



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL



Area
REGION OF WATERLOO [406065]

Machine Id
VOLVO L120H 633154

Component
Hydraulic System

Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP448162	VCP380365	VCP391791
Sample Date		Client Info		29 May 2024	11 Jan 2024	30 Aug 2023
Machine Age	hrs	Client Info		5042	4039	3000
Oil Age	hrs	Client Info		1000	4000	3000
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	9	19	15
Chromium	ppm	ASTM D5185(m)	>20	5	10	7
Nickel	ppm	ASTM D5185(m)	>10	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	1	<1
Lead	ppm	ASTM D5185(m)	>20	0	1	1
Copper	ppm	ASTM D5185(m)	>20	3	6	5
Tin	ppm	ASTM D5185(m)	>20	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

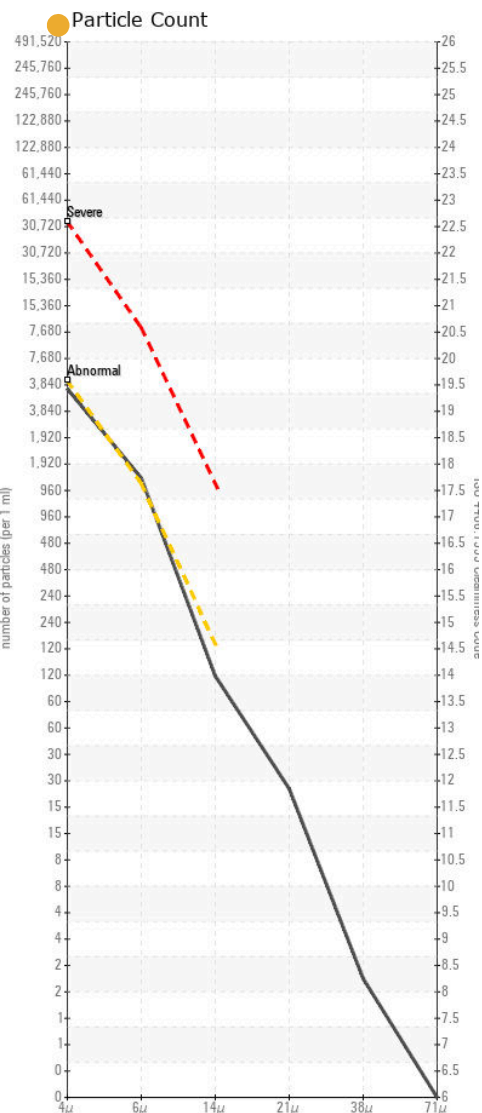
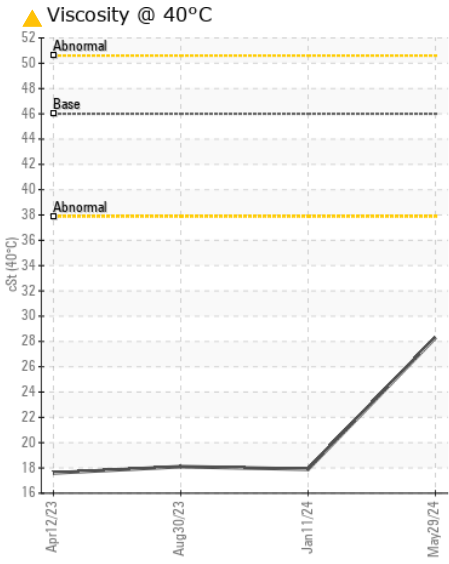
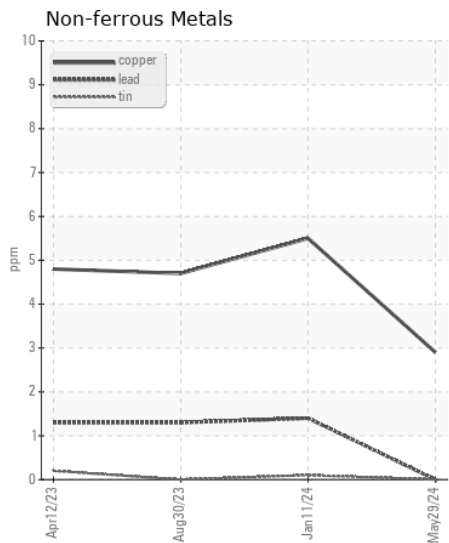
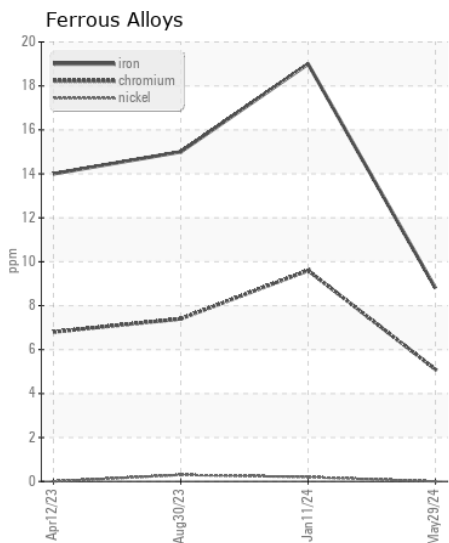
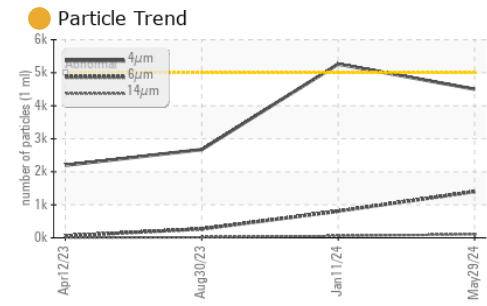
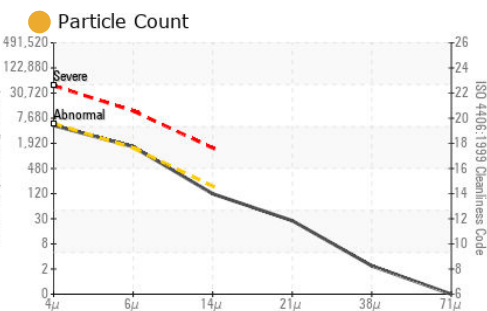
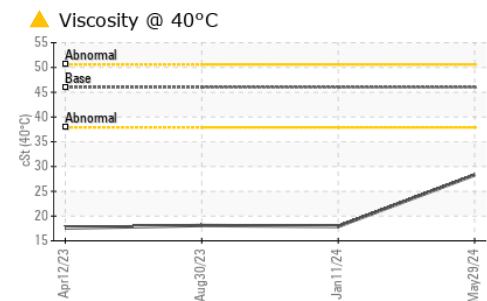
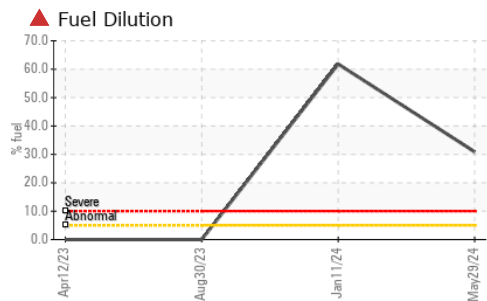
There is a light amount of silt (particulates < 14 microns in size) present in the oil. There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<1	4	4
Potassium	ppm	ASTM D5185(m)	>20	<1	2	1
Fuel	%	ASTM D7593*		▲ 30.9	▲ 61.8	---
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	● 4500	● 5262	2673
Particles >6µm		ASTM D7647	>1300	● 1398	807	268
Particles >14µm		ASTM D7647	>160	105	56	17
Particles >21µm		ASTM D7647	>40	24	14	6
Particles >38µm		ASTM D7647	>10	2	2	1
Particles >71µm		ASTM D7647	>3	0	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	● 19/18/14	● 20/17/13	19/15/11
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	.2%	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		3	5	4
Boron	ppm	ASTM D5185(m)	14	<1	<1	<1
Barium	ppm	ASTM D5185(m)	0.0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0.0	0	0	0
Manganese	ppm	ASTM D5185(m)	0.0	0	0	0
Magnesium	ppm	ASTM D5185(m)	2.6	2	2	2
Calcium	ppm	ASTM D5185(m)	49	80	57	54
Phosphorus	ppm	ASTM D5185(m)	354	363	354	376
Zinc	ppm	ASTM D5185(m)	419	443	450	456
Sulfur	ppm	ASTM D5185(m)	3719	1497	1316	1206
Visc @ 40°C	cSt	ASTM D7279(m)	46	▲ 28.3	▲ 17.9	▲ 18.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : VCP448162 **Received** : 05 Jun 2024
Lab Number : 02639920 **Tested** : 06 Jun 2024
Unique Number : 5789082 **Diagnosed** : 06 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PercentFuel, PrtCount)

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.

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