MOB II

VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
[A11723]
Machine Id
VOLVO L180H 5446
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

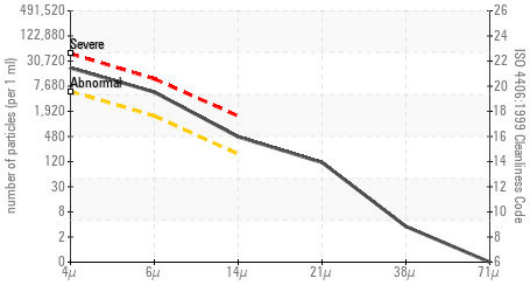
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

FLUID CONDITION

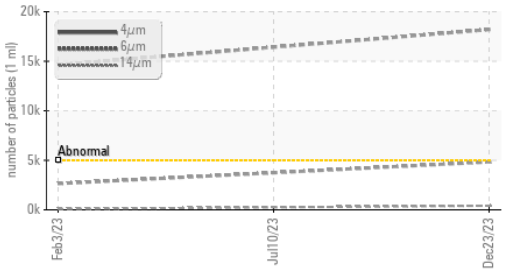
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP439487	VCP416168	VCP399121
Sample Date		Client Info		23 Dec 2023	10 Jul 2023	03 Feb 2023
Machine Age	hrs	Client Info		6982	6010	5041
Oil Age	hrs	Client Info		1500	2000	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>50	3	3	3
Chromium	ppm	ASTM D5185m	>20	2	2	1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	0	0
Lead	ppm	ASTM D5185m	>20	0	<1	<1
Copper	ppm	ASTM D5185m	>20	2	2	2
Tin	ppm	ASTM D5185m	>20	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	1	2	1
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 18200	---	▲ 14629
Particles >6µm		ASTM D7647	>1300	▲ 4834	---	▲ 2649
Particles >14µm		ASTM D7647	>160	▲ 413	---	82
Particles >21µm		ASTM D7647	>40	▲ 101	---	15
Particles >38µm		ASTM D7647	>10	3	---	0
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/19/16	---	▲ 21/19/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	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
Sodium	ppm	ASTM D5185m		3	3	2
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	0	<1	<1
Manganese	ppm	ASTM D5185m	0.0	0	<1	0
Magnesium	ppm	ASTM D5185m	2.6	4	9	8
Calcium	ppm	ASTM D5185m	49	58	64	66
Phosphorus	ppm	ASTM D5185m	354	446	435	419
Zinc	ppm	ASTM D5185m	419	487	541	519
Sulfur	ppm	ASTM D5185m	3719	1225	1581	1234
Acid Number (AN)	mg KOH/g	ASTM D8045		0.45	0.38	0.27
Visc @ 40°C	cSt	ASTM D445	46	44.1	44.0	44.3

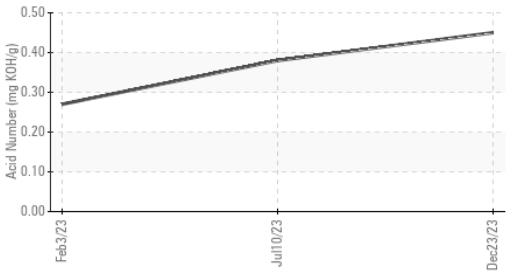
Particle Count



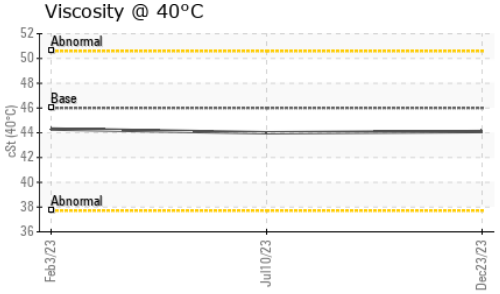
Particle Trend



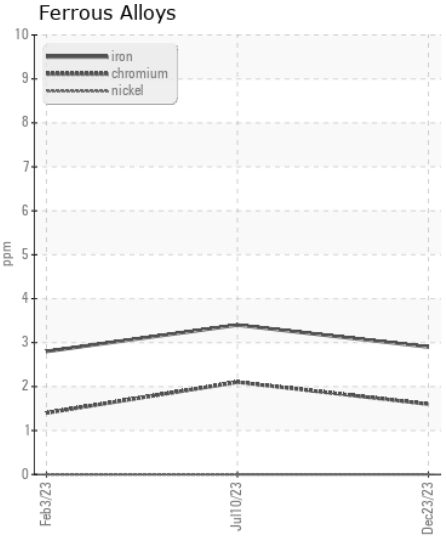
Acid Number



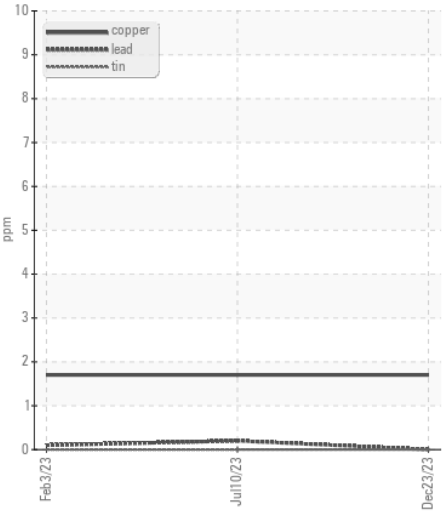
Viscosity @ 40°C



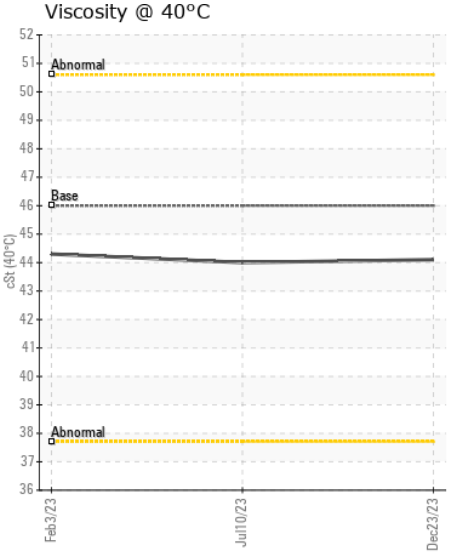
Ferrous Alloys



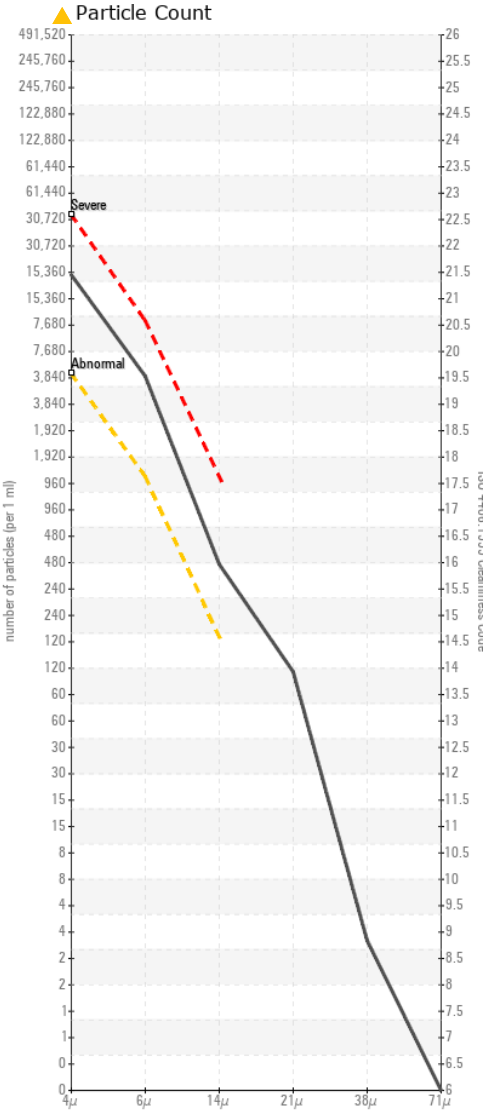
Non-ferrous Metals



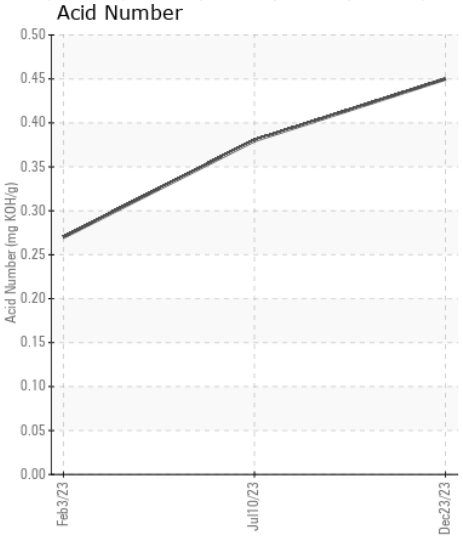
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP439487
Lab Number : 06055871
Unique Number : 10821820
Test Package : MOB 2

Recieved : 09 Jan 2024
Diagnosed : 10 Jan 2024
Diagnostician : Wes Davis

Certificate L2367

COVANTA METAL MARKETING LLC
500 MIDDLE DR
FAIRLESS HILLS, PA
US 19030
Contact: J.P.

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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