



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
AMR-12th Street
Machine Id
5678 VOLVO L180H 5678
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		DJJ0016943	VKC0000948	VKC0000695
Sample Date		Client Info		19 Mar 2024	17 Aug 2023	31 May 2023
Machine Age	hrs	Client Info		2087	996	556
Oil Age	hrs	Client Info		0	996	556
Filter Age	hrs	Client Info		0	996	556
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	4	2	1
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	0	0
Lead	ppm	ASTM D5185m	>20	1	1	0
Copper	ppm	ASTM D5185m	>20	3	2	<1
Tin	ppm	ASTM D5185m	>20	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

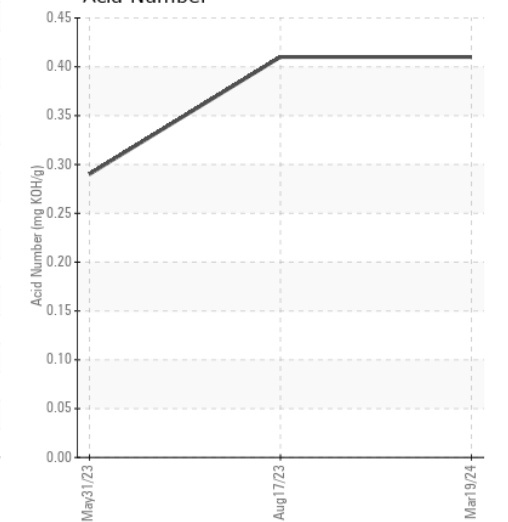
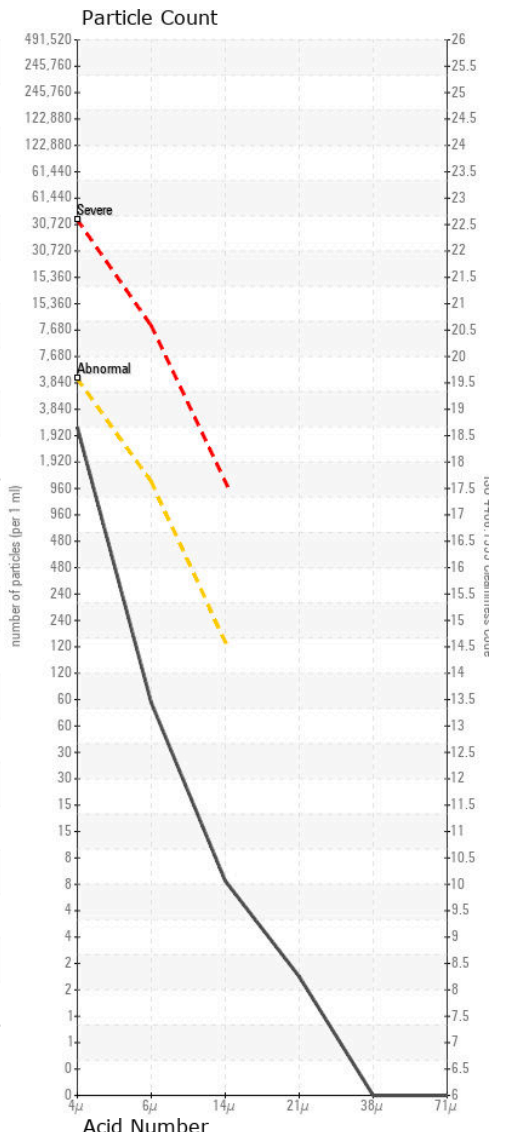
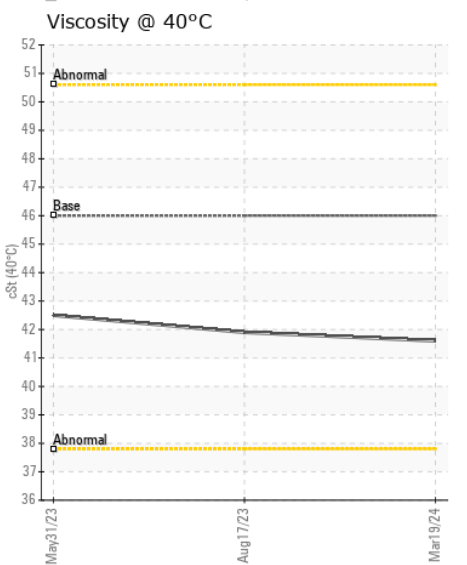
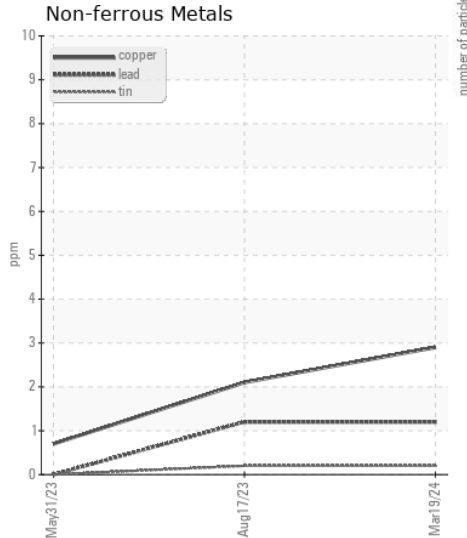
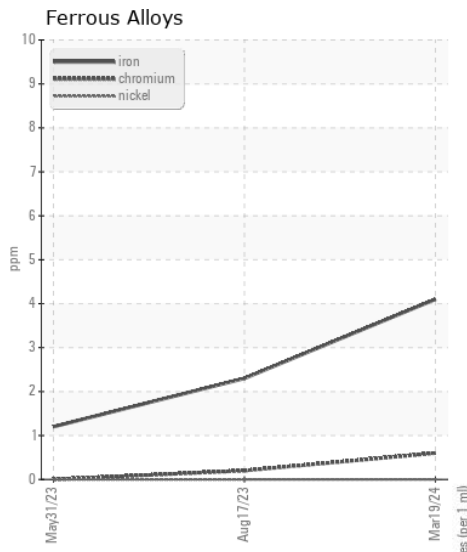
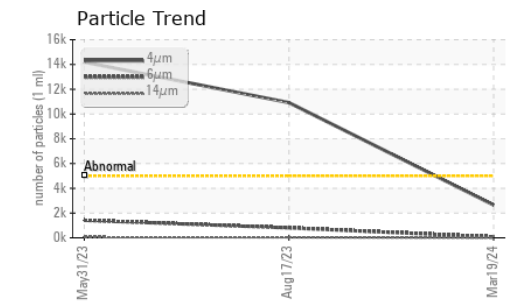
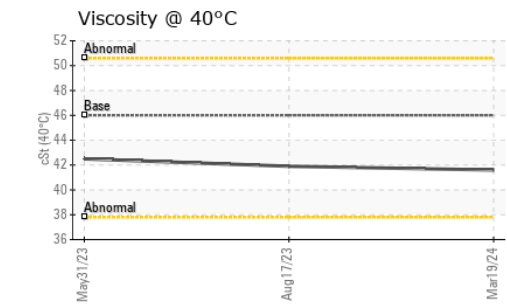
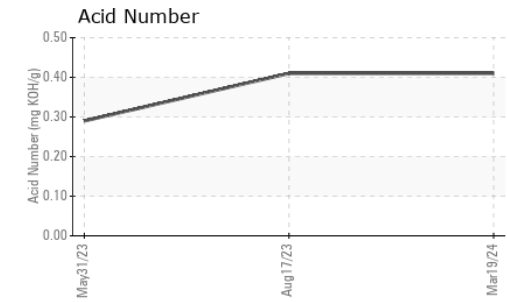
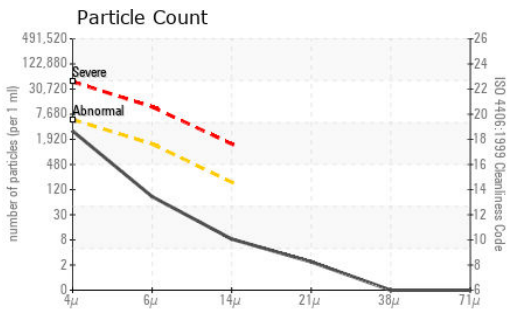
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	0	2	<1
Potassium	ppm	ASTM D5185m	>20	2	<1	1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	2651	▲ 10918	▲ 14191
Particles >6µm		ASTM D7647	>1300	72	804	● 1414
Particles >14µm		ASTM D7647	>160	7	39	48
Particles >21µm		ASTM D7647	>40	2	13	12
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/13/10	▲ 21/17/12	▲ 21/18/13
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	0	<1
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	0	2	0
Molybdenum	ppm	ASTM D5185m	0.0	0	0	0
Manganese	ppm	ASTM D5185m	0.0	0	0	0
Magnesium	ppm	ASTM D5185m	2.6	2	<1	0
Calcium	ppm	ASTM D5185m	49	57	52	59
Phosphorus	ppm	ASTM D5185m	354	350	322	349
Zinc	ppm	ASTM D5185m	419	426	432	467
Sulfur	ppm	ASTM D5185m	3719	1399	1437	1633
Acid Number (AN)	mg KOH/g	ASTM D8045		0.41	0.41	0.29
Visc @ 40°C	cSt	ASTM D445	46	41.6	41.9	42.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0016943
Lab Number : 06145258
Unique Number : 10970066
Test Package : CONST

Received : 10 Apr 2024
Tested : 12 Apr 2024
Diagnosed : 12 Apr 2024 - Wes Davis

ADVANTAGE METALS RECYCLING - 12 STREET
 1153 S. 12TH STREET
 KANSAS CITY, KS
 US 66105
 Contact: JOHN PEEK
 john.peek@advantagerecycling.com
 T: (660)424-9134
 F: (913)621-2766

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)