



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A40G 341139
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0010443	ASC0006155	VCP403769
Sample Date		Client Info		10 Apr 2024	11 Dec 2023	15 Mar 2023
Machine Age	hrs	Client Info		15279	14862	13734
Oil Age	hrs	Client Info		1000	2000	0
Filter Age	hrs	Client Info		1000	2000	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Not Changed
Sample Status				ABNORMAL	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	11	10	11
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	7	8
Lead	ppm	ASTM D5185m	>20	2	<1	0
Copper	ppm	ASTM D5185m	>150	4	3	3
Tin	ppm	ASTM D5185m	>20	1	0	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

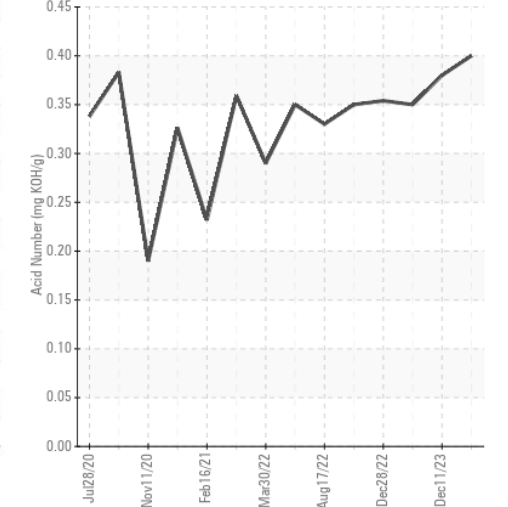
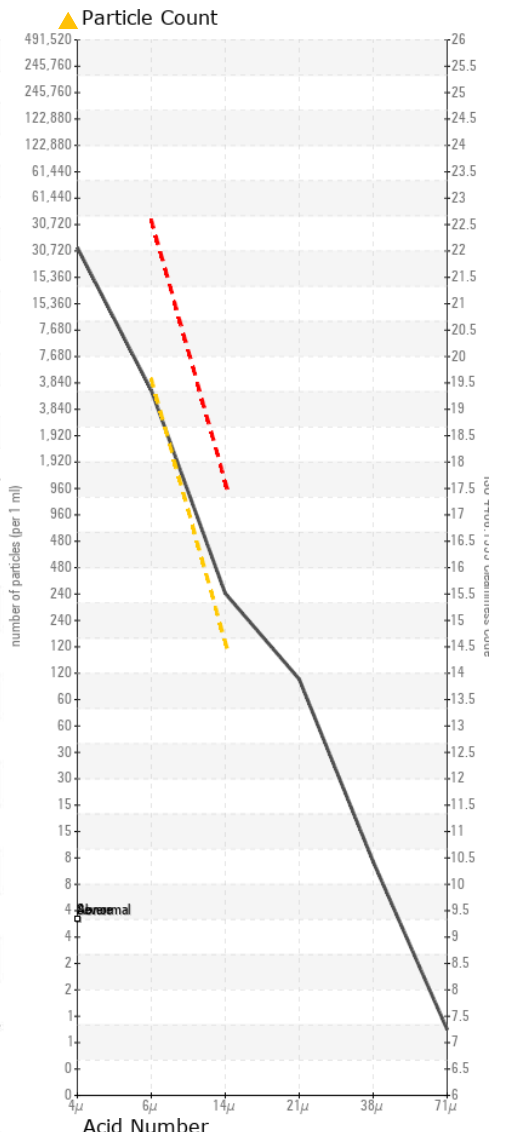
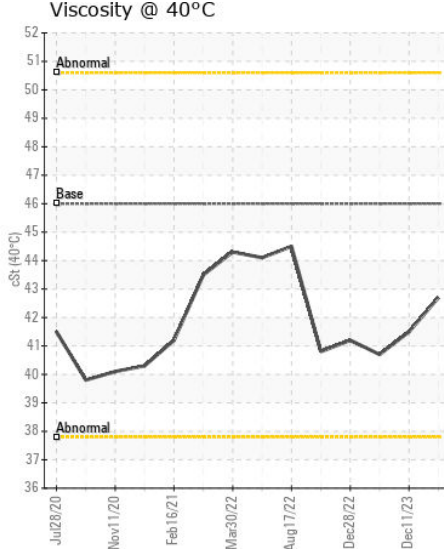
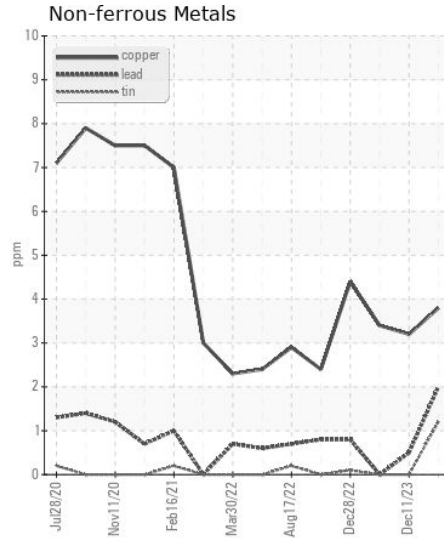
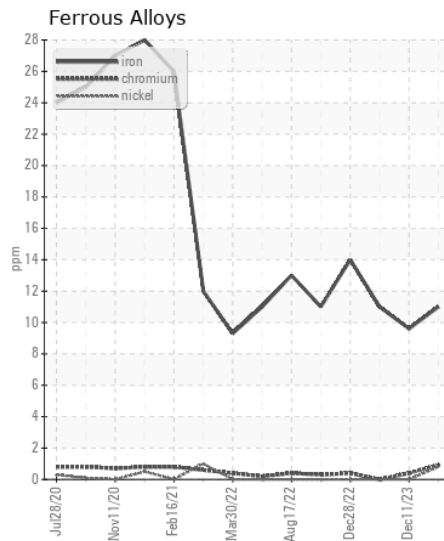
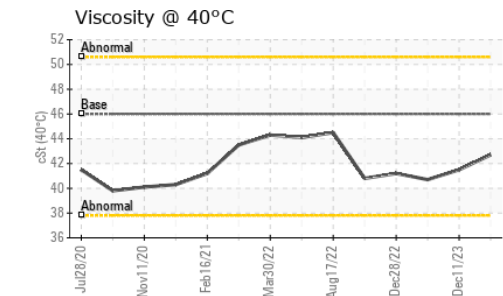
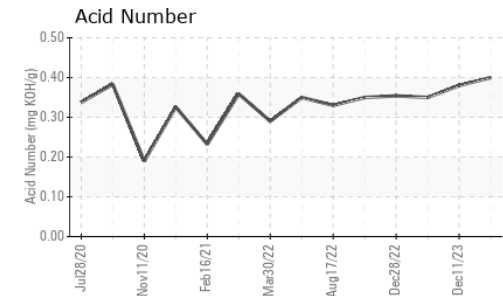
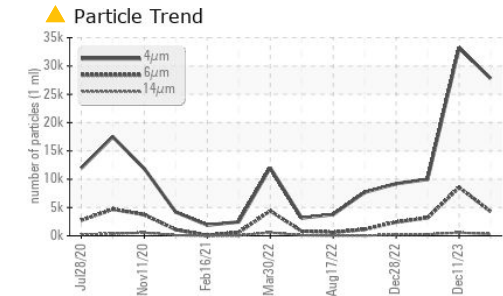
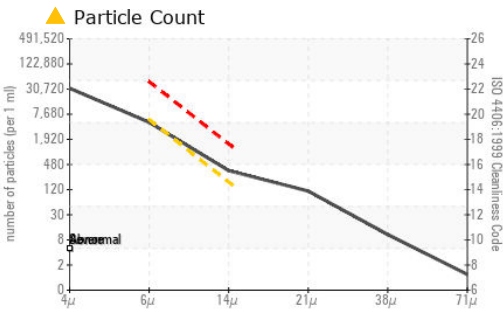
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	10	10	12
Potassium	ppm	ASTM D5185m	>20	2	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		27793	33215	9987
Particles >6µm		ASTM D7647	>5000	4292	8559	3183
Particles >14µm		ASTM D7647	>160	301	567	262
Particles >21µm		ASTM D7647	>40	98	117	46
Particles >38µm		ASTM D7647	>10	9	4	3
Particles >71µm		ASTM D7647	>3	1	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	22/19/15	22/20/16	20/19/15
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		0	1	2
Boron	ppm	ASTM D5185m	14	3	1	2
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	2	<1	1
Manganese	ppm	ASTM D5185m	0.0	<1	0	<1
Magnesium	ppm	ASTM D5185m	2.6	13	7	14
Calcium	ppm	ASTM D5185m	49	213	125	158
Phosphorus	ppm	ASTM D5185m	354	404	359	371
Zinc	ppm	ASTM D5185m	419	465	446	460
Sulfur	ppm	ASTM D5185m	3719	1651	1261	1395
Acid Number (AN)	mg KOH/g	ASTM D8045		0.40	0.38	0.35
Visc @ 40°C	cSt	ASTM D445	46	42.7	41.5	40.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0010443
Lab Number : 06147236
Unique Number : 10977314
Test Package : CONST
Received : 12 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 15 Apr 2024 - Wes Davis

HANSON SOUTHEAST
 NC HWY 117
 ERWIN, NC
 US 28339
 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)