



VOLVO

OIL ANALYSIS REPORT

WEAR**NORMAL****CONTAMINATION****ABNORMAL****FLUID CONDITION****ABNORMAL**

Machine Id

VOLVO A30G 742003

Component

Diesel Engine

Fluid

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP411533	VCP347543	VCP312825
Sample Date		Client Info		25 Dec 2023	02 Jun 2022	13 Aug 2021
Machine Age	hrs	Client Info		4127	2071	1487
Oil Age	hrs	Client Info		500	0	500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	13	13	11
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>25	<1	2	2
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	<1	6	22
Tin	ppm	ASTM D5185m	>15	0	1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

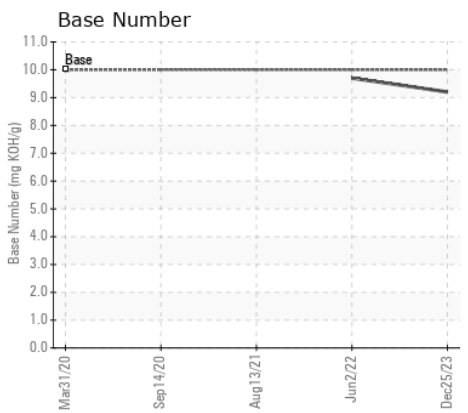
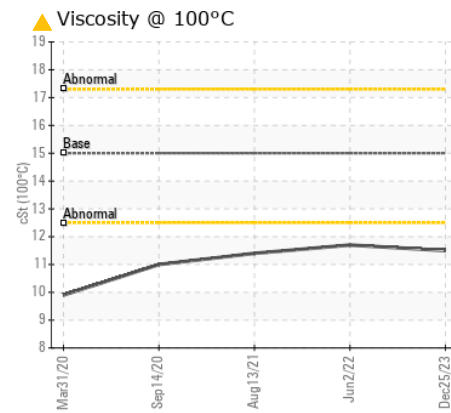
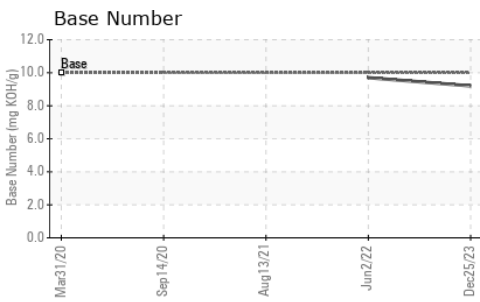
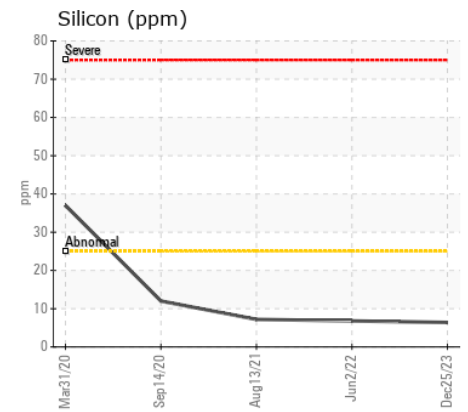
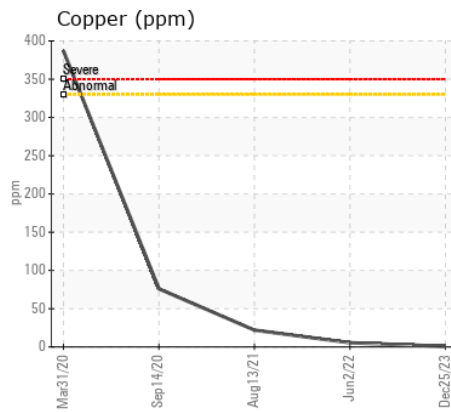
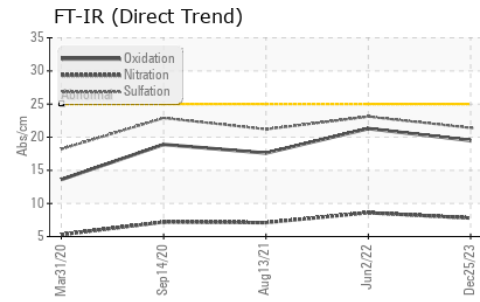
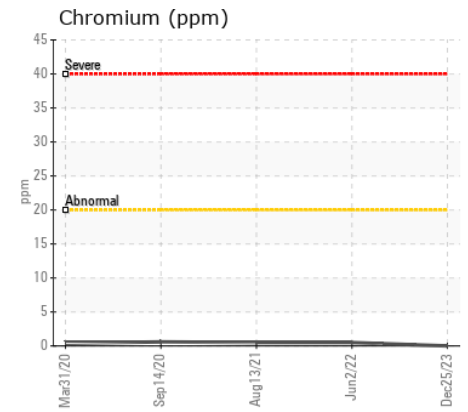
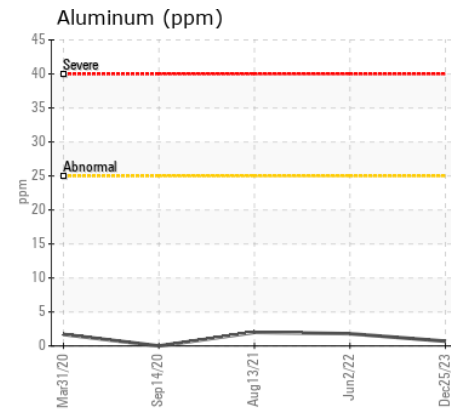
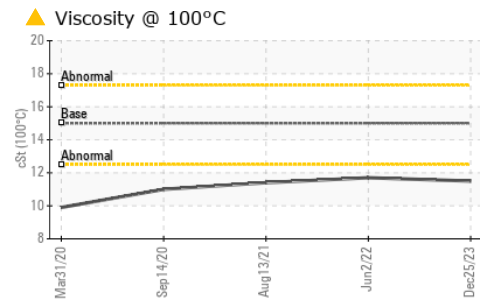
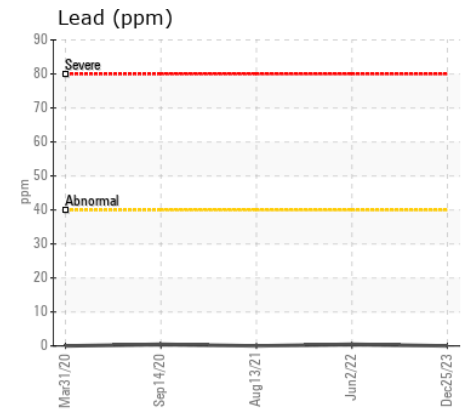
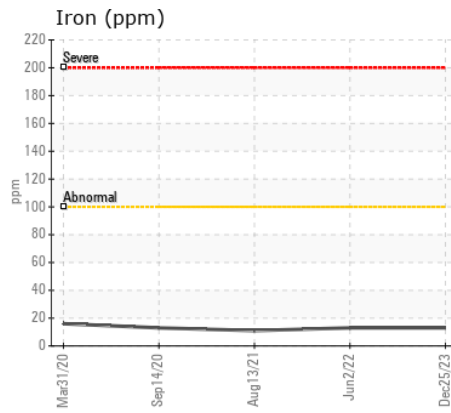
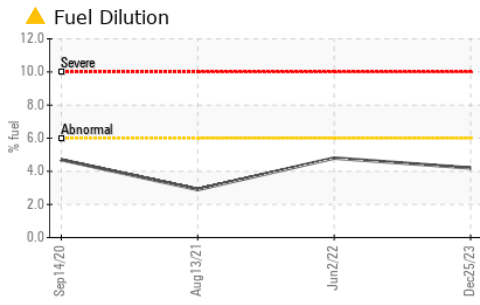
There is a moderate amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	6	7	7
Potassium	ppm	ASTM D5185m	>20	0	1	7
Fuel	%	ASTM D3524	>6.0	▲ 4.2	▲ 4.8	▲ 2.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.8	8.6	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	23.1	21.2
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

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		3	<1	2
Boron	ppm	ASTM D5185m	2.5	38	45	46
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	35	40	39
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	256	441	494	504
Calcium	ppm	ASTM D5185m	2057	1545	1604	1593
Phosphorus	ppm	ASTM D5185m	935	780	914	890
Zinc	ppm	ASTM D5185m	1223	986	1102	1002
Sulfur	ppm	ASTM D5185m	4079	2522	3048	3171
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.5	21.3	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.2	9.7	---
Visc @ 100°C	cSt	ASTM D445	15.0	▲ 11.5	▲ 11.7	● 11.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP411533
Lab Number : 06044527
Unique Number : 10805135
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)

Received : 26 Dec 2023
Tested : 29 Dec 2023
Diagnosed : 29 Dec 2023 - Jonathan Hester

MCCLUNG-LOGAN EQUIPMENT CO - WISE
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 US 24293
 Contact: DANNY BARRINGTON
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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)

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