



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A45GFS 352230
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		ASC0011041	VCP441401	VCP418628
Sample Date		Client Info		29 May 2024	18 Oct 2023	07 Jun 2023
Machine Age	hrs	Client Info		4721	4097	3621
Oil Age	hrs	Client Info		624	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Not Changed
Filter Changed		Client Info		N/A	Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	4	7	6
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	1
Lead	ppm	ASTM D5185m	>20	1	2	2
Copper	ppm	ASTM D5185m	>150	5	7	8
Tin	ppm	ASTM D5185m	>20	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

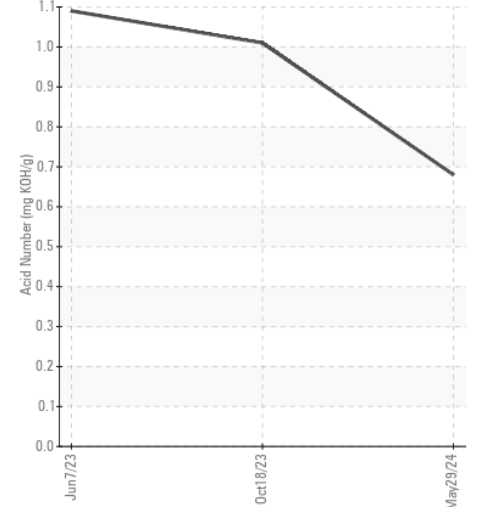
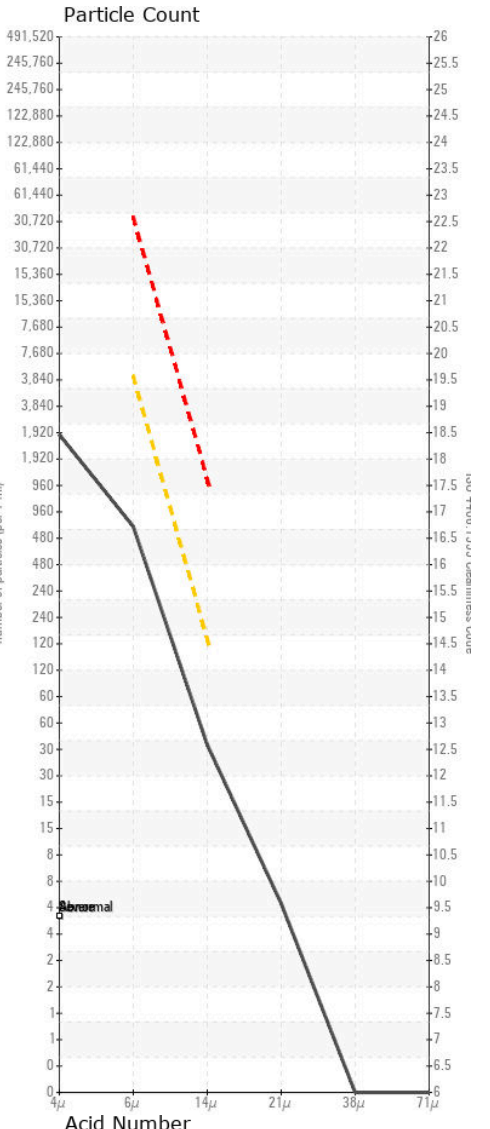
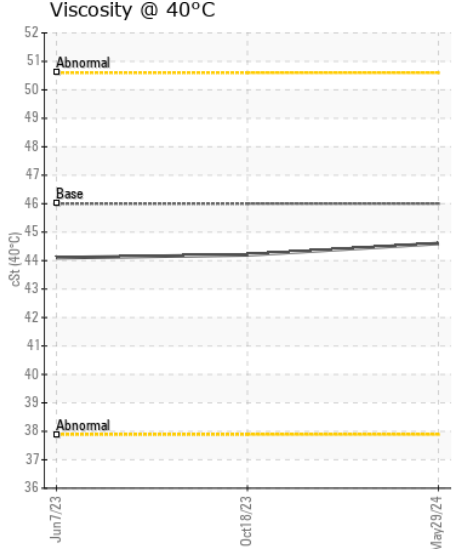
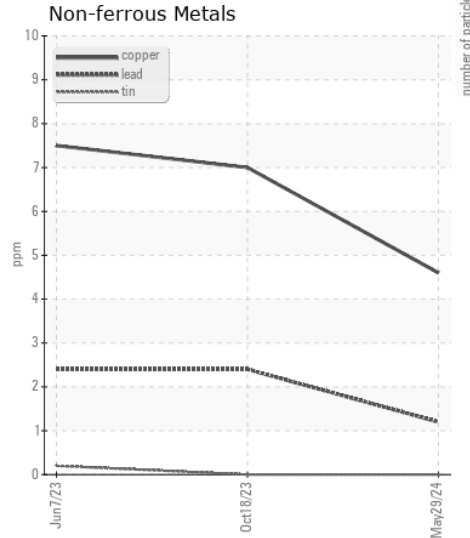
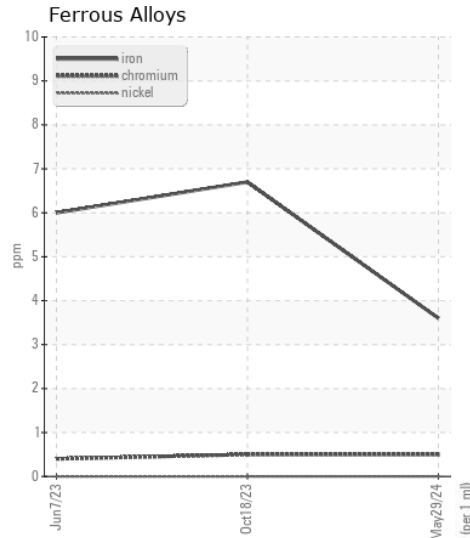
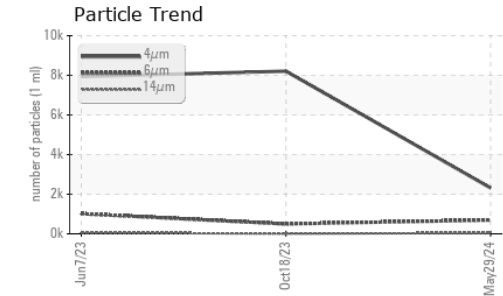
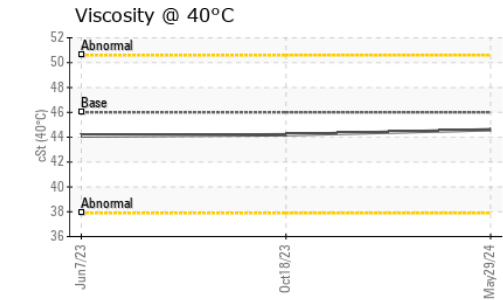
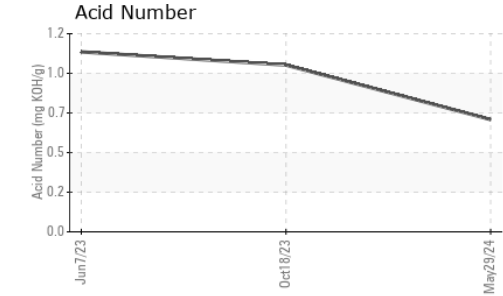
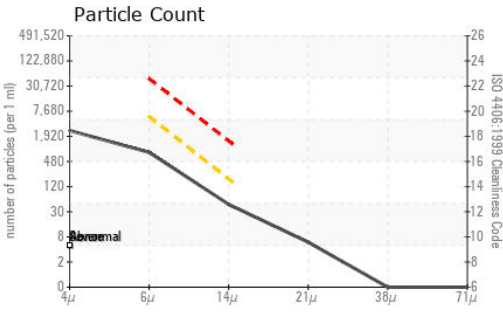
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	4	7	6
Potassium	ppm	ASTM D5185m	>20	<1	3	3
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		2314	8211	7939
Particles >6µm		ASTM D7647	>5000	694	498	1015
Particles >14µm		ASTM D7647	>160	40	11	51
Particles >21µm		ASTM D7647	>40	5	2	9
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	18/17/12	20/16/11	20/17/13
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	0	0
Boron	ppm	ASTM D5185m	14	<1	1	<1
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	1	1	2
Manganese	ppm	ASTM D5185m	0.0	<1	0	0
Magnesium	ppm	ASTM D5185m	2.6	11	14	14
Calcium	ppm	ASTM D5185m	49	1136	1692	1751
Phosphorus	ppm	ASTM D5185m	354	613	765	766
Zinc	ppm	ASTM D5185m	419	735	909	931
Sulfur	ppm	ASTM D5185m	3719	3559	5864	5058
Acid Number (AN)	mg KOH/g	ASTM D8045		0.68	1.01	1.09
Visc @ 40°C	cSt	ASTM D445	46	44.6	44.2	44.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : ASC0011041
 Lab Number : 06212297
 Unique Number : 11085161
 Test Package : CONST

Received : 17 Jun 2024
 Tested : 19 Jun 2024
 Diagnosed : 19 Jun 2024 - Wes Davis

117 - ASCENDUM MACHINERY INC - GREENVILLE
 2002 N GREENE ST
 GREENVILLE, NC
 US 27834
 Contact: ALLEN WILLIAMS
 allen.williams@ascendummachinery.com

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)

T:
 F: (704)494-8197