



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A45G 342614
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		VCP424887	VCP300845	VCP141069
Sample Date		Client Info		15 Jul 2024	24 Oct 2023	23 Jul 2021
Machine Age	hrs	Client Info		4112	3751	2062
Oil Age	hrs	Client Info		361	596	528
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	6	12	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	<1	3	0
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	2	4	22
Tin	ppm	ASTM D5185m	>15	0	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

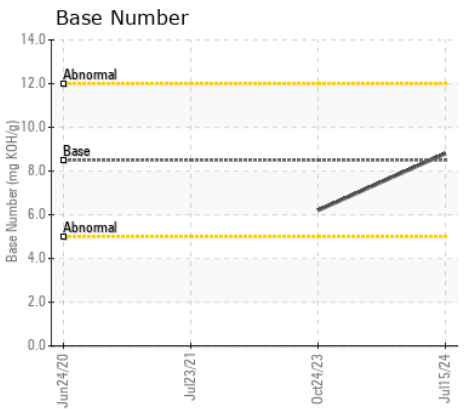
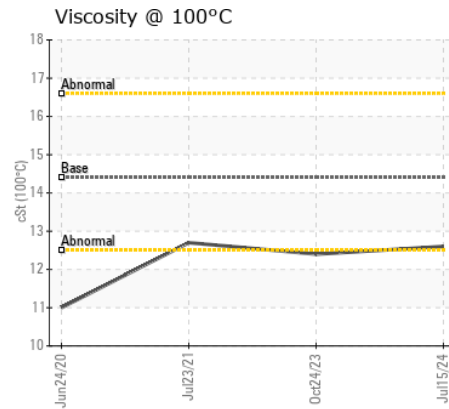
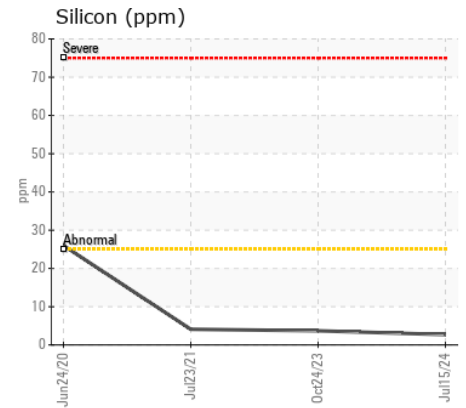
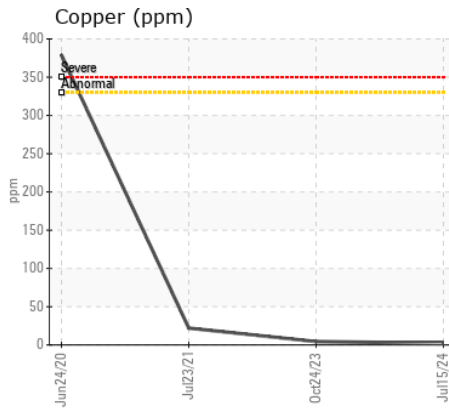
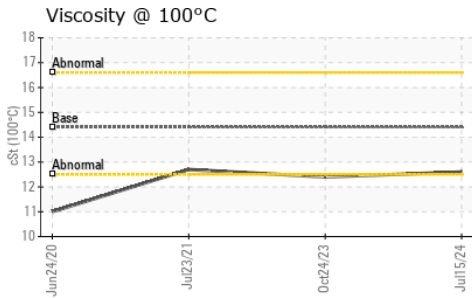
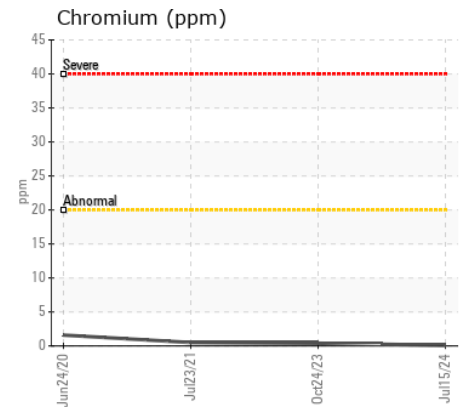
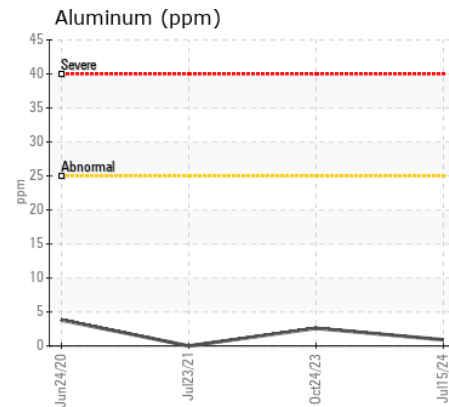
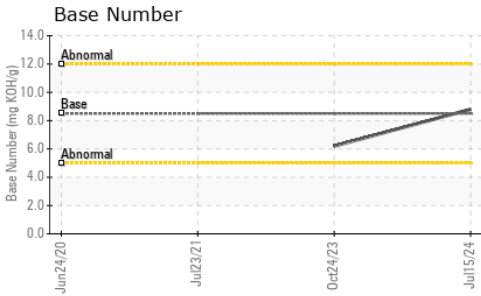
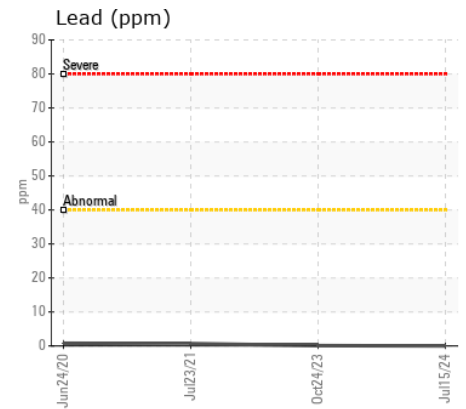
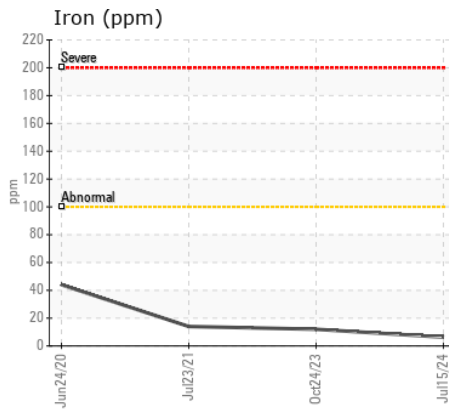
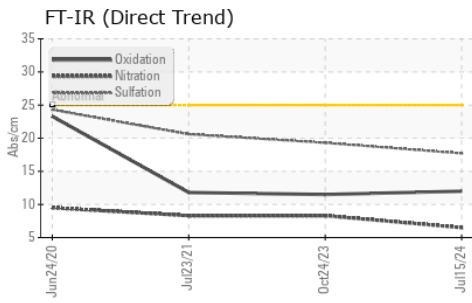
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	3	4	4
Potassium	ppm	ASTM D5185m	>20	<1	2	<1
Fuel		WC Method	>6.0	<1.0	0.6	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	6.5	8.3	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.7	19.3	20.6
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 suitable for further service.

Sodium	ppm	ASTM D5185m	>216	2	0	<1
Boron	ppm	ASTM D5185m	250	9	4	5
Barium	ppm	ASTM D5185m	10	0	7	0
Molybdenum	ppm	ASTM D5185m	100	46	24	12
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	450	683	309	160
Calcium	ppm	ASTM D5185m	3000	1413	1922	2311
Phosphorus	ppm	ASTM D5185m	1150	1001	908	964
Zinc	ppm	ASTM D5185m	1350	1140	1121	1060
Sulfur	ppm	ASTM D5185m	4250	3730	4288	3131
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.0	11.5	11.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.8	6.2	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.6	12.4	12.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP424887
Lab Number : 06237507
Unique Number : 11126341
Test Package : MOB 1 (Additional Tests: TBN)

Received : 16 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 2024 - Wes Davis

GLOVER CONSTRUCTION CO. INC.
 4493 US HWY 301 N
 PLEASANT HILL, NC
 US 27866
 Contact: BRENDA GAY
 bgay@gloverconstruction.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)

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