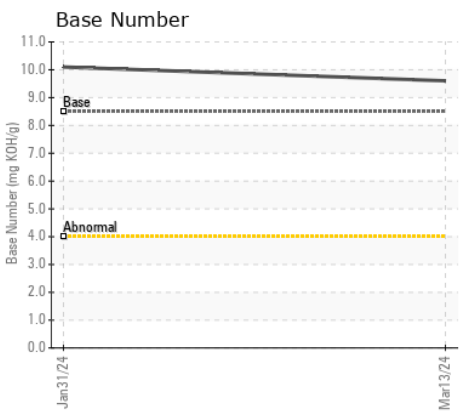
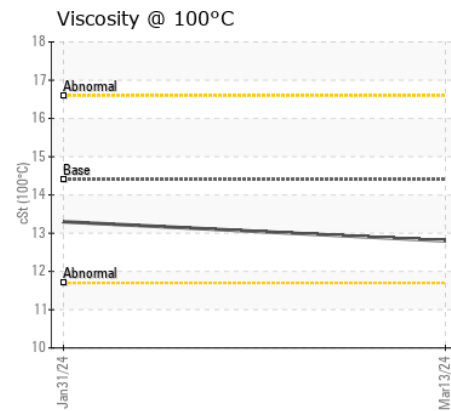
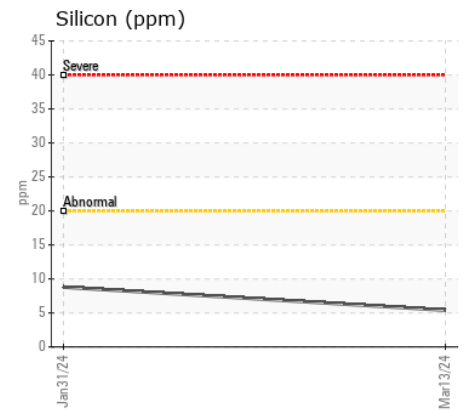
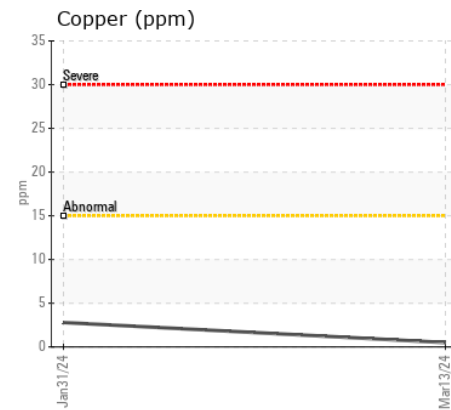
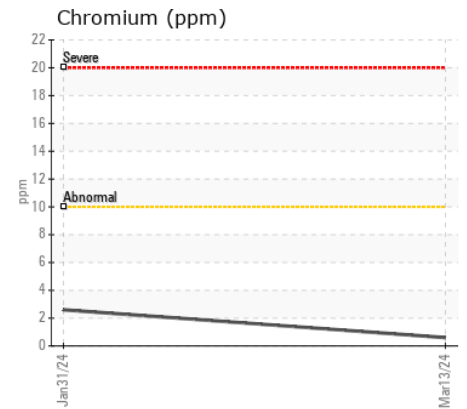
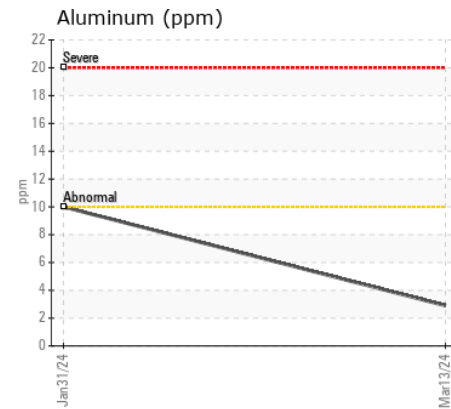
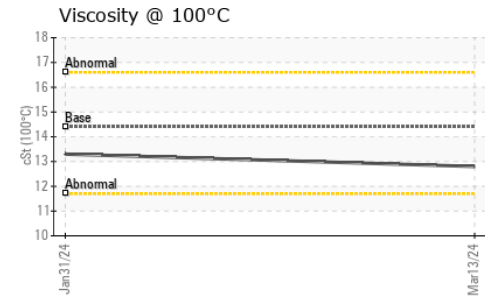
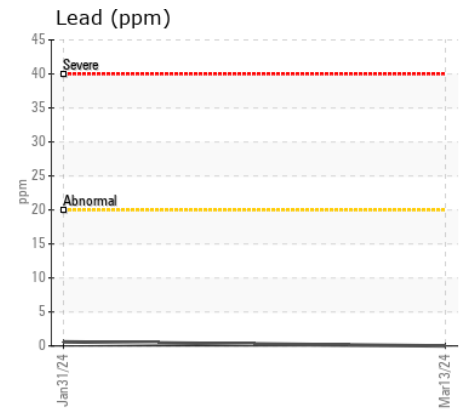
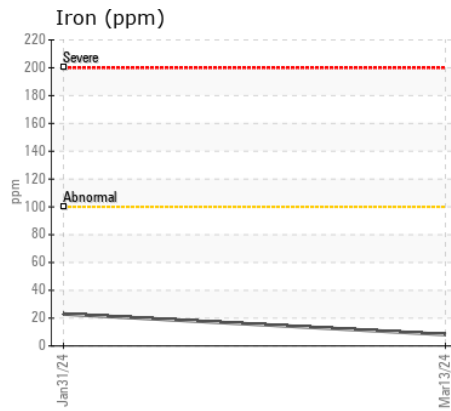
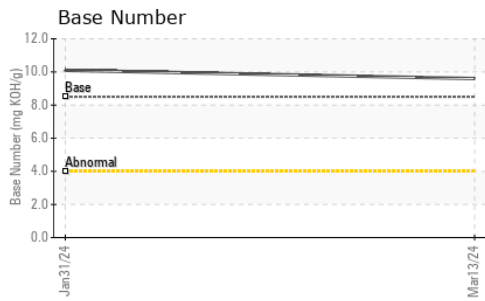
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	9	---
Potassium	ppm	ASTM D5185m	>20	0	2	---
Fuel		WC Method	>6.0	<1.0	<1.0	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	6.3	8.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	22.3	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	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	>216	1	3	---
Boron	ppm	ASTM D5185m	250	18	32	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	65	42	---
Manganese	ppm	ASTM D5185m		<1	2	---
Magnesium	ppm	ASTM D5185m	450	824	520	---
Calcium	ppm	ASTM D5185m	3000	1245	1755	---
Phosphorus	ppm	ASTM D5185m	1150	1036	1000	---
Zinc	ppm	ASTM D5185m	1350	1237	1172	---
Sulfur	ppm	ASTM D5185m	4250	3776	3026	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	19.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.6	10.1	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.8	13.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP438035 **Received** : 20 Mar 2024
Lab Number : 06124136 **Tested** : 21 Mar 2024
Unique Number : 10938287 **Diagnosed** : 21 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

COWIN EQUIPMENT COMPANY INC - GUNTERSVILLE
 15101 ALABAMA HWY 20
 MADISON, AL
 US 35756
 Contact: RANDY HARRIS
 RHARRIS@COWIN.COM
 T: (256)298-2322
 F: (256)355-5250

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)