



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A45G FS A45G352226
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		ASC0010044	ASC0008657	VCP443123
Sample Date		Client Info		29 May 2024	19 Feb 2024	17 Oct 2023
Machine Age	hrs	Client Info		5424	5007	4254
Oil Age	hrs	Client Info		4671	753	0
Filter Age	hrs	Client Info		4671	0	0
Oil Changed		Client Info		N/A	Not Chngd	Changed
Filter Changed		Client Info		N/A	Not Chngd	Changed
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	3	3	6
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	1	2
Lead	ppm	ASTM D5185m	>20	<1	2	2
Copper	ppm	ASTM D5185m	>150	4	3	7
Tin	ppm	ASTM D5185m	>20	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

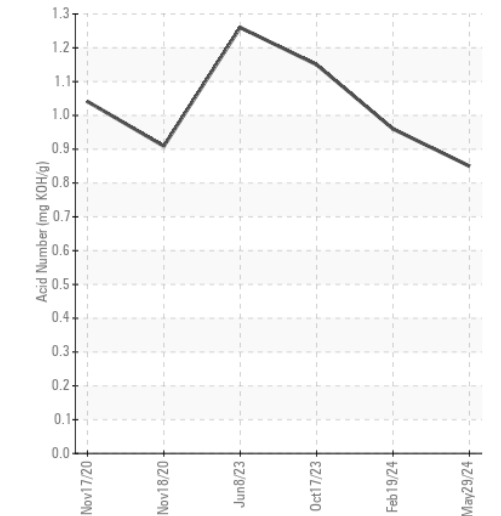
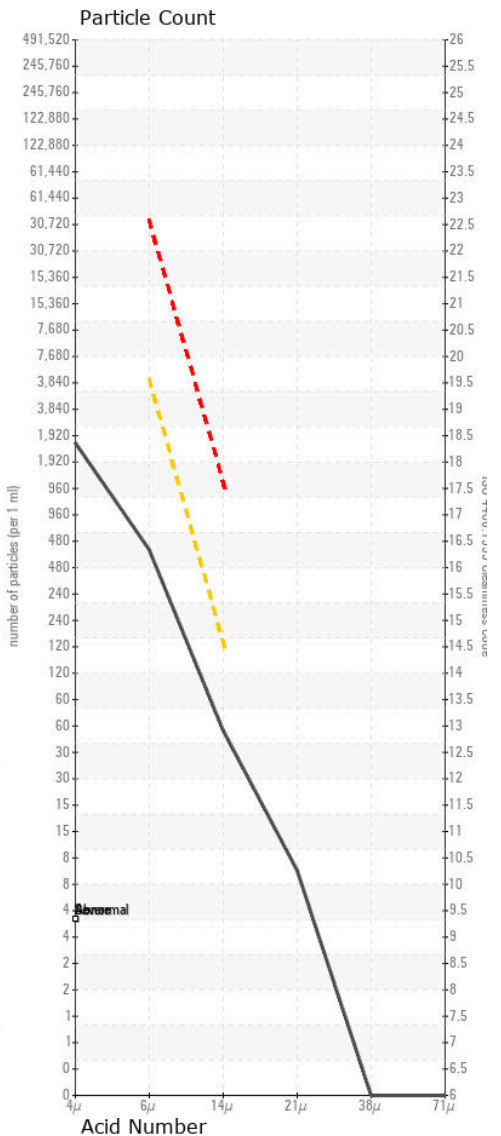
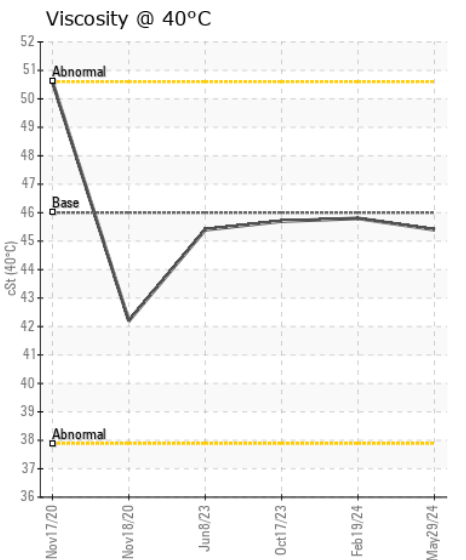
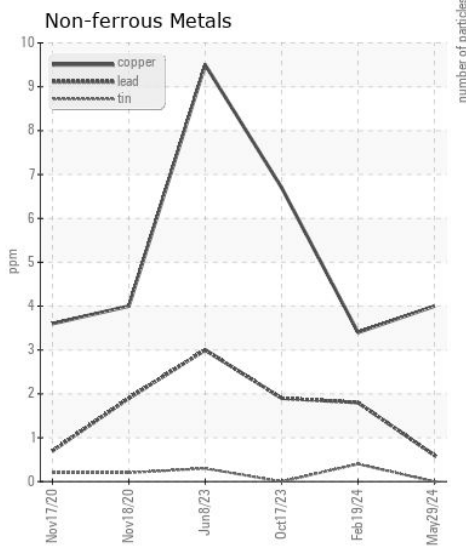
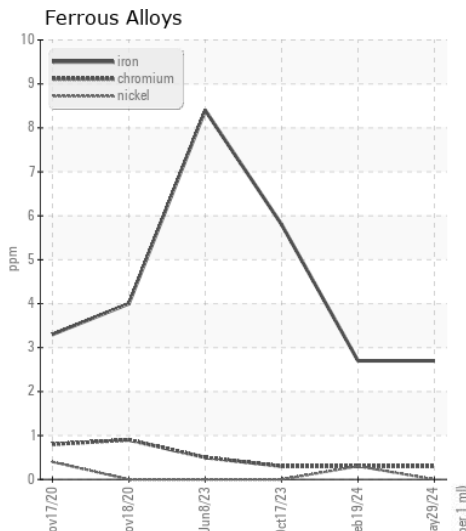
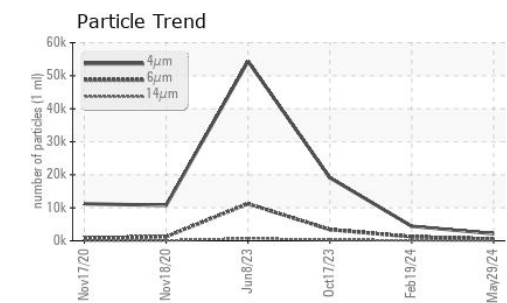
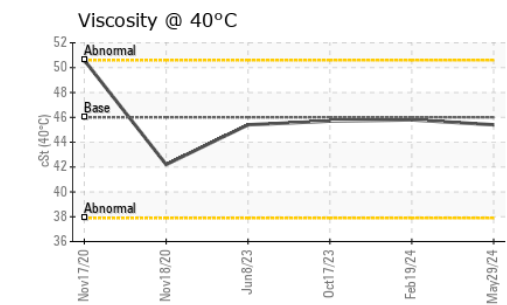
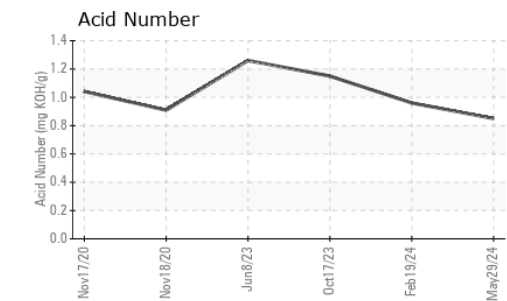
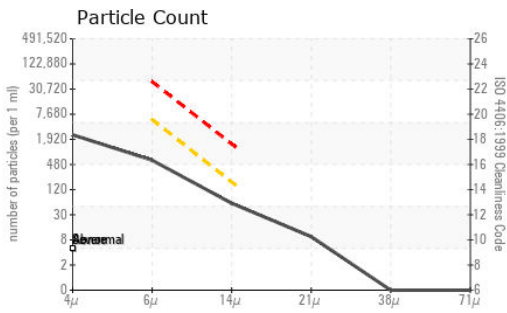
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	3	3	6
Potassium	ppm	ASTM D5185m	>20	0	<1	3
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		2159	4412	19109
Particles >6µm		ASTM D7647	>5000	532	1225	3402
Particles >14µm		ASTM D7647	>160	50	122	242
Particles >21µm		ASTM D7647	>40	8	37	51
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	18/16/13	19/17/14	21/19/15
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	2	0
Boron	ppm	ASTM D5185m	14	0	<1	2
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	2	2	2
Manganese	ppm	ASTM D5185m	0.0	<1	0	0
Magnesium	ppm	ASTM D5185m	2.6	12	10	17
Calcium	ppm	ASTM D5185m	49	1336	1228	1957
Phosphorus	ppm	ASTM D5185m	354	685	665	825
Zinc	ppm	ASTM D5185m	419	781	742	969
Sulfur	ppm	ASTM D5185m	3719	3398	2939	5739
Acid Number (AN)	mg KOH/g	ASTM D8045		0.85	0.96	1.15
Visc @ 40°C	cSt	ASTM D445	46	45.4	45.8	45.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : ASC0010044
 Lab Number : 06212288
 Unique Number : 11085152
 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