



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
VOLVO EC950F 410081

Component
Diesel Engine

Fluid
{not provided} (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP412780	VCP393284	---
Sample Date		Client Info		31 Oct 2023	17 Mar 2023	---
Machine Age	hrs	Client Info		2973	1146	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ATTENTION	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	10	23	---
Chromium	ppm	ASTM D5185m	>20	<1	1	---
Nickel	ppm	ASTM D5185m	>2	3	3	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	5	7	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	2	86	---
Tin	ppm	ASTM D5185m	>15	<1	2	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

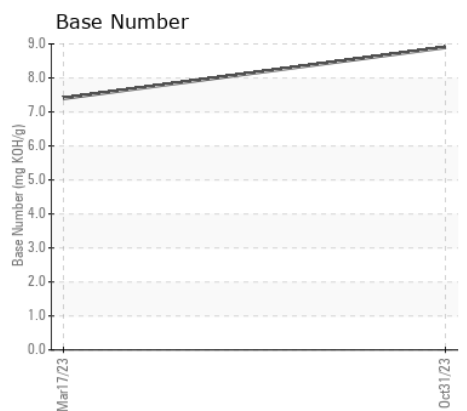
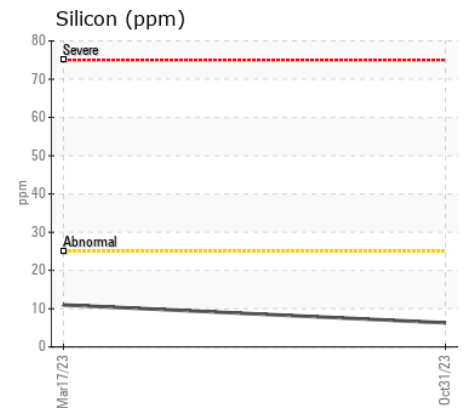
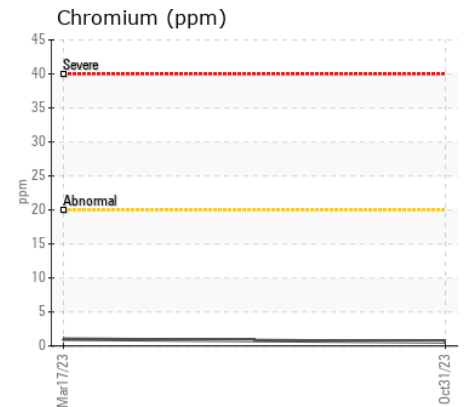
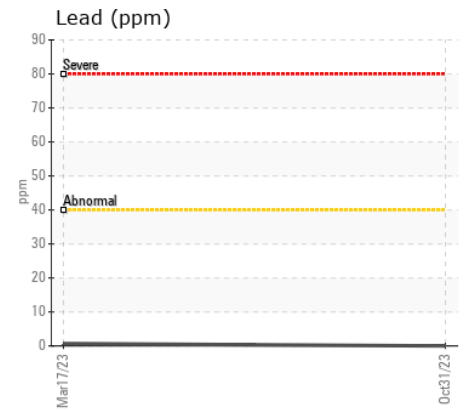
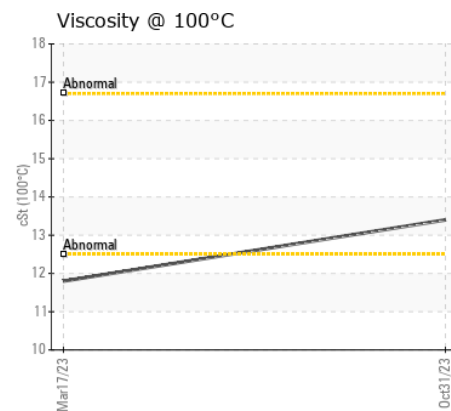
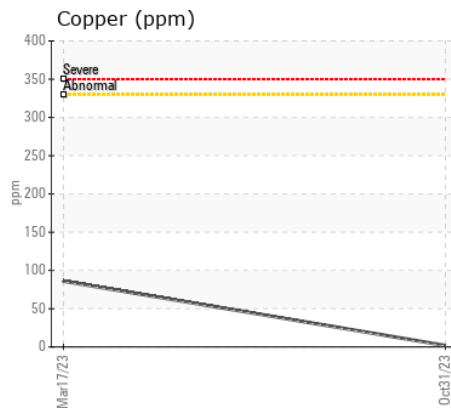
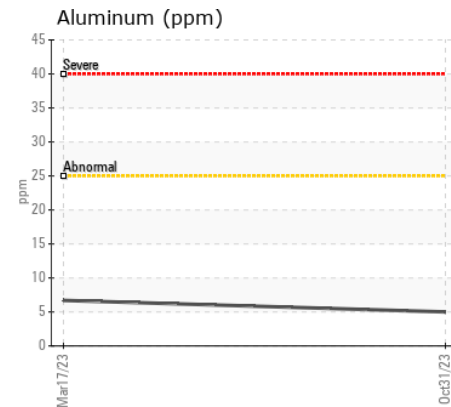
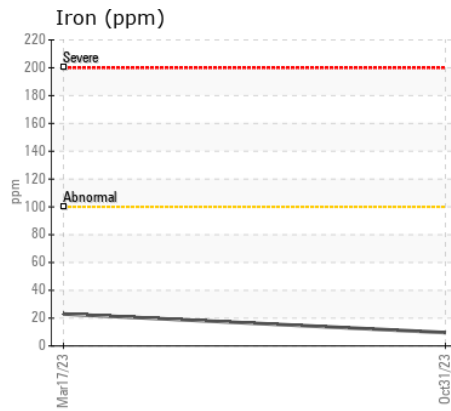
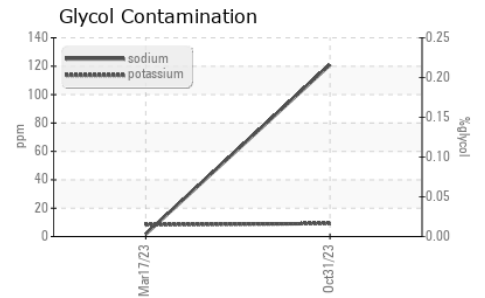
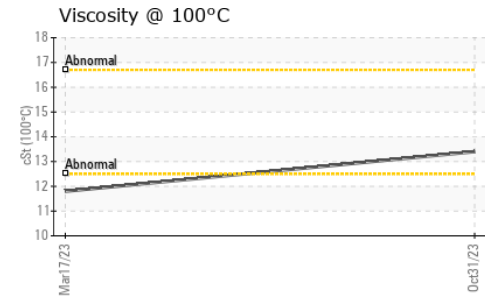
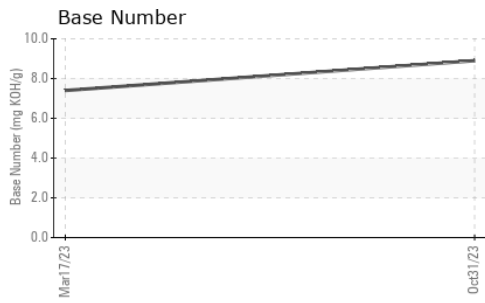
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	6	11	---
Potassium	ppm	ASTM D5185m	>20	9	8	---
Fuel		WC Method	>6.0	<1.0	1.1	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol	%	*ASTM D2982		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1.1	1.3	---
Nitration	Abs/cm	*ASTM D7624	>20	9.1	10.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	23.2	---
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	>0.2	NEG	NEG	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		▲ 121	2	---
Boron	ppm	ASTM D5185m		132	125	---
Barium	ppm	ASTM D5185m		<1	2	---
Molybdenum	ppm	ASTM D5185m		92	79	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		673	505	---
Calcium	ppm	ASTM D5185m		1464	1740	---
Phosphorus	ppm	ASTM D5185m		807	741	---
Zinc	ppm	ASTM D5185m		990	892	---
Sulfur	ppm	ASTM D5185m		3206	2653	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	17.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.9	7.4	---
Visc @ 100°C	cSt	ASTM D445		13.4	11.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP412780
Lab Number : 05995360
Unique Number : 10723720
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

Received : 01 Nov 2023
Tested : 03 Nov 2023
Diagnosed : 03 Nov 2023 - Jonathan Hester

403 - ASCENDUM MACHINERY INC - FARGO
 3739 38TH ST SW, SUITE E
 FARGO, ND
 US 58104
 Contact: JESSE SCHEELE
 jesse.scheele@ascendummachinery.com

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)

T: (701)356-4072