



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Area

[716015]

Machine Id

314865 VOLVO EC380EL 314865

Component

Hydraulic System

Fluid

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP416499	VCP429393	VCP393321
Sample Date		Client Info		17 May 2024	18 Oct 2023	24 Feb 2023
Machine Age	hrs	Client Info		3875	2919	1792
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	7	3	5
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	0	1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>10	0	<1	0
Lead	ppm	ASTM D5185m	>10	<1	1	0
Copper	ppm	ASTM D5185m	>75	11	14	13
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

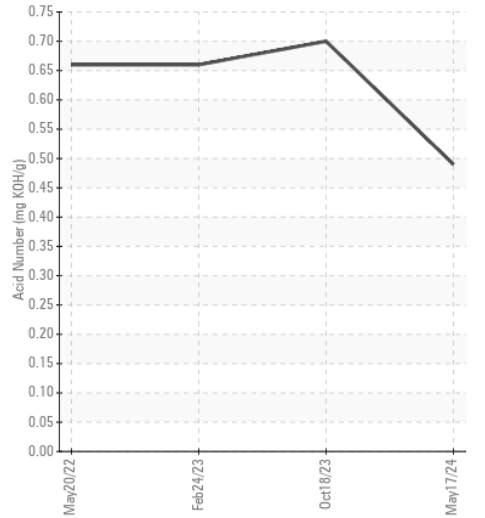
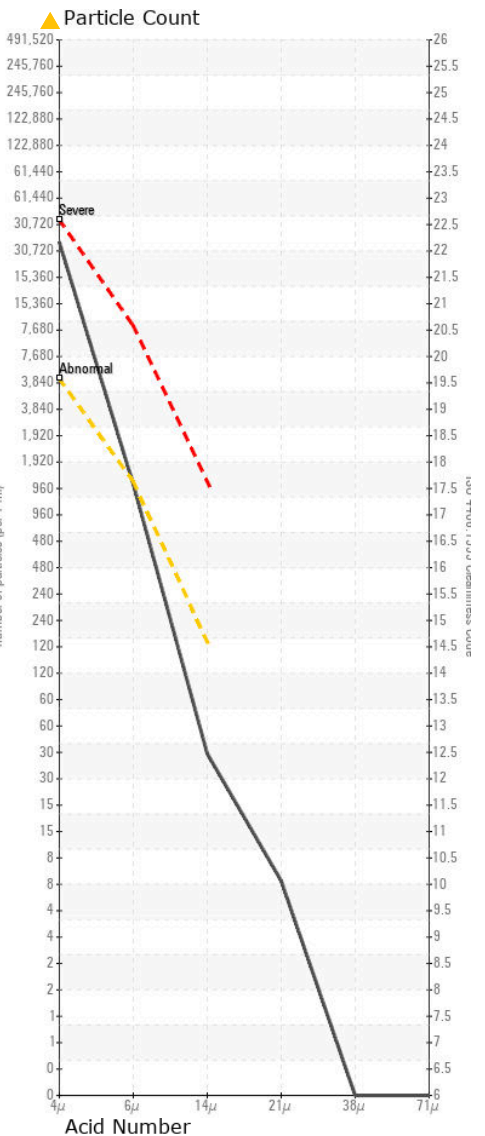
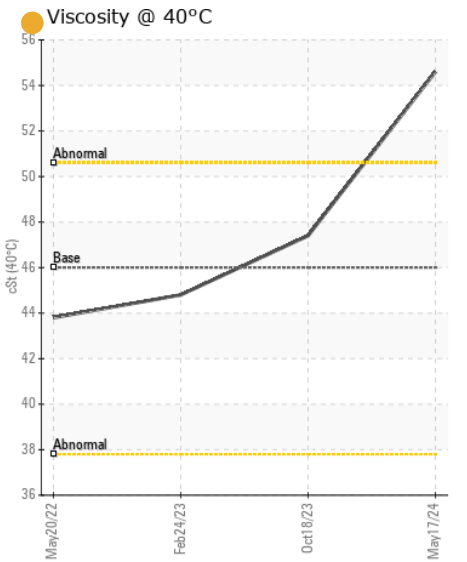
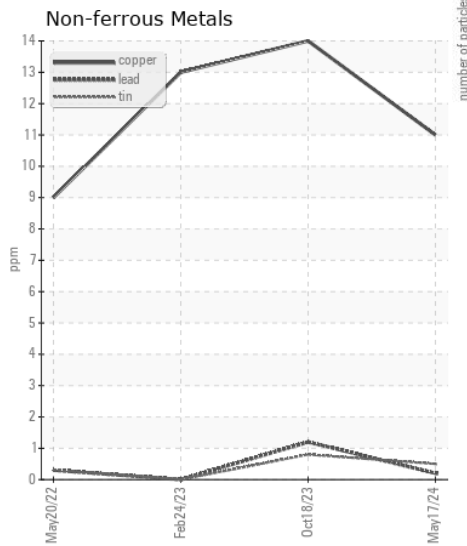
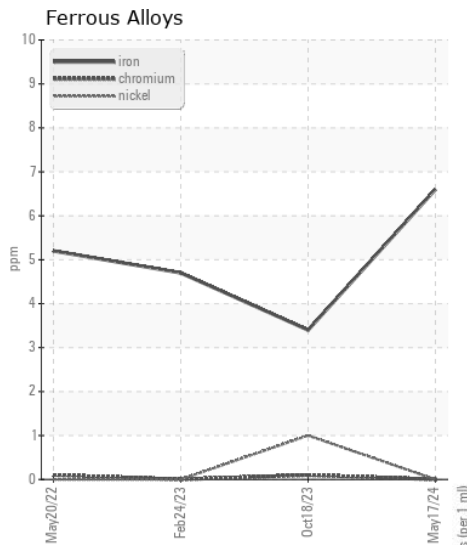
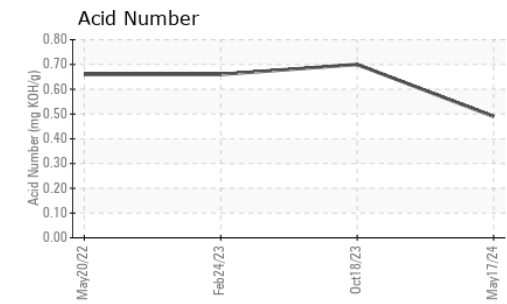
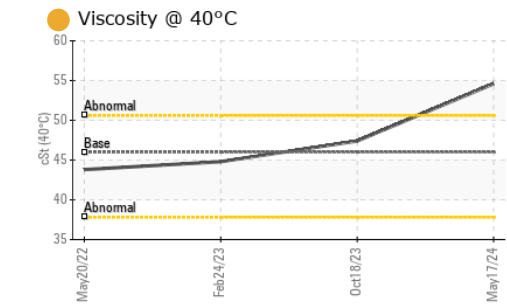
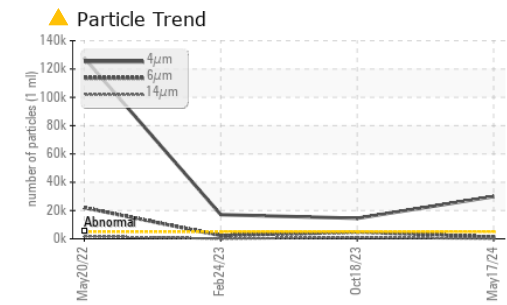
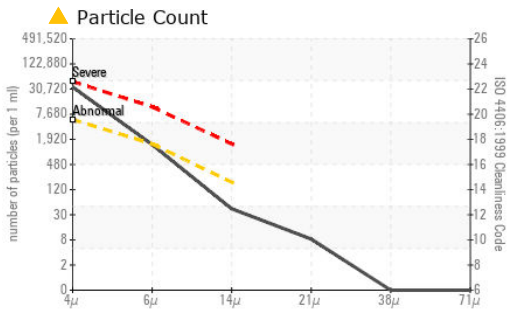
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	2	4	5
Potassium	ppm	ASTM D5185m	>20	0	2	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 29886	14506	17062
Particles >6µm		ASTM D7647	>1300	1259	4773	2291
Particles >14µm		ASTM D7647	>160	37	897	76
Particles >21µm		ASTM D7647	>40	7	363	11
Particles >38µm		ASTM D7647	>10	0	18	1
Particles >71µm		ASTM D7647	>3	0	2	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/17/12	21/19/17	21/18/13
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		2	2	<1
Boron	ppm	ASTM D5185m	14	0	0	<1
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	2	0	1
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	7	10	7
Calcium	ppm	ASTM D5185m	49	369	419	483
Phosphorus	ppm	ASTM D5185m	354	438	524	544
Zinc	ppm	ASTM D5185m	419	521	718	721
Sulfur	ppm	ASTM D5185m	3719	1473	1762	1710
Acid Number (AN)	mg KOH/g	ASTM D8045		0.49	0.70	0.66
Visc @ 40°C	cSt	ASTM D445	46	● 54.6	47.4	44.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP416499
Lab Number : 06186075
Unique Number : 11042827
Test Package : MOB 2

Received : 21 May 2024
Tested : 22 May 2024
Diagnosed : 23 May 2024 - Don Baldrige

TRADEMARK METALS RECYCLING - SUNSHINE
 13200 CAIRO LN
 OPA LOCKA, FL
 US 33054
 Contact: Service Manager

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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