



VOLVO

OIL ANALYSIS REPORT

WEAR**NORMAL****CONTAMINATION****SEVERE****FLUID CONDITION****SEVERE**

Area

[2673-1]

Machine Id

VOLVO A30G 752891

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. The oil is near the end of it's useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP441051	---	---
Sample Date		Client Info		20 Dec 2023	---	---
Machine Age	hrs	Client Info		807	---	---
Oil Age	hrs	Client Info		280	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				SEVERE	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	5	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>2	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>25	2	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	48	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

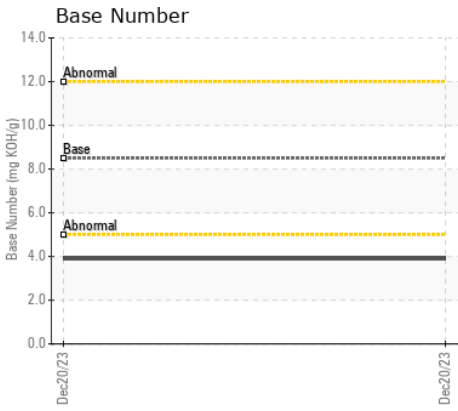
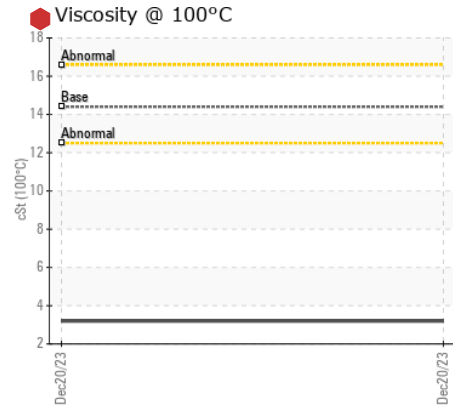
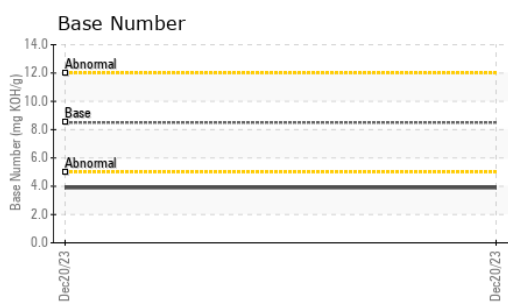
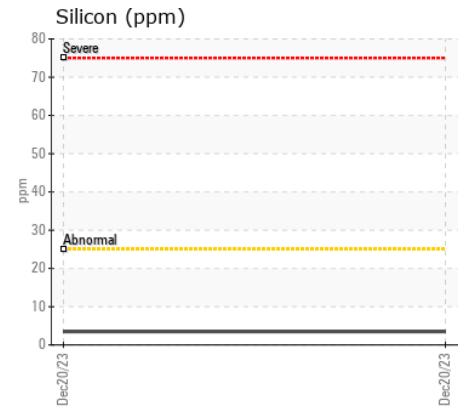
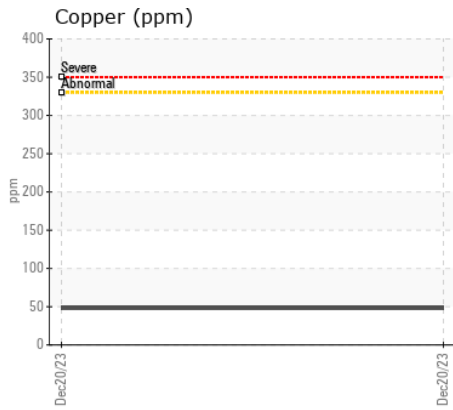
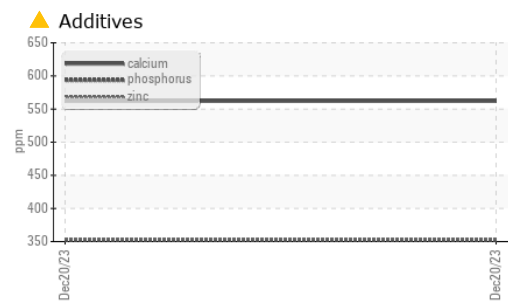
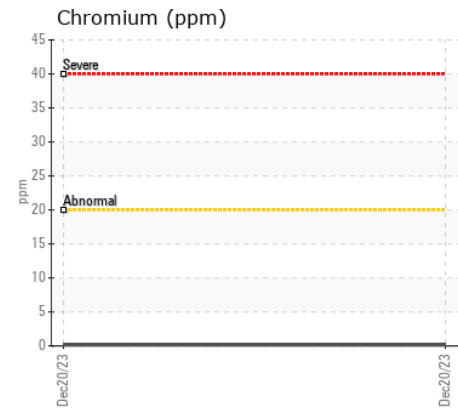
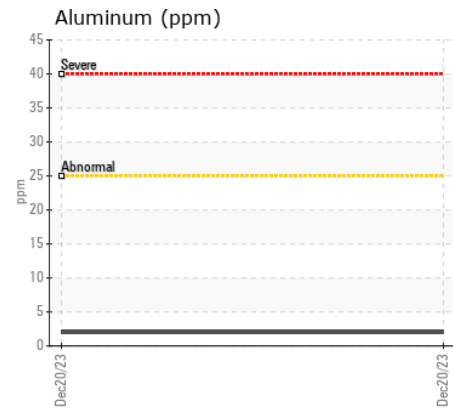
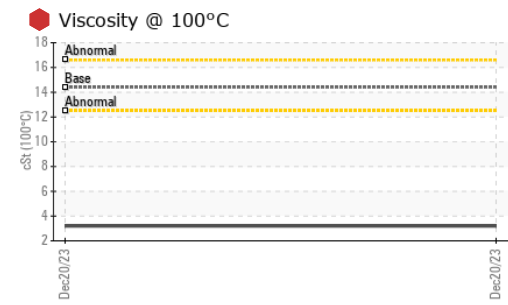
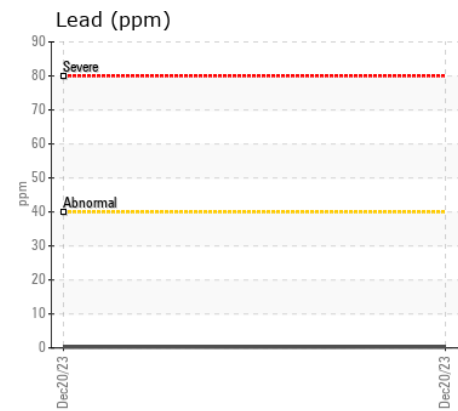
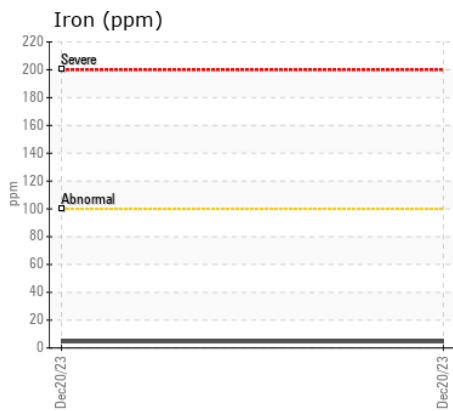
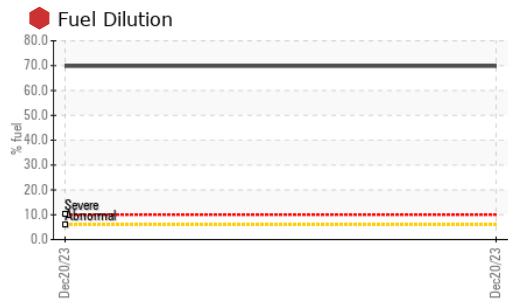
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>25	4	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---
Fuel	%	ASTM D3524	>6.0	69.8	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	7.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.1	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

Visc @ 100°C is severely low. Phosphorus ppm levels are abnormally low. Sulfur ppm levels are abnormally low. Zinc ppm levels are abnormally low. Calcium ppm levels are abnormally low. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>158	0	---	---
Boron	ppm	ASTM D5185m	250	12	---	---
Barium	ppm	ASTM D5185m	10	0	---	---
Molybdenum	ppm	ASTM D5185m	100	15	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m	450	146	---	---
Calcium	ppm	ASTM D5185m	3000	562	---	---
Phosphorus	ppm	ASTM D5185m	1150	352	---	---
Zinc	ppm	ASTM D5185m	1350	354	---	---
Sulfur	ppm	ASTM D5185m	4250	1086	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	3.9	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	3.2	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP441051 **Received** : 27 Dec 2023
Lab Number : 06045783 **Diagnosed** : 28 Dec 2023
Unique Number : 10806391 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

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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)