



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A45GFS 352466
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		ASC0011010	VCP440747	---
Sample Date		Client Info		29 May 2024	18 Oct 2023	---
Machine Age	hrs	Client Info		3913	3241	---
Oil Age	hrs	Client Info		3913	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	Not Changd	---
Filter Changed		Client Info		N/A	Not Changd	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	16	14	---
Chromium	ppm	ASTM D5185m	>20	5	3	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		2	2	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>20	1	2	---
Lead	ppm	ASTM D5185m	>20	3	2	---
Copper	ppm	ASTM D5185m	>150	8	9	---
Tin	ppm	ASTM D5185m	>20	0	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

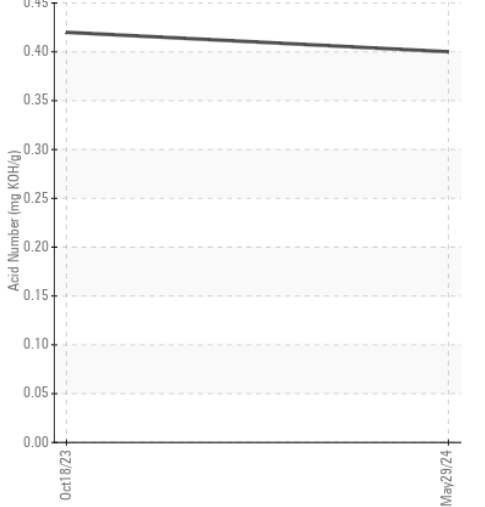
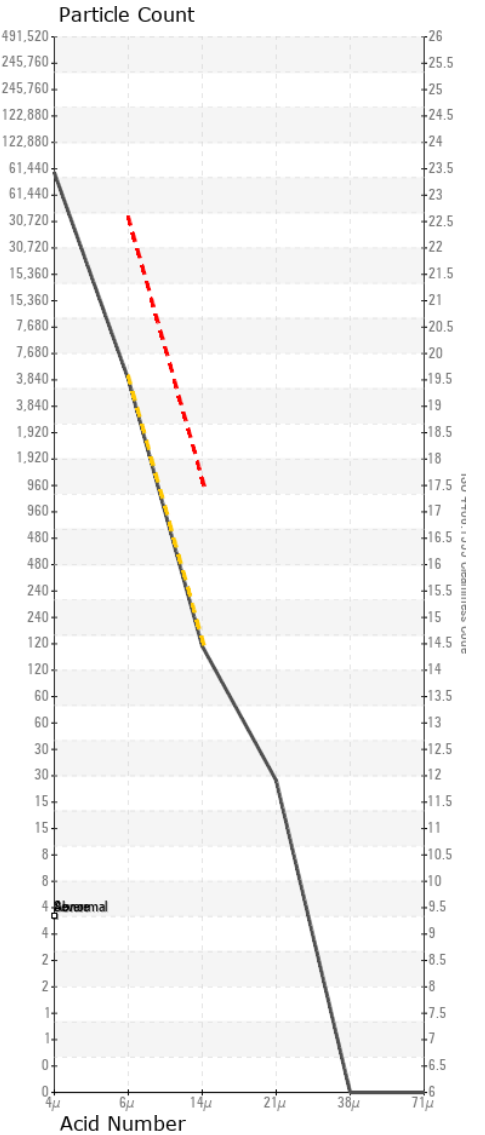
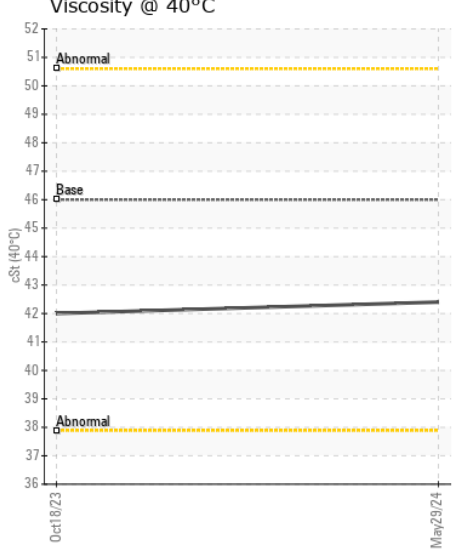
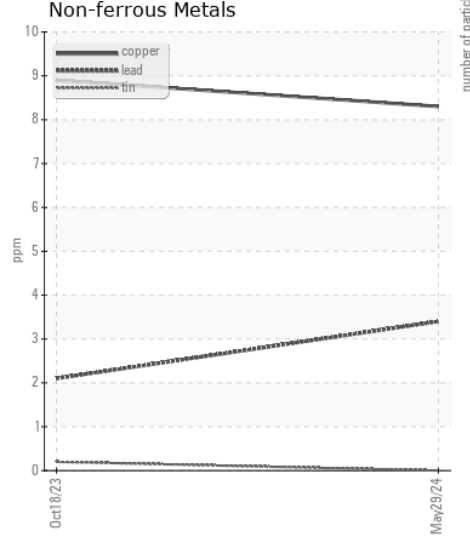
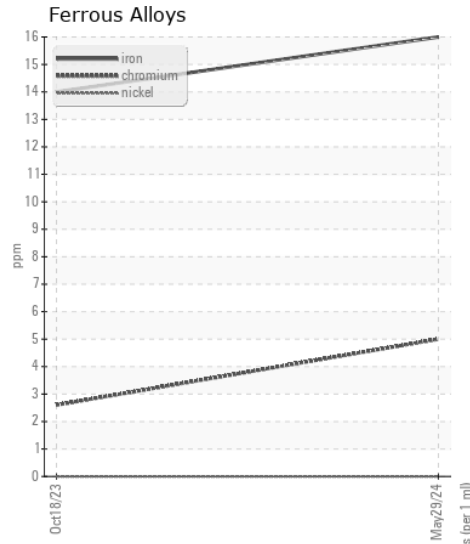
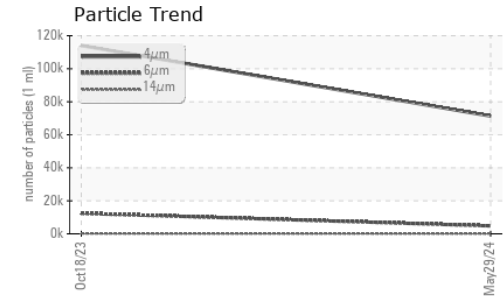
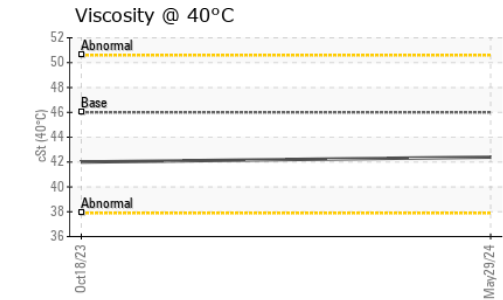
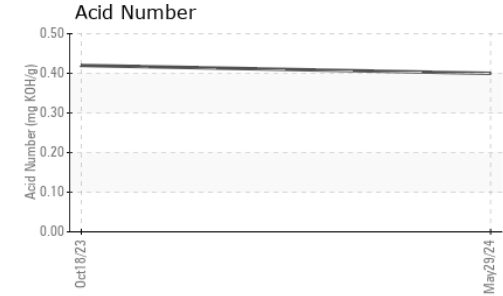
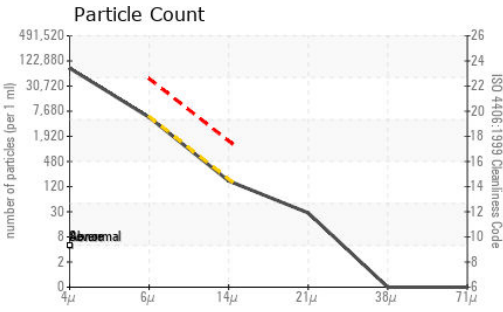
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	5	6	---
Potassium	ppm	ASTM D5185m	>20	0	2	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647		71338	114067	---
Particles >6µm		ASTM D7647	>5000	4783	▲ 12424	---
Particles >14µm		ASTM D7647	>160	145	● 162	---
Particles >21µm		ASTM D7647	>40	25	33	---
Particles >38µm		ASTM D7647	>10	0	1	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>-/19/14	23/19/14	▲ 24/21/15	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	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	---
Boron	ppm	ASTM D5185m	14	0	0	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.0	<1	<1	---
Manganese	ppm	ASTM D5185m	0.0	<1	0	---
Magnesium	ppm	ASTM D5185m	2.6	3	3	---
Calcium	ppm	ASTM D5185m	49	241	162	---
Phosphorus	ppm	ASTM D5185m	354	374	339	---
Zinc	ppm	ASTM D5185m	419	469	447	---
Sulfur	ppm	ASTM D5185m	3719	1311	1191	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.40	0.42	---
Visc @ 40°C	cSt	ASTM D445	46	42.4	42.0	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0011010
Lab Number : 06212301
Unique Number : 11085165
Test Package : CONST

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

117 - ASCENDUM MACHINERY INC - GREENVILLE
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 GREENVILLE, NC
 US 27834
 Contact: ALLEN WILLIAMS
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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)