



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area

[730410]

Machine Id

310132 VOLVO EC380 310132

Component

Hydraulic System

Fluid

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP439847	VCP383408	VCP357329
Sample Date		Client Info		25 Jun 2024	05 Apr 2024	31 May 2022
Machine Age	hrs	Client Info		11538	11210	8553
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	8	3	5
Chromium	ppm	ASTM D5185m	>10	2	0	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	0	1
Lead	ppm	ASTM D5185m	>20	<1	0	<1
Copper	ppm	ASTM D5185m	>150	2	0	3
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE

CONTAMINATION

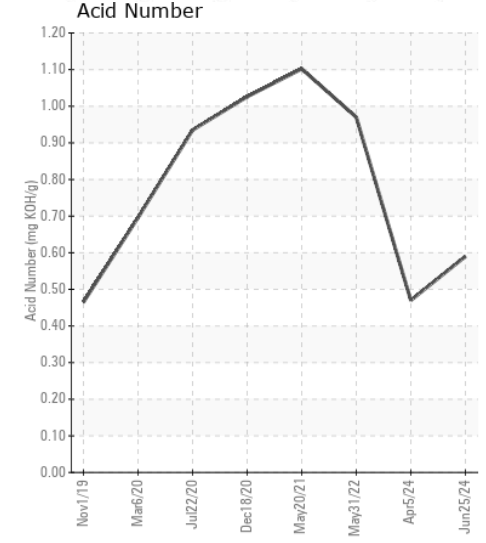
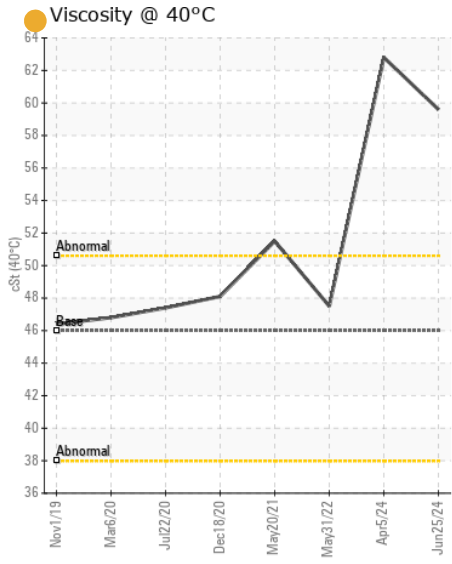
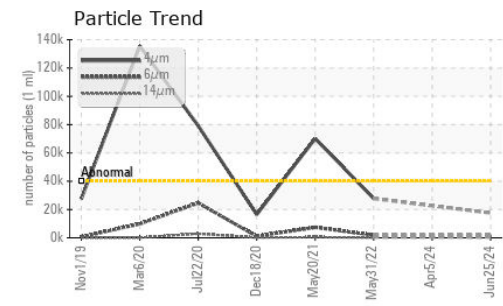
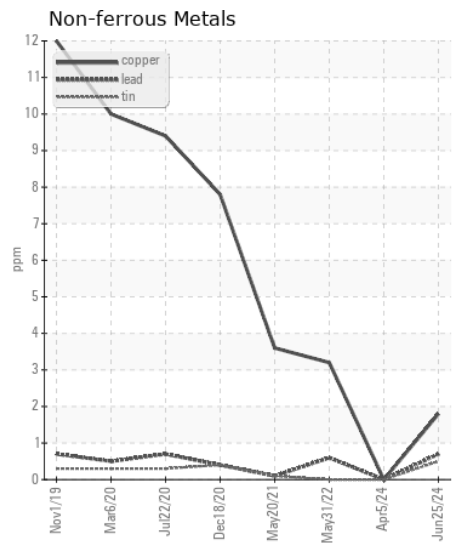
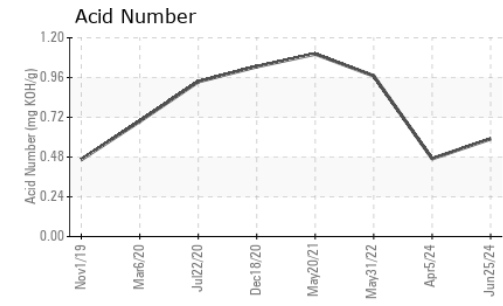
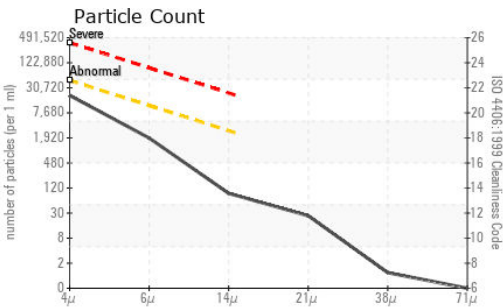
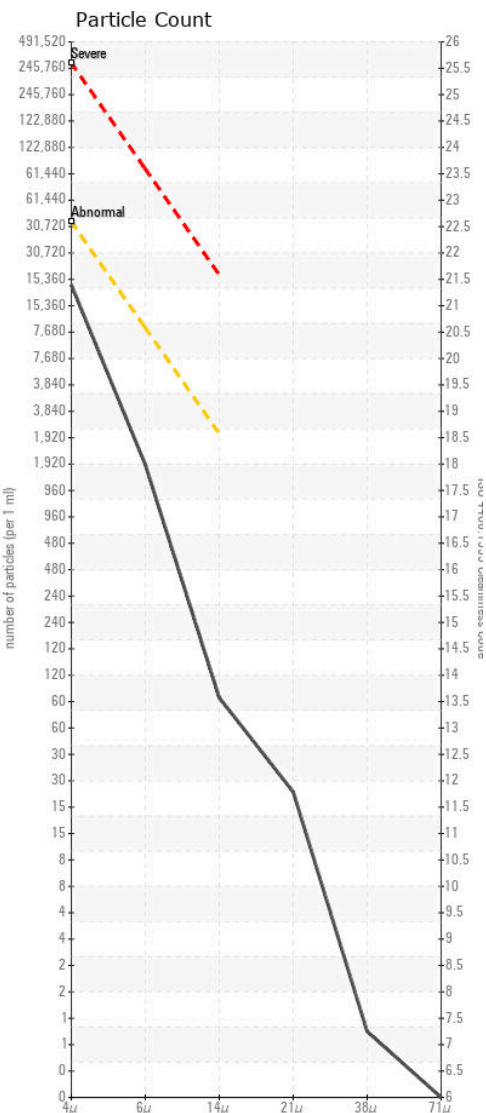
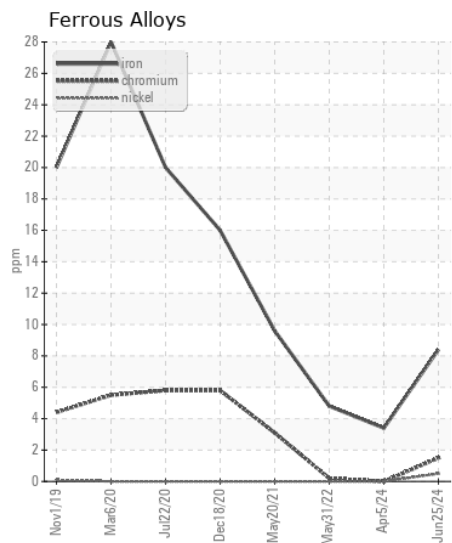
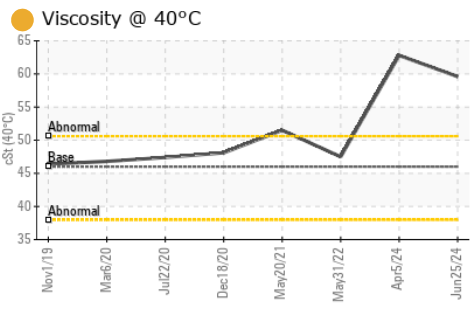
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	2	<1	4
Potassium	ppm	ASTM D5185m	>20	2	0	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>40000	17546	---	27768
Particles >6µm		ASTM D7647	>10000	1667	---	1827
Particles >14µm		ASTM D7647	>2500	79	---	84
Particles >21µm		ASTM D7647	>640	23	---	19
Particles >38µm		ASTM D7647	>160	1	---	2
Particles >71µm		ASTM D7647	>40	0	---	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	21/18/13	---	22/18/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	LIGHT
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. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		0	<1	0
Boron	ppm	ASTM D5185m	14	3	2	4
Barium	ppm	ASTM D5185m	0.0	1	0	0
Molybdenum	ppm	ASTM D5185m	0.0	2	1	2
Manganese	ppm	ASTM D5185m	0.0	<1	0	<1
Magnesium	ppm	ASTM D5185m	2.6	18	17	12
Calcium	ppm	ASTM D5185m	49	308	239	1849
Phosphorus	ppm	ASTM D5185m	354	335	373	752
Zinc	ppm	ASTM D5185m	419	473	439	920
Sulfur	ppm	ASTM D5185m	3719	1021	1083	2586
Acid Number (AN)	mg KOH/g	ASTM D8045		0.59	0.47	0.97
Visc @ 40°C	cSt	ASTM D445	46	59.6	62.8	47.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP439847
Lab Number : 06223441
Unique Number : 11101638
Test Package : MOB 2
Received : 28 Jun 2024
Tested : 01 Jul 2024
Diagnosed : 01 Jul 2024 - Don Baldridge

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)