



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area

[5480]

Machine Id

352150

Component

Hydraulic System

Fluid

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP392989	---	---
Sample Date		Client Info		15 Apr 2024	---	---
Machine Age	hrs	Client Info		5936	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	17	---	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---	---
Nickel	ppm	ASTM D5185(m)	>10	<1	---	---
Titanium	ppm	ASTM D5185(m)		<1	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	14	---	---
Lead	ppm	ASTM D5185(m)	>20	2	---	---
Copper	ppm	ASTM D5185(m)	>150	5	---	---
Tin	ppm	ASTM D5185(m)	>20	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The system cleanliness is acceptable for your target ISO 4406 cleanliness code.

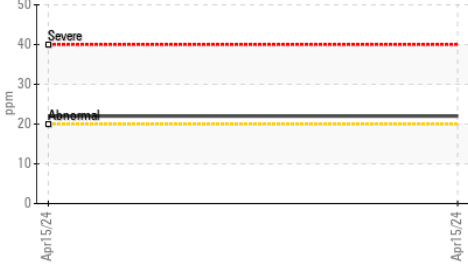
Silicon	ppm	ASTM D5185(m)	>20	▲ 22	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647		5407	---	---
Particles >6µm		ASTM D7647	>5000	380	---	---
Particles >14µm		ASTM D7647	>160	8	---	---
Particles >21µm		ASTM D7647	>40	2	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>-/19/14	20/16/10	---	---
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*	>0.1	NEG	---	---

FLUID CONDITION

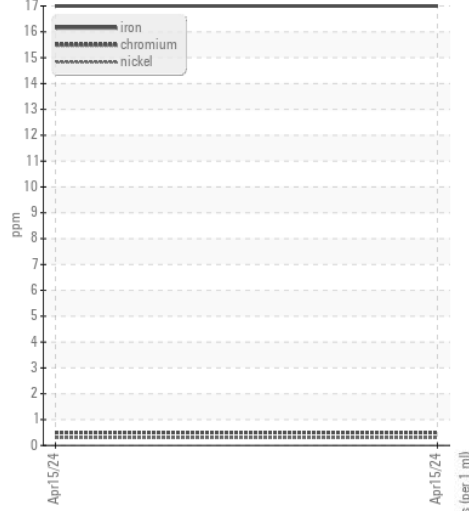
The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		2	---	---
Boron	ppm	ASTM D5185(m)	14	<1	---	---
Barium	ppm	ASTM D5185(m)	0.0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0.0	0	---	---
Manganese	ppm	ASTM D5185(m)	0.0	0	---	---
Magnesium	ppm	ASTM D5185(m)	2.6	4	---	---
Calcium	ppm	ASTM D5185(m)	49	70	---	---
Phosphorus	ppm	ASTM D5185(m)	354	314	---	---
Zinc	ppm	ASTM D5185(m)	419	408	---	---
Sulfur	ppm	ASTM D5185(m)	3719	1738	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	46	41.1	---	---

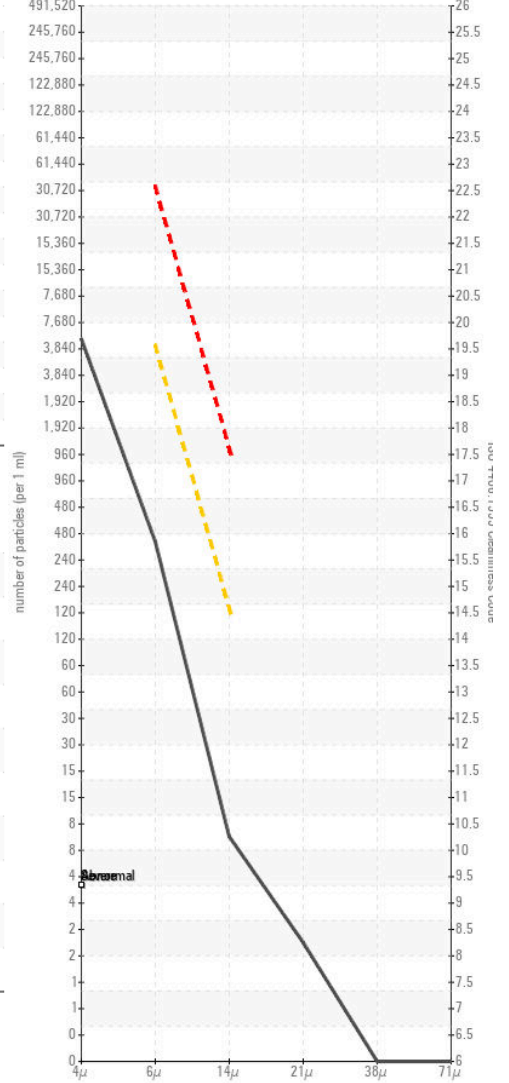
▲ Silicon (ppm)



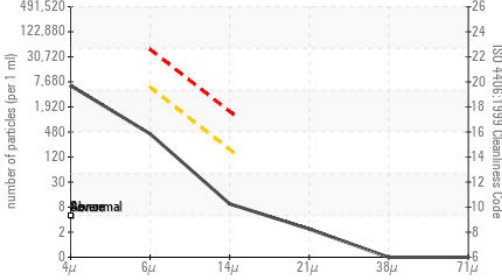
Ferrous Alloys



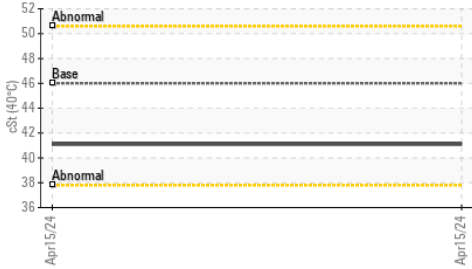
Particle Count



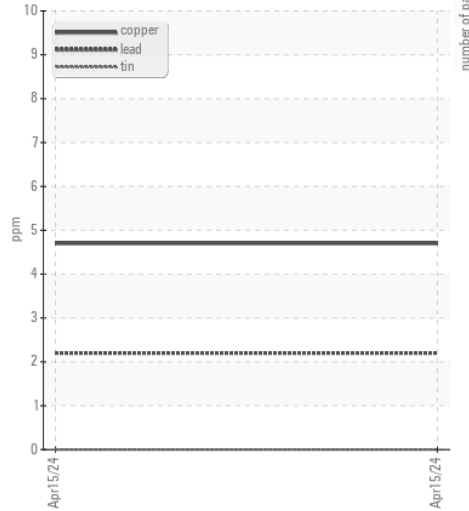
Particle Count



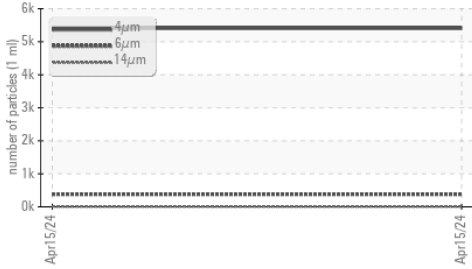
Viscosity @ 40°C



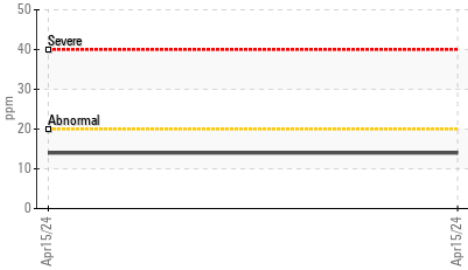
Non-ferrous Metals



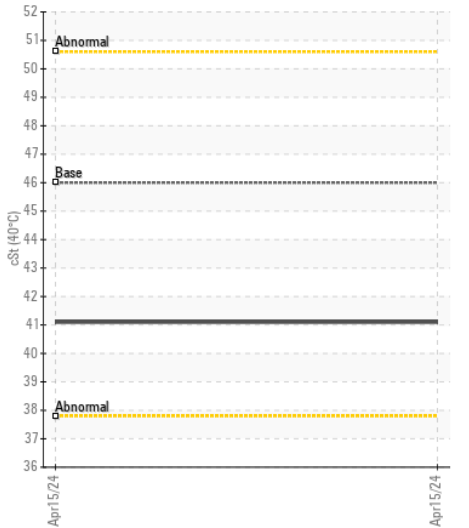
Particle Trend



Aluminum (ppm)



Viscosity @ 40°C



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : VCP392989 **Received** : 22 Apr 2024
Lab Number : 02630607 **Tested** : 23 Apr 2024
Unique Number : 5763739 **Diagnosed** : 23 Apr 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PrtCount)

GREAT WEST EQUIPMENT
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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.