



VOLVO

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[A11961]
Machine Id
VOLVO A35G 352094
Component
Diesel Engine
Fluid
MOBIL 15W40 (--- GAL)

RECOMMENDATION

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		VCP439494	VCP399141	VCP364145
Sample Date		Client Info		22 Jan 2024	24 Jan 2023	23 Aug 2022
Machine Age	hrs	Client Info		2380	1950	1220
Oil Age	hrs	Client Info		250	250	500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ATTENTION

WEAR

The copper level has decreased, but is still abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	2	18	15
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	2	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	<1	2	3
Lead	ppm	ASTM D5185m	>40	0	4	<1
Copper	ppm	ASTM D5185m	>20	▲ 26	▲ 135	4
Tin	ppm	ASTM D5185m	>20	0	2	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

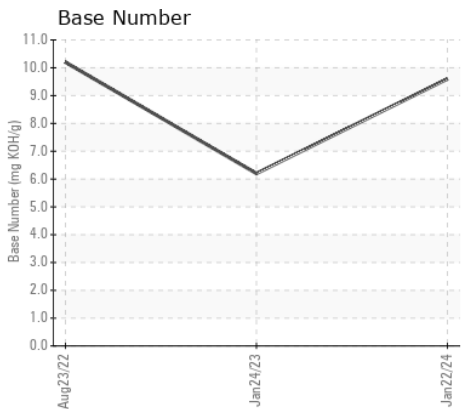
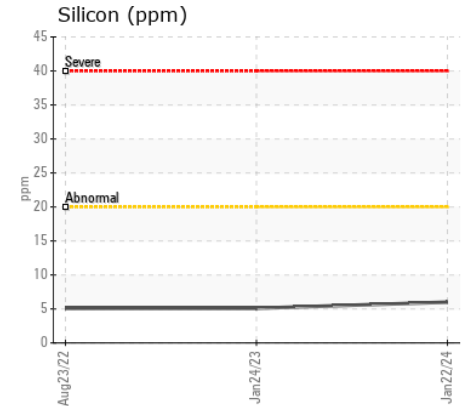
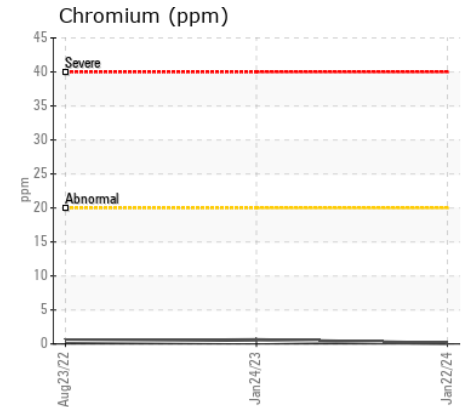
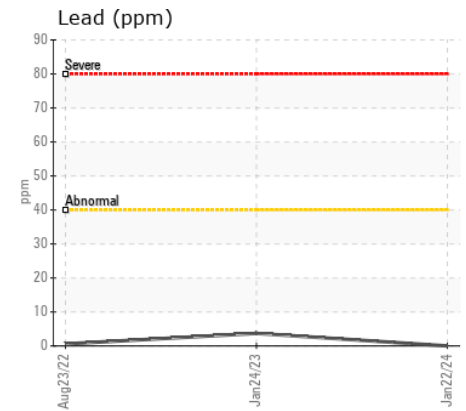
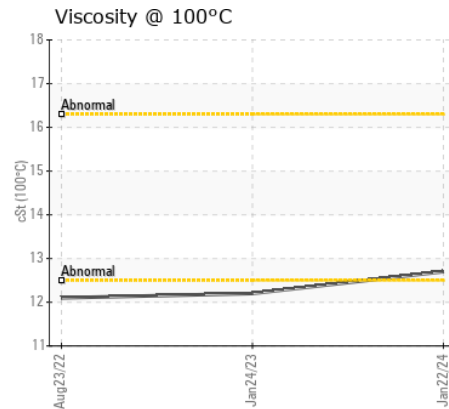
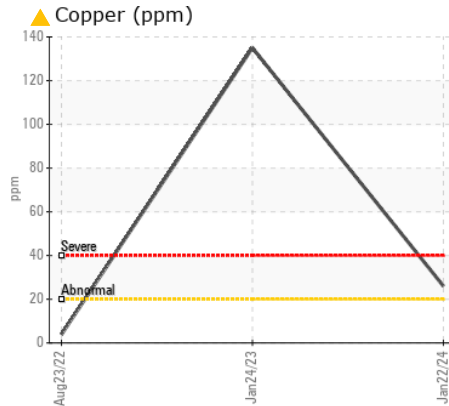
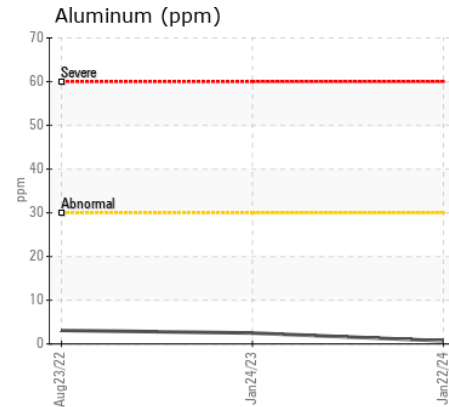
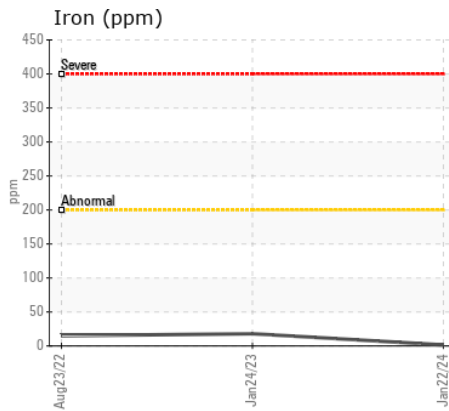
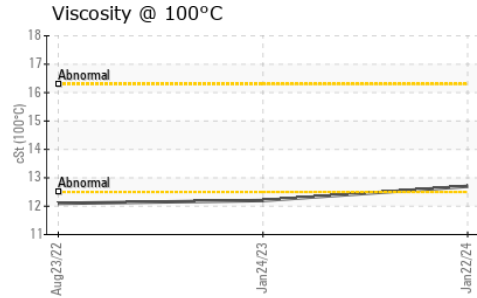
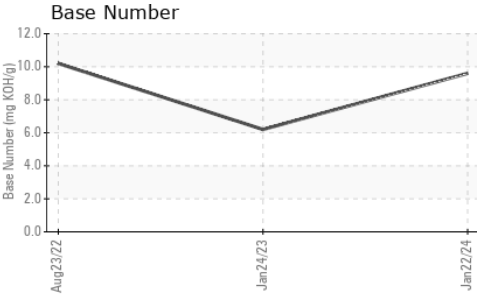
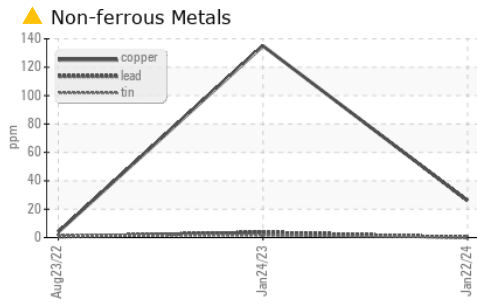
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	5	5
Potassium	ppm	ASTM D5185m	>20	0	1	1
Fuel		WC Method	>3.0	<1.0	<1.0	0.3
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	5.5	10.0	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	20.7	23.1
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 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	>118	<1	1	<1
Boron	ppm	ASTM D5185m		52	9	41
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		32	26	46
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		445	282	464
Calcium	ppm	ASTM D5185m		1676	2053	1585
Phosphorus	ppm	ASTM D5185m		944	869	900
Zinc	ppm	ASTM D5185m		1091	1142	1068
Sulfur	ppm	ASTM D5185m		2956	3839	2884
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	15.6	20.9
Base Number (BN)	mg KOH/g	ASTM D2896		9.6	6.2	10.2
Visc @ 100°C	cSt	ASTM D445		12.7	▲ 12.2	▲ 12.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP439494 **Received** : 12 Feb 2024
Lab Number : 06085795 **Tested** : 13 Feb 2024
Unique Number : 10873240 **Diagnosed** : 13 Feb 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: TBN)

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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